



# Regional Rail Fleet Project **Dubbo Maintenance Facility** Determination Report



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## Document control

**Status:** Draft

**Date of issue:** November 2018

**Version:** 1.0

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# Glossary and abbreviations

Term	Meaning
<b>ARTC</b>	Australian Rail Track Corporation
<b>BCA</b>	Building Code of Australia
<b>CCSMP</b>	Communication, Community and Stakeholder Management Plan
<b>CEMP</b>	Construction Environmental Management Plan
<b>CNVMP</b>	Construction Noise and Vibration Management Plan
<b>Contractor</b>	The entity appointed by TfNSW to design, build, finance and maintain the new train fleet and a new maintenance facility.
<b>DECC</b>	(Former) NSW Department of Environment and Climate Change
<b>Determination Report</b>	This document – a report prepared by TfNSW to assess and address certain matters to allow for a determination of the Proposal under, and in accordance with, Division 5.1 of the EP&A Act.
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
<b>EP&amp;A Regulation</b>	<i>Environmental Planning and Assessment Regulation 2000 (NSW)</i>
<b>EPA</b>	NSW Environment Protection Authority
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</i>
<b>INCG</b>	<i>Interim Construction Noise Guideline (DECC 2009)</i>
<b>Infrastructure SEPP</b>	<i>State Environmental Planning Policy (Infrastructure) 2007 (NSW)</i>
<b>LEP</b>	Local Environmental Plan
<b>LGA</b>	Local government area
<b>NES</b>	National environmental significance
<b>NML</b>	Noise management level
<b>OEH</b>	NSW Office of Environment and Heritage
<b>OEMP</b>	Operational Environmental Management Plan
<b>ONVMP</b>	Operational Noise and Vibration Management Plan
<b>OSD</b>	On-site detention
<b>RBL</b>	Rating background level
<b>REF</b>	Review of Environmental Factors
<b>Roads and Maritime</b>	NSW Roads and Maritime Services (formerly Roads and Traffic Authority)

Term	Meaning
<b>TfNSW</b>	Transport for New South Wales
<b>TMP</b>	Traffic Management Plan

# Definitions

Term	Meaning
<b>concept design</b>	The concept design is the preliminary design presented in the REF, which would be refined by the Contractor (should the Project proceed) to a design suitable for construction (subject to TfNSW acceptance).
<b>detailed design</b>	Detailed design broadly refers to the process that the Contractor undertakes (should the Project proceed) to refine the concept design to a design suitable for construction (subject to TfNSW acceptance).
<b>determination</b>	TfNSW is a determining authority for projects which require assessment under Division 5.1 of the EP&A Act and must undertake this role in accordance with section 5.5. To make a determination, TfNSW will prepare a report to document the consideration of the relevant legislative requirements and the potential environmental impacts of the project, and determine whether these impacts are likely to be significant. TfNSW may also impose conditions of approval, as part of the determination.
<b>feasible</b>	A work practice or abatement measure is feasible if it is capable of being put into practice or of being engineered and is practical to build given project constraints such as safety, maintenance and cost requirements.
<b>ISO 14001</b>	ISO 14001 are the criteria for effective environmental management systems set by the International Organisation of Standardisation.
<b>noise sensitive receiver</b>	In addition to residential dwellings, noise sensitive receivers include, but are not limited to, hotels, entertainment venues, pre-schools and day care facilities, educational institutions (e.g. schools, TAFE colleges), health care facilities (e.g. nursing homes, hospitals), recording studios and places of worship/religious facilities (e.g. churches).
<b>NSW TrainLink</b>	From 1 July 2013, NSW Trains (NSW TrainLink) became the new rail provider of services for regional rail customers.
<b>out of hours works</b>	Defined as works <i>outside</i> standard construction hours (i.e. outside of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and no work on Sundays/public holidays).
<b>the Proponent</b>	A person or body proposing to carry out an activity under Part 5, Division 5.1 of the EP&A Act – in this instance, TfNSW.
<b>the Proposal</b>	The construction and operation of the Dubbo Maintenance Facility.
<b>rail possession</b>	Rail possession is the term used by railway building/maintenance contractors to indicate that they have taken possession of the track (usually a block of track) for a specified period, so that no trains operate for a specified time. This is necessary to ensure the safety of workers and rail users.
<b>reasonable</b>	Selecting reasonable measures from those that are feasible involves making a judgment to determine whether the overall benefits outweigh the overall adverse social, economic and environmental effects, including the cost of the measure.
<b>sensitive receivers</b>	Land uses which are sensitive to potential noise, air and visual impacts, such as residential dwellings, schools and hospitals.

# Executive summary

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## Overview of Proposal

Transport for NSW (TfNSW) is the government agency responsible for the delivery of major transport infrastructure projects in NSW and is the proponent for the Dubbo Maintenance Facility (the Proposal), which is part of the Regional Rail Fleet program.

The NSW Government is replacing the entire ageing regional and intercity diesel rail fleet, including XPTs, Endeavours and XPLOREs, for customers who travel between Sydney and a range of major regional centres in NSW, as well as interstate destinations such as Canberra, Melbourne and Brisbane. As part of the procurement of the new Regional Rail Fleet, the development of a purpose built maintenance facility is required to provide a dedicated space for the stabling and maintenance of the new Regional Rail Fleet.

Jacobs, on behalf of TfNSW (as the Proponent for the Proposal) prepared a Review of Environmental Factors (REF) which detailed the scope of works and environmental impacts associated with the Proposal.

The key features of the Proposal as identified in the REF are summarised as follows:

- Maintenance facility elements:
  - Fleet maintenance building comprising three tracks to undertake maintenance activities partly housed within a covered enclosure. The size of the building would be approximately 220 metres by 30 metres.
  - Wheel lathe – a separate building allowing for train wheels to be periodically machined using an underfloor wheel lathe.
  - Train wash – an enclosed structure comprising automated wash equipment for train sets with nearby waste water treatment plant.
- Administration building – a building comprising office facilities, kitchen, dining area and amenities.
- Security building.
- Storage area, loading dock and fuel delivery area – used for the delivery and storage of plant, equipment and fuel.
- Rail infrastructure works:
  - Realignment of the Main Western Line through the site.
  - Six maintenance rail tracks (three tracks within the maintenance facility building and three external).
  - A connection to the Main Western Line on the western side of the site.
  - Decanting and provisioning infrastructure.
- Road vehicle infrastructure:
  - Access roads throughout the site.
  - Staff car park.
- Power supply including a substation, and utility adjustments.
- Relocated detention basins.
- Earthworks.

Subject to approval, construction is expected to commence in 2019 and take around 30 months to complete.

## Public display of the REF

Project stakeholders and the community were invited to provide feedback on the REF from Wednesday 8 August 2018 to Tuesday 28 August 2018. Before the public display period closed, the project team hosted Community Information Sessions in Dubbo to provide information about the Proposal.

A total of 15 submissions were received by TfNSW in response to the public display of the REF.

## Modifications to the Proposal

No modifications to the proposed scope of works have been made to the Proposal since the REF was prepared. Future modifications to the design may be considered during the detailed design phase.

Should design modifications be required as a result of the detailed design process, these modifications would be assessed to determine consistency with the Approved Project, including the potential significance of impacts on the environment. Additional mitigation measures and/or consultation would be undertaken where necessary.

## Purpose of this report

Prior to proceeding with the Proposal, TfNSW must make a determination in accordance with Division 5.1 of the EP&A Act. The purpose of this Determination Report is to address the following to allow for a determination of the Proposal:

- Assess the environmental impacts with respect to the Proposal, which were identified in the environmental impact assessment (and any proposed modifications, as detailed and assessed in this Determination Report)
- Identify mitigation measures to minimise potential environmental impacts
- Determine whether potential environmental impacts are likely to be significant
- Respond to the issues raised in submissions
- Address whether the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) apply to the Proposal.

This report documents the issues raised in the submissions received by TfNSW during the public display period and provides a response to these issues. The most common aspects raised in the submissions received were as follows:

- Impacts to the environment, particularly:
  - Noise and vibration impacts
  - Contamination, hazardous materials and pollution
  - Dust and air quality impacts
  - Hydrology, flooding and groundwater impacts
- Impacts to the traffic network and heavy vehicles associated with construction work
- Location and design of the Proposal, and alternatives considered during design development
- Impacts to property and access
- Consultation and communication undertaken before and during the REF public display and future consultation proposed during construction.

As part of the determination, the local community will be notified of TfNSW's decision to approve the Proposal by way of a community newsletter and the TfNSW website

([www.transport.nsw.gov.au/projects](http://www.transport.nsw.gov.au/projects)). TfNSW will also provide a letter to each of the respondents who made a submission during the display period. This correspondence will include an individual submission reference number for each respondent, and contact details to obtain further information regarding the ongoing progress of the Proposal.

## **Conclusion**

Based on the assessments in the REF and a review of the submissions received from the community and stakeholders, it is recommended that the Proposal be approved, subject to the mitigation measures included in the REF and the proposed Conditions of Approval. TfNSW will continue to liaise with the community and other stakeholders as the Proposal progresses through detailed design and into the construction phase.

# 1 Introduction

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## 1.1 Background

Transport for NSW (TfNSW) is the NSW Government's lead public transport agency with responsibility for ensuring that planning and policy are fully integrated across all modes of transport in NSW. It manages a multi-billion-dollar budget allocation for train, bus, ferry, light rail and taxi services and related infrastructure in NSW.

The NSW Government is replacing the entire ageing regional and intercity diesel rail fleet, including XPTs, Endeavours and XPLOREs, for customers who travel between Sydney and a range of major regional centres in NSW, as well as interstate destinations such as Canberra, Melbourne and Brisbane. As part of the procurement of the new Regional Rail Fleet, the development of a purpose built maintenance facility is required to provide a dedicated space for the maintenance of the Regional Rail Fleet.

In August 2017, the NSW Government announced that the new maintenance facility would be built in Dubbo, subject to planning approval.

Dubbo was selected as the preferred location for the new maintenance facility following a comprehensive analysis of potential sites against a range of criteria, including operational, environmental, social, economic and construction considerations. The intent of the process was to find a site that would minimise the need for empty running trains, minimise capital and operating costs, reduce strain on the Sydney metropolitan network and encourage regional development.

TfNSW is the Proponent for the Dubbo Maintenance Facility project (referred to as the 'Proposal' for the purposes of this report).

## 1.2 Review of Environmental Factors

A Review of Environmental Factors (REF) (Jacobs, 2018) was prepared for the Proposal in accordance with section 5.5 of the *Environmental Planning and Assessment 1979* (EP&A Act), and clause 228 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). The REF takes into account to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the Proposal. The REF is included in Appendix A.

The Dubbo Maintenance Facility REF was placed on public display from Wednesday 8 August to Tuesday 28 August 2018, with 15 submissions received. The issues raised in these submissions are summarised and addressed in Chapter 2 of this report.

## 1.3 Determination Report

Prior to proceeding with the Proposal, TfNSW must make a determination in accordance with Division 5.1 of the EP&A Act. Refer to Figure 1-1 for an outline of the planning approval process.

The purpose of this Determination Report is to address the following to allow for a determination of the Proposal:

- Assess the environmental impacts with respect to the Proposal, which were identified in the environmental impact assessment (and any proposed modifications, as detailed and assessed in this Determination Report)
- Identify mitigation measures to minimise potential environmental impacts
- Determine whether potential environmental impacts are likely to be significant
- Respond to the issues raised in submissions
- Address whether the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) apply to the Proposal.

This report has been prepared having regard to, among other things, the objectives of TfNSW under the *Transport Administration Act 1988*:

- (a) to plan for a transport system that meets the needs and expectations of the public
- (b) to promote economic development and investment
- (c) to provide integration at the decision-making level across all public transport modes
- (d) to promote greater efficiency in the delivery of transport infrastructure projects
- (e) to promote the safe and reliable delivery of public transport and freight services.



**Figure 1-1 Planning approval process**

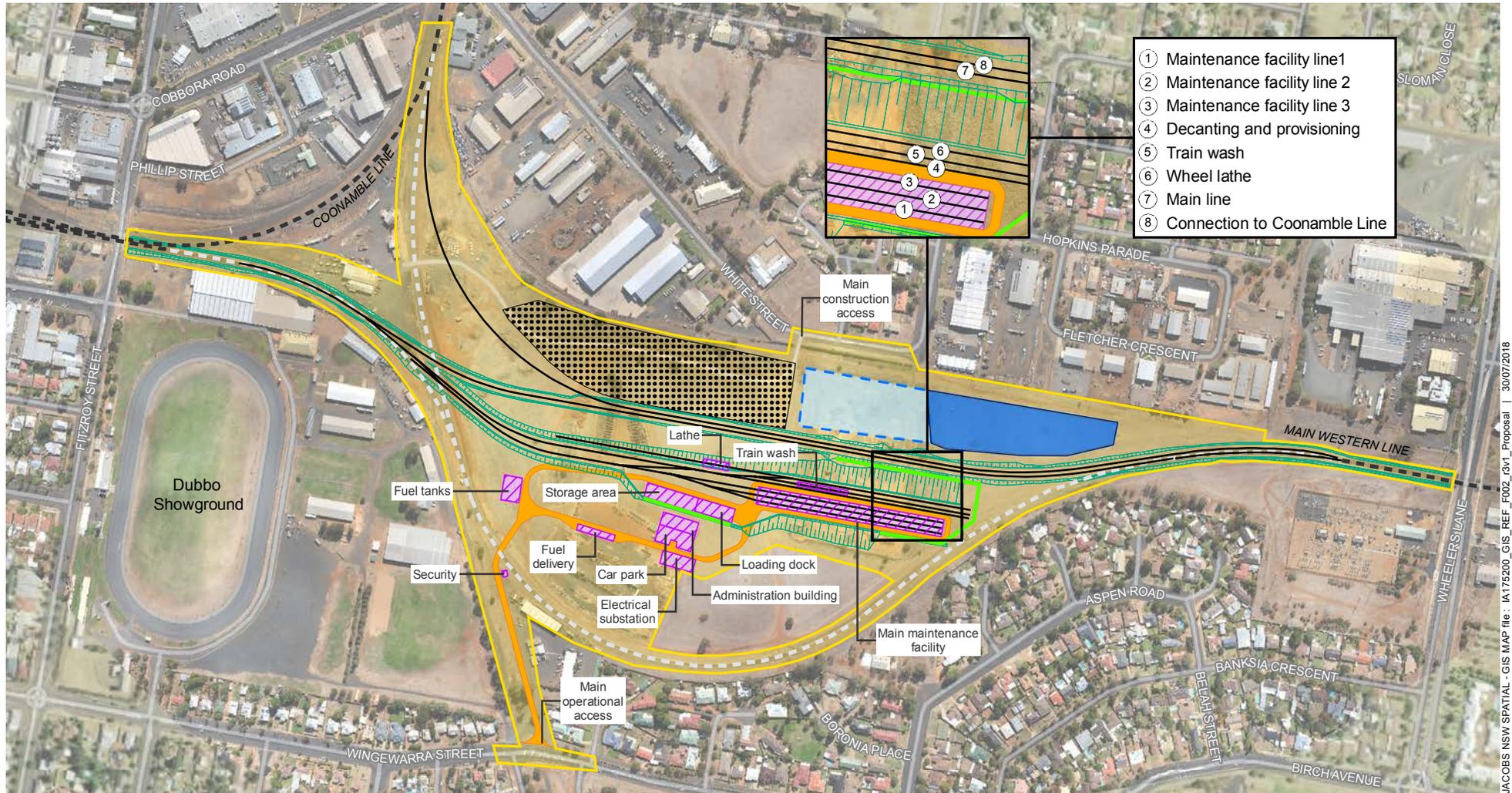
## **1.4 Description of the Proposal in the REF**

The Proposal involves construction and operation of a maintenance facility in Dubbo to support the new Regional Rail Fleet. The proposed facility would include about three kilometres of railway, comprising six tracks each capable of stabling 200 metre trains, with three of these tracks being partly covered by the maintenance building. Operational access to the facility would be from Wingewarra Street. The site would cover an area of about 25 hectares and would be bounded by a perimeter fence.

The key features of the proposed maintenance facility are shown in Figure 1-1 and Figure 1-2 and would comprise the following:

- Maintenance facility elements:
  - A maintenance facility building comprising three tracks to undertake maintenance activities, partly housed within a covered enclosure. The size of the building would be approximately 220 metres by 30 metres.
  - Wheel lathe – a separate building allowing for train wheels to be periodically machined using an underfloor wheel lathe.
  - Train wash – an enclosed structure comprising automated wash equipment for train sets with nearby waste water treatment plant.
- Administration building – a building comprising office facilities, kitchen, dining area and amenities.
- Security building.
- Storage area, loading dock and fuel delivery area – used for the delivery and storage of plant, equipment and fuel.
- Rail infrastructure works:
  - Realignment of the Main Western Line through the site.
  - Six maintenance rail tracks (three tracks within the maintenance facility building and three external).
  - A connection to the Main Western Line on the western side of the site.
  - Decanting and provisioning infrastructure.
- Road vehicle infrastructure:
  - Access roads throughout the site.
  - Staff car park.
- Power supply including a substation, and utility adjustments.
- Relocated detention basins.
- Earthworks.

Subject to approval, construction is expected to commence in 2019 and take around 30 months to complete. A detailed description of the Proposal is provided in Chapter 3 of the REF. The need for, and benefits of the Proposal are outlined in Chapter 2 of the REF.



- ① Maintenance facility line 1
- ② Maintenance facility line 2
- ③ Maintenance facility line 3
- ④ Decanting and provisioning
- ⑤ Train wash
- ⑥ Wheel lathe
- ⑦ Main line
- ⑧ Connection to Coonamble Line

**Legend**

- Existing rail line
- Existing rail line to be removed
- Existing stormwater detention basin
- Construction footprint
- Proposed new track
- Proposed batter
- Approximate location of retaining wall
- Proposed vehicle access track
- Construction compound
- Project building or facility
- Stormwater detention basin extension

Imagery © TfNSW and © Department of Finance, Services & Innovation 2017



1:6,800 @ A4  
Subject to site survey and detailed design. Not to be used for construction.

**Figure 1-2** | Key features of the Dubbo Maintenance Facility

### 1.4.1 Working hours

The majority of works required for the Proposal would be undertaken during standard NSW Environment Protection Authority (EPA) construction hours, which are as follows:

- 7:00am to 6:00pm Monday to Friday
- 8:00am to 1:00pm Saturdays
- No work on Sundays or public holidays

Work outside of the above hours is required in some cases to minimise disruptions to customers, pedestrians, motorists and nearby sensitive receivers; and to ensure the safety of railway workers and operational assets. This may include the following circumstances:

- Maintenance and repair of public infrastructure where disruption to essential services and/or considerations of worker safety do not allow work within standard hours
- The delivery of oversized plant, parts or structures that police or other authorities determine requires special arrangements to transport along public roads
- The delivery of rolling stock that police or other authorities determine requires special arrangements to transport along public roads.

Approval from TfNSW would be required for any out of hours work and the affected community would be notified as outlined in the TfNSW *Construction Noise and Vibration Strategy* (2018b)<sup>1</sup>.

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<sup>1</sup> <https://www.transport.nsw.gov.au/system/files/media/documents/2018/construction-noise%20vibration-strategy-7TP-ST-157.pdf>

## 2 Consultation and assessment of submissions

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### 2.1 REF public display

The Dubbo Maintenance Facility REF was placed on public display from Wednesday 8 August to Tuesday 28 August 2018 at the following locations:

- Dubbo Regional Council (corner of Church and Darling Streets, Dubbo)
- Macquarie Regional Library (Macquarie Street and Talbragar Streets, Dubbo)
- TfNSW Office at Level 5, Tower A, Zenith Centre, 821 Pacific Highway, Chatswood
- Online at <https://www.transport.nsw.gov.au/projects/current-projects/regional-rail>

Community consultation activities undertaken prior to the public display period included:

- Notification letters were sent to potentially impacted residents providing the opportunity to meet the project team and discuss the Proposal in more detail.
- Community letterbox drop to the area surrounding the Proposal Site (around 500 properties) including Dubbo Hospital, Saint Mary's Primary School, TAFE Western Dubbo, Dubbo Masonic Retirement Village and ALDI Dubbo.
- Email to stakeholders (Dubbo Regional Council and other identified stakeholders)
- Information on the TfNSW website
- Newspaper advertisements in the Koori Mail and Dubbo Daily Liberal to advertise the REF display location and upcoming community information sessions.

Community consultation activities undertaken during the public display period included:

- Community information sessions held on:
  - Thursday 16 August 2018 between 4:00pm and 8:00pm at Western Plains Cultural Centre Auditorium – 76 Wingewarra Street, Dubbo
  - Saturday 18 August 2018 between 9:00am and 12:00pm at Dubbo Regional Theatre and Convention Centre, Oxley Room – 155 Darling Street, Dubbo.
- Meetings between the project team and two potentially affected residents held on 17 August 2018 to hear concerns and provide further detail on the Proposal.
- Stakeholder meetings with Aboriginal Working Group and Dubbo Masonic Retirement Village on 17 August 2018 to outline the details of the Proposal, potential benefits and impacts to the community and obtain feedback.
- A market stall at the Dubbo Farmers Markets on 18 August 2018 to raise awareness and provide information on the Proposal.

### 2.2 REF submissions

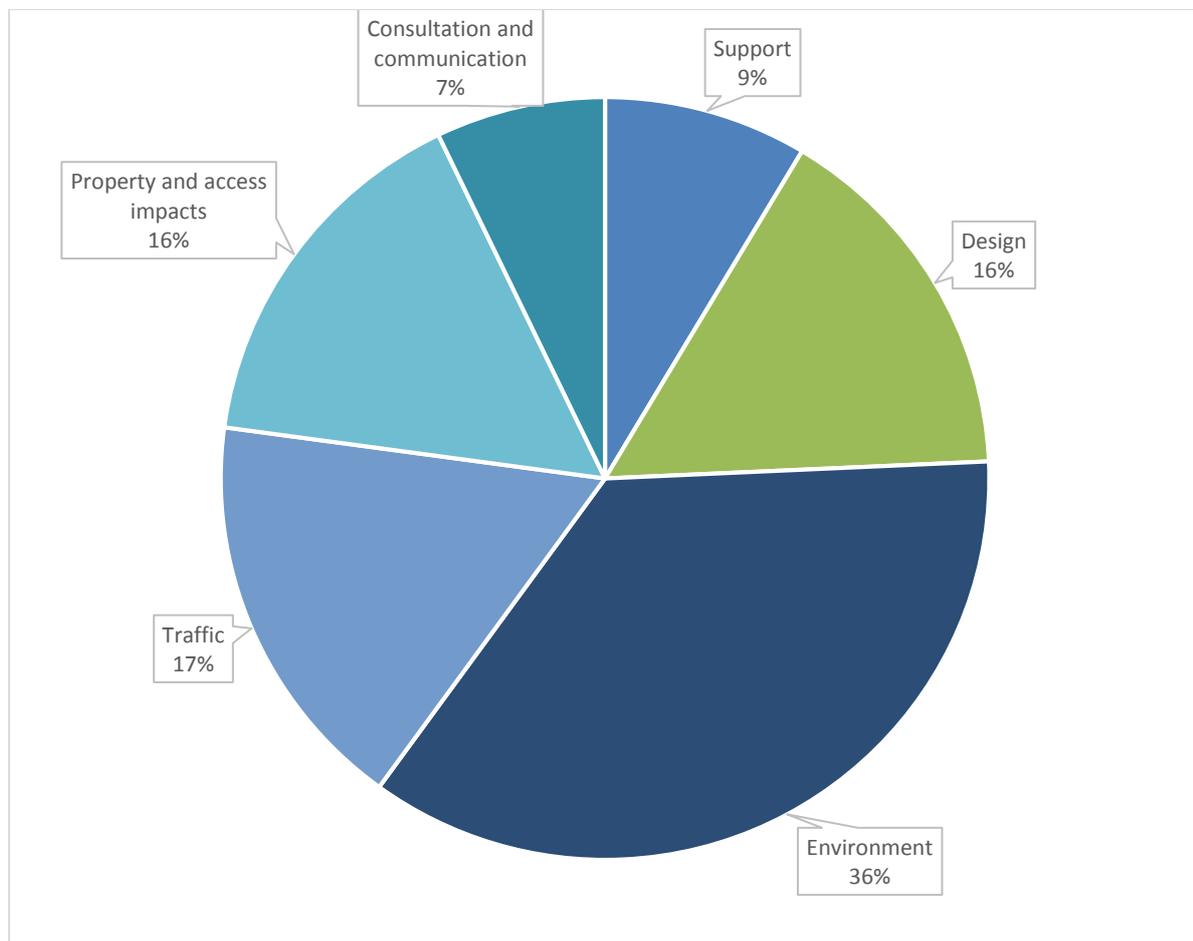
A total of 15 submissions were received by TfNSW in response to the public display of the REF, including a submission from Dubbo Regional Council. Submissions included feedback on a range of issues in relation to the Proposal. The key issues raised in submissions were:

- Impacts to the environment (36%), particularly:
  - Noise and vibration impacts
  - Contamination, hazardous materials and pollution
  - Dust and air quality impacts

- Hydrology, flooding and groundwater impacts
- Impacts to the traffic network and construction traffic (17%)
- Location of the maintenance facility, design and alternatives considered (16%)
- Impacts to property and access (16%)
- Consultation and communication undertaken before and during the REF public display as well as future consultation during construction (7%).

Of the issues raised in submissions, nine per cents submissions had expressions of support for the Proposal and the potential benefits of the Proposal.

A breakdown of the key issues raised in submissions is provided in Figure 2-1. It should be noted that multiple issues were raised in each submission, so the issue count is greater than the submission count.



**Figure 2-1 Summary of key issues raised in submissions**

## 2.3 Consideration and response to submissions

Following receipt, each submission was assigned an individual submission number. These numbers are referred to in Table 2-1.

Submissions were reviewed, with key and sub-issues identified within each submission. Issues raised in the submissions were grouped together based on their key and sub-issue categories. Each issue is presented as a summary of the specific issues raised by individual submissions meaning that, while the exact wording of a particular submission may not be presented in the summary of the issue, the intent of each individual issue raised has been captured. Responses to the grouped issues are provided in Table 2-1.

### 2.3.1 Community submissions

A summary of all issues raised and associated responses is provided in Table 2-1.

**Table 2-1 Responses to community submissions**

No.	Submission no.	Issue(s) raised	TfNSW response
<b>1. Support</b>			
1.1	3, 5, 14	Support for the Proposal.	Noted
1.2	7, 11, 12	Support for the employment opportunities and economic benefits the Proposal will generate.	Noted
<b>2. Site selection and design alternatives</b>			
2.1	2, 12	Concern regarding the suitability of the Proposal Site and query why this site was selected. Suggestion that a better location would be outside of the Dubbo city centre.	Dubbo was selected as the preferred location for the new maintenance facility after a comprehensive analysis of potential sites against a range of different criteria including operational, environmental, social, economic, and construction considerations.  Dubbo was ranked as the most suitable location for the regional maintenance facility following the completion of a multi-criteria analysis as the site included the following key attributes:

No.	Submission no.	Issue(s) raised	TfNSW response
			<ul style="list-style-type: none"> <li>• Being a terminating location for regional services</li> <li>• Having relevant supporting industry and training and educational facilities</li> <li>• A high Aboriginal population, with associated opportunities for Aboriginal participation</li> <li>• Excellent transport links with associated access benefits.</li> </ul> <p>The Proposal Site was considered the preferred location in Dubbo due to its proximity to the existing railway network, potential moderate level of environmental and community impacts, and alignment with train operation requirements.</p>
2.2	3	Request road signals be installed for the “left in/ left out ‘minimised footprint’ option” providing access to Wingewarra Street.	Traffic studies have been undertaken to assess the traffic impacts on Wingewarra Street and traffic movements from the southern entrance to the facility. The modelling did not identify a requirement for signalisation at this intersection.
2.3	3	Suggest further consideration to constructing a roundabout or right turn lane on Wingewarra Street to improve access to the facility.	<p>The left in/left out ‘minimised footprint’ option was adopted as it would reduce the number of conflicting movements with the adjacent intersections. In addition, the design would minimise the impact on the disused Molong branch railway line to allow the potential future use of the line if it was required.</p> <p>Allowing right turns or introducing a roundabout would increase traffic delays and/or risks to driver safety, and so these options were not pursued.</p> <p>The intersection design would be finalised during detailed design.</p>
2.4	8	Request a rail crossover be installed at the western end of the double line to maintain the ‘triangle’ for turning. This would avoid/minimise impacts on Fitzroy Street and the Wheelers Lane road crossing.	At present rail operations do not necessitate the installation of a rail cross over in this location. Current operational forecasts only foresee an additional four barrier closures per month of the Fitzroy Street railway crossing during regular operations. Road traffic impacts at this location (and Wheelers Lane) are likely to be minimal. The need for a rail cross over may however be re-explored during detailed design.

No.	Submission no.	Issue(s) raised	TfNSW response
<b>3. Community and stakeholder consultation</b>			
3.1	10	Request for a detailed construction program.	<p>Early works associated with the construction of the Proposal are expected to commence in early 2019 with a total construction period of around 30 months. Operation of the maintenance facility is scheduled to commence in 2021.</p> <p>An indicative construction program and outline of the key construction activities for each of the proposed stages of construction is provided in Section 3.6.1 of the REF. The construction activities are based on the concept design. The final construction activities and their timing would be subject to confirmation following the appointment of a construction contractor.</p> <p>Ongoing consultation with nearby residents, businesses and other stakeholders would be undertaken throughout the construction period, with residents advised of key construction activities that have potential to result in noise impacts.</p>
3.2	10	Concern about the level of community notification regarding the Proposal prior to the REF public display.	<p>Community consultation activities undertaken prior to the public display period included:</p> <ul style="list-style-type: none"> <li>• Notification letters were sent to potentially impacted residents. The notification letter provided the opportunity to meet the project team and discuss the Proposal in more detail, inviting residents to attend community information sessions during the public display. The date, time and location of the community information sessions were also provided.</li> <li>• Community letterbox drop to the area surrounding the Proposal Site (around 500 properties) including Dubbo Hospital, Saint Mary's</li> </ul>

No.	Submission no.	Issue(s) raised	TfNSW response
3.3	12	Query regarding the level of consultation during the development of operational management plans and potential recourse if inadequate	<p>Primary School, TAFE Western Dubbo, Dubbo Masonic Retirement Village and ALDI Dubbo.</p> <ul style="list-style-type: none"> <li>• Email to stakeholders (Dubbo Regional Council, government agencies, utility providers, emergency services, local businesses and schools)</li> <li>• Information on the TfNSW website</li> <li>• Newspaper advertisements in the Koori Mail and Dubbo Daily Liberal to advertise the REF display location and upcoming community information sessions.</li> </ul>
3.4	10	Concern about the level of consultation during the construction period and request for project contact details in the event it is necessary to make a complaint.	<p>Ongoing consultation with local communities would be carried out during the pre-construction, construction and operational phase of the Proposal. Contact details for a 24-hour construction response line, Project Infoline and email address would be provided for ongoing stakeholder contact throughout the construction phase.</p> <p>The operational environmental management plan (OEMP) and sub plans would be developed in accordance with ISO 14001 and would capture the operational environmental management requirements emerging from the REF and any subsequent planning approvals. An Operational Noise and Vibration Management Plan (ONVMP) would be prepared to confirm the final mitigation measures for operational noise and vibration. This would include consultation with affected property owners.</p> <p>The OEMP and ONVMP must comply with the REF, mitigation measures and conditions of approval.</p>

No.	Submission no.	Issue(s) raised	TfNSW response
<b>4. Traffic</b>			
4.1	3	<p>Concern regarding the assumptions made in the transport impact assessment process, specifically:</p> <ul style="list-style-type: none"> <li>• Underestimated the extent of vehicles leaving the site and turning right at 50%</li> <li>• Underestimated the traffic on Cassia Street and Kokoda Place on weekends due to sports</li> <li>• Underestimated the traffic entering and leaving the facility at 100 movements per day.</li> </ul>	<p>The Traffic Impact Assessment was based on employment generation, construction activities, train completion, operation requirements and earthmoving data developed by TfNSW. The relative proportion of the direction of movements leaving the site was assumed to be even, given the preferred Contractor was yet to be appointed, and the origin and destination of journeys is unclear at this stage of project development.</p> <p>The majority of construction and operational traffic associated with the Proposal occurs during weekdays and standard working hours.</p> <p>A construction traffic management plan would be prepared in consultation with the relevant road authorities.</p>
4.2	3	<p>Suggestion that during the operation of the facility shifts should end outside of peak periods to avoid traffic impacts along Wingewarra Street.</p>	<p>The Dubbo Maintenance Facility would have about 40-60 employees with one daytime shift and one night shift, across a 24 hour period. Specific details relating to the start and finish times have not yet been determined and would be subject to further discussion once the maintenance facility operator has been appointed. This suggestion is noted and will be communicated to the successful maintenance facility operator for further consideration.</p>
4.3	3, 6	<p>Concern regarding traffic impacts on Wingewarra Street, particularly with future development and during peak periods such as during show days.</p>	<p>As outlined in Section 6.1.3 of the REF and Appendix D (Traffic Impact Assessment), traffic modelling was undertaken to determine the impacts of the additional traffic generated by the operation of the maintenance facility on the Dubbo road network. The assessment specifically considered impacts to Wingewarra Street during the AM and PM peak periods. The results of the assessment indicate that during operation, additional traffic associated with the maintenance facility would not significantly reduce the performance of Wingewarra Street. On average there would be an increase in queueing delay of one second at the intersection of Wingewarra and Fitzroy Street.</p> <p>Liaison with the operators of the Dubbo Showground would be undertaken to minimise conflict and cumulative traffic impacts during special event</p>

No.	Submission no.	Issue(s) raised	TfNSW response
			periods at the showground during construction, train completion and operational phases of the Proposal.
4.4	12	Concern regarding whether modelling has taken into consideration the increased train movements and the subsequent traffic impacts due to the requirement for traffic to more frequently stop at rail level crossings.	As noted in Section 6.1.3 of the REF, the level crossings on the Main Western Line are currently used four times a day for passenger services. Once the maintenance facility is operational, the level crossings on the Main Western Line would still generally be used four times a day, but with an additional four barrier closures per month. The additional four barrier closures per month are expected to have a minimal impact on road traffic within Dubbo.
<b>5. Noise and vibration</b>			
5.1	10	General concern about construction noise impacts.	<p>The construction noise and vibration impacts of the Proposal have been assessed in Section 6.3 and Appendix F (Noise and Vibration Impact Assessment) of the REF. Construction noise has been assessed in accordance with the <i>Interim Construction Noise Guideline</i> (ICNG, DECC 2009) and TfNSW <i>Construction Noise and Vibration Strategy</i> (2018).</p> <p>The ICNG requires project specific Noise Management Levels (NMLs) to be established during construction for noise affected receivers (refer to Appendix F - Noise and Vibration Impact Assessment of the REF).</p> <p>These levels are calculated based on the existing background noise levels plus an allowance defined in the ICNG depending on the time of day and type of sensitive receiver. If construction noise levels are predicted to be above the NMLs, feasible and reasonable work practices are required to be investigated to minimise noise emissions and suitable mitigation and management measures identified.</p> <p>Following investigation of all feasible and reasonable work practices, if construction noise levels are still predicted to exceed the NMLs then the potential noise impacts would be managed via site specific construction noise and vibration management plans (CNVMPs). A CNVMP would be prepared prior to the commencement of construction and based on the final construction methodology.</p>

No.	Submission no.	Issue(s) raised	TfNSW response
5.2	10	Concern about effectiveness of the noise mitigation measures to be adopted, particularly the noise bund.	<p>The Noise and Vibration Impact Assessment recommended noise management measures to reduce identified operational impacts associated with the proposed facility. These measures would be considered in detail during preparation of the ONVMP for the site and where reasonable and feasible, may include:</p> <ul style="list-style-type: none"> <li>• Modifying operating procedures to reduce noise intensive activities during the evening and night at locations exposed to receivers</li> <li>• The installation of sound insulation within the walls of the maintenance shed</li> <li>• Construction of a noise barrier to reduce noise for receivers to the southern and south eastern site boundaries, where the most impacted receivers are located. A noise mound interrupting a direct line of sight between the opening of the maintenance shed and the most impacted properties would be effective in reducing noise impacts</li> <li>• Alternatives to testing or use of train horns at the site would be considered, particularly during night time hours</li> <li>• Development of an ONVMP. This plan would further develop reasonable and feasible mitigation strategies reducing identified noise impacts.</li> </ul> <p>TfNSW is committed to minimising noise levels with the aim of achieving the identified noise management levels where feasible and reasonable. A condition of approval (Condition 25) has been included as part of the planning approval determination, requiring that operational noise levels (<math>L_{A1(60\text{ second})}</math>) from horn testing, brake testing and the train movement warning system not exceed the Rating Background Level (RBL) by more than 15dBA (<math>L_{A1(60\text{ second})} \leq RBL + 15\text{dBA}</math>) at surrounding residential receivers of the maintenance facility for evening (6pm-10pm) and night-time (10pm-7am) periods.</p>
5.3	10	Concern about noise impacts during works undertaken outside of standard construction hours.	<p>Construction works would generally be undertaken within standard construction hours. However work would be undertaken outside of these hours in some cases to minimise disruptions to rail customers, pedestrians, motorists and nearby sensitive receivers; and to ensure the safety of railway workers and operational assets. These works would</p>

No.	Submission no.	Issue(s) raised	TfNSW response
5.4	10	Concern about vibration impacts during construction activities and proposed mitigation measures for vibration.	<p>include services and drainage installation, track work and the use of the construction compound.</p> <p>Section 6.3.4 of the REF assessed the construction noise impacts associated with these works being undertaken outside of standard construction hours and determined that during these activities, construction noise management levels would at times be exceeded in all noise catchment areas. It is important to note that these exceedances represent a worst case scenario. Noise impacts out of standard work hours would generally be intermittent and short term in nature. Where possible, noisy works would be scheduled to be undertaken as early as possible within the evening to avoid sleep disturbance.</p> <p>A protocol for out of hours works would be prepared to provide guidance for determining the noise levels and potential impacts on amenity for any activity required to be carried out outside standard construction hours. The protocol would also detail the consultation requirements and approval process to be followed prior to carrying out those works.</p> <p>Out of hours works would be undertaken in accordance with the TfNSW <i>Construction Noise and Vibration Strategy</i> (2018).</p> <hr/> <p>Vibration intensive plant such as compaction equipment and excavators used during construction of the Proposal can result in vibration impacts to buildings and people within close proximity to where the works are being undertaken. Minimum safe working distances to nearby sensitive receivers/structures would be established based on the vibration thresholds outlined in guidelines such as the Department of Environment and Conservation's (DEC) <i>Assessing Vibration: A Technical Guideline</i> (2006).</p> <p>Section 6.3.4 of the REF outlines the safe working distances to avoid cosmetic impacts to buildings, human comfort and damage to heritage buildings. In instances where the predicted vibrations would exceed the established thresholds, smaller and less vibration intensive plant would be used.</p> <p>Subject to landowner agreement, property condition surveys would be completed prior to piling, excavation or bulk fill or any vibratory impact works including jack hammering and compaction in the vicinity of the following buildings/structures:</p>

No.	Submission no.	Issue(s) raised	TfNSW response
			<ul style="list-style-type: none"> <li>all buildings/structures/roads within a plan distance of 20 metres from the edge of the Designated Works</li> <li>all heritage listed buildings and other sensitive structures within 50 metres from the edge of the Designated Works.</li> </ul> <p>Should any damage occur as a result of the Proposal, TfNSW or the construction contractor would fix this damage at no cost to the landowner.</p>
5.5	12	Concern about noise impacts during the operation of the facility.	<p>The operational noise and vibration impacts of the Proposal were assessed in the REF in accordance with the EPA's <i>Noise Policy for Industry</i> (EPA, 2017).</p> <p>The Noise and Vibration Impact Assessment considered a range of operational scenarios. The assessment of these scenarios presented the range of predicted impacts associated with the operation of the maintenance facility.</p> <p>To manage operational noise impacts, mitigation measures were identified for implementation across all stages of the Proposal. This included the construction of the maintenance facility to achieve a sound insulation performance no less than 26dB weighted sound reduction index (Rw) to manage operational noise from within the facility. In addition, the consideration of alternatives for horn testing elsewhere on the network or the development of alternate testing techniques was also identified.</p> <p>The assessment indicated that even after the implementation of mitigation measures, residual impacts may be experienced at some of the closest receivers to the facility.</p> <p>The predicted noise levels and required noise mitigation measures would be reviewed and verified as part of an ONVMP in the detailed design phase of the Project. This review would determine the final design of noise management and mitigation measures. Impacted property owners would be consulted during this process.</p>
5.6	12	Questioned the need for 24 hour operations and requested that consideration be given to limiting noisy works to certain times.	<p>The facility would operate 24 hours 7 days a week. Operational processes may include specifying times, locations and the manner in which for certain activities are carried out. This would be considered further in the development of the ONVMP.</p>

No.	Submission no.	Issue(s) raised	TfNSW response
5.7	12	Concern about the frequency and duration of horn testing and the use of horns outside of standard business hours.	Alternatives to testing and use of the horns within the Dubbo Maintenance Facility would be investigated. This could include testing of horns elsewhere in the network or developing alternative testing techniques. The management strategies for horn testing and horn usage would be developed further as part of the ONVMP. This consideration would include the environmental noise objectives for the proposed action and the safety of any staff within the facility. The use of horns within the Proposal Site would not be restricted where there is an immediate potential hazard or safety risk to maintenance facility employees. As mentioned previously, a condition of approval (Condition 25) has been included as part of the planning approval determination, requiring that operational noise levels ( $L_{A1(60\text{ second})}$ ) from horn testing, brake testing and the train movement warning system not exceed the RBL by more than 15dBA ( $L_{A1(60\text{ second})} \leq \text{RBL} + 15\text{dBA}$ ) at surrounding residential receivers of the maintenance facility for evening (6pm-10pm) and night-time (10pm-7am) periods.

## 6. Air quality and dust

6.1	3, 9, 10	Concern about potential dust impacts during construction and operation.	<p>As outlined in Section 6.10.3 of the REF, dust would be generated during construction activities. A dust risk assessment was undertaken to assess potential risk of dust soiling, human health impacts from dust and ecological impacts from dust during different construction activities.</p> <p>The risk assessment considered the impacts without the implementation of any mitigation measures, and determined that there was a medium risk of dust soiling during earthworks, construction and the movement of materials. The assessment also concluded that there was a low to negligible risk to human health and ecological effects.</p> <p>To further reduce impacts associated with dust, measures would be implemented including the application of water to exposed surfaces, covering stockpiles and truck loads, measures to prevent mud tracking on public roads and the timely revegetation of exposed areas.</p> <p>Potential dust impacts during the operation of the maintenance facility are expected to be negligible. Vehicles entering, exiting and traveling within the maintenance facility would generally do so on a sealed access track. Further, a new sealed access track would be provided for vehicles</p>
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No.	Submission no.	Issue(s) raised	TfNSW response
			accessing the Australian Rail Track Corporation (ARTC) site as part of the Proposal.
<b>7. Contamination</b>			
7.1	10, 13	Concern about potential for asbestos and contaminated materials on site. Concern about the proposed removal and disposal methods.	<p>A Phase 1 Preliminary Site Investigation (PSI) was prepared by Nation Partners. This document was provided in Appendix H to the REF.</p> <p>A search of relevant contamination databases on the 12 June 2018 did not reveal any known contaminated sites within the Proposal Site. No records for the Proposal Site were recorded on the NSW EPA Contaminated Land public register under the <i>Contaminated Land Management Act 1997</i>. No records of notices or licenced activities for the Proposal site were listed in the NSW EPA dataset under the <i>Protection of the Environment Operations Act 1997</i>. No records for the site were listed on the National Waste Management Site Database.</p> <p>Based upon the results and observations of the PSI, potential sources of contamination from past or current activities at the site include:</p> <ul style="list-style-type: none"> <li>• Contamination associated with current and former waste disposal areas that included observations of 200 litre drums.</li> <li>• Contamination associated with current and former rail associated activities, including minor quantities of chemicals, oils, and lubricants stored at the site.</li> <li>• Stockpiles of waste materials, including fly-tipped waste dumped illegally at the site.</li> <li>• Uncontrolled fill material within the bounds of the Council compound area and the embankment constructed for the road overpass.</li> <li>• Volatile organic compounds (VOCs) and semi volatile organic compounds (SVOCs).</li> <li>• Heavy metal and pesticide contamination associated with insect and vegetation control.</li> </ul> <p>If contamination is encountered during construction, work in the affected area would cease immediately, and an investigation must be undertaken and a report prepared to determine the nature, extent and degree of any contamination. The level of reporting must be appropriate for the identified</p>

No.	Submission no.	Issue(s) raised	TfNSW response
<b>8. Groundwater</b>			<p>contamination in accordance with relevant EPA guidelines, including <i>Guidelines for Consultants Reporting on Contaminated Sites</i> (OEH, 2011). As mentioned in Section 6.11 of the REF, an Unexpected Finds Protocol, considering asbestos containing materials and other potential contaminants, would be included in the CEMP. Procedures for handling asbestos containing materials, including licensed contractor involvement as required, record keeping, site personnel awareness and waste disposal will be undertaken in accordance with SafeWork NSW requirements.</p> <p>All spoil to be removed from site would be tested to confirm the presence of any contamination. Any contaminated spoil would be disposed of at an appropriately licensed facility. All spoil and waste must be classified in accordance with the <i>Waste Classification Guidelines Part 1: Classifying waste</i> (EPA, 2014) prior to disposal.</p>
8.1	12	<p>Concern about impacts to groundwater. Question what mitigation measures will be implemented.</p>	<p>Potential risks to the groundwater system associated with construction of the Proposal are outlined in detail in section 6.9.3 of the REF and would include:</p> <ul style="list-style-type: none"> <li>• Excavations below the water table resulting in groundwater inflows into the excavation. This would require the temporary dewatering of the excavation during construction.</li> <li>• Propagation of groundwater drawdown: Preliminary analysis based on the information available indicates very limited propagation of drawdown effects. However, if groundwater drawdown reaches receivers that use or depend on groundwater there is the potential for these receivers to be impacted.</li> <li>• Impacts to groundwater users: Preliminary analysis indicates that impacts to these receivers (i.e. groundwater bores) is unlikely. This would be considered further during the detailed design process.</li> <li>• Reduction in baseflow in potentially connected surface water systems such as Macquarie River and Talbragar River: Based on preliminary analysis impacts to these systems are not expected.</li> <li>• Accidental contamination of groundwater due to spills or leaks from construction equipment. This is generally considered low risk and</li> </ul>

No.	Submission no.	Issue(s) raised	TfNSW response
			<p>would be managed through well proven tested safeguards such as the regular inspection of plant and equipment, adherence to site specific pollution prevention protocols and availability of spill response equipment on site.</p> <p>The calculation or modelling of groundwater inflow rates and dewatering volumes would be undertaken during the detailed design phase. An assessment of potential impacts associated with dewatering would also be undertaken, including localised groundwater drawdown. Prior to construction, a construction Dewatering Management Plan would be prepared to detail likely inflow rates, proposed water management and disposal strategy. The plan would include further analysis based on latest monitoring data and Proposal design to quantify groundwater inflow rates and radial extent of groundwater drawdown in accordance with the NSW <i>Aquifer Interference Policy</i> (NOW, 2012).</p> <p>Any groundwater encountered during the construction of the Proposal would be managed and disposed of in accordance with the <i>Waste Classification Guidelines</i> (DECC, 2009b) and the TfNSW <i>Water Discharge and Reuse Guideline</i> (2012).</p>
<b>9. Development and implementation of management plans</b>			
9.1	12	Question why the environmental management plans are being developed during the detailed design phase.	<p>The Construction Environmental Management Plan (CEMP) would be prepared by the successful construction contractor (once appointed) and will demonstrate how the construction contractor will meet the environmental requirements of the REF and any associated conditions of approval.</p> <p>CEMPs are generally developed concurrently with the detailed design for a Proposal such that each process influences the other. As detailed information about the design of the Proposal becomes known, it is possible to better model and determine the environmental management requirements for the Proposal. Similarly, as the environmental management requirements are better understood, it may be necessary to modify the detailed design of the Proposal to achieve a more positive environmental outcome.</p>

No.	Submission no.	Issue(s) raised	TfNSW response
9.2	12	Question who will regulate and oversee the implementation of environmental management plans.	<p>Prior to the commencement of construction, TfNSW shall appoint an Environmental Management Representative (EMR) for the duration of the construction periods of the Proposal. The EMR will, among other things, periodically audit the environmental activities to evaluate the implementation, effectiveness and level of compliance of on-site construction activities with authority approvals and licences, the CEMP and associated plans and procedures, including carrying out site inspections weekly, or as required by TfNSW.</p> <p>The EMR will also issue recommendation to Transport for NSW for work to stop immediately, if in the view of the EMR circumstances so require, such as if a non-conformance was identified with the potential to cause material harm to the environment. The EMR is also responsible for reviewing and approving updates to the CEMP.</p>

## 10. Property impacts

10.1	10	Concern about reductions in privacy and security of nearby residential properties along the southern boundary of the site during construction and operation of the Dubbo Maintenance Facility.	<p>The Proposal Site is bounded by a residential area to the south and a small residential community centred around Darby Close to the north. The existing Main Western Line traverses the southern site boundary about 20 metres from the back fences of the residential properties. Five cul-de-sacs run off Wingewarra Street and Aspen Road south of the Proposal (Cedar Court, Mulga Court, Boronia Place, Hakea Place and Grevillea Close), with properties at the end of each cul-de-sac backing onto the Proposal Site.</p> <p>Earthworks and construction of the maintenance facility would occur close to the adjoining residents along the southern boundary of the Proposal Site. The decommissioning of the existing alignment of the Main Western Line would be the closest construction activity to all properties lining the southern site boundary. Views of the Proposal would be possible from within the backyards of about 22 private residential properties lining the railway corridor. Similarly, private residential properties would be visible from within the Proposal Site. Many of the homes have substantial tree plantings within their backyards to reduce views of the existing Main Western Line (located 20 metres from the back fence) and provide privacy. It is acknowledged that views and privacy of some residential properties would be temporarily impacted during construction</p>
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No.	Submission no.	Issue(s) raised	TfNSW response
10.2	4, 10	Concern about impacts to rear access to properties adjoining the ARTC land	<p>Maintaining privacy of residents adjacent to Dubbo Maintenance Facility is an important consideration of the Proposal's design. As recommended in the REF, the privacy of residential properties along the southern boundary would be maintained through the use of visual screening where practical and retaining existing vegetation. During operation, the privacy of adjoining residents would improve, as once the existing alignment of the Main Western Line is decommissioned, commuters traveling on the Main Western Line would no longer be able to see into the adjoining residential properties. Planting will be undertaken within the former railway corridor to screen views from the Dubbo Maintenance Facility into the adjoining properties.</p> <p>Maintaining the safety and security of residences adjacent to the Proposal during the construction and operation of the Proposal is an important consideration for TfNSW. It is acknowledged that the Proposal would result in the need for additional people to access the locality during construction of the maintenance facility. Workers would not be required to access private properties outside the Proposal area (without reason and following prior consultation from TfNSW to seek approval of the landowner). It is not expected that the additional workers would result in any decrease in the current existing security for adjoining residences.</p> <p>During operation, it is not anticipated that any employees would be required to access adjoining properties. The entrance to the maintenance facility would be securely gated to ensure access is limited to authorised personnel only.</p>
10.3	10	Request for property acquisition and compensation for impacts associated with the Proposal.	<p>Under the NSW <i>Land Acquisition (Just Terms Compensation) Act 1991</i>, TfNSW is only required to compensate property owners at market value for all property directly affected by the Proposal. This refers to property that is either temporarily or permanently required for the Proposal. There</p>

No.	Submission no.	Issue(s) raised	TfNSW response
			is no legal requirement for compensation for indirect impacts (such as amenity impacts) on adjacent properties.
10.4	10, 12	Concern that the Proposal will have a negative impact on the property values for those adjoining the Proposal Site.	<p>Movements in the value of a property are difficult to predict as they are subject to many variables including specific attributes of the property, capital improvements, demand and supply factors and other changes in the wider property market. Land values have a tendency to move in response to positive and negative influences in a given area.</p> <p>While it is acknowledged that the Proposal would result in some change to the local character of the area, ongoing detailed design of the facility would assist in ensuring that the design of the facility is as sensitive as possible to the amenity of the surrounding landscape. This would include the relocation of the Main Western Line away from properties adjoining the site, and provision of new vegetation to screen the facility from adjoining residents. This may assist with minimising potential adverse impacts on property values. The implementation of the range of additional management and mitigation measures (as identified throughout the REF) as part of the construction and operation of the Proposal are considered to be sufficient to minimise any potential impacts associated with the Proposal.</p> <p>In addition, under the NSW <i>Land Acquisition (Just Terms Compensation) Act 1991</i>, TfNSW is not required to compensate property owners for the potential loss of property value, and are only required to compensate property owners at market value for all property acquired as part of the Proposal.</p>
<b>11. Utilities</b>			
11.1	1	Concern regarding potential impacts to Optus assets, including two fibre cables within the Telstra conduit on the western and southern boundaries of the site.	As outlined in Section 3.6.12 of the REF, all services and utilities within the construction footprint would be identified prior to the commencement of construction activities. Once the utilities locations have been confirmed through potholing, the utilities would be protected or if unavoidable would be relocated, in consultation with the relevant asset owners.
<b>12. Out of scope issues</b>			

No.	Submission no.	Issue(s) raised	TfNSW response
12.1	10	Request compensation for works undertaken outside of standard construction hours and delays in the construction program.	<p>As outlined in Section 3.6 of the REF, construction timeframes are indicative only and will be confirmed by the construction contractor once the design is finalised.</p> <p>Construction works will generally be undertaken within standard construction hours. At times, work may need to be undertaken outside of these hours to minimise disruptions to rail customers, pedestrians, motorists, and nearby residents and businesses or to ensure the safety of railway workers and operational assets.</p> <p>Works undertaken outside of standard construction hours will be carried out in accordance with TfNSW's <i>Construction Noise and Vibration Strategy</i> (2018). Where possible, community notifications will be issued in advance of these works. In certain cases, TfNSW will provide noise mitigation measures to reduce construction impacts, depending on the scope and nature of the relevant out-of-hours works.</p> <p>TfNSW is not required to pay compensation for construction delays or out-of-hours works.</p>

### 3 Other stakeholder submissions

Issues raised by Dubbo Regional Council are provided below in Table 3-1.

**Table 3-1 Responses to Dubbo Regional Council's submission**

Issue no.	Issue(s) raised	TfNSW response
<b>1. General</b>		
1.1	The proposed development is Crown Development, it does not require the obtaining of a Construction Certificate and as such, Council will not be involved in any Building Code of Australia (BCA) compliance assessment.	Noted
1.2	The area of the proposed administration and maintenance buildings has no existing Council utility services (i.e. water, sewage and stormwater). Consequently, these will have to be extended into the site.	Noted. As part of the construction of the maintenance facility, some additional services, such as sewerage, water, stormwater and telecommunication would be extended to the site. This has been considered in the design of the Dubbo Maintenance Facility.
1.3	It is observed that the existing Molong to Dubbo tracks through the 'Triangle' are being removed but not reinstated. Consequently, this means that all the existing rail track and corridor south of Dubbo will no longer be available for future reinstatement. This then raises questions about the State Government's intended future uses for its existing rail corridors and the Molong Bridge over the Macquarie River.  It also means that the proposed Dubbo Zirconia Project (rare-earth mine) at Toongi will not be able to use the Molong rail line as an alternative freight option.	TfNSW would ensure that the Regional Rail project does not preclude the future use of the Molong to Dubbo train line.
<b>2. Description of the Proposal</b>		
2.1	As stated within the documentation of the Review of Environmental Factors "Operational access to the Proposal would be from Wingewarra Street (opposite Chelmsford Street). The access road intersection with Wingewarra	The design of the operational access off Wingewarra Street would be further developed in detailed design phase. The potential future operation of the Dubbo-Molong Line does not allow for the alignment of operational access off Wingewarra Street to Chelmsford Street or the installation of a concrete

Issue no.	Issue(s) raised	TfNSW response
	<p>Street would be upgraded to a left in/left out intersection as shown in Figure 3-4.</p> <p>The left in/left out intersection would restrict right turns into and out of the Proposal Site. Vehicles wishing to turn right into the Proposal Site would either undertake a U-turn by using the roundabout of Wingewarra Street and Fitzroy Street or detour via Hampden Street, right turn onto Wingewarra Street, and then left into the Proposal Site." (3.2.7 p.14/33)</p> <p>It is noted that the operational site access on Wingewarra Street is not directly opposite Chelmsford Street and there is some scope to line up the intersection. However, subsequent 'rat runs' through residential streets could be avoided through the installation of a concreted median island in Wingewarra Street if the current road layout allows for the intersection to be fixed.</p>	<p>median on Wingewarra Street. Further consultation with Dubbo Regional Council would be undertaken during the detailed design phase.</p>
2.2	<p>As stated within the documentation of the REF "Existing access to the BJ Engineering compound is via an unsealed access track and uncontrolled level crossing over the eastern side of the Proposed Site. Access would be retained either through the Dubbo Maintenance Facility or by providing an access track outside the facility boundary fence on the north side." (p.16/35)</p> <p>Due to the location of BJ Engineering inside the proposed development property, access to this facility can be provided via proposed access from Wingewarra Street.</p>	<p>As described in Section 3.2.7 of the REF, access to BJ Engineering can be provided through the Dubbo Maintenance Facility or by providing an access track outside the facility boundary fence to the north side. These options, including providing access from Wingewarra Street would be considered further during the detailed design phase.</p>
2.3	<p>As stated within the documentation of the REF, "The construction of the Proposal would result in some impacts to existing service utilities including a sewer, a potable water main and high voltage power." (p.16/35)</p> <p>Council is planning to run a trunk sewer main along the property boundary of the western side of the lot. The existing sewer main crosses the proposed development lot.</p>	<p>TfNSW will continue to consult with Dubbo Regional Council and utility owners throughout the detailed design phase regarding the potential update/relocation of any facilities or other assets. Where possible, TfNSW will work with Dubbo Regional Council to find a suitable easement for the proposed sewer trunk main.</p>

Issue no.	Issue(s) raised	TfNSW response
2.4	<p>The requirement to update/relocate facilities will depend on detailed design of Rail Maintenance Facility.</p> <p>As stated within the documentation of the REF "To support the urban design and landscaping objectives for the Proposal a landscape plan would be prepared." (3.2.9 p.17/37)</p> <p>Council would prefer to view a landscape plan now, rather than having the matter deferred, with the possibility of no consultation occurring.</p>	<p>A landscape plan would be prepared as part of the detailed design phase once a construction contractor has been engaged.</p> <p>As outlined in the REF, as a minimum the landscape plan and would consider the following:</p> <ul style="list-style-type: none"> <li>• Undertake tree and shrub planting within the decommissioned alignment of the Main Western Line to screen the Proposal from residents located to the south of the Site. The screening vegetation would consist of the following: <ul style="list-style-type: none"> <li>– Trees with a mature height of at least eight metres would be planted.</li> <li>– Trees would be at least 1.5 metres in height at planting.</li> <li>– Trees along street frontages shall be consistent and compatible with the existing street trees.</li> <li>– Tree species as recommended by Council's Trees by Street document would be considered</li> </ul> </li> <li>• Actively remove weeds during operation and maintain landscaping and grounds within the Proposal Site to a high standard.</li> </ul> <p>TfNSW and the construction contractor would undertake consultation with relevant stakeholders, including Dubbo Regional Council during the development of the landscape plan.</p>
2.5	<p>The bunded volume of the fuel storage tanks will need to contain the largest spill likely (e.g. 110% of the largest storage tank). Any spills, wash down water etc. from inside the bunded area of the fuel delivery and dispensing area will need to be collected for appropriate disposal. Discharge to the sewer is unlikely to be approved and discharge to stormwater is likely to cause water pollution. The EPA will be the appropriate regulatory authority for any pollution events.</p>	<p>The fuel storage tanks would be bunded in accordance with Australian standards and EPA guidelines. The storage, handling and disposal of fuel would be carried out in accordance with the relevant Australian standards, regulatory and EPA guidelines, and the TfNSW <i>Chemical Storage and Spill Response Guidelines</i>. The EPA would be notified of any pollution incidents under the Protection of the <i>Environment Operations Act 1997</i> where material harm to the environment is caused or threatened.</p> <p>In the event of a spill, the removal of waste water and fuel from site would only be undertaken by a licensed contractor and disposed of at a licenced</p>

Issue no.	Issue(s) raised	TfNSW response
	<p>As stated within the documentation of the REF "Trains would be refuelled on the decanting and provisioning track north of the maintenance facility building. The tanks are likely to be above ground and the tanks and refuelling area would be bunded to avoid spills and covered to meet the relevant standards.</p> <p>The decanting and resupply track would allow for emptying of effluent tanks (decanting) and refilling of water tanks on-board the Regional Rail trains." (3.2.11 p.19/38)</p> <p>The bunded volume will need to contain the largest spill likely (e.g. 110% of the largest storage tank). Any spills, wash down water etc. from inside the bunded area of the fuel delivery and dispensing area will need to be collected for appropriate disposal. Discharge to sewer is unlikely to be approved and discharge to stormwater is likely to cause water pollution.</p> <p>The effluent decanting area will need to be covered and any spills or wash down water will need to be discharged to sewer as it may contain human waste.</p>	<p>waste facility. Fuel contaminated water would not be released to the sewer or stormwater system.</p> <p>Decanting effluent waste would be undertaken within a sealed system linked to the sewer mains. The decant system design would be finalised during the detailed design phase and would be designed to comply with relevant environmental, safety and structural standards/guidelines.</p>
2.6	<p>As stated within the documentation of the REF "Due to the nature of the site being at a gradient of 1.5 percent, it is expected that some levelling works would be required. It is anticipated that approximately 155,000 cubic metres of material would be excavated from the site and 3,000 cubic metres of fill would be placed on areas of the site. Where suitable, the materials excavated from the site would be reused. Any spoil not suitable for reuse would be disposed of in accordance with the relevant legislative requirements." (3.6.6 p.26/45)</p> <p>It is noted the solid wastes will be managed in accordance with a Waste Management Plan that would be prepared with the CEMP which will be approved by TfNSW. Given that some of these wastes are likely to be contaminated and that third party reuse sites will be needed it is recommended that</p>	<p>As noted in the REF, where possible excavated materials would generally be reused on site to minimise waste disposal requirements. Where materials are unsuitable for reuse onsite (such as in the event that contamination or asbestos containing materials are identified) or are surplus to requirements, spoil would be classified in accordance with the <i>Waste Classification Guidelines</i> (DECC, 2009b) and disposed of at a suitable licenced waste facility.</p> <p>The Waste Management Plan would be prepared as part of the preparation of the Construction Environmental Management Plan by the construction contractor (once appointed). The CEMP and all associated sub plans (including the waste management plan) would be developed in consultation with government agencies and relevant service and utility providers. The CEMP and sub plans would be reviewed and approved by TfNSW prior to the commencement of construction.</p>

Issue no.	Issue(s) raised	TfNSW response
	the Waste Management Plan be referred to EPA or Council for comment prior to approval.	
<b>3. Traffic</b>		
3.1	<p>Based on the current traffic survey and SIDRA intersection modelling software, most of the intersection capacity for Level of Service (LoS) varies between A and B, however Cobbora Road-White Street intersection has LoS category F for right turn on the southern leg. In addition, the capacity of Cobra Street-Fitzroy Street intersection reaches close to its capacity (degree of saturation 0.94 and 0.95-Table 6-2).</p> <p>After considering the future traffic growth, the SIDRA model shows LoS at the Cobbora Road-White Street intersection is F and continues to maintain the F category when development belated traffic is considered (Table 6-5). The proposed development at that intersection increases the traffic delay (Table 6-5) and the applicant shall consider adequate treatment to reduce the delay for the vehicle entering Cobbora Road from White Street and exiting from Cobbora Road into White Street. In addition, the existing rail crossing on Cobbora Road is close to the intersection, which could lead to unsafe vehicle movements if the queue length in Cobbora Road increases at the time of rail crossing.</p>	<p>TfNSW will continue to consult with Dubbo Regional Council throughout the detailed design phase and will consider treatment opportunities to improve the performance of the Cobbora Road and White Street intersection to reduce delays.</p> <p>As part of the development of the Construction Traffic Management Plan, a road safety audit would be undertaken and would consider potential for queuing at the intersection of Cobbora Road and White Street to conflict with the Cobbora Road level crossing. It is proposed that the intersection configuration for Cobbora Road/White Street would be for left in/left out for construction vehicles. This intersection arrangement would be included in the Construction Traffic Management Plan.</p>
3.2	<p>Currently Wingewarra Street is not allowed for B-double (25/26m) vehicles and the applicant shall submit the assessment details (such as turning path) to evaluate the capacity of Wingewarra Street layout and capacity of access intersection to understand the provision of safe vehicle movement to/from the proposed development site.</p>	<p>Swept path analysis has been undertaken by TfNSW as part of the concept design to ensure that Wingewarra can support B-double vehicles. As the design is progressed swept path analysis would continue to be undertaken with the exact curve radii determined during detailed design. TfNSW will continue to consult with Dubbo Regional Council and Roads and Maritime Services throughout the detailed design phase and will provide the outcomes of the swept path analysis.</p>
3.3	<p>As stated within the documentation of the REF, "Operation of the Proposal would also result in increases in the number</p>	<p>As noted in Section 6.1.3 of the REF, the level crossings on the Main Western Line are currently used four times a day for passenger services. Once the maintenance facility is operational, the level crossings on the Main Western Line would still generally be used four times a day, but with an</p>

Issue no.	Issue(s) raised	TfNSW response
	<p>of closures at rail level crossings at Fitzroy Street, Wheelers Lane and Sheraton Road." (p.xvi/19)</p> <p>The current closures occurring with the Dubbo urban area are reason for concern and Council would not be supportive of any increases.</p>	<p>additional four barrier closures per month. The additional four barrier closures per month are expected to have a minimal impact on road traffic within Dubbo.</p>
3.4	<p>As stated within the documentation of the REF "The existing access from White Street (Access 1) may need to be widened to accommodate heavy vehicles. B-Doubles are restricted from turning into White Street from Cobbora Road, and would therefore access the Proposal Site via Myall Street, Welchman Street and White Street.</p> <p>A Traffic Management Plan (TMP) would be prepared during the detailed design to appropriately manage haulage movements across or along public roads." (3.6.8 p.27/46)</p> <p>"The maximum number of heavy vehicle trips during weekdays is likely to be in the order of 400 vehicle trips per day, comprising 200 in and out, due to earthworks and spoil removal." (3.6.9 p.27/46)</p> <p>Vehicle turning path details will need to be submitted to assess the capacity of the intersection and road layout. In this regard, the applicant shall submit the construction vehicle route layout for incoming and outgoing vehicles travelling to/from the site to understand the impact to Council roads due to heavy traffic.</p>	<p>As part of the finalisation of the proposed haulage routes and prior to the commencement of construction activities, detailed swept path analysis would be undertaken by the contractor to ensure the proposed haulage routes are adequate.</p> <p>TfNSW will continue to consult with Dubbo Regional Council throughout the development of the CEMP and associated sub plans (including the Traffic Management Plan) and the outcomes of the swept path analysis.</p>
<h4>4. Stormwater drainage</h4>		
4.1	<p>The eastern side of the lot for the proposed development site will be used as a stormwater detention basin. The 'Review of Environmental Factors' Stormwater Drainage (p.20) section states the intent to construct new on-site detention (OSD) on the same lot and at the existing capacity. However, due to the extent of impervious area, it is understood that the site will generate more stormwater runoff compared to existing conditions. Thus, the capacity</p>	<p>As part of the detailed design phase, TfNSW in consultation with Dubbo Regional Council would consider any additional stormwater generated by the increase in impervious surfaces associated with the Dubbo Maintenance Facility against the current capacity of the existing OSD. The size of the new OSD would be adjusted to accommodate the additional flow where required.</p>

Issue no.	Issue(s) raised	TfNSW response
	and size of the proposed OSD basin shall be reviewed prior to works commencing.	
4.2	<p>As stated within the documentation of the REF "Once the reinstated detention basins have been completed and the land subdivided, the detention basins would be returned to Dubbo Regional Council's ownership for ongoing management of the stormwater network." (3.3.1 p.22/41)</p> <p>Whether Council will accept the OSD basin or not will depend on detailed design with consideration to pervious/impervious areas, OSD, the amount of runoff coming out from the OSD basin and the effect of the runoff in the surrounding area. The applicant is also required to demonstrate how the proposed development will maintain the quality of stormwater runoff.</p>	<p>TfNSW will work closely with Dubbo Regional Council in the development of the OSD design to ensure that OSD will maintain the quality of stormwater runoff and operate in accordance with the <i>Australian and New Zealand guidelines for fresh and marine water quality</i> (ANZECC, 2000) and any other relevant Australian standards.</p>
<b>5. Noise and vibration</b>		
5.1	<p>As stated within the documentation of the REF "Noise and vibration - construction of the project would result in minor exceedances of the noise criteria and disturbance to nearby residents and commercial premises. Rail operations would occur within noise management levels, however maintenance facility activities may lead to minor exceedances of daytime, evening and sleep disturbance criteria." (p.xvi/19)</p> <p>Council is not supportive of any exceedances with regard to noise pollution, especially the issues stated regarding the ongoing operation of the maintenance facility. The EPA as the Appropriate Regulatory Authority will need to ensure that Offensive Noise is not generated.</p>	<p>It is acknowledged that the construction of the Dubbo Maintenance Facility would result in exceedances beyond the established noise management levels and that these exceedances would impact on nearby sensitive receivers. It is important to note that the exceedances outlined in the REF represent a worst case scenario and exceedances of this level would generally be intermittent and short-term in nature. Where noisy works are required to be undertaken outside of standard construction hours, these would be scheduled to be undertaken as early as possible within then evening to avoid sleep disturbance. These noise impacts would further be reduced through the preparation of a Construction Noise and Vibration Management Plan and implementation of noise management measures outlined in the REF.</p> <p>The predicted operational noise levels identified in the REF and determination of required noise mitigation would be reviewed and verified as part of an ONVMP during the detailed design phase of the Proposal. The management plan would determine the final design of management and mitigation measures, and identify any residual exceedances of the operational noise objectives. This review would also consider the possibility</p>

Issue no.	Issue(s) raised	TfNSW response
		<p>of noise mitigation options for surrounding properties which may be impacted by the Proposal including items such as use and testing of horns, train movements and standing activities and noise barriers.</p> <p>As mentioned previously, a condition of approval (Condition 25) has been included as part of the planning approval determination, requiring that operational noise levels (<math>L_{A1(60\text{ second})}</math>) from horn testing, brake testing and the train movement warning system not exceed the RBL by more than 15dBA (<math>L_{A1(60\text{ second})} \leq RBL + 15\text{dBA}</math>) at surrounding residential receivers of the maintenance facility for evening (6pm-10pm) and night-time (10pm-7am) periods.</p>
<b>6. Property, land use and socio-economic</b>		
6.1	<p>As stated within the documentation of the REF "Property, Land use and socio-economic - construction of the Proposal would impact on the local amenity (i.e. air quality, noise, traffic and visual impact)." (p.xvi/19)</p> <p>Council is not supportive of any detrimental impacts resulting from the Proposal. The EPA as the appropriate regulatory authority will need to ensure that events that may impact air quality and cause air pollution do not occur.</p>	<p>Amenity impacts associated with the Proposal such as air quality, noise, traffic and visual impacts have been assessed within the REF and mitigation measures have been proposed. Regardless, it is acknowledged that construction of a project of this nature is inevitably going to result in a temporary reduction of amenity, particularly to nearby sensitive receivers. Throughout the detailed design phase, and with the development of the CEMP, impacts would be further reviewed and the associated mitigation measures would be refined.</p>
<b>7. Hydrology, flooding and groundwater</b>		
7.1	<p>As stated within the documentation of the REF "Hydrology, flooding and groundwater - The preliminary flood impact assessment identified there would be a minor increase in flood levels on external properties and significant impact of flood levels within the Proposal Site and a section of the existing railway. A detailed flood impact assessment would be undertaken at subsequent design stages to quantify external flood impacts and mitigation measures would be included in the design to mitigate adverse impacts on people and external properties." (p.xvi/19)</p> <p>Council is not supportive of any detrimental impacts resulting from the Proposal.</p>	<p>As identified in the REF, preliminary flood modelling was undertaken based on the concept design and identified that if unmitigated there would be minor increases in flood levels on external properties, adverse impacts of flood levels within the Proposal Site and a section of the existing railway. Based on the results of the preliminary flood modelling it is clear that flood mitigation measures need to be adopted into the design of the project to offset these impacts.</p> <p>The detailed design process shall ensure that the Proposal will not increase flood levels on surrounding private properties for events up to and including the 1 in 100 year ARI (+ 10% for climate change) during construction and operation (refer to Condition 42).</p>

Issue no.	Issue(s) raised	TfNSW response
	<p>"Should the Proposal proceed, any potential associated adverse impacts would be appropriately managed in accordance with the mitigation measures outlined in this REF." (p.vii/20) However, these measures have not been reviewed in detail.</p>	
<b>8. Light spill and Siding Spring Observatory</b>		
8.1	<p>As stated within the documentation of the REF, "Due to the 24-hour operation of the facility, lighting would be required to be on for all or most of the night and would be designed to minimise off site impacts to sensitive receivers. Potential lighting impacts associated with the Proposal have been considered and are discussed in Section 6.2 of this REF." (p.19/38)</p> <p>The Proposal needs to address the Siding Spring Observatory dark sky requirements, as contained in Dubbo Local Environmental Plan 2011, clause 5.14.</p>	<p>TfNSW acknowledges the importance of the work being undertaken at the Siding Spring Observatory and the dark sky region requirements.</p> <p>Due to the operation of <i>State Environmental Planning Policy (Infrastructure) 2007</i> (Infrastructure SEPP) the Proposal is permissible without consent, and the provisions of <i>Dubbo Local Environmental Plan 2011</i> do not apply to the Proposal. However the Proposal Site is within the Siding Springs Observatory "dark sky region". TfNSW has undertaken consultation with the Director of the Siding Springs Observatory in accordance with clause 16 of the Infrastructure SEPP. Lighting for the project will be designed in accordance with the <i>Environmental Planning and Assessment Amendment (Siding Spring Observatory) Regulation 2016</i> and the <i>Dark Sky Planning Guideline</i> (Department of Planning and Environment 2016).</p>

### 3.1 Future consultation

Should TfNSW proceed with the Proposal, consultation activities would continue, including consultation with Dubbo Regional Council, the community and other key stakeholders. In addition, TfNSW would notify residents, businesses and community members in the lead up to and during construction. The consultation activities would help to ensure that:

- local council and other stakeholders have an opportunity to provide feedback on the detailed design
- the community and stakeholders are notified in advance of any upcoming works, including changes to pedestrian or traffic access arrangements and out of hours construction activities
- accurate and accessible information is made available
- a timely response is given to issues and concerns raised by the community
- feedback from the community is encouraged.

The [TfNSW email address](mailto:projects@transport.nsw.gov.au)<sup>2</sup> and Infoline (1800 684 490) would continue to be available during the construction phase, along with a 24-hour construction complaints number. Targeted consultation methods, such as use of letters, notifications, signage and verbal communications, would continue to occur. The [TfNSW website](https://www.transport.nsw.gov.au/projects/current-projects/regional-rail)<sup>3</sup> would also include updates on the progress of construction.

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<sup>2</sup> [projects@transport.nsw.gov.au](mailto:projects@transport.nsw.gov.au)

<sup>3</sup> <https://www.transport.nsw.gov.au/projects/current-projects/regional-rail>

## 4 Consideration of the environmental impacts

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### ***Environmental Planning and Assessment Act 1979***

The REF addresses the requirements of section 5.5 of the EP&A Act. In considering the Proposal, all matters affecting or likely to affect the environment are addressed in the REF and the Determination Report and associated documentation.

In accordance with the checklist of matters pursuant to clause 228(3) of the EP&A Regulation, an assessment is provided in Chapter 6 of the REF and Appendix B of the REF.

In respect of the Proposal an assessment has been carried out regarding potential impacts on critical habitat, threatened species, populations or ecological communities or their habitats, under section 5.7 of the EP&A Act.

The likely significance of the environmental impacts of the Proposal has been assessed in accordance with the then NSW Department of Planning's 1995 best practice guideline [\*Is an EIS Required?\*](#)<sup>4</sup> It is concluded that the Proposal is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats. Accordingly, an environmental impact statement under Division 5.2 of the EP&A Act is not required.

### ***Environment Protection and Biodiversity Conservation Act 1999***

As part of the consideration of the Proposal, all matters of national environmental significance (NES) and any impacts on Commonwealth land for the purposes of the EPBC Act have been assessed. In relation to NES matters, this evaluation has been undertaken in accordance with Commonwealth Administrative Guidelines on determining whether an action has, will have, or is likely to have a significant impact. A summary of the evaluation is provided in Chapter 6 and Appendix A of the REF.

It is considered that the Proposal described in the REF is not likely to have a significant impact on any Commonwealth land and is not likely to have a significant impact on any matters of NES.

### ***Biodiversity Conservation Act 2016***

Approximately 9.2 hectares of derived native grassland that is expected to be removed would have supported the Fuzzy Box Woodland EEC in the past. In its current condition it is not consistent with the definition of the EEC due to the absence of Fuzzy Box trees.

The design has sought to avoid and minimise impacts to this area by retaining a portion of approximately 1.88 hectares in the southern part of the site, where the trees are present. The exact location of these areas to be retained will be refined during detailed design.

The assessments of significance found that the Proposal would be unlikely to significantly impact threatened species, populations or ecological communities or their habitats, as defined by *Biodiversity Conservation Act 2016*. Accordingly, a Species Impact Statement is not required.

For further detail relating to the biodiversity assessment refer to Section 6.7 of the REF.

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<sup>4</sup> Refer to the National Library of Australia's 'Trove' website  
<http://trove.nla.gov.au/work/7003034?selectedversion=NBD11474648>

## ***Roads Act 1993***

Section 138 of the Roads Act requires consent from the relevant road authority for the carrying out of work in, on or over a public road. However, clause 5(1) in Schedule 2 of the Roads Act states that public authorities do not require consent for works on unclassified roads. However, where works are required on a local road, road occupancy licences would be obtained from the relevant Roads Authority prior to the commencement of works.

## **5 Conditions of Approval**

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If approved, the Proposal would proceed subject to the Conditions of Approval included at Appendix B.

## 6 Conclusion

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Having regard to the assessment in the REF, consideration of the submissions received, it can be concluded that the Proposal is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats. Consequently, an environmental impact statement is not required to be prepared under Division 5.2 of the EP&A Act.

It is also considered that the Proposal does not trigger any approvals under Part 3 of the EPBC Act.

The environmental impact assessment (REF and Determination Report) is recommended to be approved subject to the proposed mitigation and environmental management measures included in the Conditions of Approval (refer Appendix B).

## References

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Australian and New Zealand Environment and Conservation Council (ANZECC), 2000, *Australian and New Zealand guidelines for fresh and marine water quality*, Sydney

Department of Environment and Climate Change (DECC), 2009a, *Interim Construction Noise Guideline*, Sydney

DECC, 2009b, *Waste Classification Guidelines*, Sydney

Department of Environment and Conservation (DEC), 2006, *Assessing Vibration: A Technical Guideline*, Sydney

Department of Planning, 1995, *Is an EIS Required?*, Sydney

Department of Planning and Environment, 2016, *Dark Sky Planning Guideline*, Sydney

Environment Protection Authority (EPA), 2014, *Waste Classification Guidelines*, Sydney

EPA, 2017, *Noise Policy for Industry*, Sydney

Nation Partners, 2018, *Dubbo Maintenance Facility Phase 1 Preliminary Site Investigation*, Sydney

NSW Office of Water (NOW), 2012, *Aquifer Interference Policy*, Sydney

Office of Environment and Heritage (OEH), *Guidelines for Consultants Reporting on Contaminated Sites*, Sydney

Transport for NSW (TfNSW), 2012, *Water Discharge and Reuse Guideline*, Sydney

TfNSW, 2018a, *Dubbo Rail Maintenance Facility Review of Environmental Factors*, Sydney

TfNSW, 2018b, *Construction Noise and Vibration Strategy*, Sydney

# Environmental Impact Assessment Determination

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## Dubbo Maintenance Facility

### APPROVAL

I, Stephen Troughton, as delegate of the Secretary, TfNSW:

1. Have examined and considered the Proposal in the Dubbo Maintenance Facility Review of Environmental Factors (August, 2018) and the Dubbo Maintenance Facility Determination Report (November, 2018) in accordance with section 5.5 of the *Environmental Planning and Assessment Act 1979*.
2. Determine on behalf of TfNSW (the Proponent) that the Proposal may be carried out in accordance with the Conditions of Approval in this Determination Report (November, 2018), consistent with the Proposal described in the Review of Environmental Factors (August, 2018) as amended by this Determination Report.

Stephen Troughton  
Deputy Secretary  
Infrastructure and Services  
**Transport for NSW**

Date:

# Appendix A      Review of Environmental Factors

Please refer to the TfNSW website to access the Dubbo Maintenance Facility REF:

<https://www.transport.nsw.gov.au/projects/current-projects/regional-rail>

# Appendix B    Conditions of Approval

## CONDITIONS OF APPROVAL

### Dubbo Maintenance Facility

Note: these conditions of approval must be read in conjunction with the final mitigation measures in the Dubbo Maintenance Facility Review of Environmental Factors.

#### Schedule of acronyms and definitions used:

Acronym	Definition
<b>ADEIA</b>	Associate Director Environmental Impact Assessment (or nominated delegate)
<b>ADEM</b>	TfNSW Associate Director Environmental Management (or nominated delegate)
<b>ADSPD</b>	TfNSW Associate Director Sustainability, Planning and Development (or nominated delegate)
<b>AS</b>	Australian Standard
<b>CCSMP</b>	Communication, Community and Stakeholder Management Plan
<b>CECR</b>	Construction Environmental Compliance Report
<b>CEMP</b>	Construction Environmental Management Plan
<b>CIR</b>	Contamination Investigation Report
<b>CMP</b>	Contamination Management Plan
<b>dBA</b>	Decibels (A-weighted scale)
<b>ECM</b>	Environmental Controls Map
<b>EIA</b>	Environmental Impact Assessment
<b>EPA</b>	NSW Environment Protection Authority
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act 1979</i>
<b>EMR</b>	Environmental Management Representative
<b>EMS</b>	Environmental Management System
<b>EPL</b>	Environment Protection Licence issued by the Environmental Protection Authority under the <i>Protection of the Environment Operations Act 1997</i> .
<b>ICNG</b>	<i>Interim Construction Noise Guidelines</i> (Department of Environment and Climate Change, 2009)
<b>INP</b>	<i>Noise Policy for Industry</i> (EPA, 2017)
<b>ISO</b>	International Standards Organisation
<b>OEH</b>	NSW Office of Environment and Heritage
<b>ONVMP</b>	Operational Noise and Vibration Management Plan

Acronym	Definition
<b>OOHWP</b>	Out of Hours Works Protocol
<b>PECM</b>	Pre-Construction Environmental Compliance Matrix
<b>POCR</b>	Pre-Operational Compliance Report
<b>RAP</b>	Remedial Action Plan
<b>RBL</b>	Rating Background Level
<b>REF</b>	Review of Environmental Factors
<b>RING</b>	<i>Rail Infrastructure Noise Guideline</i> (EPA, 2013)
<b>RNP</b>	<i>NSW Road Noise Policy</i> (Department of Environmental, Climate Change and Water, 2011)
<b>Roads and Maritime</b>	NSW Roads and Maritime Service (formerly Roads and Traffic Authority)
<b>SMP</b>	Sustainability Management Plan
<b>TfNSW</b>	Transport for NSW
<b>TMP</b>	Traffic Management Plan

Term	Definition
<b>Construction</b>	Includes all work in respect of the Proposal, other than survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys, or other activities determined by the TfNSW ADEM to have minimal environmental impact such as minor access roads, minor adjustments to services/utilities, establishing temporary construction compounds (in accordance with this approval), or minor clearing (except where threatened species, populations or ecological communities would be affected).
<b>Contamination</b>	The presence in, on or under land of a substance at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.
<b>Designated Works</b>	Includes tunnelling, blasting, piling, excavation or bulk fill or any vibratory impact works including jack hammering and compaction, for Construction.
<b>Emergency Work</b>	Includes works to avoid loss of life, damage to external property, utilities and infrastructure, prevent immediate harm to the environment, contamination of land or damage to a heritage (indigenous or non-indigenous) item.
<b>Environmental Impact Assessment (EIA)</b>	The documents listed in Condition 1 of this approval.
<b>Environmental Management Representative (EMR)</b>	An independent environmental representative appointed to the Project, or a delegate nominated by TfNSW.
<b>Feasible</b>	A work practice or abatement measure is feasible if it is capable of being put into practice or of being engineered and is practical to build given Proposal constraints such as safety and maintenance requirements.
<b>Noise Sensitive Receiver</b>	In addition to residential dwellings, noise sensitive receivers include, but are not limited to, hotels, entertainment venues, pre-schools and day care facilities, educational institutions (e.g. schools, TAFE colleges), health care facilities (e.g. nursing homes, hospitals), recording studios, places of worship/religious facilities (e.g. churches), and other noise sensitive receivers identified in the environmental impact assessment.
<b>Project</b>	The construction and operation of the Dubbo Maintenance Facility as described in the Environmental Impact Assessment.
<b>Proponent</b>	A person or body proposing to carry out an activity under Division 5.1 of the EP&A Act – in the case of the Proposal, TfNSW.
<b>Reasonable and feasible</b>	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and nature and extent of potential improvements.

Condition number	Type
<b>General</b>	
1	<p><b>Terms of approval</b></p> <p>The Project shall be carried out generally in accordance with the environmental impact assessment (EIA) for this Project, which comprises the following documents:</p> <ul style="list-style-type: none"> <li>a) <i>Dubbo Maintenance Facility – Review of Environmental Factors</i>, (Jacobs, August 2018)</li> <li>b) <i>Dubbo Maintenance Facility – Determination Report</i> (Jacobs, November 2018).</li> </ul> <p>In the event of an inconsistency between these conditions and the EIA, these conditions will prevail to the extent of the inconsistency.</p>
2	<p><b>Project modifications</b></p> <p>Any modification to the Project as approved in the EIA would be subject to further assessment. This assessment would need to demonstrate that any environmental impacts resulting from the modifications have been minimised. The assessment shall be subject to approval under delegated authority by TfNSW. The Proponent shall comply with any additional requirements from the assessment of the Project modification.</p>
3	<p><b>Statutory requirements</b></p> <p>These conditions do not relieve the Proponent of the obligation to obtain all other licences, permits, approvals and land owner consents from all relevant authorities and land owners as required under any other legislation for the Project. The Proponent shall comply with the terms and conditions of such licences, permits, approvals and permissions.</p>
4	<p><b>Pre-construction Environmental Compliance Matrix</b></p> <p>A Pre-construction Environmental Compliance Matrix (PECM) for the Project (or such stages of the Project as agreed to by the Associate Director Environmental Management (ADEM) shall be prepared detailing compliance with all relevant conditions and mitigation measures prior to commencement of construction. The PECM shall also include details of approvals, licences and permits required to be obtained under any other legislation for the Project.</p> <p>A copy of the PECM shall be submitted to the Environmental Management Representative (EMR) for review. The EMR is to be given a minimum period of six days to review and provide any comments to the Proponent in relation to the PECM. Upon completion of the ERM review period, a copy of the PECM shall be submitted to the ADEM (or nominated delegate) for approval, at least 14 days prior to commencement of construction of the Project (or within such time as otherwise agreed to by the ADEM).</p>

**Condition number****Type****5****Construction Environmental Compliance Report**

A Construction Environmental Compliance Report (CECR) for the Project shall be prepared which addresses the following matters:

- a) compliance with the construction environmental management plan (CEMP) and these conditions
- b) compliance with any approvals or licences issued by relevant authorities for construction of the Project
- c) implementation and effectiveness of environmental controls (the assessment of effectiveness should be based on a comparison of actual impacts against performance criteria identified in the CEMP)
- d) environmental monitoring results, presented as a results summary and analysis
- e) details of the percentage of waste diverted from landfill and the percentage of spoil beneficially reused
- f) number and details of any complaints, including summary of main areas of complaint, actions taken, responses given and intended strategies to reduce recurring complaints (subject to privacy protection)
- g) details of any review and amendments to the CEMP resulting from construction during the reporting period
- h) any other matter as requested by the ADEM.

A copy of each CECR shall be submitted to the EMR for review. The EMR is to be given a minimum period of six days to review and provide any comments to the Proponent in relation to the CECR. A copy of the CECR shall also be submitted to the ADEM (or nominated delegate) for approval upon completion of the EMR review period. The first CECR shall report on the first six months of construction and be submitted within 20 days of expiry of that period (or at any other time interval agreed to by the ADEM). CECRs shall be submitted no later than six months after the date of submission of the preceding CECR (or at other such periods as requested by the ADEM) for the duration of construction.

**6****Pre-operation Compliance Report**

A Pre-Operation Compliance Report (POCR) for the Project shall be prepared, prior to commencement of operation of the Project. The POCR shall detail compliance with all conditions of approval, licences and permits required to be obtained under any other legislation for the Project.

A copy of the POCR shall be submitted to the EMR for review. The EMR is to be given a minimum period of six days to review and provide any comments to the Proponent in relation to the POCR. Upon completion of the EMR review period, a copy of the POCR shall be submitted to the ADEM (or nominated delegate) for approval at least one month prior to the scheduled operation of the Project (or such time as otherwise agreed to by the ADEM).

**Communications****7****Communication, Community and Stakeholder Management Plan**

A Communication, Community and Stakeholder Management Plan (CCSMP) shall be prepared and implemented. The purpose of the CCSMP is to engage with government agencies, relevant councils, landowners, community members and other relevant stakeholders (such as utility and service providers, bus companies and businesses). The CCSMP shall comply with the obligations of these conditions and should include, but not necessarily be limited to:

- a) details of the protocols and procedures for disseminating information and liaising with the community and other key stakeholders about construction activities

**Condition number****Type**

(including timing and staging) and any associated impacts during the construction period

- c) stakeholder and issues identification and analysis
- d) procedures for dealing with complaints or disputes and response requirements, including advertising the 24 hour construction response line number
- e) details (including a program) of training for all employees, contractors and sub-contractors on the requirements of the CCSMP.

The CCSMP shall be prepared to the satisfaction of the Director Community Engagement (or nominated delegate) prior to the commencement of construction and implemented, reviewed and revised as appropriate during construction of the Project.

**8****Community notification and liaison**

The local community shall be advised of any activities related to the Project with the potential to impact upon them.

Prior to any site activities commencing and throughout the Project duration, the community is to be notified of works to be undertaken, the estimated hours of construction and details of how further information can be obtained (i.e. contact telephone number/email, website, newsletters etc.) including the 24 hour construction response line number.

Construction-specific impacts including information on traffic changes, access changes, detours, services disruptions, public transport changes, high noise generating work activities and work required outside the nominated working hours shall be advised to the local community at least seven (7) days prior to such works being undertaken or other period as agreed to by the Director Community Engagement (or nominated delegate) or as required by the Environment Protection Authority (EPA) (where an Environment Protection Licence (EPL) is in effect).

**9****Website**

The Proponent shall provide electronic information (or details of where hard copies of this information may be accessed by members of the public) related to the Project, on dedicated pages within its existing website, including:

- a) a copy of the documents referred to under Condition 1 of this approval
- b) a list of environmental management reports that are publicly available
- c) 24 hour contact telephone number for information and complaints.

All documents uploaded to the website must be compliant with the *Web Content Accessibility Guidelines 2.0*.

**10****Complaints management**

The Proponent shall set up a 24 hour construction response line number.

Details of all complaints received during construction are to be recorded on a complaints register. A verbal response to phone enquiries on what action is proposed to be undertaken is to be provided to the complainant within two hours during all times construction is being undertaken and within 24 hours during non-construction times (unless the complainant agrees otherwise). A verbal response to written complaints (email/letter) should be provided within 48 hours of receipt of the communication. A detailed written response is to be provided to the complainant within seven (7) calendar days for verbal and/or written complaints.

Information on all complaints received during the previous 24 hours shall be forwarded to the TfNSW Community Engagement Manager, EMR and the TfNSW Environment and Planning Manager each working day.

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**Environmental management**

- 11 Construction Environmental Management Plan**
- A Construction Environmental Management Plan (CEMP) shall be prepared prior to commencement of construction which addresses the following matters, as a minimum:
- a) traffic and pedestrian management (in consultation with the relevant roads authority)
  - b) noise and vibration management
  - c) water and soil management (including flood management)
  - d) air quality management (including dust suppression)
  - e) indigenous and non-indigenous heritage management
  - f) flora and fauna management
  - g) storage and use of hazardous materials
  - h) contaminated land management (including acid sulphate soils)
  - i) weed management
  - j) waste management
  - k) environmental incident reporting and management procedures
  - l) non-compliance and corrective/preventative action procedures.

The CEMP shall:

- i) comply with the Conditions of Approval, conditions of any licences, permits or other approvals issued by government authorities for the Project, all relevant legislation and regulations, and accepted best practice management
- ii) comply with the relevant requirements of *Guideline for Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004)
- iii) include an Environmental Policy.

The Proponent shall:

1. consult with government agencies and relevant service/utility providers as part of the preparation of the CEMP
2. submit a copy of the CEMP to the EMR for review
3. submit a copy of the CEMP to the ADEM (or nominated delegate) for approval
4. review and update the CEMP at regular intervals, and in response to any actions identified as part of the EMR's audit of the document
5. ensure updates to the CEMP are made within six days of the completion of the review or receipt of actions identified by any audit of the document, and be submitted to the ADEM for approval.

The CEMP must be approved by the ADEM (or nominated delegate) at least 14 days prior to the commencement of construction work associated with the Project.

- 12 Environment personnel**
- Suitably qualified and experienced environmental management personnel shall be available and be responsible for implementing the environmental objectives for the Project, including undertaking regular site inspections, preparation of environmental documentation and ensuring the Project meets the requirements of the Environmental Management System (EMS).
- Details of the environmental personnel, including relevant experience, defined responsibilities and resource allocation throughout the project (including time to be

Condition number	Type
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spent on-site/off-site) are to be submitted for the approval of the ADEM (or nominated delegate), at least 20 days prior to commencement of construction of the Project (or within such time as otherwise agreed to by the ADEM).

Any adjustments to environmental resource allocations (on-site or off-site) are to be approved by the ADEM.

13

**Environmental management representative**

Prior to the commencement of construction, the ADEM shall appoint an Environmental Management Representative (EMR) for the duration of the construction period for the Project.

The EMR shall provide advice to the ADEM in relation to the environmental compliance and performance of the Project. The EMR shall have responsibility for:

- a) considering and advising the Proponent on matters specified in these conditions and compliance with such
- b) reviewing and where required by the ADEM, providing advice on the Project's induction and training program for all persons involved in the construction activities and monitoring implementation
- c) periodically auditing the Project's environmental activities to evaluate the implementation, effectiveness and level of compliance of on-site construction activities with authority approvals and licences, the CEMP and associated plans and procedures, including carrying out site inspections weekly, or as required by the ADEM
- d) reporting weekly to the Proponent, or as required by the ADEM
- e) issuing a recommendation to the Proponent for work to stop immediately, if in the view of the EMR circumstances so require. The stop work recommendation may be limited to specific activities if the EMR can easily identify those activities
- f) requiring reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts
- g) reviewing corrective and preventative actions to ensure the implementation of recommendations made from the audits and site inspections
- h) providing reports to the Proponent on matters relevant to the carrying out of the EMR role as necessary
- i) where required by the ADEM, providing advice on the content and implementation of the CEMP and environmental controls map (ECM) in accordance with the conditions
- j) reviewing and approving updates to the CEMP.

The EMR shall be available during construction activities to inspect the site(s) and be present on-site as required.

14

**Environmental Controls Map**

An Environmental Controls Map (ECM) shall be prepared in accordance with the TfNSW *Guide to Environmental Controls Map* (3TP-SD-015) prior to the commencement of construction for implementation for the duration of construction, and may be prepared in stages as set out in the CEMP.

The ECM shall be prepared as a map – suitably enlarged (e.g. A3 size or larger) for mounting on the wall of a site office and included in site inductions, supported by relevant written information.

A copy of the ECM shall be submitted to the EMR for review and endorsement. The EMR is to be given a minimum period of six days to review and endorse the ECM.

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Updates to the ECM shall be made within six days of the completion of the review or receipt of actions identified by any audit of the document, and submitted to the ADEM (or nominated delegate) for approval.

Following receipt of the EMR's endorsement, the ECM shall be submitted to the ADEM (or nominated delegate) for approval, at least 14 days prior to commencement of construction of the Project (or within such time as otherwise agreed by the ADEM).

**15****Operational Environmental Management Plan**

An Operational Environmental Management Plan (OEMP) shall be prepared prior to commencement of operation which addresses the following matters, as a minimum:

- a) traffic and pedestrian management (in consultation with the relevant roads authority)
- b) noise and vibration management
- c) water and soil management (including flood management)
- d) air quality management (including dust suppression)
- e) indigenous and non-indigenous heritage management
- f) flora and fauna management
- g) storage and use of hazardous materials
- h) contaminated land management (including acid sulphate soils)
- i) weed management
- j) waste management
- k) sustainability
- l) environmental incident reporting and management procedures
- m) non-compliance and corrective/preventative action procedures

The OEMP shall:

- i. comply with the Conditions of Approval, conditions of any licences, permits or other approvals issued by government authorities for the Project, all relevant legislation and regulations, and accepted best practice management
- ii. comply with the relevant requirements of *Guideline for Preparation of Environmental Management Plans* (Department Infrastructure, Planning and Natural Resources, 2004)
- iii. include an Environmental Policy
- iv. include a noise and vibration sub-plan which is to consider the environmental management measures listed in the Regional Rail Maintenance Facility Noise and Vibration Impact Assessment.

The Proponent shall:

1. consult with NSW Train Link, government agencies and relevant service/utility providers as part of the preparation of the OEMP
2. submit a copy of the OEMP to the EMR for review
3. submit a copy of the OEMP to the ADEM (or nominated delegate) at least one month prior to the commencement of operation, for approval.

The OEMP must be approved by the ADEM (or nominated delegate) prior to the commencement of operation of the Project.

Condition number	Type
<b>Hours of work</b>	
16	<p><b>Standard construction hours</b></p> <p>Construction activities shall be restricted to the hours of 7.00am to 6.00pm (Monday to Friday); 8.00am to 1.00pm (Saturday) and at no time on Sundays and public holidays except for the following works which are permitted outside these standard hours:</p> <ul style="list-style-type: none"> <li>a) any works which do not cause noise emissions to be more than 5 dBA higher than the rating background level (RBL) at any nearby residential property and/or other noise sensitive receivers</li> <li>b) out of hours work identified and assessed in the EIA or the approved Out of Hours Work Protocol (OOHWP) approved by the appropriate Authority</li> <li>c) the delivery of plant, equipment and materials which is required outside these hours as requested by police or other authorities for safety reasons and with suitable notification to the community as agreed by the ADEM</li> <li>d) Emergency Work to avoid the loss of lives, property and/or to prevent environmental harm (Emergency Work will require valid justification in writing which is to be endorsed by the ADEM)</li> <li>e) any other work as agreed by the ADEM (or nominated delegate) and considered essential to the Project, or as approved by the EPA (where an EPL is in effect)</li> <li>f) any work as approved by the EPA where an EPL is in effect.</li> </ul>
17	<p><b>High noise generating activities</b></p> <p>Rock breaking or hammering, jack hammering, pile driving, vibratory rolling, cutting of pavement, concrete or steel and any other activities which result in impulsive or tonal noise generation shall not be undertaken for more than three hours, without a minimum one hour respite period unless otherwise agreed to by the ADEM (or nominated delegate), or as approved by the EPA (where relevant to the issuing of an EPL).</p>

**Condition number****Type****Noise and vibration****18****Construction noise and vibration**

Construction noise and vibration mitigation measures shall be implemented through the CEMP, in accordance with TfNSW's *Construction Noise and Vibration Strategy* (7TP-ST-157) and the EPA's *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). The mitigation measures shall include, but not necessarily be limited to:

- a) details of construction activities and an indicative schedule for construction works
- b) identification of construction activities that have the potential to generate noise and/or vibration impacts on surrounding land uses, particularly sensitive noise receivers
- c) detail what reasonable and feasible actions and measures shall be implemented to minimise noise impacts (including those identified in the EIA)
- d) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for dealing with and responding to noise complaints
- e) an Out Of Hours Work Protocol (OOHWP) for the assessment, management and approval of works outside the standard construction hours identified in Condition 16 of this approval, including a risk assessment process which deems the out of hours activities to be of low, medium or high environmental risk, is to be developed. All out of hours works are subject to approval by the ADEM (or nominated delegate), or as approved by the EPA (where relevant to the issuing of an EPL). The OOHWP should be consistent with TfNSW's *Construction Noise and Vibration Strategy* (7TP-ST-157)
- f) a description of how the effectiveness of actions and measures shall be monitored during the proposed works, clearly indicating the frequency of monitoring, the locations at which monitoring shall take place, recording and reporting of monitoring results and if any exceedance is detected, the manner in which any non-compliance shall be rectified.

**19****Vibration criteria**

Vibration (other than from blasting) resulting from construction and received at any structure outside of the Project shall be limited to:

- a) for structural damage vibration – British Standard BS 7385-2:1993 *Guide to Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz)*
- b) if a heritage building or structure is found to be structurally unsound (following inspection) a more conservative cosmetic damage objectives of 2.5 mm/s peak component particle velocity (from German Standard *DIN 4150:Part 3 – 1999: Structural Vibration in Buildings: Effects on Structures*) would be considered
- c) for human exposure to vibration – the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: A Technical Guideline* (Department of Environment and Conservation, 2006) which includes British Standard BS 7385-2:1993 *Guide to Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz)*.

These limits apply unless otherwise approved by the ADEM (or nominated delegate) through the CEMP.

**20****Noise impacts on educational facilities**

Potentially affected pre-schools, schools, universities and any other permanent educational institutions shall be consulted in relation to noise mitigation measures to identify any noise sensitive periods (e.g. exam periods). As much as reasonably

Condition number	Type
	practicable noise intensive construction works in the vicinity of affected educational buildings are to be minimised.
21	<p><b>Piling</b></p> <p>Wherever practical, piling activities shall be completed using non-percussive piles. If percussive piles are proposed to be used, approval of the ADEM shall be obtained prior to commencement of piling activities.</p>
22	<p><b>Non-tonal reversing beepers</b></p> <p>Non-tonal reversing beepers (or an equivalent mechanism) shall be fitted and used on all construction vehicles and mobile plant regularly used on site (i.e. greater than one day) and for any out of hours work.</p>
23	<p><b>Operational noise and vibration</b></p> <p>Prior to commencement of laying of rail track or the construction of physical noise mitigation structures, an Operational Noise and Vibration Management Plan (ONVMP) shall be prepared to confirm the final mitigation measures for operational noise and vibration that must be implemented.</p> <p>The ONVMP shall be prepared in consultation with NSW Trains and other relevant stakeholders. The ONVMP shall:</p> <ul style="list-style-type: none"> <li>(a) consider any changes to the predicted noise and vibration levels identification in the EIA as a result of the detailed design process and any changes to the proposed maintenance facility operations plan</li> <li>(b) examine all reasonable and feasible noise and vibration mitigation measures consistent with <i>Rail Infrastructure Noise Guideline</i> (EPA, 2013) and the <i>Noise Policy for Industry</i> (EPA, 2017)</li> <li>(c) identify specific physical and other mitigation measures for controlling noise and vibration at the source and at the receiver (if relevant) including location, type and timing of implementation of the proposed operational noise and vibration mitigation measures</li> <li>(d) seek feedback from directly affected receivers on the final mitigation measures proposed in the review.</li> </ul> <p>The Proponent shall submit a copy of the ONVMP to the EMR for review and endorsement. The EMR is to be given a minimum period of six days to review and endorse the ONVMP. Following receipt of the EMR's endorsement, the ONVMP shall be submitted to the ADEM (or nominated delegate) for approval, at least one month prior to commencement of laying of rail track or the construction of physical noise mitigation structures (or such time as is otherwise agreed to by the ADEM).</p> <p>The approved physical mitigation measures are to be installed prior to the commencement of operations, unless otherwise agreed by the ADEM (or nominated delegate).</p>
24	<p><b>Operational noise compliance monitoring</b></p> <p>In order to validate the predicted noise levels identified in the ONVMP, monitoring shall be undertaken within three months of commencement of operation. The noise and vibration monitoring shall be undertaken to confirm compliance with the predicted noise and vibration levels.</p> <p>Should the results of monitoring identify exceedances of the predicted noise and vibration levels, additional reasonable and feasible mitigation measures would be implemented in consultation with the affected property owners.</p>
25	<p><b>Operational noise and vibration levels</b></p>

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Operational noise levels ( $L_{Aeq}$  (15 minute)) from the facility are to comply with the requirements of the *Noise Policy for Industry* (EPA, 2017) at surrounding residential receivers of the maintenance facility for daytime, evening and night-time periods.

Operational noise levels ( $L_{A1}$  (60 second)) from horn testing, brake testing and the train movement warning system are not to exceed the Rating Background Level by more than 15dBA ( $L_{A1}$  (60 second)  $\leq$  RBL+15dBA) at surrounding residential receivers of the maintenance facility for evening (6pm-10pm) and night-time (10pm-7am) periods.

**26**      **Warning sounds**  
 Warning sounds associated with the movements of rolling stock shall only occur in emergency traffic or pedestrian safety situations, but not as part of normal operations of the project. Any use of warning sounds within the maintenance facility is to comply with the requirements of Condition 25.

**27**      **Maintenance building materials**  
 The Maintenance Building is to be designed and constructed to achieve a sound insulation performance of at least 26dB Rw (weighted sound reduction index). In the event this would not achieve compliance with the requirements of Condition 25, additional noise mitigation measures are to be provided to ensure that compliance with the requirements of Condition 25.

**Contamination and hazardous materials**

**28**      **Unidentified contamination (other than asbestos)**  
 If previously unidentified contamination (excluding asbestos) is discovered during construction, work in the affected area must cease immediately, and an investigation must be undertaken and a report prepared to determine the nature, extent and degree of any contamination. The level of reporting must be appropriate for the identified contamination in accordance relevant EPA guidelines, including *Guidelines for Consultants Reporting on Contaminated Sites* (OEH, 2011).  
 A copy of any contamination report shall be submitted to the EMR for review. The EMR is to be given a minimum period of six days to review and provide any comments to the Proponent in relation to the report.  
 A copy of any contamination report must be submitted to the ADEM (or nominated delegate) for consideration upon completion of the EMR review period. The ADEM shall determine whether consultation with the relevant council and/or EPA is required prior to continuation of construction works within the affected area.  
*Note: In circumstances where both previously unidentified asbestos contamination and other contamination are discovered within a common area, nothing in these conditions shall prevent the preparation of a single investigation report to satisfy the requirements of both Condition 28 and Condition 29.*

**29**      **Asbestos management**  
 If previously unidentified asbestos contamination is discovered during construction, work in the affected area must cease immediately, and an investigation must be undertaken and a report prepared to determine the nature, extent and degree of the asbestos contamination. The level of reporting must be appropriate for the identified contamination in accordance with relevant EPA and SafeWork NSW guidelines and include the proposed methodology for the remediation of the asbestos contamination. Remediation activities must not take place until receipt of the investigation report.  
 Works may only recommence upon receipt of a validation report from a suitably qualified contamination specialist that the remediation activities have been

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undertaken in accordance with the investigation report and remediation methodology.

**Note:** *In circumstances where both previously unidentified asbestos contamination and other contamination are discovered within a common area, nothing in these conditions shall prevent the preparation of a single investigation report to satisfy the requirements of both Condition 28 and Condition 29.*

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<b>30</b>	<b>Storage and use of hazardous materials</b>
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Construction hazard and risk issues associated with the use and storage of hazardous materials shall be addressed through risk management measures, which shall be developed prior to construction as part of the overall CEMP, in accordance with relevant EPA guidelines, TfNSW's *Chemical Storage and Spill Response Guidelines* (9TP-SD-066) and Australian and ISO standards. These measures shall include:

- a) the storage of hazardous materials, and refuelling/maintenance of construction plant and equipment to be undertaken in clearly marked designated areas that are designed to contain spills and leaks
- b) spill kits, appropriate for the type and volume of hazardous materials stored or in use, to be readily available and accessible to construction workers. Kits are to be kept at hazardous materials storage locations, in site compounds and on specific construction vehicles. Where a spill to a watercourse is identified as a risk, spill kits are to be kept in close proximity to potential discharge points in support of preventative controls
- c) all hazardous materials spills and leaks to be reported to site managers and actions to be immediately taken to remedy spills and leaks
- d) training in the use of spill kits to be given to all personnel involved in the storage, distribution or use of hazardous materials.

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<b>31</b>	<b>Hazardous materials survey</b>
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A hazardous materials survey in accordance with AS2601 (2001) *Demolition of Structures* must be undertaken by an appropriately qualified environmental scientist prior to the demolition of any relevant building, works, or other infrastructure.

Subsequent removal of any hazardous material is to be undertaken in accordance with applicable EPA and WorkCover guidelines.

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<b>32</b>	<b>Contamination investigation</b>
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If recommended by the Stage 1 Preliminary Site Investigation Report, a stage 2 detailed site investigation shall be undertaken prior to construction commencing. The assessment shall generally be undertaken in accordance with:

- a) *The National Environment Protection (Assessment of Site Contamination) Amendment Measure* (NEPM) 2013;
- b) *Contaminated Sites - Sampling Design Guidelines* (EPA, 1995); and
- c) *AS4482 (2005) Guide to investigation and sampling of site with potentially contaminated soil* (2005).

The report shall be prepared in accordance with the DECCW's *Guidelines for Consultants Reporting on Contaminated Sites* (OEH, 2011). The report shall include

Condition number	Type
	<p>a preliminary waste classification in accordance with the NSW EPA <i>Waste Classification Guidelines</i> (EPA, 2014).</p> <p>Specific requirements for further investigation, remediation or management of any contamination within the identified areas recommended in the stage 2 detailed site investigation shall be included in the CEMP as appropriate.</p> <p>If contamination is identified within the Site, the Proponent is to determine whether there is a duty to report under section 60 of the <i>Contaminated Land Management Act 1997</i> (NSW) and the OEH guidelines.</p>
33	<p><b>Contamination Management Plan</b></p> <p>Specific requirements for further investigation, remediation and management of any potential contamination within the identified areas recommended in the Phase 2 contamination assessment shall be included in a Contamination Management Plan (CMP) as appropriate.</p>
<b>Soils and water</b>	
34	<p><b>Erosion and sediment control</b></p> <p>Soil and water management measures shall be prepared and implemented as part of the CEMP for the mitigation of water quality and hydrology impacts during construction of the Project. The management measures shall be prepared in accordance with <i>Managing Urban Stormwater: Soils and Construction - Volume 1</i>, 4th Edition (Landcom, 2004).</p>
<b>Heritage management</b>	
35	<p><b>Indigenous and non-Indigenous heritage</b></p> <p>If previously unidentified Indigenous or non-Indigenous heritage/archaeological items are uncovered during construction works, the procedures contained in the TfNSW <i>Unexpected Heritage Finds Guideline</i> (3TP-SD-115) shall be followed and all works in the vicinity of the find shall cease. The TfNSW Environment and Planning Manager shall be immediately notified to co-ordinate a response, which may include seeking appropriate advice from a suitably qualified and experienced heritage consultant (in consultation with the Heritage Division, OEH where appropriate). Works in the vicinity of the find shall not re-commence until clearance has been received from TfNSW and/or the heritage consultant.</p>
<b>Air quality</b>	
36	<p><b>Operational Air Quality Management Plan</b></p> <p>As part of the detailed design process, the Proponent shall undertake a review of operational air quality management for the Project and prepare an Operational Air Quality Management Plan. The plan shall include:</p> <ol style="list-style-type: none"> <li>a) air flow modelling to confirm proposed air quality goals, and compliance with applicable air quality parameters; and</li> <li>b) identification of reasonable and feasible mitigation measures to ensure compliance with applicable air quality parameters.</li> </ol> <p>The plan is to be submitted to the ADEM (or nominated delegate) for approval, at least 14 days prior to commencement of permanent built works (or such time as otherwise agreed to by the ADEM).</p>
37	<p><b>Operational air quality monitoring</b></p> <p>Monitoring of predicted air quality levels shall be undertaken within 12 months of commencement of operation of the Project. The air quality monitoring shall assess</p>

**Condition number****Type**

compliance with the air quality goals identified in the Operational Air Quality Management Plan.

Where exceedance of the predicted operational air quality levels are identified, the Proponent shall investigate additional measures to mitigate the exceedance to comply with the operational air quality goals and implement these measures where reasonable and feasible to the satisfaction of the ADEM (or nominated delegate).

**Flora and fauna****38 Removal of trees or vegetation**

Separate approval, in accordance with TfNSW's *Removal or Trimming of Vegetation Application* (9TP-FT-078), is required for the trimming, cutting, pruning or removal of trees or vegetation where the impact has not already been identified in the EIA for the Project. The trimming, cutting, pruning or removal of trees or vegetation shall be undertaken in accordance with the conditions of that approval.

**39 Replanting program**

All cleared vegetation shall be offset in accordance with TfNSW's *Vegetation Offset Guide* (9TP-ST-149). All vegetation planted on-site is to consist of locally endemic native species, unless otherwise agreed by the ADEM (or nominated delegate), following consultation with the relevant council, where relevant, and/or the owner of the land upon which the vegetation is to be planted.

**Lighting****40 Lighting scheme**

All permanent lighting for the Project is to be developed by a suitably qualified lighting designer and prepared in accordance with the *Dark Sky Planning Guideline* (Department of Planning and Environment 2016), AS 1158 *Road Lighting* and AS 4282 *Control of the Obtrusive Effect of Outdoor Lighting*.

In the event of an inconsistency between the guideline and Australian Standards, the *Dark Sky Planning Guideline* (Department of Planning and Environment 2016) will prevail to the extent of the inconsistency.

The lighting scheme shall address the following as relevant:

- a) consideration of lighting demands of different areas
- b) strategic placement of lighting fixtures to maximise ground coverage
- c) use of LED lighting
- d) minimising light spill by directing lighting down and into the rail corridor
- e) control systems for lighting that dim or switch-off lights settings according to the amount of daylight the zone is receiving
- f) motion sensors to control low traffic areas
- g) allowing the lighting system to use low light or switch off light settings while meeting relevant lighting Standards requirements, and
- h) ensuring security and warning lighting is not directed at neighbouring properties.

The proposed lighting scheme is to be submitted prior to the first design submission (System Definition Review) and accepted by TfNSW's Precincts and Urban Design team.

**Property**

Condition number	Type
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**41 Property condition surveys**

Subject to landowner agreement, property condition surveys shall be completed prior to piling, excavation or bulk fill or any vibratory impact works including jack hammering and compaction (Designated Works) in the vicinity of the following buildings/structures:

- a) all buildings/structures/roads within a plan distance of 20 metres from the edge of the Designated Works
- b) all heritage listed buildings and other sensitive structures within 50 metres from the edge of the Designated Works.

Property condition surveys need not be undertaken if a risk assessment indicates that selected buildings/structures/roads identified in (a) and (b) will not be affected as determined by a qualified geotechnical and construction engineering expert with appropriate registration on the National Professional Engineers Register prior to commencement of Designated Works.

Selected potentially sensitive buildings and/or structures shall first be surveyed prior to the commencement of the Designated Works and again immediately upon completion of the Designated Works.

All owners of assets to be surveyed, as defined above, are to be advised (at least 14 days prior to the first survey) of the scope and methodology of the survey, and the process for making a claim regarding potential property damage.

A copy of the survey(s) shall be provided to TfNSW and to each affected owner. A register of all properties surveyed shall be maintained.

Any damage to buildings, structures, lawns, trees, sheds, gardens, etc. as a result of construction activity associated with the Proposal - both direct and indirect (i.e. including vibration and groundwater changes), shall be rectified at no cost to the owner(s).

**Sustainability**

**42 Infrastructure Sustainability Council of Australia Ratings**

The Project is to enter into a ratings agreement with the Infrastructure Sustainability Council of Australia (ISCA) to obtain an Infrastructure Sustainability (IS) "Design" and "As Built" rating using the IS Rating Tool v1.2 for the Maintenance Facility.

A copy of the ISCA ratings agreement shall be submitted to the Associate Director Sustainability, Planning and Development (ADSPD) for review at least four (4) weeks prior to the commencement of construction.

**43 Sustainability Manager**

A suitably qualified and experienced Sustainability Manager shall be appointed, who is responsible for implementing sustainability objectives for the Project.

Details of the Sustainability Manager, including defined responsibilities, duration and resource allocation throughout the appointment, are to be submitted to the ADSPD for approval prior to preparation of the Sustainability Management Plan (or within such time as otherwise agreed to by the ADSPD. Any adjustments to sustainability resource allocations are to be approved by the ADSPD.

Condition number	Type
44	<p><b>Sustainability Management Plan</b></p> <p>Prior to commencement of construction, a Sustainability Management Plan (SMP) shall be prepared to the satisfaction of the ADSPD. The SMP shall include a statement outlining the Project sustainability obligations, goals, targets, tools and strategies. The SMP shall also include an IS Scorecard which indicates the credits and levels which will be targeted for achievement for the “Design” and “As Built” IS Rating Scheme rating.</p> <p>The Proponent shall submit a copy of the SMP to the ADSPD for approval, at least four (4) weeks prior to the commencement of construction (or within such time as otherwise agreed to by the ADSPD).</p>
45	<p><b>Solar photovoltaic and battery storage system</b></p> <p>Should a solar photovoltaic and battery storage system be implemented for the project, the system would be required to be tested and commissioned to the satisfaction of ADSPD.</p>
<b>Traffic and access</b>	
46	<p><b>Construction Traffic Management Plan</b></p> <p>A Construction Traffic Management Plan (TMP) shall be prepared as part of the CEMP which addresses, as a minimum, the following:</p> <ol style="list-style-type: none"> <li>a) ensuring adequate road signage at construction work sites to inform motorists and pedestrians of the work site ahead to ensure that the risk of road accidents and disruption to surrounding land uses is minimised</li> <li>b) maximising safety and accessibility for pedestrians and cyclists</li> <li>c) ensuring adequate sight lines to allow for safe entry and exit from the site</li> <li>d) ensuring access to railway stations, businesses, entertainment premises and residential properties (unless affected property owners have been consulted and appropriate alternative arrangements made)</li> <li>e) managing impacts and changes to on and off street parking, and requirements for any temporary replacement parking</li> <li>f) parking locations for construction workers away from stations and busy residential areas, and details of how this will be monitored for compliance</li> <li>g) routes to be used by heavy construction-related vehicles to minimise impacts on sensitive land uses and businesses</li> <li>h) details for relocating kiss and ride, taxi ranks bus stops (and rail replacement bus stops if required), including appropriate signage to direct customers, in consultation with the relevant taxi/bus operator. Particular provisions should also be considered for the accessibility impaired</li> <li>i) measures to manage traffic flows around the area affected by the Project, including as required regulatory and direction signposting, line marking and variable message signs and all other traffic control devices necessary for the implementation of the construction TMP</li> <li>j) all construction traffic movements (both light and heavy vehicles) from White Street onto Cobbora Road (Golden Highway) are to be via a left turn only. Right turn movements from White Street onto Cobbora Road (Golden Highway) by construction vehicles are not permitted.</li> </ol> <p>The Proponent shall consult with the relevant roads authority during preparation of the TMP, as required and obtain any approvals as required under the <i>Roads Act 1993</i>. The performance of all Project traffic arrangements are to be monitored at regular intervals (no less than annually) during construction.</p>
47	<b>Road Condition Reports</b>

Condition number	Type
	<p>Prior to construction commencement, the Proponent shall prepare road condition surveys and reports on the condition of roads and footpaths affected by construction. Any damage resulting from the construction of the Project, aside from that resulting from normal wear and tear shall be repaired at the Proponent's expense.</p>
48	<p><b>Road Safety Audit</b></p> <p>A Road Safety Audit shall be undertaken for relevant intersections as part of the detailed design process and on completion of construction. The Road Safety Audit would include specific assessment of:</p> <ul style="list-style-type: none"> <li>a) sight distances for vehicles and mitigation measures proposed</li> <li>b) assessment of the relevant intersections and mitigation measures proposed</li> </ul> <p>The Road Safety Audit would include an assessment of all relevant intersections as determined by a suitably qualified traffic management professional, and is to include those intersections that have been identified in the EIA as likely to perform at a Level of Service F as a result of the project.</p> <p>The Road Safety Audit is to be submitted to and accepted by TfNSW.</p>
<b>Additional conditions</b>	
49	<p><b>Graffiti and advertising</b></p> <p>Hoardings, site sheds and offices, fencing, acoustic walls around the perimeter of the site, and any structures built or installed as part of the Proposal are to be maintained free of graffiti and advertising not authorised by the Proponent during the construction period. Graffiti and unauthorised advertising will be removed or covered within the following timeframes:</p> <ul style="list-style-type: none"> <li>a) offensive graffiti will be removed or concealed within 24 hours</li> <li>b) highly visible (yet inoffensive) graffiti will be removed or concealed within a week</li> <li>c) graffiti that is neither offensive or highly visible will be removed or concealed within a month</li> <li>d) any unauthorised advertising material will be removed or concealed within 24 hours.</li> </ul>
50	<p><b>Flood Impact Assessment</b></p> <p>The detailed design process shall ensure that the Project will not increase flood levels on surrounding private properties for events up to and including the 1 in 100 year ARI (+ 10% for climate change) during construction or operation).</p> <p>As part of this process, and prior to the finalisation of detailed design, a detailed Flood Impact Assessment is to be developed in accordance with the NSW Government's <i>Floodplain Development Manual</i> (Department of Infrastructure, Planning and Natural Resources, 2005), to confirm the potential impacts of the Project on the regional flood and local drainage processes as a result of the detailed design process. The detailed Flood Impact Assessment shall identify management and mitigation measures to be implemented to ensure that flooding impacts are appropriately managed.</p> <p>The flood impact assessment is to be prepared in consultation with Dubbo Regional Council.</p> <p>A copy of the detailed flood impact assessment shall be submitted to the ADEM (or nominated delegate) for approval, prior to completion of the detailed design (or such time as is otherwise agreed to by the ADEM).</p>
51	<p><b>Groundwater Assessment</b></p> <p>A detailed Groundwater Assessment is to be developed as part of, but prior to the finalisation of the detailed design process undertaken to confirm the potential impacts of the Project on local and regional groundwater conditions. The</p>

**Condition number****Type**

Groundwater Assessment shall identify management and mitigation measures to be implemented to ensure that groundwater impacts are appropriately managed.

The Groundwater Assessment shall be prepared in consultation with the NSW Office of Water, and Dubbo Regional Council.

A copy of the detailed groundwater assessment shall be submitted to the ADEM (or nominated delegate) for approval, prior to completion of the detailed design (or such time as is otherwise agreed to by the ADEM).

**52****Urban Design and Landscaping Plan**

The Proponent shall prepare an Urban Design and Landscaping Plan (UDLP). The UDLP will include a Final Design Report, prepared and submitted during the detailed design phase.

The UDLP will explain how each of the urban design principles outlined in *Around the Tracks* is addressed in the Project's urban, architectural and landscape design to achieve design excellence. The essential urban design requirements of the Project will be evident in the following matters:

- a) the appropriateness of the proposed design with respect to the existing surrounding landscape, built form, behaviours and use-patterns
- b) the location and design of proposed areas of major earthworks such as noise bunds and on-site detention
- c) materials, finishes, colour schemes and maintenance procedures including graffiti control for new walls, barriers and fences
- d) location and design of pedestrian pathways, fencing and lighting equipment
- e) landscape treatments and tree planting to integrate with surrounding landscapes
- f) design detail that is sympathetic to the amenity and character of heritage items located within or adjacent to the Project site
- g) total water management principles to be integrated into the design where considered appropriate
- h) any other matters which the conditions require the UDLP to address.

The UDLP shall be delivered:

- i. prior to the finalisation of the Projects detailed design.
- ii. prepared in consultation with councils and relevant stakeholders
- iii. prepared by a registered architect and/or landscape architect
- iv. accepted by Transport for NSW's Urban Design Team.

END OF CONDITIONS