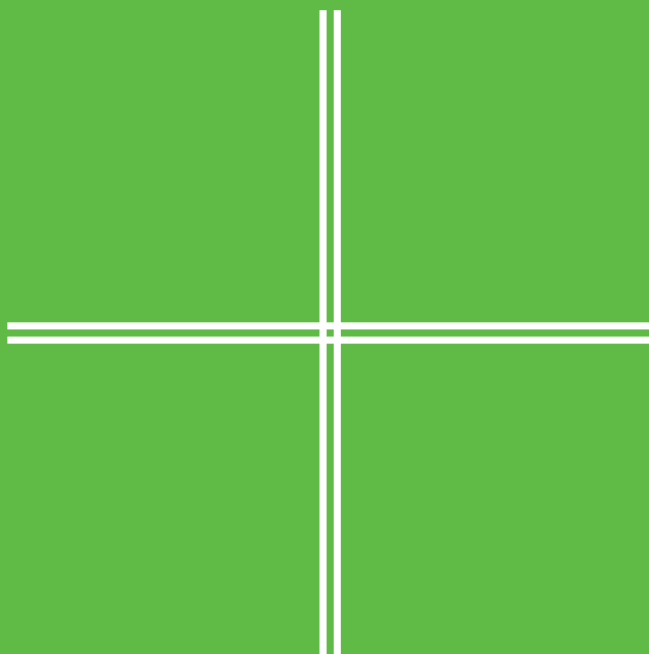


Environmental Impact Statement Stage 1-Major Civil Construction Works

Incorporating Staged Infrastructure Modification Assessment







Volume 1A

Environmental Impact Statement Stage 1-Major Civil Construction Works

Incorporating Staged Infrastructure Modification Assessment

northwestraillink



Declaration under Part 3, Schedule 2 of the Environmental Planning and Assessment Regulation 2000

Author of the Environmental Impact Statement

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Name and Address of the Responsible Person As above

Address of the Land to which this EIS Applies

Land proposed is within Hornsby Shire, The Hills Shire and Blacktown City local government areas as described within the Environmental Impact Statement, in particular Chapter 7.

Description of the Infrastructure to which this EIS Applies

This EIS examines the Civil Construction Works that will be required for the North West Rail Link (NWRL). The NWRL comprises the provision of a new electrified passenger railway between Epping and Tallawong Road, Rouse Hill extending the CityRail network to North West Sydney. It would be a two track rail corridor 23km in length, comprising the following main components:

- ❖ A direct underground connection into the existing Epping to Chatswood Rail Line at Epping (ECRL).
- ❖ Services facilities at Epping and Cheltenham.
- ❖ Two tunnel stubs to safeguard for Parramatta to Epping Rail Link.
- ❖ Eight stations – Cherrybrook, Castle Hill, Hills Centre, Norwest, Bella Vista, Kellyville, Rouse Hill and Cudgegong Road.
- ❖ An underground section of route comprised of 15.5km of two track railway in a twin tunnel configuration with cross passages at regular intervals between Epping and Kellyville.
- ❖ A 7.5km above ground section of route from Bella Vista to Tallawong Stabling Facility, Rouse Hill, which would be a combination of viaduct, embankment, at grade and cutting.
- ❖ A stabling facility at Tallawong Road for 16 eight-car trainsets with provision for later expansion to 24 eight-car trainsets.
- ❖ Provision for a concrete batch plant and pre-cast facilities in the vicinity of Balmoral Road and Memorial Avenue, Kellyville.

Assessment of the Environmental Impact of the Infrastructure

An assessment of the environmental impact of the infrastructure is contained in this Environmental Impact Statement.

Declaration

Pursuant to clause 6(f), Part 3, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*, I declare that this Environmental Impact Statement:

- a. Has been prepared in accordance with the requirements of the *Environmental Planning and Assessment Act 1979 and Environmental Planning and Assessment Regulation 2000*;
- b. Contains all available information that is relevant to the environmental assessment of the infrastructure to which this Environmental Impact Statement relates; and
- c. Contains information that is neither false nor misleading.

Michael England
26 March 2012



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EXECUTIVE SUMMARY

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Introduction

The North West Rail Link (NWRL) is a key priority railway transport infrastructure project for the NSW Government.

The NWRL is proposed to provide eight new stations and associated infrastructure over a 23 kilometre addition to the CityRail network between Epping and Rouse Hill in north west Sydney.

It is proposed that the first 15.5 kilometres of the project would be underground in twin tunnels. Between Bella Vista and Rouse Hill a 4.2 kilometre Skytrain viaduct is proposed.

New stations are planned at Cherrybrook, Castle Hill, Hills Centre, Norwest, Bella Vista, Kellyville, Rouse Hill and Cudgegong Road.

Bus, pedestrian and cycling facilities are proposed for all stations, with a total of approximately 4,000 park and ride spaces intended for Cherrybrook, Hills Centre, Bella Vista, Kellyville and Cudgegong Road Stations.

A stabling yard to allow trains to be parked at night and during off peak period is proposed to be provided at Tallawong Road.

Development of the project has a long and diverse history since 1998.



Since Concept Plan Approval was granted for the project in 2008 further strategic planning and project development has occurred. The NWRL project is now proposed to be integrated with the existing CityRail network and reach further into the North West Growth Centre.

The primary document to guide the direction of future growth in NSW and Sydney is NSW 2021. This document and other metropolitan planning strategies identify the NWRL as a key project that will help deliver the strategies and objectives of these plans.

The project is subject to an environmental assessment and approval process under the Environmental Planning and Assessment Act 1979 (EP&A Act) and is classified as Critical State Significant Infrastructure. With recent amendments to the EP&A Act, the Concept Plan Approval for the project granted by the Minister for Planning on 6 May 2008, is taken to be a Staged Infrastructure Approval under Part 5.1 of the EP&A Act.

Before major work can commence on the project, a detailed environmental impact assessment must be undertaken and approved by the Minister for Planning and Infrastructure for each stage or component of the project.

This Environmental Impact Statement (EIS) represents the detailed environmental impact assessment for Stage 1: Major Civil Construction Works required for the project.

A second and separate EIS is currently being prepared for Stage 2: Stations, Rail Infrastructure and Systems and will be exhibited in the second half of 2012.

The NSW Government is currently undertaking an Industry Engagement Process to complement market soundings held in August and September 2011. The Industry Engagement Process is being run in parallel with the Project's community consultation and planning approval process. The purpose of this process is to maximise the involvement of industry in project development and to encourage innovation in the design and delivery of the NWRL.

Any modifications to scope arising from the outcomes of the Industry Engagement Process will be incorporated into subsequent steps of the planning approval process as required.

Project Objectives

The five key objectives of the NWRL project are to:

- ❖ Ensure customer needs are met through provision of a safe, high quality, integrated and affordable transport service.
- ❖ Link existing communities and new growth areas in north west Sydney with jobs and services in the Global Economic Corridor (Macquarie Park –Chatswood – North Sydney – CBD).
- ❖ Deliver a transport service that has been informed by engagement with communities and stakeholders and represents value for money.
- ❖ Improve transport network reliability by facilitating a shift from road to rail for trips to and from the north west, to reduce bus and road congestion and improve amenity in the Sydney CBD.
- ❖ Contribute to the environmental and social sustainability by improving liveability and minimising impacts on the environment, stakeholders and the community.
- ❖ Support the Government's challenge to accommodate population growth by opening up the North West to a range of housing and employment opportunities.



The Proponent

The proponent is Transport for New South Wales (TfNSW), which is the lead agency of the NSW transport portfolio. TfNSW takes the lead on all policy and planning functions of the former Transport NSW, State Transit Authority, RailCorp, Transport Construction Authority, Roads and Maritime Services, Sydney Ferries and the Public Transport Ticketing Corporation.

A specialised Project Team has been established within TfNSW to coordinate and expedite work on the project.

North West Rail Link Project Modification

The existing Concept Plan Approval/Staged Infrastructure Approval which was granted in 2008 is proposed to be modified under section 115ZI of the EP&A Act to align the approval with an updated design and configuration for the project.

An application to modify the Concept Plan Approval/Staged Infrastructure Approval was submitted to the Department of Planning and Infrastructure (DP&I) on 14 December 2011. In particular, the application seeks to:

- ❖ Change the NWRL project definition as a result of the proposed modifications.
- ❖ Relocate Kellyville Station from Burns Road, Kellyville to Samantha Riley Drive, Kellyville.
- ❖ Provide for additional stations at Bella Vista and Cudgegong Road, Rouse Hill.
- ❖ Make changes to the location of the Hills Centre Station.
- ❖ Change the NWRL alignment within Area 20 (part of the North West Growth Centre) to a route parallel to Schofields Road as shown in the Area 20 Precinct Planning Package (DP&I, August 2011).
- ❖ Incorporate the Skytrain viaduct between Bella Vista and Rouse Hill.
- ❖ Locate a train stabling facility in the vicinity of Tallawong Road in the North West Growth Centre.

Those modifications are designed to align the Concept Plan Approval/Staged Infrastructure Approval with the current project. However, TfNSW will seek final approvals which are independent of the Concept Plan Approval/Staged Infrastructure Approval. This EIS is being prepared in support of a final project approval for Stage 1: Major Civil Construction Works.



Major Civil Construction Works

This EIS examines the major civil construction works that will be required.

These works are planned to commence in mid 2013. Major tunnelling works are planned to commence in 2014.

It is anticipated that the sites would be progressively handed over to the construction contractor(s) undertaking the stations, rail infrastructure and systems works (Stage 2) of the NWRL project between mid 2015 to late 2016. The total period of major civil construction works is expected to be approximately three and a half years. The construction program is shown below.

Construction activities	Indicative construction timeframe											
	2013			2014			2015			2016		
Site Establishment			•	•	•							
Station Excavation				•	•	•	•	•	•			
Tunnel Excavation (Tunnel Boring Machine – TBM)							•	•	•	•	•	•
Tunnel Excavation (Roadheader)				•	•	•	•	•				
Above-ground Linear Works				•	•	•	•	•	•	•	•	•
Epping Services Facility Excavation					•	•	•					
Cheltenham Services Facility Excavation								•	•	•		
Viaduct and Viaduct Stations Structural Works						•	•	•	•	•	•	

Twin bored tunnels would extend from Epping Station for 15.5 kilometres to a tunnel portal immediately north of Celebration Drive at Bella Vista. To facilitate emergency access and egress during operations, connecting cross passages will be provided at regular intervals of approximately 240 metres.

At Epping and Castle Hill crossovers would be provided in the tunnel section at each location to allow trains to cross from one track to another, for train reliability and permitting flexibility in train operations.

It is proposed to use tunnel boring machines to excavate the bulk of the tunnels. Road header machines are proposed to be used to excavate station caverns, cross passages and the connections at Epping with the existing CityRail network.



Earthworks would be required as follows:

- ❖ Celebration Drive to Balmoral Road (an embankment approximately 1,200 metres in length)
- ❖ Terry Road Retained Cut and Embankment (approximately 650 metres in length)
- ❖ Cudgegong Road Embankment (approximately 125 metres in length)
- ❖ Cudgegong Road Station and Tallawong Stabling Yard over a distance of approximately 1,020 metres.

Six of the eight stations would involve earthworks and excavation construction (with Kellyville and Rouse Hill Stations elevated on viaduct).

To the north of Balmoral Road the alignment reaches existing ground level and then continues to climb as the rail corridor transitions onto an elevated viaduct structure known as Skytrain. Skytrain would be approximately 4.2 kilometres in length and pass above areas of land subject to occasional flooding as well as crossing over Burns Road, Samantha Riley Drive, Windsor Road, Sanctuary Drive, White Hart Drive, Rouse Hill Drive and Old Windsor Road.

A number of other road and rail bridges would also be provided along the route.

Two service facilities would need to be constructed. One service facility would be provided at Beecroft Road Epping and the other near Cheltenham Oval.

Enabling works including services and utility adjustments, relocation and/or protection to utilities, road modifications and public transport modifications would also be required.

Construction activities would occur across 17 construction sites as described in the table below.



Site	Area (m²)	TBM Launch	TBM Support	TBM Retrieval	Spoil Removal	Roadheader Launch / Support	Station Construction	Services Facility Construction	Viaduct Launch / Support	General Civil Works	Concrete Batch Plant / Pre-cast Facility
Epping Services Facility	3,400			•	•			•			
Epping Decline	4,500				•	•					
Cheltenham Services Facility	12,000				•			•			
Cherrybrook Station	75,000	•	•	•	•		•				
Castle Hill Station	18,000				•	•	•				
Hills Centre Station	65,000		•		•		•				
Norwest Station	21,000				•		•				
Bella Vista Station	63,000	•	•		•		•			•	
Balmoral Road	190,000				•					•	•
Memorial Avenue	120,000								•	•	•
Kellyville Station	100,000						•		•	•	
Samantha Riley Drive to Windsor Road	50,000								•		
Old Windsor Road to White Hart Drive	97,000								•		
Rouse Hill Station	18,000						•		•		
Windsor Road Viaduct	61,000								•		
Windsor Road Viaduct to Cudgegong Road	83,000									•	
Cudgegong Road Station to Tallawong Stabling Facility	590,000				•		•			•	



After preparatory works are completed, activities at a number of worksites are proposed to be carried out on a 24 hours a day, seven days a week basis. These would be substantially enclosed, either within an acoustic shed or beneath acoustic panels covering the excavations.

The acoustic sheds would be approximately 15 metres in height in order to accommodate a gantry crane and would be appropriately designed to minimise impacts to the visual amenity of the surrounding location where practicable.

Environmental Assessment

In accordance with the Director-General's Requirements and Conditions of Approval, the following environmental issues were assessed in the EIS:

- ❖ Soils and Groundwater
- ❖ Construction Traffic
- ❖ Construction Noise and Vibration
- ❖ European Heritage
- ❖ Indigenous Heritage
- ❖ Local Business Impacts
- ❖ Land Use and Community Facilities
- ❖ Ecology (Terrestrial and Aquatic)
- ❖ Visual Impacts
- ❖ Climate Change and Greenhouse Gas Assessment
- ❖ Surface Water and Flooding
- ❖ Air Quality
- ❖ Waste Management
- ❖ Spoil Management
- ❖ Waste Water Management and Disposal
- ❖ Cumulative Impacts

The assessment of these issues resulted in the development of measures to avoid, mitigate and manage potential impacts.

An Environmental Management Framework has been developed to set out the minimum environmental, stakeholder and community management requirements for the construction of the NWRL. It would provide a link between the EIS and the Construction Environmental Management Plans that would need to be developed by the construction contractor(s).

Community Consultation

Extensive consultation has occurred over the last 10 years on the provision of a rail link to the north west.

The first consultation occurred in 2002 with the community, local business and industry groups and included:

- ❖ Publication of the initial Overview Report (2002)
- ❖ Consultation for the Environmental Assessment and Concept Plan (2005-7)



- ❖ Publication of the Preferred Project Report (2007)
- ❖ Supplementary Submissions Report (2008)

Since the NSW Government announced its intention to proceed with the NWRL in March 2011, the following activities have been undertaken:

- ❖ Castle Hill Community Information Centre opened (June 2011)
- ❖ Consultation about the Project Overview Report (July 2011)
- ❖ Place Managers appointed to liaise with residents, businesses and community organisations (October 2011)
- ❖ Ongoing consultation following Ministerial announcement of the project in December 2011.

Consultation will continue throughout the exhibition of the EIS to ensure the community and all interested stakeholders can make informed responses to the EIS.

Other Environmental Approvals

Other approvals which would need to be obtained prior to the commencement of construction include:

- ❖ An environment protection licence under Chapter 3 of the Protection of the Environment Operations Act 1997
- ❖ Consent under section 138 of the Roads Act 1993.

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) requires assessment and approval of certain actions that have, or will have, or are likely to have a significant impact on a matter of National Environmental Significance. A separate referral has been made for the project.

Project Justification and Conclusion

The NWRL has been identified as a key priority railway transport infrastructure project which will provide a significant expansion to Sydney's rail network in an area of future population and employment growth.

The project will provide access to reliable non-road based public transport and be integrated with existing rail and bus networks.

Key environmental issues have been identified and assessed throughout the project development and construction planning processes. Due to the size and construction period of the project, adverse environmental and social impacts will occur during the project's construction period.

A number of project commitments have been identified aimed at avoiding, mitigating and managing potential impacts associated with the project.



Overall, the NWRL will provide the following benefits over its longer term operational life:

- ❖ Rail access for about 300,000 residents in the north west to Epping, Macquarie Park, Chatswood, St Leonards, North Sydney and the CBD.
- ❖ New rail services to existing suburbs in the Hills District as well as future areas of growth planned for the north west.
- ❖ Improved travel time reliability compared with bus and private car.
- ❖ Significant travel time savings for travel from many areas of the north west to the Sydney CBD and Macquarie Park.
- ❖ Reduced bus congestion in the Sydney CBD in the longer term.
- ❖ An increase in services to the Macquarie University and Macquarie Park area.
- ❖ More sustainable public transport and decreased greenhouse gas emissions.

Next Steps

This EIS will be exhibited to the public for at least 30 days. During this period, any person (including a public authority) will be able to make a written submission to the Director-General of the Department of Planning and Infrastructure concerning the matter. The submissions received would be documented and considered by TfNSW as part of a Submissions Report.

You can comment on the EIS or the project by sending a written submission to:

Director, Major Infrastructure Assessments NSW Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Submissions must be received by the end of the public exhibition period.

The Director-General will prepare an assessment report to assist the Minister for Planning and Infrastructure's consideration of the application for approval to carry out the NWRL State Significant Infrastructure project.

The Minister for Planning and Infrastructure will decide whether or not to approve the construction of the project. The decision will consider:

- ❖ The EIS
- ❖ The Director-General's report on the infrastructure and the reports, advice and recommendations contained in the report
- ❖ Any advice provided by the Minister having portfolio responsibility for Transport for New South Wales.
- ❖ Any findings or recommendations of the Planning Assessment Commission following a review of the project.

State Significant Infrastructure may be approved under Part 5.1 with such modifications of the infrastructure or on such conditions as the Minister of Planning and Infrastructure may determine.



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12 Indigenous Heritage

13 Local Business Impacts

14 Land Use and Community Facilities

15 Ecology

16 Visual Amenity

17 Climate Change and Greenhouse Gas Emissions

18 Surface Water and Hydrology

19 Assessment of Non-Key Issues

20 Cumulative Impacts

21 Environmental Risk Analysis

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Executive Summary

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INTRODUCTION

1.1 Project Overview

The North West Rail Link (NWRL) project (see **Figure 1.1**) has been identified by the NSW Government as a key priority railway transport infrastructure project. It is proposed to provide eight new stations and associated services over a 23 kilometre addition to the CityRail network from Epping to Rouse Hill in north west Sydney. Stations are planned at Cherrybrook, Castle Hill, Hills Centre, Norwest, Bella Vista, Kellyville, Rouse Hill and Cudgegong Road. A stabling facility is proposed beyond Cudgegong Road station site in an area known as Tallawong Road. Bus, pedestrian and cycling access facilities are proposed for all stations, with a total of approximately 4,000 park and ride spaces to be provided at five of the stations, Cherrybrook, Hills Centre, Bella Vista, Kellyville and Cudgegong Road Stations.

Among the benefits of the project, the new rail link would provide:

- ❖ Approximately 300,000 residents in north west Sydney with rail access to Epping, Macquarie Park, Chatswood, St Leonards, North Sydney and the Sydney Central Business District (CBD).
- ❖ New rail services to existing suburbs in the Hills District as well as future areas of planned development for the north west.
- ❖ Improved travel time reliability compared with bus and private car.
- ❖ Travel time savings from many areas of the north west region to the CBD and Macquarie Park, and within the region, including to the Rouse Hill Town Centre.
- ❖ An increase in services to Macquarie University and Macquarie Park.
- ❖ Reduced bus congestion in the Sydney CBD in the longer term.

The NWRL project, including alignment and stations, was considered at concept level during 2006-2008, including widespread consultation with the community and relevant stakeholders. Since then, the concept has been optimised to ensure that it appropriately responds to the travel needs of Sydney commuters, provides value for money and produces a better product outcome for the community. This has resulted in some refinements to the project which are addressed through a modification to the 2008 Concept Approval (now Staged Infrastructure Approval) (see Chapter 6).

The rail alignment (see **Figure 1.2**) would extend from Epping to Rouse Hill by way of Castle Hill, passing through the local government areas (LGAs) of Hornsby, The Hills, and Blacktown. The first two thirds of the rail line would be in the form of underground rail tunnels from Epping Station to Bella Vista Station while the final third between Kellyville and Tallawong stabling facility would be a combination of viaduct over flood prone land, embankments and cuttings, and at grade.

The tunnels would pass under the established residential suburbs of Cheltenham, Beecroft, West Pennant Hills, Cherrybrook and Castle Hill and the newly developed or developing residential and commercial areas of Norwest Business Park and Bella Vista.

The alignment emerges from the tunnels immediately north of Celebration Drive near Bella Vista. It would then pass through the new release areas of Balmoral Road, Kellyville and Rouse Hill in an identified corridor. Parts of the alignment would be elevated on viaduct, crossing the western boundary of the Balmoral Road Release Area, undeveloped land between the Balmoral Road Release Area and the Rouse Hill Town Centre, and the 'Area 20' precinct of the North West Growth Centre.

Figure 1.1 Figure 11: North West Rail Link Regional Context



The project is subject to an environmental assessment and approval process under the Environmental Planning and Assessment Act 1979 (EP&A Act). With recent amendments to the EP&A Act, the Concept Plan Approval for the project granted by the then Minister for Planning on 6 May 2008 is taken to be a Staged Infrastructure Approval under Part 5.1 of the EP&A Act. A proposed modification to the approval has been made to align the Concept Plan Approval with the current description of the NWRL project. However, TfNSW will seek final approvals which are independent of the Concept Plan Approval/Staged Infrastructure Approval. This EIS is being prepared in support of a final project approval for Stage 1: Major Civil Construction Works

Before works can commence on the project, a detailed environmental assessment must be undertaken and approved by the Minister for each stage or component of the project. This Environmental Impact Statement (EIS) represents the detailed environmental impact assessment for Stage 1: Major Civil Construction Works required for the project, including bulk earthworks and tunnelling (EIS 1). A second and separate EIS is currently being prepared for Stage 2: Stations, Rail Infrastructure and Systems (EIS 2).

EIS 1 will seek approval for major civil construction work including:

- ❖ Two 15.5km rail tunnels between Epping and Bella Vista, linking directly into the Epping to Chatswood Rail Line (ECRL) tunnels.
- ❖ Excavation works for underground railway station construction.
- ❖ Above ground construction, including the 4.2km Skytrain viaduct structure between Bella Vista and Rouse Hill.

EIS 2 will describe the station design, railway operating systems and project operations, as well as provide a detailed description of construction works associated with:

- ❖ Station fit-out, platforms, buildings and other architectural aspects.
- ❖ Skytrain design and architectural aspects.
- ❖ Rail infrastructure such as railway tracks, signalling systems, ventilation systems, overhead power supply and substations.
- ❖ Transport interchanges, park and ride car parking facilities, kiss and ride, bus stops, taxi ranks and cycle storage.
- ❖ Access roads and landscaping.

Separating heavy construction work from the station design and railway operations allows:

- ❖ The overall project to be delivered more quickly and efficiently.
- ❖ The project team to seek approval to start building the tunnels early – and getting on with the major construction challenges as soon as possible.
- ❖ More time to discuss with the community the planning and design of railway station surrounds – areas that will become the focal points of suburbs for generations to come.

1.2 Project Development History

Development of the NWRL project has a long and diverse history which commenced in 1998 with its announcement by the NSW Government in the document – Action for Transport 2010. Following this, a pre-feasibility assessment was commissioned and completed in 2000.

The pre-feasibility assessment concluded that the NWRL would be feasible from an engineering and technical perspective, that sufficient levels of patronage would be generated to support a heavy rail link and that the rail link should be constructed as a single stage to Rouse Hill. As a result, a number of more detailed studies examining alignment and mode options were tested through the environmental assessment process. The current proposed route alignment is the outcome of these detailed studies. A history of this work is summarised in [Table 1.1](#).

Figure 1.2 Route overview

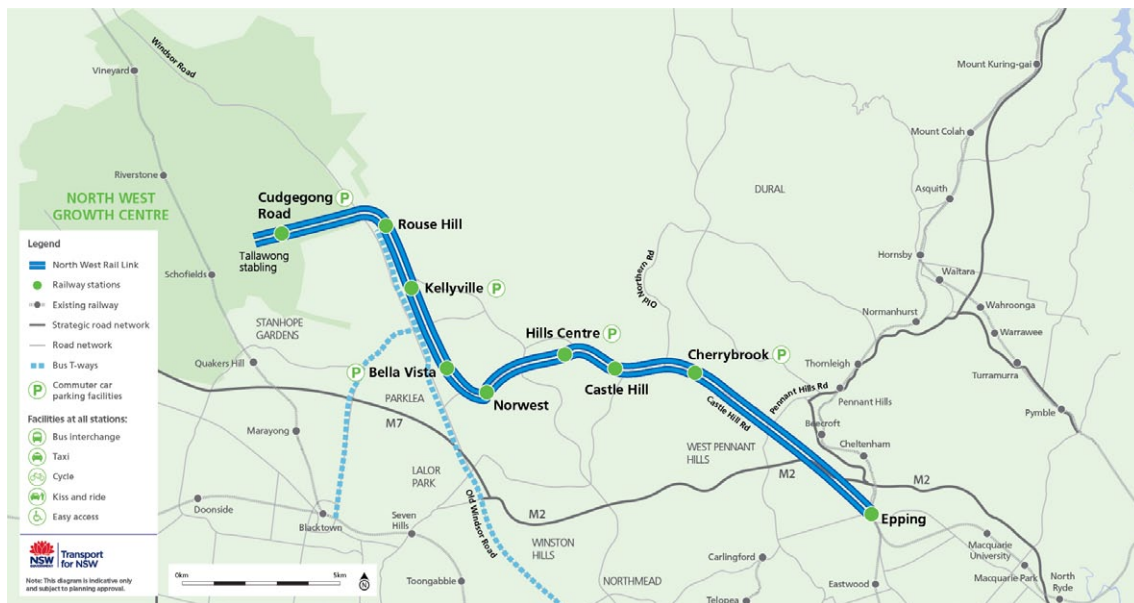


Table 1.1 Project Development History

Document	Options Considered
1998-2005	
Action for Transport 2010 (November 1998)	▪ Epping to Castle Hill Line by 2010. ▪ Castle Hill to Rouse Hill after 2010. ▪ Conceptual alignment only, from Epping to Rouse Hill.
North West Rail Link Pre-Feasibility Study (August 2000)	▪ Nine potential options for heavy rail were identified between Epping and Mungerie Park, split at Castle Hill as follows: ▪ Epping to Castle Hill, Options 1/1 to 1/4. ▪ Castle Hill to Mungerie Park, Options 2/1 to 2/5. ▪ Preferred option identified as the heavy rail link Route 1/1 to Castle Hill and Route 2/1 from there to Mungerie Park. ▪ Proposed an extension to the Richmond Line and noted that the location of the stabling facility should not preclude this opportunity. (Note the Rouse Hill Town Centre was formerly known as Mungerie Park)
NWRL Infrastructure Study (October 2001)	Considered four alignment options: ▪ Preferred alignment from the 2000 Pre-Feasibility Study: Route 1/1 then Route 2/1. ▪ Alignment 1, based on the Pre-Feasibility preferred option for the section between Norwest Business Park and Memorial Avenue. ▪ Alignment 2, designed to be more compatible with proposals for bus transitways and to minimise residential property intrusion. ▪ Alignment 3, developed to encompass benefits from alignments 1 and 2, and with a high level station at Mungerie Park. - Preferred alignment (differed from the Pre-Feasibility Study preferred alignment). A mixture of alignments 1, 2 and 3 depending on chainage. - Six stations: Franklin Road, Castle Hill, Hills Centre, Norwest Business Park, Memorial Avenue and Mungerie Park. - Three potential extension alignments beyond Mungerie Park to the Richmond Line considered. (Note the Rouse Hill Town Centre was formerly known as Mungerie Park)
North West Rail Link Overview Report: Connecting Communities (March 2002)	▪ Described all options considered from both the 2000 Pre-Feasibility Study and the 2001 Infrastructure Study. ▪ Confirmed the preferred alignment, subsequently named the 2002 Alignment.
Metropolitan Rail Expansion Program (MREP) June 2005	▪ Confirmed timing for the NWRL being a heavy rail line connecting to Rouse Hill by 2017 and on to Vineyard by 2020.

Document	Options Considered
NWRL Alternatives Study - Final Report (December 2005)	Introduced a number of new alignment and mode options: ▪ 11 heavy rail options. ▪ 15 light rail options. ▪ 15 transitway options. Reduced to: ▪ One heavy rail option (with two alternative extension alignments beyond Rouse Hill to either Vineyard or Box Hill). ▪ One light rail option. ▪ Four transitway options (but with all sharing the same alignment from Hills Centre to just beyond Rouse Hill).
2005-2006	
Project Application and Preliminary Environmental Assessment (April 2006)	Discussed two alignment options: ▪ The 2002 alignment (from the 2002 Overview Report). ▪ The 2017 Reference Scheme; i.e. the one heavy rail option generated by the NWRL Alternatives Study as well as consultation with key stakeholders and the community following the release of the 2002 Overview Report. The Preliminary Environmental Assessment carried the 2017 Reference Scheme forward for assessment, noting the following potential modifications: ▪ Adjustments to the vertical alignment at Rouse Hill. ▪ An alternative horizontal and vertical alignment option to the west of the proposed Castle Hill Station.
Premier's Urban Transport Statement (20 November 2006)	▪ Introduced the potential for a metro system to be built to service Sydney 'in the very long term'. ▪ Committed to staged deliver of NWRL to Castle Hill by 2015 and Rouse Hill by 2017.

Document	Options Considered
Concept Plan Environmental Assessment (Public Exhibition 22 November 2006 – 2 February 2007)	- Carried through the 2017 Reference Scheme. - Noted that two further alternatives were under consideration by the project team but were not included in the environmental assessment. - An underground rail connection between Epping and Franklin Road. - An elevated rail alignment between Hill Centre and Rouse Hill. Staged delivery was assessed as follows: - A first stage that connects with the existing Northern Line between Beecroft and Cheltenham stations to just west of Hills Centre Station (approximately 11 km in length and to be completed by 2015). - A second stage from west of Hills Centre Station, terminating at Rouse Hill (approximately 12 km in length and to be completed by 2017).
2006-2008	
Network Connection Options Assessment (May 2007)	Assessed connection options between Franklin Road and Epping stations: - Option 1, the Reference Scheme, an Epping to Beecroft quadruplication. - Option 2, a direct tunnel connection between Epping and Franklin Road. - Option 2 was identified as the preferred option.
Preferred Project Report (May 2007)	- Adopted the preferred option (Option 2) from the 2007 Network Connection Options Assessment; a direct tunnel connection to Epping Station. - Moved Norwest Station about 100 metres to the east from the 2017 Reference Scheme.
2008-2010	
SydneyLink (March 2008)	Introduced the North West Metro linking the Sydney CBD to Rouse Hill via Victoria Road. The new North West Metro would run from Rouse Hill to Norwest, Castle Hill, Epping Top Ryde, Gladesville, Drummoyne, and Pyrmont before reaching Wynyard, Martin Place and St James in the CBD. Epping to the Hills Centre by 2015 and the entire line by 2017.
Supplementary Submissions Report (March 2008)	Noted that the alignment for the North West Metro was envisaged to be consistent with the 2017 Reference Scheme between Epping and Rouse Hill except for the tunnel alignment connecting into any new underground North West Metro station at Epping, and the connections to the existing Epping Station.
Concept Plan approval (May 2008)	Approved the concept of the western portion of the North West Metro (i.e. from Epping to Rouse Hill).

Document	Options Considered
North West Metro Product Definition Report (October 2008)	Carried through the preferred alignment selected in the 2009 North West Metro Strategic Alignment Options Evaluation.
North West Metro Strategic Alignment Options Evaluation (September 2009)	Assessed five additional options between Epping and Rouse Hill: ▪ B1 Reference Scheme plus additional stations at Samantha Riley Drive, Norwest West, Thompson's Corner and alternative location at Hills Centre. ▪ B2 Alternative northern alignment through Norwest North and Hills Centre North. ▪ B3 Alternative northern alignment through Castle Hill. ▪ B4 Alternative southern alignment running directly from Norwest to Castle Hill. ▪ B5 Alternative southern alignment between Castle Hill and Epping. All were discarded, except for a component of B1 - the addition of a station at Samantha Riley Drive was canvassed for the long term.
North West Metro Extension Phase 2 Study (October 2008)	▪ Explored alignment options between Rouse Hill and Schofields stations. ▪ The preferred option introduced a station at Tallawong Road, which then continued onto a refurbished Schofields Station.
Metropolitan Transport Plan (February 2010)	▪ Sydney Metro deferred indefinitely in February 2010. ▪ Included plans to develop the heavy rail NWRL to Rouse Hill. Construction to commence 2017 with operation to commence by 2024. ▪ Preferred alignment from the May 2007 Preferred Project Report carried through.
Infrastructure Australia Project Submission (August 2010)	▪ Revisited the 2017 Reference Scheme from the 2006 Environmental Assessment. ▪ Indicated a new alignment for a future extension, heading in the direction of Tallawong Road (informed by the 2008 North West Metro Extension Phase 2 Study).
2011 - Present	
Government Announcement (April 2011)	▪ NSW Government announced that planning and budgeting for the NWRL would start immediately, with the establishment of a project team to: - Determine the planning approvals under the <i>Environmental Planning and Assessment Act 1979</i> - Put together a full costing of the new link - Start planning for the best way to integrate trains on the NWRL with the rest of the rail network - Start discussions with stakeholders and the community along the route

Document	Options Considered
NWRL project overview (July 2011)	▪ Outlines the new elements to the NWRL since the project was approved in 2008 ▪ New elements include an extension beyond Rouse Hill to a train stabling facility at Tallawong Road and a proposed future station at Cudgegong Road.
Submission to Infrastructure Australia (November 2011)	▪ The NSW government submission to infrastructure Australia identifies three priority projects, of which the NWRL project is one. ▪ The submission seeks a reallocation of funding from the Australian Government to the NWRL as a priority urban rail project.
Stage 1 State Significant Infrastructure Application Report (December 2011)	▪ Project application for NWRL - stage 1 major civil construction works was lodged with DP&I.
NWRL Industry engagement process (December 2011)	▪ The purpose of this process is to maximise the involvement of industry in project development and to encourage innovation in the design and delivery of the NWRL
NWRL Industry engagement process (December 2011)	▪ The purpose of this process is to maximise the involvement of industry in project development and to encourage innovation in the design and delivery of the NWRL
Community Engagement (2011)	▪ Castle Hill Community Information Centre opened (June 2011). ▪ Place Managers appointed to liaise with residents, businesses, and community organisations (October 2011) ▪ Ongoing consultation following Ministerial announcements of the project in December 2011

1.2.1 Concept Plan Approval 2008

In May 2008, the then Minister for Planning granted Concept Plan Approval (MP 06_0157) for the western portion of North West Metro, being construction and operation of a new electrified passenger rail line between Epping and Rouse Hill, including:

- ❖ Six new stations at Franklin Road, Castle Hill, Hills Centre, Norwest, Burns Road and Rouse Hill.
- ❖ Stabling facilities.
- ❖ Associated ancillary infrastructure.

The Concept Plan was assessed and approved under the former Part 3A provisions of the EP&A Act. A number of publicly available reports document the environmental assessment process, including:

- ❖ North West Rail Link Environmental Assessment and Concept Plan, dated November 2006.
- ❖ North West Rail Link Preferred Project Report, dated May 2007.
- ❖ North West Rail Link Supplementary Submissions Report, dated March 2008.
- ❖ Major Project Assessment: New Rail Line to North Western Sydney, dated April 2008.

Following the repeal of Part 3A of the EP&A Act on 1 October 2011, the Concept Plan approved on 6 May 2008 is now taken to be an approval for Staged Infrastructure under Part 5.1 of the EP&A Act.

1.2.2 Application to Modify Concept Plan Approval 2008

Consistent with the provisions of the EP&A Act and following changes to the project an application to modify the Concept Plan was made on 14 December 2011.

Further details of the modification and changes to the environmental impacts can be found in Chapter 6.

1.3 Project Proponent

The proponent for the NWRL project is Transport for New South Wales (TfNSW), which is the lead agency of the NSW transport portfolio, with primary responsibility for:

- ❖ Transport coordination.
- ❖ Transport policy and planning.
- ❖ Transport services.
- ❖ Transport infrastructure.

Transport for NSW takes the lead on all policy and planning functions of the former Transport NSW, RailCorp, Transport Construction Authority, Roads and Maritime Services (RMS), Sydney Ferries and the Public Transport Ticketing Corporation. A specialised Project Team has been established within TfNSW to coordinate and expedite work on the NWRL project.





STRATEGIC CONTEXT AND PROJECT OBJECTIVES

2

2.1 Introduction

Development of the NWRL project has a long and diverse history which commenced in 1998 with its announcement by the NSW Government.

Currently, *NSW 2021: A Plan to Make NSW Number One* is the primary document guiding the direction of development in NSW and Sydney. The plan identifies the NWRL as a key project to help deliver the NSW Government's policy priorities. This plan and the metropolitan planning context are summarised in the following sections and the role of the NWRL project in meeting the objectives of the strategies is also discussed.

In addition, the NSW Long Term Transport Master Plan Discussion Paper released in February 2012 identifies the NWRL as a project to extend the reach of the rail network. It also identifies the NWRL route as part of a strategic transport corridor from Rouse Hill through Norwest, Castle Hill, Macquarie Park and on to Chatswood as being a corridor with significant constraints. Building the NWRL will reduce these constraints.

The objectives of the NWRL project were developed based on the strategic need for the project which is established through the key plans identified above. These objectives are presented in this section.

2.2 NSW 2021 – State Plan

NSW 2021: A Plan to Make NSW Number One (NSW Government, 2011) (NSW State Plan 2021) presents the NSW Government's strategy to move the State forward over the next ten years and is based on five principal strategies with underlying goals. The five strategies are to:

- ❖ **Rebuild the economy** – restore economic growth and establish NSW as the 'first place in Australia to do business'.
- ❖ **Return quality services** – provide the best transport, health, education, policing, justice and family services, with a focus on the customer.
- ❖ **Renovate infrastructure** – build the infrastructure that makes a difference to both our economy and people's lives.
- ❖ **Strengthen our local environment and communities** – improve people's lives by protecting natural environments and building a strong sense of community.
- ❖ **Restore accountability to Government** – talk honestly with the community, return planning powers to the community and give people a say on decisions that affect them.

There are a number of goals specifically aimed at improving access and transport across the State. Common aims and themes across these goals are maximising the efficiency and effectiveness of public transport, and for active transport systems – including increasing utilisation, enhancing customer experience, integration across modes and desired origin/destination points and improving the frequency and reliability of services. Overall these combine as a general intent to raise the attractiveness, and hence utilisation, of the public transport system.

The NWRL would support these strategies and goals by providing a significant expansion to Sydney's rail network in an area of current and future population and employment growth, providing transport customers with real choice and contributing to the competitiveness of the region. The NWRL is specifically referenced in the plan as an initiative to achieve goals related to growing patronage on public transport (Goal 8) and renovation of infrastructure.

Goal 8 of the plan aims to increase patronage on public transport resulting in reduced traffic congestion, improved travel times and significant environmental benefits. In order to increase patronage, public transport needs to deliver an attractive, convenient and efficient choice for commuters. To achieve this, the frequency and reliability of public transport services would be increased along with improved integration between transportation services.

As part of Goal 8, TfNSW would expand public transport networks to support population growth in metropolitan centres, allowing communities to access jobs and services closer to home. The NWRL is identified as a key part of this expansion.

2.3 Metropolitan Planning Context

Long-term planning for Sydney aims to sustainably manage growth over the next 25 years by providing for a more compact, networked city with improved accessibility, capable of supporting more jobs, homes and lifestyle opportunities within the existing urban footprint.

To achieve this, Sydney faces a number of key growth challenges centring on population issues (including employment and housing needs); sustainability; productivity (competition and resources); and efficiencies of infrastructure delivery (particularly transport infrastructure and as part of the wider network of infrastructure across Sydney).

The rail system in Sydney is the foundation of the city's public transport system, and has been a key impetus to the growth of the city, shaping land use and human activities. Recognising this fundamental role of the transport system, metropolitan planning for the future will aim to:

- ❖ Enhance our transport system through implementation of the Metropolitan Transport Plan including rail extension projects and integration of rail and bus services.
- ❖ Build on Sydney's strengths by further integrating transport and land use planning and decision making to support increased public transport mode-share.
- ❖ Ensure a transport system that supports productivity through access to jobs, the efficient movement of freight and effective economic gateways.
- ❖ Ensure that our key centres are accessible and connected.
- ❖ Improve the passenger experience of public transport and promote active transport opportunities.
- ❖ Ensure transport corridors are preserved for future growth.

The NWRL would support metropolitan planning objectives by putting in place a key transport project which extends the connectivity of the existing rail network and supports growth centres in the north west.

2.4 Project Objectives

The NWRL will provide an efficient and effective public transport service capable of moving significant numbers of people.

This public transport service aims to address the current and likely future access requirements of residents and visitors within the emerging North West Region of Sydney. It will link this region internally. By connecting with existing transport networks, access is also more readily available to the wider metropolitan area and its attributes including employment centres, the Sydney CBD (eg retail and services), universities / tertiary institutions and the airport.

The new rail service has the potential to reduce private transport and bus movements, with flow-on effects to road systems, by reducing congestion, movement numbers, safety incidents and other road-related issues.

The NWRL would deliver on the NSW Government's commitment to provide Sydney's commuters with a public transport system that is affordable and integrated with the existing transit network.

The six key objectives of the NWRL project are to:

- ❖ Ensure customer needs are met through provision of a safe, high quality, integrated and affordable transport service.
- ❖ Link existing communities and new growth areas in north west Sydney with jobs and services in the Global Economic Corridor (Macquarie Park – Chatswood – North Sydney – CBD).
- ❖ Deliver a transport service that has been informed by engagement with communities and stakeholders and represents value for money.
- ❖ Improve transport network reliability by facilitating a shift from road to rail for trips to and from the north west, to reduce bus and road congestion and improve amenity in the Sydney CBD.
- ❖ Contribute to environmental and social sustainability by improving liveability and minimising impacts on the environment, stakeholders and the community.
- ❖ Support the Government's challenge to accommodate population growth in the north west by increasing the potential for a range of housing and employment opportunities.

2.5 Project Alternatives

Since April 2011, when the Government announced its intention to proceed with the NWRL, a number of strategic options for optimising the scope of the base case project were analysed to improve value for money and produce a better project outcome for the community. The outcome of this analysis led to the announcement of an expanded NWRL project in December 2011.

The base case project included the construction of stations at Cherrybrook, Castle Hill, Hills Centre, Norwest, Kellyville (in the vicinity of Memorial Avenue) and Rouse Hill with provision for stations in the future at Samantha Riley Drive and Cudgegong Road. The project scope included the train stabling facility at Tallawong Road beyond Rouse Hill.

The NSW Government applied a multi criteria assessment process modelled on the Australian Transport Council's National Guidelines for Transport System Management in Australia to assess a range of options that enhanced and/or optimised the base case project.

The options considered included an additional station and park and ride facility, alternative and adjusted locations for stations, and the optimised construction of sections of the rail alignment offering improved customer and product outcomes and value for money.

Following the assessment process a number of strategic options were adopted including those described in Chapter 6.

TfNSW has taken a proactive approach to consulting the community since April 2011 when the NSW Government announced its intention to proceed with the NWRL. In June 2011 the Minister for Transport opened the Castle Hill Community Information Centre which has been staffed five and half days a week since then and will continue for the duration of the project.

In the same month, TfNSW published the *North West Rail Link Project Overview* which canvassed a number of changes including two additional stations and an alternative location for the stabling yard. This was the subject of a public exhibition process which included 10 community information and feedback sessions, and produced an issues report that informed the final project definition.

A photograph of a high-speed train in motion, blurred to convey speed. The train is dark with a prominent yellow stripe along its side. It is in a station with a tiled platform. The scene is lit with warm, yellowish light, possibly from station lamps. A large, white, stylized number '3' is centered on the image. A white crosshair, consisting of two perpendicular lines, is also centered, overlapping the number and the train.

3



STATUTORY PLANNING AND ASSESSMENT FRAMEWORK

3

3.1 Introduction

The following sections set out the NSW and Commonwealth approval and assessment processes as they apply to the NWRL project.

3.2 NSW Environmental Planning Approvals

The overarching statutory framework for environmental planning approval in NSW is provided by the EP&A Act. Supporting this primary piece of legislation are the Environmental Planning and Assessment Regulation 1980 (the regulation) and a suite of environmental planning instruments, including State Environmental Planning Policies (SEPP) and Local Environmental Plans.

3.2.1 Project Definition and Permissibility of the North West Rail Link

The NWRL project is defined as a rail infrastructure facility under the provisions of clause 78 of *SEPP (Infrastructure) 2007* (Infrastructure SEPP). As a rail infrastructure facility to be carried out by or on behalf of a public authority, it is identified as development that is permissible without consent under the provisions of clause 79 of the Infrastructure SEPP. The project is not proposed to be undertaken on land reserved under the *National Parks and Wildlife Act 1974* (NPW Act).

3.2.2 State Significant Infrastructure

The NWRL project has been declared to be State Significant Infrastructure under Part 5.1 of the EP&A Act through the following mechanisms:

- ❖ Section 115U(4) of the EP&A Act allows specified development on specified land to be declared as State Significant Infrastructure. One of the mechanisms through which this has been done is clause 15 and Part 1, Schedule 4 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP). Under Schedule 4 of the SRD SEPP, development that was the subject of a major project application (in this case MP 06_0157 which sought concept approval under Part 3A for the NWRL project) was declared to be State Significant Infrastructure.
- ❖ Clause 16(b) of the SRD SEPP also declares the NWRL project as described in Schedule 5 of the SRD SEPP as State Significant Infrastructure.

The NWRL project is therefore State Significant Infrastructure and will be assessed and determined by the Minister for Planning and Infrastructure under Part 5.1 of the EP&A Act.

3.2.3 Critical State Significant Infrastructure

Section 115V of the EP&A Act allows State Significant Infrastructure to be declared to be Critical State Significant Infrastructure in certain circumstances. Under clause 16 and Schedule 5 (clause 2) of the SRD SEPP, the NWRL project has been declared to be Critical State Significant Infrastructure. The declaration recognises the importance of the NWRL as a project that is essential to the State for economic, environmental or social reasons.

3.2.4 Concept Plan Approval/ Staged Infrastructure Approval

On 6 May 2008, a Concept Plan Approval (MP 06_0157) was granted for the NWRL project under Part 3A of the EP&A Act. With the repeal and replacement of Part 3A, clause 5 of Schedule 6A of the EP&A Act sets out savings and transitional provisions in respect of Part 3A and operates to make the Concept Plan Approval issued under Part 3A an approval for Staged Infrastructure under Part 5.1 of the EP&A Act. The Staged Infrastructure Approval, however, does not permit the carrying out of works and a separate detailed environmental assessment and approval is required for the project, or each part of the project, before construction can commence.

Since the Concept Plan Approval was issued in 2008, further strategic planning and project development has occurred. The NWRL project is now proposed to be integrated with the existing CityRail network and, as a consequence, the existing Concept Plan Approval/ Staged Infrastructure Approval is proposed to be modified under section 115ZI of the EP&A Act to align that approval with the updated design and configuration of the project.

3.2.5 Application to modify Staged Infrastructure Approval

An application to modify that approval was submitted to the Department of Planning and Infrastructure (DP&I) on 14 December 2011. The modification application seeks to:

- ❖ Change the NWRL project definition as a result of the proposed modifications.
- ❖ Relocate Kellyville Station from Burns Road, Kellyville to Samantha Riley Drive, Kellyville.
- ❖ Provide for additional stations at Bella Vista and Cudgegong Road, Rouse Hill.
- ❖ Make minor changes to the location of the Hills Centre Station.

- ❖ Change the NWRL alignment within Area 20 (part of the North West Growth Centre) to a route parallel to Schofields Road as shown in the Area 20 Precinct Planning Package (DP&I, August 2011).
- ❖ Incorporate the Skytrain viaduct between Bella Vista and Rouse Hill.
- ❖ Locate a train stabling facility in the vicinity of Tallawong Road in the North West Growth Centre.

3.2.6 Staging of State Significant Infrastructure Applications

It is proposed that the detailed environmental impact assessment of the NWRL project would be delivered in two major parts being:

- ❖ Stage 1: State Significant Infrastructure Application and EIS for Major Civil Construction Works (this document, also referred to as EIS 1).
- ❖ Stage 2: State Significant Infrastructure Application and EIS for Stations, Rail Infrastructure and Systems (referred to as EIS 2).

In addition to these two stages, other construction activities would be required in preparation for the stage 1 major civil construction works, and construction of the stations and rail infrastructure. These construction activities, which are assessed as part of EIS 1, are described in Section 7.10.

3.2.7 State Significant Infrastructure – Stage 1: Major Civil Construction Works

The EIS has been prepared to address:

- ❖ The environmental assessment requirements specified in the concept plan approval/ Staged Infrastructure approval, which have been endorsed by the DP&I as the environmental assessment requirements for this EIS under Part 5.1 on 3 February 2012.
- ❖ Supplementary environmental assessment requirements issued by the Director-General of the DP&I on 3 February 2012.
- ❖ The commitments made in the Statement of Commitments included in *North West Rail Link Supplementary Submissions Report* (TIDC, March 2008).
- ❖ The outcomes of on-going consultation with key stakeholders (refer to Chapter 5).

The EIS would be placed on public exhibition by the DP&I for at least 30 days, and interested parties are invited to make a submission on the project. A Submissions Report would be prepared to respond to issues raised in submissions and a Preferred Infrastructure Report may also be prepared to address any proposed changes that minimise environmental impact or deal with any other issue raised during assessment of this application.

The State Significant Infrastructure application for the NWRL project major civil construction works would be determined by the Minister for Planning and Infrastructure, having regard to the assessment presented in this EIS, issues raised in submissions and the responses provided in the Submissions Report and the Director-General's Report.

3.2.8 State Significant Infrastructure – Stage 2: Stations, Rail Infrastructure and Systems (EIS 2)

A separate EIS is currently being prepared for the stations, rail infrastructure and systems associated with the NWRL. That EIS would also be publicly exhibited and a Submissions Report and/ or Preferred Infrastructure Report would be prepared. The State Significant Infrastructure application for the stations, rail infrastructure and systems would be determined by the Minister for Planning and Infrastructure.

3.3 State Environmental Planning Instruments

With the exception of Infrastructure *SEPP and SRP SEPP*, there are no State environmental planning instruments that substantially govern the carrying out of the NWRL project.

3.4 Director-General's Requirements, Conditions of Approval and Statement of Commitments

Table 3.1 to **Table 3.4** set out the Director-General's Requirements, the Conditions of Approval and Statement of Commitments as they relate to the NWRL and where they have been addressed in EIS 1. (Copies of these requirements can be found in Appendix A).

Table 3.1 Staged Infrastructure Approval Modification - Supplementary Environmental Assessment Requirements

No.	Modification - Supplementary Environmental Assessment Requirements	Where it is addressed in this EIS
1	The modification assessment shall provide details of the proposed changes to the staged SSI approval, including its change to a heavy rail line, and describe the strategic context of the project in relation to relevant State and regional strategies.	Chapter 6
2	The modification shall also address the following matters: - consideration of any changed or additional impacts as a result of the proposed modifications to the Staged SSI approval, including those that are related to the proposed Construction and Operation of Stations, Rail Infrastructure and Systems stage, at a conceptual level; - consideration of the Area 20 Precinct proposed land uses, infrastructure and strategies, taking into account Development in special area - Cudgegong Station Area (Appendix 6 -Area 20 Precinct Plan); and - a discussion of potential extensions of the project beyond Cudgegong Road.	Chapter 6
3	The modification assessment shall document consultation undertaken with relevant government agencies and the community in its preparation, with a focus on the proposed changes, and how matters raised during consultation have been considered.	Chapter 5

Table 3.2 State Significant Infrastructure Application – Major Civil Constructions Works-
Supplementary Environmental Assessment Requirements

No.	Modification - Supplementary Environmental Assessment Requirements	Where it is addressed in this EIS
1	The Environmental Impact Statement (EIS) shall be prepared in accordance with, and meet the requirements of Part 3 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> .	EIS has been prepared in accordance with these requirements.
2	The EIS shall include an assessment of the project generally in accordance with the Staged SSI approval (MP 06_157), as modified, and in particular, Section 3 Project Applications and Specific Requirements, and Statement of Commitments.	EIS has been prepared generally in accordance with these requirements.

No.	Modification - Supplementary Environmental Assessment Requirements	Where it is addressed in this EIS
3	In addition to the above matters, the EIS shall also have consideration of the following supplementary matters, including associated management and mitigation measures (as relevant): State Significant Infrastructure Application Report Further assessment identified in the Report (<i>North West Rail Link – Stage 1 Major Civil Construction Works</i>). Project Design Interaction with future land use plans in relation to underground components of the project, in consultation with relevant Councils, including the Epping Town Centre Study. As part of the ancillary infrastructure components assessment, matters relating to safety and emergency access, and associated impacts. Growth Centres Biodiversity Certification Consideration of biodiversity measures outlined in the Growth Centres Biodiversity Certification Order. Where necessary, clearing of existing native vegetation within non-certified areas of Growth Centres should be offset in accordance with the relevant biodiversity measures in the Biodiversity Certification Order. Indigenous Heritage Detail consultation undertaken with Aboriginal stakeholders and describe how their views and values have been considered. The assessment shall demonstrate that an appropriate archaeological assessment methodology, including research design, (where relevant) has been undertaken, including results. Archaeological investigation works shall be done in consultation with the EPA and the Department. Non-Indigenous Heritage Potential visual and cultural landscape impacts on Rouse Hill House Estate. Noise The assessment of construction noise shall have consideration of the <i>Interim Construction Noise Guideline</i> (DECC, 2009). Air Quality and Emissions Construction air quality impacts on sensitive receptors. A Scope 1 greenhouse gas assessment (as defined by the Greenhouse Gas Protocol). Soils and Mineral Resources Spoil and waste generation and associated impacts, including: storage, handling and disposal; soil erosion and associated water course impacts, soil salinity and acid sulphate soils; and potential mineral resource and mine subsidence impacts, including consultation with NSW Trade and Investment and the Mine Subsidence Board.	EIS has been prepared in accordance with these requirements. EIS 2 Chapter 15 Chapter 12 Chapter 11 Chapter 10 Chapter 17 Chapters 5 and 8 and Section 19.2

No.	Modification - Supplementary Environmental Assessment Requirements	Where it is addressed in this EIS
4	Consultation The EIS shall document consultation undertaken with relevant government agencies and the community in its preparation and how matters raised during consultation have been considered.	Chapter 5

Table 3.3 Staged Infrastructure Approval Conditions

No.	Condition	Where it is addressed in this EIS
Terms of Concept Approval		
1.1	The Proponent shall carry out the concept plan and all related projects generally in accordance with the: - Major Project Application 06_0157; <i>North West Rail Link Environmental Assessment and Concept Plan</i>, dated November 2006, and prepared by GHD Pty Ltd; - North West Rail Link Preferred Project Report, dated May 2007, and prepared by GHD Pty Ltd; - North West Rail Link Supplementary Submissions Report, dated March 2008, and prepared by the Transport Infrastructure Development Corporation; and - the conditions of approval.	The EIS has been prepared generally in accordance with these requirements.
1.2	In the event of an inconsistency between: - any documents listed in condition 1.1a) to 1.1d) inclusive, the most recent document shall prevail to the extent of the inconsistency; and - the conditions of approval and any document listed in condition 1.1a) to 1.1d) inclusive, the conditions of approval shall prevail to the extent of the inconsistency.	The EIS has been prepared generally in accordance with these requirements.
1.3	Limits of Approval To avoid any doubt, this concept plan approval does not permit the construction of any part of the proposal described in Schedule 1, unless and until a project approval is granted with respect to those works.	Noted

No.	Condition	Where it is addressed in this EIS
1.4	Provision of Information Within 6 weeks of the date of this concept plan approval the Proponent shall place an electronic copy of the documents referred to under condition 1.1 a) to e) of this approval (or details of where hard copies of this information may be accessed by members of the public) on a new website established for the proposal, or dedicated pages within its existing website	See www.northwestrail.com.au
Project Design		
2.1	The Proponent shall in consultation with relevant Government agencies, relevant Councils and relevant stakeholders, ensure that underground components of the project are designed with regard to existing and/ or planned future underground utilities and infrastructure including the planned extension of the M2 Motorway	Chapter 5
2.2	The Proponent shall in consultation with relevant Councils and relevant Government agencies including (but not necessarily limited to) the GCC, MoT, the Department, Landcom, ensure that surface components of the project are integrated with surrounding landuse (existing and planned future, as relevant) as far as reasonable and feasible, consistent with the objectives of <i>Integrated Land Use and Transport</i> (DUAP 2001 or as updated), to minimise the potential for landuse conflicts. In particular: ▪ design of Castle Hill station shall consider the Castle Hill Draft Master Plan (or as updated); and ▪ Kellyville and Rouse Hill Stations and stabling facilities are to be integrated with the precinct planning for the Burns Road Release Area, Rouse Hill Regional Centre and the Area 20 precinct of the North West Growth Centre, as relevant.	Chapter 5
2.3	The Proponent shall in consultation with relevant Government agencies, relevant Councils and relevant stakeholders ensure that ancillary infrastructure are located and designed to minimize biophysical and/ or amenity impacts, as far as reasonable and feasible.	Chapter 5
2.4	The Proponent shall ensure that station precincts across the project provide a high degree of accessibility to all modes-of-access, consistent with the objectives of <i>Integrated Land Use and Transport</i> (DUAP 2001 or as updated).	To be addressed in EIS 2
2.5	The Proponent shall ensure that the surface components of the project affecting roads are designed to minimise traffic disruptions as far as reasonable and feasible, in consultation with the RTA and/ or relevant Councils.	Chapter 9

No.	Condition	Where it is addressed in this EIS
Performance Standards		
2.6	In relation to operational noise and vibration, the Proponent shall ensure that: a. the project rail corridor is designed consistent with the <i>Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects</i> (DECC, 2007); b. the project stabling facilities are designed consistent with the Industrial Noise Policy (EPA, 2000); and c. the project is designed to consistent with <i>Assessing Vibration: A Technical Guideline</i> (DECC, 2006).	To be addressed in EIS 2
2.7	The Proponent shall ensure that any floodplain topography and/ or waterway affected by cut-and-cover construction methodology is re-instated and/ or rehabilitated consistent with pre-construction conditions.	Chapter 18
2.8	The Proponent shall ensure that the biodiversity impacts associated with the project are offset consistent with the 'improve and maintain' principles of the Growth Centres Commission Biodiversity Certification process, in consultation with the DECC.	Chapter 15

No.	Condition	Where it is addressed in this EIS
Project applications and specific requirements		
3.1	Pursuant to section 75P(1)(a) of the Environmental Planning and Assessment Act 1979, the following environmental assessment requirements apply with respect to any projects related to this concept plan approval: a. a detailed project description including: i. confirmation of the alignment, station locations (including feasibility of any additional stations) and stabling arrangements; and ii. the design and location of ancillary infrastructure; b. a detailed project-specific statement of commitments, with regard to the statement of commitments prepared for the concept plan, clearly identifying any new or amended commitments relating to the project; c. an updated assessment of statutory matters, where the project affects land that has not already been identified in the documents referred to in conditions 1.1 (a) to (d); d. an assessment of Matters of National Environmental Significance, as relevant; e. an appropriate and justified level of consultation with relevant Councils and relevant Government agencies including (but not limited to) RailCorp, MoT, GCC, Landcom, DECC, DPI (Fisheries), DWE, RTA, including a description of how agency and Council input has been considered in decisions on design and/ or mitigation; f. an appropriate and justified level of consultation with relevant stakeholders including a description of how stakeholder input has been considered in decisions on design and/ or mitigation; g. assessment of the key issues identified in conditions 3.2 to 3.16 of this approval, including of relevant ancillary infrastructure; and h. assessment at an appropriate level of detail of the impacts and mitigation measures associated with any additional key issues of relevance to the project, identified during further design development, that are not specifically identified in this concept plan approval.	Chapter 7 Chapter 22 Chapter 3 Chapter 3 Chapter 5 Chapter 5 Chapters 8 - 18 Chapters 19 and 20

No.	Condition	Where it is addressed in this EIS
3.2	Property and Landuse The Proponent shall confirm the footprint of the project with respect to alignment, station precincts and ancillary infrastructure as far as reasonable and feasible, and describe the landuse impacts on existing and planned future use associated with any additional land take.	Chapters 7 and 14
Traffic and Transport		
3.3	The Proponent shall review mode-of-access demand and peak traffic predictions at Epping Station taking into account the impact of ECRL operations on patronage distribution; and identify any required changes to mode-of-access arrangements at Epping.	EIS 2
3.4	The Proponent shall confirm mode-of-access arrangements at each new station, with consideration to (but not necessarily limited to) the following matters: a. at Cherrybrook Station – details of park and ride provisions, road access arrangements (including the feasibility of a signalised intersection between Castle Hill, Glenhope and Franklin Roads); and pedestrian and cycle linkages to the surrounding pedestrian catchments of Cherrybrook and West Pennant Hills; b. at Castle Hill Station – investigation of options for shared use parking; bus access arrangements; and pedestrian and cycle linkages between the station and residential areas surrounding the Castle Hill town centre, retail areas within the town centre and the Castle Towers shopping centre; c. at Hills Centre Station - details of park and ride provisions; road access arrangements; and pedestrian linkages to the Castle Hill industrial estate; d. at Norwest Station - investigation of options for shared use parking; access for buses, kiss and ride and taxis; and pedestrian and bus linkages to the Norwest Business Park and surrounding residential catchments; e. at Kellyville Station – details of park and ride provisions; bus interchange arrangements which are integrated to the Parramatta to Rouse Hill Transitway; and road, pedestrian and cycle access that are integrated with the planned provisions for the Balmoral Road Release Area; and f. at Rouse Hill Station - bus interchange arrangements which are integrated to the Parramatta to Rouse Hill Transit way; and road, pedestrian and cycle access that are integrated with the planned provisions for the Rouse Hill Regional Centre	EIS 2

No.	Condition	Where it is addressed in this EIS
3.5	The Proponent shall confirm the construction traffic impacts associated with the project, identifying: a. haulage routes; b. peak congestion and intersection performance impacts at local and arterial roads considering cumulative impacts from surrounding development and from concurrent construction sites; c. reasonable and feasible construction options at road crossings to avoid and/ or minimise traffic disruptions; and d. requirements for road and/ or lane closure and alternative travel arrangements	Chapter 9
3.6	Noise and Vibration The Proponent shall review the noise and vibration impacts of the project during construction (including construction traffic) and operation, considering all reasonable and feasible mitigation options at existing and planned future receivers.	Chapter 10
3.7	Geotechnical The Proponent shall identify risks to groundwater quality and/ or risks to surface water quality from contaminated groundwater during construction and operation, including measures to avoid, manage, mitigate and monitor impacts	Chapter 8

No.	Condition	Where it is addressed in this EIS
3.8	Geotechnical - The Proponent shall identify the following matters in relation to the bored tunnel components of the project: - existing groundwater conditions (level and quality), taking into consideration seasonal variability; - local and regional drawdown impacts, including any groundwater users impacted by the project and measures to offset impacts; - options for the sustainable use and/or disposal of tunnel inflow; - measures to minimise the risk of bed cracking and loss of surface flow when tunnelling below creek lines and contingency measures for restoring affected waterways consistent with pre-construction conditions, including monitoring procedures and performance criteria; - impacts to groundwater dependent ecological communities (affected by groundwater drawdown) and to riparian and instream ecology (affected by surface cracking and water flow impacts); and - surface locations (and associated infrastructure) above the tunnel alignment that are likely to be at risk to land subsidence or settlement impacts, including relevant settlement design criteria and measures to minimise, monitor and offset impacts	Chapters 8 and Chapter 15 (to Item e)
Surface Water and Hydrology		
3.9	For surface components of the project located on floodplains, the Proponent shall identify flood design criteria in accordance with the <i>Floodplain Development Manual</i> (2005), describing risks to existing and planned future receivers and infrastructure based on the modelling of a full range of flood sizes up to and including the probable maximum flood.	Chapter 18
3.10	For temporary construction sites located on floodplains, the Proponent shall identify reasonable and feasible mitigation measures for mitigating flood risk, including procedures for restoring and monitoring any temporary creek diversions consistent with pre-construction conditions.	Chapter 18
3.11	For cut and cover tunnel components which cross creek lines, the Proponent shall describe the proposed construction methodology, identifying measures to minimise the risk of bed cracking and loss of surface flow and contingency measures for restoring and monitoring waterways, consistent with pre-construction conditions.	Not Applicable as no cut and cover tunnels are proposed which cross creek lines

No.	Condition	Where it is addressed in this EIS
3.12	The Proponent shall identify impacts to riparian and instream ecology from any direct disturbances to waterways and to flora and fauna from changes to creek flow or flood behaviour, during construction or operation.	Chapter 15
3.13	Flora and Fauna The Proponent shall confirm the ecological impacts associated with the project with consideration to conditions 3.8 e) and 3.12, and identify measures to offset impacts, clearly distinguishing between measures to be provided as part of the <i>Growth Centres Commission Biodiversity Certification</i> process and other measures. The Proponent shall describe how the effectiveness of the offset measures would be monitored, what actions shall be taken if measures are identified to be ineffective, the maintenance responsibilities, and timing of implementation of offset measures.	Chapter 15
3.14	Indigenous Heritage The Proponent shall review the indigenous heritage impacts of the project considering cumulative impacts from surrounding development, consistent with: - Steps 1 to 4 of the Protocol for Aboriginal Stakeholder Involvement in the assessment of Aboriginal cultural heritage in the Sydney Growth Centres (Context Pty Ltd, 2006a) and the Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres (Context Pty Ltd, 2006a), for land within the North West Growth Centre; and - Guideline for Aboriginal Cultural Heritage Impacts Assessment and Community Consultation (DECC July 2005), for all other areas. - The Proponent shall identify mitigation priorities with consideration to the regional significance of impacts.	Chapter 12
3.15	European heritage The Proponent shall review the European Heritage impacts of the project, describing measures to minimise and/ or appropriately manage impacts.	Chapter 11
3.16	Visual and Urban Design The Proponent shall review the visual and urban design impacts and mitigation requirements for the project in accordance with Statement of Commitment 40 to 44; identifying the timing of implementation of urban design and landscaping measures, how the effectiveness of landscaping measures would be monitored, and maintenance responsibilities for relevant urban design and landscape measures	Chapter 16

Table 3.4 Statement of Commitments

No.	Commitment	Where it is addressed in this EIS
1	Core sustainability principles would be developed for the design and construction of the project covering the following themes: ▪ Energy ▪ Greenhouse emissions ▪ Water ▪ Community and stakeholder involvement ▪ Biodiversity ▪ Resource recycling/minimisation To develop the principles a benchmarking exercise would be undertaken to enable sustainability goals and objectives to be determined, which would provide clear result areas and targets under each theme	Chapters 4, 17, 5, 15 and Section 19.2. TfNSW has undertaken a benchmarking exercise.
2	Communications processes would be developed and implemented throughout delivery of the project. These would include: ▪ Opportunities to input into the design process such as at station precincts and structures and proposed mitigation measures (e.g. noise barriers) for construction and operations; ▪ Methods to inform the community of the progress and performance of the project and issues of interest to the community; ▪ Processes to receive and manage complaints; and ▪ Consultation with affected property owners.	Chapter 5
3	Ongoing consultation would occur with Government agencies regarding issues raised during previous consultation and as identified within the Environmental Assessment and Concept Plan and the Preferred Project Report	Chapter 5
4	A construction strategy would be developed confirming detailed construction activities and methodologies at each construction site for the construction of the tunnel.	Chapter 7
5	Detailed construction methodologies at each construction site would be developed, including spoil management, with the aim of minimising environmental impacts and informing future impact assessment	Chapter 7
6	Consultation with Councils, the Growth Centres Commission, RailCorp and other relevant stakeholders would be undertaken to ensure environmental planning instruments reflect planning, construction and operation of the project and include integrated planning provisions for appropriate development controls within the vicinity of the rail line and stabling facility.	Chapter 5

No.	Commitment	Where it is addressed in this EIS
7	Land use and property impacts of the project, including construction sites and all ancillary facilities, would be further assessed in consultation with Councils and surrounding landowners.	Chapter 5
8	A Land Asset Management Strategy to address 'land surplus to use', post construction would be developed jointly with the Department of Planning (Land Management Branch) in consultation with Councils, Growth Centres Commission and RailCorp. This strategy would investigate opportunities for land amalgamation of parcels severed by the project and identify opportunities for development that is consistent with surrounding land use planning.	EIS 2
9	Consultation with relevant Councils, government agencies, utility providers, land owners and communities involved in the planning of precincts in the vicinity of each station would be undertaken with the aim of encouraging transit-orientated development around each station. The role of each station within the context of provision of public transport services would be established, including the need and capacity of park and ride facilities, establishing connections with other transport modes (including the potential for integrated ticketing), and integrating pedestrian and cyclist facilities.	Chapter 5 and EIS 2
10	Further investigations would be undertaken with respect to the planned expansion of the Castle Hill Shopping Centre and integration of the project with the Castle Hill Draft Master Plan	Chapters 5 and 20 and EIS 2
11	At each station, further studies would be undertaken to consider the integration of the station with the local area to ensure that predicted patronage and mode access are catered for during operation. Studies would consider local connectivity requirements; pedestrian modelling (including emergency access); bicycle facilities; the potential impacts of traffic accessing the station from the surrounding road network; parking requirements and the integration of the Transitway and other bus services with the new rail stations. These investigations would be undertaken in consultation with Councils, RailCorp, Ministry of Transport and the Roads and Traffic Authority	EIS 2
12	The location, scale, design and quantum of park-and-ride facilities at the Franklin Road, Hills Centre and Burns Road Station would be reviewed during further design. This is to be undertaken with reference to relevant parking policies and in consultation with Councils, RailCorp and the Ministry of Transport	EIS 2
13	In consultation with Councils, RailCorp, the Ministry of Transport and surrounding landowners, investigate opportunities for 'shared use' or complementary parking facilities adjacent to Norwest Station.	EIS 2

No.	Commitment	Where it is addressed in this EIS
14	In consultation with the RTA and Councils, investigate the feasibility of providing a direct access point to the Franklin Road site from Castle Hill Road and the potential for a signalised intersection at the intersection of Glenhope Road with Castle Hill Road.	Chapters 5 and 9 and EIS 2
15	In consultation with the RTA and Councils investigate potential access improvements to Franklin Road Station from areas to the north.	EIS 2
16	The design of construction activities would consider access points, surrounding intersections, bus routes and pedestrian flows.	Chapter 9
17	Traffic modelling and traffic management analysis would be undertaken for the roads and intersections impacted by the project during the project construction and operation. This analysis would consider existing and planned road upgrades	Chapter 9 and EIS 2
18	A detailed construction methodology for the construction over and/or under roads would be developed in consultation with the RTA and Councils with the aim of minimising traffic disruptions (including construction of the bridge over Windsor Road at Kellyville and cut and cover construction under Norwest Boulevard, Windsor Road and Burns Road).	Chapter 9
19	Maintenance access points would be identified and planned in consultation with RailCorp and Councils	EIS 2
20	A detailed noise and vibration assessment of the proposed construction activities, including blasting if required, would be undertaken as part of design development and would include the investigation of the potential need for reasonable and feasible mitigation in accordance with relevant policies and guidelines.	Chapter 10 and EIS 2
21	Consult with local Councils, Growth Centres Commission and RailCorp in relation to land use planning and development controls to minimise the need for physical noise mitigation	Chapter 5 and EIS 2
22	In regard to operational noise, the Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects (Department of Planning, 2007) would be used to implement the following activities: ▪ Modelling of operational noise impacts (including ground borne noise) in more detail as part of the design development; ▪ Identification of acoustic mitigation measures to meet, where reasonable and feasible, the design goals; and ▪ Select representative locations for the project at which it is appropriate to later assess compliance.	EIS 2

No.	Commitment	Where it is addressed in this EIS
23	In regard to train stabling operational noise, the following would be undertaken: ▪ Determine the extent of any physical noise mitigation measures in consultation with Department of Environment and Climate Change, RailCorp and Growth Centres Commission; and ▪ Review the results of RailCorp's investigations into addressing horn – noise and consider the feasibility in consultation with RailCorp of implementing a low volume horn test.	EIS 2
24	Investigate feasible and reasonable mitigation measures to manage operational vibration in consultation with Councils, the Department of Environment and Climate Change and RailCorp	EIS 2
25	Design of waterway crossings and structures would be undertaken with reference to the Guidelines for Design of Fish and Fauna Friendly Waterway Crossings (Fairfull and Witheridge 2003) and Fish Passage Requirements for Waterway Crossings (2003) and considering the quality of riparian habitat present, in consultation with the Department of Primary Industries (NSW Fisheries) and other relevant Government agencies.	Chapter 7 and EIS 2
26	The location of structures associated with the rail tunnel, such as ventilation shafts, emergency egress/access points and discharge/runoff outlets, would be assessed with respect to the potential application of SEPP 19.	Chapter 15
27	A detailed ecological assessment would be undertaken at all construction sites and along above ground sections of the project corridor. The assessment would identify areas to be avoided (where practicable), construction related impacts and how these can be managed; and, where required, describe measures to offset significant impacts on threatened species and/or endangered ecological communities. This assessment would be undertaken in consultation with the DECC, the Growth Centres Commissions, RailCorp and the Commonwealth Department of Environment and Water Resources as appropriate.	Chapter 15 and EPBC Referral

No.	Commitment	Where it is addressed in this EIS
28	‘Improve and Maintain’ assessments on biodiversity values would be undertaken to identify the potential impacts of the project and benefits from protection measures to be implemented. The methodology adopted for all parts of the project would be consistent with the draft Growth Centres Conservation Plan (GCC, 2007) and DECC’s draft Guidelines for biodiversity certification of environmental planning instruments (2007).	Chapter 15
29	Further investigations would be undertaken as part of the design development into opportunities for beneficial reuse of spoil. As a result of these investigations further assessment of transport options and routes for spoil movement would be undertaken.	Chapters 7 and 9 and Section 19.2
30	Additional research would be undertaken to determine the history and potential heritage significance of the sites identified in Castle Hill. Site-specific archaeological assessments would be undertaken in the event that they are found to have heritage significance.	Chapter 11
31	Site-specific archaeological assessments would be undertaken for the two archaeological sites identified along Old Windsor Road and Windsor Road.	Chapter 12
32	A view analysis would be undertaken to and from Rouse Hill House and its estate and the Glenhope property. If required appropriate mitigation measures would be identified	Chapter 16
33	The Indigenous Heritage protocol and methodology developed for the Growth Centres would continue to be applied as the project progresses, in consultation with DECC and relevant Indigenous groups	Chapter 12
34	A detailed assessment would be undertaken in the vicinity of sites identified to have moderate to high archaeological potential. The assessment would identify areas to be avoided, construction related impacts and how these can be managed; and, where required, salvage excavation prior to any subsurface impact on the deposit. Advertising for interested parties would need to be undertaken prior to any subsurface investigation, in accordance with DECC requirements.	Chapter 12
35	Detailed geotechnical and groundwater investigations would be undertaken involving site investigations to inform future design development.	Chapter 8

No.	Commitment	Where it is addressed in this EIS
36	A detailed flood assessment would be undertaken in accordance with appropriate NSW Government guidelines and in consultation with Councils and relevant Government agencies. This would include a two dimensional model of the Caddies Creek confluence to facilitate a better understanding of the discharges at the confluence of the creeks and associated design requirements	Chapter 18
37	Investigations into the construction and operational impacts on the Elizabeth Macarthur Creek would be undertaken in accordance with relevant NSW Government guidelines.	Chapter 18
38	The floodplain storage impacts would be defined during design development in accordance with the relevant NSW Government guidelines	Chapter 18
39	Further investigations into the location, size and treatment levels of a water treatment plant(s) would be undertaken in consultation with DECC, Councils and RailCorp. Investigations would include identifying discharge points, determining the receiving water quality and water re-use/recycling opportunities.	Chapter 18 and EIS 2

No.	Commitment	Where it is addressed in this EIS
40	The following architectural, landscape and urban design principles would be used to guide the design of the new stations and transport interchanges, civil works (such as noise walls, embankments and the viaduct section) and/or the stabling facility concepts: ▪ Reinforce the role of the station and transport interchange within its surrounding neighbourhood as the principal transport and community facility within the locality. ▪ Stations and the stabling facility would be designed in the context of the scale, character and image of the surrounding area and enhance the presentation of the area to visitors, residents and travellers. ▪ Maintain or improve the links across the project and to surrounding areas and activities. Where a connection between adjacent areas is desirable, pedestrian bridges or underpasses would be considered. ▪ Easy access facilities would be incorporated into the station designs and integrated with the associated transport interchanges. ▪ Movement networks should improve existing, or establish new comfortable and inviting pedestrian environments, including equitable access within the railway station and adjoining areas. ▪ A design theme would be established for bridges/viaduct to link the overall rail design together. The design would ensure that the structures are simple, integrated with the surrounding area and finished to a high quality. Fencing, parapets and any railing on the bridges would also be integrated with the overall design. ▪ Establish a hierarchy of access to stations consistent with NSW Govt policy package "Integrating land –use and transport" i.e prioritise public transport and other non-car based access to the rail stations and adjoining areas where possible. ▪ Station precinct design should facilitate new development that reflects the highest standards and quality of design.	EIS 2
41	Visual impact assessment of the project would be undertaken as part of design development. This would consider both the existing and future urban environment to identify impacts and potential mitigation measures, such as architectural, landscape and/or urban design treatments. Additional assessments would apply to pedestrian and cycle facilities; proposed bridging structures; cutting and embankment treatments; landscape treatment projects; design of the stations and stabling facility; proposed acoustic treatments; and any visual buffer areas as required	EIS 2

No.	Commitment	Where it is addressed in this EIS
42	Measures to mitigate visual impacts and deliver high quality design outcomes would include: - Where noise walls are proposed, potential visual impacts would be minimised by implementation of urban design measures, developed in consultation with adjacent property owners (mitigation measures might include plantings and high quality facings near residential areas). - Earth mounding would be considered where space allows and where significant vegetation would not be lost. - The design of any civil works, such as noise walls, retaining walls, the viaduct and underpasses would adopt CPTED principles, including the need for unobstructed views into and outside of the underpass, effective drainage and ventilation, wide corridors and good lighting. - Light spill would be minimised as much as possible to reduce impacts on surrounding existing and future residents in accordance with relevant standards.	EIS 2
43	TIDC's Design Review Panel would guide the application of architectural, landscape and urban design principles throughout the design development.	TfNSW Design Review Panel would be used and would form part of EIS 2
44	Public art and interpretation would be incorporated into architectural elements or urban design treatments and would be assessed and implemented with design themes and urban design criteria (eg. graffiti management).	EIS 2
45	An assessment of the potential impacts and benefits of construction and operation on adjacent businesses would be undertaken in consultation with business owners during the design phase.	Chapter 13

3.5 Other NSW Environmental Approvals

Other environmental approvals relevant to the NWRL project under section 115ZH of the EP&A Act include:

- ❖ An environment protection licence under Chapter 3 of the Protection of the Environment Operations Act 1997.
- ❖ A consent under section 138 of the Roads Act 1993.

Environmental planning approvals that do not apply to or in respect of State Significant Infrastructure but which have been considered during the preparation of this EIS include (refer to section 115ZG of the EP&A Act):

- ❖ A permit under section 201, 205 or 219 of the *Fisheries Management Act 1994*.
- ❖ An Aboriginal heritage impact permit under section 90 of the *National Parks and Wildlife Act 1974*.
- ❖ A water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 of the *Water Management Act 2000*.

3.6 Commonwealth Environmental Approvals

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) requires assessment and approval of certain actions that have, or will have, or are likely to have a significant impact on a matter of National Environmental Significance, being:

- ❖ The world heritage values of a declared World Heritage property.
- ❖ The National Heritage values of a National Heritage place.
- ❖ The ecological character of a declared Ramsar wetland.
- ❖ Listed threatened species and ecological communities.
- ❖ Listed migratory species.
- ❖ A nuclear action.
- ❖ An action in a Commonwealth marine area.
- ❖ An action in the Great Barrier Reef Marine Park (or outside the Park but within Australian jurisdiction) that, will have, or is likely to have, a significant impact on the environment in the Great Barrier Reef Marine Park.

Approval is also required under the EPBC Act for:

- ❖ An action on Commonwealth land that has, will have, or is likely to have, a significant impact on the environment.
- ❖ An action that has, will have, or is likely to have, a significant impact on the environment on Commonwealth land, no matter where it is to be carried out.
- ❖ An action outside Australian jurisdiction that has, will have, or is likely to have, a significant impact on the environment in a Commonwealth Heritage place outside the Australian jurisdiction.
- ❖ An action by the Commonwealth or a Commonwealth agency that has, will have, or is likely to have, a significant impact on the environment.

A referral has been prepared for submission under the EPBC Act.

4





SUSTAINABILITY

4.1 Introduction

This chapter describes the overall approach to sustainability on the NWRL project and how specific objectives and related targets and initiatives are being incorporated into the design, construction and operation of the project.

It defines sustainability in the Australian context, outlines the NWRL Environmental and Sustainability Policy and identifies specific initiatives being incorporated into the project. As sustainability is a priority throughout the life cycle of NWRL, the next steps to further develop and integrate sustainability initiatives are discussed.

4.1.1 Director-General Requirements, Conditions of Approval and Statement of Commitments

The Statement of Commitments relating to Sustainability Strategies are provided in **Table 4.1**.

Table 4.1 Statement of Commitments

SoC Reference	Description	Addressed
1	Sustainability Strategies Core sustainability principles would be developed for the design and construction of the project covering the following themes: ▪ Energy ▪ Greenhouse emissions ▪ Water ▪ Community and stakeholder involvement ▪ Biodiversity ▪ Resource recycling/minimisation To develop the principles a benchmarking exercise would be undertaken to enable sustainability goals and objectives to be determined, which would provide clear result areas and targets under each theme.	▪ Section 4.3 & Table 4.2 ▪ NWRL Sustainability Strategy (summarised in Section 4.3 and Table 4.2)

4.2 Sustainability overview

There are many definitions for sustainability or sustainable development. One of the original descriptions of sustainable development is ‘development which meets the needs of the present without compromising the ability of future generations to meet their own needs’ (World Commission on Environment and Development, 1987, Our Common Future, commonly referred to as the Brundtland Report).

In 1992 the Commonwealth Government defined Ecologically Sustainable Development (ESD) as ‘using, conserving, and enhancing the community’s resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased (Commonwealth of Australia 1992). The four principles to assist achievement of ESD are defined in both the Environmental Planning and Assessment Regulation (EP&A Regulation) and the Protection of the Environment Administration Act 1999 (PEA Act) as:

- ❖ The precautionary principle
- ❖ Inter-generational equity
- ❖ Conservation of biological diversity and ecological integrity
- ❖ Improved valuation and pricing and incentive mechanisms

Chapter 22 details how the project addresses these four principles of ESD.

4.3 North West Rail Link Environment and Sustainability Policy

An environment and sustainability policy has been developed for the NWRL project. It acknowledges that the project has the potential for both positive and negative sustainability related impacts and aims to maximise the potential sustainability benefits while minimising negative impacts.

To do this, the policy establishes five areas of commitment:

Leadership:

- ❖ Implement coordinated and transparent decision making, by engaging with stakeholders and suppliers, encouraging innovation and demonstrating sustainability leadership
- ❖ Explore new benchmarks for the transport infrastructure sector by requiring high standards from our designers, contractors and suppliers.

Community and customer:

- ❖ Provide accessible, safe, pleasurable and convenient access and transport services for all customers
- ❖ Establish positive relationships with community and stakeholders to maximise opportunities to add value to local communities in North West Sydney

Land use integration and place making:

- ❖ Create desirable places, promote livability, cultural heritage, optimise community and economic benefit
- ❖ Balance transport oriented development opportunities with stakeholder expectations

Embedding sustainability:

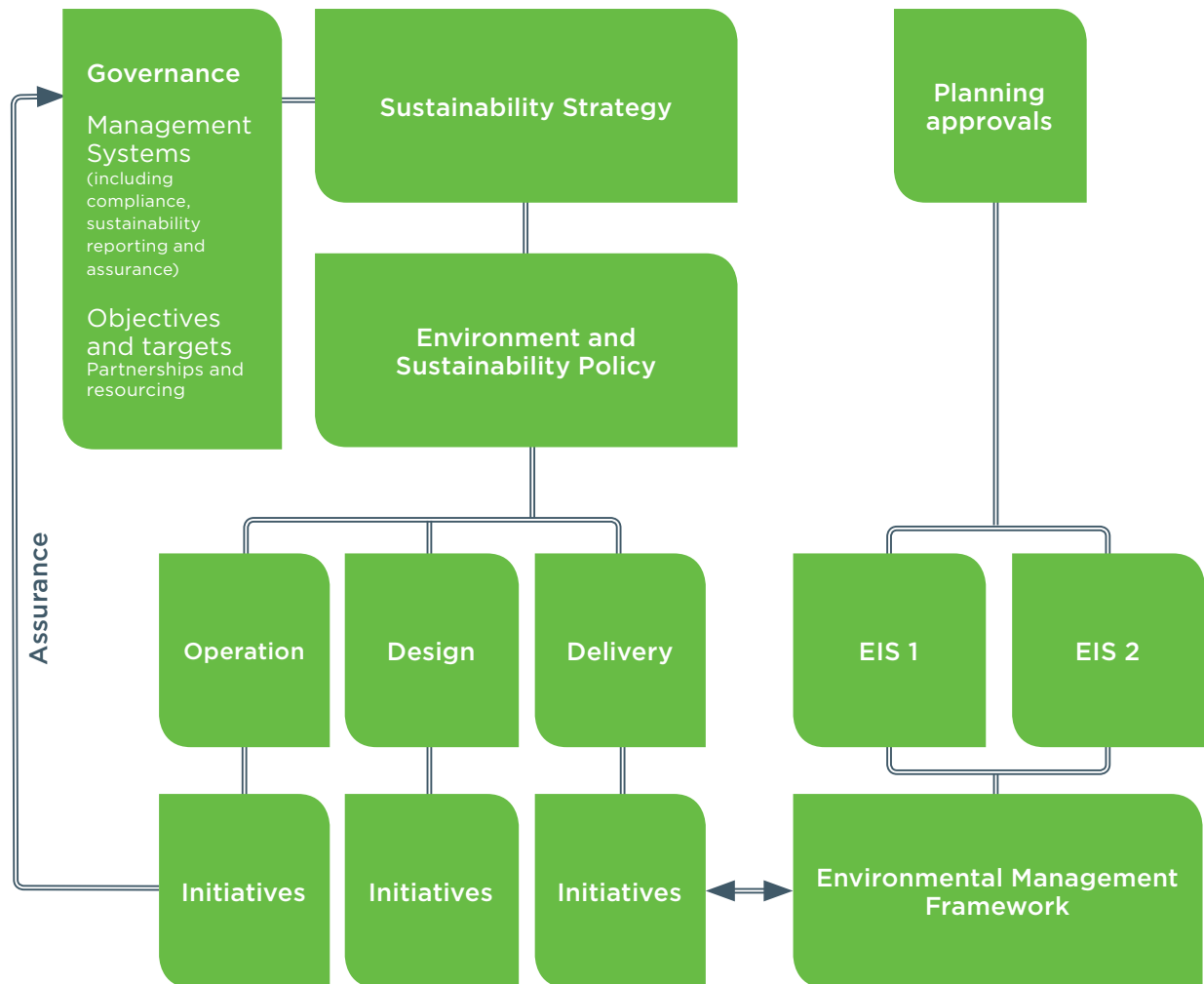
- ❖ Establish robust sustainability objectives and targets
- ❖ Maintain an environmental management system that is integrated into all our project activities
- ❖ Ensure thorough and open environmental assessment processes are developed, deployed and maintained
- ❖ Develop and maintain an environmental management framework to embed best practice environmental and sustainable outcomes during construction
- ❖ Apply effective assurance processes to monitor performance against the project environment and sustainability objectives and identify appropriate reward or corrective action, as required.
- ❖ Apply environment and sustainability specific processes to the procurement of delivery activities

Accountability:

- ❖ Undertake public sustainability reporting
- ❖ Hold employees and contractors to the NWRL project accountable for proactively meeting their environmental and sustainability responsibilities
- ❖ Provide appropriate training and resource necessary to meet our responsibilities

These commitments provide an overarching framework for the development of more specific sustainability objectives, developed as part of a sustainability strategy, to guide the integration of sustainability into project governance, design, construction and operation. The relationship between the sustainability strategy, and underpinning policy and objectives and their integration into the project is described in **Figure 4.1**.

Figure 4.1 Project Sustainability Strategy



Fourteen objectives have been identified. These are described in **Table 4.2** along with specific project initiatives to be achieved. Where these objectives and initiatives relate to a section of the EIS, a cross reference is provided.

Table 4.2 Project Sustainability Initiatives

Key issue	Project sustainability objective	Project initiatives	EIS
Governance	Demonstrate sustainability leadership within the rail, transport and land use sectors	Develop and communicate project specific sustainability policy	Ch 4
		Review application of sector specific project rating tools (for example the Infrastructure Sustainability Rating Tool)	
		Review application of relevant sustainable design guidelines (for example the TfNSW Sustainable Design Guidelines for Rail)	
		Integrate sustainability initiatives in to approvals framework to provide basis for compliance	Ch 4
		Develop and implement best practice assurance processes to deliver on sustainability commitments	Appendix C EMF Section 4.4

Key issue	Project sustainability objective	Project initiatives	EIS
		Apply benchmarking to identify appropriate targets throughout the life cycle of the project.	
Climate change	Be resilient to climate change impacts	Undertake climate change risk analysis and design to reduce risk	Ch 17 Climate Change Ch 18 Surface Water and Hydrology
Carbon management	Reduce operation, construction and embodied carbon emissions	Offset a proportion of electricity needs during construction phase.	Ch 17 Climate Change
		Carbon emission reduction strategies to be identified.	Ch 17 Climate Change
		Offset operational electricity needs for operations phase.	EIS 2
		Offset a proportion of operational demand using onsite renewable or low carbon sources at stabling yard, stations or car parks.	EIS 2
Energy efficiency	Promote energy efficient design and construction, including reducing fuel usage	Develop energy savings measures that demonstrate energy efficiency across the life of the project.	N/A

Key issue	Project sustainability objective	Project initiatives	EIS
Land use integration	Promote liveability and sustainability benefits of urban renewal and consolidation.	Initiatives will be developed and documented in EIS 2	EIS 2
Customer experience	Promote enhanced urban design and passenger comfort	Initiatives will be developed and documented in EIS 2	EIS 2
		Actively engage local communities, potential customer and other stakeholders on the development and implementation of the project.	Chapter 5 Consultation
		Annually refresh temporary works visible from public domain.	Ch 16 Visual Amenity
Community benefit	Enhance community benefits through transport amenity and reliability	Community legacy projects to be provided.	EIS 2
		All local education facilities to be educated on project development and benefits.	N/A
		Public art strategy to be included in community consultation process.	N/A
Resource – land	Optimise above and below ground land take requirements		

Key issue	Project sustainability objective	Project initiatives	EIS
		Explore opportunities to reduce excavated volumes and temporary works land take	Ch 7 Project Description
		Develop residual land strategy to optimise use of residual land	EIS 2
Resource – water efficiency	Minimise demand for, and use of potable water, as well as maximise opportunities for water re-use from captured stormwater, wastewater and groundwater	Minimise demand for potable water during construction by maximising water re-use	Ch 7 Project Description Ch 19 Non-Key Issues
Resource – waste and materials	Reduce materials use and minimise waste through the project life cycle.	Maximise recycling of construction waste	Ch 7 Project Description Ch 19 Non-Key Issues
		Require contractors to undertake Life Cycle Analysis for key materials	
		Minimise amount of spoil to be disposed by maximising reuse	Ch 7 Project Description Ch 19 Non-Key Issues
Heritage conservation	Protect and promote local heritage through appropriate design, planning and management controls	Undertake a heritage assessment and integrate outcomes into project design	Ch 11 European Heritage Ch 12 Indigenous Heritage

Key issue	Project sustainability objective	Project initiatives	EIS
		Contractors to develop heritage management plans	
		Incorporate heritage education opportunities into construction site visual screening	
Biodiversity conservation	Protect and create biodiversity through appropriate planning, management and financial controls	Undertake biodiversity assessment and integrate outcomes into project design	Ch 15
		Develop a biodiversity offset strategy	Ch 15
Pollution control	Reduce sources of pollution and optimise control at source to avoid environmental harm	Avoid pollution events by development of EMS	Appendix C EMF
Supply Chain	Influence contractors, sub-contractors and materials supplier to adopt sustainable practices in support of the NWRL Environment and Sustainability Policy.	Opportunities to promote greater equality of opportunity and social inclusion through a local skilled employed workforce to be investigated.	

4.4 Next Steps

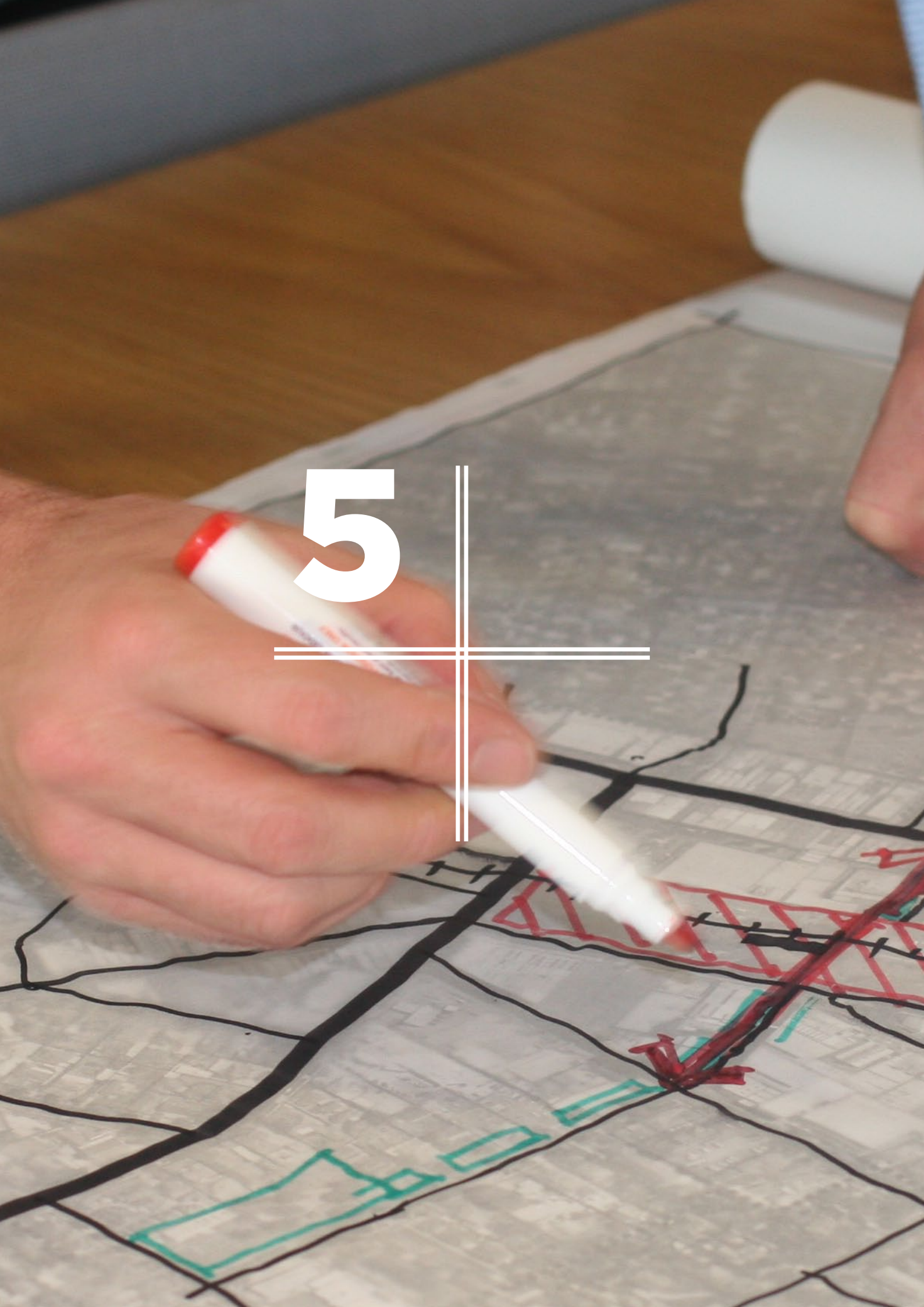
The Environmental Management Framework (Appendix C) is a North West Rail Link project-wide framework which sets out minimum environmental, stakeholder and community management requirements for construction.

It acts as a linking document between the initiatives described in this EIS (and EIS 2) and their further development and implementation by contractors through individual Construction Environmental Management Plans (CEMP).

Contractors would be required to implement and adhere to the requirements of this Environmental Management Framework and it will be included as a contract document in all design and construction contracts.

Implementation of sustainability initiatives will be monitored and audited. The result of this process will be reported and subject to independent verification as part of an overall sustainability assurance process.

5





CONSULTATION

5

5.1 Introduction

The purpose of this section is to describe the consultation process that occurred during the preparation of this EIS, identify who has been consulted, the issues that were raised, and to guide the reader to the chapters within the EIS documentation in which those issues are addressed.

5.1.1 Background

Extensive consultation has occurred over the last 10 years on the provision of a rail link to the north west.

The first consultation occurred in 2002 with the community, local business and industry groups and included:

- ❖ Publication of the initial Overview Report (2002)
- ❖ Consultation for the Environmental Assessment and Concept Plan (2005-7)
- ❖ Publication of the Preferred Project Report (2007)
- ❖ Supplementary Submissions Report (2008)

Since the NSW Government announced its intention to proceed with the NWRL in March 2011, the following activities have been undertaken:

- ❖ Castle Hill Community Information Centre opened (June 2011)
- ❖ Consultation about the Project Overview Report (July 2011)

- ❖ Place Managers appointed to liaise with residents, businesses and community organisations (October 2011)
- ❖ Ongoing consultation following Ministerial announcement of the project in December 2011.

Consultation will continue throughout the exhibition of the EIS to ensure the community and all interested stakeholders can make informed responses to the EIS.

TfNSW has taken a proactive approach to consulting the community since April 2011 when the NSW Government announced its intention to proceed with the NWRL. In June 2011 the Minister for Transport opened the Castle Hill Community Information Centre which has been staffed five and half days a week since then and will continue for the duration of the project.

In the same month, TfNSW published the North West Rail Link Project Overview which canvassed a number of changes including two additional stations and an alternative location for the stabling yard. This was the subject of a public exhibition process which included 10 community information and feedback sessions, and produced an issues report that informed the final project definition.

The need for key stakeholders and the community to have accessible points of contact throughout the planning process was recognised with the appointment of four Place Managers. Following the distribution of newsletters along the proposed alignment, the Place Managers have made contact with directly affected residents and businesses through door-knocking as well as visiting residents' groups, schools, sporting clubs, and many others to offer briefings about the plans and their potential impacts.

The project team has also sought early consultation with the three local councils and government agencies with which numerous briefings and topic-specific workshops have been held.

The above methodology has been underpinned by the establishment of a Community Information Centre at Castle Hill, an information/feedback line and an interactive website.

5.2 Early consultation activities prior to EIS process

5.2.1 Consultation activities 2002-2008

The first opportunity the public had to comment on the NWRL occurred following the publication of *Action for Transport 2010* (NSW Government, November 1998).

Consultations during the preparation of the *North West Rail Link Environmental Assessment and Concept Plan* (TIDC, 2006) commenced in November 2005 with:

- ❖ Residents within 250 metres of the proposed alignment
- ❖ Statutory agencies
- ❖ Other key stakeholders such as environmental, community and business groups.

A total of 61 submissions were received from the public and the issues raised were addressed in the Environmental Assessment when it was lodged with the DP&I (former Department of Planning (DoP)). The government agency and local government consultations were similarly reported.

Following lodgement, the former DoP put the application for a Concept Plan on public exhibition. Over 1,600 submissions were received during and immediately following public exhibition.

In February 2007, the *North West Rail Link Preferred Project Report* (TIDC, 2007) was prepared, which provided responses to issues raised in submissions received during the public exhibition of the Environmental Assessment. It also included information about additional studies undertaken in response to submissions, and provided details on proposed modifications to the concept plan as described in the assessment.

The *Preferred Project Report* was then placed on public exhibition with submissions received including in excess of 3,000 form letters and 338 other individual submissions up to August 2007. This resulted in the publication of a *North West Rail Link Supplementary Submissions Report* in March 2008 in which the issues raised were addressed.

5.2.2 Consultation activities related to the North West Growth Centre (2008-2011)

Extensive community, landowner and government agency consultation was undertaken by the DP&I as part of the planning process for Area 20 within the North West Growth Centre. The NWRL corridor was identified in documentation prepared as part of the process and following exhibition in 2008, eight of the 53 submissions related to the NWRL project. The Area 20 Precinct was rezoned for urban development in October 2011 by the Minister for Planning and Infrastructure. Further detail regarding Area 20 can be found at Sydney's Growth Centres website (<http://www.gcc.nsw.gov.au/area20-55.html>).

5.2.3 Consultation activities in 2011

Following the Government's announcement to proceed with the NWRL, the Castle Hill Community Information Centre was officially opened by the Minister for Transport on 29 June 2011. It is staffed five and a half days per week and, since opening, approximately 2,500 people have made enquiries at the centre.

In July 2011 a newsletter was distributed to more than 45,000 residents and businesses along the corridor introducing the North West Rail Link Project Overview. This described the proposal in some detail and canvassed the idea of two additional stations and an alternative location for the stabling yard at Tallawong Road, the result of Precinct Planning work associated with Area 20. The newsletter marked the beginning of a public exhibition process in which stakeholders received further information about the NWRL from a number of sources including:

- ❖ The project's website <http://northwestrail.com.au>,
- ❖ The Castle Hill Community Information Centre (located at 299 Old Northern Road, Castle Hill),
- ❖ Community information sessions (eight in total)
- ❖ Telephone (1800 019 989)
- ❖ Email - info@northwestrail.com.au.

A total of 184 submissions were received in response to exhibition of the North West Rail Link Project Overview. A breakdown of the responses is provided in Table 51: Breakdown of stakeholder responses to Project Overview **Table 5.1**.

Table 5.1 Breakdown of stakeholder responses to Project Overview

Stakeholder	
Individuals	133
Councils	9
Interest Groups/Organisations	31
Members of Parliament	4
Businesses	7

The main categories of issues raised were:

- ❖ Alternative considerations: Community feedback about alternatives to the proposed project scope.
- ❖ Traffic, parking and public transport issues: Topics related to commuter facilities such as car parking and general responses in relation to station/network accessibility and planning for other transport connections.
- ❖ Route alignment: Topics raised about the proposed route alignment, including comments regarding stations, location and rail corridor (tunnel).
- ❖ Project justification: Topics and questions raised in relation to project funding and/or expenditure as well as requests for investment in other transport alternatives (outside of the project scope).
- ❖ Land use planning: Comments about future land use planning in relation to the project.
- ❖ Construction practices and timing: Comments with regard to construction staging and timing and property/business access during construction.
- ❖ Communication and consultation issues: Future communication material and consultation activities.

TfNSW in its Project Overview Issues Report (November, 2011) addressed the above issues amongst others.

5.3 Consultation requirements – Conditions of the Concept Plan Approval, Statement of Commitments and Director-General's Requirements

The consultation process has been guided by the conditions and Statement of Commitments attached to the 2008 Concept Plan Approval, and by a second set of Director-General's Requirements issued following lodgement of the State Significant Infrastructure Application in 2011.

5.3.1 Concept Plan Approval - 2008

The approval conditions for the Concept Plan outline an extensive process of stakeholder engagement during the development of the NWRL. These approval conditions have been and will continue to guide the consultation during the planning approvals process for NWRL.

The approval conditions define stakeholders as:

- ❖ Relevant Councils (Hornsby Shire Council, Hills Shire Council and Blacktown City Council)

- ❖ Relevant Government Agencies: Any Commonwealth or state agency that has a statutory or other interest in the project. Agencies/Authorities noted in the approval include DP&I, Growth Centres Commission (now within DP&I), Department of Environment and Climate Change (now Office of Environment and Heritage) and Environment Protection Authority, Ministry of Transport (now Transport for NSW), Department of Water and Energy (now NSW Office of Water), NSW Fisheries (now NSW Fisheries), RailCorp, Roads and Traffic Authority (now Roads and Maritime Services), Landcom and the Commonwealth Department of Sustainability Environment Water Population and Communities.
- ❖ Relevant stakeholders: A party that would be directly affected by the project or would otherwise have a reasonable interest in the project, such as affected landowners, utility and service providers, businesses, bus companies and community members.

Further consultation requirements are described in **Table 5.2** Cross-disciplinary working groups established for **Table 5.2** and Appendix A.

5.3.2 Staged Infrastructure Approval and State Significant Infrastructure Application - 2011

Following lodgement of the Staged Infrastructure Approval Modification and State Significant Infrastructure Application in December 2011 (refer Chapter 3), the DP&I issued further Director-General's Requirements requiring the modification assessment to 'document consultation undertaken with relevant government agencies and the community in its preparation, with a focus on proposed changes, and how matters raised during consultation have been considered.' The Director-General's Requirements also required that detailed information be supplied about 'consultation undertaken with Aboriginal stakeholders and describe how their view and values have been considered.'

Details of consultation with Aboriginal stakeholders are contained in Chapter 12.

5.4 Consultation during the Environmental Impact Assessment Process

The consultation process described in this section commenced in December 2011 following the Minister for Transport's announcement of the modified project (see Chapter 6). It also supports one of the six project objectives to "deliver a transport service that has been informed by engagement with communities and stakeholders and represents value for money".

The purpose of the consultation process was:

- ❖ To meet and exceed the obligations described in the Director-General's Requirements, the Conditions of the Concept Plan Approval and the Statement of Commitments
- ❖ To provide quality information about the plans for the NWRL and likely impacts during early works and construction activities
- ❖ To record all issues raised and suggestions made
- ❖ To take account of issues and suggestions during the preparation of the EIS.

5.4.1 Compliance with Staged Infrastructure Conditions of Approval

TfNSW has established a number of working groups in order to facilitate cross agency consultation about project impacts and how they should be managed. Table 52 Cross-disciplinary working groups established for NWRL Table 5.2 to Table 5.4 below discuss the membership of working groups, their focus and how their issues have been addressed.

Table 5.2 Cross-disciplinary working groups established for NWRL

Group	Membership	Focus
Roads and Maritime Services Working Group	- Hillsbus - Busways - TfNSW NWRL Project Team - TfNSW Planning & Programs Division - Roads and Maritime Services (RMS) / Transport Management Centre (TMC)	Construction - Local and cumulative impacts of construction activities and heavy vehicle traffic on road network - Impacts of construction activities and heavy vehicle traffic on road condition - Construction traffic access to major arterial roads - Potential changes to bus operations and T Way during construction. Operations - Longer term implications of station operations on local and regional traffic networks - Access arrangements for future stations and servicing facilities - Integration of stations with local and regional cycle networks - Integration of stations with other modes of public transport. Key issues at specific locations - Crossing at Windsor Road can not preclude future grade separation of intersection and widening to six lanes - Crossings at Samantha Riley Drive and Terry, Cudgegong and Tallawong Roads - Traffic management during construction at Norwest Boulevard - Interaction of construction activities with planned road upgrades within the region including the widening of Schofields Road.

Group	Membership	Focus
Planning Reference Group	▪ Department of Planning and Infrastructure (DP&I) Major Assessments (Chair) ▪ TfNSW NWRL Project Team ▪ TfNSW Planning & Programs Division ▪ Office of Environment and Heritage (OEH) ▪ Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) ▪ NSW Office of Water (NOW) ▪ Department of Industry and Investment ▪ Environment Protection Authority (EPA)	Regular project updates, specialist presentations and discussion of emerging environmental and/or statutory issues, covering for example: ▪ Flora and fauna ▪ Indigenous heritage consultation ▪ Water issues, including : Saline ground water groundwater interactions, licensing queries, groundwater ecosystems ▪ Advice regarding contents of EIS with regard to Water Management Act, water demands, water licensing arrangements etc ▪ Growth Centres ▪ Biodiversity Certification & Environment Protection and Biodiversity Conservation (Act Strategic Assessment ▪ Key areas of concern for fisheries and agriculture ▪ Key areas of concern for minerals resources ▪ Environment protection licence issues ▪ Biodiversity and threatened species and their habitat ▪ Aboriginal cultural heritage ▪ Climate change impacts ▪ Methodologies for environmental assessment.

Group	Membership	Focus
Departmental Precinct Land Use Group	- DP&I Urban Renewal & Major Sites (Chair) - Hornsby Shire Council - The Hills Shire Council - Blacktown City Council - Parramatta City Council - DP&I Major Assessments - TfNSW NWRL Project Team	The working group will oversee development of precinct plans for stations on the corridor and work will be undertaken with local Councils and other stakeholders to address long-term opportunities to improve connectivity. The aim is to ensure that the precinct planning will enable future transit-oriented developments associated with the North West Rail Link to achieve: - a mix of uses-employment, retail and community services located within a five minute (400 metres) walkable catchment – to reduce the need for trips to meet daily needs; - precincts that promote connectivity and access to the stations, interchange facilities, key activities and uses; - a population density within walking distance of each station (generally 800 metres) to provide the threshold to deliver a range of activities and uses; - promote use of public transport including parking policies and cycling strategies that aim to reduce car use; and - facilitate well-designed development. Key issues specifically raised include: 1.5 – 2 km radius of stations' envelope - Comments on SSI areas of concern - Overview of emerging construction methodology - Planning approvals team briefing of senior council staff during preparation of EIS1 – construction impacts. - Specific issues – traffic impacts in Hornsby Shire, extension to Richmond line, stabling yard location

Group	Membership	Focus
Local Council and Councillor updates	▪ Hornsby Shire Council ▪ The Hills Shire Council ▪ Blacktown City Council	Regular project updates and discussion of local issues, covering for example: ▪ Environmental issues ▪ Local planning controls ▪ Potential impacts on local communities ▪ Construction strategies and mitigation measures ▪ Council studies and background information
Station /precinct meetings	▪ Targeted meetings with Hornsby Shire Council, The Hills Shire Council, Blacktown City Council and DP&I Growth Centres	▪ Master planning and urban design issues directly related to the proposed stations and their construction. ▪ Addresses Council's existing and proposed strategic planning policies, site-specific master plans and local environment plans.
Railcorp Environmental and Sustainability Technical Working Group	▪ TfNSW NWRL Project Team ▪ RailCorp	Part of the broader technical interface with RailCorp, focused on environmental and sustainability issues, including the environmental assessment process. Construction ▪ Potential construction impacts ▪ Key issues, such as noise and ecology Operations ▪ Sustainability initiatives ▪ Longer term implications of station operations on local and regional train networks ▪ Access and maintenance arrangements for future stations and servicing facilities ▪ Key issues, such as noise and vibration
Utility and service provider meetings	▪ Ausgrid ▪ Endeavour Energy ▪ National Broadband Network (NBN) ▪ Sydney Water	▪ Location and potential impacts on existing or planned utility provision. ▪ Power supply for construction and operation ▪ Water supply for construction and operation

The Conditions of Approval made reference to specific impacts. The table below extracts these and offers commentary on how requirements have been met to date. The table focuses on construction aspects and activities associated with the major civil construction works, which is the focus of the current environmental assessment. Consultation is ongoing to inform the planning, design and environmental assessment for the stations, rail infrastructure and systems.

Table 5.3 Compliance Table

Requirement	Consultation	Outcomes (construction focus)
Ref: Condition of Approval (CoA) 2.1 Ensure that underground components of the project are designed with regard to existing and/or planned future underground utilities and infrastructure including the planned extension of the M2 Motorway.	Consultation and meetings have occurred with a range of utility providers and agencies, including: ▪ Ausgrid ▪ Endeavour Energy ▪ NBN ▪ Sydney Water ▪ RMS ▪ RailCorp ▪ Gas utilities ▪ TransUrban Issues discussed: ▪ Utility services required for construction and ongoing operation of NWRL ▪ Relocation of utilities to allow for early and enabling works	▪ Enabling works, including utility adjustments, relocation and/or protection to utilities, road modifications and public transport modifications, have been considered within the EIS. ▪ Initial discussions with TransUrban have identified issues associated with the construction site adjacent to the M2 Motorway. Further details: Chapter 7: Project Description

Requirement	Consultation	Outcomes (construction focus)
Ref: CoA 2.2 Ensure the surface components of the project are integrated with surrounding landuse (existing and planned future, as relevant) as far as reasonable and feasible, consistent with the objectives of Integrated Land Use and Transport (DUAP 2001 or as updated), to minimise the potential for landuse conflicts. In particular: Design of Castle Hill station shall consider the Castle Hill Draft Master Plan (or as updated); and Kellyville and Rouse Hill Stations and stabling facilities are to be integrated with the precinct planning for the Balmoral Road Release Area, Rouse Hill Regional Centre and the Area 20 precinct of the North West Growth Centre, as relevant.	Consultation has occurred with ▪ Hornsby Shire Council ▪ The Hills Shire Council ▪ Blacktown City Council ▪ Parramatta City Council ▪ Department of Planning & Infrastructure Further meetings are scheduled with Hornsby Shire Council, The Hills Shire Council and Blacktown City Council to discuss master planning and urban design issues relating to station precincts and integrated land use planning issues with the various urban release areas. Consultation undertaken with Hornsby Shire Council and Parramatta City Council regarding implications of the Project in relation to the Epping Town Centre Study.	Local strategic planning, master plans (including the Castle Hill Master Plan), precinct planning (including for Area 20) and local environmental plans (including the Balmoral Road Release Area) are informing the design of the project. The Departmental Precinct Land Use Group is focused on long-term opportunities to improve connectivity and enable future transit-oriented development. Further details: Chapter 6: Modification of Staged Infrastructure Chapter 7: Project Description

Requirement	Consultation	Outcomes (construction focus)
Ref: CoA 2.3 The Proponent shall in consultation with relevant Government agencies, relevant Councils and relevant stakeholders ensure that ancillary infrastructure are located and designed to minimise biophysical and/ or amenity impacts, as far as reasonable and feasible.	The working groups described above have been consulted on a regular basis with particular focus on opportunities to minimise environmental impacts from elements such as vent shafts and car parking that were defined as ancillary infrastructure in the Concept Plan Approval/Staged Infrastructure Approval.	Outcomes from consultation activities are continuously elevated to the relevant technical specialists to ensure that the input has been considered in decisions on design and/or mitigation. Specific examples where ancillary infrastructure has been modified to minimise biophysical and/ or amenity impacts include: ▪ Location of the Intermediate Services Facility (at Cheltenham) determined based on consultation with Hornsby Shire Council ▪ Location of Epping Services Facility avoids adjacent bushland ▪ Car park design and locations optimised and sustainable design principles applied. Further details: Chapter 6: Modification of Staged Infrastructure Chapter 7: Project Description

Requirement	Consultation	Outcomes (construction focus)
Ref: CoA 3.1.e) An appropriate and justified level of consultation with relevant Councils and relevant Government agencies including (but not limited to) RailCorp, MoT, GCC, Landcom, DECC, DPI (Fisheries), DWE, RTA, including a description of how agency and Council input has been considered in decisions on design and/ or mitigation.	Consultation has been undertaken with the following bodies: ▪ Hornsby Shire Council ▪ Blacktown City Council ▪ The Hills Shire Council ▪ Parramatta City Council ▪ Hawkesbury City Council ▪ Railcorp ▪ TfNSW ▪ Department of Planning and Infrastructure ▪ RMS/TMC ▪ OEH ▪ NSW Office of Water ▪ Department of Trade and Investment ▪ Department of Primary Industries (including relevant functional units) ▪ Landcom The working groups outlined in Table 5.2 have been consulted wherever possible on a regular basis.	Outcomes from consultation activities are continuously elevated to the relevant technical specialists to ensure that the input has been considered in decisions on design and/or mitigation. Specific examples where the project has been modified include: ▪ Planning for an additional station within the Norwest Business Park (Bella Vista Station) ▪ Modification of the alignment and location of Hills Centre Station to improve transport outcomes and reduce potential construction impacts. ▪ Modification of the location of Kellyville Station to improve transport outcomes. ▪ Location of the Intermediate Services Facility (at Cheltenham). ▪ Location of Epping Services Facility ▪ Car park design ▪ Location of Cherrybrook Station to reduce conflicts associated with site constraints ▪ Various changes to construction access arrangements in consultation with RMS.

Requirement	Consultation	Outcomes (construction focus)
Ref: CoA 3.1.f) An appropriate and justified level of consultation with relevant stakeholders including a description of how stakeholder input has been considered in decisions on design and/ or mitigation;	The working groups outlined in Table 5.2 have been consulted wherever possible on a regular basis.	Outcomes from consultation activities are continuously elevated to technical specialists who have acted upon them. Specific examples, in addition to those identified above, where the project has been modified include: Modification of the alignment and location of Hills Centre Station to improve transport outcomes and reduce potential construction impacts, including specific change to construction access to minimise impacts on showground activities Kellyville Station relocated in response to community input on access and desire for commuter parking Changes to the alignment to reduce impacts on the OK Caravan Park Various changes to construction site layouts and access points based on community feedback and local knowledge of sensitive receivers.

Requirement	Consultation	Outcomes (construction focus)
Ref: Statement of Commitment (SoC) 2 Communications processes would be developed and implemented throughout delivery of the project. These would include: Opportunities to input into the design process such as at station precincts and structures and proposed mitigation measures (e.g. noise barriers) for construction and operations; Methods to inform the community of the progress and performance of the project and issues of interest to the community; Processes to receive and manage complaints; and Consultation with affected property owners.	An outline stakeholder and community consultation strategy has been developed in Appendix C – Environmental Management Framework. During delivery this will complement the initiatives developed during the early planning stages, which will continue through the delivery period: ▪ The NWRL Community Information Centre is kept informed of key construction information and relevance to the community and stakeholders ▪ A dedicated NWRL telephone line, email address and website has been established ▪ Place Managers who have responsibility for certain project areas, undertake door knocks and act as community contact for the project ▪ One to one meetings have taken place with affected property owners.	Enquiries and complaints are managed in a responsive manner so that issues are dealt with promptly and effectively. Through the mechanisms outlined, stakeholders have had and will continue to have an opportunity to input into the proposed mitigation measures for the construction works. The information lines, community information centre and stakeholder meetings will continue during the EIS2 design phase of the project. Further details: Appendix C – Environmental Management Framework Section 5.5.1
Ref: SoC 3 Ongoing consultation would occur with Government agencies regarding issues raised during previous consultation and as identified within the Environmental Assessment and Concept Plan and the Preferred Project Report	Ongoing consultation with the working groups has taken place as outlined above. Issues raised during previous consultations have been discussed within the working groups. This consultation will continue into the station design phase of EIS2.	Refer to above items.

Requirement	Consultation	Outcomes (construction focus)
Ref: SoC 6 Consultation with Councils, the Growth Centres Commission, RailCorp and other relevant stakeholders would be undertaken to ensure environmental planning instruments reflect planning, construction and operation of the project and include integrated planning provisions for appropriate development controls within the vicinity of the rail line and stabling facility.	Consultation undertaken with Hornsby Shire Council, Blacktown City Council, The Hills Shire Council and the Department of Planning and Infrastructure (including the Growth Centres) regarding environmental planning instruments.	The project has been specifically planned for in the Area 20 precinct process and land use zoning. Councils have undertaken to refer relevant Development Applications to TfNSW to ensure local development considers the future rail project. Referrals are considered in consultation with RailCorp.
Ref: SoC 7 Land use and property impacts of the project, including construction sites and all ancillary facilities, would be further assessed in consultation with Councils and surrounding landowners.	Meetings have taken place with Councils and surrounding landowners with regard to land use and property impacts such as traffic, access, noise and vibration.	Mitigation measures to address the direct impacts of construction works on land use and community facilities have been developed with Councils and landowners (eg revegetation, maintenance and bushwalker access at the Cheltenham site) and are included in EIS1. The long term integration and compatibility of land use surrounding each station would be considered within EIS2. Further details: Chapter 14 Land Use and Community Facilities

Requirement	Consultation	Outcomes (construction focus)
Ref: SoC 9 Consultation with relevant Councils, government agencies, utility providers, land owners and communities involved in the planning of precincts in the vicinity of each station would be undertaken with the aim of encouraging transit-orientated development around each station. The role of each station within the context of provision of public transport services would be established, including the need and capacity of park and ride facilities, establishing connections with other transport modes (including the potential for integrated ticketing), and integrating pedestrian and cyclist facilities.	Consultation undertaken to date with key Council and agency stakeholders has touched on precinct planning and integrated transport planning. The Departmental Precinct Land Use Group, Local Council and Councillor updates and Station precinct meetings are specific examples. This consultation will continue through the preparation of EIS 2 and beyond.	The planning of station precincts will be considered in more detail as part of upcoming consultation and with outcomes incorporated into EIS2.

Requirement	Consultation	Outcomes (construction focus)
Ref: SoC 14 In consultation with the RTA and Councils, investigate the feasibility of providing a direct access point to the Franklin Road site from Castle Hill Road and the potential for a signalised intersection at the intersection of Glenhope Road with Castle Hill Road.	Hornsby Shire Council and RMS were consulted regarding the proposed construction access points and traffic intersections at the Cherrybrook construction site. Hornsby Shire Council expressed a preference for egress from Franklin Road being for light vehicles only. Preference for access to the station to be taken from Castle Hill Road. With regards to operations, Hornsby Shire Council raised no issues regarding the signalised intersection at Glenhope Road/Castle Hill Road. Hornsby Shire Council asked that access and egress for buses be considered via this intersection. RMS requested clarification on whether diamond operation can be achieved at the Glenhope intersection. Request that NWRL have regard to the needs of pedestrians at this location during construction and build this into any intersection arrangements.	Construction access has been coordinated with RMS and Hornsby Shire Council. Further discussions regarding detailed design will be undertaken. The planning of station precincts will be considered in more detail as part of upcoming consultation and with outcomes incorporated into EIS2 Further details: Chapter 7: Project Description Chapter 9: Construction Traffic

Requirement	Consultation	Outcomes (construction focus)
Ref: SoC 21 Consult with local Councils, Growth Centres Commission and RailCorp in relation to land use planning and development controls to minimise the need for physical noise mitigation	Local Councils, Department of Planning & Infrastructure (including the Growth Centres) and RailCorp have been consulted in relation to land use, planning and development controls.	The need to provide clear justification for construction methods was identified and any mitigation measures which would be used such as noise walls and screening. The Area 20 precinct has specifically planned for appropriate development and controls to respond to the future rail project including industrial development adjacent to the stabling facility. Operational noise mitigation will be considered in more detail as part of upcoming consultation and with outcomes incorporated into EIS2

Requirement	Consultation	Outcomes (construction focus)
Ref: SoC 45 An assessment of the potential impacts and benefits of construction and operation on adjacent businesses would be undertaken in consultation with business owners during the design phase.	Consultation and briefings have occurred with a number of local businesses potentially affected the by construction works including: ▪ BP Bella Vista ▪ Beaumont Strata Management ▪ Castle Towers Centre Management ▪ Coutts (on behalf of Lexington Corporate) ▪ Fit Kids Learning Centre ▪ Glenhope B&B Historical Homestead ▪ OK Caravan Park ▪ Koala Park, Cherrybrook ▪ Landcom (Kallina Estate) ▪ Lend Lease - new Rouse Hill Estate ▪ McDonalds Bella Vista ▪ Norwest Commercial and Industrial Real Estate ▪ Norwest Marketown ▪ Rouse Hill Town Centre Management ▪ Walker Properties, Graceland Estate, Kellyville ▪ Zerefos Group Consultation with local businesses will continue during development of EIS 2.	Mitigation measures to address the impacts on local businesses, such as accessibility, car parking and operating amenity, have been developed and are included in EIS 1. Operational impacts on businesses will be considered in EIS 2. Further details: Chapter 13: Local Business Impacts

Requirement	Consultation	Outcomes (construction focus)
Ref: Modification Director-General Requirement The modification assessment shall document consultation undertaken with relevant government agencies and the community in its preparation, with a focus on the proposed changes, and how matters raised during consultation have been considered.	Key stakeholders and government agencies have been specifically consulted with regard to the modification assessment. Comments were received from : ▪ Blacktown City Council ▪ Department of Primary Industries ▪ NSW Office of Water ▪ Department of Planning and Infrastructure All consultation cited in 5.4 to 5.6 in this chapter incorporated the modifications announced in December 2011.	Further details: Chapter 6 provides detail on the modification.

Table 5.4 lists those agencies and key stakeholders consulted, cross-referenced to the principal topics discussed at various meetings.

Table 5.4 Agencies and key stakeholders compliance table - summary

ISSUES											
	Land use planning	Property	Traffic and Transport	Access	Construction activities	Noise and vibration	Water	Ecology	Heritage	Visual	
STAKEHOLDERS											
Federal Government	SEWPaC								•		
State Government Agencies	DP&I	•	•	•	•	•	•	•	•	•	•
	TfNSW	•		•	•	•	•				
	Department of Primary Industries (and its ancillary functional areas)	•			•	•		•			
	OEH (including EPA)					•	•	•	•	•	
	NSW Trade & Investment					•					
	RMS	•		•	•	•					
	Sydney Metropolitan and Hawkesbury Nepean Catchment Management Authorities							•	•		
	NOW					•		•			
	RailCorp	•	•	•	•	•	•	•	•		
	Local Government	Hornsby Shire Council	•	•	•	•	•	•	•	•	•
The Hills Shire Council		•	•	•	•	•	•	•	•		•
Blacktown City Council		•	•	•	•	•	•	•	•		•
Parramatta City Council		•		•							

ISSUES		Land use planning	Property	Traffic and Transport	Access	Construction activities	Noise and vibration	Water	Ecology	Heritage	Visual
Utility and Service Providers	Ausgrid	•	•		•	•					
	Endeavour Energy	•	•		•	•					
	Sydney Water	•	•		•	•					
	Jemena	•				•					
	NBN	•				•					
	Telstra	•				•					
	Mine Subsidence Board	•				•					
Bus Companies	Hillsbus			•		•					
	Busways			•		•					
Relevant Indigenous Groups						•				•	
Business potentially affected by construction						•					
Surrounding landowners		•	•			•	•			•	•
Local Communities		•	•	•	•	•	•			•	•

5.5 Issues raised during government agency and related consultation

During consultation with the agencies, utility and transport providers a number of specific issues were raised. These are listed below in **Table 5.5** and cross referenced to relevant chapters in this EIS. The table focuses on construction aspects and activities associated with the major civil construction works, which is the focus of the current environmental assessment. Consultation is ongoing to inform the planning, design and environmental assessment for the stations, rail infrastructure and systems.

Table 5.5 Issues raised during the government agency and related consultation

Issue category	Sub-category	EiS 1 document reference
Land use planning	Environmental planning instruments	Chapter 3
	Land use development controls	Chapter 14
	Planning of precincts	EIS 2
	Area 20 Precinct Plan	Chapter 14
	Implementation of Epping Town Centre Study	Chapter 14 and EIS 2
	Station precinct design	EIS 2
	Long term development plans	Chapter 14 and EIS 2
	Planning approval process	Chapter 3
Property	Land use and property impacts	Chapter 14
	Dilapidation survey of properties above the proposed rail tunnels	Chapter 8
	Acquisition and construction program	Chapter 7
Project development and design	Project scope	Chapter 7
	Timing of project	Chapter 7
	Implementation timetable	Chapter 7
Minerals	Mineral resource evaluation	Chapter 8
Traffic and movement	Traffic management during construction	Chapter 9
	Transport integration	Chapter 9
	Traffic safety management	Chapter 9

Issue category	Sub-category	EIS 1 document reference
	High volumes of traffic on Castle Howard Road	Chapter 9
	Franklin Road vehicle access	Chapter 9
	Pedestrian facilities and access	Chapter 9
	Road crossings	Chapter 9
	Integration of stations with cycle networks	EIS 2
	Integration of stations with public transport	EIS 2
Access and parking	Maintenance access points	Chapter 9
	Construction traffic access	Chapter 9
	Parking facilities (on street, commuter, staff)	Chapter 9
	Park/kiss and ride	Chapter 9 and EIS 2
Construction activities	Construction methodology	Chapter 7
	Bridge construction	Chapter 7
	Cut and cover construction	Chapter 7
	Adjacent business impact	Chapter 13
	Schofields Road zone	Chapter 7
	Stabling facilities	Chapter 7
	Epping bus tunnel impacts	Chapter 9
	Bushfire	N/A
	Skytrain pylons and viaduct	Chapter 7
	Providing power to worksites	Chapter 7
	Operational service provision	Chapter 7
	Local and cumulative impacts of construction activities	Chapters 8-20
	Impact of heavy vehicle traffic on road condition	Chapter 9
	Interaction of construction activities with planned road upgrades	Chapter 9
Noise and vibration	Stabling noise	Chapter 10
	Operation vibration	EIS 2

Issue category	Sub-category	EIS 1 document reference
	Screening and landscaping	Chapter 10 and Chapter 16
	Hours of construction	Chapter 10
	Acoustic impacts	Chapter 10
	Ambient noise monitoring	Chapter 10
Water	Detailed flood assessment	Chapter 18
	Water treatment plants	Chapter 18
	Surface water	Chapter 18
	Groundwater quality	Chapter 8
	Water sensitive urban design	EIS 2
	Stormwater management	Chapter 18
	Site water demands and water sources	Chapter 7 and Chapter 18
	Water licensing	Chapter 3 and Chapter 18
Waste	Waste/spoil disposal	Section 19.2
	Discharge into watercourses	Chapter 18
Climate change	Air quality	Section 19.1
	Greenhouse gas	Chapter 17
Ecology	Detailed ecological assessment	Chapter 15
	Biodiversity offsetting	Chapter 15
	Rare bats adjacent to Cheltenham site	Chapter 15
	Fish habitats	Chapter 15
Soil	Impacts on soil and land resources	Chapter 8, Section 19.2
	Acid sulphate soils (ASS)	Chapter 8
Heritage	Indigenous heritage protocol and methodology (Aboriginal cultural heritage values)	Chapter 12

Issue category	Sub-category	EIS 1 document reference
	Detailed assessment of heritage impacts	Chapter 11 and Chapter 12
	Heritage item in Ray Road	Chapter 11
Community facilities	Castle Hill Showground	Chapter 14
	Cherrybrook netball courts	Chapter 14
	Reduced recreational space	Chapter 14
Visual and urban design	Mitigation of visual impact	Chapter 16
	High quality design	Chapter 7 and EIS 2
	Visual impact from motorway	Chapter 16 and EIS 2

5.5.1 Consultation with the community

A number of contact and feedback mechanisms have been available to the community during the planning process, and proactive measures taken to disseminate information about the plans and their impacts. These are described in **Table 5.6** below.

Table 5.6 Community contact and feedback mechanisms

MECHANISM / EVENT	DETAILS
Information and feedback line:	1800 019 989
Email:	info@northwestrailcom.au
Castle Hill Community Information Centre:	Staffed five and a half days a week, this centre has the most up-to-date NWRL information and presentations. Since opening visitations have exceeded 2,500.
Website:	www.northwestrailcom.au. This site is continuously updated to include latest project information and offers visitors the opportunity to leave comments, participate in on-line discussions and register their interest in being kept up to date with latest NWRL developments.
Place Managers/door-knocking:	Place Managers have door knocked residences and businesses adjacent to construction sites, or areas where above ground infrastructure will be constructed. Each Place Manager has an allocated area and is proactive in making contact with potentially affected individuals, businesses and community groups. Each has an introductory newsletter with personal contact details that can be left if during door-knocking there is no one at home.

MECHANISM / EVENT	DETAILS
December 2011 newsletter	In December 2011 a newsletter was distributed to 11,700 residents and businesses along the corridor describing the modified project and announcing the start of the planning process.
Key stakeholder briefings	Over 50 briefings have been arranged with a number of community based organisations whose operations will be directly impacted during consultation. These have included: Primary and secondary schools ▪ Arden Junior School ▪ Arden Secondary School ▪ Beecroft Primary School ▪ Cheltenham Girls High ▪ Tangara School for Girls ▪ Epping Heights Public School ▪ Inala School Sports clubs ▪ Beecroft Cricket Club ▪ Beecroft Football Club ▪ Beecroft Netball Club ▪ Budokan Judo Club Community groups and services ▪ Castlebrook Memorial Park and Cemetery ▪ Castle Hill & Hills District Agricultural Society Inc ▪ Castle Hill RSL sub-branch ▪ Castle Hill RSL Club ▪ Glenwood Community Association Inc. ▪ Hillsong Church ▪ Mungerie House Businesses and their representatives ▪ BP Bella Vista ▪ Beaumont Strata Management ▪ Castle Towers Centre Management ▪ Coutts (on behalf of Lexington Corporate) ▪ Fit Kids Learning Centre ▪ Glenhope B&B Historical Homestead ▪ OK Caravan Park ▪ Koala Park, Cherrybrook ▪ Landcom (Kallina Estate) ▪ Lend Lease - new Rouse Hill Estate ▪ McDonalds Bella Vista ▪ Norwest Commercial and Industrial Real Estate ▪ Norwest Marketown ▪ Rouse Hill Town Centre Management ▪ Walker Properties, Graceland Estate, Kellyville ▪ Zerefos Group

The project has also maintained a contact database that records each contact made, the issues raised, and the response given. This will be maintained for the duration of the project.

Table 5.7 Details of Contacts Database

Contacts	Number
Emails received via info@NWRL address	90
1800 callers	174
Website – Total Visits	87,320
Website – Unique Visits	39,935
Website – Documents downloaded	43,297

5.6 Issues raised by the community

Table 5.8 captures the issues that have been raised by individuals, businesses and community organisations during the preparation of the EIS. The table focuses on construction aspects and activities associated with the major civil construction works, which is the focus of the current environmental assessment. Consultation is ongoing to inform the planning, design and environmental assessment for the stations, rail infrastructure and systems.

Table 5.8 EIS response to issues raised by community

Issue category	Issue raised	EiS 1 document reference
Property	Compensation for loss of house value	Chapter 7
	Impacts on properties adjacent to alignment	Chapters 8 - 21
	Impact on properties close to proposed construction traffic routes, Cheltenham	Chapter 9
Project design and development	Skytrain impacts	Chapter 7
	Tallawong Road stabling yard	Chapter 7
	Cudgegong Road Station	Chapter 7
	Kellyville station location	Chapter 7
	Bella Vista station location	Chapter 7
	Diverting of trains on Epping – Parramatta lines	Chapter 7
	Concern about lack of space on trains servicing Denistone	N/A and EIS 2
	Train travel times through to city – network capacity?	Chapter 7

Issue category	Issue raised	EIS 1 document reference
	Traffic management	Chapter 9
	Road and Bus service changes	Chapter 9
	Need for services facilities at Cheltenham	Chapter 7
Access	Continued access to Showground area	Chapter 9
	Construction and operational parking and access	Chapter 9 and EIS 2
	Car parking during the day time	Chapter 9
	Car space allocations	Chapter 9
Construction activities	Spoil management	Section 19.2
	Timing of construction	Chapter 7
Noise and vibration	Noise and vibration during construction	Chapter 10
	Noise and vibration during operations	EIS 2
Ecology	Loss of vegetation at Cheltenham	Chapter 15
Visual	Visual impact on properties close to proposed service facility at Cheltenham	Chapter 16
Recreation	Loss of sports facilities at Cheltenham Oval netball courts	Chapters 7 and 14
	Impact on Arthur Whitling Park	Chapters 7 and 14

5.7 Next steps

TfNSW plans to commit significant resources to continuing a broad based community and stakeholder consultation process during the public exhibition of EIS 1. Key elements of this will include:

A range of written material that describes the plans and their impacts, customised to each location. These will include:

- ❖ A booklet describing:
 - EIS 1 major works (overview)
 - Each construction site
 - Major construction works
 - Ecology, environment and heritage
 - Management of traffic impacts
 - Sustainability
 - How to make a submission on EIS 1
 - A brief overview of EIS 2
- ❖ A submissions and 'have your say' guide to assist people, groups and agencies that wish to make a submission to the DP&I
- ❖ Key stakeholder briefings:
 - Government agency and council staff
 - Councillors – Hornsby Shire, The Hills Shire and Blacktown City Councils
 - SEWPaC
 - Key land owners
 - Community organisations/interest groups
- ❖ An EIS exhibition newsletter delivered to approximately 45,000 residents and businesses along the alignment
- ❖ Community information and feedback sessions including access to fact sheets, information display boards and technical specialists. These sessions will be advertised in the local press, by hand-out information at key locations, and through letters of invitation to key community and government stakeholders. Each sessions will display information that describes project proposals for the area. Information and feedback sessions will be held at:
 - Epping
 - Cherrybrook
 - Castle Hill
 - Norwest
 - Rouse Hill

Information about further opportunities to engage with the project team about construction impacts on an ongoing basis has been included in the Environmental Management Framework (see Appendix C).

Consultation is ongoing and will inform the design and environmental assessment of the stations, rail infrastructure and systems, including station precincts and rail operations (EIS 2).

