



Introduction and Context

Chapter 1. Introduction

1.1 Overview

This environmental assessment describes the proposed North West Rail Link. The North West Rail Link would be a twin track passenger railway, approximately 23 km in length, connecting with the existing Northern Line north of Epping Station and terminating at Rouse Hill. The construction and operation of the North West Rail Link and associated works are referred to as 'the project' for the purposes of this environmental assessment.

The project forms part of the Metropolitan Rail Expansion Program, which includes the North West Rail Link, the South West Rail Link and the CBD Rail Link. These projects would provide links between the major new growth and employment areas of the metropolitan region. The Metropolitan Rail Expansion Program also includes long term plans to extend the South West Rail Link to Bringelly and extend the North West Rail Link to the Richmond line.

North West Sydney is one of the major growth areas in the Sydney metropolitan region. To improve access to employment and educational opportunities for existing and future residents, and to alleviate the growing traffic congestion in this area, the NSW Government proposes to build the North West Rail Link, a new heavy rail line linking Epping with the regional centres of Castle Hill and Rouse Hill.

The project would serve the growing population in North West Sydney and provide public transport connections to major centres including the Sydney CBD, North Sydney, Macquarie Park and Chatswood.

The project would provide fast connections to the Lower North Shore, the Sydney CBD and the North Ryde/Macquarie area. It would service established residential areas (approximately two thirds of the proposed alignment traverses developed land) and it would also service the Balморal Road Release Area, Rouse Hill development area and the North West Growth Centre, a growth area identified in the Sydney Metropolitan Strategy, City of Cities – A Plan for Sydney's Future (Department of Planning, December 2005).

This environmental assessment has been prepared by GHD Pty Ltd (GHD) in accordance with the requirements of Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). It has been prepared to support an application to the Minister for Planning for approval of the concept plan for the project. The environmental assessment assesses the key issues associated with the project as specified by the Director-General's requirements received on 12 July 2006.

1.2 The proponent

Transport Infrastructure Development Corporation (TIDC) is a state-owned corporation established under the *Transport Administration Act 1988*. TIDC's main role is to manage the delivery of a range of major new transport infrastructure projects for the NSW Government.

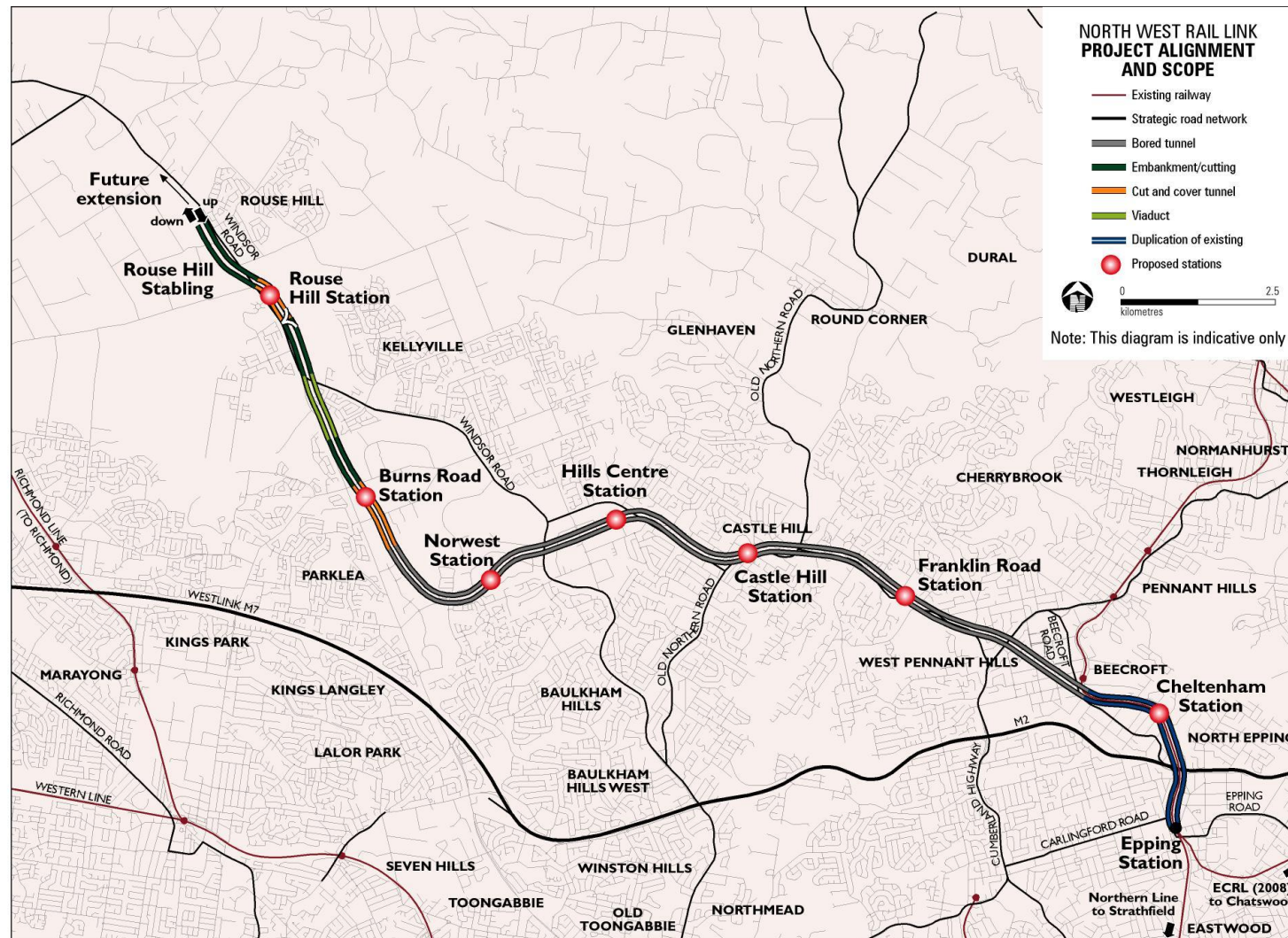


Figure 1.1 Key features of the project

TIDC is seeking the Minister's approval for the concept plan for the project. For that purpose, TIDC has undertaken an environmental assessment in accordance with the Director-General's requirements.

For the project, a Program Steering Group currently oversees TIDC. The group comprises representatives from TIDC, RailCorp, NSW Treasury, the NSW Premier's Department, the Department of Planning, the Ministry of Transport and the Growth Centres Commission.

Once construction and commissioning has been completed, RailCorp would be responsible for operations along the North West Rail Link as part of the existing CityRail network.

1.3 Key features of the project

The project is a major public transport initiative, which aims to lower road congestion, relieve pressure on the existing Western and Northern rail lines, and efficiently connect the population of North West Sydney with other regions, with provision for future growth.

The project would connect to the existing Northern Line and the Epping to Chatswood Rail Line. Six new stations are proposed: Franklin Road Station, Castle Hill Station, Hills Centre Station, Norwest Station, Burns Road Station, and Rouse Hill Station. Cheltenham Station would be upgraded.

Key features the project are described below and shown in Figure 1.1. More detailed maps showing the proposed alignment are provided in section 7.

The key features of the project include:

- » A 2.5 km surface quadruplication of the Northern Line between north of Epping Station and Beecroft Station (including works at Cheltenham Station);
- » A 16 km section in tunnel from the Northern Line to Burns Road, including four underground stations (Franklin Road Station, Castle Hill Station, Hills Centre Station and Norwest Station);
- » A 4 km surface section from Burns Road to Rouse Hill, including approximately 1 km on viaduct and two underground stations (Burns Road Station and Rouse Hill Station)
- » An interim train stabling facility at Rouse Hill;
- » Ancillary tunnel support facilities such as tunnel ventilation, transformers and a water treatment plant(s); and
- » Construction work sites, including a site within the Balmoral Road Release Area and a site at the proposed Hills Centre Station.

The project is anticipated to be operational by 2017. A staged delivery scenario would see the project between Epping and Hills Centre Station operational by 2015 and the remainder of the project to Rouse Hill operational by 2017.

1.4 The environmental assessment

The environmental assessment addresses the Director-General's requirements for the preparation of a concept plan for the project. The environmental assessment provides:

- » Information on the project, including need for the project, its strategic context and the alternatives considered;
- » A description of the concept plan for the project;
- » An assessment of the potential key environmental impacts of the project identified by the Director-General's requirements; and
- » The proponent's commitments to further assessment and proposed measures to minimise and manage potential environmental impacts.

As the environmental assessment has been prepared for a concept plan for the project, detailed information on all aspects and therefore associated impacts is not yet available. The impact assessments undertaken for the environmental assessment have been undertaken to a broad level. Where further more detailed assessment is required, this forms part of the recommended mitigation measures/draft statement of commitments for the project.

The environmental assessment is structured as follows:

Volume 1 – Environmental Assessment (main report)

- » **Part A Introduction and context** – provides an introduction to the environmental assessment (chapter 1); information on the assessment requirements under relevant legislation and environmental planning instruments (chapter 2); a description of the location and existing environmental features of the area potentially affected by the project (chapter 3); and a summary of the consultation that occurred during the assessment process (chapter 4);
- » **Part B Information on the project** – describes the need for and objectives of the project (chapter 5); the alternatives that were considered as part of the development of the project (chapter 6); and includes a description of the project (Chapter 7);
- » **Part C Environmental assessment** – based on the project described in Part B, this part includes an environmental risk analysis identifying key potential environmental issues (chapter 8); an assessment of these issues (chapter 9); and information on how other environmental issues would be managed (chapter 10);
- » **Part D Conclusion** – for the project described in Part B, and considering the results of the assessment summarised in Part C, this part provides a description of the concept plan (chapter 11), a draft statement of commitments made by the proponent in relation to progressing the assessment and design of the project (chapter 12); and the project justification and conclusion to the environmental assessment (chapter 13).

Volume 2 and 3 – Appendices

Volume 2 and 3 contain specialist technical assessments/background reports, which have been prepared for the purpose of undertaking an assessment of the potential impacts of the project in

accordance with the Director-General's requirements. These specialist reports have been informed by the description of the project as set out in Part B of the environmental assessment.

The specialist reports have been used to inform the environmental assessment contained in Part C of this document. In particular, the mitigation and management measures suggested in the specialist reports have been taken into account in developing the recommended mitigation measures and further investigations for the project as a whole. Mitigation measures to be adopted as part of the project would be subject to further assessment and design development.

The proponent's draft statement of commitments with respect to the concept plan for the project are set out in chapter 12 of this document.

The specialist reports comprise:

- » Traffic, transport, parking and access assessment (GHD);
- » Noise and vibration impact assessment (Heggies Australia Pty Ltd);
- » Ecological assessment (GHD);
- » Flooding and surface water management (GHD);
- » Geology, geotechnical and groundwater assessment (GHD);
- » Archaeological assessment of indigenous heritage (Jo McDonald Cultural Heritage Management Pty Ltd);
- » Heritage review (Casey & Lowe Pty Ltd);
- » Visual and urban design assessment (Hassell Pty Ltd);
- » Spoil management (GHD);
- » Social impact assessment (B Cubed Sustainability Pty Ltd); and
- » Construction site management (GHD).