

ST MARYS INTERMODAL FREIGHT TERMINAL

PRELIMINARY ENVIRONMENTAL ASSESSMENT

PREPARED FOR:
PACIFIC NATIONAL

SEPTEMBER 2018

PREPARED IN PARTNERSHIP WITH:

urbanco



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PLANNING FREIGHT FRIENDLY CITIES + REGIONS

ST MARYS INTERMODAL FREIGHT TERMINAL

PRELIMINARY ENVIRONMENTAL ASSESSMENT

SEPTEMBER 2018

ISSUE 1H: FOR LODGEMENT WITH NSW DPE

Prepared for: **PACIFIC NATIONAL**

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EXECUTIVE SUMMARY

SITE planning + design, Urbanco and BG&E have been engaged by Pacific National Pty Ltd to prepare the following Preliminary Environmental Assessment (PEA) and subsequent documents required to secure the necessary approvals to facilitate the development of Lot 2 Forrester Road, Lots 3 Lee Holm Road and Lot 196 Christie Street, St Marys (the ‘subject site’) for an Intermodal Freight Terminal.

This document constitutes a PEA to support a request for Secretary’s Environmental Assessment Requirements (SEARs) to enable the preparation of an Environmental Impact Statement (EIS) to accompany a development application for the St Marys Intermodal Freight Terminal (the ‘proposed development’) under Part 4, Division 4.7 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The proposed development includes the staged construction and operation of an intermodal (road and rail) terminal and container park with an operating capacity of 300,000 twenty-foot equivalent units (TEU) (shipping containers) annual throughput.



“Develop a ‘best practice’ intermodal freight terminal at St Marys in Western Sydney to facilitate freight mode-shift, reduce road congestion and support supply-chain efficiency and productivity.”

The subject site, the subject of this PEA, is described as:

- Lot 2 Forrester Road, St Marys on DP 876781;
- Lot 3 Lee Holm Road on Deposited Plan 876781; and
- Lot 196 Christie Street on Deposited Plan 31912 (comprising the rail siding);

comprising a 9.9ha portion (the ‘subject site’) of the broader 43ha site (the ‘broader site’).

The broader site enjoys direct frontage to Christie Street, Forrester Road and Lee Holm Road, all of which are gazetted public roads under the control and management of the City of Penrith and connect the site to the regional and state freight road network.

The St Marys Intermodal Freight Terminal is proposed to operate up to 24 hours per day, 7 days per week, with 80% of the heavy vehicle movements expected to occur between 5am and 10pm, 7 days a week.



The proposed development will facilitate the introduction of a new container rail shuttle between Port Botany and greater western Sydney, increasing the volume of import and export freight moved via rail and relieving the regional and state road network of heavy vehicle and container traffic, including primary freight roads servicing Port Botany.

The proposed development includes the following works:

- Upgrading the rail infrastructure sidings for loading and unloading of trains, with access via the existing Dunheved Railway spur line traversing the site from the Great Western Railway line;
- Construction of hardstand areas for container storage and laydown, rail and vehicle loading and unloading areas;
- Construction of new internal access roads providing separate ingress and egress for light and heavy vehicles as follows:
 - to/from Lee Holm Road for heavy vehicles; and
 - to/from Forrester Road for light vehicles;
- Construction of:
 - Wash bay;
 - Office building;
 - Fuel storage area;
 - Container shed (repair bay);
 - Transport shed;
 - Staff and visitor light vehicle parking bays (parallel to the internal light vehicle access road connecting to Forrester Road); and
 - Heavy vehicle parking bays;
- Ancillary development includes:
 - Signage and landscaping;
 - Utility services to support the proposed development including drainage, potable water, water (for firefighting purposes), power, data, security and sewerage;
 - Minor realignment of a section of the Sydney Trains high voltage overhead power line at the southern end of the subject site;
 - Stormwater detention basin with bio-retention;
 - Minor clearing of areas of vegetation regrowth, remediation (if required) and minor earthworks; and
 - Electrical transformer.

Refer to **Plan 1 - Concept Design Version D Phase 1 and 2 - General Arrangement**, at the rear of this document.

The proposal aligns with, and supports, the Local and State Government's strategic intent and objectives as outlined in the:

- Greater Sydney Region Plan;
- Western Sydney Region Plan;
- Future Transport Strategy 2056;



- Penrith City Strategy;
- 2013 NSW Freight and Ports Strategy; and
- 2017 NSW Draft Freight and Ports Plan;

amongst others, and once operational the facility will play an essential role in growing the volume of freight movements by rail, which in turn assists in alleviating road congestion and heavy vehicle movements on the regional and state road networks, particularly primary freight roads servicing Port Botany.

The proposed development is consistent with the State Government's commitment and policy objectives relating to the Port Botany expansion and achieving an ultimate throughput of 7,500,000 TEU's annually.

Stage 1 of the St Marys Intermodal Freight Terminal is expected to:

- **Support an operating capacity of 300,000 TEU annual throughput;**
- **Support local employment through the creation of 133 new full time equivalent (FTE) jobs during operation and 60 FTE jobs during construction; and**
- **Remove 50,000 to 60,000 heavy vehicles from the regional and state road networks, including primary freight routes servicing Port Botany.**

The proposed St Marys Intermodal Freight Terminal and associated port container rail shuttle will result in a significant reduction in the road-based container transport in favour of rail, with local traffic impacts able to be managed on the existing adjoining road network. Noise and air quality impacts can be managed in a coordinated way across the site through appropriate design consideration and mitigation measures. Likewise, stormwater management and quality will adopt water sensitive urban design measures with consideration for rainwater harvesting and re-use.

The scope of development proposed by this PEA, is largely identical to the development outlined in the previous PEA lodged by TPG Town Planning and Urban Design in September 2015, with the exception of design refinements informed by a previous SEARs (Ref SS 15-7308) (issued on 23 October 2015) and the operational requirements of the prospective terminal operator. Refer to **Section 4 Proposal Description**.



In accordance with Section 4.36 of the EP&A Act, the proposed development is declared State Significant Development under the provisions of Schedule 1, Clause 19(1b) of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) as it is Development that has a capital investment value of more than \$30 million for the following purposes: (b) railway freight terminals, sidings and inter-modal facilities. On that basis an Environmental Impact Statement (EIS) is required, with the Sydney Western City Planning Panel being the consent authority on behalf of the Minister.

The following PEA provides an overview of anticipated environmental considerations for the purpose of requesting SEARs, as issued by the Secretary of the Department of Planning and Environment to inform the preparation of an EIS under clause 3 of Schedule 2 of the Environmental Planning and Assessment Regulations 2000.

Based on preliminary investigations and in consideration of the matters raised in the SEARs (issued in 2015), it is considered that there are no major environmental constraints that would preclude granting planning approval to the proposed development.

Preparation of the EIS and associated technical specialist studies for the proposed development will entail a detailed environmental assessment to support the preparation of Conditions of Approval and the Statement of Commitments. As per the 2015 SEARs technical reports required to support an EIS are likely to include:

- Strategic and statutory planning framework and context;
- Air quality;
- Traffic and transport, including rail;
- Soil, contamination and water;
- Heritage (Aboriginal and non-indigenous);
- Visual amenity, design and landscaping;
- Flooding;
- Biodiversity;
- Waste;
- Hazards and risks; and
- Property and infrastructure.

The results of the environmental assessment and the design of the proposed development will be subject to key stakeholder consultation during the preparation of the EIS and public exhibition periods, including but not limited to:

- Local, State or Commonwealth government authorities, including:
 - Environment Protection Authority;
 - Office of Environment and Heritage;
 - Transport for NSW;
 - Roads and Maritime Services;
 - Sydney Trains;



- Department of Primary Industries (Water);
- NSW Rural Fire Service;
- NSW Health;
- NSW Ports;
- Penrith City Council; and
- Blacktown City Council.
- Service and infrastructure providers, including:
 - Australian Rail Track Corporation;
 - Sydney Water Corporation;
 - Endeavour Energy;
 - Jemena;
 - Telstra; and
 - AGL Upstream Investments Pty Ltd.
- Specialist interest groups, including Local Aboriginal Land Councils; and
- The public, including community groups and adjoining and affected landowners.



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1. CAPITAL INVESTMENT VALUE	
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1. INTRODUCTION

Pacific National Pty Ltd (the ‘Applicant’) propose to redevelop 9.9ha of ‘General Industrial’ zoned land under the Penrith Local Environment Plan 2010 (Penrith LEP 2010) at Lee Holm and Forrester Roads, St Mary’s (the ‘subject site’) for the development of the St Marys Intermodal Freight Terminal (the ‘proposed development’). The subject site forms part of a broader 43ha land area (the ‘broader site’) owned by Pacific National Properties Operations Pty Ltd and Pacific National (NSW) Pty Ltd. Refer to **Figure 1 – Local Context Plan** and **Figure 2 – Aerial Site Plan**.

1.1 SITE BACKGROUND

The broader site was initially acquired by the State Rail Authority (SRA) as a site to house its Tangara train maintenance and storage facility in 1986. Initial earthworks to raise the level of the broader site commenced in 1987. However, this plan was abandoned in the late 1990s, during which time the broader site was unused. The broader site was then filled with material excavated from the Northside Sewerage Tunnel Project in 1999.

A previous designated development application (including an EIS) for the Western Sydney Rail Freight Terminal (WSRFT), was approved by the Minister of Planning in 2000 for a portion of the broader site. It is noted that this previous consent was issued to a different applicant and different landowner, both unrelated to Pacific National. The previous consent applied to a significantly larger-scale development, compared to the current proposal, and accordingly the potential environmental impacts associated with the current proposed development for the St Marys Intermodal Freight Terminal are expected to be far less significant. Further details are provided in **Section 7**.

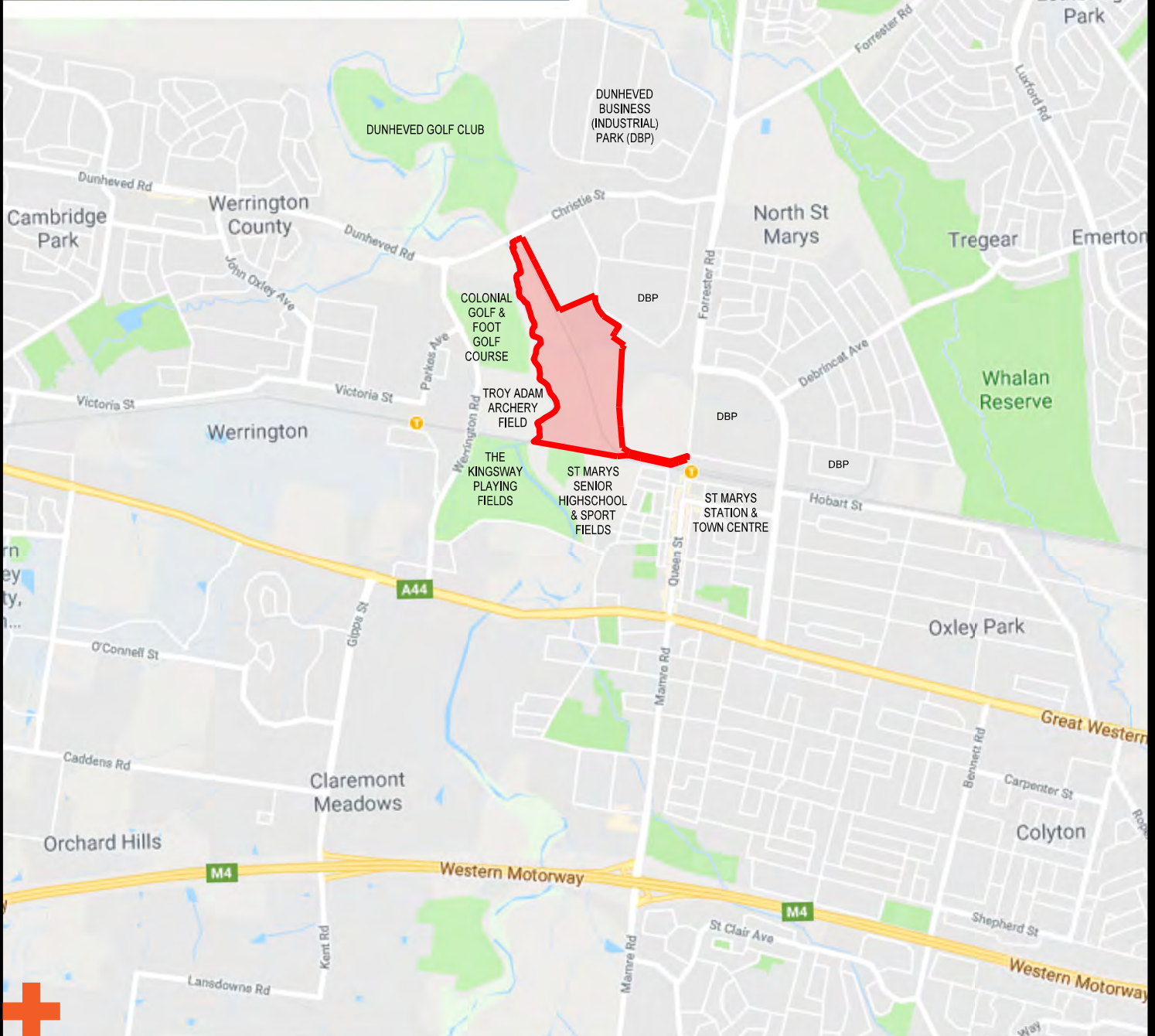
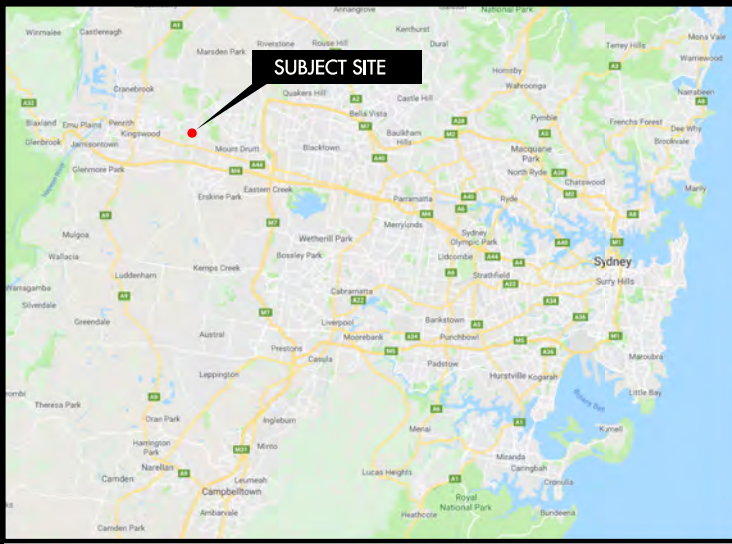
In June 2001 FreightCorp became the registered proprietor of the former SRA land, and in February 2002 Pacific National acquired the land, as per the ownership outlined in **Section 2.1**.

In December 2005, physical site works commenced in accordance with, and under, the previous development consent granted by the Minister (DA No. 170-05-2000) for the WSRFT, prior to the approval lapsing on 19 December 2005.

In October 2015 a SEARs was issued for the preparation of an EIS for the development of the subject site in a similar manner as now proposed (Ref SS 15-7308). The SEARs expired in October 2017.



FIGURE 1 LOCAL CONTEXT PLAN



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ST MARYS INTERMODAL FREIGHT TERMINAL

CLIENT : Pacific National
PLAN NO. : 17-103-5-001
REVISION : A
DATE : 31 July 2018
DRAWN : BDL
SCALE : 1:35,000@A4

LEGEND
BROADER SITE

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SITE

PLANNING + DESIGN

LOCAL CONTEXT PLAN



0 350 700 1050 1400m

FIGURE 2 AERIAL SITE PLAN



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ST MARYS INTERMODAL FREIGHT TERMINAL

CLIENT : Pacific National
PLAN NO. : 17-103-5-001

REVISION : A
DATE : 31 July 2018

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LEGEND

- BROADER SITE
- SUBJECT SITE
- LOT NUMBERS
- BOUNDARIES

SITE

PLANNING + DESIGN

AERIAL SITE PLAN



0 75 150 225 300m



1.2 PROPOSED DEVELOPMENT OVERVIEW

The 9.9ha site is proposed to be developed for the operation of the St Marys Intermodal Freight Terminal with an operational capacity of 300,000 TEU annual throughput and associated container handling operations. There is no immediate plan to develop the balance of the broader site.

The Capital Investment Value (CIV) of the proposed development is estimated to be \$33,212,000 (Refer to **Appendix 1**).

The proposed St Marys Intermodal Freight Terminal will be supported by a dedicated port rail shuttle service from Port Botany, with the road transport leg commencing at the St Marys site.

The St Marys Intermodal Freight Terminal will be operated by an independent intermodal freight forwarding organisation, with containers transported between Port Botany and St Mary's via three to four (3 to 4) 650 metre Pacific National trains per day.

Freight forwarding from St Mary's to the customer (such as those located at Marsden Park, Eastern Creek and Wetherill Park, amongst others) is estimated to generate 380 truck movements per day (i.e. 190 truck movements in and out).

80% of the heavy vehicle movements are expected to occur between the hours of 5.00am to 10.00pm, with the rail sidings and container parks operating up to 24 hours, 7 days per week.

The proposed development will form an important port link to move containers to and from Port Botany, resulting in more freight being moved by rail and relieving the regional and state road network, including primary freight routes servicing Port Botany, of heavy vehicle and container freight movements.

Key components of the proposed development are summarised as upgrades to the rail infrastructure, construction of hardstand pavement areas, internal access roads and associated external road connections, administrative and operational buildings and facilities, vehicle parking and ancillary works. The development is proposed to be constructed in two stages. Refer to **Section 4** for additional details.

1.3 PLANNING APPROVAL PATHWAY OVERVIEW

A previous development consent for a portion of the site was issued to the previous owner, NSW State Rail Authority, in 2000 (Reference DA 170-05-2000) for the Western Sydney Rail Freight Terminal (WSRFT) and minor physical works were commenced in December 2005.

A SEARs was issued for the site in October 2015 (Reference SSD 15-7308) for a development proposal largely identical to the proposed development outlined in this report (Refer to **Section 4** for details). The SEARs lapsed in October 2017.

In accordance with Section 4.36 of the Environmental Planning and Assessment Act (EP&A Act), the proposal is declared to be State Significant Development under the provisions of Schedule 1, Clause 19(1b) of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP). This is on the basis that it is Development that has a capital investment value of more than \$30 million



for the following purposes: (b) railway freight terminals, sidings and inter-modal facilities. Additional information is provided in **Section 5** of this report.

1.4 PURPOSE OF THIS REPORT

This document constitutes a Preliminary Environmental Assessment (PEA) to support a request for a Secretary's Environmental Assessment Requirements (SEARs) to inform the preparation of an Environmental Impact Statement (EIS) to accompany a development application for State Significant Development (SSD) for the St Marys Intermodal Freight Terminal.

Approval for the proposed development is sought under Part 4, Division 4.7 of the EP&A Act. The purpose of this PEA is to provide details of the proposal to the Secretary of the Department of Planning and Environment to enable the issue of SEARs under clause 3 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regs). The SEARs will form the basis of the environmental assessment to be included in a subsequent EIS.

To support the request for SEARs, this PEA provides an overview of the site and the proposed development, sets out the statutory context, and provides commentary on the likely environmental and planning issues.

1.5 APPLICANT AND CAPITAL INVESTMENT VALUE

The Applicant for the proposed development is Pacific National, Australia's largest private rail operator boasting an unrivalled freight rail and intermodal network across Australia with demonstrated national experience in freight supply chain operation, logistics delivery, property management, and a strong commitment to stakeholder engagement.

The proposed development is defined as State Significant Development by its Capital Investment Value, a threshold that is defined in Schedule 1 of the SRD SEPP.

Capital Investment Value (CIV) is defined in in Clause 3 of the EP&A Regulations as follows:

capital investment value of a development or project includes all costs necessary to establish and operate the project, including the design and construction of buildings, structures, associated infrastructure and fixed or mobile plant and equipment, other than the following costs:

- (a) amounts payable, or the cost of land dedicated or any other benefit provided, under a condition imposed under Division 7.1 or 7.2 of the Act or a planning agreement under that Division,*
- (b) costs relating to any part of the development or project that is the subject of a separate development consent or project approval,*
- (c) land costs (including any costs of marketing and selling land),*



- (d) *GST (within the meaning of A New Tax System (Goods and Services Tax) Act 1999 of the Commonwealth).*

The CIV for the proposed development has been determined by Chrysalis as approximately \$33,212,000 (AUD). A copy of the Chrysalis report confirming the CIV is included in **Appendix 1**.



2. SITE CONTEXT

2.1 LAND DETAILS

The subject site is described as:

- Lot 2 on Deposited Plan 876781 (2 Forrester Road) – owned by Pacific National (NSW) Pty Ltd; and a portion of
- Lot 3 on Deposited Plan 876781 (69 – 81 Lee Holm Road) – owned by Pacific National Properties Operations Pty Ltd; and the rail siding, which is described as
- Lot 196 on Deposited Plan 31912 (196 Christie Street) – owned by St Marys Land Ltd, leased to Pacific National (NSW) Pty Ltd. Lot 196 contains the existing rail infrastructure.

The broader site includes the above-mentioned lots, together with:

- Lot 2 on Deposited Plan 734445 (55 – 67 Lee Holm Road) – owned by Pacific National Properties Operations Pty Ltd; and
- Lot 2031 on Deposited Plan 815293 (western side / Links Road) – owned by Pacific National (NSW) Pty Ltd.

2.2 SITE DESCRIPTION

The subject site comprises approximately 9.9ha of previously developed light industrial land in the suburb of St Marys within the Penrith local government area (LGA), as indicated on **Figures 1 and 2**.

The subject site proposed to be developed for the St Marys Intermodal Freight Terminal is described as:

- Lot 2 Forrester Road, St Marys on Deposited Plan 876781;
- Lot 3 Lee Holm Road, St Marys on Deposited Plan 876781; and
- Lot 196 Christie Street, St Marys on Deposited Plan 31912.

The subject site enjoys direct frontage to Forrester Road, Lee Holm Road and Christie Street, which are gazetted public roads under the control and management of the City of Penrith and connect the site to the regional and state freight road network.

The subject site is predominantly cleared and levelled, resulting from previous development outlined in **Section 1.1**. Limited vegetation regrowth has occurred across the site, concentrated on and around stockpiled earth bunds. Vegetation is also concentrated along the banks of Little Creek.

Lot 196 contains the existing rail infrastructure, including a metal shed, below rail pits and dam, historically used for the import of material excavated from the Northside Sewerage Tunnel Project.

A number of power, telecommunication and drainage lines traverse the site. A section of the Sydney Trains high voltage overhead power line is proposed to be realigned to facilitate the development and operation of the intermodal terminal.

There is currently no immediate plan to develop the balance of the broader site.



Refer to **Figure 2 – Aerial Site Plan**.

2.3 LOCAL CONTEXT

The broader and subject sites are located within the suburb of St Marys, which comprises a mix of commercial, industrial, residential, recreation and public purpose uses.

The subject site is located in the south-eastern portion of the broader site, where the broader site is bounded by:

- Lee Holm Road, Forrester Road and the Dunheved Business (Industrial) Park to the east;
- the Great Western Railway passenger and freight rail line, the St Marys Senior High School sports fields and public recreation fields to the south;
- the St Marys passenger train station and associated multi-level car parking station and the St Marys town centre, comprising commercial, retail and car parking services and facilities, to the south east;
- a portion of the broader site (west of the rail siding), South Creek, the Colonial Golf and Footgolf Course, the Troy Adams Archery Field and areas of public recreation to the west; and
- the Dunheved Business (Industrial) Park and the Dunheved Golf Course are located to the north.

The subject site is well located and ideally suited for the development of the proposed St Marys Intermodal Freight Terminal, enjoying direct access to the Greater Western Sydney rail line, proximity to the regional and state freight road network and in consideration of the compatibility of surrounding land uses, which provide a buffer to noise sensitive residential areas further afield. Consideration of potential environmental impacts and measures for mitigation are discussed in **Section 7**.

Refer to **Figure 1 – Local Context Plan** and **Figure 2 – Aerial Site Plan**.

2.4 REGIONAL CONTEXT

The broader site is located in the suburb of St Marys, approximately 45km west of Sydney's Central Business District and 49km west of Port Botany.

The region is characterised by established and emerging areas of urban, commercial, education, recreation and industrial development and conservation reserves typical of growth areas at the edges of the Sydney metropolitan region.

The region is well served by the local, regional and state road network, including the Western Motorway (M4) and the Great Western Highway (A44), connecting the region to eastern Sydney and western regional NSW, and the Westlink (M7) connecting to southern NSW and the wider state road network.

Capitalising on the excellent access to the freight road network and availability of large greenfield sites, the region also boasts significant existing and emerging industrial areas comprising large scale freight forwarding, warehousing and distribution centres at Erskine Park, Eastern Creek, Wetherill Park, Arndell Park and Marsden Park, all of which are less than 20kms from the proposed St Marys Intermodal Freight Terminal.



St Marys is located within proximity to the north-western road gateway to Sydney and on the Great Western Railway line, providing excellent freight road and rail connections between Sydney (including Port Botany), western Sydney and regional NSW.

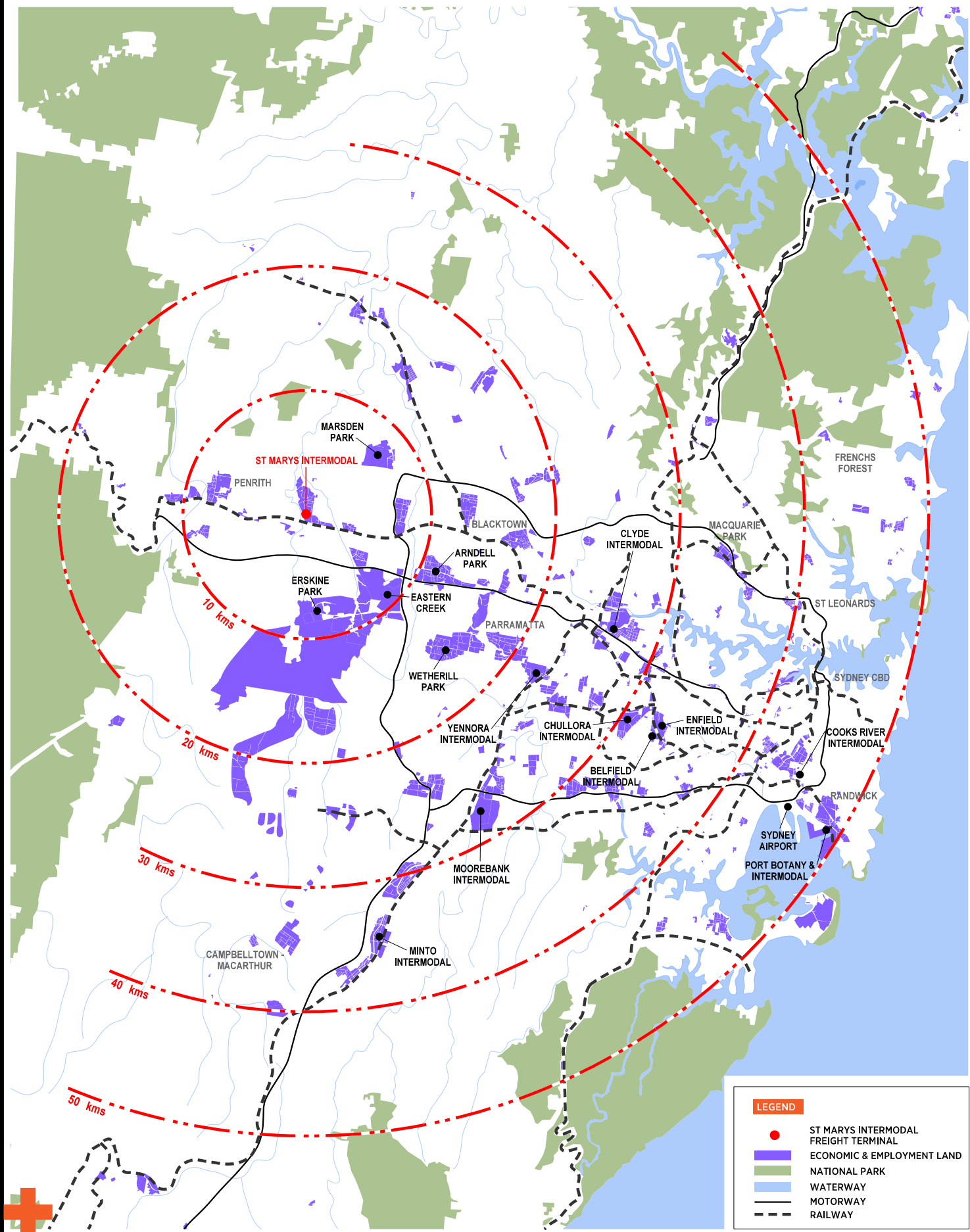
The Great Western Railway line, abutting the subject site, provides freight rail connections between Sydney, regional NSW and interstate freight rail lines connecting to South Australia, the Northern Territory and Western Australia. Following completion of the Inland Rail, the Great Western Railway will also provide a freight rail connection through Parkes to Brisbane and Melbourne.

St Marys is ideally located for the development of an intermodal freight terminal to service the established and growing region.

Refer to **Figure 3 – Regional Context Plan**.



FIGURE 3 REGIONAL CONTEXT PLAN



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ST MARYS INTERMODAL FREIGHT TERMINAL

CLIENT : Pacific National

REVISION : A

DRAWN : BDL

PLAN NO. : 17-103-5-001

DATE : 31 July 2018

SCALE : 1:400,000@A4

NOTE

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SITE

PLANNING + DESIGN

REGIONAL CONTEXT PLAN



0 4 8 12 16km



3. PROPOSAL NEED AND JUSTIFICATION

A number of key NSW State and local government strategic land use and transport planning documents cite the pressure of population growth on existing infrastructure and the environment and the need to balance those pressures with economic growth, as key drivers for change in NSW.

With the Greater Sydney population forecast to grow from 4.7 million today, to 8 million over the next 40 years, the freight network will come under increasing pressure to move and distribute imports, exports and urban freight efficiently and in a manner that minimises its impact on urban amenity and liveability.

Whilst Port Botany has recently completed a major expansion of its container facilities to cater for long-term trade growth that will follow population growth and continued exports of Australian produce and raw materials, road and rail freight networks, including intermodal terminals, will play an increasingly important role in providing an efficient and sustainable freight supply chain for Sydney and regional NSW.

With that in mind, the proposed St Marys Intermodal Freight Terminal is essential to support the forecast growth in the freight task and facilitate efficient freight movements to service western Sydney's growth areas, and in turn supports the efficient operation of Port Botany.

3.1 STRATEGIC PLANNING AND TRANSPORT FRAMEWORK

3.1.1 GREATER SYDNEY REGION PLAN – A METROPOLIS OF THREE CITIES

The Greater Sydney Region Plan envisages the growth of Greater Sydney into a metropolis of three cities, where most residents will live within 30 minutes of their jobs, education and health facilities, services and great places. It also acknowledges that the retention of industrial land close to centres and transport is critical to supporting businesses and services.

The Region Plan identifies a metropolis of three cities, described as:

- Western Parkland City
- Central River City
- Eastern Harbour City

Objective 16 of the Greater Sydney Region Plan (2018) states “The forecast increase in the movement of goods will require a freight network that can support safe, efficient and reliable journeys between centres, freight precincts, trade gateways and intermodal terminals across Greater Sydney”. St Marys is specifically identified as a ‘Metropolitan Cluster’ intermodal terminal within the Western Parkland City “that will be required by 2056” as part of the vision for the Greater Sydney freight network.

The proposed intermodal terminal directly aligns with the details specified within Objective 16 of the Greater Sydney Region Plan and contributes to achieving supply-chain efficiency and security within metropolitan Sydney.



3.1.2 WESTERN CITY DISTRICT PLAN (2018)

Consistent with the Greater Sydney Region Plan, the Western City District Plan sets out planning priorities and actions for the Western Parkland City.

Planning Priority W10 of the Western Sydney Region Plan identifies the importance of “Maximising freight and logistics opportunities and planning and managing industrial and urban services land” and reiterates objectives outlined in Objective 16 of the Greater Sydney Region Plan.

Planning Priority W10 specifically identifies St Marys as a ‘Strategic Centre’ within the ‘Western Sydney District industrial and urban services land and freight assets’ plan (Figure 18). The Proposed St Marys Intermodal Terminal is also identified on Figure 18, with recognition that the intermodal will form part of the broader freight and logistics network.

The importance of improving supply-chain efficiency forms a key priority of the Western City District Plan, including the provision of associated protected industrial and urban services land. The proposed intermodal terminal is consistent with the strategic objectives of Planning Priority W10.

3.1.3 FUTURE TRANSPORT STRATEGY 2056

The Future Transport Strategy 2056 (2018) is a long-term vision for Sydney and recognises the importance of “integrated road and rail logistic chains supported by intermodal terminals and dedicated, high performing freight pathways” required to support NSW’s future population and economy.

The Strategy acknowledges the need for integration of transport and land use planning to effectively plan collection points in proximity to centres and at network interchanges. The proposed St Marys Intermodal Freight Terminal is wholly consistent with these objectives, providing for the expansion of intermodal rail capacity in Western Sydney.

3.1.4 DRAFT NSW FREIGHT AND PORTS PLAN (2017)

The (draft) NSW Freight and Ports Plan (2017) is one of the ‘issue-specific’ plans that supports the Future Transport Strategy 2056 and seeks to update the NSW Freight and Ports Strategy (2013). The Freight and Ports Plan states that “intermodal terminals (IMTs) play a crucial role in the transport of containerised and bulk freight, facilitating improved productivity and efficiency across the network, and acting as a key enabler for increasing rail share”.

The proposed St Marys Intermodal Freight Terminal is identified within the metropolitan network plan (Figure 25) and its development forms an important part of the intermodal terminal network identified in the Freight and Ports Plan.

3.1.5 PENRITH CITY STRATEGY

The purpose of the Penrith City Strategy is to identify key issues facing the City over the next 10-20 years and outlines how Council will respond.



The Penrith City Strategy identifies St Marys as a strategic centre on the ‘Transport + Access City Strategy’ and recognises the opportunities afforded to the locality due to the presence of an accessible rail line. The proposed St Marys Intermodal Freight Terminal supports the growth of St Marys as an important centre within the City of Penrith.

The City of Penrith acknowledges the need to “improve road and rail transport connections... to support Penrith’s role as a regional hub”. The proposed intermodal terminal provides the interface between road and rail infrastructure and achieves this key objective.

3.2 PROJECT OUTCOMES

3.2.1 LOCAL ECONOMIC IMPACT

Stage 1 of the St Marys Intermodal Freight Terminal is expected to generate 133 new full time equivalent (FTE) operational jobs, comprising:

- 17 reach stacker and forklift operators;
- 100 truck drivers; and
- 16 train drivers;

creating local employment opportunities in a locality with an above average unemployment rate and supporting employment self-containment and self-sufficiency.

In turn, local employment results in greater local expenditure, supporting local business and contributing to gross regional product.

In addition to the 133 FTE operational jobs, it is estimated that the proposed development will generate 60 FTE jobs during construction.

3.2.2 FREIGHT AND TRANSPORT EFFICIENCY

Stage 1 of the St Marys Intermodal Freight Terminal will support the movement of 110,000 TEU’s annually between Port Botany and St Marys, which is equivalent to removing 50,000 to 60,000 trucks from the freight road network, including primary freight road routes servicing Port Botany.

The operation of the proposed container rail shuttle to and from Port Botany will provide significant advantages over road transport through the reduction of on-road heavy vehicles movements and associated congestion.

The benefits of a container port shuttle to St Marys Intermodal Freight Terminal include:

- **Traffic Congestion:** Currently road transport departing from Port Botany is significantly impacted by congestion on the M5 and restricted access onto the M1, with congestion on both roads anticipated to increase over coming years. A further compounding factor is that a significant portion of the beneficial freight owners request deliveries by midday. This requires truck drivers to negotiate the M5 during peak traffic periods.



- Location: The site is located in proximity to major industrial parks including Eastern Creek, Erskine Park and Wetherill Park. Delivering full containers to the site via the port shuttle will allow these industrial parks to be more easily serviced and across a wider operating window.

3.2.3 PRODUCTIVE USE OF STRATEGIC LAND AND INFRASTRUCTURE

The site is zoned for the proposed land use (permitted with consent) and is generally consistent with surrounding industrial land uses.

The site is currently available for the proposed redevelopment and will make use of existing infrastructure and utility services, where possible. A key component of the proposed development is the reuse of an existing rail spur through the site and linkage to the Great Western Railway line. Reuse of existing rail infrastructure is a key benefit, providing immediate rail access for container transportation.

In addition, the site gains direct access via the local road network to Great Western Hwy and the M4 via Forrester Road, Lee Holm Road, Christie Street, Wellington Road and Mamre Road. Ultimately, the site will gain access to the proposed Outer Sydney Orbital corridor comprising a future motorway and freight rail line, which is identified to the immediate west of the site.

3.2.4 ENVIRONMENT

A key environmental benefit of the proposed development is a reduction in heavy vehicle road transportation of containers from Port Botany. This is expected to result in improvements in air quality and lower carbon emissions by reducing heavy vehicle exhaust emissions.

Reduced traffic volumes and congestion along some of western Sydney's main arterial roads is also anticipated. Improvements in transportation efficiency and the delivery of goods in a more efficient manner would subsequently benefit end receivers and have a net positive impact on GDP.



4. PROPOSAL DESCRIPTION

The proposed development includes the staged construction, and ultimate operation, of 9.9ha of the broader site for the St Marys Intermodal Freight Terminal, comprising an intermodal (road and rail) terminal and container park with an operating capacity of 300,000 TEU annual throughput.

The proposed development will facilitate the introduction of a new container rail shuttle between Port Botany and greater western Sydney, increasing the volume of import and export freight moved via rail and relieving the regional and state road network of heavy vehicle and container traffic, including primary freight roads servicing Port Botany.

The proposed development includes the following works:

- Upgrading the rail infrastructure sidings for loading and unloading of trains, with access via the existing Dunheved Railway spur line traversing the site from the Great Western Railway line;
- Construction of hardstand areas for container storage and laydown, rail and vehicle loading and unloading areas;
- Construction of new internal access roads providing separate ingress and egress for light and heavy vehicles as follows:
 - to/from Lee Holm Road for heavy vehicles; and
 - to/from Forrester Road for light vehicles;
- Construction of:
 - Wash bay;
 - Office building;
 - Fuel storage area;
 - Container shed (repair bay);
 - Transport shed;
 - Staff and visitor light vehicle parking bays (parallel to the internal light vehicle access road connecting to Forrester Road); and
 - Heavy vehicle parking bays;
- Ancillary development includes:
 - Signage and landscaping;
 - Utility services to support the proposed development including drainage, potable water, water (for firefighting purposes), power, data, security and sewerage;
 - Minor realignment of a section of the Sydney Trains high voltage overhead power line at the southern end of the subject site;
 - Stormwater detention basin with bio-retention;
 - Minor clearing of areas of vegetation regrowth, remediation (if required) and minor earthworks; and
 - Electrical transformer.

Refer to **Plan 1 - Concept Design Version D Phase 1 and 2 - General Arrangement**, at the rear of this document.



The proposed development is largely similar to the previous PEA submitted in 2015, though the following changes should be noted:

- The addition of:
 - Wash bay;
 - Office building;
 - Fuel storage facility;
 - Container shed (repair bay);
 - Transport shed;
 - Staff and visitor parking;
 - Electrical transformer;
- The realignment of a portion of the Sydney Trains high voltage overhead power line; and
- The rail head, hardstand and access roads have a greater separation from Little Creek and its associated vegetation.

Construction is proposed to be undertaken in two stages.

The CIV for the proposed development has been determined by Chrysalis as approximately \$33,212,000 (AUD). A copy of the Chrysalis report confirming the CIV is included in Appendix 1.

Stage 1 of the St Marys Intermodal Freight Terminal is expected to generate 133 new full time equivalent (FTE) operational jobs, comprising:

- 17 reach stacker and forklift operators;
- 100 truck drivers; and
- 16 train drivers;

working across split shifts, and 60 FTE jobs during construction.

Containers will be loaded/unloaded to/from trains and heavy vehicles; and transferred to designated container storage areas by mobile container handling equipment (reach stackers and forklifts).

The St Marys Intermodal Freight Terminal will be operated by an independent intermodal freight forwarding organisation, with containers transported between Port Botany and St Mary's via three to four (3 to 4) 650 metre Pacific National trains per day.

Freight forwarding from St Mary's to the customer (such as those located at Marsden Park, Eastern Creek and Wetherill Park, amongst others) is estimated to generate approximately 380 truck movements per day (i.e. 190 truck movements in and out).

80% of the heavy vehicle movements are expected to occur between the hours of 5.00am to 10.00pm, with the rail sidings and container parks Intermodal facility operating up to 24 hours, 7 days per week.

There is no immediate plan to develop the balance of the site.



5. STATUTORY PLANNING + APPROVALS

5.1 PENRITH LOCAL ENVIRONMENTAL PLAN 2010

The principal environmental planning instrument applicable to the land is the Penrith Local Environmental Plan 2010 (Penrith LEP). Based on the information available via NSW Legislation the subject land is zoned 'IN1 General Industrial', as shown in **Figure 4**.

The objective of the IN1 General Industrial zoning under the Penrith LEP 2010 is:

- To provide a wide range of industrial and warehouse land uses.
- To encourage employment opportunities.
- To minimise any adverse effect of industry on other land uses.
- To support and protect industrial land for industrial uses.
- To promote development that makes efficient use of industrial land.
- To permit facilities that serve the daily recreation and convenience needs of the people who work in the surrounding industrial area.

The following relevant uses are Permitted with consent:

- Car parks;
- Depots;
- Flood mitigation works;
- Freight transport facilities;
- General industries;
- Industries;
- Roads;
- Signage;
- Storage premises;
- Transport depots;
- Truck depots;
- Vehicle body repair workshops;
- Vehicle repair stations;
- Warehouse or distribution centres.

The proposed inland container terminal is considered to be best defined as a 'freight transport facility' as the proposed development involves an intermodal container terminal.

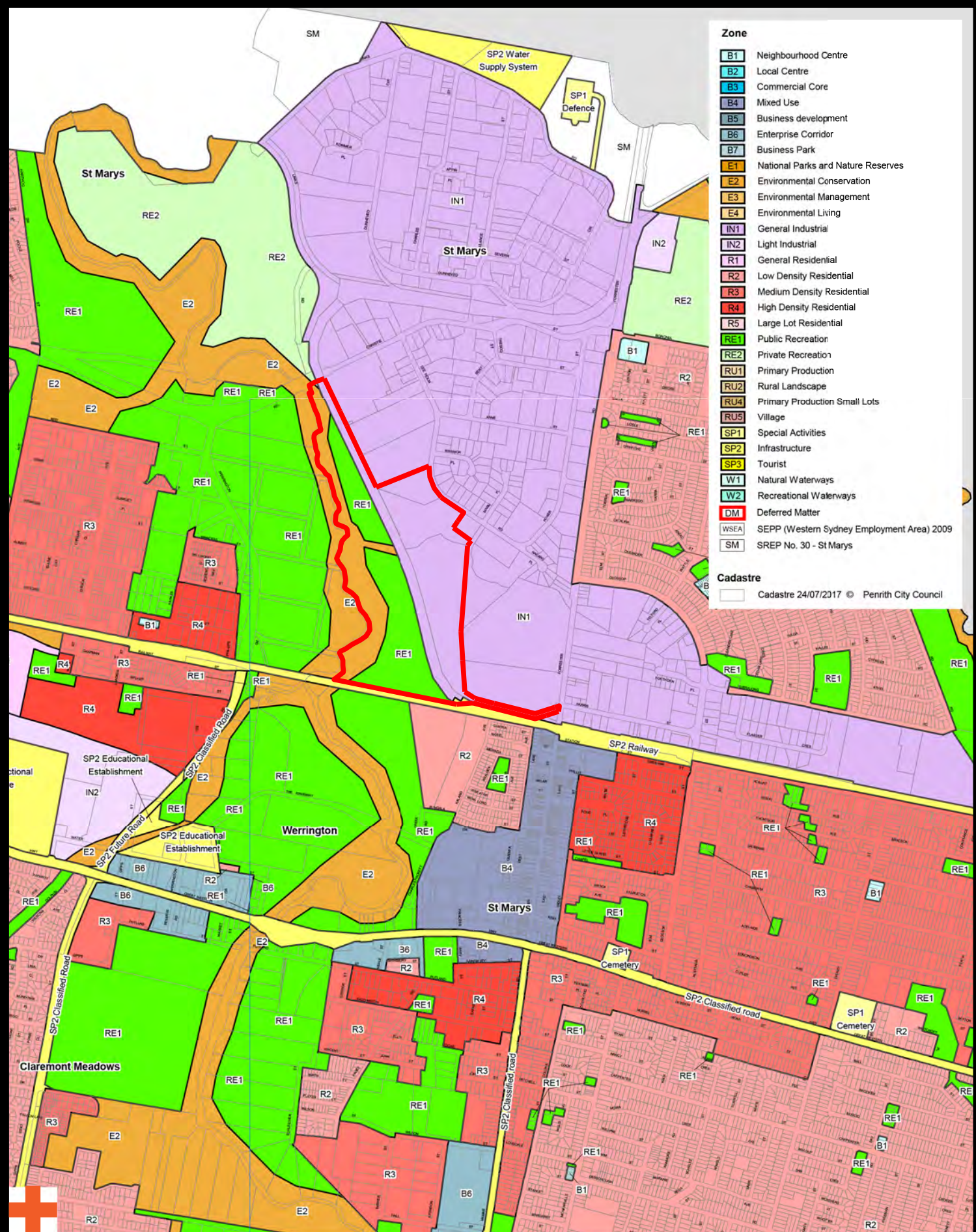
A 'freight transport facility' is defined as follows:

***Freight transport facility** means a facility used principally for the bulk handling of goods for transport by road, rail, air or sea, including any facility for the loading and unloading of vehicles, aircraft, vessels or containers used to transport those goods and for the parking, holding, servicing or repair of those vehicles, aircraft or vessels or of the engines or carriages involved.*



A 'freight transport facility' is permitted with consent within the 'IN1 General Industrial' zone under Penrith LEP 2010.

FIGURE 4 EXTRACT FROM PENRITH LEP 2010 LAND ZONING MAP



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CLIENT : Pacific National
PLAN NO. : 17-103-5-001

REVISION : A
DATE : 31 July 2018

DRAWN : BDL
SCALE : 1:20,000@A4

LEGEND
— BROADER SITE

NOTE
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0 200 400 600 800m

LOCAL ENVIRONMENTAL PLAN 2010 EXTRACT



5.2 STATE ENVIRONMENTAL PLANNING POLICY (STATE AND REGIONAL DEVELOPMENT) 2011

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) provides a list of development ‘classes’ which may be considered State Significant Development (SSD).

In accordance with Section 4.36 of the Environmental Planning and Assessment Act 1979 (EP&A Act), SSD is development that is declared to be State Significant Development under the provisions of Schedule 1 of the SRD SEPP if it:

- is, by operation of another environmental planning instrument, permissible with development consent, and
- is also included in Schedule 1 or 2 of the SRD SEPP.

Schedule 1 of the SRD SEPP identifies classes of development which are SSD. Each class includes thresholds, such as capital investment value or some other quantifiable criteria or location requirement.

Schedule 2 of the SRD SEPP lists sites which have been identified as state significant. Development that meets the relevant criteria within these sites is SSD.

Clauses 19 of the SDR SEPP states:

19. Rail and related transport facilities

- 1) Development that has a capital investment value of more than \$30 million for any of the following purposes:*
 - (a) Heavy railway lines associated with mining, extractive industries or other industry,*
 - (b) Railway freight terminals, sidings and inter-modal facilities.*
- 2) Development within a rail corridor associated with railway infrastructure that has a capital investment value of more than \$30 million for any of the following purposes:*
 - (a) Commercial premises or residential accommodation,*
 - (b) Container packing, storage or examination facilities,*
 - (c) Public transport interchanges.*

The proposed development is therefore considered to be SSD under Clause 19(1)(b) of the SRD SEPP and development consent will be sought under Part 4, Division 4.7 of the EP&A Act. An EIS and associated specialist studies will be prepared in accordance with the Environmental Planning and Assessment Regulation 2000 (Regulation).

A similar preliminary environmental assessment for SSD was previously considered by the Department of Planning and Environment in 2015 and a SEARs was issued in October 2015 (Reference: SSD 15-7308).

5.3 LEGISLATION APPLICABLE TO THE PROPOSAL

A summary of the planning and environmental legislation which is relevant to the proposed development is summarised in **Table 1**. **Table 1** also provides a summary of the relevant potential



environmental impacts of the proposed development which relate to the application of each of the identified legislation.

TABLE 1 LEGISLATION SUMMARY

LEGISLATION	POTENTIAL ASSESSMENT REQUIREMENTS
COMMONWEALTH	
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	If disturbance to any listed threatened species, ecological communities or migratory species and impact on Commonwealth land is identified, an EPBC Approval will be sought.
STATE	
Environmental Planning and Assessment Act 1979 (EP&A Act) Environmental Planning and Assessment Regulations 2000 State Environmental Planning Policy (State and Regional Development) 2011	This legislation determines the planning approval pathway for a State Significant Development (SSD) and requires an assessment of potential impacts on the environment.
Protection of the Environment Operations Act 1997 (POEO Act)	Potential site operations and impacts including air, noise emissions and discharge of polluted water. If required, an Environmental Protection Licence(s) (EPL) will be obtained for any relevant activities in Schedule 1 of the POEO Act.
Contaminated Land Management Act 1997 and State Environmental Planning Policy No. 55 Remediation of Land	Disturbance of contaminated land, if any, and potential for further soil contamination, if any.
National Parks and Wildlife Act 1974 (NPW Act)	Disturbance of any objects or places of Aboriginal heritage significance, if any. Under Section 89J of the EP&A Act development applications assessed as SSD do not require an Aboriginal Heritage Impact Permit (under section 90 of the NPW Act). However, the potential presence and disturbance to any existing Aboriginal heritage at the site will be determined through an Aboriginal Cultural Heritage Assessment.
Biodiversity Conservation Act 2016	Any potential disturbance to listed threatened species and ecological communities and potential biodiversity impacts will be assessed through a Biodiversity Development Assessment Report.
Water Act 1912 Water Management Act 2000 (WM Act)	Any disturbances of groundwater aquifers impact on flooding and water quality of surrounding water bodies will be assessed. In particular, the proposed development will include an assessment of surface and groundwater flows, flooding impact and stormwater management, with reference to South Creek and Little Creek. Under Section 89J of the EP&A Act development applications assessed as SSD do not require a permit (under section 89, 90 or 91 of the WM Act).
Crown Land Act 1989	The presence of an any impact to Crown Land, including the potential for an easement or right-of-way over a Crown Reserve.
Roads Act 1993	The proposed development will require an Impact Assessment on traffic flow and works to public and private roads. Under Section 89K of the EP&A Act consent under Section 138 of the Roads Act cannot be refused if it is necessary for the carrying out of SSD authorised by a development consent. The EIS for the proposed development will consider the Roads Act with an application undertaken post determination.
Heritage Act 1977	Disturbance to any heritage listed object that is of state or local significance, if any, Under Section 89J of the EP&A Act. Development applications assessed as SSD do not require a permit (under section 139 of the Heritage Act). A Non-Indigenous Heritage Assessment for the potential impacts of the proposed development will be conducted to provide an assessment of historic heritage impacts.
Waste Avoidance and Resource Recovery Act 2001	Waste management and potential opportunities for diversion of waste from landfill. A waste Impact Assessment will be undertaken to classify and manage waste during construction and operation of the proposed development.
Rural Fires Act 1997	Assessment of bushfire risk, if any, will be included in a Hazard and Risk Assessment for the proposed development. The Act provides for bushfire management/prevention and ensuring the site is suitably protected from the threat of bushfires. Under Section 98J of the EP&A Act



	development applications assessed as SSD do not require a bush fire safety authority (under section 100B of the Rural Fires Act).
State Environmental Planning Policy (Infrastructure) 2007	Generation of traffic to be considered by the RMS in accordance with Clause 104 'Traffic generating development' and Schedule 3.
State Environmental Planning Policy No. 55 – Remediation of Land	<p>In accordance with Clause 7: Contamination and remediation are to be considered in determining a development application:</p> <p>(1) A consent authority must not consent to the carrying out of and development of land unless:</p> <p>(a) it has considered whether the land is contaminated, and</p> <p>(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and</p> <p>(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.</p> <p>A Section 149 Certificate and further investigations will identify any known or likely contamination on the site, and a Phase 1 contamination assessment of the site may be required.</p>
State Environmental Planning Policy No. 64 – Advertising and Signage	The location and design of signage and impact on the surrounding visual environment will be included in a Visual Impact Assessment for the proposed development.
Penrith Local Environment Plan 2010 (Penrith LEP) Penrith Development Control Plan 2014 (Penrith DCP)	Impact of the proposed development on the environment and the built form of the Penrith Local Government Area will be assessed.
Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River	The general planning considerations in the SREP and the strategies listed in the Action Plan of the Hawkesbury-Nepean Environmental Planning Strategy relevant to the proposed development will need to be considered.



6. CONSULTATION

To date, no formal consultation has been undertaken, however a similar SSD proposal was previously considered by the Department of Planning and Environment in 2015 and SEARs was issued in October 2015 (Reference: SSD 15-7308).

The proposed development and the results of the environmental assessment and the design of the proposed development will be subject to key stakeholder consultation throughout the preparation of the EIS and public exhibition periods, including but not limited to:

- Local, State or Commonwealth government authorities, including:
 - Environment Protection Authority;
 - Office of Environment and Heritage;
 - Transport for NSW;
 - Roads and Maritime Services;
 - Sydney Trains;
 - Department of Primary Industries (Water);
 - NSW Rural Fire Service;
 - NSW Health;
 - NSW Ports;
 - Penrith City Council; and
 - Blacktown City Council.
- Service and infrastructure providers, including:
 - Australian Rail Track Corporation;
 - Sydney Water Corporation;
 - Endeavour Energy;
 - Jemena;
 - Telstra; and
 - AGL Upstream Investments Pty Ltd.
- Specialist interest groups, including Local Aboriginal Land Councils; and
- The public, including community groups and adjoining and affected landowners.

The program of consultation will likely involve a range of consultation methods and may include meetings, newsletters and/or a project website. The process and outcomes of consultation will be included in the EIS.



7. KEY ENVIRONMENTAL ISSUES

7.1 ENVIRONMENTAL ASSESSMENT OVERVIEW

A range of potential environmental issues have been identified as associated with the construction and operation of the proposed development based on the availability of existing information and preliminary investigations for the site. Additional background information is available resulting from work associated with the previous PEA and SEARs in 2015, notwithstanding the previous SEARs has now lapsed.

The next stage of the project will assess potential environmental issues and make recommendations in relation to appropriate mitigation measures and management plans, if required.

Construction will be undertaken in accordance with statutory requirements for the management of potential off-site impacts.

Stage 1 of the St Marys Intermodal Freight Terminal will have an operating capacity of 300,000 TEU per annum, comprising approximately 380 truck movements day (i.e. 190 truck movements in and out) and three to four (3 to 4) 650m trains per day. Environmental impacts will be assessed relative to this operating capacity.

Based on preliminary investigations, it is considered that there are no major environmental constraints that would preclude assessment of the proposed development.

Traffic generated from operations on the site can be accommodated on the adjoining road network. Noise and air quality impacts can be managed in a co-ordinated way on the site through appropriate plant design and mitigation measures.

Stormwater drainage and surface water quality management will require further assessment, with management through detention of stormwater, water sensitive urban design measures and potential rainwater harvesting and re-use.

The potential perceived environmental issues are further assessed in the following sections.

7.2 SCREENING OF ENVIRONMENTAL SIGNIFICANCE ASSESSMENT

A preliminary environmental site sensitivity process has been undertaken to determine likely key issues of environmental assessment significance (refer **Table 2** below). This preliminary screening identifies general prioritisation of environmental assessment issues based on potential significance and does not consider mitigation measures to minimise and manage potential impacts. Mitigation and management measures will be developed during the assessment process and presented in detail in the EIS, if required.

TABLE 2 ENVIRONMENTAL SIGNIFICANCE ASSESSMENT

ST MARYS INTERMODAL FREIGHT TERMINAL – ENVIRONMENTAL SIGNIFICANCE ASSESSMENT					
	UNMITIGATED ENVIRONMENTAL RISK SCREENING				
	LIKELIHOOD	CONSEQUENCE	SIGNIFICANCE	STAKEHOLDER LEVEL OF INTEREST	ENVIRONMENTAL ASSESSMENT SIGNIFICANCE
Air Quality					
Dust generation during construction	Possible	Moderate	Medium	High	High
Emissions from plant, equipment and vehicles during construction	Probable	Insignificant	Low	Low	Low
Impacts during operation, including indirect greenhouse gas emissions	Improbable	Insignificant	Low	Low	Low
Traffic and Transport					
Construction traffic generation	Possible	Moderate	Low	Medium	Medium
Operational traffic generation	Possible	Moderate	Medium	High	Medium
Project access arrangement and safety, including access arrangements over private property	Possible	Moderate	Low	Low	Low
Interactions with airports and rail infrastructure	Probable	Low	Low	Medium	Low
Interactions with pedestrians and cyclists	Possible	Moderate	Medium	Low	Low
Noise and Vibration					
Construction noise and vibration	Possible	Moderate	Medium	Medium	Medium
Operational noise and vibration	Probable	Insignificant	Medium	Medium	Low
Traffic noise	Probable	Low	Medium	Medium	Low
Soils and Water					
Water consumption	Possible	Insignificant	Low	Low	Low
Contamination	Possible	Low	Low	Low	Low
Salinity	Possible	Low	Low	Low	Low
Erosion, sedimentation and run-off	Possible	Moderate	Medium	Low	Medium
Watercourse crossings (during construction and on-going access), including impacts on riparian vegetation	Possible	Moderate	Medium	Low	Medium
Groundwater impacts	Possible	Insignificant	Low	Low	Low
Flooding and drainage impacts	Possible	Insignificant	Low	Low	Low
Heritage					
Impacts on Aboriginal heritage	Improbable	Insignificant	Low	Low	Low
Impacts on non-Aboriginal heritage	Improbable	Insignificant	Low	Low	Low
Landscape Character and Visual Amenity					
Construction related landscape and visual amenity impacts	Possible	Insignificant	Low	Low	Low
Operational landscape and visual amenity impacts	Possible	Insignificant	Low	Low	Low
Ecology					
Vegetation clearing – native vegetation	Possible	Moderate	Medium	Medium	Medium
Vegetation clearing – riparian vegetation	Possible	Moderate	Medium	Medium	Medium
Impacts on listed threatened species	Improbable	Low	Low	Low	Low
Impacts on groundwater dependent ecosystems	Improbable	Low	Low	Low	Low
Waste					
Construction waste	Probable	Insignificant	Medium	Low	Low
Operational waste	Possible	Insignificant	Low	Low	Low
Land Use					
Property severance	Improbable	Insignificant	Low	Low	Low
Impacts on existing development patterns	Improbable	Insignificant	Low	Low	Low
Acquisition of easements	Improbable	Insignificant	Low	Low	Low
Impacts on public infrastructure and public open space	Improbable	Insignificant	Low	Low	Low



7.3 TRAFFIC AND ACCESS

Rail access to the subject site is provided via existing infrastructure including the Great Western Railway line and the existing Dunheved railway line, which is proposed to be upgraded for use for container transportation and loading/unloading. Dedicated train pathways held by Pacific National to ensure the intermodal terminal can be services and that there will be no disruption to NSW passenger railway services.

Construction of new internal access roads providing separate ingress and egress for light and heavy vehicles as follows:

- to/from Lee Holm Road for heavy vehicles; and
- to/from Forrester Road for light vehicles;

Both Forrester and Lee Holm Roads are gazetted public roads under the control and management of the City of Penrith and have immediate access to the larger connector and arterial road network, such as the Great Western Highway (A44) and the Western Motorway (M4).

Whilst heavy vehicle movement in the immediate vicinity of the subject site will increase, as outlined earlier a key benefit of the proposed port rail shuttle will be the removal of 50,000 to 60,000 heavy vehicles from the regional and state freight road network between Port Botany and western Sydney, increasing the capacity and efficiency of those roads for private commuter and public transport and a reduction in vehicle emissions.

Whilst heavy vehicle traffic volumes will increase within the vicinity of the subject site, further detailed traffic analysis and authority consultation will be undertaken to support the preparation of a Traffic Impact Assessment to inform the EIS, which will outline the capacity of the road network to support the proposed development and any works required.

7.4 NOISE AND VIBRATION

A Noise and Vibration Impact assessment will be undertaken and will have consideration for the location and topography of the site. Topographic features may influence noise through an influence on wind direction and speed and attenuation of site generated noise and vibration. The direction and proximity to sensitive receivers including residences will also be considered. The noise assessment will determine compliance with the relevant EPA construction and operational noise criteria and guidelines.

The following activities may impact noise levels and therefore impact on the amenity of surrounding sensitive receivers:

Construction

- Construction of key infrastructure components, in particular the rail link (connection to the Great Western Railway line from the spur line);
- Use of plant and machinery throughout the site; and
- Movement of vehicles on the site and externally during construction



Operation

- Truck movements, rail movements and the operation mobile container lifting equipment during operation of the site.

A suite of mitigation measures will be considered to minimise noise impacts and can be managed in a co-ordinated way across the site and can include the following measures:

- Preparation of Traffic Management Plans to provide for sharing truck movements across site and replacing movement in the vicinity of sensitive receivers, manage night time truck movements, minimize idling of engines while on site, provide for limited use of vehicle breaks where possible and maintain trucks in proper working order to limit noise emissions. Due to the low speed operational environment, off-site noise impacts will be limited;
- Provisions of noise controls on site such as vegetated earth mounds and bunker walls to assist in mitigating adverse noise impacts; “Soft Landing” technology will be used to minimise container handling noise and consideration will be given to eliminating or reducing audible reversing beeper, where it will not compromise operational safety;
- Preparation of a Rail Management Plan to provide for the selection of locomotives, select shunting methods by stopping the trains well past residential receivers to increase the separation distance of the impacts of shunting, undertake shunting noise trials to determine ideal shunting speed; and
- Operational noise mitigation measures including the selection and location of bunker walls as noise barriers and dust wind breaks, if needed.

Vibration impacts are expected to be limited to train vibrations and will be included in the impact assessment for the proposed development.

7.5 WATER QUALITY, STORMWATER AND FLOODING

The closest surface waterways to the proposed development are Little Creek, located at the northern extent of the hardstand area, and South Creek, which is located on the western boundary of the broader site.

Potential environmental impacts associated with stormwater and flooding in relation to water quantity, water quality and fish passage and habitat, if any, will be considered. A summary of potential impacts may include:

- Removal of existing and construction of new stormwater management structures may result in an increase of surface flows, volume and velocity across the subject site and the associated mobilisation of debris and soils. Potential impacts such as increased erosion, surface scouring, and sedimentation and transportation of soils off-site into adjacent vegetation and waterways;
- Potential flood impacts of the subject site if the site lies in a flood prone area;
- Deposition of particulates on the site associated with road and rail transport movements. Discharge of particulates from site during typical flow conditions is considered to be negligible with the implementation of erosion and sediment controls; and



- Potential spills of fuels, oils, lubricants or site goods could be controlled by surface water detention structures and implementation of spill and emergency response procedures.

A Flood Assessment, Stormwater Management Plan adopting Water Sensitive Urban Design principles, Soil and Water Management Plan (SWMP) and Erosion and Sediment Control Plan (ESCP) for the construction and operational phases will be prepared containing a suite of mitigation measures to manage any predicted water quality, stormwater or flooding impacts associated with the proposed development.

7.6 AIR QUALITY

Based on the relatively benign nature of the proposed construction and operations at the subject site, construction air quality impacts are expected to be limited to dust generation and vehicle exhaust emissions. An Air Quality Impact Assessment will take into consideration any potential increases in total suspended particulates (TSP) and PM10 against air quality criteria. Temperature, rainfall data and the proposed construction and operational site activities will be considered in detail to understand likely air quality impacts.

A summary of these potential impacts (without appropriate mitigation), relating to air quality, may include:

Construction

- Dust and particle matter resulting from the construction activities which have the potential to increase wind erosion and dust dispersion, namely:
 - Vegetation clearing/earthmoving;
 - Handling of soil material;
 - Demolition of existing structures; and
 - Movement of heavy plant and machinery on unsealed areas within the subject site.

Operation

- Emissions from vehicle exhaust including locomotives, trucks, cars and container handling equipment.

A suite of mitigation measures may be implemented to mitigate dust emissions and vehicle exhaust emissions, if required, including:

- Maintain vehicles and machinery in correct operating order and prevent idling of engines;
- Use of watering carts to reduce dust generation on unsealed areas, including stockpiles during construction activities; and
- Prompt revegetation of exposed surfaces during construction of the site to prevent dust and material loss.

7.7 SOIL AND CONTAMINATION

A Phase 1 Contamination Assessment will be undertaken, to identify any contamination and geotechnical issues, if required. Any further investigations and/or action plans will be determined by the Phase 1 assessment.



7.8 BIODIVERSITY

A Biodiversity Assessment will be conducted to identify any ecological issues, constraints and characteristics relating to the subject site. The Assessment will identify the presence of vegetation communities and listed species, native and exotic fauna species, habitats and communities. The Assessment will also inform the need for strategies to off-set any impacts from the proposed development to ensure compliance with the Biodiversity Conservation Act 2016 and associated environmental policies and assessment methodologies, if required.

It is unlikely that investigations will confirm the presence of significant biodiversity constraints given the previous development and highly disturbed areas of the subject.

The potential impacts on waterways to the north and the west of the site will also be considered. The assessment may include the consideration of:

Construction

- Clearing of vegetation including any loss of fauna habitat and riparian habitat at within classified waterways, if any; and
- Potential impacts to aquatic habitat in nearby waterways, if any.

Operation

- Fauna impacts from any collisions with vehicles or plant in operation within the site, as a result from increased traffic movements within, and in the vicinity of the site;
- Any spread of weeds due to increased movement of people, vehicles, machinery, etc within the site areas;
- The potential for accidental spills or leaks (oils, fuel, lubricants and chemicals) on the site to reach the aquatic environment of Little Creek or South Creek via rainfall runoff, though it is considered unlikely with the implementation of spill controls, and
- Potential impact upon the roosting, breeding and foraging activities of locally occurring fauna, as a result of increased exposure to light, noise, dust, vehicles and people on site.

During construction and operation of the site, it is intended that impacts on any identified ecological values will be avoided or minimised by the implementation of a suite of mitigation measures during and following construction. If required, specific management strategies will be identified for the conservation of any threatened species in retained habitat adjoining the subject site, where possible.

7.9 ABORIGINAL AND NON-INDIGENOUS HERITAGE

An Aboriginal Cultural Heritage Assessment and Non-Aboriginal Heritage Assessment will be prepared to identify the presence of any existing heritage items on the site and in surrounding areas, the condition and significance of any identified heritage items and mitigation measures to protect, preserve or manage the heritage value of the site.

Key site characteristics relating to potential Aboriginal and non-Aboriginal heritage significance will be identified by investigation of the site history and history of surrounding areas, review of local, State and Commonwealth heritage databases and field studies, if required.



A review of the Penrith LEP does not indicate a local listing of any heritage sites within the site. A review of State and Commonwealth databases will be conducted during the heritage investigations for preparation of the EIS.

7.10 VISUAL IMPACT, URBAN DESIGN AND LANDSCAPING

The proposed development is expected to generally be in keeping with the existing industrial character of the site and its surrounding areas. The likelihood of any localised visual impact of the site beyond its current levels due to high and/or bulky structures/equipment storage will be assessed.

Generally, the existing stockpiled earth bunds and surrounding land uses are expected to screen the proposed development from most of the surrounding area. Overall, the most prominent views of the site may occur at localised boundary points including the St Marys Senior High School sports fields, the residential area to the south east and from the golf course and archery field located to the west of South Creek. A Visual Impact Assessment will consider any potential impacts based on the location and proximity of residential properties to visible features of the developed site.

Potential impacts may include:

Construction

- The location of construction plant and machinery and vehicle movements potentially resulting in short term visual impacts on the surrounding area and the amenity of South Creek; and
- Minor light spill impacts to surrounding areas due to the use of lighting during construction, although this is considered unlikely.

Operation

- Visual impact based on the final design (i.e. built form and container stacks) and to surrounding local roads and residential areas; and
- Light spill impact upon surrounding areas during the operation, although this is considered unlikely

A suite of mitigation measures will be incorporated into the design of the proposed development including landscaping, planting, earth bunds and built-form screening to reduce the overall visual impact of the site, if required. Potential visual impacts and the development of project design and appropriate management measures will be considered in more detail during the environmental assessment phase.

In addition to this a Light Spill Analysis may be undertaken to determine any detrimental visible impact from light spill from the subject site to residential properties, in accordance with the required criteria as specified in Australian Standard AS4282-1997 'Control of Obtrusive Effect of Outdoor Lighting', if required.

7.11 DURING CONSTRUCTION HAZARDS AND RISKS

The proposed operations at the subject site are relatively benign in nature, involving container movement and storage. A Hazard and Risk Assessment will be undertaken, and management measures developed in detail as part of the preparation of the EIS.



Bushfire management measures will be implemented as part of the Operational Environmental Management Plan, if required. However, it is noted that the site is not located in a bushfire prone area.

7.12 OTHER ENVIRONMENTAL ISSUES

A summary of other potential environmental issues is described in **Table 3**, below.

TABLE 3 OTHER ENVIRONMENTAL ISSUES

Assessment of the following issues may be undertaken during the preparation of the EIS.

ENVIRONMENTAL ISSUE	POTENTIAL IMPACTS
Economic	<p>Economic impacts are primarily positive and may include:</p> <ul style="list-style-type: none"> ▪ The creation of 133 FTE jobs during operation of the St Marys Intermodal Freight Terminal and 60 FTE jobs during construction; ▪ Jobs creation, particularly in occupational categories that are matched to the employment profile of the local population; ▪ Job creation in a locality with an above average unemployment rate and supporting employment self-containment and self-sufficiency; ▪ Increased local employment results in greater local expenditure, supporting local business and contributing to gross regional product (GRP); ▪ The removal of 50,000 to 60,000 heavy vehicles per year off the regional and state freight road network, alleviating congestion and supporting supply chain efficiency; ▪ Removal of heavy vehicles from the primary freight road network servicing Port Botany, supporting the efficiency and productivity of the Port; ▪ Improved efficiency of goods delivery via rail transportation of containers resulting in improved operating efficiency of customers and overall increase in gross domestic product (GDP); ▪ Reduced volumes of heavy vehicle movements along the M5 corridor; and ▪ Reduced truck vehicle kilometres across the Sydney metropolitan freight road network.
Social	Potential social impacts and benefits relating to impacts of the proposed development (including health, employment and crime prevention).
Utilities	Potential impacts on existing services including stormwater, sewer, water, telecommunications and electricity.
Public Infrastructure (State and Local Development Contributions)	Potential impacts on public infrastructure, in particular, as a result of traffic increases and employee population.
Waste	Disposal of waste during construction and operation provides an opportunity for waste reduction, reuse and recycling on site.
ESD	<p>Opportunities for beneficial impacts from energy and water conservation, waste minimisation and resource recovery.</p> <p>Regional ESD benefits associated with the mode shift from road to rail.</p>
Greenhouse Gas/Climate Change	Flooding of infrastructure (rail and intermodal), storm/heat damage to infrastructure and increased operating costs due to carbon pricing.




8. CONCLUSION AND SUMMARY

SITE planning + design, Urbanco and BG&E have been engaged by Pacific National Pty Ltd to prepare the Preliminary Environmental Assessment (PEA) and subsequent documents required to secure the necessary approvals to facilitate the development of Lot 2 Forrester Road, Lot 3 Lee Holm Road and Lot 196 Christie Street, St Marys (the ‘subject site’) for an Intermodal Freight Terminal.

The proposed development includes the staged construction, and ultimate operation, of 9.9ha of the broader site for the St Marys Intermodal Freight Terminal, comprising an intermodal (road and rail) terminal and container park with an operating capacity of 300,000 TEU annual throughput.

The proposed development will facilitate the introduction of a new container rail shuttle between Port Botany and greater western Sydney, increasing the volume of import and export freight moved via rail and relieving the regional and state road network of heavy vehicle and container traffic.



“Develop a ‘best practice’ intermodal freight terminal at St Marys in Western Sydney to facilitate freight mode-shift, reduce road congestion and support supply-chain efficiency and productivity.”

The proposal aligns with, and supports, the Local and State Government’s strategic intent and objectives as outlined in the:

- Greater Sydney Region Plan;
- Western Sydney Region Plan;
- Future Transport Strategy 2056;
- Penrith City Strategy;
- 2013 NSW Freight and Ports Strategy; and
- 2017 NSW Draft Freight and Ports Plan;

amongst others, and once operational the facility will play an essential role in growing the volume of freight movements by rail, which in turn assists in alleviating road congestion and heavy vehicle movements on the regional and state road networks, particularly primary freight roads servicing Port Botany.



The proposed development is consistent with the State Government's commitment and policy objectives relating to the Port Botany expansion and achieving an ultimate throughput of 7,500,000 TEU's annually.

Stage 1 of the St Marys Intermodal Freight Terminal is expected to:

- **Support an operating capacity of 300,000 TEU annual throughput;**
- **Support local employment through the creation of 133 new full time equivalent (FTE) jobs during operation and 60 FTE jobs during construction; and**
- **Remove 50,000 to 60,000 heavy vehicles from the regional and state road networks, including primary freight routes servicing Port Botany.**

The proposed St Marys Intermodal Freight Terminal is essential to support the forecast growth in the freight task and facilitate efficient freight movements to service Western Sydney's growth areas, and in turn supports the efficient operation of Port Botany.

The subject site is well located and ideally suited for the development of the proposed St Marys Intermodal Freight Terminal, enjoying direct access to the Greater Western Sydney rail line, proximity to the regional and state freight road network and in consideration of the compatibility of surrounding land uses, which provide a buffer to noise sensitive residential areas further afield.

St Marys is ideally located for the development of an intermodal freight terminal to service the established and growing western Sydney region.

The Marys Intermodal Freight Terminal will be operated by an independent intermodal freight forwarding organisation, with containers transported between Port Botany and St Mary's via three to four (3 to 4) 650 metre Pacific National trains per day.

Freight forwarding from St Mary's to the customer (such as those located at Marsden Park, Eastern Creek and Wetherill Park, amongst others) is estimated to generate and 380 truck movements per day (i.e. 190 truck movements in and out).

80% of the heavy vehicle movements are expected to occur between the hours of 5.00am to 10.00pm, with the rail sidings and container parks Intermodal facility operating up to 24 hours, 7 days per week.



This document constitutes a PEA to support a request for Secretary’s Environmental Assessment Requirements (SEARs) to enable the preparation of an Environmental Impact Statement (EIS) to accompany a development application for the St Marys Intermodal Freight Terminal (the ‘proposed development’) under Part 4, Division 4.7 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

Pacific National is Australia’s largest private rail operator boasting an unrivalled freight rail and intermodal network across Australia with demonstrated experience in freight supply chain operation, logistics delivery, property management, and a strong commitment to stakeholder engagement and corporate social responsibility.

Pacific National welcomes the opportunity to work collaboratively with the City of Penrith and the NSW Government to deliver the St Marys Intermodal Freight Terminal and the multitude of benefits for the location, region and wider supply chain and road networks.



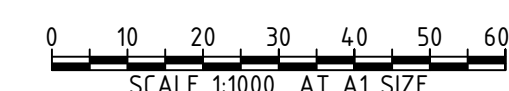
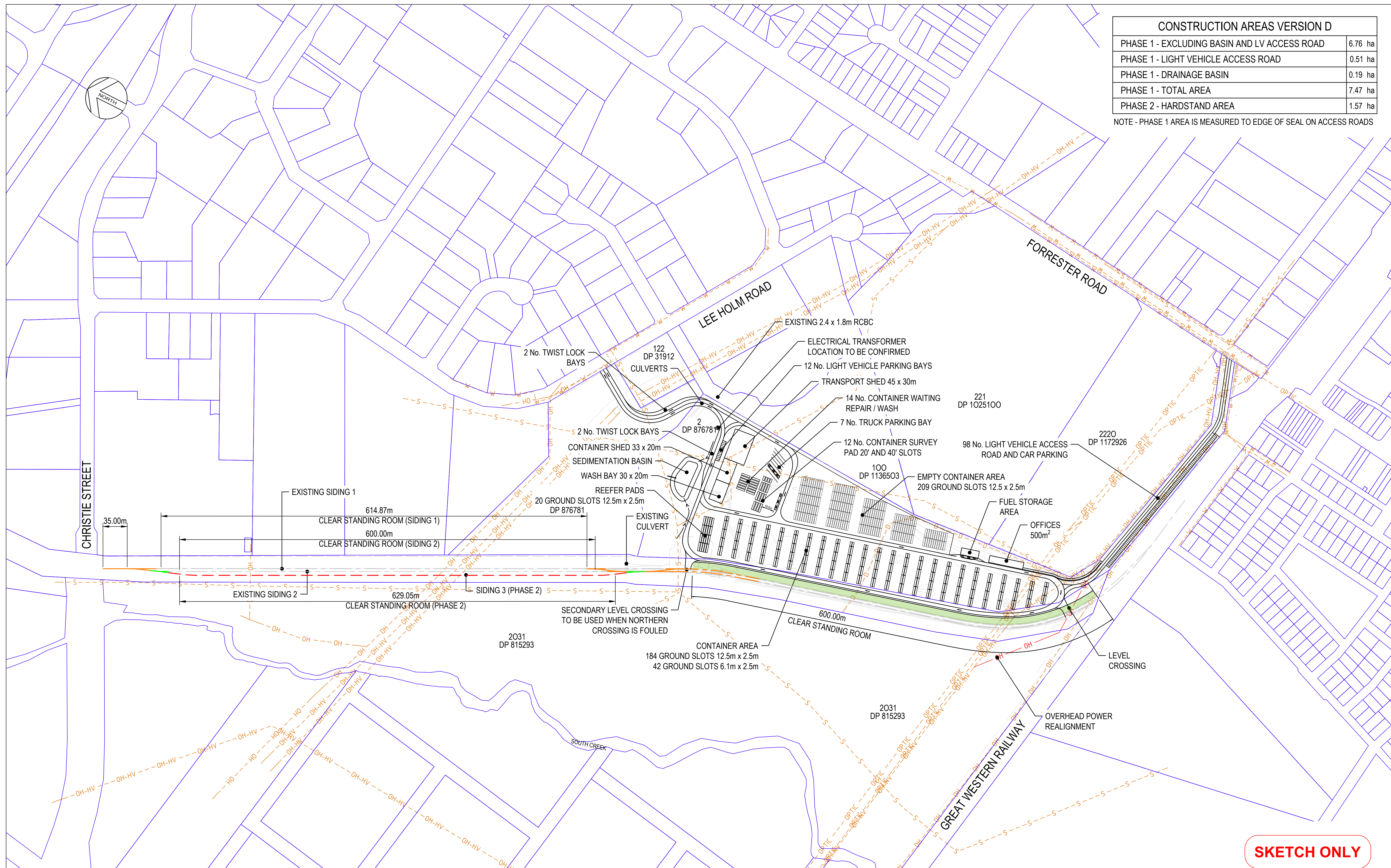
PLAN 1 CONCEPT DESIGN VERSION D PHASE 1 AND 2 - GENERAL ARRANGEMENT

BG&E

(BG&E plan ref: B18028_SK-C-0022_ Rev A, dated 01/08/2018)

(SITE doc ref: 180919 BGE B18028-SKC-0022_A.pdf)

CONSTRUCTION AREAS VERSION D	
PHASE 1 - EXCLUDING BASIN AND LV ACCESS ROAD	6.76 ha
PHASE 1 - LIGHT VEHICLE ACCESS ROAD	0.51 ha
PHASE 1 - DRAINAGE BASIN	0.19 ha
PHASE 1 - TOTAL AREA	7.47 ha
PHASE 2 - HARDSTAND AREA	1.57 ha





APPENDIX 1

1. CAPITAL INVESTMENT VALUE

Chrysalis Quantity Surveying & Cost Consultants
(SITE doc ref: 180724 Chrysalis Report V1.0 – St Marys CIV.pdf)

CAPITAL INVESTMENT VALAUTION REPORT for St Marys Inland Container Terminal, NSW

Client: Pacific National



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Document Control

<u>Date</u>	<u>Version</u>	<u>Title</u>
22/07/2018	1.0	Capital Investment Valuation

Distribution

<u>Date</u>	<u>Name</u>	<u>Organisation</u>
24/07/2018	Richard Johnson	Pacific National

Executive Summary

Chrysalis Quantity Surveying was engaged on behalf of Pacific National's (PN) to advise on the proposed freight transport facility at St Marys Inland Container Terminal. The purpose of this estimate is to inform the Capital Investment Value (CIV).

Total project value table.1

	Value
Construction works	\$ 25,680,000
	<hr/>
	\$ 25,680,000
Planning	\$ 642,000
Contingency	\$ 3,852,000
Client Costs	Excluded
Professional fees	\$ 762,000
Mobile Plant	Excluded
SUB TOTAL	<hr/>
	\$ 30,936,000
Escalation	\$ 2,276,000
SUB TOTAL	<hr/>
	\$ 33,212,000
ESTIMATED TOTAL COMMITMENT	<hr/>
	\$ 33,212,000

Order of Cost Information

The cost plan is based upon design information and quantities provided by BG & E Engineers. The following information was provided:

- SK-C -0009 Rev B (Concept Design Phase 1 and 2 General Arrangement)
- SK-C -0010 Rev B (Concept Design Phase 1 and 2 Hardstand and Track Layout)
- SK-C -0011 Rev B (Concept Design Phase 1 General Arrangement)
- SK-C -0012 Rev B (Concept Design Phase 1 Hardstand and Track Layout)
- SK-C -0015 Rev A (Concept Design Phase 1 and 2 Pavement Plan)
- SK-C -0016 Rev A (Concept Design Phase 1 Pavement Plan)
- Concept Quantities Rev A

In compiling the order of costs, we have made assumptions where there is currently insufficient detail. The level of design detail is high level with limited information, this has led to Chrysalis making a series of assumptions. We have assumed the works will be procured via a design and construct contract with the Client completing the necessary works to get planning and associated approvals. We have assumed that a minimum of 3 contractors would be invited to compete on the Design and Construction Tender.

The costs included within the cost plan have been calculated based on benchmark rates from projects of a similar nature. At this stage we have excluded costs for specialist equipment required in order for the transport facility to operate (Mobile Plant).

The order of costs has been broken down into the following elements:

- Preliminaries
- Earthworks
- Civil Works
- Utility Services
- Pavement Areas / Access Roads
- Rail Infrastructure sidings
- Buildings
- Signage and Landscaping

Detail and assumptions

Earthworks – We have assumed this will be preparation for the roads, hardstands and buildings. With no Geotechnical information available at this stage this could be a high risk item.

Utility Services – We have included allowances for installation of utility services including drainage, potable water, fire water, power, data, security and sewerage. We have assumed that there are services running along either Lee Holm Road or Forrester Road that can feed the site.

Roadways – We have allowed for internal access roads with main entry stemming from Lee Holm Road for trucks and light vehicle access and egress movements via Forrester Road. Upgrades to these roads have been allowed for but as the requirements of the upgrades are not known this is a medium risk item.

Rail infrastructure sidings - We have allowed for loading and unloading of trains accessed via the existing rail which traverses the site. The costs include for taking up and replacing the existing track and the additional of track and turnouts. All track rates include clear and grub, topsoil strip, site prep, formation prep, minor earthworks, ballast, track rail and sleepers. We have excluded for any signalling and commissioning, if this is required we would need to know the extent of the signalling to be introduced. We have included for 5 new turnouts as indicated and a new level crossing.

Buildings – We have allowed for typical tilt up high bays warehouses for the Wash Down and Repair areas along with insitu typical building for the Administration building. We have doubled the area for Administration from 200m² to 400m² as it is not thought that 200m² will be sufficient to accommodate all the necessary requirements to accommodate increase staff and freight handling.

Signage and Landscaping – We have included allowances for these items, directional signage around the site and local access roads, with landscaping allowed for around the Administration building, Gate house and minimal soft landscape works to the entrances/exits for the road access.

Quantities

The quantities used for the purpose of this report are based upon the information provided by the concept design completed by BG & E Engineers. Chrysalis has carried out a review of the quantities and found no major discrepancies with the quantities.

In addition to the construction costs the following items have been included within the Estimated Total Costs. These will be monitored as the project progresses.

Planning at \$642,000 for professional fees, applications and studies to be undertaken to secure planning consent stage.

Design Contingency at 5% (\$1,284,000) to cover design changes and finalisation of design up to tender documentation stage.

Construction Contingency at 10% (\$2,568,000) to cover changes and unforeseen items during the construction period.

Professional Fees have been included at \$762,000.

Escalation has been included at \$2,276,000. Should the scope of works or the timeframe of the works to commence change from that advised then this will need to be reconciled.

Exclusions

- All costs exclude GST
- No allowance for rock breaking or blasting
- No allowance for land tenure/leasing
- No allowance for Native Title
- No allowance for Loco provisioning or refuelling on site
- No allowance for compressed air systems
- No allowance for out of gauge detectors
- No allowance for train weight or RFID systems
- No allowance for removal of contaminated or hazardous materials
- No allowance for protection or relocation of sewers on site
- Excavated materials to be disposed of onsite
- Land acquisition costs

Risks

The following key risks have been identified.

- Existing site conditions result in high cost of site preparation, contaminated by hazardous materials or rock, existing services to be diverted - HIGH
- Building areas exceeding the areas currently identified – LOW
- The building form and type of construction differs from the assumptions used to determine the elemental costs – HIGH
- Tender conditions are currently favourable when tendering construction projects. However with the project not due to go to tender until the 2018-9, there is a chance the market will change – MEDIUM
- Project delays, particularly in obtaining funding and approval to proceed. No allowances have been included to cover these items – HIGH
- Escalation in building costs – MEDIUM
- Additional scope items coming into the project– MEDIUM

Appendix A – Capital Investment Valuation

Capital Investment Valuation V1.0

Description	Quantity UOM	Total	Total
Preliminaries		2,130,000	
Earthworks		650,000	
Civil Works		1,170,000	
Utility Services		3,330,000	
Pavement Areas / Access Roads		9,600,000	
Rail Infrastructure sidings		6,270,000	
Buildings		2,310,000	
Signage and Landscaping		220,000	
TOTAL CONSTRUCTION COSTS			25,680,000
PLANNING			
TOTAL Planning	1 Item		642,000
DESIGN CONTINGENCY			
TOTAL Design Contingency	1 Item		1,284,000
CONSTRUCTION CONTINGENCY			
TOTAL Construction Contingency	1 Item		2,568,000
PROFESSIONAL FEES			
TOTAL Professional Fees	1 Item		762,000
CLIENT/OWNER COSTS			
Project Insurance	Excl		
Finance costs	Excl		
Legal fees	Excl		
Land costs	Excl		
TOTAL Client/Owner Costs			0
MOBILE PLANT			
Excluded			
TOTAL Mobile Plant			0
ESCALATION			
Based on BCI June 2018			
TOTAL Escalation			2,276,000
EXCLUSIONS, NOTES AND ASSUMPTIONS			
All costs exclude GST			
No allowance for rock breaking or blasting			
No allowance for land tenure/leasing			
No allowance for Native Title			
No allowance for Loco provisioning or refuelling on site			
No allowance for compressed air systems			
No allowance for for out of gauge detectors			
No allowance for train weight or RFID systems			
No allowance for removal of contaminated or hazardous materials			
No allowance for protection or relocation of sewers on site			
Excavated materials to be disposed of onsite			
No allowance for land acquisition costs			
No allowance for finance costs			
No allowance for legal fees			
TOTAL Exclusions, Notes and Assumptions			0
TOTAL FOR BUILDING			33,212,000

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SITE

PLANNING + DESIGN



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