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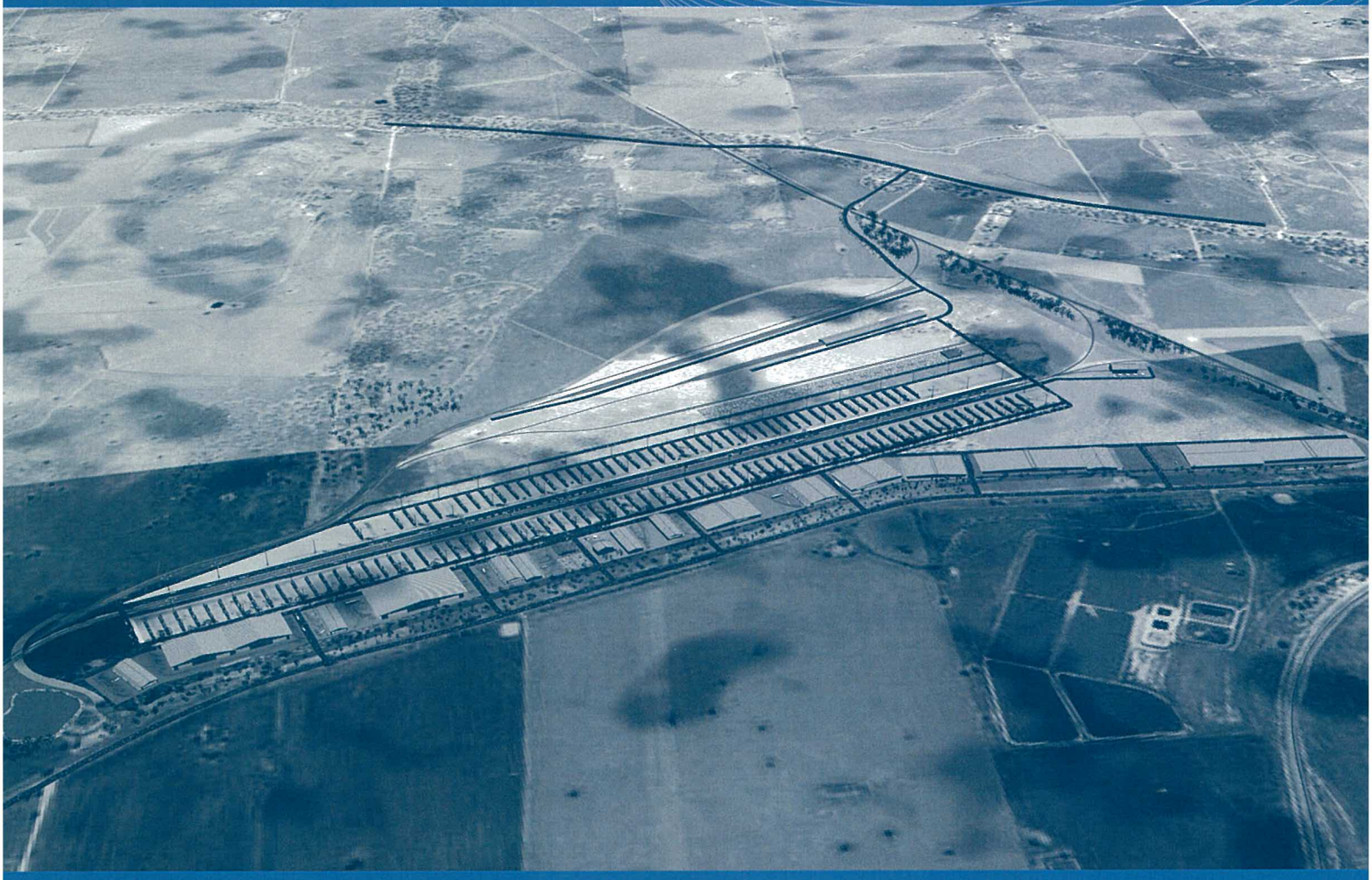
Parkes LOGISTICS AXIS

PART B
INFORMATION ON THE PROPOSAL



5. Strategic assessment

5.1 Overview

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

As the site selected for the PIT is a greenfield site, there are excellent operational advantages as regards 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 PIT 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 PIT also provides 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. The PIT is therefore designed to serve national markets.

5.2 Need for the proposal

The strategic need for the PIT can be illustrated by a number of wider strategic plans for transport and road infrastructure. Key documents supporting the proposal include Parkes Shire Council's *Rationale for the Parkes Multi-Modal Transport Logistics HUB*, 2002 and the Federal Government's AusLink policy as articulated in the DOTARS *White Paper*, 2004.

5.2.1 Parkes Transport Hub Local Environmental Study

To avoid ad hoc ribbon development along rail and road corridors the Parkes Transport Hub concept proposed a planned industrial park to service the needs of the freight industry sector.

Parkes Shire Council prepared a draft local environmental plan to create a relatively compact industrial park. This involved the rezoning of approximately 516 hectares of land previously used for agricultural and industrial purposes land from 1(a) Rural "A" to 4(a) Industrial Hub.

A Local Environmental Study (LES) was undertaken by Parkes Shire Council in 2003, to address the issues associated with the rezoning of the land. As part of the LES, Parkes Shire Council prepared a *Rationale for the Parkes Multi-Modal Transport Logistics HUB,* 2002. The document describes the need for the Parkes

Transport hub development in the broader context of Regional, State, National and International freight logistic trends.

The objectives of the Parkes Multi-Modal Transport Logistics hub are discussed in Parkes Shire Council's *Rationale for the Parkes Multi-Modal Transport Logistics HUB, 2002.* The objectives of the Parkes transport hub are to:

- Provide competitive advantage through a multimodal approach to freight logistics while ensuring no intrusion on residential amenity;
- Provide competitive access to national and international markets;
- Provide ecologically sustainable opportunities for freight related commercial development;
- Facilitate leading edge, logistic operation and logistics chain management;
- Facilitate eFulfilment through eLogistics, including Intelligent Transport Systems;
- Provide the opportunity for development of a National Freight Logistics Communications HUB;
- Champion, research, development and innovation;
- Investment in people; and
- Meet the logistics demands of market driven agriculture.

Success of the HUB requires adequate areas of suitable land purposely engineered to facilitate logistic chain development of this nature, including utilities, transport corridors (both on-road and off-road), buffers to protect residential amenity, worlds' best telecommunication facilities, and resource management planning with the overriding ethos of ecological sustainability (PSC, 2002).

Although this PIT is one component of the HUB, the proposal would help achieve the objectives for the Multi-Modal Transport Logistics HUB by providing a national road and rail intermodal terminal.

The following information contained in the Rationale for the Parkes Multi-Modal Transport Logistics HUB document (2002) forms part of the strategic need for the proposal.

Road freight

The Newell Highway currently carries over 1000 vehicles per day, 40% of which are B-Doubles. The regions west of Parkes are a large generator of freight and are rapidly adopting road-trains as the preferred freight vehicle. These are common west of the Newell Highway (PSC, 2002).

From 1 July 2001 the Minister for Roads provided special approval for the operation of higher mass limit vehicles on the Newell Highway to help address the increasing freight volumes. A fourfold increase in freight is forecast by 2010,

which would result in unmanageable impacts along the Newell Highway (PSC, 2002).

Rail freight

Freight on rail showed a 52% increase over 10 years from 88.3 billion net tonne kilometres in 1990/91 to 134.2 and current trend would see this increase (PSC, 2002).

The Bureau of Transport and Regional Economics assesses that the freight task will double by the year 2010 (Mountain Industries, 2002). The bureau has also estimated that:

» National non-bulk road freight will more than double over the period 1995 to 2010 with growth of more than 75% from 1999 to 2010.

» National non-bulk rail freight activity will grow by just over 25% over the period 1999 to 2010, and by over 50% to 2020.

Recently, the Federal Government announced it would fund the preparation of a feasibility study for an Inland Rail Corridor linking the Port of Melbourne to the Port of Brisbane. Currently there are two popular alignments for the inland rail corridor, both via Parkes.

Should the Inland Rail Corridor be found feasible, the completion of this new route will see two major rail freight corridors intersect at Parkes. This will see a need for trains to be redirected and reconfigured from the Sydney-Adelaide-Perth line to the Melbourne-Brisbane line or vice versa.

Air freight

The International Air Transport Association predicted a 5.6% annual average international passenger growth rate from 2000-2004 and a 6.7% annual average international freight growth rate for the same period.

Sydney airports are currently congested and are not expected to support the level of forecast export growth. Parkes offers a cheaper cost structure for air exports for all NSW agricultural production areas.

The PIT can provide facilities for distribution of freight to and from the Sir Henry Parkes International Airport.

Shipping

Shipping is the mode of choice for long haul bulk movement, and accounts for over 99% of imported and exported freights, by volume. Integration of shipping services into the logistics network is imperative for Australia to remain competitive, will inevitably increase the demand on rail freight and there will be a consequential need for the reconfiguration of containerised trains.

Summary

The *Rationale for the Parkes Multi-Modal Transport Logistics HUB* formed part of the overall strategic plan for the proposal as the PIT would provide a facility for

the storage, handling and distribution of freight to key destinations throughout Australia.

5.2.2 AusLink White Paper

AusLink is the Australian Government's policy for improved planning and accelerated development of Australia's land transport infrastructure. It will revolutionise the planning and funding of Australia's national roads, railways and inter-modal terminals by taking a long-term, strategic approach to future needs.

The AusLink White Paper released in June 2004, sets out the Government's vision for building Australia's national land transport future. All levels of government acknowledge that, to help meet the demand for efficient intermodal facilities, a joint effort is required between governments and industry to develop a framework for planning and promoting these facilities (www.auslink.gov.au).

It is supported by a $12.7 billion programme of Australian Government investment over the five year period 2004-05 to 2008-09 together with partnering funding from State and Territory Governments and the private sector.

The future freight task

The total freight task is forecast to almost double in the next 20 years. Domestic non-urban freight is expected to grow at 2.2 per cent per annum between 2000 and 2020 to 375 billion tonne-kilometres. Domestic non-bulk freight is expected to grow at 3.4 per cent per annum between 2000 and 2020 to 255 billion tonne-kilometres. It can be expected to double between 2000 and 2022. Total non-bulk road freight is predicted to grow at 3.6 per cent per annum to 2020 with the intercapital non-bulk road freight growth predicted to grow even faster at 4.0 per cent per annum. The increase in traffic will also necessitate more efficient use of existing and new transport infrastructure.

The total number of containers handled through Australia’s ports is expected to increase by 66 per cent by 2013—from 2.9 million containers in 2002–03 to 4.8 million in 2012–13. Most of this growth will occur in the Melbourne and Sydney regions. The expected significant growth in container throughput could potentially lead to changes in the nature of the rail task in urban and regional areas to help ease the capacity constraints on capital city container ports.

Handling the future freight task will also require increased integration of rail and road services and a significant improvement in intermodal transfers among road, rail, and ports. The provision of an adequate framework to enable this to occur will be critical to the success of Australia’s future transport system. These are central objectives of AusLink.

The AusLink approach to planning and decision making

Under AusLink, the Australian Government takes a strategic approach to Australia’s future by ensuring that the nation’s land transport network meets future challenges. AusLink will translate better planning into better solutions by targeting transport funding to priority needs and allowing certainty for future

investment. The Government has developed AusLink to provide a better framework for decision-making and investment.

AusLink has the following core components:

» A defined national network of important road and rail infrastructure links and their intermodal connections;

» The National Land Transport Plan which outlines the Government's approach to improving and integrating the National Network, and the investments it will make;

» A single funding regime, under a new AusLink programme, for the National Network;

» Separately earmarked funding for local and regional transport improvements; and

» New legislative, intergovernmental and institutional mechanisms.

The most relevant components have been discussed in further detail below.

The AusLink National Network

The AusLink National Network and its connections to the broader transport network are the focus of the Australian Government's planning and funding responsibility.

The National Network moves beyond separately planned and funded rail and road networks and ad hoc rail/road intermodal developments. It is a single integrated network of land transport linkages of strategic national importance.

The National Network will improve land transport access to major ports and airports and encompass major rail/road intermodal transfer points on the network. It will be a crucial element in achieving integration of all transport modes.

The AusLink National Network is based on those:

» National and interregional transport corridors—including connections through urban areas;

» Links to ports and airports; and

» Other rail/road intermodal connections,

that together are of critical importance to national and regional economic growth, development and connectivity.

The National Network comprises the existing National Highway System and the Defined Interstate Rail Network, together with links to ports, airports and other major concentrations of intermodal activity. Generally, the national Network includes the important road and rail links on each national transport corridor (see Figure 5-1).

Figure 5-1 AusLink National Network

(Source:http://www.auslink.gov.au/policy/overview/background/whitepaper/fig7.aspx)

The National Land Transport Plan and funding

The National Land Transport Plan is the blueprint for improving the national Network into the future. It will operate on a rolling five-year basis. Improving the capacity and reliability of interstate and interregional corridors, and upgrading critical road and rail links is part of this plan. The Government has allocated a total of $11.8 billion for road and rail transport, including $9.2 billion to AusLink over the five years of the plan.

The Melbourne-Brisbane inland corridor, the Sydney-Adelaide corridor and the Sydney-Dubbo corridor have been identified as part of the National investment priority for the five year plan.

The Australian Government's strategic priority for the Melbourne-Brisbane inland corridor is to develop it as a viable inland multimodal corridor for long-distance freight and passenger traffic. Investment priorities include the Newell Highway upgrading works and a heavy vehicle bypass of Moree. Rail freight will benefit from investment by the ARTC on the Melbourne-Sydney and Sydney-Brisbane

track, in addition to investing on the track between Cootamundra and Werris Creek.

The key links in the Sydney-Adelaide corridor are the Hume and Sturt Highways to Adelaide; and the interstate railway between Sydney and Adelaide, via Cootamundra, Parkes and Broken Hill. The Australian Government proposes to invest in upgrading of the Sturt Highway in areas and ARTC proposes to invest on the track between Parkes and Broken Hill.

The key links in the Sydney-Dubbo corridor are the Great Western Highway and Mitchell Highways from Sydney to Dubbo via Bathurst and Orange and the rail link from Sydney to Parkes via Bathurst. The corridor passes through the Blue Mountains west of Sydney and links the Central West region of New South Wales to Sydney. It serves the regional centres of Parkes, Bathurst and Orange. The Australian Government has spent almost $100 million on upgrading works on the Great Western Highway as part of a larger New South Wales Government upgrading programme and aims to deliver a four-lane highway between Penrith and Katoomba, and three lanes for most of the route between Katoomba and Mount Victoria in the Blue Mountains.

The PIT is situated in a location that would benefit directly from expenditure on infrastructure development within these corridors, and investment on the AusLink National network as a whole. Network wide investments also identifies the location of intermodal facilities,

Intermodal terminals

Australia's container ports in Sydney, Melbourne, Fremantle, Brisbane, Adelaide and Darwin are engaged in increasing the share of freight railed to and from their facilities. Port managers are working with State, Territory and local governments to revitalise rail track and services and establish inland intermodal terminals for the receipt and dispatch of containerised goods. This is in response to growth in container traffic, limited port land and congested access to existing port facilities. These initiatives are planned and implemented by State and local governments, the relevant port authorities/corporations and related industry stakeholders—such as rail and trucking operators. The Australian Government supports their work in this critical area of freight logistics.

The PIT would specifically provide for the loading/unloading of containers from rail wagons to road vehicles or onto a hardstand area. Container storage areas for both full and empty containers adjacent to the intermodal sidings with road access for direct transhipment and collection of stored containers would be provided.

5.3 Suitability of the site

Parkes is logically and suitably situated to support a national intermodal terminal. 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 Sydney, Adelaide and Perth. These routes are experiencing a high growth rate as an Australian freight corridor and Parkes has the opportunity of becoming the hub of Australian freight movements.

Parkes is also the easternmost point on the east-west rail corridor that allows for high stacking of rail wagons and the assemblage of long trains. To the east of Parkes, constraints such as steep topography, tight curves, tunnels and bridges, and the freight curfew in the metropolitan regions are encountered (PSC, 2002). In addition, the proposed site would take advantage of the existing and any future upgrades, such as those mentioned in the AusLink White Paper, to the national road and rail transport infrastructure.

Broadly, Parkes can offer trip times to capital cities by road and rail as follows:

Table 5.1 Trip times to capital cities from Parkes

City	Rail (hours)	Road (hours)
Sydney	8-9	6
Melbourne	10-12	9
Brisbane	21/14*	12
Adelaide	16	12
Perth	62	50

* Note: Brisbane by rail in 14 hours requires completion of the proposed standard gauge line from Moree to Brisbane. The current rail route is via Dubbo, Ulan, Maitland and then the North Coast Line.

5.3.1 Summary

With predicted increases in freight haulage within Australia, an intermodal terminal in Parkes would provide an efficient multimodal freight logistics solution for the storage, handling and distribution of freight to key destinations throughout Australia. Parkes is a suitable location for this facility due to its unique position at the intersection of the north-south and east-west Australian inland freight corridors.

5.4 Alternatives to the proposal

Terminals Australia has been focussed on the development of the PIT for several years. The proponent has been working closely with the key stakeholders during this period to accommodate this PIT within the Industrial Hub Zone. No other locational alternatives have been identified or considered.

5.5 Objectives and benefits of the proposal

The objectives and benefits of the PIT are to:

- Provide a facility to reconfigure, cross-load, maintain and service ‘super-freighter’ trains of up to 1800m length without having to split the train into smaller ‘rakes’ due to siding length or loading/unloading constraints;
- Provide a major national inland terminal capable of handling the predicted growth in rail mode share with access to either the Main Western rail line or the proposed Inland Rail Corridor that can be developed progressively as required without operational compromise or hindrance; and
- Provide the basis for industries associated with freight assembly, distribution, multi-modal transfer, warehousing and trans-shipment with bonded stores in the terminal which would allow freight movements directly to and from ships under bond to the intermodal rail terminal or warehousing and distribution facility, thus avoiding delays at the wharves.

6. The proposal

6.1 Overview

The specific requirements for the PIT are to provide the following:

- A full range of best practice container handling, storage, warehousing, and logistics facilities. The handling and storage requirements for the PIT shall be capable of handling an annual throughput of 240,000 TEU (Twenty foot Equivalent Units) of bulk (containerised) goods and materials at an Initial Stage of operation by 2010, and 530,000 TEU of bulk (containerised) goods and materials at an Ultimate Stage of operation by 2020;
- A minimum two intermodal sidings capable of stabling an 1800m long train as a single configuration without the requirement to split into shorter lengths for loading/unloading operations;
- A Gantry crane over the intermodal rail sidings for the loading/unloading of containers from rail wagons to road vehicles or onto a hardstand area;
- An Administration building and terminal plant maintenance centre (for maintenance of container handling machinery e.g. gantries, reach stackers, fork lift trucks);
- Warehousing and distribution facilities on the southern side of the site, fronting Brolgan Road, approximately 100m from the intermodal sidings and container storage area, with 'back door' access to these;
- Provide a master siding creating a 'Y-link' between the Main Western rail line and the Parkes-Narromine rail line, and the provision of a passing/crossing loop on the Parkes-Narromine rail line;
- Container storage areas for both full and empty containers adjacent to the intermodal sidings with road access for direct transhipment and collection of stored containers;
- Provide a locomotive servicing centre for the refuelling and sanding of locomotives;
- Provide a heavy engineering/rollingstock maintenance centre, including independent rail sidings from either the master siding or intermodal sidings and road access;
- Wagon storage sidings for the stabling and inspection of wagons (potentially seasonal grain wagons), with its location being sufficient distance away from the main operations of the PIT providing road access for maintenance vehicles;
- Provide a temporary fuel storage and distribution centre capable of handling and storage of fuel containers that are specifically designed to standard 20-foot container dimensions, and are to arrive full at the PIT via dedicated rail siding off the master siding or intermodal sidings. These containers are then

either transhipped directly to road vehicle or to a hardstand area for storage. This facility would be sufficient distance away from the main operations of the rail terminal for safety purposes and with road access provided; and

» Provide public utilities and services including water, electricity, gas, sewer, and telecommunications.

6.2 Key features of the proposed development

The facilities and associated infrastructure would be progressively delivered on the site based on market demand, and the organic growth of the facilities due to increase in market share, which would lead to an increase in throughput.

Two time horizons were set by Terminals Australia to determine the infrastructure requirements based on the predicted throughput of the terminal. These horizons were:

» Initial Stage: Initial facilities and associated infrastructure to be delivered over a five year period from project initiation with an estimated throughput of approximately 240,000 TEU at the end of this period; and

» Ultimate Stage: Remaining facilities and associated infrastructure to be delivered during years 10-15 of the project with an estimated throughput of approximately 530,000 TEU at the end of this horizon.

The facilities and infrastructure required to support the development of the site to handle the estimated throughput of approximately 240,000 TEU per annum at the Initial Stage are summarised below.

Table 6.1 Initial Stage works

Facility	Required Infrastructure	Description
Master Siding	Connecting Main Western rail line with Parkes-Narromine rail line	Approximately 4,500 m of rail infrastructure including earthworks, drainage, track, signalling, 1 new level crossing at Brolgan Rd.
Mainline Siding	Parkes - Narromine Line Mainline Siding	Approximately 2,300 m of rail infrastructure including earthworks, drainage, track, signalling.
Intermodal Terminal Facility	Two Intermodal Terminal Sidings	Approximately 5,600 m of rail infrastructure including earthworks, drainage, track (including rail connections). Rail connections to mainline and master siding require signalling.
	Hardstand	14 Hectares of container storage area including earthworks, drainage, unsealed pavement, lighting.
	Road Infrastructure	Approximately 4,500 m of road infrastructure including earthworks, sealed pavement, kerb & gutter, lighting, including connections to Brolgan Rd, (incl. intersection works) for terminal roads, gantry road, access road for terminal admin office & maintenance facility.
	Buildings	Administration office (with carpark) & plant maintenance facility with fuel tank (includes on site first flush systems and roofwater tanks).
Warehousing Facilities	Approximately 2,700m access roads (including intersections)^	Two access roads to Brolgan Rd (incl. intersection) and access road to intermodal terminal for heavy vehicles including earthworks, sealed pavement, kerb and gutter, lighting. Based on Initial Stage and Ultimate Stage warehousing. If 'potential additional warehousing' provided, approximately 1,800 m of additional roads and intersections; and approximately 1,100m of underground stormwater reticulation required.
	Warehousing	User Specified. Warehousing and offices to include roofwater tanks and first flush systems.
General Utilities/ Services	Stormwater Reticulation System	Approximately 4,450m of underground stormwater reticulation system; expand 2 existing dams to become on site detention basins (OSD 1 & OSD 2); drainage culvert across Brolgan Rd; drainage culvert across Main Western rail line.
	Electricity	Extend existing 11kV overhead supply to site.
	Sewer	Install bio-cycle waste water system such as the Kelair Blivet system due to minimal initial requirements.

	Town Water	Town water to be provided to site. Initial Stage facilities to include roofwater tanks and recycling for use as non-potable water for the facility.
	Gas	Liaise with service provider to enter into agreement to provide gas main from existing services at the Initial Stage.
	Telecommunications	Extend existing ISDN services to the site (not suitable for broadband).

The facilities and infrastructure required to support the development of the site to handle the estimated throughput of approximately 530,000 TEU per annum at the Ultimate Stage is presented below.

Table 6.2 Ultimate Stage works

Facility	Required Infrastructure	Description
Intermodal Terminal Facility	Two rail sidings	Approximately 4,700 m of rail infrastructure including earthworks, drainage, track, 2 new internal level crossings.
	Hardstand	10 Hectares of earthworks, sealed pavement, and lighting. Retrofit 14 Hectares of sealed pavement (from Initial Stage development).
	Access roads	Approximately 4,500 m of earthworks, sealed pavement, kerb & gutter, and lighting for Terminal and gantry roads for heavy vehicles.
	Stormwater reticulation	Approximately 1,500m underground stormwater reticulation system and approximately 500m above ground reticulation system.
Train Refuelling & Sanding Facility	One rail siding	Approximately 250m rail infrastructure including earthworks, track and connections.
	Warehouse ('Shed')	Shed over rail siding with fuel tank and sand storage on site, including carpark. Shed to have roofwater tanks and first flush system.
	Stormwater reticulation	Approximately 100 m underground stormwater reticulation system.
	Access road	Approximately 350m access roads including earthworks, sealed pavement, kerb & gutter, and lighting for heavy vehicles.
Containerised Fuel Storage Facility	Two rail sidings	Approximately 2,000 m of rail infrastructure including earthworks, drainage, track and connections.
	1,850 m of access	Access road to facility for heavy vehicles including

Facility	Required Infrastructure	Description
	roads* * Includes northern access road plus new intersection at Condobolin Road.	earthworks, sealed pavement, kerb and gutter, lighting and intersection works at Condobolin Road. Northern access road includes road over rail bridge at Parkes-Narromine rail line and an at grade level crossing with Master Siding.
Containerised Fuel Storage Facility (cont.)	Hardstand	Three Hectares of earthworks and sealed pavement including kerb and gutter for bunding (lighting to be confirmed).
	Offices with carpark	User Specified. Office to include roofwater tanks and first flush systems.
	Stormwater reticulation	Approximately 1,600m underground stormwater reticulation system and approximately 1,000m above ground reticulation system.
Warehousing Facilities	Approximately 2,700m access roads (including intersections)^	Two access roads to Brolgan Rd (incl. intersection) and access road to intermodal terminal for heavy vehicles including earthworks, sealed pavement, kerb and gutter, lighting. ^Based on Initial Stage and Ultimate Stage warehousing. If 'potential additional warehousing' provided, approximately 1,800 m of additional roads and intersections; and approximately 1,100m of underground stormwater reticulation required.
	Warehousing	User Specified. Warehousing and offices to include roofwater tanks and first flush systems.
Heavy Engineering Facility	Four rail sidings	3,500 m of rail infrastructure including, earthworks, track and connections.
	Approximately 500m access roads	Approximately 500 m of earthworks, sealed pavements, kerb & gutter, lighting for heavy vehicles.
	Warehouse including office and carpark	User Specified. Warehousing and offices to include roofwater tanks and first flush systems.
	Approximately 600m stormwater reticulation	Approximately 500m underground stormwater reticulation system and approximately 100m above ground reticulation system.
Wagon Storage Facility	Four rail sidings	Approximately 3,200 m^ (incl. optional 900m extensions) of rail infrastructure including, earthworks, track and connections. ^ Approximately 1,900 m excluding 900m extensions.
	Approximately 2,600m stormwater reticulation	Approximately 1,100m underground stormwater reticulation system and approximately 1,500m above ground reticulation system.

Facility	Required Infrastructure	Description
	Approximately 1,200m access road ^^	Approximately 1,200 m of earthworks, sealed pavements, kerb & gutter, lighting for heavy vehicles. ^^Excludes trackside roads = approximately 2,500m.
General Utilities/ Services	Electricity	Provide new overhead supply to site to satisfy demand requirements with connections to existing and new facilities.
	Sewer	Liaise with Parkes Shire Council to have the town sewer connected (will require pumping back to existing terminus across rail line) with connections to existing and new facilities.
	Town Water	Adopt rainwater harvesting in conjunction with town water on all new facilities to reduce the demand for non-potable and irrigation uses.
	Gas	Gas main to have capacity to provide demand at Ultimate Stage with connections to new facilities.
	Telecommunications	Discuss installation of fibre optic cable with service provider, and investigate the feasibility to upgrade when demand requires, with connections to existing and new facilities.

The Concept Layout Plan at Initial Stage and Concept Layout Plan at Ultimate Stage are shown in Figure 6-1 and Figure 6-2 respectively. Although the Concept Layout Plan (Figure 6-2) currently provides for a total of 26 hectares the proponent notes that the site has the potential to support approximately 60 hectares of warehousing should market demand warrant. Appropriate planning processes would be followed at the time should this expanded scenario come to fruition.

Artist impressions of the PIT are shown from Figure 6-3 to Figure 6-7.

FIGURE 6-1 : CONCEPT LAYOUT PLAN AT INITIAL STAGE

PRELIMINARY

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Scale	1-5000	DO NOT SCALE	
Drawn	CT	Designed	CC
Drafting Check	CC	Design Check	KT
Approved	D ROBERTS		
Date	18/01/06		

This Drawing must not be used for Construction unless signed as Approved

Client: TERMINALS AUSTRALIA PTY LTD
Project: PARKES INTERMODAL TERMINAL
Title: CONCEPT LAYOUT PLAN AT INITIAL STAGE ONLY

Original Size: A0
Drawing No: 21-13701-R020A (Fig.6-1)
Rev: A

EXISTING LEVEL CROSSING WITH TYPE 'F' SIGNALS TO BE UPGRADED TO INCLUDE ADVANCED WARNING

TO NARROMINE

NEW INTERSECTION TO RTA SPECIFICATIONS

MR61 (CONDOBOLIN ROAD)

GRADE SEPARATED CROSSING

PROPOSED NORTHERN ACCESS ROAD

98
DP750179

PROPOSED MASTER SIDING

PROPOSED PROTECTED LEVEL CROSSING AT GRADE

SITE BOUNDARY

4 x 500-800m WAGON STORAGE SIDINGS WITH OPTIONAL MIN. 900m EXTENSIONS (---)

TRAIN REFUELLING & SANDING FACILITY AREA = 0.5ha.

HEAVY ENGINEERING FACILITY
AREA = 2.5ha
4 x 600m SIDINGS

6
DP857631

EXISTING RAIL LINE

CONTAINERISED FUEL STORAGE FACILITY
AREA = 3.5ha (700m x 50m)
2 x 800m SIDINGS

PROPOSED SIDING

PROPOSED LANDSCAPING

18
DP658361

INTERMODAL TERMINAL CONTAINER STORAGE
ULTIMATE STAGE = 10ha

INTERMODAL TERMINAL SIDINGS
4 x 1800m AT ULTIMATE STAGE

GANTRY RAILS

POTENTIAL ADDITIONAL WAREHOUSING
AREA = 12ha

INITIAL WAREHOUSING AREA = 2ha

ULTIMATE WAREHOUSING AREA = 3ha

BROLGAN ROAD 40.235 WIDE

BROLGAN ROAD TO BE UPGRADED FROM PROPOSED LEVEL CROSSING TO WEST LIME ROAD FOR HEAVY VEHICLES

EXISTING LEVEL CROSSING TO BE UPGRADED TO TYPE 'F' SIGNALS WITH BOOMS AND WIDENED

RESTRICTED ACCESS BY AUTHORISED VEHICLES ONLY

MULTIPLE SITE ACCESS AT BROLGAN ROAD AS REQUIRED FOR EACH WAREHOUSE FACILITY & TERMINAL ADMIN OFFICE/MAINTENANCE FACILITY

TERMINAL ADMINISTRATION OFFICE (INCL. PARKING)
AREA = 0.5ha

TERMINAL PLANT REFUELLING & MAINTENANCE FACILITY
AREA = 0.5ha

EXPAND EXISTING DAM FOR ON SITE DETENTION #1 (OSD#1)

PROPOSED LEVEL CROSSING AT GRADE WITH TYPE 'F' SIGNALS WITH BOOMS

DRAINAGE CULVERT UNDER BROLGAN ROAD

IRON SHEARING SHED

OVERFLOW PIPE FROM OSD#1 TO OSD#2

30.175 WIDE

COOPERS ROAD

200
DP627302

PROPOSED EASEMENT

EXPAND EXISTING DAM FOR ON SITE DETENTION #2 (OSD#2)

OVERFLOW PIPE FROM OSD#2 TO GOOBANG CREEK

TO BROKEN HILL

EXISTING RAIL LINE

30.175 WIDE

DRAINAGE CULVERT OR BORED PIPE UNDER RAIL LINE

OVERFLOW PIPE TO GOOBANG CREEK

TO PARKES

BROLGAN ROAD

ORANGE BROKEN HILL RAILWAY

NOTE:
STORMWATER DRAINAGE CONCEPT OMITTED FOR CLARITY.
REFER TO DRAWING No.21-13701-R0200 REV. A FOR DETAILS

FIGURE 6-2 : CONCEPT LAYOUT PLAN AT ULTIMATE STAGE

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Drafting Check	CC	Design Check	KT
Approved	D ROBERTS		
Date	18/01/06		

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Client: **TERMINALS AUSTRALIA PTY LTD**
Project: **PARKES INTERMODAL TERMINAL**
Title: **CONCEPT LAYOUT PLAN AT ULTIMATE STAGE**

Original Size: **A0** | Drawing No: **21-13701-R020** | Rev: **A**

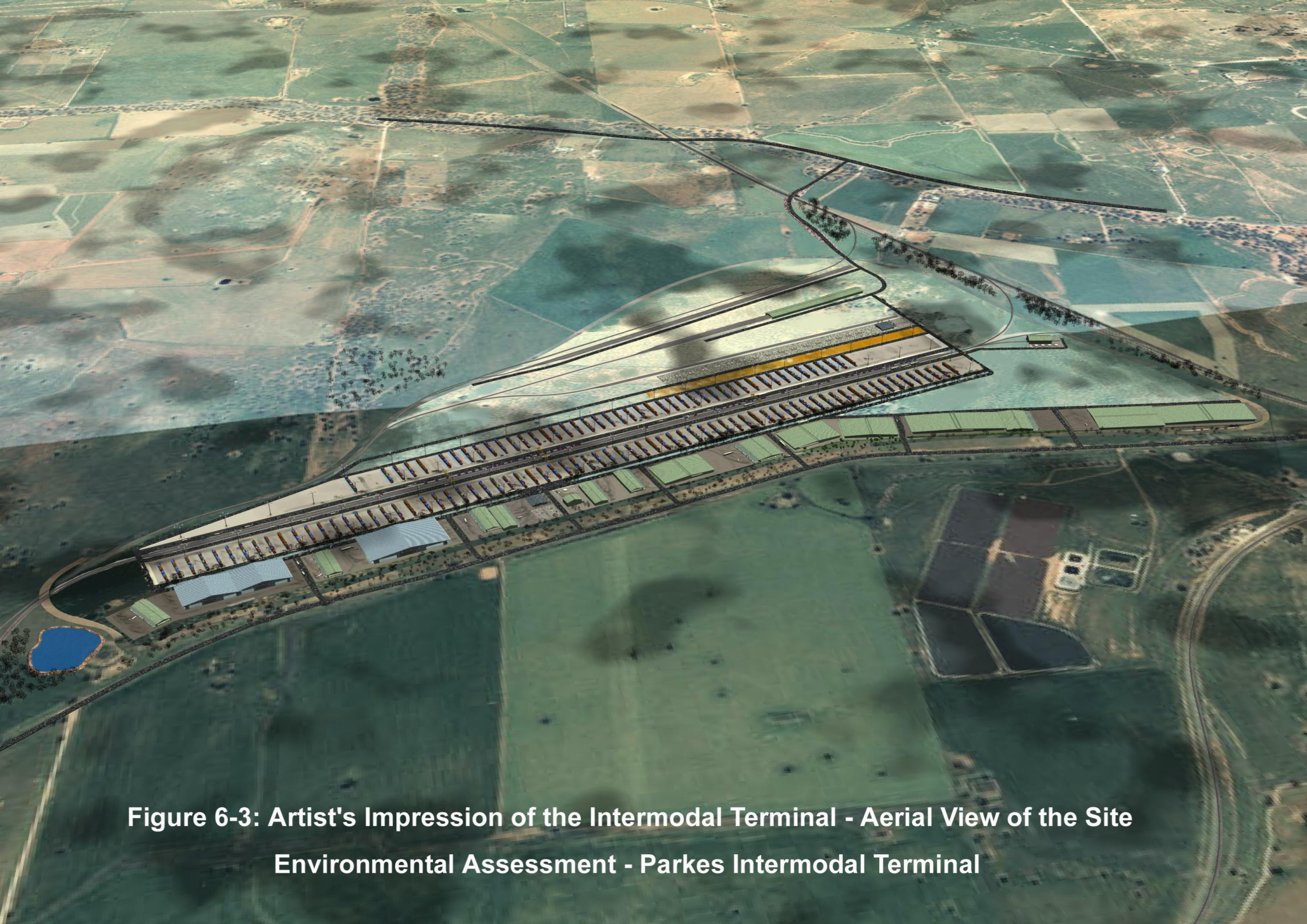

Figure 6-3: Artist's Impression of the Intermodal Terminal - Aerial View of the Site

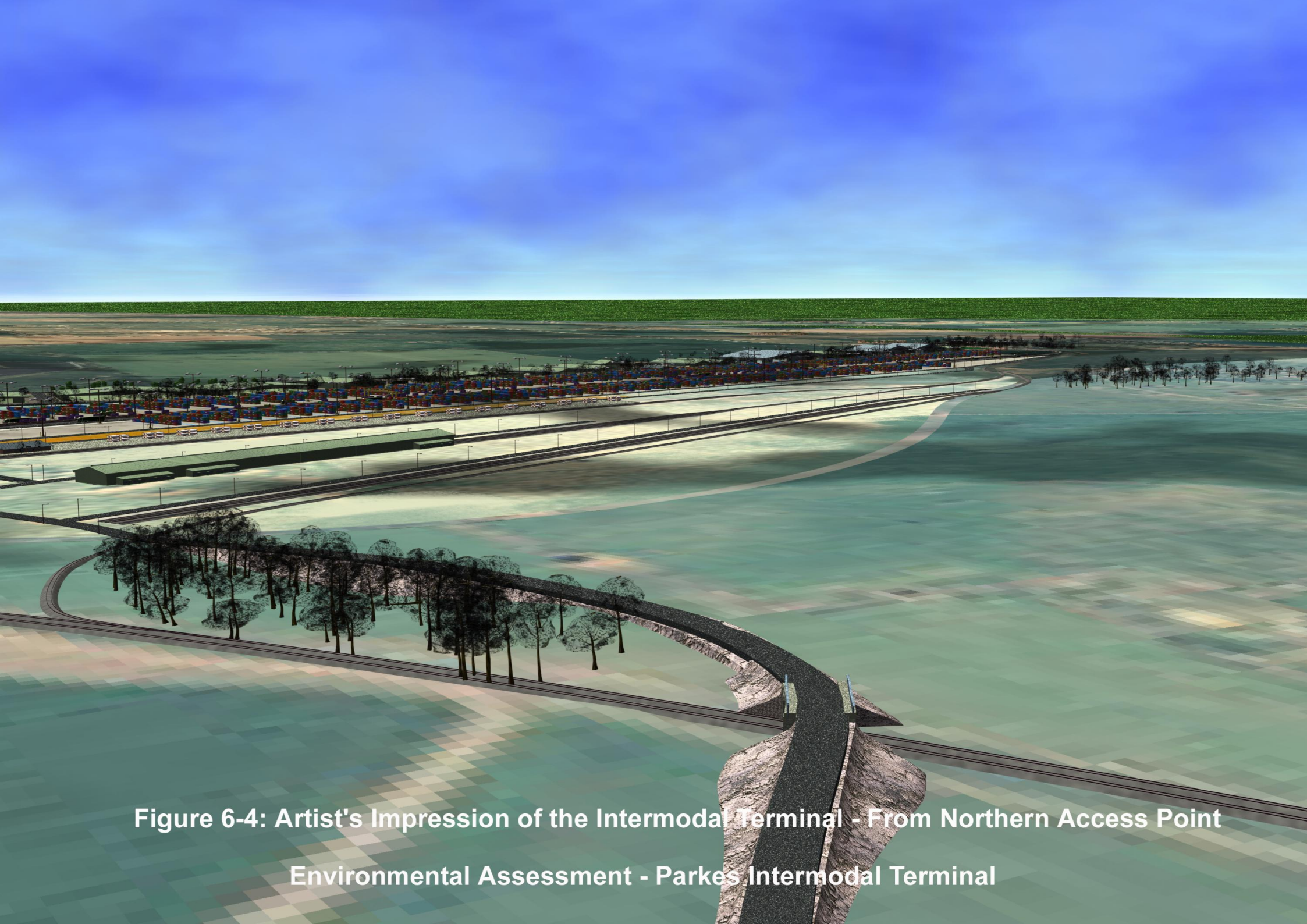

Figure 6-4: Artist's Impression of the Intermodal Terminal - From Northern Access Point

Figure 6-5: Artist's Impression of the Intermodal Terminal - Looking West over the Containers

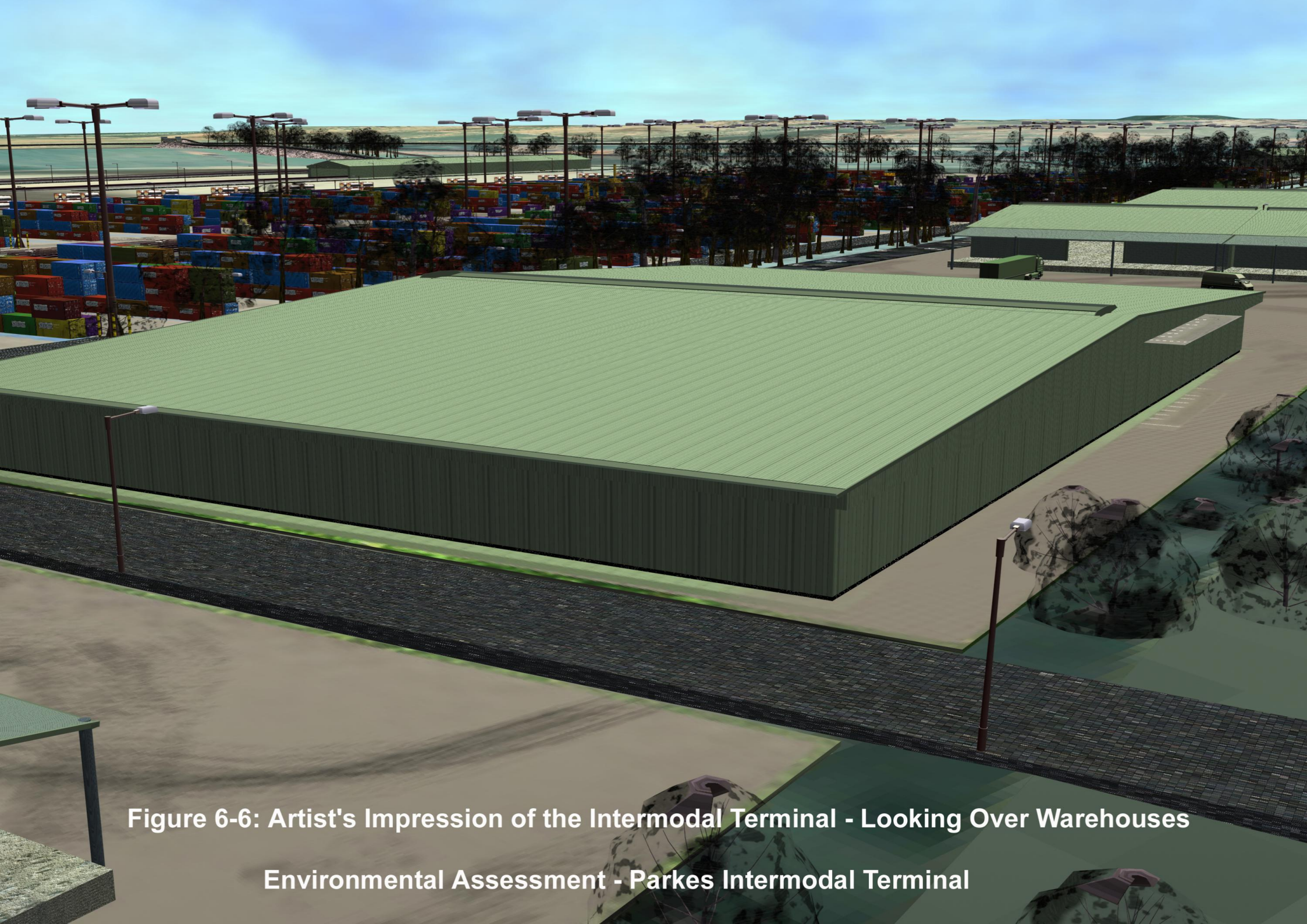

Figure 6-6: Artist's Impression of the Intermodal Terminal - Looking Over Warehouses

Figure 6-7: Artist's Impression of the Maintenance Facility at the Intermodal Terminal