Terminals Australia

# Parkes Intermodal Terminal

## Background Report

September 2005

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# Appendices

# 1. Introduction

## 1.1 Background

GHD Pty Ltd (GHD) has prepared this Background Report on behalf of Terminals Australia to provide information to relevant authorities and stakeholders on its proposal to develop an Intermodal Terminal in Parkes, in western NSW (referred to as 'the proposal' for the purposes of this report). The proposal will provide a facility for the large-scale transport, warehousing/storage of freight. The proposal would be one component in the Multi Modal Freight Logistics Hub being pursued by Parkes Shire Council. It is envisaged that the Multi Modal Freight Logistics Hub would include:

» The development of industrial sites based around existing rail infrastructure; and

» The development of a 'ring road' around Parkes.

Parkes is suitably situated to support a national intermodal hub. It is strategically located at the junction of the national road and rail corridors of the Newell Highway connecting Melbourne and Brisbane, the Main Western (Sydney-Perth) and proposed inland (Melbourne-Brisbane) rail routes, and the transcontinental railway linking the eastern seaboard to Perth. The proposed site would take advantage of the existing and any future upgrades to the national road and rail transport infrastructure.

GHD is assisting Terminals Australia with the following components of the project:

» Engineering Masterplan ('the masterplan');

» Environmental Impact Assessment (an Environmental Impact Statement); and

» Management of the Development Application process.

This background report provides the following information on the proposal to assist relevant stakeholders and authorities to identify potential issues:

» A description of the proposal;

» A description of the proposal site;

» A discussion of the approvals process, planning controls and potential approvals; and

» An outline of the potential key environmental impacts.

## 1.2 The Proponent

Terminals Australia Pty Ltd, a private consortium, is the proponent for this proposal.

# 2. Site Description

## 2.1 Regional Context

Parkes is situated 365 km from Sydney, 995 km from Brisbane, 1067 km from Adelaide and 306 km from Canberra on the western edge of the Great Dividing Range in western NSW (Tourism NSW, 2005). The town centre of Parkes is the major urban centre in the Parkes Shire Local Government Area (LGA).

Parkes is strategically located at the junction of several national freight corridors, the main southern railway and a high capacity rail and road network which is experiencing a high rate of growth as a freight corridor.

Parkes supports a broad range of industry including agriculture, mining and transport. The following businesses are already present in the area or represented in Parkes:

| | |
|---|---|
| North Parkes Mine | Western Lime |
| FCL Pty Ltd | Food Services Central |
| Graincorp | Alkane (Peak Hill Gold Mine) |
| Western Wools | National Tanks |

A heavy vehicle ring road system would be built to service the Multi Modal Freight Logistics Hub. The ring road is an initiative being undertaken by Parkes Shire Council and the Roads and Traffic Authority (RTA).

## 2.2 The Site

The site for the proposal is approximately 5 kilometres west of the urban centre of Parkes. The site is located south of the Main Road 61, north of the Brolgan Road and west of the Parkes Naromine Railway. The primary vehicular access to the site is via Brolgan Road.

Terminals Australia owns the majority of the site. The site comprises Lot 6 DP 857631, Lot 98 DP 750179, Lot 99 DP 750179, Lot 360 DP 750179 and Lot 1 DP 1082995. The proposal also incorporates part of Lot 200 DP 627302 – this lot is not owned by Terminals Australia but an agreement for use of the land has been reached with the owner.

The site is approximately 365 hectares in size - approximately 50% of which would be required for the proposal (**Appendix A** illustrates the indicative size of the main features proposed for the site).

The site is typical agricultural land of the area, and is currently being agisted to local farmers (**Figure 2** and **Figure 3**). Dominant features on the landscape are the Parkes-Narromine rail line, derelict dwellings, agricultural fields and associated

dwellings/fences, Brolgan Road, the Sydney-Adelaide-Perth rail line, and a predominant ridge on the western side of the site.

**Figure 1 Site Location, Parkes**

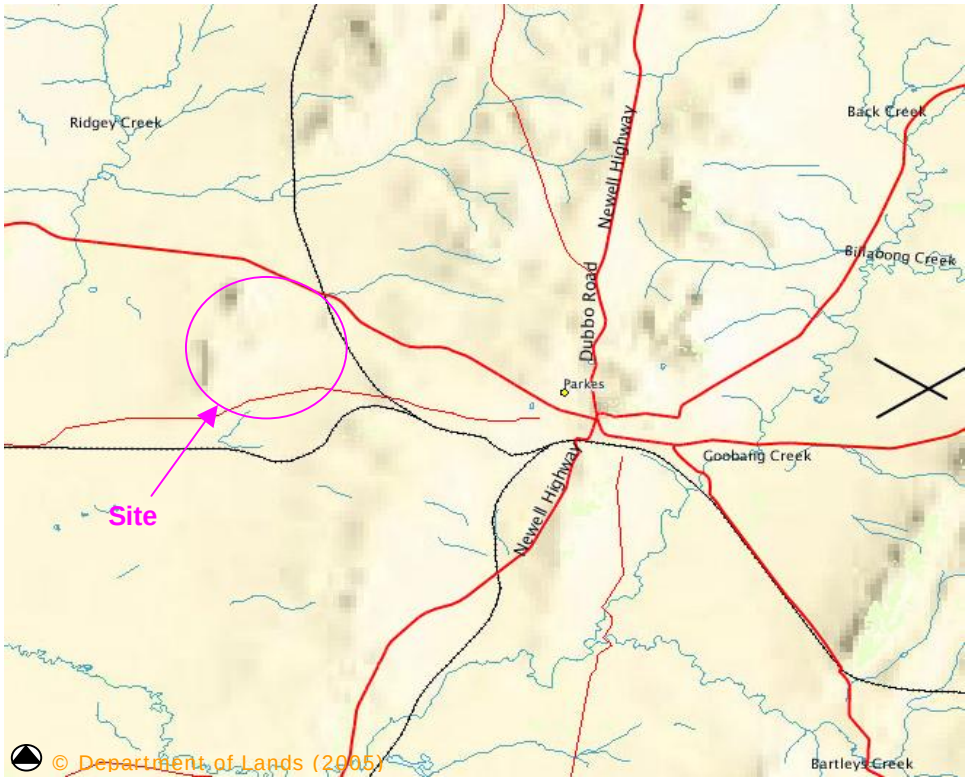


**Figure 2 The Site, Parkes**

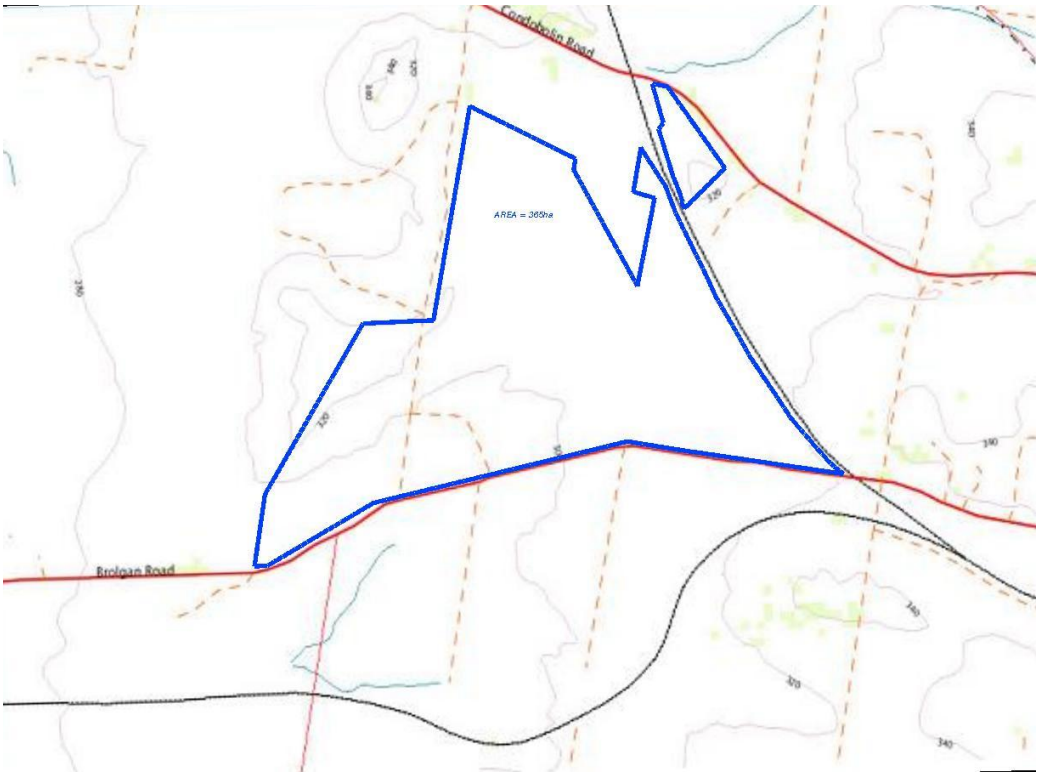


**Figure 3 - Property Boundary with Parkes Narromine Railway**

**Figure 4 Site Showing Pasture Grass and Property Boundary**

# 3. Overview of the Proposal

## 3.1 The Proposal

The proposal involves the construction of a national facility for the large-scale transport, warehousing, manufacturing and storage of freight. The proposal will be a 24 hour operation.

As the site selected for the proposal is a greenfield site, there are excellent operational advantages in regards to the flexibility of rail movements and access to either the east-west rail line or the proposed inland rail corridor. The size of the site means that a terminal operation could be established and be progressively developed without operational compromise or hindrance.

One of the purposes of the proposal is to provide a strategic location between the freight service user and the operator, such as a port, whereby the freight operators can take advantage of road/rail transport modes. Additionally, the freight operator can utilise terminal facilities such as cold storage, refuelling facilities and both short-term and long-term storage.

For rail operators, the proposal could also provide a facility to reconfigure, cross-load, maintain and service trains. Depending upon market forces, the site could also potentially provide rolling stock storage as well as maintenance facilities.

### 3.1.1 Key Features

A summary of the key features of the proposal (at its ultimate stage) is provided below. The project description will be further developed as an outcome of the functional design and subsequent masterplanning process.

| | |
|---|---|
| » Capital Cost | » $150 – 350 million (indicative only) |
| » Employment | » Up to 600 employees during construction |
| » Indicative areas for major uses | » Rail Terminal 24 Ha<br>(incl. Container Storage and operational depot but not rail lines)<br>» Warehousing 28 Ha<br>» Engineering Facility 2.5 Ha<br>» Containerised Fuel Storage and Distribution Facility 3.5 Ha<br>» On-site refuelling facility 1 Ha |
| » Infrastructure | » 22,000 m of rail track;<br>» 120,000 sq.m of pavement for internal roads;<br>» 30,000 sq.m of pavement for upgrade to external roads;<br>» 1 bridge over Parkes-Narromine railway to grade separate the northern access to the site. |

| | |
|---|---|
| » Development | » 100,000 sq.m warehousing Pavement;<br>» 40,000 sq.m warehousing;<br>» 240,000 sq.m heavy duty pavement for container storage;<br>» 25,000 sq.m pavement of the engineering facility;<br>» 16,000 sq.m warehousing for engineering facility;<br>» 25,000 sq.m heavy duty pavement for fuel storage and distribution facility |
| » Freight movements | Trains - 8 per day (48/week for 6 day week)<br>Trucks – 297 per day (1792/week for 6 day week) |
| In addition to the above, minor infrastructure items necessary include administration offices, maintenance sheds and facilities for on site plant (including fork lifts), utilities/services and landscaping. | |

### 3.1.2 Concept Layout of the Site

A preliminary concept layout plan is included as **Appendix A.**

It is envisaged that the proposal will be a 24 hour operation.

The preliminary concept layout plan does not differentiate the staging of the development on the site and shows the ultimate stage of the proposal.

The container storage park on the southern side of the intermodal sidings is indicative in size only, however, highlights the area available for this function. It is adjacent to the rail sidings to minimise the distances for handling containers and it is planned that roadways would be constructed under the gantry crane for direct transhipment to/from road vehicles.

The warehousing and distribution area shown on the preliminary concept layout plan is indicative of the size of the area available. This gross area would include access roads and provision for other infrastructure for the servicing of the warehousing and distribution facilities.

The concept for the warehousing and distribution facilities on the southern side of the site (fronting Brolgan Road) is to provide ‘back door’ access to the intermodal sidings/container park and be within approximately 100m of these sidings.

It is envisaged that the heavy engineering/rollingstock maintenance facility, the rollingstock storage sidings, and the fuel storage and distribution facility would all branch off the master siding and not the intermodal sidings. This clearly demarcates the rail terminal and minimises unauthorised road vehicles to/from the rail terminal and also minimises the rail movements within the terminal.

### 3.1.3 Stages of development

There are three likely scenarios for development of the proposal, as outlined below:

1. Full scale development of the terminal and supporting infrastructure.
2. A two staged development of a single intermodal siding, 2 short sidings and essential roads in an initial phase with the balance completed subsequently.

   This initial phase of infrastructure would include the necessary railway infrastructure to link the proposed terminal to both the east-west rail line as well as the Parkes-Narromine rail line. This railway infrastructure would include an 1800m length intermodal siding as well as a crossing loop on the Parkes-Narromine rail line.

   Other infrastructure to be included at the initial stage includes:

   - A master siding or 'through-road' creating a 'Y-Link' between the east-west rail line and the Parkes-Narromine rail line.
   - Administration building and terminal plant maintenance facility (for the maintenance of heavy handling facilities e.g. staddle loaders, reach stackers, forks, etc.).
   - Gantry crane over the intermodal rail siding for the loading/unloading of containers from rail wagons to road vehicles or onto a hardstand area.
   - Warehousing and distribution facilities on the southern side of the site (fronting Brolgan Road), approximately 100m from the intermodal sidings/container park with 'back door' access to the intermodal sidings/container park.
   - Container storage park for both full and empty containers adjacent to the intermodal sidings.

3. Progressive development of individual items of infrastructure concurrent with development of individual commercial sites. The minimum infrastructure requirements would be the same as for the second option with subsequent elements of the proposal being developed as market forces demand.

## 3.2 Timeframe

Should a staged approach to the development of the proposal be undertaken, the development timetable has been assumed to be as follows:

- Initial Stage – complete and in operation by 2010; and
- Subsequent Stage – operational by 2020.

It is acknowledged that the development of the proposal would be progressive between these two stages, and that growth and/or the introduction of functions considered to be long term opportunities may occur at any interim stage of the development. As stated in Section 3.1, development of the Terminal would be progressive and dependent on market demand.

# 4. Approval Process

## 4.1 Overview

The existing framework for assessment of the project is established by *Environmental Planning & Assessment Act 1979* (EP&A Act 1979).

The recently announced planning reforms would be considered to determine the planning approval requirements for the proposal. The new planning approval process will be set out in the new Part 3A of the EP&A Act 1979, the amendment of which was recently passed by Parliament. Potential implications of the reforms for the assessment and approval process have been discussed with Department of Infrastructure, Planning and Natural Resources (DIPNR).

It is noted that the *Environmental Planning and Assessment Amendment (Infrastructure and Other Planning Reform) Act 2005* was assented to by Parliament on 16 June 2005. The development application for the proposal is likely to be considered under Part 3A (in accordance with the Amendment Act). The potential implications for the environmental impact assessment process will need to be considered as the project progresses.

## 4.2 Permissibility of the project

The *Parkes Local Environmental Plan 1990* (the LEP) applies to the site. The site is zoned 4(a) (Industrial ''Hub' Zone) under the LEP. The zone objectives and development control requirements for zone 4(a) are as follows:

1 *Objectives of zone*

*The objectives of this zone are:*

*(a) to recognise the Parkes "Hub" as a special industrial enterprise area, specifically to nurture a multi-modal freight and transport interchange, and*

*(b) to designate land for the accommodation of key industrial uses which are linked to the freight logistics industry, and*

*(c) to encourage the growth of the freight logistics industry and capture consequent economic benefits for Parkes, and*

*(d) to enable the continuation of agricultural land use within the zone.*

2 *Without consent*

*Agriculture (other than ancillary dwellings and intensive livestock keeping establishments).*

3 *Only with consent*

*Any purpose other than a purpose included in Item 2 or 4.*

4 *Prohibited*

*Boarding-houses; cemeteries; child care centres; churches; clubs; community centres; dwelling-houses; educational establishments; general stores; health care professionals; home industries; home occupations; hospitals; hotels; motels; motor showrooms; picnic grounds; places of public worship; reception*

*establishments; recreation facilities; recreational establishments; retail plant nurseries; roadside stalls; shops; tourist facilities; units for aged persons; veterinary hospitals.*

The proposal is not included in item 2 or 4 (it is not a prohibited development or a development allowed without consent). As a result, it falls under item 3 and would be permissible with development consent.

## 4.3 NSW legislative framework for development consent

### 4.3.1 Environmental Planning and Assessment Act 1979

The EP&A Act 1979, together with the *Environmental Planning and Assessment Regulation 2000* (the Regulation) forms the statutory framework for planning and environmental assessment in NSW. The Minister for Infrastructure, Planning and Natural Resources, statutory authorities and local councils are responsible for implementation of the EP&A Act 1979.

The development application for the proposal is likely to be considered under the new Part 3A (in accordance with the Amendment Act). The potential implications for the environmental impact assessment process will need to be considered as the project progresses.

The proposal is considered to be a 'major project' and 'designated development' under the EP&A Act. These factors influence the decision making process as follows:

» Major project – the Minister for Planning is the consent authority for the proposal; and

» Designated development – an environmental impact statement (EIS) needs to be submitted with the application for development consent.

Further information on the development approval process as it applies to the proposal is provided in Sections 4.3.2 and 4.3.3.

### 4.3.2 Major Projects

Major projects are defined by clause 6 of *State Environmental Planning Policy (Major Projects) 2005* as:

*'Development that, in the opinion of the Minister, is development of a kind:*

*(a) described in Schedule 1 or 2, or*

*(b) described in Schedule 3* as a project to which Part 3A of the Act applies,

is declared to be a project to which Part 3A of the Act applies*.'*

The proposal meets the definition under Schedule 1 clause 23(1):

*23 Rail and related transport facilities*

*(1) Development that has a capital investment value of more than $30 million for the purpose of:*

*(a) heavy railway lines associated with mining, extractive industries or other industry, or*

*(b) railway freight facilities or inter-modal terminals.*

The proposal is an inter-modal terminal with a capital investment value of more than $30 million and thus can be categorized as a major project.

Under section 76A (9) of the EP&A Act, the Minister is the consent authority for major projects, where that development requires development consent.

### 4.3.3 Designated Development

The proposal is considered to be a designated development under Schedule 3, clause 28 of the EP&A Regulations 2000:

*28 Railway freight terminals*

*Railway freight terminals (including any associated spur lines, freight handling facilities, truck or container loading or unloading facilities, container storage, packaging or repackaging facilities):*

*(a) that involve more than 250 truck movements per day, or*

*(b) that involve the clearing of more than 20 hectares of native vegetation, or*

*(c) that are located:*

*(i) within 40 metres of a natural water body, wetland or environmentally sensitive area, or*

*(ii) within 500 metres of a residential zone or dwelling not associated with the development and, in the opinion of the consent authority, having regard to topography and local meteorological conditions, are likely to significantly affect the amenity of the neighbourhood by reason of noise, odour, dust, lights, traffic or waste.*

The proposal falls under clause 28(a) as it will involve more than 250 truck movements per day (once all stages are developed).

## 4.4 Other approvals/licences that may be required

### 4.4.1 NSW

The need for approvals/licences etc under other legislation will be considered as the project progresses. Potentially relevant legislation may include:

- *Dangerous Goods Act 1974;*
- *Heritage Act 1977;*
- *National Parks and Wildlife Act 1974;*
- *Roads Act 1993;*
- *Threatened Species Conservation Act 1995;*
- *Protection of the Environment Operations Act 1997.*

It is noted that under Section 75U of the *Environmental Planning and Assessment Amendment (Infrastructure and Other Planning Reform) Act 2005* a number of concurrences/approvals that were previously required are no longer required.

### 4.4.2 Commonwealth

The need for a referral to the Minister for Environment under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* will be considered as the project progresses.

# 5. Key Environmental Impacts

Based on the provisions within Parkes Shire Council's Local Environmental Study the following are considered to be the key issues associated with the proposal. These issues, together with any other issues identified by statutory authorities, will be investigated in more detail in the EIS. The following list is presented in order of risk, from most to least.

## 5.1 Hazards and Risks

Risks and hazards associated with the proposal would be associated with the construction of the rail infrastructure and associated facilities such as the warehouses, heavy engineering facility and particularly the containerised fuel storage facility and two refuelling facilities. The ongoing operation of the engineering and fuel storage facility will also pose hazard and risk issues.

The containerised fuel storage centre is the most northerly component of the site and is over 1.5 kilometres from the nearest dwelling. It is however adjacent to the heavy engineering facility - appropriate buffer zones and containment measures around the containerised fuel storage centre will be required. The facility is intended to provide for up to 1,000,000 litres of diesel, unleaded petrol or petrol in containers of approximately 12,500 litre capacity.

Two refuelling facilities are also included in the proposal – one to service trains and the other for plant operating on the site such as forklifts. Each facility will store in the order of 110,000 litres of fuel.

## 5.2 Traffic and Transport

The Parkes Transport Hub – Local Environmental Study envisaged that the existing arterial roads servicing the Parkes Hub would be adequate to meet existing industry requirements for the short to medium term. A ring road system may be developed in the future as the need arises (PSC, 2003).

The proposal has the potential to generate both road and rail transport through the Parkes area. At the proposals ultimate stage it is envisaged 8 trains and 297 trucks will pass through the site per day.

## 5.3 Noise

Additional noise is likely to result from the construction works and operation of the proposal. To assess the existing noise levels and the predicted noise and vibration a detailed assessment by GHD acoustic specialists would be conducted.

## 5.4 Aesthetics, Visual and Lighting

The proposal is located approximately 5 kilometres west of Parkes town centre in a broad valley. A low ridge lies in a north east-south west direction on the north western side of the site.

An existing residence lies to the south west of the site approximately 1.5 kilometres from the proposed sidings and warehouses. However, the rail access to the site is proposed to occur within approximately 0.5 kilometres of the dwelling. Two other dwellings are in proximity to the site – one lies 1.5 kilometres north of the northern length of the master siding and on the lee side of the small ridge to the north-west of the site. The second dwelling lies to the south-west of the proposal , over 2 kilometres from the proposed sidings and warehouses and over 1 kilometre from the master siding.

Several other industrial activities are located within the Multi Modal Freight Logistics Hub as outlined in section 2.1.

Floodlighting of the site to facilitate 24 hour operation will be required.

The Sidings Springs Observatory lies over 300 kilometres north of Parkes. Potential night time operation and floodlighting impacts of the proposal on the Sidings Springs Observatory will need to be determined. Floodlights and associated illumination have the potential to generate artificial sky glow which may impact the operation of the observatory. Orana REP No. 1 – Siding Spring gazetted in 1990 covers the area around Siding Spring Observatory in Coonabarabran and is designed to deal with the problem of light emission interfering with the effectiveness of the telescopes.

## 5.5 Amenities and Utilities

The proposal will require sources for a number of utilities/services to support its operation. These utilities include: water; electricity supply; gas supply; sewerage & drainage; and communications. An assessment existing utilities/services will need to be made in terms of:

» Existing routes relative to the proposed site;

» Capacity of existing systems to accommodate initial stage development;

» Ability of the existing systems to meet future demands of the ultimate stage development;

» Suitability to extend current infrastructure network to meet new demands for ultimate stage development; and

» Perform analysis to determine the feasibility to construct new infrastructure to accommodate future growth of the ultimate stage development.

Water mains presently exist along the Brolgan Road frontage to the site of Western Wool operation.

The Parkes Hub would be connected to the Parkes Shire Council Sewerage System via a pump station located towards the western boundary of the subject land. The Parkes Shire Sewage System can readily accommodate the proposed development of

the Parkes Hub (PSC, 2003). All industry discharging to the Parkes Shire Council Sewerage System would be required to enter into a trade waste agreement, thereby controlling waste discharged.

AGL advised that there is ample surplus of natural gas within the existing system to service industrial developments at the Parkes Hub (PSC, 2003).

## 5.6 Air Quality

Transport is one of the fastest growing sectors of greenhouse gas emissions due primarily Australia's excessive reliance on road transport. The Bureau of Transport Economics (1996) predicts that greenhouse gas emissions from transport will increase nearly 50% between 1990 and 2015, with emissions from road transport increasing 45% (www.ara.net.au, 2005).

In contrast rail freight uses only one third of the fuel required by road transport per tonne of freight hauled and produces less than one third of the greenhouse gas emissions. Rail is twice as energy efficient as road even after fuel use has been included for rail line haul, road pick up and delivery from rail terminals, manufacture of transport equipment and construction of roads and railway lines.

Air quality impacts arising from dust generation will be greatest during the construction phase. Emissions from the proposed fuel storage facility also have the potential to impact local air quality.

## 5.7 Waste Minimisation

Depending on the final design and construction method for the proposed development, the following wastes are likely to be generated during construction:

- Concrete
- Bitumen
- Steel
- Aluminium sheeting
- Vegetation
- Waste water
- Timber
- Masonry bricks
- Fill
- Effluent

The appropriate waste minimisation method for these surplus materials will need to be considered, involving a detailed assessment of the waste generated by the proposed works, and strategies that would be implemented to reduce, reuse and recycle waste.

## 5.8 Land use

The existing land use on site is small to medium scale grazing and cropping properties and associated dwellings.

Parkes Shire Council has rezoned various parcels of land comprising the Multi Modal Freight Logistics Hub from 1(a) (Rural “A” Zone) to 4(a) (Industrial “Hub” Zone) and 6(a) (Service Corridor Zone). The rezoning allows for the long term planning of freight services and infrastructure as outlined in Section 4.1.

The proposed development would primarily take place on land owned by Terminals Australia. Access and utilisation of the privately owned block south of Brolgan Road will be required to provide rail access link to the Parkes-Broken Hill line. Terminals Australia has reached an agreement with the owners to utilise their land for this purpose.

## 5.9 Community

The proposed development would create employment opportunities for the population of Parkes and nearby communities during construction and in the operation of the proposal. It is anticipated that the construction works would generate approximately 600 new jobs and bring skilled workers into the area.

The purchase of goods and services associated with the presence of construction activities and staff would stimulate local businesses, while multiplier and flow on effects would generate additional employment on both a local and regional scale.

By providing a major transport Hub and storage facilities, other businesses may be encouraged to establish in Parkes thereby further increasing job opportunities as well as increasing services and amenities within the community.

The following issues are likely to be of interest to the community:

» Noise and air quality;

» Visual impacts;

» Impacts on biodiversity; and

» Ongoing employment generation.

## 5.10 Water Quality

The proposed site is located within the Ridgey Creek catchment - a tributary of the Goobang Creek to the south. Goobang Creek is part of the Lachlan River catchment that forms the greater catchment of the Murray-Darling Basin System.

A desktop assessment of the hydrology and hydrogeological conditions for the Multi Modal Freight Logistics Hub has been undertaken in the Parkes Transport Hub Environmental Audit (Terra Consulting, 2003). This assessment highlighted no significant issues or risk to both groundwater resources and surface water quality from existing land uses.

The assessment concluded that based on the investigations undertaken, development of the area would pose minimal risk to groundwater. The assessment also concluded that altering the water cycle by increased run off from hard surfaces and reduced recharge there exists a possibility that urban salinity will result at the site, without effective mitigation measures being implemented.

## 5.11 Ecology - Flora and Fauna

The proposed development is located in a region that has a long history of agricultural practices.

Terra Consulting prepared an Environmental Audit in September 2003 that was included in the Parkes Transport Hub – Local Environmental Study, 2003.

The two main vegetation communities present within the Environmental Audit Study Area were open grassland / pastureland and open woodland communities. It is considered unlikely that the subject site provides favourable habitat for any threatened flora or fauna species.

However, areas that retain ecological value are those areas with restricted or controlled access by grazing stock, farming and human impact. The main such area within the site is the small ridge line located in the north west.

## 5.12 Indigenous Heritage

Several scarred trees have been identified within Parkes LGA as part of previous surveys. The NSW National Parks and Wildlife Service were consulted during the preparation of the Parkes Transport Hub – Local Environmental Study (PSC, 2003) and raised no issues associated with the subject site.

## 5.13 Non-indigenous Heritage

An initial desktop search of the Department of the Environment and Heritage's Register of the National Estate, the NSW Heritage Office's State Heritage Register and the Parkes Shire Council Local Environmental Plan 1990 revealed no recorded items are located on the site.

An old mud brick homestead and associated buildings that are dilapidated and in imminent danger of complete collapse also exist on the site. It is GHD's understanding that Parkes Shire Council has recently reviewed the significance of this feature.

## 5.14 Geology, Soil and Topography

The topography of the proposed site is characteristic of the Parkes area. It is flat to undulating terrain with smooth sloped and isolated hills. The hills have rounded crests with convex slopes graded to 10 percent (PSC, 2003). Included on the site are hills up to 320 metres Australian Height Datum (AHD), with most of the site at approximately. 300 metres AHD.

Preliminary soil testing undertaken as part of the Parkes Transport Hub LES 2003, found that soil samples were non-saline in the topsoil and increasing to slight salinity with depth (Terra Consulting, 2003).

The proposal would require large areas of the site to be subjected to heavy loads from storage and transport infrastructure. Envirowest Consulting undertook a preliminary geotechnical assessment in 2001 of the Multi Modal Freight Logistics Hub. Their assessment is incorporated into the Parkes Transport Hub Environmental Audit

prepared for PSC (Terra Consulting, 2003). This geotechnical survey concluded that the site is suitable for industrial development with no area susceptible to mass movement.

## 5.15 Other issues

The EIS will also address the following other issues:

» Cumulative impacts

» Ecologically sustainable development.

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Appendix A

# Concept Design

## Concept Site Layout Plans

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