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LEVEL CROSSING TREATMENT REPORT – WATERWORKS ROAD (LX606)

A2I | Albury to Illabo

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GLOSSARY

Specific terms and acronyms used throughout this plan are listed and described in Table 1 below.

TABLE 1: DEFINITIONS

TERM	DEFINITION
A2I	Albury to Illabo
AADT	Annual Average Daily Traffic
ADC	Assumptions, Dependencies and Constraints
ALCAM	Australian Level Crossing Assessment Model
ARTC	Australian Railway Track Corporation
CBA	Cost Benefit Analysis
CSSI	Critical State Significant Infrastructure
D&C	Design and Construct
DDR	Detailed Design Review (100% Design)
EIS	Environmental Impact Statement
FDR	Feasibility Design Review
IFC	Issued for Construction
GHSC	Greater Hume Shire Council
HV	Heavy Vehicle
IR	Inland Rail
JSC	Junee Shire Council
J2I	Junee to Illabo
Km	Kilometres
LCTR	Level Crossing Treatment Report
LGA	Local Government Area
LSC	Lockhart Shire Council
LX	Level Crossing
O&M	Operations and Maintenance
ONRSR	Office of the National Rail Safety Regulator
MIRDA	Master Inland Rail Development Agreement

TERM	DEFINITION
PDR	Preliminary Design Review (70% design)
PDR	Preliminary Design Review (70% design)
PHL	Project Hazard Log
RMS	Former Roads and Maritime Services. Now TfNSW
SDR	Systems Definition Review
SFAIRP	So Far as Is Reasonably Practical
ST	Sydney Trains
TfNSW	Transport for New South Wales
WSP	WSP Australia
WWCC	Wagga Wagga City Council

1 INTRODUCTION

This Public Level Crossing Treatment Report (LCTR) has been prepared in consultation with Transport for NSW and Junee Shire Council. In accordance with E152 and in order to minimise risks to the construction program, individual reports will be submitted for each crossing. As the project progresses opportunities to streamline the number of LCTR's will be reviewed.

This Public Level Crossing Treatment Report relates to Waterworks Road (LX606), within Junee Shire Council (JSC). JSC is the Road Manager for LX606 and has been consulted on the design. While the works will not impact the Olympic Highway, TfNSW have been consulted on the design in accordance with E144.

Works at LX606 for the Inland Rail Project is scheduled to commence on 6th November 2026.

1.1 Inland Rail

In May 2026, the Australian Government confirmed that Inland Rail will be delivered between Beveridge and Parkes as a priority, enabling double-stacked freight capability between Melbourne, Perth and Adelaide, via Parkes. The Government also confirmed that it will work with the Queensland and New South Wales (NSW) Governments to preserve the rail corridor north of Parkes to allow for future project delivery. Delivery of sections between Beveridge in Victoria and Parkes in New South Wales is underway, including the Albury to Illabo (A2I) section. Inland Rail will progressively connect Melbourne and Brisbane, through regional Victoria, New South Wales and Queensland.

Each delivered stage of Inland Rail will enhance the national rail freight network by reducing congestion and creating capacity for our major East Coast highways and regional roads.

In the future, once all 12 sections are fully completed, it is envisaged the track will enable double-stacked trains to run from Beveridge, north of Melbourne to a proposed intermodal terminal at Ebenezer, west of Brisbane; with single-stacked trains able to pass through Ebenezer to Kagaru to connect with the existing Sydney to Brisbane coastal line.

From Beveridge, connections to the east, west or the Port of Melbourne will be enabled, while the Ebenezer to Kagaru section in Queensland will allow further connections to the North, South and Port of Brisbane in the future.

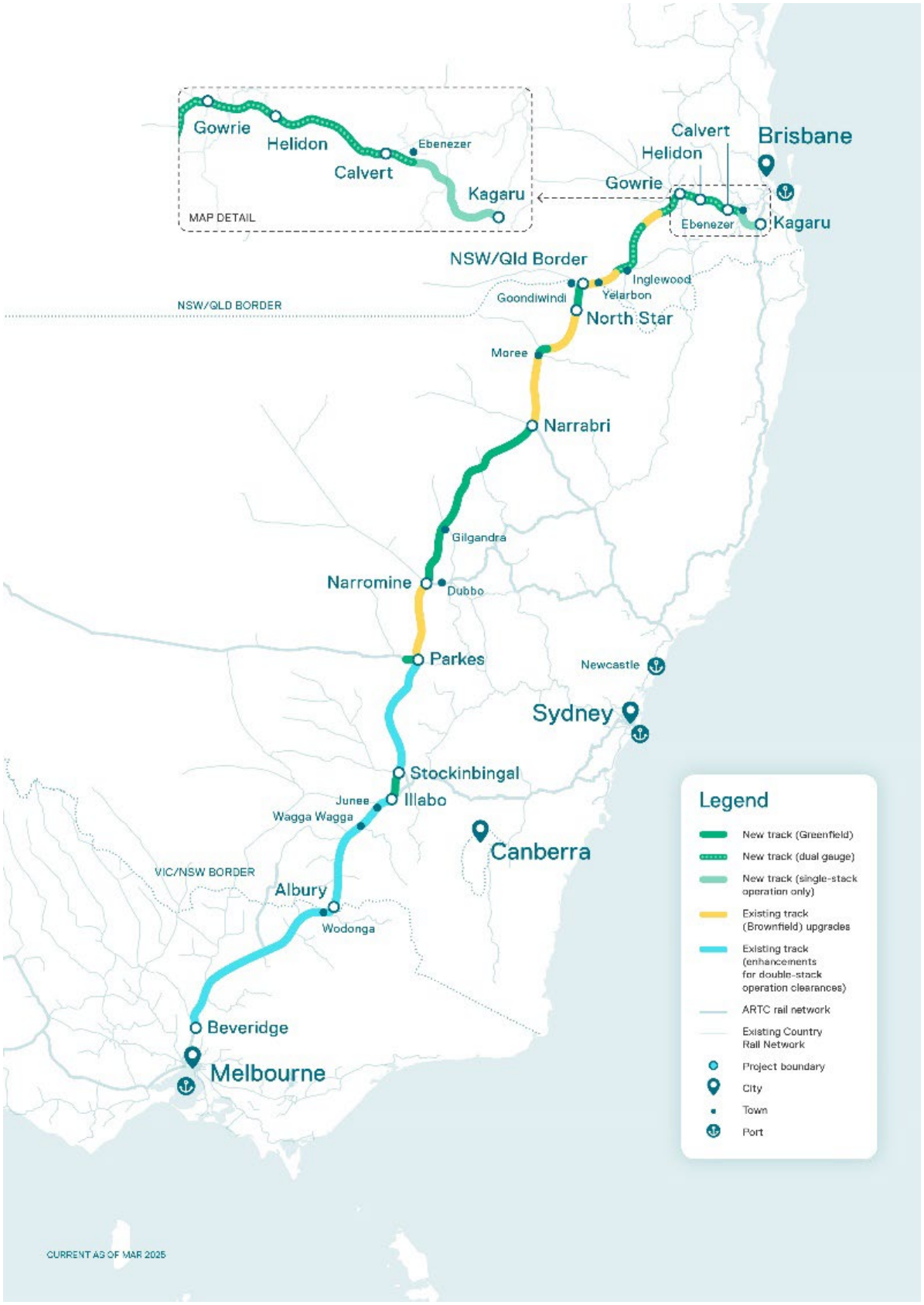


FIGURE 1: INLAND RAIL ALIGNMENT MAP

1.2 Albury to Illabo (A2I)

The Albury to Illabo (A2I) Project is an Enhancement Project within the Inland Rail Program. The scope includes enhancement works to structures and sections of track along 185 km of the existing operational standard-gauge railway.

Enhancements or modification works are required at discrete sites along the A2I alignment to provide the increased vertical and horizontal clearances required for double-stacked freight trains.

The Critical State Significant Infrastructure (CSSI) for the A2I project as described in Schedule 1 of the planning approval document includes ancillary works/adjustments to nine level crossings. Seven of these are public level crossings which were in operation before the Inland Rail Project, one is a public level crossing at Dampier Street in Bomen which was closed to road traffic prior to the Inland Rail Project and there is one private level crossing which will be detailed in the Private Level Crossing Treatment Report as per Condition E150 and 151.

A2I enhancement works include:

- Track realignment/track slews
- Lowering and/or modification within the existing rail corridor
- Modification, removal or replacement bridge structures (rail, road and/or pedestrian bridges)
- Raising or replacing of signal gantries
- Level crossing modifications
- And other associated works.

The existing and proposed level crossing control at LX606 is primary flashing lights and boom barriers.

Following the Australian Government announcement in May 2026, the design for LX606 has been optimised to:

- Achieve the clearances required to achieve double stack train operations
- Maintain the down track alignment to ensure that the available stacking distance is not impacted

This existing infrastructure will not be impacted as part of the level crossing modification required to facilitate double stacked trains and there will be no returned assets to JSC. The following modifications are proposed at LX606:

- Minor Up Main Line track slew through the level crossing to achieve the increased clearance required to accommodate double stacked trains
- Asphalt reinstatement up to 1m from the outer face of rail (ARTC maintenance boundary) associated with the minor Up Main track slew

TABLE 2: LX606 SUMMARY TABLE

No #	Crossing Name and location	Design Package	Road Manager	Km	Level Crossing Treatment	Works Summary
LX606	Waterworks Road, Junee	LX606	JSC	478.138	Active controls (Flashing lights and Boom Barriers)	Minor track slew through the level crossing Asphalt reinstatement within ARTC maintenance boundary

Scope change from the Environmental Impact Statement

The EIS design for LX606 proposed slewing both the Up Main and Down Main tracks through the level crossing. The proposed slew of the Down Main towards Waterworks Road would have reduced the available stacking distance between the railway and the Waterworks Road intersection. To address the short-stacking issue associated with that design, the EIS identified changes to intersection priority at Waterworks Road, together with associated signage and pavement works.

As the design has matured, the scope at LX606 has been optimised. The revised design retains the Down Main, existing level crossing warning equipment and Waterworks Road intersection in their current configurations. The proposed works are now limited to minor slew of the Up Main towards the Olympic Highway and associated asphalt reinstatement within the ARTC maintenance boundary. These works achieve the clearances required for double stack freight train operations.

As the optimised design does not move the Down Main towards Waterworks Road, it does not reduce the existing stacking distance or alter the existing road configuration. The changes to intersection priority, signage and pavement identified in the EIS to mitigate the effects of the earlier track alignment are therefore no longer required. The existing short-stacking condition is not created or worsened by the proposed works and the Waterworks Road and Olympic Highway intersections will continue to operate in their existing configurations

The optimised design does not introduce any new safety risks or made worse the risk profile for the Waterworks Road level crossing.

The optimised scope reduces the overall extent of works and avoids permanent changes to Council-managed pavement, line marking and intersection arrangements. The works remain confined to rail infrastructure within the ARTC maintenance boundary, with no Council assets proposed to be transferred, handed back or dedicated to Council following completion. Compared with the EIS design, the optimised scope therefore avoids the associated road, pavement and intersection works and the environmental and community disturbance associated with undertaking those works



Figure 2: Location of LX606 Waterworks Road

1.3 Planning Approvals

The Albury to Illabo section of the Inland Rail Program (the proposal) is a Critical State Significant Infrastructure project being assessed under the Environmental Planning and Assessment Act 1979 (NSW).

An Environmental Impact Statement (EIS) for the proposal was placed on public exhibition in 2022 and submissions were invited from the community and key stakeholders. Inland Rail responded to the issues raised in these submissions in the EIS Response to Submissions Report in November 2023. Alongside this, Inland Rail also prepared a Preferred Infrastructure Report (PIR) in response to a request from DPHI for further assessment of traffic and transport, noise and vibration, and air quality impacts from the proposal. Additionally, the PIR also considered changes to the proposal since the EIS that had arisen as a consequence of the further assessments and related submissions. The PIR was placed on public exhibition from 15 November 2023 to 6 December 2023 and during this time, the community and key stakeholders were invited to make a submission. Inland Rail subsequently prepared a PIR Response to Submissions (PIR-RtS) report in February 2024 that responds to the issues raised in these submissions.

Following submission of the PIR-RtS, DPHI completed their assessment of the proposal in accordance with Government legislation, policies and guidelines. The DPHI provided their assessment report and recommended conditions of approval in September 2024 to the NSW Planning Minister to consider when deciding on the project approval.

Approval from the NSW Minister for Planning was granted on 8th October 2024.

TABLE 3: CONDITIONS OF APPROVAL COMPLIANCE MATRIX

Note: where a COA relates to the CSSI, the information will be crossing specific as allowed under COA E152.

No.	Condition	Section Reference
E144	Any new overbridges, new or modified roads, and new or modified level crossings must be designed and constructed to meet relevant design, engineering and safety guidelines, including the Austroads Guide to Traffic Management, and relevant Transport for NSW Austroads Supplements. The roads authority, asset owner, and TfNSW must be consulted throughout the design process of all new or modified bridges, roads and/or levels crossings. Evidence of consultation with the asset owner and TfNSW, and endorsement of the roads authority, must be made available to the Planning Secretary on request in accordance with Condition A8. *Note: This condition does not affect any obligations to obtain approvals under the Roads Act 1993.*	Refer Appendix A.
E146	In order to maintain safe and efficient operation of the road network, the Proponent must prepare a Public Level Crossing Treatment Report in consultation with TfNSW and relevant councils. The report must:	This LCTR has been developed in consultation with TfNSW and JSC. Refer Appendix A.
	(a) illustrate the location of all public level crossings which traverse the CSSI;	Figure 2
	(b) list, and identify on a figure, any public level crossings that will be closed or upgraded, including the type of treatment proposed where a level crossing is to be upgraded;	Appendix B
	(c) where no works are proposed at a public crossing, provide reason for the decision;	Appendix B N/A as works are proposed at LX606
	(d) include measures to avoid potential short-stacking at level crossings; and	Appendix C
	(e) provide justification for any proposed closures.	Section 5

No.	Condition	Section Reference
E147	The assessment of level crossings must utilise the Australian Level Crossing Assessment Model (ALCAM). The process for determining the type of level crossing treatment must be consistent with the process outlined in the documents listed in Condition A1 and the Traffic Impact Assessment Appendix M of the EIS.	Appendix B Table 7
E148	The Public Level Crossing Treatment Report must also include an assessment of the road risks, consistent with the guideline Railway Crossing Safety Series 2011, Plan: Establishing a Railway Crossing Safety Management Plan (NSW Roads and Traffic Authority, 2011). The report is also to include an assessment of the crossing's compliance with AS /RISSB 7658-2020. Railway Infrastructure – Railway Level. Crossing and AS1742.7 2016 Manual of uniform traffic control devices and Section 10 Rail Crossings of AGRD Part 4.	Appendix D
E149	The design of any level crossing on a public road must be endorsed by TfNSW or the relevant roads authority (where not TfNSW), prior to commencing construction of that crossing.	N/A. While JSC has been consulted on the design, no assets are being returned to Council and there are no changes to the existing road configuration or operation. JSC will still be required to provide the necessary approvals under the Road Act 1993 including but not limited to Section 138 approvals
E152	The Public Level Crossing Treatment Report and Private Level Crossing Treatment Report must be submitted to the Planning Secretary for approval at least one (1) month prior to the closure or upgrade of a public or private level crossing, as relevant. Individual reports may be submitted for each crossing or address a group of crossings or the entire CSSI.	This Report is an individual report for LX606. This report is being submitted to the Planning Secretary at least (1) month prior to commencement of the works.

2 CONSULTATION

2.1 Overview

Inland Rail's values commit the organisation to active engagement with stakeholders and the community; therefore, a comprehensive consultation program has been undertaken throughout the planning and design phases of the A2I Inland Rail project.

Effective communication and stakeholder engagement are fundamental to reducing risk and minimising social and environmental impacts. Inland Rail believes that identifying, engaging, and effectively communicating with stakeholders is critical to the successful delivery of Inland Rail.

Inland Rail has conducted extensive consultation with key level crossing stakeholders including TfNSW and Junee Shire Council during the planning and detailed design of the Albury to Illabo public level crossings. All consultation, prior to the Contractors engagement, has been done in line with the Inland Rail A2I Communication Strategy Engagement Implementation Plan (EIP). Consultation by the Contractor has been in line with the Community Communication Strategy and Communication and Stakeholder Engagement Plan.

There are signed agreements in place between ARTC and all of the Councils across A2I. These are referred to as Master Inland Rail Development Agreements and were signed between 2021 and 2023. These are important in ensuring there is alignment on the key matters before any works are commenced. The council development agreement includes a list of council assets impacted by the project including level crossings, the scope of works at each location as well as the required design standards.

Information sharing agreements have been established to enable the prompt transfer of information between Council's and the project team. This information included inputs into the design process including road traffic counts, proposed changes in road usage and feedback on any future development plans.

Inland Rail and Martinus have adopted the following methods of engagement to discuss and seek feedback from key stakeholders on the level crossing designs:

- Monthly Monitoring Meetings
- Stage Gate Design Reviews where the stakeholder can provide feedback in a Comments Register on the following stages of design:
  - SDR (30%)
  - PDR (70% design)
  - DDR (100% design)
- Stage Gate Briefing Workshops where Martinus presents the design package and provides attendees with the opportunity to ask questions.
- 70% Safety in Design Workshop
- Technical Working Groups

Inland Rail and Martinus will continue to consult and work closely with these key stakeholders during the construction and handover phase of the project.

Consultation activities specific to LX606 are detailed in Appendix A.

3 PUBLIC LEVEL CROSSING ASSESSMENT

Level crossings have been assessed in accordance with the public level crossing treatment methodology detailed in Appendix A of the A2I EIS Technical Paper 1: Traffic and Transport "Public Level Crossing Treatment Methodology".

The key principles that guided the decision-making process for determining treatments at public level crossings are noted below:

- Utilising a risk-based decision-making process focused on minimising risk so far as is reasonably practicable (SFAIRP);
- Consistency in determining public level crossing treatments across the projects of the Inland Rail Programme;
- Consistent methodology used to determine whether the cost of potential treatment is grossly disproportionate to the level of risk to safety and the projected benefits; and
- Ensuring the feasibility of the Inland Rail Programme by proposing cost-effective solutions.

An overview of the process in assessing public level crossings and developing treatments is outlined in the following sections.

In summary all public level crossings within the A2I scope either:

- Have active controls (Flashing lights and Boom Barriers) which is the highest form of level crossing control under the Australian Standard
- Will be closed as part of the project

3.1 Identification of all public level crossings within the project area

An important objective of public level crossing investigations was the clear and accurate identification of all level crossings within the project area and getting agreement on who the road manager is. The development of an initial level crossing list encompassed a review of existing level crossing datasets including the Australian Level Crossing Assessment Model (ALCAM) database, ARTC's asset management database and any relevant property records.

The list of level crossings was then provided to the relevant road manager for review to ensure that all level crossings and associated Road Managers were correctly identified, and the data was updated to reflect any agreed changes. The road managers for all public crossings are documented in Table 2. This is also documented in the Council Development Agreements.

4 PUBLIC LEVEL CROSSING ASSESSMENT

4.1 Assessment of public level crossings for closure

In New South Wales, formal closure of a level crossing needs to be undertaken in accordance with the requirements of the Transport Administration Act 1998 and requires Ministerial approval. Closure of legal level crossings within A2I project will only be actioned following confirmation from the road manager (for public level crossings) of no objection to closure.

Initial consideration was given to the elimination of level crossing risks by assessing all level crossings for closure. This is in line with the Transport for New South Wales (TfNSW) Level Crossing Closures Policy, which notes that:

> "in order to manage the risks to safety associated with road and rail interfaces, the closure of public and private level crossings in NSW is to be pursued, where it is practical and cost effective to do so"

Each was reviewed considering traffic volumes and alternative routes, along with land use, property ownership and any special user groups which may use the level crossing.

Crossings that could potentially be closed were identified where:

- Traffic volumes are (relatively) low;
- Alternative legal access is available or reasonably achievable; and
- The imposition on road users is not considered unreasonable, considering Rail Industry Safety and Standards Board (RISSB) level crossing consolidation guideline.

The assessment is summarised in Section 5.

4.2 Criteria for automatic grade separation

ARTC's policy as per Appendix L of the Submission Report is that rail-road interfaces will be automatically grade separated in the following instances:

- Rail-road crossings with four rail tracks (current)
- Rail-road crossings of freeways and highways of four or more lanes (current and committed plans).
- Where grade separation is the logical option for engineering or topographical reasons.

LX606 did not met the above criteria.

All public level crossings which do not meet the automatic grade separation criteria are to be assessed using the Level Crossing Risk Tool, in order to determine the appropriate crossing treatment, which may still be that the crossing be grade separated. Further detail on the risk tool is included below.

4.3 Level crossing risk tool

Where closure is not feasible, a methodology was developed to identify risk treatments to be implemented at each individual level crossing. This methodology was formalised in the level crossing risk tool which identified risk treatments and assisted Inland Rail to demonstrate that risks to safety would be managed So Far As Is Reasonably Practicable (SFAIRP) for both brownfield and greenfield interfaces.

In accordance with the Office of the National Rail Safety Regulator's (ONRSR's) recommendation on the use of quantitative risk assessment techniques, a decision was made to develop a tool which moved away from a "warrant" approach (e.g. decisions around control types based on basic metrics such as road type or traffic volumes) to a cost benefit analysis (CBA) approach for safety risk management. The approach utilises ALCAM as one of the main inputs into the decision process for the recommended level of control at Inland Rail level crossings.

The Australian Transport Council in May 2003 agreed to adopt ALCAM as the only comprehensive level crossing assessment model in Australia. ALCAM is an assessment tool used to identify key potential risks at level crossings and assess the overall effects of proposed treatments.

Consideration of factors other than ALCAM that may influence the recommended level of control were also considered, where relevant on a case-by-case basis, including:

- Collision and near-collision history;
- Engineering experience (both rail and road);
- Traffic and transport impacts; and
- Local knowledge of driver and pedestrian behaviour.

Level crossing treatment (control) options which may be considered as part of the process included:

- Upgrade of RX-2 passive (stop sign) level crossings to RX-5 active (flashing lights and boom barrier) control;
- Upgrade of existing RX-5 flashing light-controlled level crossings to include boom barriers;
- Retain existing RX-2 passive controls and renew the level crossing infrastructure, including signage and road markings, to ensure that the crossing complies with the Australian Standard;
- Grade separation; and
- Other treatments identified based on-site specific risks.

Transport for New South Wales (TfNSW) Level Crossing polices have been considered in the development of the proposed treatments, including:

- the Level Crossing Closures Policy; and
- the Construction of New Level Crossings Policy.
- Speed Limit on Approach to Active Level crossings Policy.

In order to be consistent with the TfNSW Level Crossing Improvement Program (LCIP), Inland Rail have also adopted the position that all upgrades to active controls (RX-5) will include boom gate barriers in addition to the flashing lights and bells.

4.4 Cost benefit analysis (CBA)

Part of the test as to whether risks have been managed SFAIRP was to determine whether the cost of the additional control was grossly disproportionate to the benefit gained via a CBA. From a financial perspective, to do the CBA, three key inputs were required:

- The avoided cost if an additional risk control is implemented – ALCAM provided a quantitative measure of risk reduction generated by changing the controls at the level crossing. Risk reduction (benefits) could be calculated by comparing two risk scores for two scenarios – for example one proposal with stop signs and one with flashing lights and boom barriers. ALCAM is focused on safety risks and encompasses the costs of fatalities and injuries resulting from a road rail collision.
- The cost of implementing the additional risk control – This was a combination of the capital cost of the additional control and the annual maintenance and repair cost over the life of the additional control
- What would be considered grossly disproportionate – From a legal perspective the ONRSR Meaning of Duty to Ensure Safety So Far As Is Reasonably Practicable Guideline provided guidance on what would be considered grossly disproportionate through considering a Grossly Disproportionate Factor (GDF). The guideline suggested that the GDF may be dependent on the likelihood and consequence with low risks having a factor of 2 and high risk having a factor of 10.

All public level crossings within the A2I scope where closure is not being progressed will have active controls (with flashing lights and boom barriers). This is the highest form of level crossing control under the Australian Standard.

4.5 The use of ALCAM assessments in the determination of level crossing treatments

ALCAM assessments have been undertaken for public road level crossings in their existing configuration, thus providing a baseline risk score. The “proposal” functionality in the ALCAM system was used to model the ALCAM risk score assuming the project proceeds. This incorporates forecast changes to train speeds, volumes and train lengths. For the A2I project, this assessment assumed the maximum operational train speed and the forecasted road and train volumes. This aligns with the EIS timeframes.

Updated road traffic counts, including a breakdown between light and heavy vehicles, have also been collected for all public roads and included in this analysis. In parallel, Inland Rail reviewed the ONRSR incident data to determine road rail collisions at the respective level crossings.

The next level of control was applied at level crossings assessed as being non-compliant for the existing control. For example, where sufficient sighting distance for a stop sign crossing could not be achieved as a result of increased train speeds, as per Australian Standard 1742.7-2016 (Manual of uniform traffic control devices Part 7: Railway crossings) the minimum control would be flashing lights and boom barriers. Even for level crossings compliant for the current control, the next level of control was modelled in ALCAM and a cost-benefit/grossly disproportionate analysis undertaken. Additional levels of control were modelled and a cost-benefit/gross disproportionate analysis carried out for each until the risk factor was reduced and a cost-effective level of crossing protection established.

4.6 Preliminary design

Preliminary design was first undertaken to confirm that a level crossing with the proposed control, compliant with the relevant standards, could be constructed onsite. This design incorporated the appropriate road design standards as directed by the relevant road infrastructure manager.

The design was completed such that all level crossings remaining as part of the final works will be upgraded/constructed to comply with AS/RISSB 7658:2012 “Railway Infrastructure – Railway Level Crossings”, AS1742.7 (2016) “Manual of Uniform Traffic Control Devices Railway Crossings” and other road authority standards, and to address SFAIRP any safety deficiencies identified through the design and risk assessment process.

Site specific level crossing treatments were then reviewed with the respective road infrastructure managers as the project progressed through detailed design.

4.7 Detailed Design

The Preliminary design of LX606 was initially progressed through SDR, PDR, DDR and IFC, within the Junee to Illabo design package J7. The design was subsequently optimised to achieve the required double-stack clearances while retaining the existing Down Main alignment, level crossing warning equipment and road configuration. This new DDR design was submitted under Package JF

4.8 Interface agreements

In accordance with National and State Rail Safety Law requirements, all current and proposed public road crossings will be subject to an Interface Agreement.

The Rail Road Interface Agreement within Junee Shire Council Area has been signed by all parties. ARTC have advised that as project works are nearing completion, ARTC as the RIM will review the RSNL Interface Agreement and update the document where required in consultation with the relevant road manager(s).

5 LEVEL CROSSING CLOSURE SUMMARY

TABLE 4: LEVEL CROSSING CLOSURE SUMMARY TABLE

LX	Crossing name and location	Road Manager	Proposed closure	Reasoning	Discussed with Road Manager	Conclusion
LX606	Waterworks Road, Marinna	Junee Shire Council	No	Closure of Waterworks Road not feasible as the road provides essential connectivity for local residents and the broader transport network	N/A	Closure not proposed

6 ASSESSMENT OF THE ROAD RISKS

An assessment of the road risks, consistent with the guidelines Railway Crossing Safety Series 2011 (NSW Roads and Traffic Authority, 2011) was undertaken. Key documents evidencing the risk assessment process have been listed Appendix D.

Safety in Design (SiD) process for the level crossing design was undertaken in accordance with the following:

- A SiD workshop was convened with relevant stakeholders post 70% design, ensuring quorum requirements were met to achieve adequate representation from all relevant design disciplines, delivery teams, human factors, operations and maintenance representatives, and third parties. The workshop reviewed the level crossing design and confirmed the design objectives.
- Hazards for the level crossing were systematically identified SFAIRP.
- For each identified hazard, the causes and consequences were analysed.
- Existing controls were reviewed, and their effectiveness was evaluated by determining the associated likelihood, consequence, and resulting risk level in accordance with the approved ARTC risk matrix.
- Additional control measures were proposed to further reduce the likelihood, consequence, or overall risk level, applying the hierarchy of controls.

Construction-related risks and controls within the scope of works were transferred to the construction team via the ADC Transfer Form. This form was endorsed by the Construction Manager and Safety Manager, and the risks were recorded in the Construction Risk Register for management through the Construction Risk Assessment Workshop (CRAW) process.

O&M-related risks associated with the level crossing design required formal endorsement of residual risks by the designated risk owner prior to the Issued for Construction (IFC) stage. For risks applicable to ARTC, this endorsement is obtained through a Joint Operational Safety Review (JOSR), conducted following the Detailed Design review and prior to IFC. Minutes from the JOSR are distributed to the attendees. For risks applicable to Council, this endorsement is obtained within the Post 70% SiD or written acknowledge following the submission of the hazard log. The accepted controls are evidenced in the Project Hazard Log (PHL) appended to the Design Report at each stage of design which is provided to the Stakeholders.

A Road Safety Audit was undertaken on the 100% Detailed Design. The audit is carried out for the sole purpose of identifying any hazardous features of the design, that may lead to future incidents for road users. The identified risks to road safety are documented in the report and presented for consideration by the design team for appropriate remedial actions.

Noting the optimised scope, IRPLs assessment of the of the optimised design confirms it does not introduce any new safety risks or made worse the risk profile for the Waterworks Rd level crossing. Overall, the proposed optimised scope does not make a material impact to the existing risk profile. The level crossing has been adequately controlled with flashing lights and boom barriers which represent the highest-level crossing control under the Australian Standard. This assessment is further supported by the fact that there have been no recorded incidents (Collisions or near hits) at this level crossing based on the incident data in National Level Crossing Portal (NXLP).

Refer to Appendix D for the list of documents that evidence the activities described above.

APPENDIX A

Consultation with Key Stakeholders

TABLE 5: CONSULTATION WITH KEY STAKEHOLDERS

Date	Forum	Stakeholder	Location	LX	Design Stage	Design Discussion	Design Response	Status
-	PIR Review	TfNSW	J2I	LX606	N/A	Level crossing interface agreements – TfNSW stated that under Rail Safety National Law (RSNL), "rail operations" includes design, construction, and modification of railways. As such, TfNSW recommended that Safety Interface Agreements are required to be established as part of the proposal development to inform design and construction, and TT23 should be amended accordingly.	PIR-RtS updated to reflect TfNSW comment as follows: *TT23 - In accordance with national and state rail safety law requirements, public road crossings would be subject to an Interface Agreement with the relevant road manager in order to identify and minimise safety risks as far as practicable during operations.*	Closed
-	PIR Review	TfNSW	J2I	LX606	N/A	Level crossing operational impact - TfNSW stated that the operational impact of the proposal has not been considered across the entire alignment and that all road-rail interfaces along the alignment should be included within the proposal scope.	The Critical State Significant Infrastructure (CSSI) for the A2I project as described in Schedule 1 of the planning approval document includes ancillary works/adjustments to nine level crossings only.	Closed
19-Jul-24	Email	TfNSW	J2I	LX606	PDR	Inland Rail emailed PDR design to TfNSW. The purpose of this submission was to enable TfNSW to confirm if this discrete project site requires Section 138 approval in accordance with the Roads Act, a 'Minor WAD' or a WAD.	It was determined by TfNSW that a Minor WAD would not be required, however TfNSW advised that approval under Section 138 of the Roads Act 1993 would be required from Council with concurrence from TfNSW for signage on State Classified Road (correspondence dated 18/09/2024).	Closed
16-Mar-21	Council Meeting	Junee Shire Council	J2I	LX606	N/A	Junee Shire Council noted that at the Council meeting held 16 March 2021, Councillors passed a resolution advocating that all public rail crossings in the Junee Shire be activated.	All public level crossings which are within the approved scope of the A2I project will either be closed or have active controls.	Closed

						Letter was received from Council 13 April 2021 for advocating all public level crossing in the Shire to be activated.		
13-Dec-23	SDR Design Review	Junee Shire Council	J2I	LX606	J7 SDR	The pavement length on Waterworks Road should extend to the Olympic Highway to ensure vehicles can safely stop before the level crossing, particularly heavy vehicles. Highway given trucks will be stopping. The same issue goes for the change of treatment to giveways on Waterworks Road.	Olympic Highway intersection design is outside Martinus scope.	Closed
13-Dec-23	SDR Design Review	Junee Shire Council	J2I	LX606	J7 SDR	JSC was consulted on the SDR LX606 design prior to the optimised solution	The STRAIL rubber panels are a Type-Approved product by ARTC. This means that the product has been put forward, sponsored, tested and assessed by ARTC as meeting the requirements for the environment. The Type Approval documentation, and the supplier documentation can be provided, and indicates that the product is approved for use up to 110kph provided it's installed as per the manufacturer's instructions. We have notes on our design drawings also specifically stating that this product shall be installed as per the manufacturer's instructions. The load capacity and design life is as per the product spec.	Closed
13-Dec-23	SDR Design Review	Junee Shire Council	J2I	LX606	J7 SDR	Inland rail is changing the line marking on the intersection on the eastern side of the level crossing, to remove the existing control point restriction and eliminate the potential for short stacking. JSC accepts this neccesary safety improvement, however, cannot accept the risk and associated increase noise and dust created by vehicles	The updated drawings (Rev 0.1) show a change in priorities to provide stopping on Waterworks road, as per the 30% (SDR) design upon which this orginal comment was made. There is no requirement in the MIRDA to provide asphalt surface for multiple queued	Open

						stopping on an unsealed pavement. The asphalt layers have at least 50m of queue length. ST 10/2/26 - Still needs Transport Forum to approve design. ST will support presentation with PT13 comment response 21	vehicles and so no provision for this in the Rev 0.1 design. 10/2/26 - Refer Rev 0.1 waterworks road design and presentation to JSC 4/2/26. Pavement is proposed 35m each way of stop line on Waterworks Road. 13/9/26 – the comment remains open as the traffic forum rejected the design. Refer DDR JF package for new design that no longer impacts JSC assets or Waterworks Road intersection.	
13-Dec-23	SDR Design Review	ARTC	J2I	LX606	J7 SDR	SDR issued for ARTC for review. Include details of any works to the road approaches at LX 603, LX 604 ad LX 606. Need more information on road geometry (X sections, pavement, longitudinal profiles, tie in and joint details)	Further details were provided in the next stages of design	Closed
13-Dec-23	SDR Design Review	TfNSW	J2I	LX606	J7 SDR	TfNSW reviewed and provided comments on the design. Refer comment sheet 5-0052-210-PEN-J7-CS-0001-TW	Comments have been addressed and closed	Closed
9-July-24	PDR Design Review	Junee Shire Council	J2I	LX606	J7 PDR	As the design has been developed, the turning lane currently used by heavy vehicles, to exit south onto the Olympic Highway has been removed and a solid line installed on the exit. This access route doesn't need to be upgraded by it should remain open and not as a barrier edge line. If a barrier edge line and curve is installed, it will encourage	Martinus will remove the edge line marking and reduced batter to allow access to unformal slip lane	Closed

						unsafe movements and head-ons where heavy vehicles approach the intersection.		
9-July-24	PDR Design Review	Junee Shire Council	J2I	LX606	J7 PDR	No safe turning paths have been achieved/assessed/demonstrated for the currently gazetted 25m B-double vehicles travelling from Waterworks to the Olympic Highway when using the curves or slip lane exiting onto the Olympic Highway. These vehicles should be assessed as the design vehicle.	Martinus will remove the edge line marking and reduced batter to allow access to unformal sliplane	Closed
9-July-24	PDR Design Review	Junee Shire Council	J2I	LX606	J7 PDR	The current design vehicle is a single unit 12.5m truck. This does not at all reflect the current usage of the route and the current gazettal for 25m B-doubles.	The level crossing design will be updated to reflect a 19m semi-trailer design vehicle, as per the Reference Design. This is greater than the current design 18.971m present on eastern side (Waterwork Rd) approach. The level crossing design will be updated to satisfy Inland Rail train clearance scope to ensure there is sufficient stacking distance for a 19m semi-trailer. This will require an adjustment to the existing stopping priorities, placing stop-bars on Waterworks Rd. This will - inturn - require a stepped speed reduction on WaterWorks Rd from 100kph to 50kph to ensure safe stopping adjacent to the LX. 13/9/26 – the comment remains open as the traffic forum rejected the design. Refer DDR JF package for new design that no longer impacts JSC assets or Waterworks Road intersection.	Open

9-July-24	PDR Design Review	Junee Shire Council	J2I	LX606	J7 PDR	The current design vehicle is a single unit 12.5m truck. This does not at all reflect the currently gazetted vehicles, and ignores a substantial amount of design checks. The critical concern for Council, if this design is adopted, is the stacking restrictions with the proposed intersection treatment between the Waterworks Road and the rail crossing. The route must stay gazetted for 25m B-double vehicles and this design limits the ability for them to stack. An alternative intersection treatment, stopping on Waterworks Road would allow b-doubles to have right of way to enter and exit the rail crossing. Provided they could exit at the slip lane on the Olympic Highway side, as they do currently, the full gazettal can be maintained. Council does not want minor design decisions to impact current gazettals.	The level crossing design will be updated to reflect a 19m semi-trailer design vehicle, as per the Reference Design. This is greater than the current design 18.971m present on eastern side (Waterwork Rd) approach. The level crossing design will be updated to satisfy Inland Rail train clearance scope to ensure there is sufficient stacking distance for a 19m semi-trailer. This will require an adjustment to the existing stopping priorities, placing stop-bars on Waterworks Rd as well as additional signage (W3-1 Stop Ahead and repeater W3-1) in accordance with AS1742.2. Regarding stepped speeds, it has not been proposed for the intersection as sufficient signage placed on Waterworks Road on both approaches to the intersection as well as sufficient SSD to enable vehicles to stop at the intersection as required. Its requested that JSC remove/trim trees on approach to intersection to improve sight lines to the intersection and to see oncoming trains. Once the trees are removed/trimmed, vehicles will be able to have a better sight distance to level crossing on approach and slow down and stop at the intersection. According to TS 03631 TfNSW Speed Zoning Standards Table 10.1.2, speed zoning will need to start 5.5km away from the intersection and potentially require length of speed zone change road to	Closed

							be upgraded to sealed pavement (5.5km length). This addiitonal pavement works is outside CIZ and scope of project. There are no proposed works to Olympic Highway to address existing road network deficiencies.	
9-July-24	PDR Design Review	ARTC	J2I	LX606	J7 PDR	PDR issued for ARTC for review. Unclear what the SSD checks are trying to show in the document 5-0052-210-PEN-J7-RP- 0001_B. In the design report 5-0052-210-PEN-J7-RP-0001_B_Part2 design parameters for minor roads/side roads have been considered for SSD calculations. Hence, the SSD needs to be checked on the minor roads. The sight distances (SSD) are instead being assessed at the major road intersection. Are these drawings trying to show SISD instead? The whole sight distance section in the main report and associated drawings needs to be checked and revised.	The Stopping Sight Distance SSD (AGRD Part 3) section has been updated to include SSD values for Waterworks Road (major roads). Values in Table 4-29 have also been updated to suit Waterworks Road (major road) speed.	Closed
9-July-24	PDR Design Review	ARTC	J2I	LX606	J7 PDR	5-0052-210-PEN-J7-RP-0001_B_Part5.1.3 shows 113m MGSD, not 83m as discussed in 4.3.9.3.4 in 5-0052-210-PEN-J7-RP-0001_B_Part2. MGSD should consider speed on the major road (approaching vehicle) not the design speed on the minor/side road. Can MR confirm road speeds and the corresponding MGSD. Similarly, MGSD should also consider the observation angle limits according	MGSD speeds updated to calculate based on Waterworks Road speed (major road) Additional commentary has been added regarding observation angle and compliance with AGRD Part 4A Section 3.2.3. Observation angle shown on Sight Distance sketches.	Closed

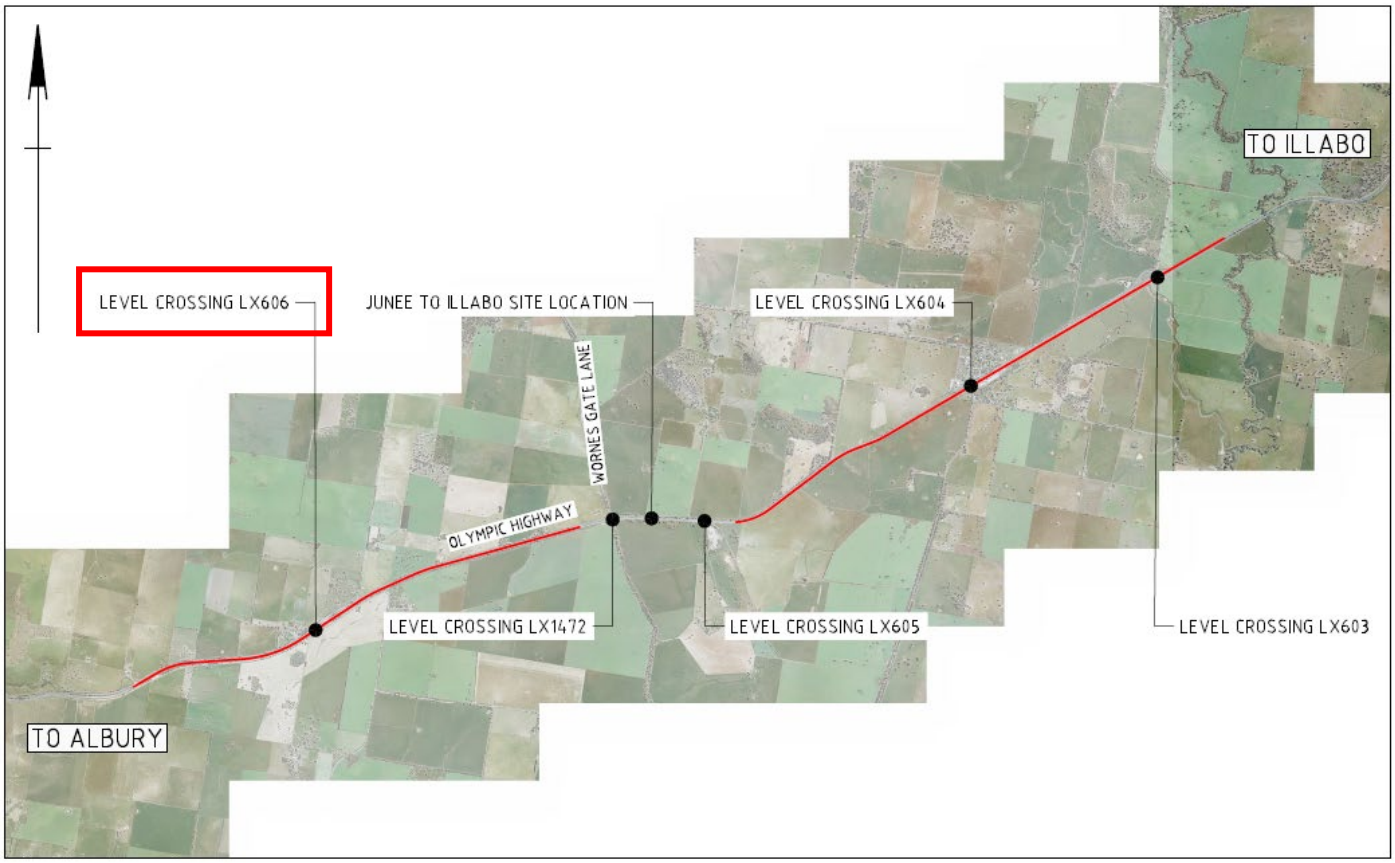
						to AGRD 4 A s 3.2.3 guidance. Sight diagrams (where included) should show these observation angles.		
22-Nov-24	DDR Design Review	TfNSW	J2I	LX606	J7 DDR	TfNSW reviewed and provided comments on the design. Refer comment sheet 5-0052-210-PEN-J7-CS-0001-TW	Comments have been addressed and closed	Closed
22-Nov-24	DDR Design Review	ARTC	J2I	LX606	J7 DDR	DDR issued for ARTC for review.	No level crossing treatment comments were received. Refer Comment sheet 5-0052-210-PEN-J7-CS-0001	Closed
26-Feb-25	SiD	Junee Shire Council	J2I	LX606	J7 DDR	A Safety in Design Workshop was held with JSC on LX604 and LX606.	Refer 5-0052-210-PAS-J0-MM-0001	Closed
21 July 2026	Meeting	Junee Shire Council	J2I	LX606	JF	An A2I level crossing briefing was held with JSC	JSC briefed on the proposal to optimise the design at LX606	Closed
18-Sep-26	RSA	Junee Shire Council	J2I	LX606	JF	RSA has been issued to JSC. Refer 5-0052-210-PEN-JF-RP-0001	Comments have been received and the RSA was addressed at the SiD	Closed
18-Sep-26	RSA	TfNSW	J2I	LX606	JF	RSA has been issued to TfNSW. Refer 5-0052-210-PEN-JF-RP-0001	TfNSW letter received 5-0001-210-PTP-J5-LT-0003_0 TfNSW has reviewed the DDR design drawings and RSA and notes the reduced scope of works. TfNSW understands that the scope is now limited to changes to the track alignment (rail centre line) which will not raise the track vertical alignment, and no changes will be made to signage in the Olympic Highway corridor. On this basis, TfNSW makes no further comment.	Closed

11-Sep-26	DDR Design Review	ARTC	J2I	LX606	JF DDR	DDR Design review issued for review	Comments have been received and are being incorporated into IFC design where feasible.	Closed
17-Sept-2026	SID and Waiver Risk Workshop	ARTC	J2I	LX606	JF DDR	A Safety in Design workshop was held with ARTC for LX606.	Minutes 5-0052-210-PAS-JF-MM-0001	Closed
18-Sep-26	DDR Design Review	Junee Shire Council	J2I	LX606	JF DDR	DDR Design review issued for review	Comments received on 7/10/2026. Comment close out responses provided to JSC.	Closed
18-Sep-26	DDR Design Review	TfNSW	J2I	LX606	JF DDR	DDR Design review issued for review	TfNSW letter received 5-0001-210-PTP-J5-LT-0003_0. Refer Appendix F	Closed
23-Sep-26	Meeting	Junee Shire Council	J2I	LX606	JF DDR	Meeting held with JSC to discuss optimised design for LX606	JSC confirmed receipt of DDR Design package for LX606. JSC progressing design review.	Closed
30-Sep-26	SiD	Junee Shire Council	J2I	LX606	JF DDR	A Safety in Design workshop was held with JSC for LX606.	Minutes 5-0052-210-PAS-JF-MM-0002. Actions from the meeting are closed. 1. IRPL provided context on the expected IR operational changes 2. JSC to confirm that based on the reduced scope, traffic forum approval is not required for the design	Closed
30-Sep-26	DDR and RSA	TNSW	J2I	L606	JF DDR	Letter	TfNSW letter received 5-0001-210-PTP-J5-LT-0003_0. Refer Appendix F TfNSW acknowledged the reduced scope and note they have no further comment on the design.	Closed

01-Oct-26	LCTR	JSC	J2I	L606	JF DDR	Report	LCTR provided to JSC as per the consultation requirements of COA E144. No comments received to date. Emailed received from JSC stating they *'no further comment on the optimised design and reduced scope for LX606 Waterworks Road level crossing presented to us*.'	Closed
02-Oct-26	LCTR	TfNSW	J2I	L606	JF DDR	Report	LCTR provided to TfNSW as per the consultation requirements of COA E144. No comments received to date. Emailed received from JSC stating they *'no further comment on the optimised design and reduced scope for LX606 Waterworks Road level crossing presented to us*.'	Closed

APPENDIX B

Level Crossing Treatment Summary



LOCATION PLAN
NTS

TABLE 6: LEVEL CROSSING SCOPE AND LOCATION

Crossing Number	Crossing Name	Existing Control	Proposed Control	Road Manager	Scope	Crossing Location	Existing Chainage	GIS Latitude	GIS Longitude
LX606	Waterworks Road	Active – Flashing lights and Boom Barriers	Active – Flashing lights and boom Barriers	JSC	Minor Up Main Line track slew through the level crossing to accommodate double stacked trains. Asphalt reinstatement up to 1m from the outer face of rail (ARTC maintenance boundary) associated with the minor Up Main track slew	Marinna	478.136	34.845065	147.646549

TABLE 7: LEVEL CROSSING TREATMENT SUMMARY

Crossing Number	Road Name	Assessed for Closure	AADT (Baseline)	%HV	Assumed Growth Rate %	AADT (2040)	ALCAM Assessments Undertaken	Non ALCAM factors considered	Incident Data (ONRSR) 01/07/2014 to 11/09/2024	LX is compliant - existing control	CBA undertaken	Proposed control complies with AS1742.7	Required S3 greater than 750m
LX 606	Waterworks Road	Y	37	20.5	0	37	Y	Y	0 reported near misses or collisions between and train and a road vehicle	Active Controls	Y	Y	NA (Active controls)

APPENDIX C

Short Stacking Review

TABLE 8: SHORT STACKING REVIEW

LX	Crossing name and location	Road Manager	Design Vehicle	Short stacking issue	Mitigation Measures
LX606	Waterworks Road	JSC	26m B-Double	* N/A	COA146d requires consideration of measures to avoid potential short-stacking at level crossings. The initial scope proposed slewing both the up and down tracks thus reducing the available stacking distance on the Waterworks approach. The optimised design maintains the down track alignment thus ensuring that the available stacking distance is not impacted. While the intersection with Waterworks Road is outside the scope of the proposed works and the project does not alter the existing stacking distance or intersection arrangement, IRPL recommends a W7-13-2N “Rail Crossing on Side Road – Keep Tracks Clear” sign to be installed on the Waterworks Road approach. The W7-13-2N sign is regularly used by road authorities to warn road users of a level crossing located close to an intersection and advises drivers to ensure sufficient space is available beyond the crossing before proceeding, thereby preventing vehicles from queuing on the rail tracks. JSC are supportive of including this supplementary control in the design.

** The Reference design noted that the existing layout of the level crossing had a short stacking deficiency on the southern side of the rail based on the 26m B-Double. It is noted the this is a low volume Road. The ALCAM assessment records an AADT of 37 vehicles, including 20.5% heavy vehicles, equivalent to approximately eight heavy-vehicle movements per day. These movements include all heavy-vehicle classes and are not exclusively 26m B-doubles.*

This assessment is further supported by the fact that there have been no recorded incidents (Collisions or near hits) at this level crossing based on the incident data in National Level Crossing Portal (NXLP).

This crossing is controlled by flashing lights and boom barriers which is the highest form of level crossing control in the Australian Standard.

APPENDIX D

Risk Assessment Evidence

Introduction

An assessment of the road risks, consistent with the guidelines Railway Crossing Safety Series 2011 (NSW Roads and Traffic Authority, 2011) was undertaken on the optimised LX606 (JF) design. Key documents evidencing the risk assessment process are listed below and have been provided to TFNSW and ARTC. These are the road and rail managers for the level crossings which are the subject of this report.

Design Packages

- 2100_J7 – Junee to Illabo (includes LX606)
- 2100_JF – LX606 design

Design Review - ARTC

- J2I SDR, PDR, DDR, IFC designs issued. Refer 5-0052-210-PEN-J7-CS-0001 for comment sheet.
- JF Design Report (5-0052-210-PEN-JF-RP-0001) – Appendix H, includes ARTC comments on the new optimised design

Design Review - Council

- J2I SDR, PDR, DDR, IFC designs issued. Refer 5-0052-210-PEN-J7-CS-0001_JC for comment sheet.
- 2100_JF – LX606 design issued 18th Sept 2026 for consultation. IRPL are waiting comments.

Design Review - TfNSW

- 2100_JF – LX606 design issued 18th Sept 2026 for consultation. A letter received 30th Sep 2026 stating TfNSW make no further comment.

Safety in Design

- JF Post 70% SID and Waiver risk workshop was conducted 17th Sep 2026 with ARTC (5-0052-210-PAS-JF-MM-0001)
- JF Post 70% SID was conducted 30th Sep 2026 with JSC (5-0052-210-PAS-JF-MM-0002)
    - The purpose of Safety in Design was to identify O&M and construction risks that arise or existing risk profiles that are changed as a result of the proposed design work. If there is no meaningful impact on an existing BAU risk as a result of the proposed works, then it is not applicable for those works.
    - The quorums at the 70% SiD workshops (17/09/26, 30/09/26) agreed that the existing risk of a road vehicle failing to stop in time and colliding with a passing train had no meaningful increase in risk.
- A2I LX606 Scope Optimisation Safety Memo 5-0000-210-PRK-JF-ME-0001
- Refer LX606 Design Report (5-0052-210-PEN-JF-RP-0001) for:
    - Appendix B1 and B2 for Technical and Safety VCRM in Appendix B1 and B2
    - Appendix C1, C2 and C3 for design hazard log, hazard mapping and master hazard log
    - Section 2.9 and Appendix Q for human factors considerations

Construction and O&M risk transfer

- ARTC JOSR for LX606 will be scheduled prior to IFC.
- Council endorsement for LX606 hazards will be not be required as there are no returned assets to JSC
- Refer Appendix M of the LX606 Design Report (5-0052-210-PEN-JF-RP-0001) for ADC Transfer Forms.

Road Safety Audit (RSA)

- Refer Road Safety Audit – LX606 5-0052-210-PEN-JF-RP-0001

APPENDIX E

Risk Assessment Summary

IR PHA ID	HAZARD	Causes	Consequence	EXISTING CONTROLS	RISK ASSESSMENT IDENTIFIED CONTROLS	POST RISK ASSESSMENT LIKELIHOOD	POST RISK ASSESSMENT CONSEQUENCE	POST RISK ASSESSMENT RISK
PHL_115	Road vehicle collides with construction worker or equipment	CA1. Lack of separation between road traffic and construction site at level crossings or adjacent to live road e.g. Olympic Highway; Wagga Footbridge site access via Station Street CA2. Albury Footbridge pier installation is within the ARTC car park [Albury Footbridge] CA3. Access to Cassidy Footbridge construction site is through Telstra depot with car park [Cassidy Footbridge]	CO1. Serious injuries - Moderate	EC1/C. SWMS for working near live traffic EC2/C. Exclusion zone to be set up prior to construction works EC3/C. Traffic Management Plan	C1. Road closure during construction works C2. Vehicle and pedestrian diversion routes to be provided during construction works	Unlikely	Moderate	MEDIUM: 11 (3D)
PHL_210	Temporary road closures for level crossing works (in possessions) impact local road and pedestrian movements	CA1. Locals not advised of temporary closures CA2. Sat nav systems still direct people over level crossings CA3. Road closure of LX606 leads vehicles to detour to roads with poor or abnormal sight distance and configuration [LX606]	CO1. Road Vehicle / Worker collision - Major Injury CO2. Delays to emergency services in local area	None identified. Refer to proposed future controls.	C1. Consultation to be undertaken as part of construction planning for each site and temporary works C2. Vehicle and pedestrian diversion routes to be provided during construction works C3. Construction to consider whether one lane closure is feasible as an alternative to road closure.	Unlikely	Major	MEDIUM: 15 (4D)
PHL_312	Trespasser accesses the rail corridor through level crossing and subsequently hit by the train during construction	CA1. Insufficient rail corridor fencing at level crossing during construction	CO1. Single fatality - Extreme	EC1/C. Site access management plan ~~EC2/O. RIW worker to follow ARTC Safeworking procedures for works within ARTC corridor~~ [Rejected. This control does not mitigate the risk of a trespasser accessing the rail corridor]	C1. Temporary fencing at the LX site during construction	Unlikely	Extreme	HIGH: 20 (5D)

	1. Injury or illness with no impairment (may or may not require treatment)	2. Injury or illness with short-term impairment	3. Injury or illness with moderate but recoverable impairment	4. Injury or illness with long term to permanent impairment	5. One or more fatalities
Safety					
Assets: Network Performance	1. Immaterial disruption to non-critical track section	2. Material disruption to non-critical track section or Immaterial disruption to critical track section	3. Material disruption to a critical track section recoverable in the short-term	4. Material disruption to critical track section not recoverable in the short term	5. Material disruption to critical track section not recoverable in the short term with significant long term impacts on customers
Assets: Organisational Capability	1. Manageable impact to internal operations, which may or may not require internal reallocation of existing resources	2. Missing short-term targets which may or may not require use of additional resources	3. Reduced ability to achieve business goals with some business impact	4. Material failure to achieve business goal(s) with significant business impact	5. Failure to achieve business goals with lasting impacts
Financial (Enterprise)	1. <$2M operating profit loss of enduring impact; or One off impact of less than $10M; or <$50M impact to balance sheet	2. $2M to $10M operating profit loss of enduring impact; or One off impact of $10M to $50M; or $50M to $250M impact to balance sheet	3. $10M to $50M operating profit loss of enduring impact; or One off impact of $50M to $250M; or $250M to $500M impact to balance sheet	4. $50M to $150M operating profit loss of enduring impact; or One off impact of $250M to $750M; or $500M to $1B impact to balance sheet	5. >$150M operating profit loss of enduring impact; or One off impact of >$750M; or >$1B impact to balance sheet
Environment	1. Minimal environmental impact	2. Limited and recoverable environmental impact	3. Significant and recoverable environmental impact	4. Permanent impact to area of less than high environmental significance	5. Permanent impact to area of high environmental significance
Regulatory	1. Expected to prompt regulatory interest	2. Increased oversight by regulator	3. Limited fine, official caution and / or direction to act	4. Formal regulatory action impacting on operating activities and / or material fine	5. Prosecution of the company and / or its office holders
Reputation	1. Short term loss of confidence from other than key stakeholders	2. Sustained loss of confidence from other than key stakeholders	3. Short-term loss of confidence from a key stakeholder	4. Sustained loss of confidence from a key stakeholder	5. Loss of Shareholder support
	Not significant	**Minor**	**Moderate**	**Major**	**Extreme**
	1	2	3	4	5
Likelihood					
A. Almost Certain Once per month (Is expected to occur in most circumstances)	**A**	**MEDIUM 1A**	**MEDIUM 2A**	**HIGH 3A**	**VERY HIGH 4A**	**VERY HIGH 5A**
B. Likely Between once a month and once a year (Will probably occur in most circumstances)	**B**	**LOW 1B**	**MEDIUM 2B**	**HIGH 3B**	**VERY HIGH 4B**	**VERY HIGH 5B**
C. Possible Between once a year and once in five years (Might occur at some time)	**C**	**LOW 1C**	**MEDIUM 2C**	**MEDIUM 3C**	**HIGH 4C**	**VERY HIGH 5C**
D. Unlikely Between once in 5 years and once in 20 years (Could occur at some time)	**D**	**LOW 1D**	**LOW 2D**	**MEDIUM 3D**	**MEDIUM 4D**	**HIGH 5D**
E. Rare Once in more than 20 years (May occur in exceptional circumstances)	**E**	**LOW 1E**	**LOW 2E**	**LOW 3E**	**MEDIUM 4E**	**MEDIUM 5E**

APPENDIX F

TfNSW Consultation

Transport for NSW

30 September 2026

TfNSW Reference: WST24/00003/177| SF2024/002449

Ms Cassandra Hodges
Senior Project Manager – Interfaces
Inland Rail Pty Ltd
290 Clarinda Street
PARKES NSW 2870

SSI-10055; Albury to Illabo Inland Rail Project; LX606 (Waterworks Road) – Detailed Design Review

Dear Ms. Hodges,

Transport for NSW (TfNSW) received Detailed Design Review (DDR) design drawings and Road Safety Audit (RSA) for LX606 on 18 September 2026 via Aconex (IR2140-TRANSMIT-006987). Additional information requested by TfNSW was provided on 25 September 2026 via email.

TfNSW has reviewed the DDR design drawings and RSA and notes the reduced scope of works. TfNSW understands that the scope is now limited to changes to the track alignment (rail centre line) which will not raise the track vertical alignment, and no changes will be made to signage in the Olympic Highway corridor.

On this basis, TfNSW makes no further comment.

Should you require further information in relation to this matter, please contact the undersigned via: development.inlandrail@transport.nsw.gov.au or on 0417 125 741.

Yours sincerely,

Howard Orr
Manager Development Services – Inland Rail
Transport Planning Branch
Planning, Integration and Passenger

APPENDIX G

JSC Consultation

From: Jeetendra Dahal <jeetendra.dahal@junee.nsw.gov.au>
Sent: Friday, 30 October 2026 2:51 PM
To: Daniel Johnston <DJohnston@ARTC.com.au>
Cc: Michael Jackson <michael.jackson@junee.nsw.gov.au>; Malcolm Clark <MClark@ARTC.com.au>; Kate Hardy <KHardy2@ARTC.com.au>; Gary Newbold <GNewbold@ARTC.com.au>
Subject: [EXT] Re: Inland Rail Albury to Illabo (A2I) project works at Waterworks Rd level crossing LX606 - JSC design endorsement or statement of no comment

Warning: This email was sent by a sender external to the organization. Please exercise caution and ensure that this email was sent by a trusted sender.

If you believe this email is suspicious, please report it with the "Report Phishing" icon in Outlook, or forward to suspiciousemails@artc.com.au.

Hi Daniel,

We have no further comments on the optimised design and reduced scope for LX606 Waterworks Road level crossing presented to us.

Regards
Jeetendra Dahal
Director Engineering Services
Junee Shire Council

A 29 Belmore Street, Junee NSW 2663
P 02 6924 8100 | **M** 0497 111 644
E jeetendra.dahal@junee.nsw.gov.au | **W** www.junee.nsw.gov.au