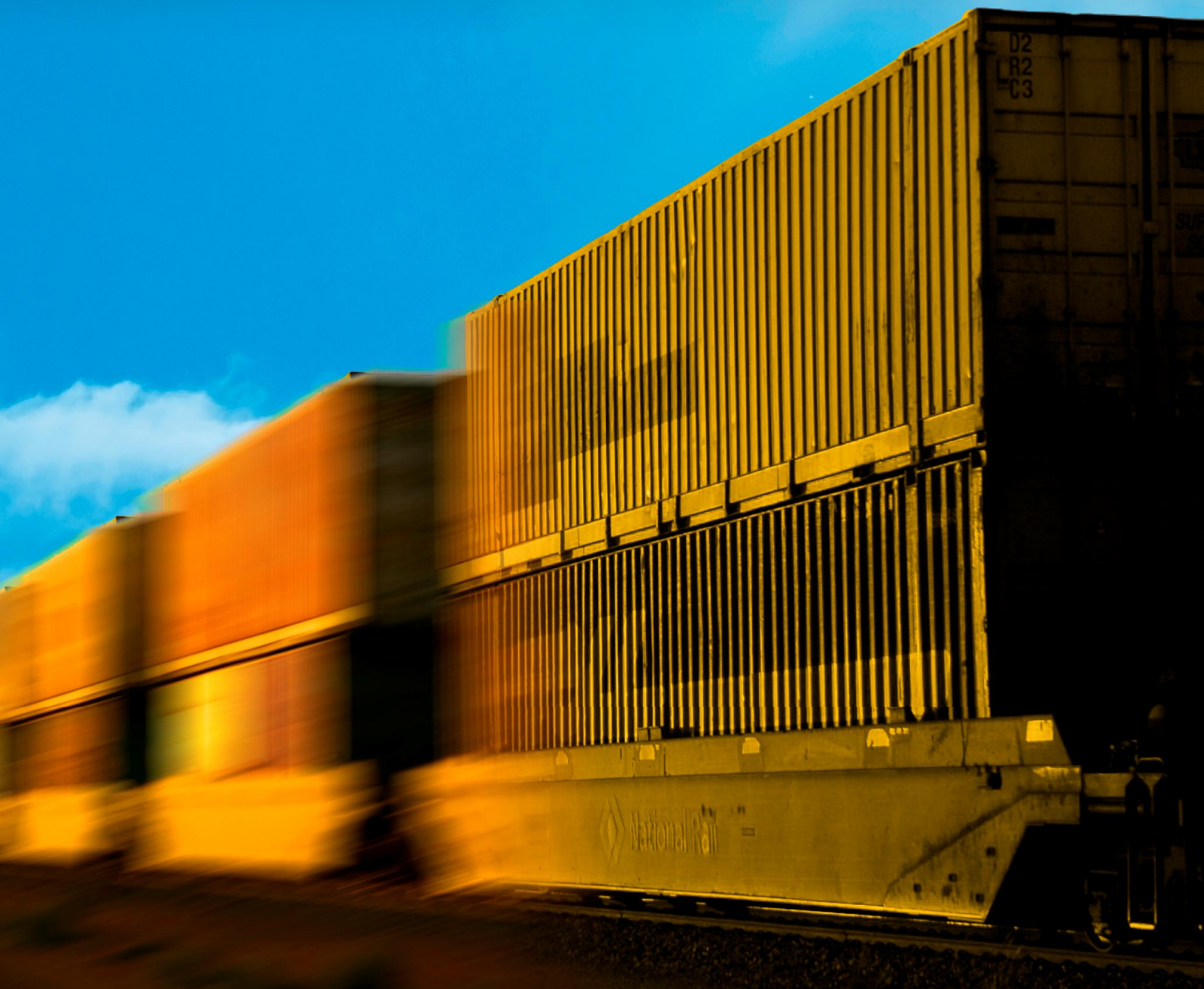




Technical and Approvals Consultancy  
Services: Parkes to Narromine  
Public Level Crossing Treatment Report

February 2019

3-0001-240-DCW-00-RP-0001



Prepared for

Australian Rail Track Corporation

Prepared by

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## Glossary

ALCAM	Australian Level Crossing Assessment Model
ARTC	Australian Rail Track Corporation
CBA	Cost Benefit Analysis
CSSI	Critical State Significant Infrastructure
GDF	Grossly Disproportionate Factor
IRDJV	Inland Rail Design Joint Venture – WSP MM legal entity
LGA	Local Government Area
LX	Level Crossing
NSC	Narromine Shire Council
ONRSR	Office of the National Rail Safety Regulator
P2N	Parkes to Narromine
PSC	Parkes Shire Council
RISSB	Rail Industry Safety and Standards Board
RMS	Roads and Maritime Services
SFAIRP	So Far As Is Reasonably Practical
TfNSW	Transport for New South Wales
WSP MM	WSP Australia   Mott MacDonald trading as IRDJV

# 1 Introduction

The Australian Government has undertaken to deliver the Melbourne to Brisbane Inland Rail (Inland Rail) project as a vital piece of infrastructure to complete the National Freight Network and to provide for a significant modal shift of freight from road to rail.

Australian Rail and Track Corporation (ARTC) submitted a State Significant Infrastructure (SSI) application to construct and operate the Parkes to Narromine (P2N) Inland Rail Project (the project) under Part 5, Division 5.2 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The project was approved by the Minister for Planning in June 2018 (SSI 7475)

In accordance with condition E44 of the Planning Approval for Critical State Significant infrastructure (CSSI 7475), this report details the treatment of public level crossings, and the consultation activities with Transport for NSW, RMS, Parkes and Narromine Shire Councils. This revision of the report focuses on the consultation with Transport for NSW, RMS, Parkes Shire Council (PSC) and will be updated and re-issued to include the treatment of public level crossings, and the consultation activities with Narromine Shire Council (NSC) once consultation with NSC is finalized.

The appendices attached to this report (A – F) reflect information specific to the entire alignment for the Parkes to Narromine Project. The information related to NSC will be updated and re-submitted once consultation with NSC is finalized.

## 1.1 Background

The Parkes to Narromine (P2N) section of Inland Rail is a brownfield upgrade of the existing rail corridor extending from 449.200km to 547.550km on the existing Goobang Junction to Narromine line within the Australian Rail Track Corporation (ARTC) network between Parkes and Narromine. The line will remain a single bi-directional track, running a variety of freight and grain. The P2N section also includes the North-West Connection; 5.3km of greenfield connection, including a fork at the Southern Junction.

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 methodology outlined in Appendix H “*Public Level Crossing Treatment Methodology*” of the Submissions Report.

In Appendix H it states that ARTC key principles guiding the decision-making process for determining treatments at public level crossings includes:

- Utilising a risk-based decision-making process focused on minimising risk so far as is reasonably practicable;
- Consistency in the determination of level crossing treatments across the projects of the Inland Rail programme;
- Consistent methodology used in the determination of whether the cost of the potential available 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.

## 1.2 Purpose of this report

In accordance with condition E44 of the Planning Approval, this report:

- Illustrates the location of all public level crossings which traverse the project;
- Lists and identifies 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;

- Where no works are proposed at a public crossing, the report provides reason for the decision; and
- Provide justification for any proposed closures.
- Includes 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).

## 2 Conditions of approval applicable to the Public Level Crossing Treatment Report

Condition Reference	Requirement	Reference	Compliance comment
A5	Where the terms of this approval require a document to be prepared or a review to be undertaken in consultation with identified parties, consultation must be carried out in accordance with the Communications Strategy required by Condition B1. Evidence of the consultation undertaken must be submitted to the Secretary with the document. The evidence must include:	-	ARTC has engaged with RMS, Transport NSW and the relevant councils in the development of the Public Level Crossing Treatment Report.
A5 (a)	documentation of the engagement with the party(ies) identified in the condition of approval that has occurred prior to submitting the document for approval;	Section 3	Outline of consultation provided in Section 3 of this document. Further information will be provided on request.
A5 (b)	log of the points of engagement or attempted engagement with the identified party(ies) and a summary of the issues raised by them;	Section 3	Addressed as part of Section 3.
A5 (c)	documentation of the follow-up with the identified party(ies) where feedback has not been provided to confirm that they have none or have failed to provide feedback after repeated requests;	-	Follow up as per P2N Communication Strategy.
A5 (d)	outline of the issues raised by the identified party(ies) and how they have been addressed; and	Section 3	Detailed by stakeholder.
A5 (e)	a description of the outstanding issues raised by the identified party(ies) and the reasons why they have not been addressed.	Section 3	Detailed by stakeholder.
E44	The Proponent must prepare a Public Level Crossing Treatment Report in consultation with Transport for NSW (including RMS) and relevant councils. The report must:	This document	



Condition Reference	Requirement	Reference	Compliance comment
E44 (a)	illustrate the location of all public level crossings which traverse the CSSI;	Appendix A	Appendix A illustrates the location of all level crossings on the CSSI.
E44 (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 A and Appendix B	Appendix A and Appendix B outline the level crossings to be upgraded and closed with the type of treatment planned.
E44 (c)	where no works are proposed at a public crossing, provide reason for the decision; and	-	ARTC is completing work at all public level crossings within the revised CSSI.
E44 (d)	provide justification for any proposed closures.	Section 5 and Appendix C	Detailed justification including in Section 5 and Appendix C and Appendix E.
E44	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 methodology outlined in Appendix H of the Submissions Report.	Section 3.5 and Appendix B	The methodology followed, consistent with Appendix H, is detailed in Section 3.5. The consideration for each level crossing is Appendix B.
E44	The report must also include an assessment of the road risks, consistent with the guideline <i>Railway Crossing Safety Series 2011, Plan: Establishing a Railway Crossing Safety Management Plan</i> (NSW Roads and Traffic Authority, 2011).	Appendix D	The Level Crossing Risk Assessment is included in Appendix D.
E44	The design of any level crossing on a public road must be endorsed by the relevant road authority	-	ARTC will receive written endorsement from the relevant road authority before works on the level crossing starts.
E46	The Public Level Crossing Treatment Report and Private Level Crossing Treatment Report must be submitted to the Secretary for information 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.	-	ARTC will submit the report "Public Level Crossing Treatment" to the Secretary at least one month before the closure or upgrade of a public level crossing.

## 3 Consultation

### 3.1 Overview

ARTC's values commit the organisation to active engagement with stakeholders and the community. For Inland Rail, effective communication and stakeholder engagement are fundamental to reducing risk, optimising the route alignment, and minimising social and environmental impacts. ARTC believes that identifying, engaging, and effectively communicating with stakeholders is critical to the successful delivery of Inland Rail.

ARTC has conducted extensive consultation with Parkes and Narromine Shire Councils, Roads and Maritime Service and Transport for NSW during the planning and detailed design of the Parkes to Narromine project public level crossings. Following the approval of the P2N Communication Strategy all consultation has been done in line with the strategy including the consultation on public level crossings. The below outlines key consultation activities conducted with each stakeholder during the design of the public level crossings.

ARTC will continue to consult and work closely with these key stakeholders during the construction and operation of P2N.

Correspondence related to the consultation activities is included in Appendix F. Other evidence as outlined below, is held by ARTC and can be provided on request to the Secretary or Environmental Representative.

## 3.2 Transport for New South Wales

There has been several workshops, presentations and meetings with Transport for New South Wales during the design process which are summarised below.

### 3.2.1 Key issues raised during consultation with Transport for New South Wales

Item	Issue raised	ARTC response	Outcome	Date closed
1	TfNSW noted that the policy adopted for active upgrades in NSW which are delivered under the State Level Crossing Improvement Program (LCIP) is that all active upgrades are to boom barriers and flashing lights rather than flashing lights only	ARTC has adopted this position for Inland Rail	All active upgrades on P2N include boom barriers and flashing lights	June 2018
2	TfNSW queried whether 4 quadrant booms were being considered for P2N	ARTC noted that 4 quadrant booms had not been type approved on the ARTC network and that there is no standard configuration in Australian for how these would be designed. None have been installed in NSW	No 4 quadrant booms have been included in the design on P2N	June 2018
3	TfNSW noted that there are two level crossing policies in NSW for consideration as part of the level crossing design process	ARTC noted that the TfNSW “crossing closure” and “New Level Crossing” policies would be reviewed as part of the design process	Noted	June 2018
4	Level Crossing sighting distances – TfNSW requested a list of locations on P2N with a required S3 sighting distance greater than 750m	ARTC confirmed that there are no passive crossings on P2N with a required S3 greater than 750m due to improvements to crossing approaches as part of the design	No passive level crossing has been designed on P2N with an S3 greater than 750m	November 2018
5	TfNSW asked ARTC to provide the standard used to assess sighting distances at private crossings	Relevant standard provided to TfNSW	Noted	November 2018

Item	Issue raised	ARTC response	Outcome	Date closed
6	TfNSW asked for an update on RMS roads on P2N	ARTC noted that a number of meetings had taken place to discuss the design solution at Henry Parkes Way with RMS (only RMS road on P2N)  RMS requested active advance warning be installed due to a curve on 1 approach which limits sighting distances.	Design includes boom barriers and the installation of Active advance warning lights at Henry Parkes Way  RMS feedback on the level crossing design has been incorporated as part of the detailed design process	November 2018
7	The determination of level crossing treatments takes into consideration future road and train columns. TfNSW sought clarification on the time horizons utilised	ARTC confirmed that updated traffic counts were undertaken at all level crossings and that the time horizon used in the modelling of future road and train volumes was 2040 to align with the EIS timeframes.	Noted	November 2018
8	TfNSW asked for an update on how ARTC were maximising crossing closures on P2N	ARTC provided an update on the public crossing closure process, noting that 1 public crossing would be closed on P2N  ARTC discussed their proposed approach to incentivise landowners to close private crossings which was supported by TfNSW which was supported by TfNSW	All closures will proceed in accordance with the requirements of the <i>Transport Administration Act 1998</i>  ARTC will progress the proposal in relation to private level crossing closures	November 2018

### 3.2.2 Key communication activities with Transport for New South Wales

Item	Method of communication	Date	Topic Addressed
1	Workshop	Feb 2017	General Programme overview – ARTC & TfNSW with DIRD as observers. Level Crossing section addressed the IR Road Rail Crossing Strategy, the grade separation policy, the level crossing risk tool and treatment options
2	Meeting	May 2017	Meeting with ARTC and TfNSW with DIRD as observers to discuss a number of NSW projects including I2S, NS2B and N2NS. This incorporated a level crossing update
3	Presentation	May 2017	Presentation to the TfNSW Level Crossing Policy and Program manager on the IR Road Rail Strategy, IR grade separation policy, Level Crossing Risk Tool, IR Road Rail Investigation & Design Procedure and ARTC also provided a breakdown of the proposed numbers of public and private road rail interfaces across NSW
4	Presentation	June 2018	Presented to the NSW Level Crossing Strategy Council which is chaired by TfNSW. Provided an overview of the IR Road Rail Strategy and the Public LX treatment approach, provided a breakdown of the number of proposed public road rail interfaces by project across NSW.
5	Meeting - Presentation	November 2018	Level Crossing strategy update to TfNSW. Presented a breakdown of proposed public road rail interfaces by project area and discussed the public level crossing treatment methodology, crossing closures, provided an update on the Parkes to Narromine project and the P2N public Level crossing treatment report.
6	Email	November	Draft Public Level Crossing Treatment Report sent to TfNSW
7	Email	December 2018	Public Level Crossing Treatment Report sent to TfNSW for Consultation – Appendix F.
8	Meeting	January 2019	Discuss TfNSW & RMS feedback on the Public Level Crossing Treatment Report

## 3.3 Roads and Maritime Services

Roads and Maritime Service is the agency responsible for building and maintaining state road infrastructure (Classified Roads) and managing the day-to-day compliance and safety for roads across the state. There is one level crossing on a Classified Road within the CSSI, that being on Henry Parkes Way. Henry Parkes Way is also known as Condobolin Road.

### 3.3.1 Key issues raised during consultation with Roads and Maritime Services

Item	Issue raised	ARTC response	Outcome	Date closed
1	<p>RMS requested that the RMS's Land Use Development Process be followed for the review and approval of the design.</p> <p>In accordance with RMS procedures, RMS prepared a draft Works Authorisation Deed (WAD) for the works. The WAD is a legally binding contract between RMS and ARTC, authorising ARTC to undertake roadworks on a State road.</p>	Agreed to follow RMS process.	<p>Technical, construction, commissioning and handover components of the WAD have been agreed by both ARTC and RMS. Formal acceptance to follow pending bank guarantee agreements.</p>	Pending
			<p>RMS has provided written feedback of the proposed Level Crossing design.</p>	Pending
2	<p>RMS requested that ARTC further consider the grade separation of the Henry Parkes Way LX, and provide justification as to why grade separation at this location had not been adopted.</p>	<p>ARTC provided details on ARTC's grade separation policy (identified in Appendix H of the Submissions Report and subsequently approved by the Minister for Planning).</p> <p>ARTC provided further details on the assessment and consideration of a grade separated crossing on Henry Parkes Way.</p>	<p>Existing at grade level crossing will be upgraded with boom barriers and active advance warning.</p>	October 2018
3	<p>RMS raised concern that the approach sighting to the Henry Parkes Way LX was insufficient and requested that active advanced warning lights be installed on each approach.</p>	ARTC agreed to the request.	<p>Active advance warning lights will be provided at Henry Pares Way.</p>	October 2018

Item	Issue raised	ARTC response	Outcome	Date closed
4	<p>ARTC proposed to reduce the speed limit through active level crossings from 100km/h to 80km/h.</p> <p>RMS noted that this treatment was inconsistent with the RMS speed zoning guidelines and would not be supported.</p>	ARTC did not progress this proposal.	The existing speed limits will remain unchanged.	March 2018
5	<p>RMS requested that an independent stage three detailed design Road Safety Audit (RSA) for the Henry Parkes Way works be included in the final design submission.</p>	ARTC agreed to the request.	The audit was provided to RMS as part of the final design submission.	December 2018

### 3.3.2 Key communication activities with Roads and Maritime Service

Item	Method of communication	Date	Topic Addressed
1	Skype meeting	Nov 2016	Public Level Crossings, incl Road Speeds and Road counts – Nov 2016
2	Meeting	Nov 2017	ARTC provided an overview of the detail design and IFC process including progressive design submissions. Discussed RMS approvals process
3	Meeting	19 Dec 2017	30% Design for P2N , Henry Parkes Way Design Approval requirements
4	Email / Letter	Jan 2018	Request for WAD, AAWD, ALCAM and LX Treatment assessment
5	Meeting	Feb 2018	LX Design Meeting – EIS Approvals, Speed Reductions, Henry Parkes Way AAWD
6	Meeting	19 Dec 2017	Temporary works approvals – 19 Dec 2017
7	Email	Aug – Oct 2017	Request for details of road design requirements, updated traffic counts, utilities information, flooding modelling to support detailed design process. Advised that emails should go to development.western@rms.nsw.gov.au - Aug – Oct 2017.
8	Letter	April / May 2018	Agreement to enter WAD with ARTC
9	Email	Sep – Oct 2018	Henry Parkes Way Design
10	Email	20 Dec 2018	IFC Design Submission
11	Email	Dec 2018	Public Level Crossing Report issued to RMS for consultation – Appendix F.
12	Meeting	January 2019	Discuss TfNSW & RMS feedback on the Public Level Crossing Treatment Report
13	Email	Feb 2019	RMS feedback on the design



## 3.4 Parkes Shire Council

Appendix B outlines the level crossings within the Parkes LGA. ARTC has worked closely with Parkes Shire Council during the planning of Inland Rail, including the designs of the level crossings.

### 3.4.1 Key issues raised during consultation with Parkes Shire Council

Item	Issue raised	ARTC response	Outcome	Date closed
1	Changing the works at Brolgan Road associated with the North-West Connection from grade separation to a new at-grade level crossing	Although shown as grade separated in the EIS, ARTC reassessed the need to provide a grade separated crossing at this location, in accordance with ARTC's grade separation policy and the Level Crossing Treatment Methodology (identified in Appendix H of the Submissions Report and subsequently approved by the Minister for Planning).  The review recommended that the design be changed from grade separated to an at-grade actively controlled level crossing.	Council accepted change to an active level crossing.	November 2017
2	ARTC proposed the closure of a level crossing at Dows Lane (also known as Rodda's Road).	Council agreed to support the closure of the low use crossing pending the outcome of public consultation.  ARTC submitted Consultation Outcomes Report to Parkes Shire Council for comment. Report in Appendix E.	Council provided ARTC with a letter of no objections and agreed to assist ARTC with the process of closing the level crossing.  ARTC are progressing the closure in accordance with the NSW Transport Administration Act.	February 2019
3	Council requested that the lane width for two lane crossings be increased from 3.1 to 3.25m.	Noted and changed design to suit	Incorporated into IFC design	August 2018

Item	Issue raised	ARTC response	Outcome	Date closed
4	Council requested that a minimum 6m wide area of seal be provided at minor level crossings to enable two vehicles to pass at the crossing.	ARTC noted that minor crossings are currently single lane, and that a like-for-like replacement, compliant with current standards, is proposed. A single lane is considered acceptable due to the low traffic volumes on the specific roads. The ARTC proposal is for a minimum 3.7m wide seal, with the design checked for capacity and road safety.  ARTC noted that while the seal was single lane, the formation (lane and shoulders) is 5.5m wide - enough to enable two vehicles to pass at the crossing.	Council accepted ARTC's approach. No changes to the single lane crossing designs.	August 2018
5	Council raised concerns regarding a proposal to provide 85km/h advisory speed signs on the new Brolgan Road level crossing	ARTC advised that, owing to property and engineering constraints, including the existing road geometry, to provide a design without any advisory signs through this crossing would not be possible without considerable expense and delay to the project. As the area near level crossing was part of the Logistic Hub Master Plan, Council agreed that the speed limit on road would likely reduce in the future. ARTC provided a compromise design which removed the need for the advisory speed signs, but kept the associated curve advisory signs, which Council have accepted in principle.	ARTC have redesign the level crossing alignment.	February 2019
6	Council raised concerns about the risk assessment for the proposed Brolgan Road level crossing rating of Low and IFC drawings for crossing not being completed.	Due to the late change in the design of Brolgan Rd level crossing, IFC drawings will be completed in March 2019. ARTC will work with Council on the risk assessment for Brolgan Rd level crossing.	Pending	February 2019

### 3.4.2 Key communication activities with Parkes Shire Council

Item	Method of communication	Date	Topic Addressed
1	Meeting and email	November 2016	Public LX engagement – including road traffic counts and road speeds.
2	Briefing, letter and copy of EIS provided	July to August 2017	EIS Public Exhibition.
3	Email	August to October 2017	Details of road design requirements, updated traffic counts, utilities information to support detailed design process requested from Council.
4	Meeting	November 2017	ARTC provided an overview of the detail design and IFC process including progressive design submissions.
5	Design submitted for comment and meeting	December 2017	30% detailed design including the new level crossings at Brolgan Road and Coopers Road submitted to Council. Discussions also included road closures, approvals process, specific requirements, short stacking, level crossing treatments and Temporary works and approvals. Proposed public level crossing treatments reviewed by council  Council objected to any proposal to close Coopers road due to future developments planned in this area
6	Email	February 2018	ARTC requested feedback on detailed design.
7	Meeting	February 2018	Potential closures
8	Meeting	April 2018	Resolution of design issues
9	Meeting	May 2018	Dows Lane Level Crossing Closure proposal discussed with Parkes Shire Council.
10	Design submitted for comment	May 2018	70% Detail Design provided to council for comment.
11	Email	July 2018	100% LX Memo provided to council in response to feedback on 70% design.
12	Meeting	April 2018	Council comments, design issues, closure of Dows Road, design at Cookies Parade
13	Email and meeting	August 2018	100% Detail Design issued to council for comment and endorsement.

14	Email	August 2018	Further comments received regarding Dow's Lane closure and design issues from Parkes Shire Council.
15	Email	November 2018	IFC LX Detail Design issued to council endorsement.
16	Meeting	December 2018	Meeting to discuss proposed closures and IFC design.
17	Email	December 2018	Public Level Crossing Report issued to Council for consultation – Appendix F.
18	Meeting	January 2019	Meeting to discuss further details of closures, IFC design and project update.
19	Email	January 2019	Comments received from Parkes Shire Council providing additional feedback on Brolgan Road level crossing IFC design.
20	Meeting	February 2019	Meeting to discuss design feedback.
21	Email with attached letter	February 2019	Acceptance of Public Level Crossing report and IFC drawings (except for Brolgan Rd level crossing design and risk assessment).

## 3.5 Narromine Shire Council

The level crossings in Narromine LGA are shown in Appendix A. ARTC are continuing to work closely with Narromine Shire Council to complete the designs of the Narromine Shire Council level crossings. This section will be updated to include details of the consultation once consultation with NSC is finalised.

## 4 Level Crossing Assessment

Level crossings have been assessed in accordance with the public level crossing treatment methodology detailed in Appendix H “*Public Level Crossing Treatment Methodology*” of the Submissions Report.

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

- Utilising a risk-based decision-making process focused on minimising risk, so far as is reasonably practicable;
- Consistency in the determination of public level crossing treatments across the projects of the Inland Rail Programme;
- Consistent methodology used in the determination of whether the cost of the potential available 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 followed in assessing public level crossings and developing treatments is outlined below.

The location and treatment of each of the public level crossings is illustrated in figures included in Appendix A. A summary of the assessment for each public level crossing is included in Appendix B.

### 4.1 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. 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 Australian Transport Council in May 2003 agreed to adopt the Australian Level Crossing Assessment Model (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.

Section 10 of ONRSR’s Policy on Level Crossings (June 2016) provides support for the use of ALCAM as follows: “*ONRSR accepts the use of ALCAM as a tool to help prioritise investment (when used in conjunction with other relevant factors, such as recent occurrence history). This tool has been endorsed by state and territory ministers.*”

The list of level crossings was then provided to the relevant road manager for review to ensure that all level crossings and the associated road infrastructure managers were correctly identified.

### 4.2 Level crossing closure review

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”,*

In New South Wales, formal closure of any level crossing needs to be undertaken in accordance with the requirements of the *Transport Administration Act 1998* and requires Ministerial approval.

ARTC advised that no legal crossing will be closed unless the road manager (public level crossings) has no objections to the closure.

An assessment of the potential traffic and other impacts of closing level crossings was undertaken.

The potential (and potential impacts of) closure of each of the existing level crossings was assessed. 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, taking into account Rail Industry Safety and Standards Board (RISSB) level crossing consolidation guideline.

Assessments also identified where closure may require construction of an alternative route or other works roadworks to facilitate removing an access across the railway.

Following review of the proposed closure locations by the relevant road managers the permanent closure of one public road level crossing on the Parkes to Narromine (P2N) section is being progressed by ARTC in accordance with the NSW Transport Administration Act 1988. Refer Section 5 for more details.

### 4.3 Criteria for Automatic Grades Separation

ARTC's policy as per Appendix H 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); and
- Where grade separation is the logical option for topographical reasons.

No crossings in the P2N section 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.

### 4.4 Level Crossing Risk Tool

Where closure is not feasible, a methodology was developed to identify what risk treatments should be implemented at each individual level crossing. This methodology was in the form of a formalised Level Crossing Risk Tool that identified risk treatments and assisted ARTC in being able to demonstrate that risks to safety would be managed So Far As Is Reasonably Practicable (SFAIRP) for both Brownfield and Greenfield interfaces. In line with Office of the National Rail Safety Regulator (ONRSR's) recommendation around 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.

Consideration of factors other than ALCAM that may influence the recommended level of control were also taken into account, 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 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 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 policies have been considered in the development of the proposed treatments, including the:

- Level Crossing Closures Policy; and
- Construction of New Level Crossing Policy.

To be consistent with the TfNSW Level Crossing Improvement Program (LCIP), ARTC 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.

## 4.5 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, 3 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.

## 4.6 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 what the ALCAM risk score would be assuming the project proceeds. This incorporates forecast changes to train speeds, volumes and train lengths. For the Parkes to Narromine project, this assessment assumed the maximum Inland Rail train speed of 115 km/h and the 2040 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, ARTC reviewed the ONRSR incident data to determine if there had been any road rail collisions at the respective level crossings.



If a level crossing was assessed as being non-compliant for the existing control, the next level of control was applied. For example, if based on the updated train speeds sufficient sighting distance for a stop sign crossing as per Australian Standard 1742.7-2016 (Manual of uniform traffic control devices Part 7: Railway crossings) could not be achieved, then the minimum control would be flashing lights and boom barriers. Even when a level crossing was 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 is reduced and a cost-effective level of crossing protection was established.

## 4.7 Preliminary Design

A preliminary level of 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 has been 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 so far as reasonably practicable 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.

## 4.8 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. Where not already completed, all interface agreements will be updated following commissioning of the upgraded crossings.

## 5 Closure of Level Crossings

An assessment of level crossings that could potentially be closed was undertaken to identify crossings where traffic volumes are low, legal access is available or reasonably achievable and the imposition on road users is not considered unreasonable. Details of the issues considered are included in the assessment summary for each level crossing included in Appendix C.

Following consideration of the closure assessment, and consultation ARTC undertook with Council, adjacent landholders, broader community and other stakeholders, ARTC is progressing the permanent closure of level crossing LX1093 at Rodda Road. Background on the closure of this level crossing is detailed in the following section.

The reasoning for not progressing the closure of the remaining level crossings assessed is also presented in Appendix C.

Where a crossing is required to be relocated any distance to address a design deficiency or a stakeholder request, these are treated as a closure of an existing crossing, and provision of a new crossing at the new location. The level crossing LX1087 (Mickibri Road) is required to be relocated slightly to improve visibility from a vehicle at the crossing, triggering the closure process. This crossing is discussed in Section 5.2.

Background on the level crossings to be closed is detailed below.

### 5.1 Closure of LX1093 Dows Lane (aka Rodda's Road)

LX1093 Dows Lane (also known as Rodda's Road) was identified as a very minor public crossing, with alternate route available only 500m to the south via Peak Hill Road and level crossing LX1092. Both crossings are managed by Parkes Shire Council.

Traffic counts showed an average of one vehicle user per day during the count period at the Dows Lane crossing. The crossing appeared to be used as an infrequent backroad / shortcut.

The consultation done regarding the closure of this crossings is outlined in Appendix E.

Council noted that they have no objection to the closure and will assist ARTC with the process for application of closing roads as outlined under the relevant Local Government Acts and Regulations.

ARTC are progressing the closure of this level crossing in accordance with the NSW Transport Administration Act 1988.

### 5.2 Relocation of LX1087 (Mickibri Road)

It was necessary to relocate level crossing LX1087 at Mickibri Road approximately 10m to the north to improve the angle of a heavy vehicle to provide compliant sight lines when stopped at the crossing. The new crossing will be constructed to the current standards and will provide the same functionality offered by the existing level crossing. Parkes Shire Council was consulted and agreed to this change.

## 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. The assessment is included in Appendix D.

The process follows the steps in the reference, being:

- **Identify** the safety risks, hazards and hazardous events at each level crossing;
- **Evaluate** the mechanisms of crash causation at a level crossing, applying the railway crossing cause/consequence bow tie model. Select safety management measures that are appropriate for the risk and that will minimise that risk, so far as is reasonably practicable; and
- **Assess** the risk at each level crossing, applying risk tolerance and risk assessment processes.

The risk assessment was undertaken on the proposed configuration for each level crossing at the completion of the detailed design.

The assessment shows that all risks are rated at no greater than low level, SFAIRP.

# Appendix A

## Level Crossing Locations



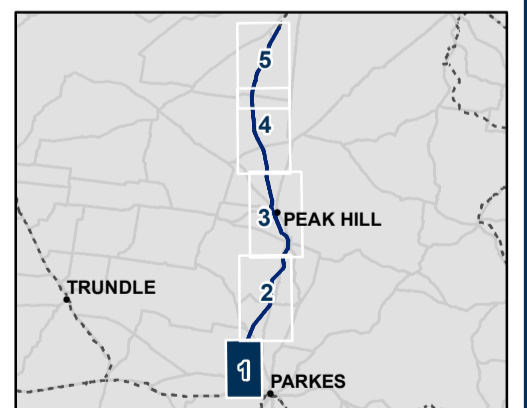
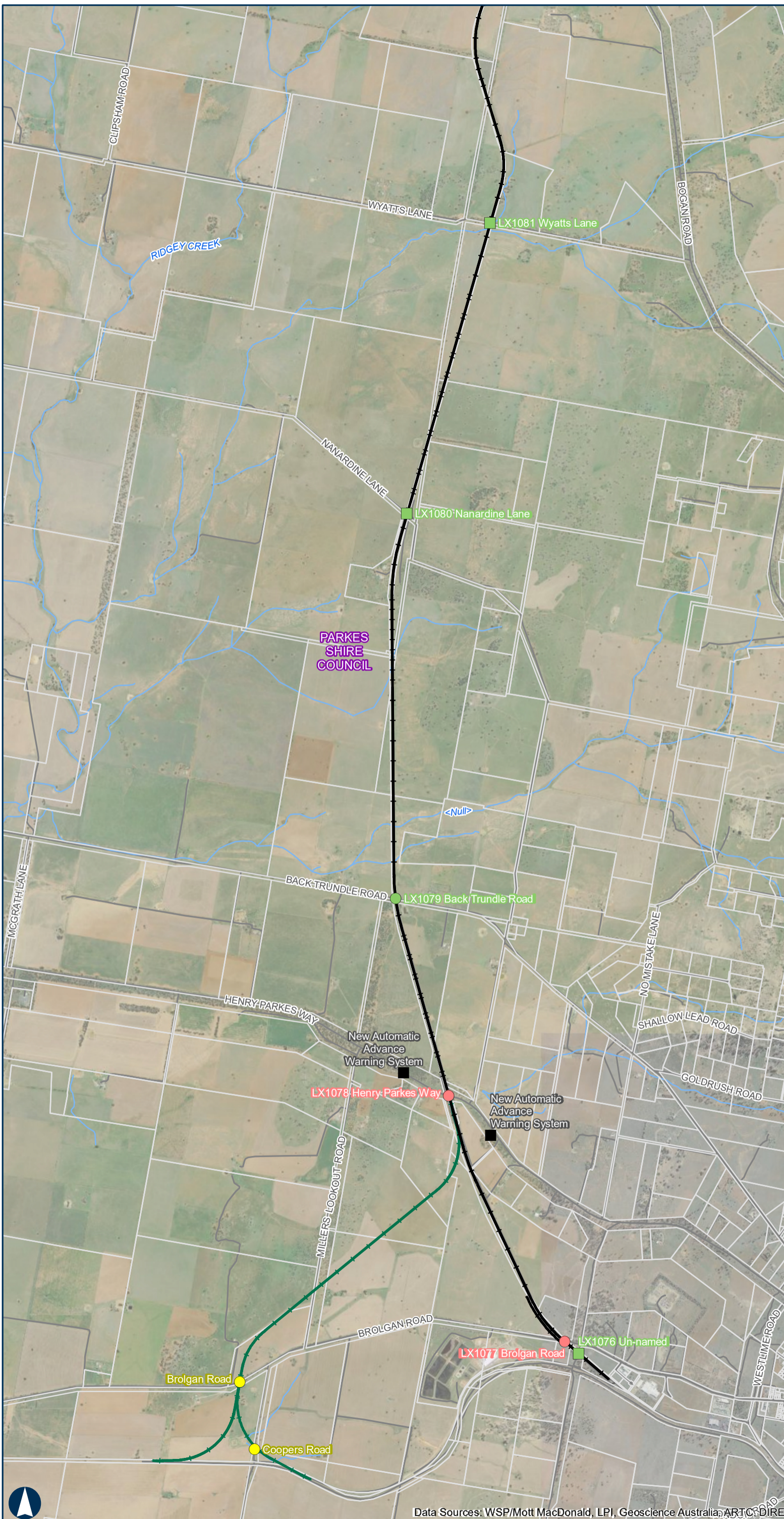
**PARKES TO NARROMINE**

Public Level Crossings

Sheet 1 of 5

**LEGEND**

- Automatic Advance Warning
- Track alignment - Brownfield
- Track Alignment -
- Watercourse
- Road
- Property lots
- Local Government Areas
- Public Level Crossings**
- RX-2 -> RX-2 (AS1742.7 Compliant)
- ⊗ RX-2 to be closed
- RX-2 -> RX-5 & Boom Barriers (AS1742.7 Compliant)
- RX-5 -> RX-5 & Boom Barriers (AS1742.7 Compliant)
- New RX-5 & Boom Barriers (AS1742.7 Compliant)



Coordinate System: GDA 1994 MGA Zone 55

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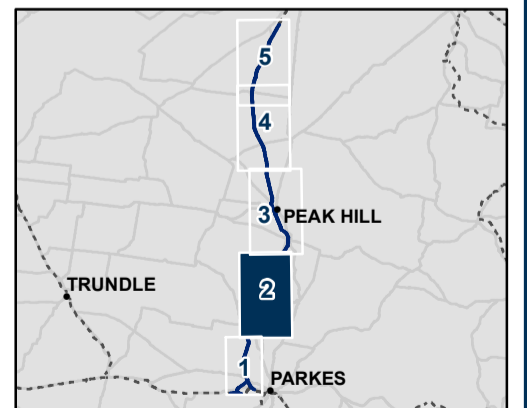
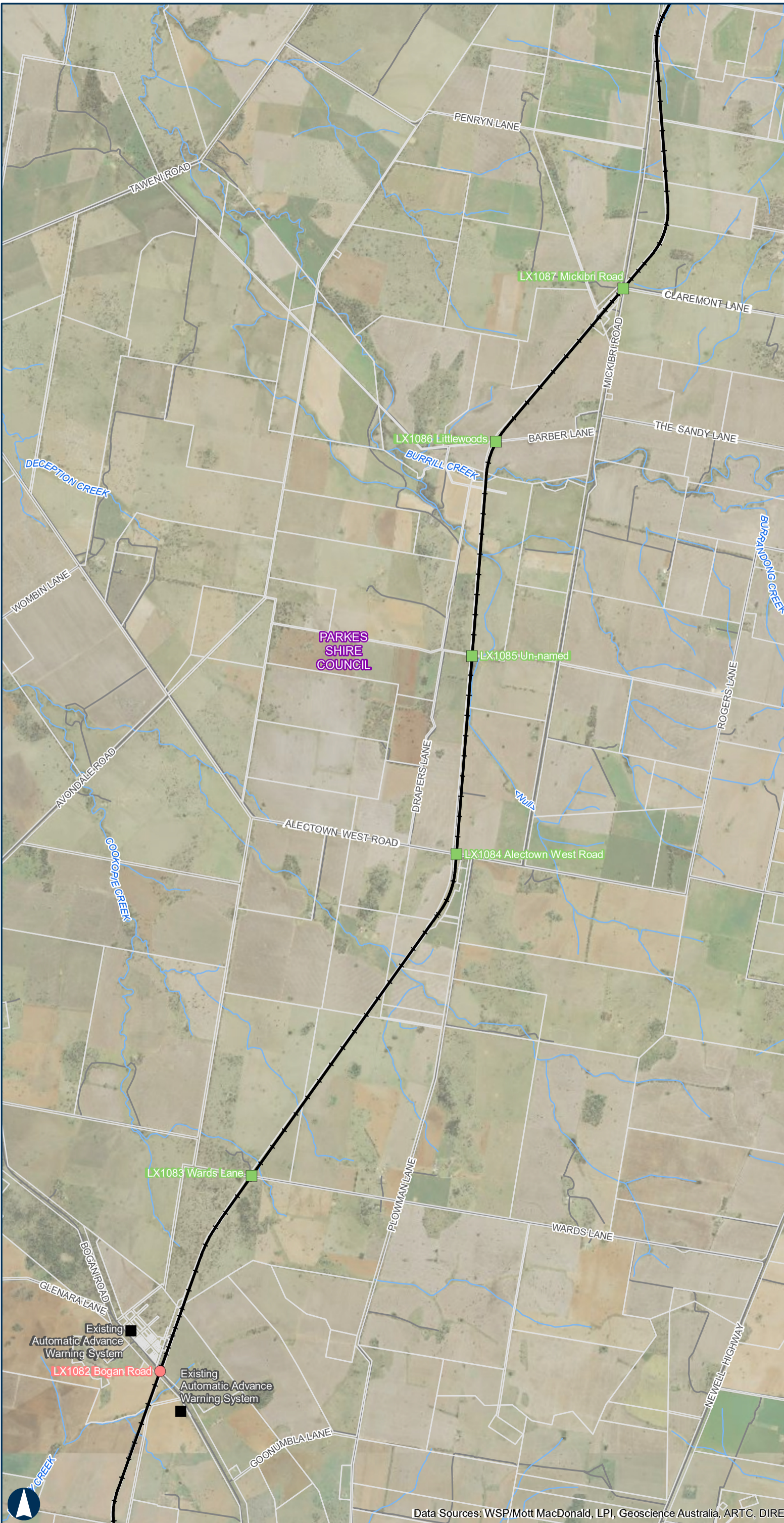
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 Date: 27/11/2018  
 Author: IRDJV  
 Scale: 1:37,500

Data Sources: WSP/Mott MacDonald, LPI, Geoscience Australia, ARTC/DIRE

**PARKES TO NARROMINE**  
Public Level Crossings

**LEGEND**

- Automatic Advance Warning
- Track alignment - Brownfield
- Track Alignment -
- Watercourse
- Road
- Property lots
- Local Government Areas
- Public Level Crossings**
- RX-2 -> RX-2 (AS1742.7 Compliant)
- ⊗ RX-2 to be closed
- RX-2 -> RX-5 & Boom Barriers (AS1742.7 Compliant)
- RX-5 -> RX-5 & Boom Barriers (AS1742.7 Compliant)
- New RX-5 & Boom Barriers (AS1742.7 Compliant)



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Date: 27/11/2018

Author: IRDJV

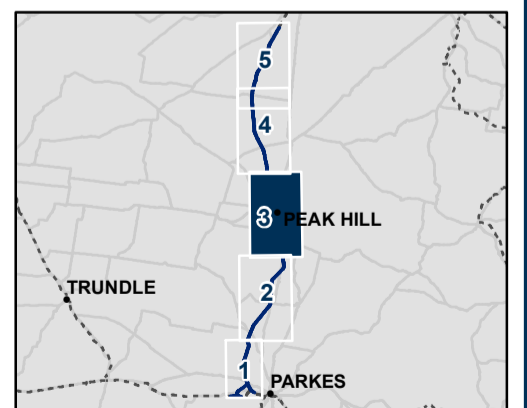
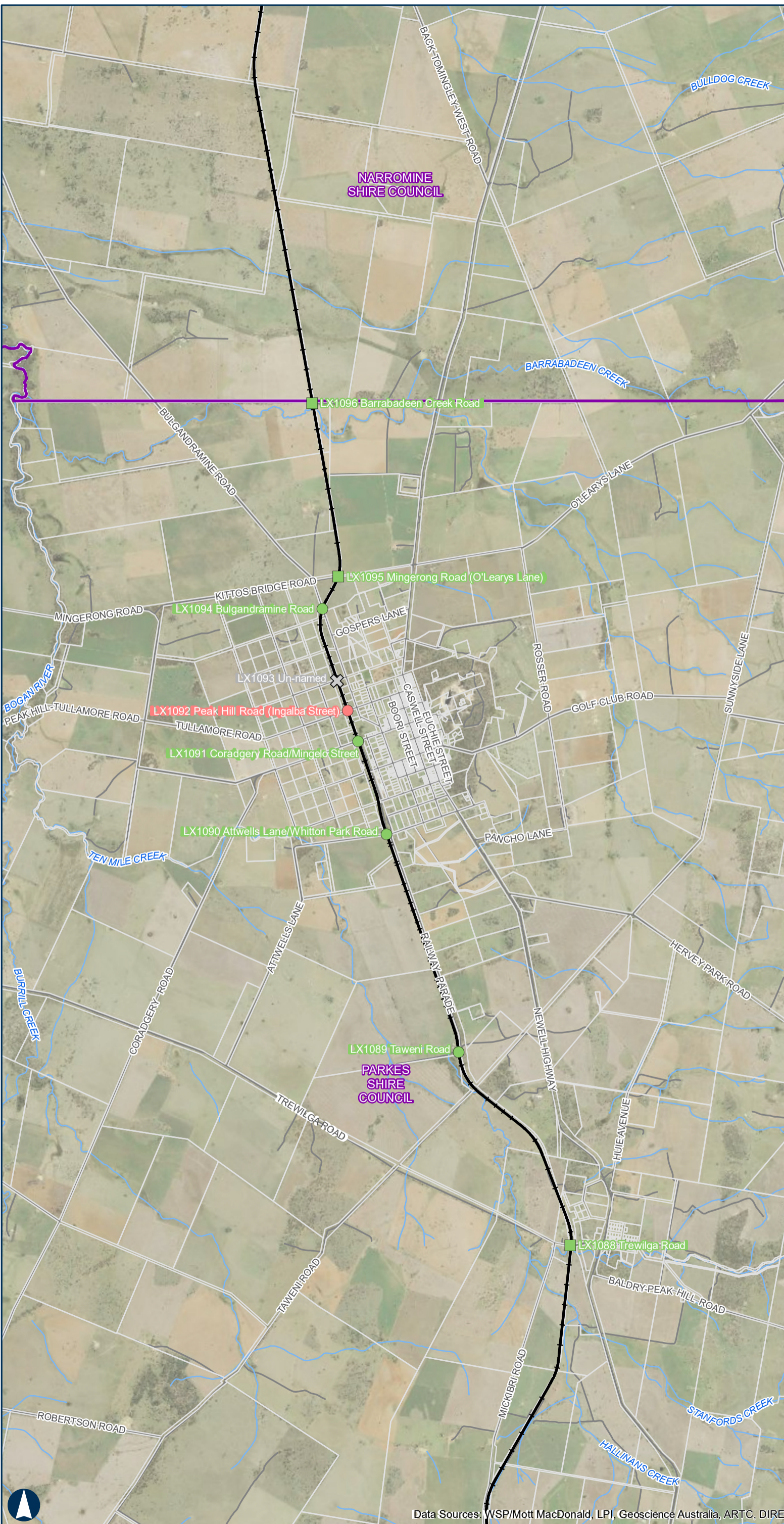
Data Sources: WSP/Mott MacDonald, LPI, Geoscience Australia, ARTC, DIRE

**PARKES TO NARROMINE**  
Public Level Crossings

Sheet 3 of 5

**LEGEND**

- Automatic Advance Warning
- +— Track alignment - Brownfield
- +— Track Alignment -
- Watercourse
- Road
- Property lots
- Local Government Areas
- Public Level Crossings**
- RX-2 -> RX-2 (AS1742.7 Compliant)
- ⊗ RX-2 to be closed
- RX-2 -> RX-5 & Boom Barriers (AS1742.7 Compliant)
- RX-5 -> RX-5 & Boom Barriers (AS1742.7 Compliant)
- New RX-5 & Boom Barriers (AS1742.7 Compliant)



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Scale: 1:55,000

Date: 27/11/2018

Author: IRDJV

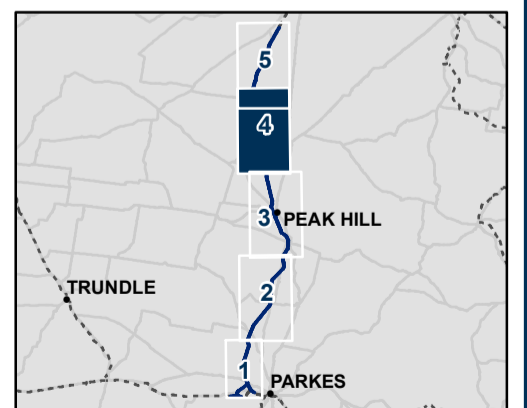
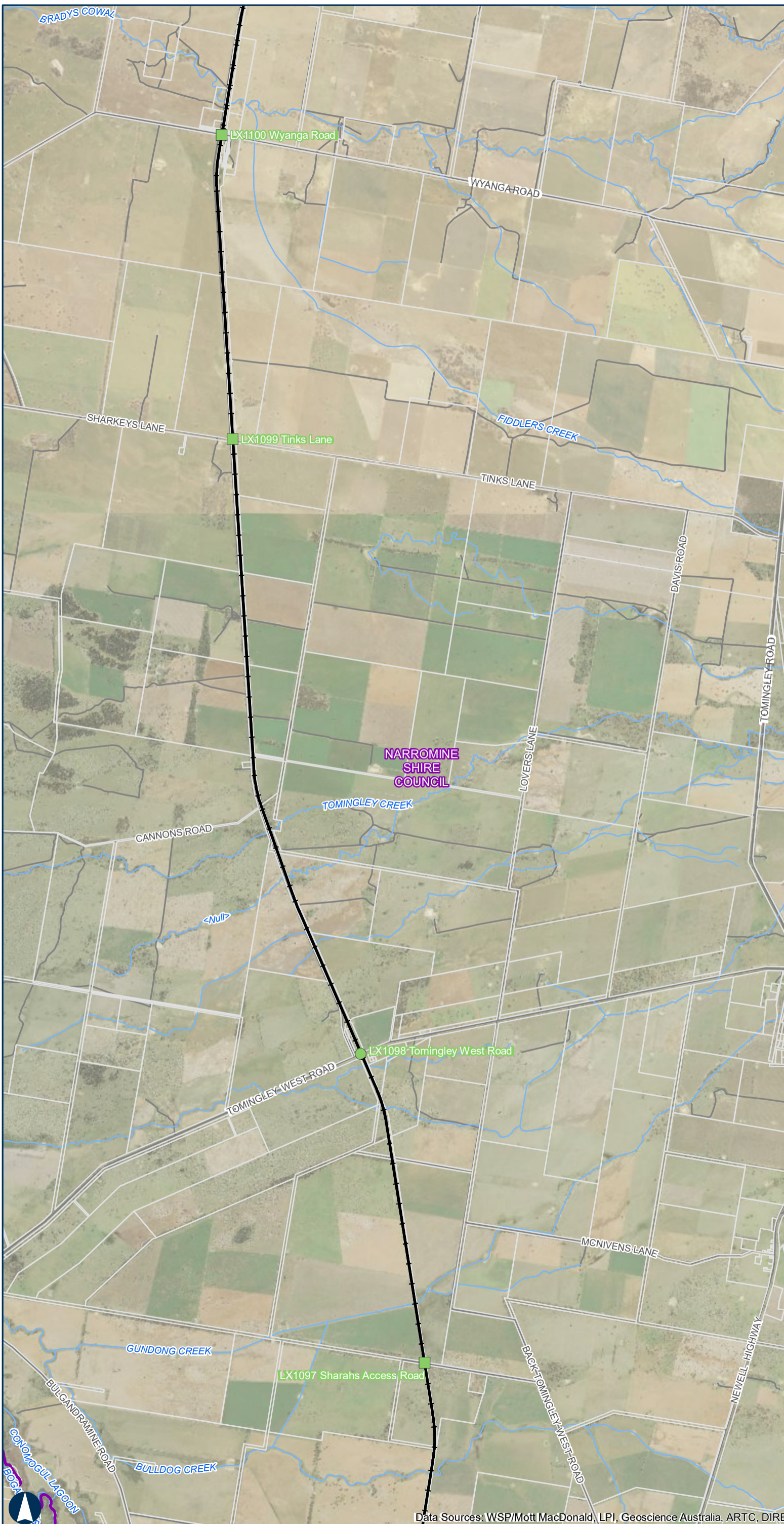
Data Sources: WSP/Mott MacDonald, LPI, Geoscience Australia, ARTC, DIRE

**PARKES TO NARROMINE**  
Public Level Crossings

Sheet 4 of 5

**LEGEND**

- Automatic Advance Warning
- Track alignment - Brownfield
- Track Alignment -
- Watercourse
- Road
- Property lots
- Local Government Areas
- Public Level Crossings**
- RX-2 -> RX-2 (AS1742.7 Compliant)
- ⊗ RX-2 to be closed
- RX-2 -> RX-5 & Boom Barriers (AS1742.7 Compliant)
- RX-5 -> RX-5 & Boom Barriers (AS1742.7 Compliant)
- New RX-5 & Boom Barriers (AS1742.7 Compliant)



2Km

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Date: 27/11/2018

Author: IRDJV

Data Sources: WSP/Mott MacDonald, LPI, Geoscience Australia, ARTC, DIRE



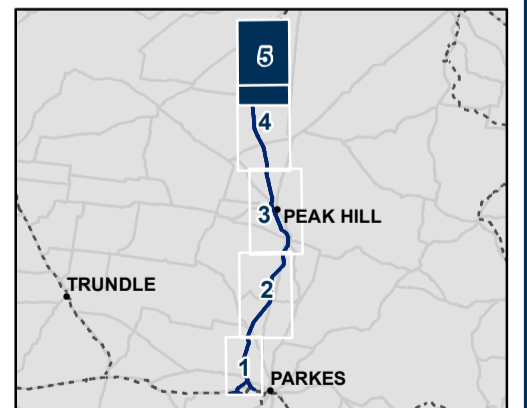
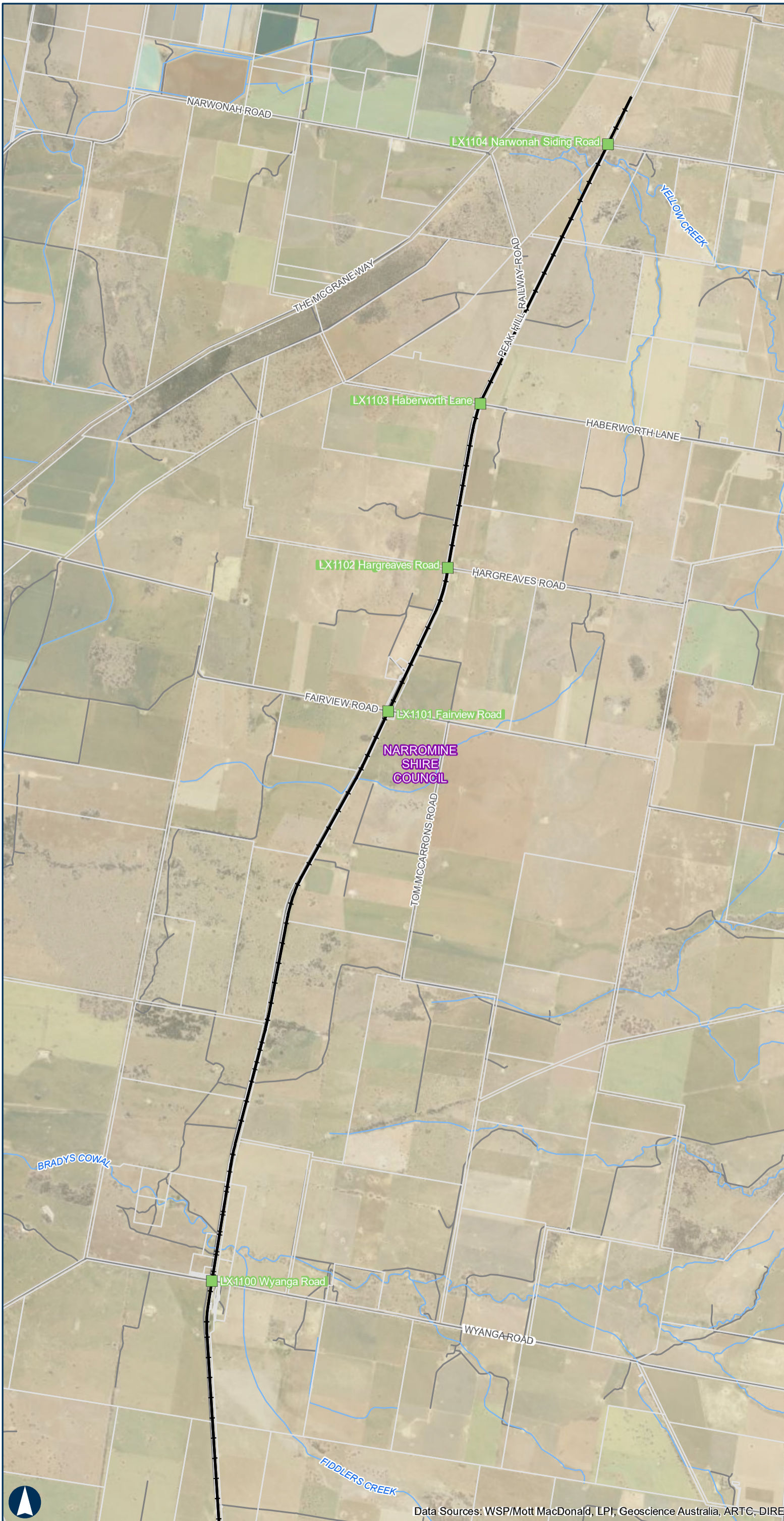
**PARKES TO NARROMINE**

Public Level Crossings

Sheet 5 of 5

**LEGEND**

- Automatic Advance Warning
- +— Track alignment - Brownfield
- +— Track Alignment -
- Watercourse
- Road
- Property lots
- Local Government Areas
- Public Level Crossings**
- RX-2 -> RX-2 (AS1742.7 Compliant)
- ⊗ RX-2 to be closed
- RX-2 -> RX-5 & Boom Barriers (AS1742.7 Compliant)
- RX-5 -> RX-5 & Boom Barriers (AS1742.7 Compliant)
- New RX-5 & Boom Barriers (AS1742.7 Compliant)



2Km

Coordinate System: GDA 1994 MGA Zone 55

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Scale: 1:55,000

Date: 27/11/2018

Author: IRDJV

Data Sources: WSP/Mott MacDonald, LPI, Geoscience Australia, ARTC, DIRE



# Appendix B

## Level Crossing Treatment Summary



## Level Crossing Assessment Summary

Crossing Number	Crossing Name	Existing Control	Proposed Control	Road Manager	Crossing Location	Rail KM (Historic)	GIS Latitude	GIS Longitude	Meets the criteria for automatic Grade Separation?	Assessed for Closure? (Refer Appendix C)	Updated Road Traffic Data		
											AADT (2017)	%HV	Assumed Growth Rate
-	Coopers Road	New	RX-5 + Barriers	Parkes SC	Parkes	-	-33.142575	148.099758	N		36	10%	0%
-	Brolgan Road	New	RX-5 + Barriers	Parkes SC	Parkes	-	-33.136588	148.098119	N		202	5%	1%
1076	Public Road / Stock Crossing	RX-2	RX-2	Parkes SC	Parkes	449.61	-33.13377	148.133817	N		15	1%	0%
1077	Brolgan Road	RX-5	RX-5 + Barriers	Parkes SC	Parkes	449.792	-33.132726	148.132326	N		431	13%	1%
1078	Condobolin Road / Henry Parkes Way	RX-5	RX-5 + Barriers & AAWS	RMS	Parkes	452.53	-33.111061	148.119836	N		1427	9%	1%
1079	Back Trundle Road	RX-2	RX-5 + Barriers	Parkes SC	Parkes	454.518	-33.09367057	148.1140298	N		61	17%	1%
1080	Nanadine Lane	RX-2	RX-2	Parkes SC	Goonumbla	458.303	-33.05952468	148.1147881	N		13	0%	0%
1081	Wyatts Lane	RX-2	RX-2	Parkes SC	Goonumbla	461.222	-33.033723	148.123203	N		18	6%	0%
1082	Bogan Road	RX-5 + AAWS	RX-5 + Barriers & AAWS	Parkes SC	Goonumbla	465.276	-32.99917284	148.1284032	N		571	11%	1%
1083	Wards Lane / Townsend's	RX-2	RX-2	Parkes SC	Goonumbla / Stoney Hill	468.39	-32.97372137	148.1422423	N		6	4%	0%
1084	Avondale Road (Public Road)	RX-2	RX-2	Parkes SC	Alectown West	473.922	-32.9316985	148.1731982	N		30	8%	0%
1085	Public Road	RX-2	RX-2	Parkes SC	Alectown West	476.78	-32.90592143	148.1752688	N	Y	<1	0%	0%
1086	Littlewoods	RX-2	RX-2	Parkes SC	Mickibri	479.883	-32.87814158	148.1786397	N		9	0%	0%
1087	Mickibri Road	RX-2	RX-2	Parkes SC	Mickibri	482.76	-32.85817222	148.1978044	N		10	10%	0%
1088	Trewilga Road	RX-2	RX-2	Parkes SC	Trewilga	490.605	-32.79162384	148.2150821	N		52	22%	1%
1089	Cookies / Railway Parade	RX-2	RX-5 + Barriers	Parkes SC	Trewilga	493.932	-32.76658064	148.1975633	N		9	0%	0%
1090	Whitton Park Road	RX-2	RX-5 + Barriers	Parkes SC	Peak Hill	497.225	-32.73849811	148.186145	N		24	4%	0%
1091	Mingelo Street	RX-2	RX-5 + Barriers	Parkes SC	Peak Hill	498.635	-32.72643182	148.1815473	N		151	11%	1%
1092	Peak Hill Road (Ingalba Street)	RX-5	RX-5 + Barriers	Parkes SC	Peak Hill	499.118	-32.72247304	148.1798424	N		185	14%	1%
1093	Dows Road (Rodda's Road)	RX-2	To be closed	Parkes SC	Peak Hill	499.56	-32.71854319	148.1781686	N	Y	1	0%	0%
1094	Bulgandramine Road	RX-2	RX-5 + Barriers	Parkes SC	Peak Hill	500.632	-32.70929584	148.1758146	N		72	6%	1%
1095	Mingerong Road (O'Learys Lane)	RX-2	RX-2	Parkes SC	Peak Hill	501.15	-32.70510921	148.1781549	N		24	8%	0%
1096	Public Road / Barrabadeen Creek	RX-2	RX-2	Parkes SC	Peak Hill	503.697	-32.68257512	148.1739136	N	Y	<1	0%	0%

## Level Crossing Assessment Summary

Crossing Number	Crossing Name	Existing Control	Proposed Control	ALCAM Assessments Undertaken	Non ALCAM factors Considered	Incident Data (2011-2015)	LX is compliant existing control	CBA undertaken	Proposed control complies with AS1742.7	Required S3 greater than 750m
-	Coopers Road	New	RX-5 + Barriers	Y	Y		Y	Y	Y	NA (active controls)
-	Brolgan Road	New	RX-5 + Barriers	Y	Y		Y	Y	Y	NA (active controls)
1076	Public Road / Stock Crossing	RX-2	RX-2	Y	Y		Y	Y	Y	N
1077	Brolgan Road	RX-5	RX-5 + Barriers	Y	Y		Y	Y	Y	NA (active controls)
1078	Condobolin Road / Henry Parkes Way	RX-5	RX-5 + Barriers & AAWS	Y	Y	2 near misses	Y	Y	Y	NA (active controls)
1079	Back Trundle Road	RX-2	RX-5 + Barriers	Y	Y		N	Y	Y	NA (active controls)
1080	Nanadine Lane	RX-2	RX-2	Y	Y		Y	Y	Y	N
1081	Wyatts Lane	RX-2	RX-2	Y	Y		Y	Y	Y	N
1082	Bogan Road	RX-5 + AAWS	RX-5 + Barriers & AAWS	Y	Y	1 near miss	Y	Y	Y	NA (active controls)
1083	Wards Lane / Townsend's	RX-2	RX-2	Y	Y		Y	Y	Y	N
1084	Avondale Road (Public Road)	RX-2	RX-2	Y	Y		Y	Y	Y	N
1085	Public Road	RX-2	RX-2	Y	Y	1 near miss	Y	Y	Y	N
1086	Littlewoods	RX-2	RX-2	Y	Y		Y	Y	Y	N
1087	Mickibri Road	RX-2	RX-2	Y	Y		Y	Y	Y	N
1088	Trewilga Road	RX-2	RX-2	Y	Y	1 near miss	Y	Y	Y	N
1089	Cookies / Railway Parade	RX-2	RX-5 + Barriers	Y	Y		N	Y	Y	NA (active controls)
1090	Whitton Park Road	RX-2	RX-5 + Barriers	Y	Y		N	Y	Y	NA (active controls)
1091	Mingelo Street	RX-2	RX-5 + Barriers	Y	Y		N	Y	Y	NA (active controls)
1092	Peak Hill Road (Ingalba Street)	RX-5	RX-5 + Barriers	Y	Y	1 near miss	Y	Y	Y	NA (active controls)
1093	Dows Road (Rodda's Road)	RX-2	To be closed	Y	Y		Y	Y	Y	N
1094	Bulgandramine Road	RX-2	RX-5 + Barriers	Y	Y		N	Y	Y	NA (active controls)
1095	Mingerong Road (O'Learys Lane)	RX-2	RX-2	Y	Y		Y	Y	Y	N
1096	Public Road / Barrabadeen Creek	RX-2	RX-2	Y	Y		Y	Y	Y	N

## Level Crossing Assessment Summary

Crossing Number	Crossing Name	Existing Control	Proposed Control	Road Manager Feedback on the design	Feedback incorporated into design	Reason feedback not incorporated	Interface Agreement to be updated post commissioning
-	Coopers Road	New	RX-5 + Barriers	Council supportive of use of EDD	Y		Y - Existing signed IA with Parkes Shire Council/RMS - To be updated to include this interface
-	Brolgan Road	New	RX-5 + Barriers		Y		Y - Existing signed IA with Parkes Shire Council/RMS - To be updated to include this interface
1076	Public Road / Stock Crossing	RX-2	RX-2	Adjust lane widths to 3.25m	Y		Y
1077	Brolgan Road	RX-5	RX-5 + Barriers		Y		Y
1078	Condobolin Road / Henry Parkes Way	RX-5	RX-5 + Barriers & AAWS	Design to include Active Advanced Warning Signs	Y		Y
1079	Back Trundle Road	RX-2	RX-5 + Barriers	Council supportive of use of EDD sight distance	Y		Y
1080	Nanadine Lane	RX-2	RX-2	Adjust lane widths to 3.25m	Y		Y
1081	Wyatts Lane	RX-2	RX-2	Adjust lane widths to 3.25m	Y		Y
1082	Bogan Road	RX-5 + AAWS	RX-5 + Barriers & AAWS		Y		Y
1083	Wards Lane / Townsend's	RX-2	RX-2	Adjust lane widths to 3.25m	Y		Y
1084	Avondale Road (Public Road)	RX-2	RX-2	Adjust lane widths to 3.25m	Y		Y
1085	Public Road	RX-2	RX-2	Adjust lane widths to 3.25m	Y		Y
1086	Littlewoods	RX-2	RX-2	Adjust lane widths to 3.25m	Y		Y
1087	Mickibri Road	RX-2	RX-2	Adjust lane widths to 3.25m	Y		Y
1088	Trewilga Road	RX-2	RX-2	Adjust lane widths to 3.25m	Y		Y
1089	Cookies / Railway Parade	RX-2	RX-5 + Barriers		Y		Y
1090	Whitton Park Road	RX-2	RX-5 + Barriers	Council supportive of use of EDD sight distance	Y		Y
1091	Mingelo Street	RX-2	RX-5 + Barriers		Y		Y
1092	Peak Hill Road (Ingalba Street)	RX-5	RX-5 + Barriers		Y		Y
1093	Dows Road (Rodda's Road)	RX-2	To be closed		Y		Y
1094	Bulgandramine Road	RX-2	RX-5 + Barriers	Council supportive of use of EDD sight distance	Y		Y
1095	Mingerong Road (O'Learys Lane)	RX-2	RX-2	Adjust lane widths to 3.25m	Y		Y
1096	Public Road / Barrabadeen Creek	RX-2	RX-2	Adjust lane widths to 3.25m	Y		Y

# Appendix C

## Level Crossing Closure Considerations



## Level Crossing Closure Considerations

Crossing Number	Crossing Name	Road Manager	Crossing Location	Rail KM (Historic)	GIS Latitude	GIS Longitude	AADT	Reasoning	Discussed with Road Manager	Conclusion
LX1085	Public Road	Parkes Shire Council	Alectown West	476.78	-32.90592143	148.1752688	<1	Adjacent to one property that is segregated by rail. Traffic counts showed no use during count period. Further investigation found crossing used infrequently by landholder to move stock and machinery between landholdings on both sides of the railway.	Council supportive of closure pending favourable response from community.	Proposal for closure abandoned.
LX1093	Rodda's Road (off Dows Road/Lane)	Parkes Shire Council	Peak Hill	499.56	-32.71854319	148.1781686	1	Very minor public crossing, with alternate route 500m south via Peak Hill Road (LX1092). Traffic counts showed an average of 1 user per day during the count period. No landowners identified who may practically need to use this crossing (feasible and preferable alternative route available).	Council supportive of closure pending favourable response from community.	Public consultation undertaken and Dows Road Level Crossing Outcomes Report submitted to council. Council provided ARTC with a letter of no objections and agreed to assist ARTC with the process of closing the level crossing as outlined in the Local Government Acts and Regulations. ARTC are progressing the closure in accordance with the NSW Transport Administration Act.
LX1096	Public Road / Barrabadeen Creek	Parkes Shire Council	Peak Hill	503.697	-32.68257512	148.1739136	<1	Very minor public crossing, which does not appear to serve any landholding split by the rail. Alternate route 4km south via Mingerong Road (LX1095). Traffic counts showed an average of 1 user per day during the count period. Further investigation found crossing used to move stock and farm equipment by two landowners (one with no feasible alternative crossing) with property on both sides of railway.	Council supportive of closure pending favourable response from community.	Proposal for closure abandoned.

# Appendix D

## Level Crossing Risk Assessment





**Inland Rail - Parkes to Narromine  
Railway Crossing Risk Assessment**

Ref	Level Crossing	Control	Approach	Pre Incident Management Measures	Post Incident Management Measures	Risk	Risk category	Risk type	Incident	Consequence					Consequence Rating	Likelihood Rating	Risk Level
										Fatalities and injuries	Delays to road users and freight	Delays to trains and passengers	Damage to property / environment	Secondary crash			
LXNW01	Coopers Road	RX-5 + Booms	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Operation of active control (train detection, lights, boom)	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						LXNW02	Brolgan Road	RX-5 + Booms	Sealed	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> <li>- Seal approaches on gravel roads</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X							X	X		Low	Negligible	Negligible
Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing		X							X	X		Low	Negligible	Negligible
Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X							X	X	X	High	Negligible	Low
Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Negligible	Negligible
Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Operation of active control (train detection, lights, boom)	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X									X		Low	Low	Negligible
Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Negligible	Negligible
LX1076	Public Road / Stock Crossing	RX-2	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>							Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Low	Low	Negligible
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Low	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Low	Low
						Oversize vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Negligible	Negligible

## Level Crossing Closure Considerations

Crossing Number	Crossing Name	Road Manager	Crossing Location	Rail KM (Historic)	GIS Latitude	GIS Longitude	AADT	Reasoning	Discussed with Road Manager	Conclusion
LX1085	Public Road	Parkes Shire Council	Alectown West	476.78	-32.90592143	148.1752688	<1	Adjacent to one property that is segregated by rail. Traffic counts showed no use during count period. Further investigation found crossing used infrequently by landholder to move stock and machinery between landholdings on both sides of the railway.	Council supportive of closure pending favourable response from community.	Proposal for closure abandoned.
LX1093	Rodda's Road (off Dows Road/Lane)	Parkes Shire Council	Peak Hill	499.56	-32.71854319	148.1781686	1	Very minor public crossing, with alternate route 500m south via Peak Hill Road (LX1092). Traffic counts showed an average of 1 user per day during the count period. No landowners identified who may practically need to use this crossing (feasible and preferable alternative route available).	Council supportive of closure pending favourable response from community.	Public consultation undertaken and Dows Road Level Crossing Outcomes Report submitted to council. Council provided ARTC with a letter of no objections and agreed to assist ARTC with the process of closing the level crossing as outlined in the Local Government Acts and Regulations. ARTC are progressing the closure in accordance with the NSW Transport Administration Act.
LX1096	Public Road / Barrabadeen Creek	Parkes Shire Council	Peak Hill	503.697	-32.68257512	148.1739136	<1	Very minor public crossing, which does not appear to serve any landholding split by the rail. Alternate route 4km south via Mingerong Road (LX1095). Traffic counts showed an average of 1 user per day during the count period. Further investigation found crossing used to move stock and farm equipment by two landowners (one with no feasible alternative crossing) with property on both sides of railway.	Council supportive of closure pending favourable response from community.	Proposal for closure abandoned.

**Inland Rail - Parkes to Narromine  
Railway Crossing Risk Assessment**

Ref	Level Crossing	Control	Approach	Pre Incident Management Measures	Post Incident Management Measures	Risk	Risk category	Risk type	Incident	Consequence					Consequence Rating	Likelihood Rating	Risk Level
										Fatalities and injuries	Delays to road users and freight	Delays to trains and passengers	Damage to property / environment	Secondary crash			
LX1077	Briogan Road	RX-5 + Booms	Sealed	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Operation of active control (train detection, lights, boom)	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						LX1078	Condobolin Road / Henry Parkes Way	RX-5 + Booms	Sealed	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> <li>- Active advance warning signs run after railway crossing has opened</li> <li>- RRPMS and CAMs</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X							X	X		Low	Negligible	Negligible
Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing		X							X	X		Low	Negligible	Negligible
Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X							X	X	X	High	Negligible	Low
Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Negligible	Negligible
Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Operation of active control (train detection, lights, boom)	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X									X		Low	Low	Negligible
Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Negligible	Negligible
LX1079	Back Trundle Road	RX-5 + Booms	Sealed	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>							Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Operation of active control (train detection, lights, boom)	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible

**Inland Rail - Parkes to Narromine  
Railway Crossing Risk Assessment**

Ref	Level Crossing	Control	Approach	Pre Incident Management Measures	Post Incident Management Measures	Risk	Risk category	Risk type	Incident	Consequence					Consequence Rating	Likelihood Rating	Risk Level
										Fatalities and injuries	Delays to road users and freight	Delays to trains and passengers	Damage to property / environment	Secondary crash			
LX1080	Nanardine Lane	RX-2	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Low	Low	Negligible
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Low	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Low	Low
						Oversize vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Negligible	Negligible
						LX1081	Wyatts Lane	RX-2	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Low	Low	Negligible
Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X							X	X		Low	Low	Negligible
Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing	X	X							X	X		Medium	Low	Low
Oversize vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Negligible	Negligible
Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X							X	X	X	High	Negligible	Low
Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X									X		Low	Low	Negligible
Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X							X	X		Medium	Negligible	Negligible
LX1082	Bogan Road	RX-5 + Booms	Sealed	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> <li>- Active advance warning signs run after railway crossing has opened</li> <li>- Road lighting</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>							Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Operation of active control (train detection, lights, boom)	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible

**Inland Rail - Parkes to Narromine  
Railway Crossing Risk Assessment**

Ref	Level Crossing	Control	Approach	Pre Incident Management Measures	Post Incident Management Measures	Risk	Risk category	Risk type	Incident	Consequence					Consequence Rating	Likelihood Rating	Risk Level
										Fatalities and injuries	Delays to road users and freight	Delays to trains and passengers	Damage to property / environment	Secondary crash			
LX1083	Wards Lane / Townsend's	RX-2	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Low	Low	Negligible
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Low	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Low	Low
						Oversize vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Negligible	Negligible
						LX1084	Avondale Road (Public Road)	RX-2	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Low	Low	Negligible
Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X							X	X		Low	Low	Negligible
Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing	X	X							X	X		Medium	Low	Low
Oversize vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Negligible	Negligible
Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X							X	X	X	High	Negligible	Low
Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X									X		Low	Low	Negligible
Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X							X	X		Medium	Negligible	Negligible
LX1085	Public Road	RX-2	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>							Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Low	Low	Negligible
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Low	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Low	Low
						Oversize vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Negligible	Negligible

**Inland Rail - Parkes to Narromine  
Railway Crossing Risk Assessment**

Ref	Level Crossing	Control	Approach	Pre Incident Management Measures	Negligible	Risk	Risk category	Risk type	Incident	Consequence					Consequence Rating	Likelihood Rating	Risk Level
										Fatalities and injuries	Delays to road users and freight	Delays to trains and passengers	Damage to property / environment	Secondary crash			
LX1086	Littlewoods	RX-2	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Low	Low	Negligible
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Low	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Low	Low
						Oversize vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Negligible	Negligible
						LX1087	Mickibrn Road	RX-2	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Low	Low	Negligible
Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X							X	X		Low	Low	Negligible
Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing	X	X							X	X		Medium	Low	Low
Oversize vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Negligible	Negligible
Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X							X	X	X	High	Negligible	Low
Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X									X		Low	Low	Negligible
Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X							X	X		Medium	Negligible	Negligible
LX1088	Trewilga Road	RX-2	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>							Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Low	Low	Negligible
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Low	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Low	Low
						Oversize vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Negligible	Negligible

**Inland Rail - Parkes to Narromine  
Railway Crossing Risk Assessment**

Ref	Level Crossing	Control	Approach	Pre Incident Management Measures	Post Incident Management Measures	Risk	Risk category	Risk type	Incident	Consequence					Consequence Rating	Likelihood Rating	Risk Level					
										Fatalities and injuries	Delays to road users and freight	Delays to trains and passengers	Damage to property / environment	Secondary crash								
LX1089	Cookies / Railway Parade	RX-5 + Booms	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible					
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low					
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low					
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible					
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible					
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low					
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible					
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low					
						Operation of active control (train detection, lights, boom)	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low					
LX1090	Whitton Park Road	RX-5 + Booms	Sealed	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>																	
LX1091	Mingelo Street	RX-5 + Booms	Sealed	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>																	

**Inland Rail - Parkes to Narromine  
Railway Crossing Risk Assessment**

Ref	Level Crossing	Control	Approach	Pre Incident Management Measures	Post Incident Management Measures	Risk	Risk category	Risk type	Incident	Consequence					Consequence Rating	Likelihood Rating	Risk Level
										Fatalities and injuries	Delays to road users and freight	Delays to trains and passengers	Damage to property / environment	Secondary crash			
LX1092	Peak Hill Road (Ingalba Street)	RX-5 + Booms	Sealed	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing		X	X	X		Low	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Operation of active control (train detection, lights, boom)	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						LX1094	Bulgantramine Road	RX-5 + Booms	Sealed	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> <li>- Active control of RC (flashing lights and boom gates)</li> <li>- Adequate operating time of active signals before train</li> <li>- Maintenance of equipment and 'fail-safe'</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X							X	X		Low	Negligible	Negligible
Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing		X							X	X		Low	Negligible	Negligible
Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X							X	X	X	High	Negligible	Low
Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Negligible	Negligible
Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Operation of active control (train detection, lights, boom)	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Low	Low
Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X									X		Low	Low	Negligible
Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X							X	X	X	Medium	Negligible	Negligible
LX1095	Mingerong Road (O'Learys Lane)	RX-2	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>							Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Low	Low	Negligible
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Low	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Low	Low
						Oversize vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Negligible	Negligible



**Inland Rail - Parkes to Narromine  
Railway Crossing Risk Assessment**

Ref	Level Crossing	Control	Approach	Pre Incident Management Measures	Post Incident Management Measures	Risk	Risk category	Risk type	Incident	Consequence					Consequence Rating	Likelihood Rating	Risk Level
										Fatalities and injuries	Delays to road users and freight	Delays to trains and passengers	Damage to property / environment	Secondary crash			
LX1096	Public Road / Barrabadden Creek	RX-2	Unsealed, sealed at crossing	<ul style="list-style-type: none"> <li>- Sight distance to control device exceeds AS1742.2</li> <li>- Adequate lane, shoulder and carriageway widths for vehicle types and speeds</li> <li>- Advance warning signs and pavement markings comply with AS1742.7</li> <li>- Control type appropriate for road users using RC</li> <li>- Signs and pavement markings to AS 1742</li> <li>- Design reflects NSW Road Rules 2008</li> <li>- No advertising signs, or unnecessary road signs, trees and road furniture to cause road user distraction</li> <li>- No distracting or confusing lighting in vicinity of RC or railway approaches</li> <li>- Control appropriate for road / railway alignment</li> <li>- Road speed limit appropriate for conditions</li> <li>- Train speed and operations appropriate for RC</li> <li>- Warning signs and advisory speeds appropriate and in accordance with AS1742.2</li> <li>- Road surface maintained to attain adequate ride quality and skid resistance</li> <li>- Education campaigns that inform road users of statutory requirements and hazard</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate road alignment and stopping sight distances</li> <li>- Clear zone free of hazards</li> <li>- Detour routes</li> <li>- Emergency management plan</li> <li>- Emergency response by rail authority</li> <li>- Emergency response by TMC, police and local council</li> <li>- Frangible roadside furniture</li> <li>- Location and protection of control infrastructure</li> <li>- No unnecessary infrastructure at LX</li> <li>- No unnecessary trees at LX</li> </ul>	Setting sun produces glare which reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.3 Road user does not see train at or approaching the RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Road user tries to "beat" train when an oncoming train is visible or active controls are active	2. Road user fails to keep clear while a train is approaching	Type 2.6 Deliberate action by road user to beat train to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Road user speeding	1. Road user fails to stop while a train is approaching	Type 1.6 Road user travelling too fast on approach to RC	Crash between road user and train at railway crossing	X	X	X	X	X	Low	Low	Negligible
						Crossing stock	1. Road user fails to stop while a train is approaching	Type 1.1 Road user fails to observe traffic control device at RC	Crash between road user and train at railway crossing		X	X	X		Low	Low	Negligible
						Slow moving heavy vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.4 Road user slow to clear RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Low	Low
						Oversize vehicle fails to clear crossing	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Negligible	Negligible
						Crossing by pedestrian or cyclist	5. Road user fails to observe other road user	Type 5.1 Road user fails to observe and react to stationary or slow vehicles	Crash between road users	X	X	X	X	X	High	Negligible	Low
						Surface slippery in wet weather	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Poor weather (rain, dust, fog) reduces driver vision and awareness of railway crossing	1. Road user fails to stop while a train is approaching	Type 1.5 Road user does not allow for increased stopping distance on slippery or unsealed road or path	Crash between road user and train at railway crossing	X	X	X	X	X	Medium	Low	Low
						Vandalism of RC equipment - signs and signals	4. Failure of traffic control signals or active control	Type 4.3 Damaged infrastructure	Crash between road user and train at railway crossing	X			X		Low	Low	Negligible
						Vehicle breakdown/stop on railway	2. Road user fails to keep clear while a train is approaching	Type 2.1 Road user stranded/crashed on RC	Crash between road user and train at railway crossing	X	X	X	X		Medium	Negligible	Negligible

# Appendix E

## Dows Lane Level Crossing Closure Considerations





BH:SM

Contact Person: Ben Howard

6 February 2019

Australian Rail Track Corporation  
Level 15, 60 Carrington Street  
SYDNEY NSW 2000

ATT: Nelson Wallis - Stakeholder Engagement Lead Parkes-Narromine

Dear Nelson

## **PROPOSED ROAD CLOSURE DOWS LANE - AUSTRALIAN RAIL TRACK CORPORATION (ARTC)**

At Parkes Shire Councils Ordinary Meeting held on Tuesday 22 January 2019, Council considered the proposed crossing closure, Dows Lane, Peak Hill.

The Council resolution is outline below for your information:

1. *That Council offer no objections to the closure of Dows Lane, Peak Hill as outlined by the Australian Rail Track Corporation (ARTC).*
2. *That Council assist the ARTC with the process for application of closing roads as outlined under relevant Local Government Acts and Regulations*

Council looks forward to continuing to work with ARTC on the Inland Rail project.

Should you require any further information on this matter, please do not hesitate to contact Council's Director Works and Services, Ben Howard, on 6861 2344.

Yours faithfully

Ben Howard  
**DIRECTOR WORKS AND SERVICES**

**P2N Parkes to Narromine  
Dows Lane Level Crossing Consultation Outcomes Report**



**Document control**

<b>CLIENT</b>	Australian Rail Track Corporation ABN: 75 081 455 754
<b>PROJECT</b>	Inland Rail Programme – P2N Parkes to Narromine
<b>DOCUMENT TITLE</b>	Dows Lane Level Crossing Consultation Report
<b>DATE ISSUED</b>	30/11/2018
<b>REVISION</b>	0
<b>ORIGINATOR/COMPANY</b>	ARTC
<b>PURPOSE</b>	To outline consultation done by ARTC for the proposed Dows Lane level crossing closure
<b>ENDORSED BY</b>	Helena Orel
<b>APPROVED BY</b>	Colin Forde
<b>DATE APPROVED</b>	16/01/2019

**Revision history**

<b>REVISION</b>	<b>DATE ISSUED</b>	<b>DESCRIPTION</b>
0	16/01/2019	Approved for distribution

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## 1. INTRODUCTION

The Australian Government, through the Australian Rail Track Corporation (ARTC) and in partnership with the private sector is delivering Inland Rail; a multi-billion dollar infrastructure project which will complete the 'spine' of the national freight network between Melbourne and Brisbane via regional Victoria, New South Wales and Queensland. This new 1,700km line is the largest freight rail infrastructure project in Australia. The first train is expected to operate in 2025. The Government has committed \$9.3 billion to deliver Inland Rail.

The dedicated Inland Rail freight network will transform the way goods are moved between Melbourne and Brisbane, connecting farms, mines, cities and ports to global markets. It will support Australia's four richest farming regions; provide supply chain benefits and substantial cost savings for producers. In addition the project will bring lower costs and greater efficiencies to freight customers and will ultimately deliver more produce and goods to customers along the eastern seaboard.



Figure 1: Melbourne to Brisbane Inland Rail Route

### 1.1. Parkes to Narromine Project

The Parkes to Narromine (P2N) section of the Inland Rail programme is one of 13 projects that complete Inland Rail. It includes 98.4km of existing rail track with 5.3km of new rail to be built near Parkes.

The main features of the P2N project include:

- Upgrading the track, track formation and culverts within the existing rail corridor for 98 kilometres between Parkes and Narromine
- Realigning the track where required to minimise tight curves
- Providing three new crossings loops
- Providing a new 5.3 kilometre long rail connection to the Broken Hill line west of Parkes (the 'north west connection' between Henry Parkes Way and Broglan Road)
- Ancillary works to level crossings, signalling and communication, signage, fencing, services and utilities.

The community in Parkes to Narromine area will see construction-related activities from October 2018 onward, with the work expected to be completed by mid-2020.

## 2. OVERVIEW

### 2.1. Dows Lane/Rodda's Road level crossing LX1093

Level crossing LX1093 connects Dows Lane to Bulgandramine Road, located in Peak Hill, NSW. Figure 1 pictures the Dows Lane level crossing level crossing in its current condition. Figure 2 shows the current condition of the road leading up to the crossing.

Please see Figure 3 which outlines the current layout of the crossing and surrounding area. While the laneway is officially called Rodda's Road, it is not signposted or marked on most publicly available maps. As a result, during consultation ARTC has called this crossing *Dows Lane level crossing* to ensure clear communication during consultation. In the remainder of this report the crossing will be referred to as the Dows Lane Level Crossing.

ARTC conducted traffic monitoring between Monday 30 October 2017 and Sunday 29 October 2017 just south of the level crossing. On average there was one vehicle a day travelling across the crossing.



Figure 1: Dows Lane Level Crossing September 2018



Figure 2: Existing road September 2018





**Figure 3: Dows Lane – current layout**

### 2.1.1. Level crossing closure

Due to low traffic numbers and poor condition of the road, ARTC proposes to close the level crossing for safety reasons. This is in line with the Transport for NSW 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'*. There is a suitable detour option with no impact on travel time for commuters. The level crossing 440m south of Dows Lane, LX1092 on Tullamore Road will be upgraded to an active level crossing with RX-5 lights and bells assembly and booms. As a result, this crossing will be a much safer point to cross the track. Figure 4 shows the detour route.



Figure 4: Alternate route with Dows Lane level crossing closure

Following on initial discussions with Parkes Shire Council, ARTC conducted community consultation about the proposed closure in line with council's recommendations.

### 3. CONSULTATION

The level crossing closure process will be undertaken in line with the requirements of the Transport Administration Act 1998.

Following on from ARTC’s preference to close the level crossing, ARTC completed further consultation to advise local residents, landowners and road users about the proposed permanent closure of Dows Lane Level Crossing.

ARTC is committed to working with the community during the planning and construction of Inland Rail.

A variety of activities were used to engage, inform and obtain feedback from stakeholders, landowners and the broader community. A summary of activities is provided in Table 1 Consultation Activity Summary Table and more detail of each activity is provided in subsequent sub sections.

Table 1 Consultation Activity Summary Table

Date	Consultation Activity	Purpose
Mid 2018	Meetings and correspondence with Parkes Shire Council	Inform Parkes Shire Council of options and ARTC plans for level crossing closure and feedback on how consultation should be approached
27 August 2018	Peak Hill CCC meeting	Inform committee about the closure of Dows Lane level crossing
August 2018 – November 2018	Details of closure provided on Inland Rail’s website	Informing broader community, the details of level crossing closure
27 August 2018	Notification letter	Informing stakeholders about the permanent closure of Dows Lane level crossing
12 September	Peak Hill Inland Rail community drop in session	Informing broader community details of level crossing closure
10 September – 8 October 2018	Newspaper advertisements	Inform wider community about the level crossing closure
4 October – 4 November 2018	Signage installed at crossing	Inform wider community about the permanent closure of Dows Lane level crossing

#### 3.1.1. Parkes Shire Council Peak Hill Community Consultative Committee meeting

A Peak Hill CCC meeting was held on the 27 August 2018. As requested by Parkes Shire Council, ARTC consulted the committee about the Dows Lane level crossing closure. No objections were raised about the proposed closure.

#### 3.1.2. Notification letter

A notification letter was prepared to inform all landowners and the wider community. This was sent on 27 August 2018. Notification area outlined in Figure 5 Notification area. A copy of the notification sent is available in Appendix A.

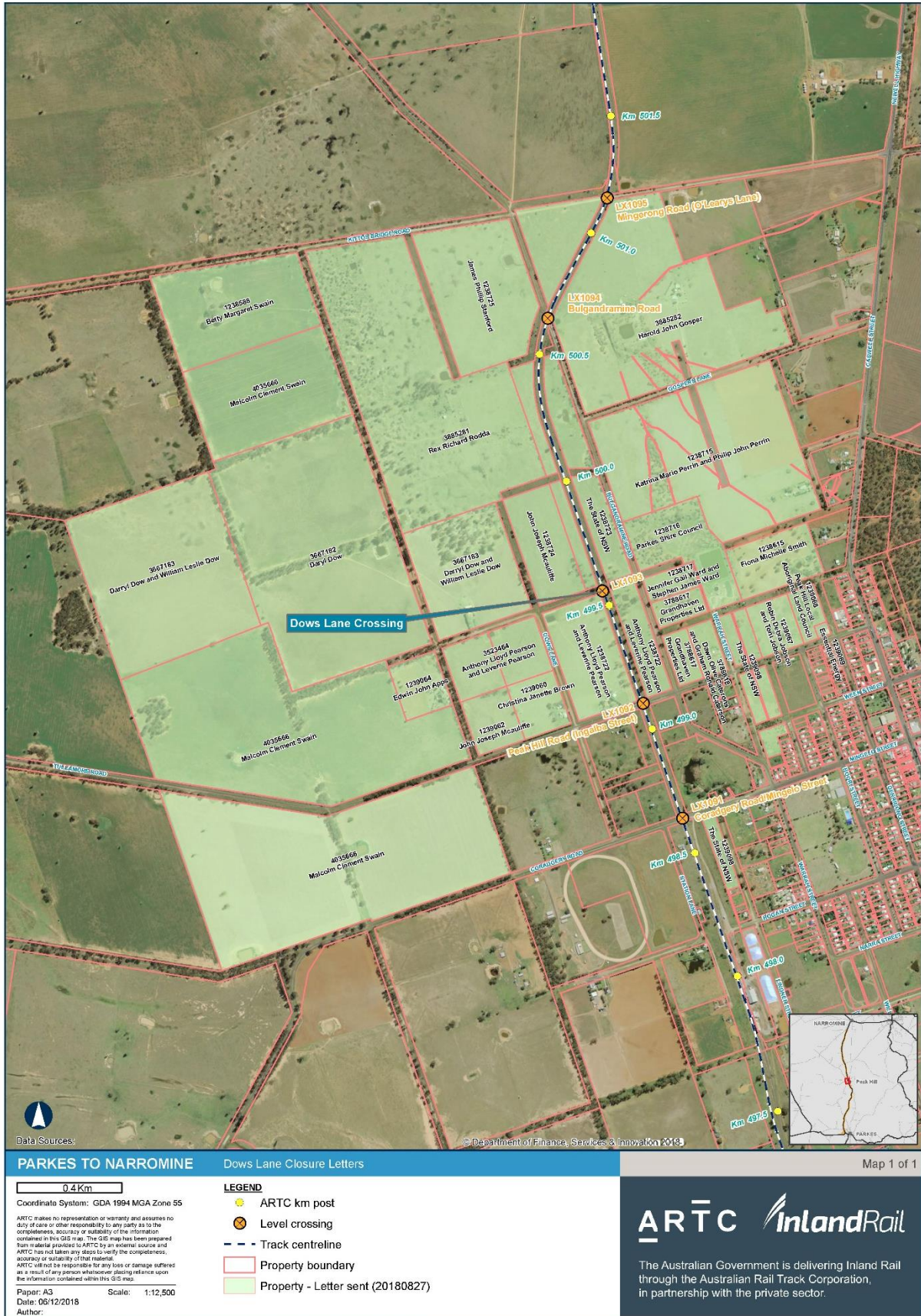


Figure 5: Notification area

### 3.1.3. Advertisements

Advertisements were used to inform the wider community about the Dows Lane Level Crossing closure. This campaign ran from 10 September 2018 until 8 October 2018. The adverts were run in the following newspapers:

- Parkes Champion
- Narromine News
- Peak Hill Times

The advertisement is shown in the below Figure 6: Advertisement

**ARTC *InlandRail* PARKES TO NARROMINE PROJECT**

**ROAD AND LEVEL CROSSING CLOSURE**

Inland Rail is a once-in-a-generation project connecting regional Australia to domestic and international markets. Construction on the first section of Inland Rail will start between Parkes and Narromine in late 2018 and is expected to be finished by mid-2020.

As part of this work, we will be permanently closing:

**A small section of road between Taweni Road and Railway Parade, near Ten Mile Creek, Peak Hill**

**Why?**

Currently this section of the road is located within the railway corridor and is unsafe.

We will be closing this section of Taweni Road in 2019.

**Are there alternative routes?**

There are a number of alternative routes available.

Maps of alternative routes are available on our website, [www.inlandrail.com.au/p2n](http://www.inlandrail.com.au/p2n)

**Dows Lane level crossing, Peak Hill**

**Why?**

Closing this level crossing helps us improve public safety.

We will be closing this level crossing in 2019.

**Are there alternative routes?**

There is an alternative nearby level crossing located at Tullamore Road, Peak Hill. This crossing has an active warning system which provides a safer location to cross the railway track.

IR-475

Figure 6: Advertisement

### 3.1.4. Signage

Two signs were installed on 4 October 2018 and left in place until 4 November 2018. This was used to inform the wider community and landowners in the area about the level crossing closure. These signs are outlined in Figure 7.



Figure 7: Signage installed at Dows Lane level crossing

## 4. FEEDBACK RECEIVED

### 4.1. Community Consultative Committee (CCC) meeting

ARTC have consulted with the CCC regarding the Dows Lane level crossing closure. Nine people attended the CCC meeting at the AIR Hall in Peak Hill.

Overall, there were no concerns raised about the Dows Lane level crossing closure at the meeting. There was no opposition to the closure.

### 4.2. Individual landowner feedback

ARTC was contacted by two landowners as part of the consultation.

Details of consultation

#### 4.2.1.1. Landowner 1

The Inland Rail Team received a phone call from nearby landowner who raised concerns about the level crossing closure. The landowner currently uses the Dows Lane Level Crossing to move stock. They raised concerns that the alternative route, Tullamore Road was a busy road in comparison to Dows Lane and as a result would put their safety and their stocks safety at risk.

ARTC advised the landowner that due to an increase in train numbers, Tullamore Road would be a safer location to cross as it would have an active level crossing, which would warn of trains before they approached. ARTC also advised the landowner that additional level crossings created an additional safety risk and that ARTC planned to close the level crossing to improve public safety.

Following a request by Parkes Shire Council ARTC completed further consultation with landowner on 19 December 2018. This meeting included the offer to install two sets of gates at either side of the Tullamore Road Level Crossing to assist in moving stock across the rail. The landowner advised that they were not interested in this offer and still objected to the closure of the Dows Lane Level crossing.

#### 4.2.1.2. Dog walker

The Inland Rail Team met with a dog walker at the Peak Hill community drop in session. They advised ARTC that they currently used Dows Lane to walk their dog. Following on from a discussion they were advised that they could use alternative routes to walk their dog. They did not object to the level crossing closure.

## 5. NEXT STEPS

ARTC proposes to proceed with the level crossing closure in accordance with the requirements of the Transport Administration Act 1988.

Under the Act ARTC is required to notify council of any proposed level crossing closures.

Prior to progressing further, ARTC would like notification from council that council either accept or have no objection to the closure. This position would be aligned with the Transport for NSW level crossing closure policy.

ARTC will work with Transport for NSW and the Ministry of Transport to complete the formal closure process.

Day month 2018  
Reference:

Name  
Address  
SUBURB NSW POSTCODE

Dear Mr/MRS XXX

### Permanent closure of section of Dows Lane level crossing, Peak Hill

Australian Rail Track Corporation (ARTC) is building a new 1700 km Inland Rail track from Melbourne to Brisbane. Construction on the first section of Inland Rail will start between Parkes and Narromine in late 2018 and is expected to be finished by mid 2020.

As part of this work, we will be permanently closing the Dows Lane level crossing. Closing this level crossing helps us improve public safety.

There is an alternative nearby level crossing located at Tullamore Road, Peak Hill. This crossing has an active warning system which provides a safer location to cross the railway track. A map of this is provided over the page.

We will notify you again at least seven days before we start work near your property on Inland Rail. This will include information about when the Dows Lane level crossing will be closed. This is expected to occur in 2019.

For more information about Inland Rail or the Dows Lane level crossing closure, please contact us:

**Phone:** 1800 732 761  
**Email:** [InlandRailNSW@artc.com.au](mailto:InlandRailNSW@artc.com.au)  
**Website:** [www.inlandrail.com.au/p2n](http://www.inlandrail.com.au/p2n)

Sincerely,



Mark Stevens  
Senior Project Manager, Inland Rail Programme

Dows Lane level crossing closure and alternative route







# PARKES SHIRE COUNCIL

*Our Mission: To Deliver Progress and Value to our Community*

*Our Communities Vision:*

*In 2022 the Parkes Shire will be a progressive regional centre, embracing a national logistics hub with vibrant communities, diverse opportunities, learning and healthy lifestyles.*

## MINUTES

TUESDAY 22 JANUARY 2019

Minutes of the Ordinary Meeting of Parkes Shire Council will be held at the Council Administration Centre, 2 Cecile Street, Parkes, commencing at 2.00 pm for the purpose of considering the items included on the Agenda.

**GENERAL MANAGER:** Kent Boyd



---

## Ordinary Meeting

**Minutes of the Ordinary Meeting held in the Council Chambers, 2 Cecile Street on Tuesday 22 January 2019 at 2.00pm.**

---

### **PRESENT**

Councillor K J Keith OAM, (in the Chair)  
Councillor L A O'Leary  
Councillor G W Pratt  
Councillor N C Westcott

Councillor P J Smith  
Councillor K M McGrath  
Councillor AJ Ward

### **IN ATTENDANCE**

General Manager - K Boyd  
Director Technology and Corporate Services - L Finn  
Director Planning and Environment - S Campbell  
Director Works & Services - B Howard  
Director Infrastructure - A Francis  
Chief Operating Officer - B Byrnes  
Economic and Business Development Manager - A Wyllie  
Minutes Secretary - M Wyatt

### **MEETING COMMENCEMENT**

The Meeting commenced at 2.10pm.

#### **1 PRAYER**

The Mayor asked the General Manager to open proceedings with a prayer.

#### **2 APOLOGIES**

##### **19 - 1 Resolution**

That

Councillor Wally Biles be granted leave of absence (REASON: Leave of Absence).  
Councillor Bill Jayet be granted leave of absence (REASON: Leave of Absence)  
Councillor Barbara Newton be granted leave of absence (REASON: Leave of Absence).

Moved Councillor Louise O'Leary, seconded Councillor Pat Smith.

**CARRIED**

### **3 CONFIRMATION OF MINUTES OF PREVIOUS MEETING**

#### **19 - 2 Resolution**

That the Minutes of the Ordinary Meeting of Parkes Shire Council held on Tuesday 18 December 2018 copies of which have been forwarded to Councillors, be confirmed.

Moved Councillor George Pratt, seconded Councillor Neil Westcott.

**CARRIED**

### **4 DECLARATIONS OF INTEREST**

Nil

### **5 NOTICES OF MOTION/RESCISSION**

Nil

### **6 LATE BUSINESS**

In accordance with Council's Code of Meeting Practice 3.7(c) a decision is now required to determine which, if any Late item/s submitted to the meeting will be dealt with at the meeting or deferred for further consideration at a future Ordinary Meeting of Parkes Shire Council.

#### **19 - 3 Resolution**

That Late Item/s 16.2, 17.8 and 17.9 be considered at this Council meeting.

Moved Councillor Pat Smith, seconded Councillor George Pratt.

**CARRIED**

## **7 MAYORAL MINUTES**

### **7.1 Mayoral Minute - Functions Attended by Mayor, Councillors and Senior Staff**

---

#### **Executive Summary**

A report on the upcoming functions requiring the attendance of the Mayor, Councillors or Senior Staff in relation to community events or civic matters.

#### **Recommendation**

1. That the report of upcoming functions for the Mayor, Councillors and Senior Staff be received and noted.

#### **19 - 4 Resolution**

That the information be received and noted.

Moved Councillor George Pratt, seconded Councillor Neil Westcott.

**CARRIED**

---

## **7.2 Mayoral Minute - Coming Known Events for Mayor, Councillors and Senior Staff**

---

### **Executive Summary**

A report on the upcoming functions requiring the attendance of the Mayor, Councillors or Senior Staff in relation to community events or civic matters.

### **Recommendation**

1. That the report of upcoming functions for the Mayor, Councillors and Senior Staff be received and noted.

### **19 - 5 Resolution**

1. That the information be received and noted.
2. That Council write to the Liquor Accord to request for a rescheduling of their meeting dates in 2019 as these tend to coincide with Ordinary Council Meetings.

Moved Councillor Louise O'Leary, seconded Councillor Pat Smith.

**CARRIED**

---

### **7.3 Mayoral Minute - 2019 Parkes Elvis Festival**

---

#### **Executive Summary**

The 2019 Elvis Festival celebrated its 27th year this year, with the theme "*All Shook Up*", which saw over 27,000 visitors to the Parkes Shire and surrounds between 9-13 January 2019.

Many Councillors, Council staff and volunteers including Elvis Revival Inc (ERI) made a significant contribution to the Festival's success and should be sincerely thanked for their efforts.

A comprehensive report on the Festival will be prepared in due course.

#### **Recommendation**

1. That Council record its appreciation to all staff and volunteers involved in the Festival delivery.
2. That Council write to Elvis Revival Inc. (ERI) thanking them for their valuable contribution to the Festival.
3. That Council send letters of appreciation to all the Festival Sponsors.
4. That Council formally thank The Hon Michael McCormack MP for his attendance and participation in the Festival.

#### **19 - 6 Resolution**

That the recommendation be adopted.

Moved Councillor George Pratt, seconded Councillor Ken McGrath.

**CARRIED**

## **8 COUNCILLORS' REPORTS**

Nil

## **9 INWARDS CORRESPONDENCE**

### **9.1 (ICR) Letters of Appreciation**

---

#### **Executive Summary**

During the exercise of its various functions, Council frequently receives letters of appreciation for services rendered or actions taken by Councillors and staff.

The most recently received letters and emails are from Destination NSW and emails from Ken and Nina Deacon, Garry and Diane Manning and Joe and Lee-Ann Mandica.

#### **Recommendation**

1. That the information be received and noted.

#### **19 - 7 Resolution**

That the information be received and noted.

Moved Councillor Neil Westcott, seconded Councillor Ken McGrath.

**CARRIED**



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## **10 GENERAL MANAGER'S REPORT**

### **10.1 (GM) Australian Local Government Association - Call for Motions - 2019 National General Assembly**

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#### **Executive Summary**

The Australian Local Government Association (ALGA) is calling for motions from Councils for discussion at the National General Assembly (NGA) scheduled to be held in Canberra 16 - 19 June 2019.

The theme for the 2019 National General Assembly is "*Future Focused*" focusing on how Councils can work in partnership with the Australian Government in particular to meet the current and future needs of local communities.

#### **Recommendation**

1. That motions be considered for submittal to the 2019 National General Assembly

#### **19 - 8 Resolution**

1. That the recommendation be adopted.
2. That Council prepare a motion pertaining to the drought and climate change.

Moved Councillor Pat Smith, seconded Councillor Alan Ward.

**CARRIED**

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## **10.2 (GM) Council Meeting and Other Key Scheduling Dates for 2019**

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### **Executive Summary**

Further to Council resolution 18 - 283, it is recommended that the 15 October 2019 Ordinary Council meeting be held on 22 October 2019 to accommodate the Mayor ( or nominee), General Manager and other interested Councillor/s attending the Local Government NSW Annual Conference in Warwick Farm from 14 to 16 October 2019.

### **Recommendation**

1. That the Ordinary meeting scheduled for 15 October 2019 be rescheduled to 22 October 2019 to accommodate the Mayor (or nominee), General Manager and other interested Councillor/s attending the Local Government NSW Annual Conference in Warwick Farm from 14 to 16 October 2019.

### **19 - 9 Resolution**

That the recommendation be adopted.

Moved Councillor Ken McGrath, seconded Councillor Neil Westcott.

**CARRIED**

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### **10.3 (GM) Drought Communities Program - Extension**

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#### **Executive Summary**

As Council is aware, the Australian Government promised \$1 million to a number of Councils under the Drought Communities Program - Extension. The funding guidelines are restrictive in terms of scope and timeline (projects "must" be completed by 30 June 2019).

Given the tight timeline, the projects have been progressed as tabled below. In addition, an exemption to the formal tendering process is sought to allow mandatory timeframes to be met.

Not all projects have been approved at the time of this report.

#### **Recommendation**

1. That the information be noted.
2. That pursuant to Section 55(3)(i) of the *Local Government Act* 1993 tenders not be called for the Drought Communities Program Extension projects, to ensure completion of all projects by due deadline.

#### **19 - 10 Resolution**

That the recommendation be adopted.

Moved Councillor George Pratt, seconded Councillor Neil Westcott.

**CARRIED**

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## **11 DIRECTOR TECHNOLOGY AND CORPORATE SERVICES REPORT**

### **11.1 (DTCS) Investment Report as at 31 December 2018**

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#### **Executive Summary**

The carrying value of Council's investments at 31 December 2018 was \$33,331,699.

#### **Recommendation**

1. That the information in relation to investments held at 31 December 2018 be received and noted.

#### **19 - 11 Resolution**

That the information be received and noted.

Moved Councillor Ken McGrath, seconded Councillor George Pratt.

**CARRIED**

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## 11.2 (DTCS) Inland Astro Trail Symposium 2019

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### Executive Summary

The Inland Astro-Trail is a not for profit astro-tourism, STEAM outreach (Science, Technology, Engineering, Arts and Mathematics), cultural heritage and development initiative to link, promote, utilise and conserve sites of astronomical significance in southeastern Australia's rural inland for the benefit of local communities.

The Inland Astro-Trail concept emerged from the Big Skies Collaboration's Skywriters Project to develop an astro-tourism trail linking all the astronomical sites between CSIRO's Australia Telescope Compact Array (ATCA) near Narrabri, in north-western New South Wales, and Mt Stromlo Observatory in the Australian Capital Territory, within a region we call Southeastern Australia's 700 Kilometre Array (700KA).

The Inland Astro-Trail Symposium and AGM, planned to be held in the Coventry Room, Parkes on 6 February 2019, is part of the Big Skies Collaboration. The Symposium will bring together approximately 100 stakeholders including 20 guest speakers, arts practitioners, astronomers and local communities from the surrounding 700 kilometre array region to discuss the future of the astro-trail and its potential contribution to rural communities. The Symposium will feature a dinner and stargazing at the Dish, art exhibition opening, and a First Nations performance in addition to the guest speaker and symposium program.

### Recommendation

1. That Council approve to waive the hire cost of the Coventry Room for the use of the event estimated to be \$479 (setup by the event organiser) and tea/coffee and biscuits for basic catering;
2. That Council provide assistance with AV equipment setup including access to IT Technician if required for the event held in the Coventry Room;
3. That Council's Destination team provide branded notepads and pens for approximately 100 attendees;
4. That the Council owned Parkes+ giant letters and cubes be installed in the foyer prior to the event and removed following the event at the Coventry Room;
5. That Council's Destination team continue to work with the event organisers to promote the event and leverage the event for the Shire;
6. That the Mayor and/or Councillors attend the Inland Astro-Trail Symposium and AGM on 6 February 2019, if available;
7. That in exchange for the provision of this support, Council seeks appropriate sponsorship recognition and acknowledgement from event Organisers.

### 19 - 12 Resolution

That the recommendation be adopted.

Moved Councillor Alan Ward, seconded Councillor Ken McGrath.

**CARRIED**

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## **12 DIRECTOR PLANNING AND ENVIRONMENT'S REPORT**

### **12.1 (DPE) December 2018 Building Statistics**

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#### **Executive Summary**

During the month of December 2018 there were seven (7) Development Applications received totalling \$24,390,095.00 and nine (9) consents were issued. Three (3) Complying Development Certificates were received totalling \$132,221.00 and five (5) consents were issued.

#### **Recommendation**

1. That the information be received and noted.

#### **19 - 13 Resolution**

That the information be received and noted.

Moved Councillor Louise O'Leary, seconded Councillor Neil Westcott.

**CARRIED**

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## **12.2 (DPE) DA2018/0114 Change of Use (Dwelling to Health Consulting Room) at Lot 3 DP 19284, 28 Armstrong Street, Parkes**

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### **Development Application Information**

**Application No:** DA2018/0114

**Applicant:** Barnson Pty Ltd

**Property:** Lot 3 DP 19284, 28 Armstrong Street, Parkes

**Proposal:** Change of use (Dwelling to Health Consulting Room)

### **Executive Summary**

Council is in receipt of a development application for a change of use of an existing dwelling to a Health Consulting Room (Physiotherapy Clinic) at 28 Armstrong Street, Parkes. The application is reported to Council for determination, given the proposal is not consistent with the onsite car parking requirements under clause 3.3.4 Car Parking and Access of the Parkes Development Control Plan 2013 and three submissions were received (two of which were objections) in relation to the development.

The site is located on the western side of Armstrong Street, one lot south of the intersection with Dalton Street. The site contains an existing single storey dwelling and attached carport. The prevailing land-uses in the locality are varied between residential, commercial and recreational facilities. Residential uses dominate the northern and southern side of Armstrong Street. The eastern side of Armstrong Street has a mix of commercial and recreational land-uses with associated car parking areas.

The applicant has advised that the proposed physiotherapy clinic is to operate five days per week (Monday to Friday) generally between the hours of 6am and 7pm, and closed on weekends and public holidays. The applicant expects around 48 clients attending the clinic per week, with no more than six clients at the clinic at any one time. The physiotherapy clinic will be staffed by one Administration, two Physiotherapists and one Occupational Therapist.

The subject site is zoned R1 General Residential under the Parkes Local Environmental Plan 2012, which permits a physiotherapy with consent. The proposal is considered to be consistent with the relevant objectives of the zone. However, the proposal is not consistent with Clause 3.3.4 of the Parkes Development Control Plan 2013 (DCP), which requires a total of 9 car parking spaces to be provided onsite. The applicant proposes two onsite car parking spaces in a stacked arrangement which is permitted for staff parking, therefore resulting in a shortfall of 7 onsite car parking spaces.

The development application was placed on exhibition and neighbour notified for a period of 21 days from 14 November 2018 to 7 December 2018. A total of two objections were received in relation to the development. The objections to the development are based on the potential for car parking, traffic and noise impacts to arise in the locality as a result of the operation of the physiotherapy clinic. Phillip Donato MP also wrote to Council after receiving representations from one of the objectors. While not objecting to the proposal, Mr Donato wished to make sure Council was aware of the objector's concerns and included a copy of such to his offices' submission. All submissions are included in Attachment 4 to this report.

The assessment of the development proposal (Attachment 3) concludes the proposed development will not detrimentally impact on traffic or car parking in the area, given the relatively small scale of the physiotherapy clinic and the availability of car parking in the adjacent AE Fox Carpark and surrounding streets. A survey of parking in the locality confirms there is capacity for 71 cars in the public carpark as well as 22 street car parking spaces within 100 metres of the proposed physiotherapy clinic. The biggest user of the AE Fox Carpark is the Parkes Early Childhood Centre (PECC) which has peak parking demand from 8am to 9am and 3:30pm to 4:30pm. The applicant advises they are prepared to limit physiotherapy visits and health classes to avoid peak parking periods. A condition has been included in the recommendation, requiring no health classes during peak public parking times.

A review of other physiotherapy clinics in Parkes shows these businesses operate effectively in residential areas with limited on-site car parking, specifically:

- **Parkes Physiotherapy & Sports Injuries Centre** (27-29 Clarinda Street), No onsite car parking
- **Lachlan Physiotherapy** (337 Clarinda Street), No onsite car parking
- **Dixon Physiotherapy** (16 Currajong Street), two onsite car parks

In relation to noise, the assessment concluded that noise would be minimal, given the nature of the use in conjunction with expected operating hours.

Minor demolition and building works will be undertaken on the existing dwelling to make it suitable for a physiotherapy clinic. Conditions have been included in the recommendation to control the demolition and building phases.

A small business identification sign will be attached to the front building façade. The sign is minor in nature and will not detract from the streetscape.

The Plans of the development proposal are included in Attachment 1. The Statement of Environmental Effects in support of the development proposal is included in Attachment 2. A Development Assessment Report, dealing with all aspects of the proposal is included in Attachment 3.

## **Recommendation**

It is recommended that the application be approved subject to the conditions contained in the report.

## **Conditions**

### **Approved Plans and Documentation**

1. The development shall be carried out in accordance with:
  - I. The approved stamped Site Plan prepared by BARNSON PTY LTD, Drawing Number 30184-A01, Revision: A and dated 25 October 2018
  - II. The approved stamped Floor Plan prepared by BARNSON PTY LTD, Drawing Number 30184-A02, Revision: A and dated 25 October 2018
  - III. The approved stamped Signage Details



- IV. The approved stamped Statement of Environmental Effects prepared by BARNSON PTY LTD, Reference Number: 30184-PRO\_A and dated 31 October 2018

except as varied by the conditions listed herein or as marked in red on the approved plans. A copy of the approved stamped plans is to be maintained on site for constructional and reference purposes.

### **Prior to Commencement**

2. The Applicant is to obtain a Construction Certificate from either Council or an Accredited Certifying Authority, certifying that the proposed works are in accordance with the Building Code of Australia and applicable Council standards prior to any building works commencing.

Note. No building, engineering or excavation work is to be carried out in relation to this development until the necessary construction certificates have been obtained.

Note. It is the responsibility of the Applicant to ensure that the development complies with the Building Code of Australia and applicable Council standards in the case of building work. This may entail alterations to the proposal so that it complies with these standards.

3. The following building fire safety upgrades shall be provided and installed to the existing building:
- (a) All building elements, including any openings located within 3.0m of the southern boundary (fire source feature) are required to comply with the requirements of the BCA (Vol. 1) Performance Requirement CP1 and CP2;
  - (b) Provide to the existing front entrance door (the building's required exit door) a device capable of holding the door in the open position, and
  - (c) Provision of portable fire extinguishers within the building, in conformity with E1.6 of the BCA (Vol. 1).

Design detail and plans of the required upgrading works shall be submitted with the Construction Certificate and must be approved by Parkes Shire Council prior to the release of any Construction Certificate. The approved aforementioned upgrade works are required to be completed prior to the issue of any Interim or Final Occupation Certificate.

4. The applicant is to submit to Parkes Shire Council, at least two (2) days prior to the commencement of any works, a 'Notice of Commencement of Building or Subdivision Works' and 'Appointment of Principal Certifying Authority'.
5. The person having the benefit of this Development Consent carrying out the building work must, unless that person is the principal contractor, ensure that the principal contractor has been notified of the critical stage inspections and any other inspections that are specified by the appointed Principal Certifying Authority (PCA) to be carried out.

Note. The 'principal contractor' is the person responsible for the overall coordination and control of the carrying out of the building work.

6. A Waste Management Plan shall be submitted to Council prior to the commencement of any demolition works. The Plan must address, but not limited to, the following matters:

- (a) Details of demolition works and the presence of asbestos or other hazardous waste;
  - (b) Details of waste to be generated by the work;
  - (c) Arrangements for removal of waste material from site; and
  - (d) Destination of waste materials being removed from the site.
7. The applicant shall notify the adjoining property owners of the proposed work a minimum of 2 days prior to the commencement of demolition work and shall ensure that there is no disruption to their amenity or business.
8. Upon completion of demolition and prior to commencement of construction, the following information must be submitted to Council:
- (a) An asbestos clearance certificate prepared by a competent person; and
  - (b) A signed statement verifying that demolition work and the recycling of materials was undertaken in accordance with this consent. In reviewing documentation Council will require actual receipts for the recycling/disposal of all materials.

### **During Work**

9. Building demolition works that are necessary for the proposed alterations to the building are required to be undertaken in accordance with Australian Standard AS 2601—1991: The Demolition of Structures, published by Standards Australia and all applicable WorkCover requirements.
10. All building rubbish and debris, including that which can be wind-blown, shall be contained on site in a suitable container for disposal at the Parkes Waste Landfill Depot. The container shall be erected on the building site prior to work commencing and shall be maintained for the term of the construction to the completion of the project.
- Note. No building rubbish or debris shall be placed or permitted to be placed on any adjoining public reserve, footway or road.
- Note. The waste container shall be regularly cleaned to ensure proper containment of the building wastes generated on the construction site.
11. No contaminated waste-water or liquid waste from demolition and building operations is to be discharged into Parkes Shire Council's sewerage or stormwater system.
12. All removal, transport and disposal of asbestos or other contaminated waste materials shall be controlled in accordance with the Work Health and Safety Act 2011 and the Protection of Environment Operations Act 1997.
- Note. The delivery of asbestos waste to Parkes Shire Council's Waste Depot must be pre-booked.
13. Building activities, demolition work and excavation work involving the use of electric or pneumatic tools or other noisy operations shall be carried out only between 7.00 am and 6.00 pm on weekdays and 8.00 am and 1.00 pm on Saturdays. No work on Sundays or Public Holidays is permitted.
14. All loading, unloading and storage of goods, equipment, tools and building materials, or the carrying out of building operations related to the development proposal shall be carried out within the confines of the property. No loading, unloading and storage of goods, equipment, tools and building materials, or the carrying out of building

operations related to the development proposal shall be carried out on the nature strip, footpath or public roadway system.

15. During construction, the disused/redundant vehicle crossing and layback shall be removed and reinstated with concrete kerb and gutter, with the footpath area also to be restored to the satisfaction of Council prior to the completion of work (whichever is later). All relevant approvals under the Roads Act 1993 to carry out the construction works are to be obtained from Parkes Shire Council. The work must be completed prior to the issue of a Final Occupation Certificate.
16. Any damage caused to footpaths, roadways, utility installations and the like by reason of construction operations shall be made good and repaired to a standard equivalent to that existing prior to commencement of construction. The full cost of restoration/repairs of property or services damaged during the works shall be met by the Applicant.

### **Operational Conditions**

17. The hours of operation of the physiotherapy clinic are restricted to those times listed below:

- (a) Monday to Friday 6:00am to 7:00pm
- (b) Weekends / Public Holidays Closed

Except for structured health classes, such as Pilates, which are not permitted within the times listed below:

- (a) 8.00am to 9.00am Monday to Friday
- (b) 3.30pm to 4.30pm Monday to Friday

Any variation to these hours is to be subject to the prior consent of Council.

18. An Annual Fire Safety Statement shall be furnished to Parkes Shire Council for all the Essential Fire or Other Safety Measures forming part of this approval within twelve (12) months after the Fire Safety Certificate was issued. A copy of the Fire Safety Certificate must be submitted to Council by the owner. An electronic copy of the Annual Fire Safety Statement shall also be forwarded to the Fire Commissioner via the following dedicated email address: [afss@fire.nsw.gov.au](mailto:afss@fire.nsw.gov.au).
19. There must be no interference with the amenity of the area by reason of the emission of any "offensive noise" as defined in the Protection of the Environment Operations Act 1997, vibration, smell, fumes, smoke, vapour, steam, soot, ash or dust, or otherwise as a result of the development.

### **Prior to Occupation**

20. Prior to the occupation or use of the premises, an Occupation Certificate must be obtained from the Principal Certifying Authority for the subject development.
21. Prior to the issue of an Occupation Certificate, the Owner shall submit to Parkes Shire Council a Final Fire Safety Certificate stating that each essential fire safety measure specified in the current Fire Safety Schedule for the building to which the certificate relates:
  - (a) Has been assessed by a properly authorised person; and
  - (b) Was found, when it was assessed, to be capable of performing to a standard not less than that required by the current fire safety schedule for the building.

The assessment is to be carried out within a period of three (3) months from the date on which the Final Safety Certificate was issued. The owner of the building shall forward a copy of the certificate to the New South Wales Fire Brigades and also prominently display a copy in the building.

Note: A Final Fire Safety Certificate must be provided before a final Occupation Certificate can be issued for the building

### **Prescribed conditions under the Environmental Planning and Assessment Regulation 2000**

22. All new building work is required to comply with the requirements of the Building Code of Australia in force at the time of the application for a Construction Certificate is made.
22. A sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:
- (a) Showing the name, address and telephone number of the principal certifying authority for the work, and
  - (b) Showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
  - (c) Stating that unauthorised entry to the site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

### **19 - 14 Resolution**

That the recommendation be adopted.

Moved Councillor Neil Westcott, seconded Councillor Pat Smith.

**CARRIED**

In a show of hands by all Councillors:

For - Cr Ken Keith, Cr Pat Smith, Cr Louise O'Leary, Cr Neil Westcott, Cr Alan Ward,

Against - Cr George Pratt and Cr Ken McGrath

Did not vote - Cr Wally Biles, Cr Bill Jayet and Cr Barbara Newton

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## 12.3 (DPE) DA2018/0120 Alterations and Additions Commercial (extension of retail premises) at Lot 14 DP 834085, 75 Molong Road, Parkes

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### Development Application Information

**Application No:** DA2018/0120

**Applicant:** PG Evans

**Property:** Lot 1 DP 405052, 75 Molong Road, Parkes

**Proposal:** Alterations and additions commercial (extension of retail premises)

### Executive Summary

DA2018/0120 proposes alterations and additions to an existing retail premises (Parkes Bearings and Parts) at 75 Molong Road, Parkes. The proposed extension is to be located on the southern (rear) side of an existing retail premises and will be 6 metres long, 8.9 metres wide and have an eave height of 3.6 metres. The proposed building extension to the existing retail premises will be used for storage purposes.

The application is reported to Council as one objection to the development was received during notification of the proposal. The objection is based on the proposed extension increasing existing stormwater and traffic issues in the locality.

The assessment of the development proposal (see Attachment 3) concludes the proposed development fits in the locality and there are no constraints on the site or posed by adjacent developments. The proposed extensions are for storage purposes only and will not result in significant increases in traffic or surface water runoff. Conditions have been included in the recommendation to control construction and operation of the expanded retail premises, including vehicle entry / exit signage, building upgrades to comply with the BCA and stormwater management.

The Plans of the development proposal are included in Attachment 1. The Statement of Environmental Effects in support of the development proposal is included in Attachment 2. A Development Assessment Report, dealing with all aspects of the proposal is included in Attachment 3.

### Recommendation

It is recommended that the application be approved subject to the conditions contained in the report.

#### **Conditions**

1. The development shall be carried out in accordance with:
  - I. The approved stamped plan(s) Sheet No. A0.2 and A0.4 prepared by P Evans, dated 19 November 2018.
  - II. The approved stamped Floor Plan, Sheet No. A0.3, prepared by P Evans, dated 19 December 2018.
  - III. The approved stamped Statement of Environmental Effects.

A current and approved copy of the approved stamped by Parkes Shire Council is to be maintained on site for constructional and reference purposes.

### **Prior to Issue of the Construction Certificate**

2. The Applicant is to obtain a Construction Certificate from either Council or an Accredited Certifying Authority, certifying that the proposed works are in accordance with the Building Code of Australia and applicable Council Development and Engineering Standards prior to any building and or subdivision works commencing.  
  
Note. No building, engineering or excavation work is to be carried out in relation to this development until the necessary construction certificates have been obtained.  
  
Note. It is the responsibility of the Applicant to ensure that the development complies with the Building Code of Australia and applicable Development and engineering standards in the case of building work and the applicable Council Engineering Standards in the case of subdivision works. This may entail alterations to the proposal so that it complies with these standards.
3. The Applicant must submit to Council, at least two (2) days prior to the commencement of any works, the attached 'Notice of Commencement of Building or Subdivision Works and Appointment of Principal Certifying Authority'.
4. Erosion and sedimentation controls must be in place prior to the commencement of site works and maintained throughout construction activities until the site is landscaped and/or suitably revegetated. The controls shall be in accordance with the latest publication of Managing Urban Stormwater – Soils and Construction produced by Landcom.
5. In order to facilitate the upgrading of the fire safety measures contained within the building, the following shall be undertaken as the required fire safety upgrading for the existing building, the details of which will be required to be submitted with the application for Construction Certificate with the required building upgrading works being required to be completed prior to the issue of ANY Occupation Certificate:

Provide and install the following measures to the subject building:

- (a) Removal of the non-conforming latches, pad lock and bolts from the required exit doors from the building and replacement with latches conforming with D2.21 of the NCC;
- (b) Provision of suitable barriers to be provided to the required exit doors to prevent vehicles from blocking the exit in accordance with the requirements of Clause D1.10 of the NCC, and
- (c) Provision of portable fire extinguishers throughout the building in accordance with the requirements of Clause E1.6 of the NCC and AS2444-2001.

### **During Works**

6. The development must be carried out in accordance with:
  - (i) AS 2601-2001, The demolition of structures.
  - (ii) Workcover NSW and the Work Health and Safety Regulation 2011
7. Building activities and demolition and excavation work involving the use of electric or pneumatic tools or other noisy operations shall be carried out only between 7.00am

and 6.00pm on weekdays and 8.00 am and 1.00 pm on Saturdays. No work on Sundays or Public Holidays is permitted.

8. All loading, unloading and storage of goods, equipment, tools and building materials, or the carrying out of building operations related to the development proposal shall be carried out within the confines of the property. No loading, unloading and storage of goods, equipment, tools and building materials, or the carrying out of building operations related to the development proposal shall be carried out on the nature strip, footpath or public roadway system.
9. Building and construction materials, plant, equipment and the like must not be stored nor construction work carried out on the road reserve, footpath or roadway, unless associated with a separate approval under the Road Act 1993.
10. All building rubbish and debris, including that which can be windblown, shall be contained on site in a suitable container for disposal at an approved Waste Landfill Depot. The container shall be erected on the building site prior to work commencing and shall be maintained for the term of the construction to the completion of the development.
11. Any damage caused to footpaths, roadways, utility installations and the like by reason of demolition or construction operations shall be made good and repaired to a standard equivalent to that existing prior to commencement of works. The full cost of restoration/repairs of property or services damaged during works shall be met by the Applicant.
12. All roofwater collected from the proposed development and associated existing building shall be drained to the rainwater tank with any overflow contained onsite, so that water from those areas is not directed towards the Henry Parkes Way road reserve or Lot 3 DP 1112408 and is properly conveyed away from buildings in accordance with the Plumbing Code of Australia. Stormwater disposal drains shall be connected to all roof gutter down pipes within 14 days of installation of the roof covering and/or the construction of hard standing areas, as may be appropriate, to discharge water in accordance with an approved stormwater management system.
13. During work the applicant must install an entry and exit sign identifying the vehicular access to the property and delineate the access driveway from the access driveway servicing Lot 3 DP 1112408 by way of a physical bollard barrier to the satisfaction of Council's Director Engineering Services.

#### **Prior to Occupation of an Occupation Certificate**

14. Application for an Occupation Certificate must be submitted to and approved by the Principal Certifying Authority prior to use of the whole or part of the new building/works.
15. A Fire Safety Certificate shall be furnished to the Principle Certifying Authority for all the Essential Fire or Other Safety Measures forming part of this approval prior to the issue of any Occupation Certificate. A copy of the Fire Safety certificate must be submitted to Council by the PCA with the Occupation Certificate. An electronic copy of the Final Fire Safety Certificate (together with a copy of the current Fire Safety Schedule) shall also be forwarded to the Fire Commissioner via the following dedicated email address: [afss@fire.nsw.gov](mailto:afss@fire.nsw.gov).

### **Operational Conditions**

16. An Annual Fire Safety Statement shall be furnished to the Principal Certifying Authority for all the Essential Fire or Other Safety Measures forming part of this approval within twelve (12) months after the Fire Safety Certificate was issued. A copy of the Annual Fire Safety Statement must be submitted to Council. An electronic copy of the Annual Fire Safety Statement shall also be forwarded to the Fire Commissioner via the following dedicated email address: [afss@fire.nsw.gov](mailto:afss@fire.nsw.gov).
17. The location and facilities for the collection, storage and disposal of waste generated within the premises must be in such a manner that the waste materials/storage bins or refuse areas are not visible from any public place.
18. There must be no interference with the amenity of the area by reason of the emission of any "offensive noise" as defined in the Protection of the Environment Operations Act 1997, vibration, smell, fumes, smoke, vapour, steam, soot, ash or dust, or otherwise as a result of the development.

### **Prescribed Conditions**

19. The work must be carried out in accordance with the requirements of the Building Code of Australia.
20. A sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:
  - (a) Showing the name, address and telephone number of the principal certifying authority for the work, and
  - (b) Showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
  - (c) Stating that unauthorised entry to the site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.
21. Where development involves an excavation that extends below the level of the base of the footings of a building on adjoining land, the person having the benefit of the certificate must at the person's own expense:
  - (a) Protect and support the adjoining premises from possible damage from the excavation, and
  - (b) Where necessary, underpin the adjoining premises to prevent any such damage.



**19 - 15      Resolution**

That the recommendation be adopted.

Moved Councillor Ken McGrath, seconded Councillor Neil Westcott.

**CARRIED**

In a show of hands by all Councillors:

For - Cr Keith, Cr Smith, Cr O'Leary, Cr Westcott, Cr Ward, Cr Pratt and Cr McGrath

Against - Nil

Did not vote - Cr Biles, Cr Jayet and Cr Newton

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## **13 DIRECTOR WORKS AND SERVICES REPORT**

### **13.1 (DWS) Roads to Recovery Program 2019 to 2024 Funding Announcement**

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#### **Executive Summary**

Parkes Shire Council has been formally advised by The Hon Michael McCormack MP, Deputy Prime Minister, Minister for Infrastructure, Transport and Regional Development, of the Road to Recovery Program Funding.

Council has been advised of the allocated \$5,350,451 over five years under the extended Roads to Recovery Program (R2R) which will conclude 30 June 2024.

Council has generally used R2R funds to carry out works that would not be possible under normal circumstances from Council's funds. It is intended to continue the practice with the projects being for the continuation of widening of narrow seals on Local Roads.

#### **Recommendation**

1. That the Roads to Recovery funding for 2019 - 2024 be noted.

#### **19 - 16 Resolution**

1. That the information be received and noted.
2. That Council write to The Hon Michael McCormack MP to thank him for the additional funding of \$500,000.

Moved Councillor Neil Westcott, seconded Councillor Louise O'Leary.

**CARRIED**

Council adjourned for afternoon tea at 3.20pm and Councillor Alan Ward left the meeting due to a family commitment.

The meeting resumed at 3.50pm.

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## **14 DIRECTOR INFRASTRUCTURE REPORT**

### **14.1 (DI) Level 2 Water Restrictions January 2019**

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#### **Executive Summary**

Lake Endeavour and Lake Metcalf supplies are currently at 40% capacity and as such, this triggers a move to Level 2 Water Restrictions under Parke Shire Council's Drought Management Plan.

#### **Recommendation**

1. That Council note the change in Water Restrictions from Level 1 to Level 2.

#### **19 - 17 Resolution**

That the information be received and noted.

Moved Councillor Louise O'Leary, seconded Councillor Ken McGrath.

**CARRIED**

## **15 CONSIDERATION OF COMMITTEE MINUTES**

### **15.1 Committee Minutes - Parkes Sports Council Meeting 11 December 2018**

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#### **Executive Summary**

The Minutes of the Parkes Sports Council Meeting held on 11 December 2018 are presented for the information of Council. At the meeting a proposal for a new Gatekeepers shelter to the entry of Northparkes Oval was discussed. In addition, Julian Fyfe gave a presentation on the Recycled Water Rising Main and how it will impact sporting groups.

#### **Recommendation**

1. That the minutes of the Parkes Sports Council meeting held on 11 December 2018 are received and noted.

#### **19 - 18 Resolution**

That the information be received and noted.

Moved Councillor George Pratt, seconded Councillor Louise O'Leary.

**CARRIED**

## **16 QUESTIONS AND MATTERS OF URGENCY**

### **16.1 Q&M from Cr Westcott - Rezoning opportunities in Villages**

During the mid term IP&R check ins, a number of questions were asked about the future economic use of various parcels of land in the Shire. Of particular interest to me is land at Alectown that could be rezoned which would permit economic growth and commercial activity on the Newell highway.

A resident of Alectown raised the issue again at the recent Check in and was told that the matter will take years to be finalised through a new LEP process.

I request a suggested time frame for the proposed consultation process and the ultimate rolling out of the new LEP.

I believe Councillors would benefit greatly from a clear indication of the process and the ability to have current planning opportunities and constraints explored as part of the process.

#### **Response from Steven Campbell, Director Planning & Environment:**

Due to the complexity of land use planning processes, it is suggested an information session be provided to the next Parkes Delivery Plus Workshop on the process, likely timeframes and funding for review of the Parkes Environmental Plan 2012.

### **19 - 19 Resolution**

1. That the information be noted
2. That staff prepare a presentation as outlined to be given at a Parkes Delivery Plus Workshop on 5 February 2019.

Moved Councillor Neil Westcott, seconded Councillor Ken McGrath.

**CARRIED**

Councillor Alan Ward returned to the meeting at 4.20pm.

## **16.2 Q&M Cr McGrath – Frequency of red lid bin collection**

Cr McGrath has recently received complaints and in particular over the Christmas break in relation the red lid bin collection. Cr McGrath suggests the fortnight frequency of the red lid bin collection should be reconsidered. Two complainants have described odours from neighbours bins who have failed to meet the collection day as well as other users who believe the red lid bin should be collected more often.

Cr McGrath would like the matter reconsidered.

### **Response from Steven Campbell, Director Planning & Environment:**

It is suggested the matter be considered in a report the Waste Committee before being further considered at a Parkes Plus or Ordinary Council meeting.

### **19 - 20 Resolution**

1. That the information be received and noted.
2. That a report be prepared for consideration by the Waste Committee to be held on 19 February 2019.

Moved Cr Alan Ward, seconded Cr George Pratt

**CARRIED**

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## **17 CONSIDERATION OF CONFIDENTIAL BUSINESS ITEMS**

### **17.1 (GM) Policy Development and Review - Community Financial Assistance Policy and Leasing and Licensing Policy**

**Prepared By:** General Manager

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#### **Executive Summary**

An important component of Council's corporate governance responsibility is the progressive development and review of Council's policies.

It is proposed to implement a Community Financial Assistance Policy to assist Council in providing a fair, equitable and transparent process for the distribution of public money and a Leasing and Licensing Policy to ensure that a consistent, equitable and transparent process is applied in regards to the leasing and licensing of Council managed properties.

#### **Recommendation**

1. That the Community Financial Assistance policy and the Leasing and Licensing policy be adopted in principle to allow for Council to consult with community based commercial and volunteer entities, for implementation from 01 July 2019.
2. That a Council Committee be established, with independent representation, to consider requests for Community Financial Assistance.
3. That a report be tabled at a future meeting of Council on the community's response and final adoption of these policies.

#### **19 - 21 Resolution**

That the recommendation be adopted.

Moved Councillor Louise O'Leary, seconded Councillor George Pratt.

**CARRIED**

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## **17.2 (DTCS) Parkes Airport Event**

**Prepared By:** Director Technology and Corporate Services

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### **Executive Summary**

A reply has been received from the proponents of a planned event at Parkes Regional Airport following Council's consideration of the matter at its meeting held on 18 December 2019.

The purpose of this report is to update Council on the progress of the additional discussions held.

### **Recommendation**

1. That the information be received and noted.

### **19 - 22 Resolution**

That the information be received and noted.

Moved Councillor Neil Westcott, seconded Councillor Alan Ward.

**CARRIED**



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### **17.3 (DWS) CENTROC Linemarking Services**

**Prepared By:** Director Works and Services

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#### **Executive Summary**

This report provides advice on progressing a regional panel contract for Linemarking services to Council.

#### **Recommendation**

1. It is recommended that a contract is signed between Council and one or more of the contract is 1 December 2018 to 30 November 2019, with two optional 12 month extensions:
  - Avante Linemarking
  - Central West Linemarking
  - Complete Linemarking Services
  - Oz Linemarking
  - Red Squirrel (transverse linemarking only)
2. Council to advise Centroc of its decision.

#### **19 - 23 Resolution**

That the recommendation be adopted.

Moved Councillor Ken McGrath, seconded Councillor George Pratt.

**CARRIED**

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## **17.4 (DWS) Proposed Road Closure Dows Lane - Australian Rail Track Corporation (ARTC)**

**Prepared By:** Director Works and Services

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### **Executive Summary**

Council has received a proposal from the Australian Rail Track Corporation (ARTC) to review the possibility of the closing of a public level crossing within Councils local road network, being Dows Lane Peak Hill.

### **Recommendation**

1. That Council offer no objections to the closure of Dows Lane, Peak Hill as outlined by the Australian Rail Track Corporation (ARTC).
2. That Council assist the ARTC with the process for application of closing roads as outlined under relevant Local Government Acts and Regulations

### **19 - 24 Resolution**

That the recommendation be adopted.

Moved Councillor Neil Westcott, seconded Councillor Ken McGrath.

**CARRIED**

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## **17.5 Committee Minutes - Audit, Risk and Improvement Committee Meeting held 18 December 2018**

**Prepared By:** Chief Operating Officer

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### **Executive Summary**

A meeting of the Parkes Shire Council Audit, Risk and Improvement Committee was held on 18 December 2018. The Minutes have been distributed to the Committee members and will be confirmed at the next scheduled meeting of the Committee. The Minutes are attached for Councillors information.

### **Recommendation**

1. That the Recommendations and/or Actions below of the Audit, Risk and Improvement Committee meeting held on 18 December 2018 be endorsed by Council.

#### **ARIC External Audit Report as at 18 December 2018**

1. It was the consensus of the Committee that the information provided in the Report be received and noted.
2. That the Committee receive an update/action plan on the progress of dealing with the matters identified in the Audit Report for next meeting of the Committee.

#### **ARIC Risk Management Report as at 18 December 2018**

1. It was the consensus of the Committee that the information provided in the Report be received and noted.
2. That clarification on the residual risks on the High Risk projects be provided at the next meeting.
3. That the Committee endorse the proposed process for the implementation of a formal framework and policy on requests for donations, contributions and waiving of fees and charges.
4. That the Committee note management's advice on the pending departure of the CFO and that an update be provided at next meeting
5. Subject to the Internal Audit outcome the Committee to receive a project plan related to CIS highlighting key areas to be addressed and further that CIS improvements be included as a standing item in future ARIC agenda's

#### **ARIC Compliance Report as at 18 December 2018**

1. It was the consensus of the Committee that the information provided in the Report be received and noted.
2. That the Committee notes that management will be undertaking a review of environmental legislative compliance and develop a strategy to address the requirements.
3. That a report be tabled at a future meeting of the Committee on Council's Environment Strategy including the establishment of a risk based environmental compliance register

#### **ARIC Fraud and Corruption Prevention Report as at 18 December 2018**

1. It was the consensus of the Committee that the information provided in the Report be received and noted.
2. That an Action Plan/results from Credit Card Review be tabled at the next meeting of the Committee

3. The Committee also noted the controls and procedures in place to address possible risks associated with the Shop local cards.

**ARIC Internal Controls as at 18 December 2018**

1. It was the consensus of the Committee that the information provided in the Report be received and noted.
2. That a report be tabled on the progress and mitigation around risk for flexible work arrangement to next meeting of the Committee.

**ARIC Internal Audit Report as at 18 December 2018**

1. It was the consensus of the Committee that the information provided in the Report be received and noted.
2. That a summary report on outstanding actions from previous Internal Reviews be included as a standing item in future Internal Audit Reports to the Committee.

**ARIC External Accountability including Financial Reporting as at 18 December 2018**

1. It was the consensus of the Committee that the information provided in the Report be received and noted.

**ARIC Continuous Improvement Report as at 18 December 2018**

1. It was the consensus of the Committee that the information provided in the Report be received and noted.
2. It was requested that the number of sick leave taken and the turnaround of staff also be captured each quarter, to reflect the culture of Council as part of Employee Engagement section of this Continuous Improvement Report.

**19 - 25 Resolution**

That the recommendation be adopted.

Moved Councillor Neil Westcott, seconded Councillor Alan Ward.

**CARRIED**

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## **17.6 Committee Minutes - Economic Development Committee Airport Sub-Committee Meeting 18 December 2018**

**Prepared By:** Economic & Business Development Manager

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### **Executive Summary**

Minutes of the Economic Development Committee Airport Sub-Committee meeting held on Tuesday 18 December 2018 are attached for Council's consideration.

### **Recommendation**

1. That the Minutes of the Economic Development Committee Airport Sub-Committee meeting held on Tuesday 18 December 2018 be noted and the recommendations be adopted.

### **19 - 26 Resolution**

That the recommendation be adopted.

Moved Councillor Alan Ward, seconded Councillor George Pratt.

**CARRIED**

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## **17.7 Committee Minutes - Economic Development Committee Meeting 18 December 2018**

**Prepared By:** Economic & Business Development Manager

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### **Executive Summary**

Minutes of the Economic Development Committee meeting held on Tuesday 18 December 2018 are attached for Council's consideration

### **Recommendation**

1. That the Minutes of the Economic Development Committee Meeting held on Tuesday 18 December be noted and the recommendations be adopted

### **19 - 27 Resolution**

That the recommendation be adopted.

Moved Councillor Louise O'Leary, seconded Councillor Pat Smith.

**CARRIED**

## **17.8 (DI) Purchase of Additional Groundwater License**

**Prepared By:** Director Instructure

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### **Executive Summary**

Councils Strategic Business Plan for Water and Sewerage Supply as well as the 2015 IWCM, identifies the need to procure additional water access licences (WAL) from the Regulated Lachlan system. Groundwater licenses can be traded within each Management Zone within the Regulated system.

Council has been approached with an offer to buy a license within our existing Management Zone at the current market rate.

### **Recommendation**

1. That Council agree to purchase the ground water access licence in accordance with this report and appropriate due diligence checks.
2. That the necessary documentation to facilitate the purchase and transfer of the water access licences be signed under the seal of Council as required.

### **19 - 28 Resolution**

That the recommendation be adopted.

Moved Councillor Neil Westcott, seconded Councillor Alan Ward.

**CARRIED**

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## **17.9 (GM) Procurement of Commercial Property being Lots 1 DP772220, 5 Sec. 5 DP758827 and 1 DP961580 Clarinda Street Parkes**

**Prepared By:** General Manager

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### **Executive Summary**

As Council is aware several large land parcels in Dalton Street Parkes, have been successfully procured over the past two (2) years which will ultimately be annexed with the Council civic precinct, should expansion ever be required.

An opportunity now exists to further expand the precinct with a land parcel on the southwest side of Clarinda Street, being lots 1 DP772220, 5 Sec. 5 DP758827 and 1 DP961580. The land is vacant and is currently being utilised as an informal unsealed car park.

The Lots have a frontage to Clarinda Street whilst also having access to Lowing Lane to the rear.

### **Recommendation**

1. That Council agree to purchase the land parcel on the southwest side of Clarinda Street, being lots 1 DP772220, 5 Sec. 5 DP758827 and 1 DP961580, for \$250000 incl GST if applicable.
2. That the seal of Council be applied as required to effect the acquisition.
3. That the land be declared operational land on acquisition.

### **19 - 29 Resolution**

That the recommendation be adopted.

Moved Councillor Ken McGrath, seconded Councillor Alan Ward

**CARRIED**

At this stage being 5.45pm, the Closed meeting concluded and the Mayor re-opened the Meeting to the public. The Mayor read aloud the resolutions of the Confidential Business items tabled in the Closed Meeting for the benefit of the public gallery.

There being no further business the Mayor declared the meeting closed at 5.50pm.



# Appendix F

Public Level Crossing Treatment Report  
Consultation Letters



20<sup>th</sup> December 2018

Ben Howard  
Director Works & Services  
Parkes Shire Council  
2 Cecile Street  
Parkes NSW 2870

ben.howard@parkes.nsw.gov.au

**Subject: Inland Rail Parkes to Narromine Public Level Crossing Treatment Reports**

Dear Ben,

As per the Parkes to Narromine Project Conditions of Approval, ARTC are pleased to provide the Parkes Shire Council with a copy Public Level Crossing Treatment Report for review and consideration.

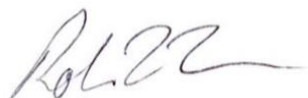
This report builds on the consultation held with Park Shire Council to date in relation to the design of relevant Public Level Crossings with the Council's jurisdiction and has been developed to cover the following items as per the Conditions of Approval:

- Illustrates the location of all public level crossings which traverses the CSSI;
- Lists and identifies 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;
- Where no works are proposed at a public crossing, provides reason for the decision; and
- Provides justification for any proposed closures.

In considering this report, ARTC invites Parkes Shire Council to provide any feedback to ARTC at your earliest convenience or by the 15<sup>th</sup> of January 2019. Alternatively, should the Council be satisfied with the Public Level Crossing Treatment Report, confirmation of this position by the abovementioned date would be greatly appreciated.

We look forward to working further with the Parkes Shire Council and should you have any queries please do not hesitate to contact the undersigned.

Yours sincerely,



Rob Zeirzer  
**Project Manager**

21st December 2018

James White  
Project Director – Inland Rail  
Freight, Strategy and Planning  
Transport for NSW  
18 Lee Street  
CHIPPENDALE NSW 2008

By email: [james.white@transport.nsw.gov.au](mailto:james.white@transport.nsw.gov.au)

Dear James,

## **Parkes to Narromine Public Level Crossing Treatment Report**

ARTC is pleased to provide the Parkes to Narromine (P2N) Public Level Crossing Treatment Report, prepared in accordance with the Conditions of Approval for the P2N Project, for consideration and review by Transport for NSW.

You may recall that in our meeting on 12 November regarding the Inland Rail level crossing strategy, Inland Rail Level Crossing Manager Aisling Twomey mentioned that the report was under development. ARTC undertook to provide an advance draft of material from the report, which was included in Karina Randall's email of 29 November.

The Report:

- Illustrates the location of all public level crossings which traverse the P2N Project;
- Identifies any public level crossings that will be closed or upgraded, including the type of treatment proposed where a level crossing is to be upgraded;
- Where no works are proposed, provides reason for the decision; and
- Provides justification for any proposed closures.

We will be in contact early in the new year to discuss whether TfNSW would propose to provide written comments or prefer a face-to-face meeting to provide feedback. We would request any comments on the report by 15 January if possible.

We look forward to Transport for NSW's consideration of the Report.

Yours sincerely,



**Terry Bones**  
**Shareholder and Government Relations – Inland Rail**

cc Godwin Camilleri, Level Crossing Policy and Program Manager, TfNSW

20<sup>th</sup> February 2019

Renee Massurit  
Project Engineer  
Roads and Maritime Services  
51-55 Currajong Street  
Parkes NSW 2870

renee.massurit@rms.gov.au

**Subject: Inland Rail Parkes to Narromine Level Crossing IFC Design Documentation Acceptance**

Dear Renee,

ARTC are pleased to present to the Roads and Maritime Services (RMS) the Issued for Construction Design Documentation (**IFC Design Documentation**) for the upgrade and construction of level crossings as part of the Inland Rail Parkes to Narromine (**P2N**) project identified in Appendix A to this letter. The IFC Design Documentation has been developed by WSP Australia Pty Limited and Mott MacDonald Australia Pty Limited trading as IRDJV on instruction from ARTC. ARTC has commissioned an independent review and certification of the IFC Design by a team of Technical Advisors engaged by ARTC.

It is acknowledged by ARTC that RMS have provided feedback in regards to the IFC design as part of the consultation and approval process. The comments provided by RMS have been taken on board by IRDJV and are under the process of revising the respective IFC drawings. The revised IFC drawings will be submitted to RMS upon completion. ARTC seeks RMS' acceptance on the basis that the responses to the raised comments are deemed acceptable by RMS.

ARTC/IRDJV responses to RMS comments:

- Note 8 under Level Crossing Drainage, Sheet 3 – RCBC's should be to RMS specifications
  - *Response:* adding 'and RMS specifications' after manufacturers recommendations is acceptable to IRDJV
- The RX-5 assembly as noted on Site Layout should be labelled "RX-5 Assembly with Boom Barrier"
  - *Response:* Noted. Simple change, but all the RX-5 assembly with boom barrier across the project (i.e. all of them) are noted as "RX-5 Assembly". Do we want to change all the plans?
- On Site Layout and General Arrangement sheets – RRPMS are to be spaced ay 12m spacings on the centre line.
  - *Response:* Noted. Simple change
- Culvert Structural Details – General Notes – 40 MPa required for concrete, 45mm cover to the steel

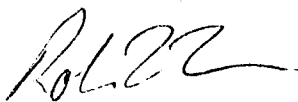
- Response: Concrete strength of 40MPa and cover are specified on drawing 3-0001-240-SCU-00-DR-0103. Cover is 45mm unless the precast element is cast using intense vibration and rigid forms, in which case it can be 35mm
- Existing culvert at CH33313 needs extending (Longitudinal Sheet 1) –
  - Response: New culvert, clearzone of 6m to be reviewed.
- Setout details – a 1m sealed shoulder is required. Relatively simple change.
  - Response: The shoulder can be widened within the existing formation, but should be changed in the model also to ensure it remains in-sync with the drawings.
- Culvert 1/1078DDR2 – Another 2.4m unit on each end is required to achieve a clearzone of 6m
  - Response: Accepted
- Culvert 1/1078DDR2 – Base slab must be poured in-situ
  - Response: All road culvert base slabs are cast in-situ, the comment may be referring to an old version of the culvert GA where precast base slabs were called up. In-situ road culvert base slabs are detailed on drawing 3-0001-240-SCU-00-DR-2003.
- Culvert 1/1078DDR1 - Another 2.4m unit on each end is required to achieve a clearzone of 6m
  - Response: Accepted

The IFC Design Documentation presented to RMS has been designed to and will be built to meet Australian Standards, ARTC standards and local government rules and regulations. ARTC has designed the level crossings to meet the RMS standards. The relevant standard to which the level crossings have been designed are noted on the drawings presented.


At your earliest convenience, please sign and return a copy of this letter confirming RMS's acceptance of the IFC Documentation.

We look forward to working with RMS and should you have any queries please do not hesitate to contact the undersigned.

Yours sincerely,



Rob Zeirzer  
**Project Manager**

Date	RMS Acceptance
22/2/19	Position: Project Engineer
	Name: Renee Massurit
	Signature: 
The above signed hereby accepts the IFC Design Documentation identified in Appendix A for the Parkes to Narromine (P2N) section of the Inland Rail Programme.	

**ARTC**

**InlandRail**

Level 9, 40 Creek Street  
Brisbane Qld 4000  
GPO Box 2462, Queen Street  
Brisbane Qld 4000

P. 1800 732 761  
E. inlandrailqld@artc.com.au  
W. inlandrail.com.au

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**Appendix A – IFC Design Documentation**



Appendix A – IFC Design Documentation

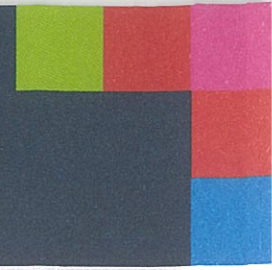
**ARTC** *InlandRail*



Drawing Number	Description	REV	Level Crossing No. and type	Name & KM	New/ Existing	Level Crossing Treatment
3-0001-240-PEN-00-DR-0101	PARKES TO NARROMINE GENERAL NOTES SHEET 1	0	N/A	N/A	N/A	N/A
3-0001-240-PEN-00-DR-0102	PARKES TO NARROMINE GENERAL NOTES SHEET 2	0	N/A	N/A	N/A	N/A
3-0001-240-PEN-00-DR-0103	PARKES TO NARROMINE GENERAL NOTES SHEET 3	0	N/A	N/A	N/A	N/A
3-0001-240-PEN-00-DR-0104	PARKES TO NARROMINE GENERAL NOTES SHEET 4	0	N/A	N/A	N/A	N/A
3-0001-240-PEN-00-DR-0105	PARKES TO NARROMINE GENERAL NOTES SHEET 5	0	N/A	N/A	N/A	N/A
3-0001-240-PEN-00-DR-0201	PARKES TO NARROMINE LEGEND	0	N/A	N/A	N/A	N/A
3-0001-240-SCU-00-DR-0103	PARKES TO NARROMINE CULVERT STRUCTURAL DETAILS GENERAL NOTES	0	N/A	N/A	N/A	N/A

Drawing Number	Description	REV	Level Crossing No. and type	Name & KM	New/ Existing	Level Crossing Treatment
3-0001-240-DPV-00-DR-0101	PARKES TO NARROMINE PAVEMENT PROFILES	0	N/A	N/A	N/A	N/A
3-0001-240-DPV-00-DR-0102	PARKES TO NARROMINE PAVEMENT PROFILES SHEET 2	0	N/A	N/A	N/A	N/A
3-0001-240-DCW-00-DR-0301	PARKES TO NARROMINE LEVEL CROSSING LX1078 GENERAL ARRANGEMENT	0	LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly
3-0001-240-DCW-00-DR-0302	PARKES TO NARROMINE LEVEL CROSSING LX1078 SITE LAYOUT	0	LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly
3-0001-240-DCW-00-DR-0303	PARKES TO NARROMINE LEVEL CROSSING LX1078 SETOUT DETAILS	0	LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly
3-0001-240-DCW-00-DR-0311	PARKES TO NARROMINE LEVEL CROSSING LX1078 LONGITUDINAL SECTION SHEET 1	0	LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly
3-0001-240-DCW-00-DR-0312	PARKES TO NARROMINE LEVEL CROSSING LX1078 LONGITUDINAL SECTION SHEET 2	0	LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly
3-0001-240-CDR-00-DR-5011	PARKES TO NARROMINE CULVERT PLAN AND SECTION CULVERT 1/1078DDR2	0	LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly

Drawing Number	Description	REV	Level Crossing No. and type	Name & KM	New/ Existing	Level Crossing Treatment
3-0001-240-CDR-00-DR-5341	PARKES TO NARROMINE CULVERT PLAN AND SECTION CULVERT 1/1078DDR1	0	LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly
3-0001-240-CXR-00-ME-0003	Henry Parkes Way Design Information Memo	A	LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly
3-0001-240-CXR-00-RP-0001_A	Road Safety Audit Report – Railway Crossing RX1078 on Henry Parkes Way	A	LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly
CAR 1 response	Corrective Action Request		LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly
CAR 2 response	Corrective Action Request		LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly
CAR 3 response	Corrective Action Request		LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly
Close Out Form	Response – The Auditor's response		LX 1078 RX-5	Henry Parkes Way 452.472km	Existing	RX-5 with boom barriers and flashing light assembly



BH:SM

Contact Person: Ben Howard

28 February 2019

Mr Rob Zeirzer  
Project Manager  
Inland Rail  
GPO Box 2462  
BRISBANE QLD 4000

Dear Rob

## **INLAND RAIL PARKES TO NARROMINE LEVEL CROSSING IFC DESIGN DOCUMENTATION ACCEPTANCE**

Reference is made to your letter dated 8 February 2019 regarding the Inland Rail Parkes to Narromine Level Crossing IFC Design Documentation Acceptance.

Council has enclosed a signed copy of your letter confirming Parkes Shire Council's acceptance of the IFC Document Documentation for P2N.

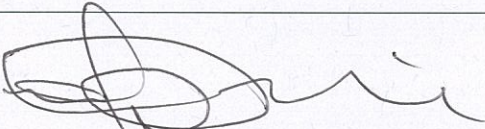
It is noted that the IFC does not included the proposed level crossing on Brolgan Road (LXNW02) as this crossing is subject to further design considerations.

It is also noted your letter makes reference to the technical WSP 'Public Level Crossing Treatment Report' and disputes the risk assessment for the proposed Brolgan Road level crossing rating of Low. Given the design speed for road traffic has not been met.

Should you require any further information on this matter, please do not hesitate to contact Council's Director Works and Services, Mr Ben Howard, on 6861 2344.

Yours faithfully

  
P2N Ben Howard  
**DIRECTOR WORKS AND SERVICES**

Date	Council Acceptance <i>28.2.19.</i>
	Position: <i>Acting Director Works &amp; Services</i>
	Name: <i>Wayne O'Sullivan</i>
	Signature: 
The above signed hereby accepts the IFC Design Documentation identified in Appendix A for the Parkes to Narromine (P2N) section of the Inland Rail Programme.	