



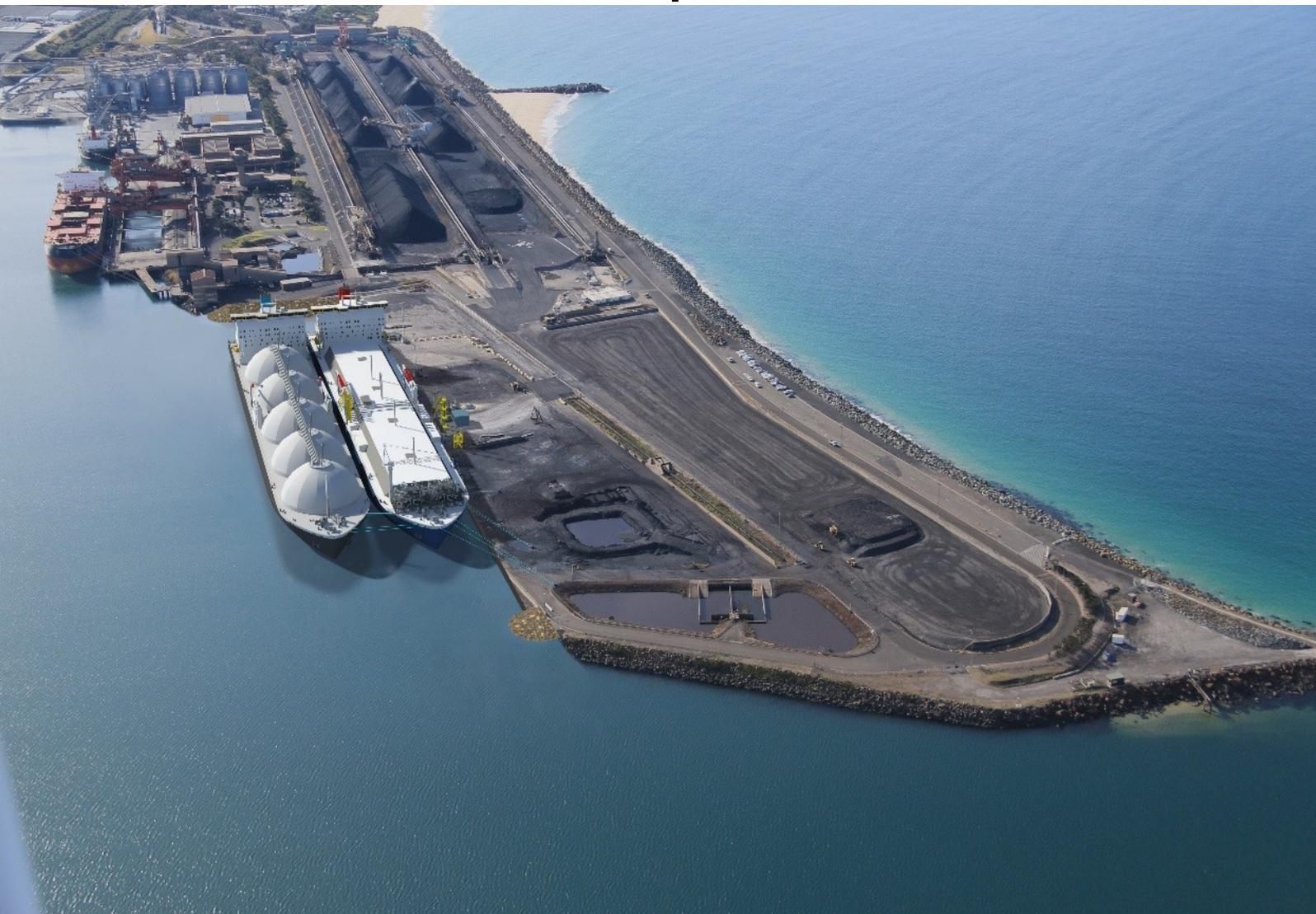
Port Kembla Gas Terminal

Construction Traffic Management Plan Stage 2A Marine Berth Construction and Onshore Receiving Facilities

Australian Industrial Energy

20 December 2021

→ The Power of Commitment



GHD Pty Ltd | ABN 39 008 488 373

133 Castlereagh Street, Level 15

Sydney, New South Wales 2000, Australia

T +61 2 9239 7100 | F +61 2 9239 7199 | E sydmil@ghd.com | ghd.com

Printed date	
Last saved date	20 December 2021
File name	\\ghdnet\ghd\AU\Sydney\Projects\21\27477\Tech\MP update\Stage 2A\Construction Traffic Management Plan\PKGT-AIE-CTMP-Stage-2A_V2.docx
Author	Emily Kate Marsh
Project manager	Karl Rosen
Client name	Australian Industrial Energy
Project name	East Coast Gas Project
Document title	Port Kembla Gas Terminal Construction Traffic Management Plan
Revision version	Rev 0
Project number	2127477
AIE document number	PKGT-AIE-PLN-019

Document status

Status Code	Author	Reviewer		Approved for issue		
		Name	Signature	Name	Signature	Date
A	Emily Kate Marsh	Sophy Townsend		Karl Rosen		06.10.2021
B	Emily Kate Marsh	Sophy Townsend		Karl Rosen		03.11.2021
0	Emily Kate Marsh	Sophy Townsend		Karl Rosen		20.12.2021

© GHD 2021

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

Acronyms

Acronym	Definition
AIE	Australian Industrial Energy
Berth 101	MBD Site Compound
Council	Wollongong City Council
CSSI	Critical State Significant Infrastructure
CTMP	Construction Traffic Management Plan
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 197</i>
EPL No 21529	Environment Protection Licence
ESCP	Erosion and Sediment Control Plan
FSRU	Floating Storage and Re-gasification Unit
GHD	GHD Pty Ltd
HSE	Health, Safety and Environment
HVNL	Heavy Vehicle National Law
ICNG	<i>Interim Construction Noise Guideline</i>
GHD	GHD Pty Ltd
LNG	liquefied natural gas
KPI	Key Performance Indicators
MBD	Marine Berth Construction and Dredging
MLA	Marine Loading Arms
ORF	Onshore Receiving Facilities
OSOM	Oversize Over Mass
PIRMP	Pollution Incident Response Management Plan
PKCT	Port Kembla Coal Terminal
PKGT	Port Kembla Gas Terminal
PKGT EIS	Port Kembla Gas Terminal Environmental Impact Statement
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Roads Act	<i>Roads Act 1993</i>
ROL	Road Occupancy Licences
SRD SEPP	State Environmental Planning Policy State and Regional Development
TfNSW	Transport for NSW
The Project	Port Kembla Gas Terminal Project

Contents

1. Introduction	1
1.1 Overview	1
1.2 Background	1
1.3 Purpose	2
2. Project overview	3
2.1 Site description	3
2.2 Project construction scope of works	5
2.3 Construction of quay wall (MBD – Land Based)	8
2.4 Power, communications, and water connections	10
2.5 Construction of ORF	10
3. Roles and responsibilities	12
4. Legislative requirements	14
5. Planning requirements	15
5.1 Conditions of approval	15
5.2 Environmental Protection Licence	19
6. Traffic and access management	21
6.1 Construction vehicles and volume	21
6.2 Site access	21
6.3 Loading and unloading area	22
6.4 On-site parking	22
6.5 Transport of piles	22
6.6 Out of hours deliveries	22
6.7 Oversized vehicle movements	23
6.8 Potential hazards	23
6.9 Dust and mud control	23
7. Compliance management	25
7.1 Training	25
7.2 Traffic impact on local roads	25
7.3 Community engagement	25
7.4 NSW Ports notification	26
7.5 Dilapidation surveys	26
7.6 Monitoring	26
8. Communication and complaints	27
8.1 Internal communications	27
8.2 External communications	27
8.3 Complaints management	27
9. Inspections, monitoring and audits	29
9.1 Environmental inspections	29
9.2 Monitoring	29
9.3 Auditing	30
9.4 Environmental reporting	30

9.5	Compliance tracking register	30
9.6	Non-conformance, corrective, and preventative actions	31
10.	Incident management and emergency response	32
10.1	Incident management	32
10.2	Emergency response	33
11.	Document management and review	34
11.1	Record management	34
11.2	Review and revision of CTMP	34
11.3	Access to information	34
References		36

Table index

Table 2.1	Construction stages/work packages	5
Table 2.2	Marine berth and wharf structures to be constructed during Stage 2A	8
Table 2.3	Construction of power connections for Stage 2A	10
Table 2.4	Structures to be constructed for ORF during Stage 2A	10
Table 3.1	Roles and responsibilities of Project Team	12
Table 4.1	Legislation and relevant policy applicable to this CTMP	14
Table 5.1	Planning requirements	16
Table 5.2	EPL No. 21529 conditions	19
Table 6.1	Approximate volume of construction vehicles for Stage 2A	21
Table 7.1	Community consultation contacts	26

Figure index

Figure 2.1	Site overview	4
Figure 2.2	Stage 2A works and location of MBD Site Compound and Emplacement Cell Construction Site	6
Figure 2.3	Layout of MBD Site Compound	7
Figure 2.4	Location of quay wall and layout of MBD and ORF	9
Figure 6.1	Rumble grid to be installed at MBD Site Compound and Emplacement Cell Construction Sites	24
Figure 6.2	Gravel haul road to be installed at MBD Site Compound and Emplacement Cell Construction Sites	24

Appendices

Appendix A	Construction traffic routes
Appendix B	Vehicle movement plans
Appendix C	Truck driver induction
Appendix D	Oversized vehicle routes

1. Introduction

1.1 Overview

This Construction Traffic Management Plan (CTMP) has been developed as a sub-plan to the Port Kembla Gas Terminal Project (the Project) Environmental Management Strategy (EMS). This CTMP has been prepared by GHD Pty Ltd (GHD) on behalf of Australian Industrial Energy (AIE) to apply to construction activities associated with Stage 2A construction of the Project.

This CTMP interfaces with the other associated sub-plans, which together describe the proposed structure for environmental management and monitoring requirements for the Project. This CTMP addresses the requirements of the Port Kembla Gas Terminal Environmental Impact Statement (PKGT EIS) and associated Infrastructure Approval (SSI 9471) and Environmental Protection Licence (EPL) No. 21529 and has been prepared in consultation with Transport for NSW (TfNSW), Wollongong City Council (Council) and NSW Ports.

1.2 Background

AIE is developing the Project which involves the development of a liquefied natural gas (LNG) import terminal at Port Kembla, south of Wollongong, NSW. The Project will be the first of its kind in NSW and will provide a simple and flexible solution to the state's gas supply challenges.

NSW currently imports more than 95 per cent of the natural gas it uses from other eastern states. In recent years, gas supplies to the Australian east coast market have tightened, resulting in increased natural gas prices for both industrial and domestic users.

The Project provides an immediate solution to address the predicted shortages and will result in significant economic benefits for both the Illawarra region and NSW. The Project will have a capacity to deliver more than 100 petajoules of natural gas, equivalent to more than 70 percent of NSW gas needs and will provide between 10 to 12 days of natural gas storage in case of interstate supply interruption. LNG will be sourced from worldwide suppliers and transported by LNG carriers to the gas terminal at Port Kembla where it will be re-gasified for input into the NSW gas transmission network.

The Project has been declared Critical State Significant Infrastructure (CSSI) in accordance with Section 5.13 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) (NSW) and Schedule 5 of the State Environmental Planning Policy State and Regional Development (SRD SEPP). The Project received Infrastructure Approval from the Minister for Planning and Public Spaces on 29 April 2019.

The construction of the Project is primarily associated with the establishment of a new berth facility at Port Kembla to enable an LNG carrier to berth alongside the Floating Storage and Re-gasification Unit (FSRU) and new infrastructure to connect the terminal to the existing gas network. Excavation and dredging would be required to establish the new berth facility, with spoil deposited in a cell (referred to as the 'Emplacement Cell') in the Outer Harbour.

The development has progressed to Stage 2A works located at Berth 101 (referred to as 'the site' or 'MBD Site Compound'). The Stage 2A works include land-based construction works associated with the Marine Berth Construction and Dredging (MBD) and Onshore Receiving Facilities (ORF). The Stage 2A works include:

- Completion of excavation works undertaken during Stage 1 (including transport of spoil materials to Emplacement Cell Construction Site).
- Construction of the quay wall at the MBD Site Compound.
- Construction of ORF at the MBD Site Compound (including construction of Wharf Topside Area, Utility Area, and Common Area).
- Installation and commissioning of power, communications, and potable water line.
- Installation of gas pipeline within the MBD Site Compound as part of ORF.

1.3 Purpose

This CTMP has been prepared in accordance with the PKGT EIS and associated Infrastructure Approval (SSI 9471) and EPL No. 21529. It describes how the management measures and commitments in the PKGT EIS, Infrastructure Approval (SSI 9471) relating to traffic movements are to be implemented by the Principal Contractor during Stage 2A construction of the Project. Specifically, this plan includes requirements to:

- provide for the safe movement of vehicular and pedestrian traffic.
- The protection of workers and pedestrians from passing traffic.
- The provision for access to properties located within the limits of the works.
- The design, construction, maintenance and removal of any necessary temporary roadways and detours.
- The provision of traffic controllers, where required.
- The installation of temporary signs, road markings, lighting, and safety barriers.

This plan addresses the above requirements and includes, but is not limited to:

- Performance criteria for traffic safety measures including safe driving practices.
- Mitigation strategies to minimise impacts on local transport routes and pedestrians.
- Mitigation strategies to minimise dust and dirt when transporting spoil materials.

AIE and its contractors acknowledge that maintaining local traffic safety in the vicinity of the MBD Site Compound is paramount to the successful delivery of the construction phase of the Project. AIE is committed to ensuring this CTMP is reviewed and updated regularly to ensure its objectives are met and that the approval conditions outlined in the Infrastructure Approval (SSI 9471) and EPL No. 21529 are achieved.

This CTMP is applicable to all staff, employees, subcontractors, and any statutory service authorities undertaking the Stage 2A works described in Section 2 of this CTMP. The CTMP implementation and on-going development will be managed by the Project Team (refer to Section 3).

2. Project overview

2.1 Site description

The site of the Project is situated at Port Kembla within the Illawarra region of NSW, about 80 kilometres south of Sydney. Port Kembla is mainly characterised by an existing import and export terminal and multiple other business, cargo, logistics, bulk goods, and heavy industrial facilities in the vicinity.

Port Kembla is situated about two kilometres south of the centre of Wollongong. Other localities surrounding Port Kembla and the Project site include Mangerton, Mount St. Thomas and Figtree to the north-west; Unanderra to the west; Berkeley to the south-west; and Cringila, Lake Heights, Warrawang and the residential region of Port Kembla to the south.

The zoned land use in the region includes special use and industrial use at Port Kembla and a mix of primarily residential and commercial uses at the surrounding localities. Major infrastructure in the region of Port Kembla includes the Princes Highway, which is a major state and regional highway connecting Sydney and Wollongong and regional areas further south. Princes Highway provides access to Port Kembla through turnoffs at Masters Road, Five Islands Road and Northcliffe Drive and is broadly utilised including by heavy vehicles from the port.

The South Coast railway line runs along the periphery of Port Kembla including the stations Port Kembla, Port Kembla North, Cringila and Lysaghts. The rail line services commuters and is also used to transport bulk solid goods like coal, grain, copper and steel from Port Kembla. The environmental features of Port Kembla and the surrounding region are limited given the extensive industrial, commercial and residential development. Waterways in the region include the Gurungaty Waterway, Allans Creek, American Creek and Byarong Creek. Green space includes JJ Kelly Park and Wollongong Golf Club to the north and a larger open area to the south-west.

The Project will be predominantly located within land zoned for dedicated port and industrial uses. Berth and wharf facilities, as well as the FSRU, would be situated at Berth 101 at the Inner Harbour, while the gas pipeline would extend around the periphery of port operations from Berth 101 to a tie-in point at Cringila. The Emplacement Cell will be located in the Outer Harbour. A site overview is provided as Figure 2.1.



Figure 2.1 Site overview

2.2 Project construction scope of works

2.2.1 Overview

The Project construction scope of work has been divided into the three main packages (with associated activities), as outlined in Table 2.1. Construction staging of the Project has been approved in accordance with Condition 3 of Schedule 4 of Infrastructure Approval SSI-9471 as per correspondence from DPIE dated 27 October 2021. This CTMP applies only to the works associated with Stage 2A.

Table 2.1 Construction stages/work packages

Stage	Package	Proposed commencement	Activities
1	Early Enabling Works	May 2021	Demolition of Berth 101, removal of structures and land based excavation works, and Cone Penetration Testing (CPT) in the Outer Harbour to inform Emplacement Cell design and relocation of Bunker Oil Pipeline.
2A	Marine Berth Construction – Land Based	January 2022	Completion of excavation works undertaken during Stage 1. Transport of spoil materials for storage at the Emplacement Cell Construction Site. Quay wall construction.
		February 2022	Installation of communications conduit, potable water line, and 11kV power cable and Padmount Substation within MBD Site Compound.
		April 2022	Construction of the ORF, which comprises three areas: Wharf Topside Area; Utility Area; and Common Area.
		June 2022	Pipeline construction and associated ancillary infrastructure within MBD Site Compound delivered as part of ORF scope.
2B	Marine Berth Construction and Dredging – Land and Marine Based	March 2022	Continuation of Stage 2A with addition of the following activities:
			Excavation/dredging and construction of the Emplacement Cell in the Outer Harbour
			Marine based construction activities including installation of navigational aids and revetment shore protection.
3	Pipeline Installation including tie-ins (NGP)	June 2022	Construction of an 18" onshore natural gas pipeline approximately 6.3km in length from the Berth 101 site boundary to Tie-in Facility at Cringila for connection to the Eastern Gas Pipeline Pipeline construction to occur concurrently with Jemena, subject to separate set of management plans.

The construction of Stage 2A works is located within the former Port Kembla Coal Terminal (PKCT) Bulk Products Berth (Berth 101). As part of the Early Enabling Works the removal of existing structures and services and excavation was undertaken to facilitate subsequent development stages of the Project.

The following will be undertaken as part of the Stage 2A land-based works:

- Construction of the quay wall at MBD Site Compound incorporating finalisation of excavation works undertaken during Stage 1 Early Enabling Works (including transport of spoil materials to Emplacement Cell Construction Site).
- Installation of and commissioning of power, communications, and potable water line.
- Construction of ORF at MBD Site Compound (including construction of Wharf Topside Area, Utility Area, and Common Area).
- Installation of gas pipeline within MBD Compound site.

An outline of the tasks associated with Stage 2A is provided in Section 2.3 through Section 2.5. The site of the works includes the MBD Site Compound with materials being transported to the Emplacement Cell Construction Site. The location of the Stage 2A works, MBD Site Compound, and the Emplacement Cell Construction Site is shown in Figure 2.2.

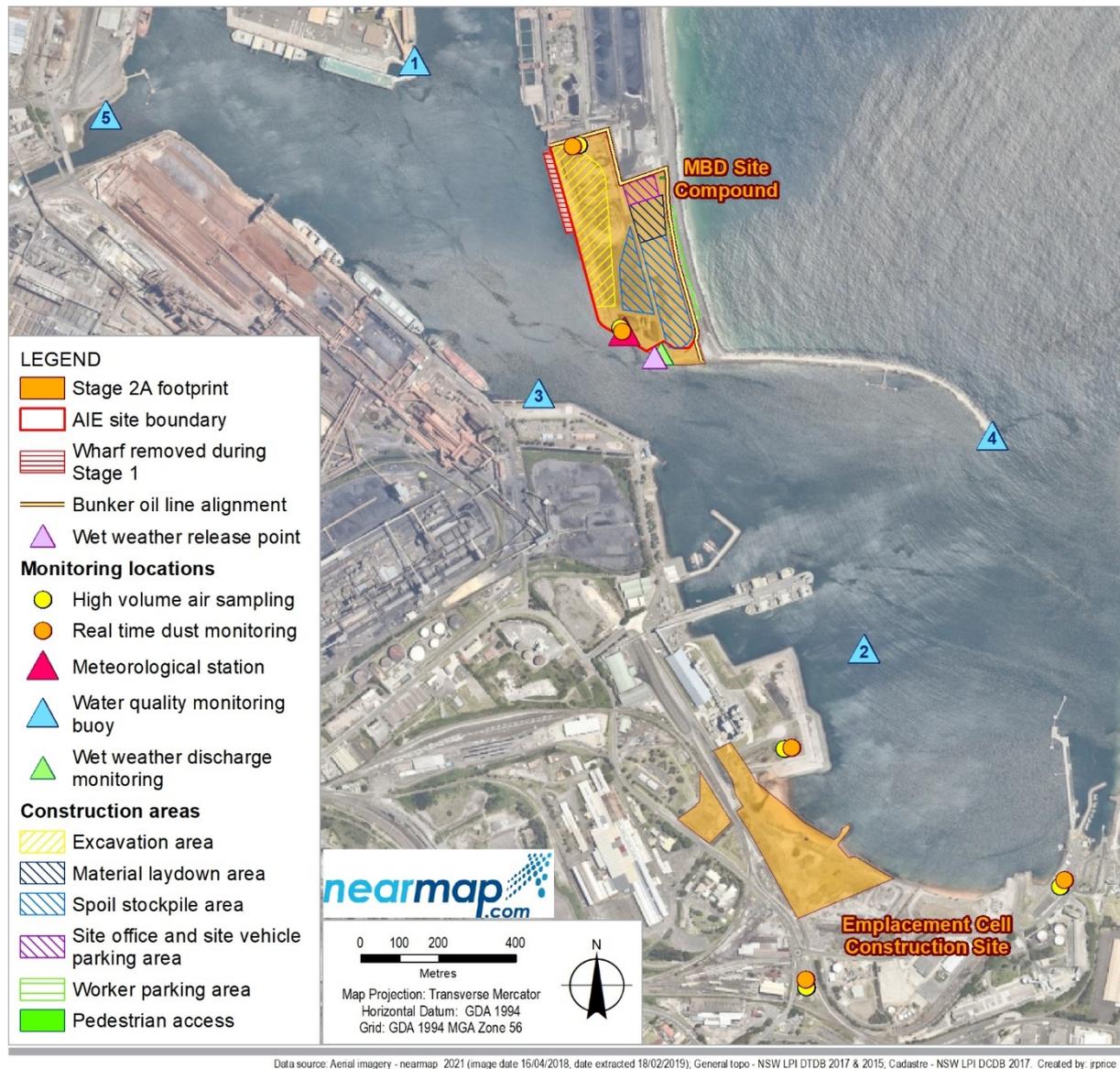


Figure 2.2 Stage 2A works and location of MBD Site Compound and Emplacement Cell Construction Site

2.2.2 Traffic

Traffic generated by Stage 2A will be controlled through the gate on Sea Wall Road. Heavy vehicle movements will be generated by the delivery of materials, equipment, and plant to the MBD Site Compound and transport of stockpiled material to the Emplacement Cell Construction Site.

There may be a requirement to transport and tip up to 8000m³ of crushed concrete and up to 2000m³ of crushed heavily bound base course to the Emplacement Cell Construction Site via road to increase the storage footprint area within the East Stockyard and to facilitate for later use during the construction of the Emplacement Cell.

The activities associated with this task will involve loading, road transportation via truck and trailer (approximately 30-tonne capacity), unloading, stockpiling, and management of the stockpiles.

Light vehicle movements will be generated from construction workers accessing the MBD Site Compound. Parking will be provided for up to 76 workers on the MBD Site Compound (refer to Figure 2.3).

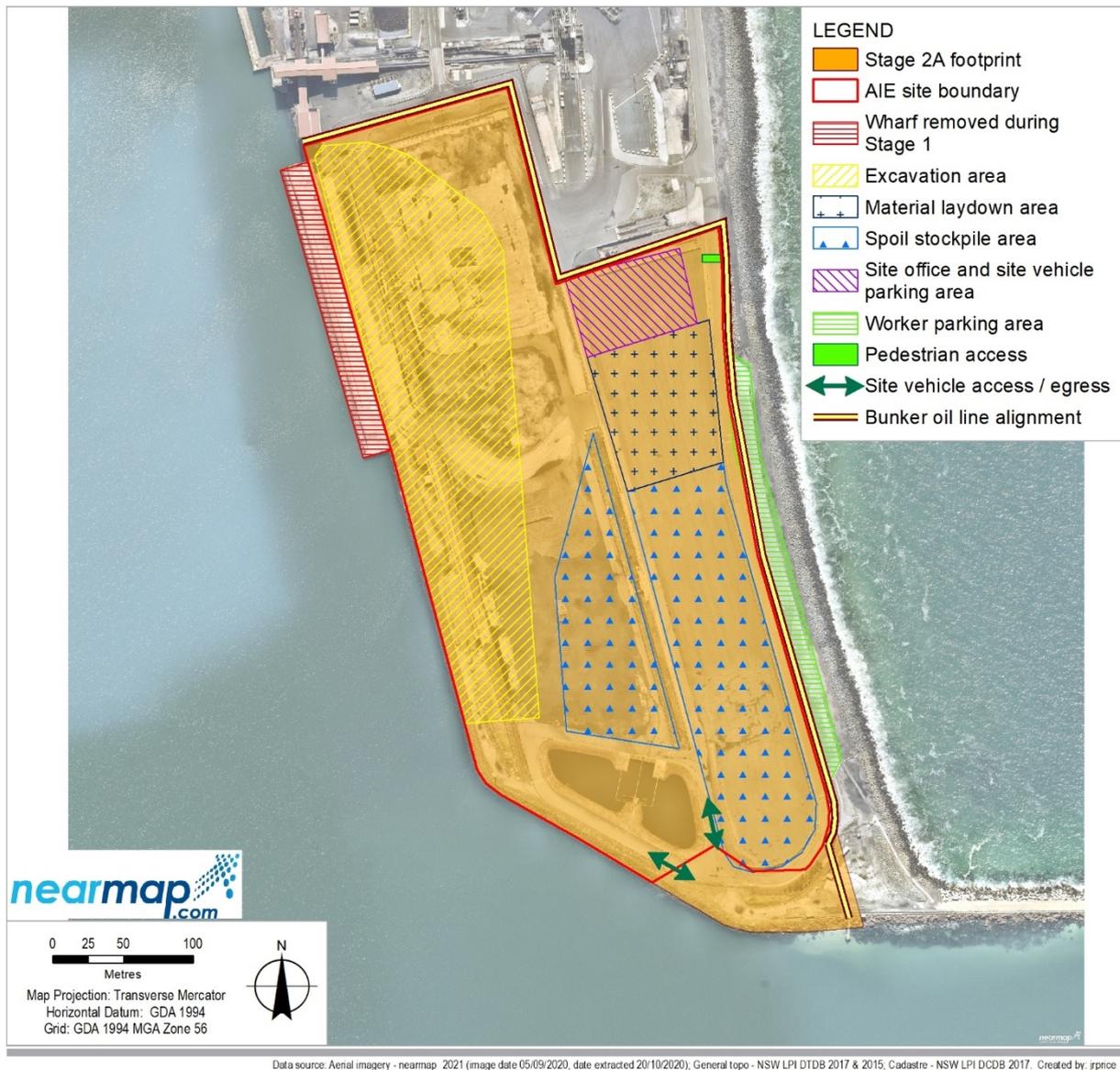


Figure 2.3 Layout of MBD Site Compound

2.2.3 Program

The Stage 2A works are anticipated to commence in January 2022. Stage 2B which includes the continuation of land-based construction and water-based works) are then anticipated to commence in March 2022 (refer to Table 2.1.)

2.3 Construction of quay wall (MBD – Land Based)

A number of structures will be constructed within the MBD Site Compound to accommodate the FSRU and LNG carrier for the Project. Excavation and stockpiling activities from the Stage 1 Early Enabling Works will continue on-site during Stage 2A to lay the platform for ongoing construction activities at the MBD Site Compound.

The new structures that will commence construction during Stage 2A are summarised in Table 2.2. The location of the quay wall and layout of the marine berth and wharf facilities is shown in Figure 2.4.

Table 2.2 Marine berth and wharf structures to be constructed during Stage 2A

Component	Works required
Earthworks and stockpiles	<ul style="list-style-type: none"> – Completion of excavation and backfilling works from Stage 1 Early Enabling Works. – A nominal 15-metre-wide section on the northern end and a circa 60-metre 'wedge' at the south- west corner of the excavation zone was left to facilitate contractor access and will required completion at commencement of Stage 2A. – Excavated materials from the Early Enabling Works have been stockpiled within the Eastern and Western Stockyards of the MBD Site Compound and the Emplacement Cell Construction Site. – The excavated materials stockpiled include: <ul style="list-style-type: none"> • Approximately 15,000m³ of demolished concrete crushed to nominal 70mm minus. • Approximately 30,000m³ of heavily bound base course crushed to nominal -150mm minus. • Approximately 25,000³ of mixed slag, general fill, and coal nominally < 150mm in size. • Approximately 10,000m³ of predominantly sand with some slag and coal. – The excavated materials will be used/reused for quay wall construction and to backfill the landside area of the quay wall or transported to the Emplacement Cell Construction Site for storage and use in construction of the Emplacement Cell.
Quay wall	<ul style="list-style-type: none"> – Construction of a new piled quay wall keyed into bedrock complete with sheet pile anchor wall, capping beam and tie rods to the south of the existing coal terminal. – Excavated and processed materials from the Stage 1 Early Enabling Works are stockpiled within the MBD Site Compound and will be used during construction of the quay wall and to backfill on landside area of the wall. – Installation of a marine fender system attached to the capping beam along the quay wall to protect the quay wall from berthing and mooring loads. – Installation of a cathodic protection system to the quay wall and associated elements, including assessment of the potential impacts the FSRU and pipeline cathodic protection will have on quay wall. – Backfilling and compaction on landside area of wall utilising the site stockpiled materials.
Mooring dolphins	<ul style="list-style-type: none"> – Installation of landside mooring dolphin structures on reinforced concrete platforms supported by steel piles. – Mooring equipment will be installed and comprise the following: <ul style="list-style-type: none"> • 20 load sensing quick release hooks. • Up to four land-based mooring winches on mooring dolphins may be required. • Up to four swivel fairleads may be required to enable each mooring line to land-based winches to be fed in a horizontal alignment.
Marine Loading Arm foundations	Construction of a new reinforced concrete foundation supported on steel piles, located behind the new quay wall.
Gangway tower foundation	Construction of foundation for Gangway tower.
Fire monitor foundation	Fire monitor foundations, subject to risk studies.

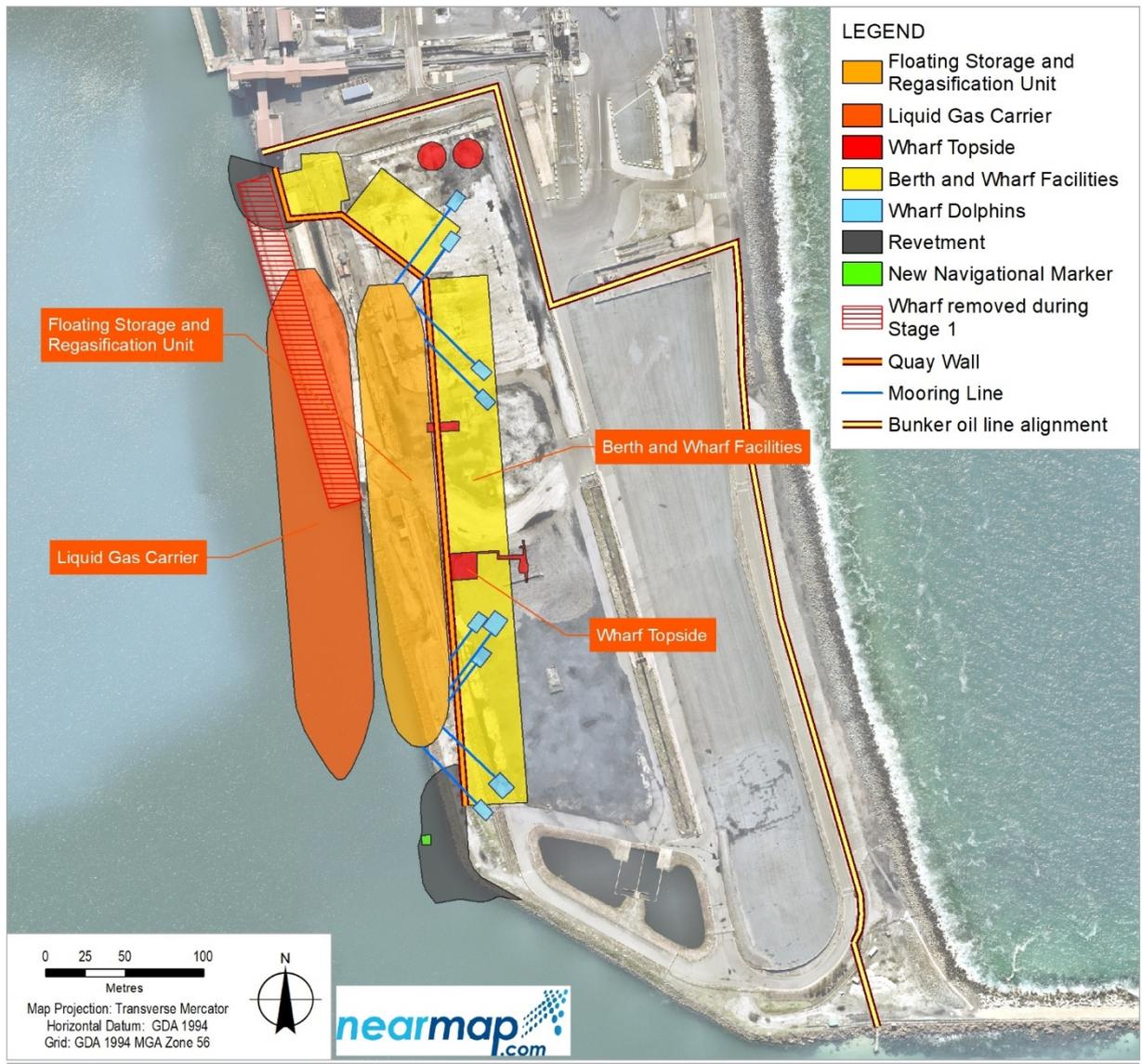


Figure 2.4 Location of quay wall and layout of MBD and ORF

2.4 Power, communications, and water connections

Works required for power, communications, and water connections are summarised in Table 2.3.

Table 2.3 Construction of power connections for Stage 2A

Component	Works required
Power and communications	<ul style="list-style-type: none"> – Construction and installation of a new 11kV power cable in a buried conduit and Substation. – Energisation of the Padmount Substation and 415kV Temporary Building Supply. – Installation of communication conduit and pits.
Potable water	<ul style="list-style-type: none"> – Extension of existing potable water line within MBD Site Compound.

2.5 Construction of ORF

The general layout of the ORF areas is shown in Figure 2.4. Works required for the three ORF areas are summarised in Table 2.4.

Table 2.4 Structures to be constructed for ORF during Stage 2A

Component	Works required
Wharf Topside Area	
Marine Loading Arms (MLAs)	Installation of MLAs, including: <ul style="list-style-type: none"> – Civils and structures. – Associated works such as piping, hydraulics, electrical, instrumentation, and auxiliary systems.
Piping and valving	<ul style="list-style-type: none"> – All necessary piping and valving. – Odorant injection facilities. – Pig launcher, downstream of the MLAs to tie-in to the Natural Gas Pipeline.
Gangway	<ul style="list-style-type: none"> – Gangway access tower to provide connection between the wharf and FSRU.
Utility connections	FSRU utilities connections for: <ul style="list-style-type: none"> – Communications. – Marine Diesel Oil. – Freshwater. – Sewage, bilge, and grey water.
Utility Area	
Site Utilities	Site utilities including: <ul style="list-style-type: none"> – Potable water and sewerage. – Instrument air and bottled nitrogen. – Diesel storage. – Electrical distribution (including UPS and emergency diesel generators). – Control and instrumentation. – Telecommunications.
Common Areas	
Firefighting systems and equipment	Firefighting equipment including: <ul style="list-style-type: none"> – Firewater storage. – Pumps. – Firewater monitors.
Security systems and equipment	<ul style="list-style-type: none"> – CCTV. – Fencing and gates. – Security access and monitoring systems.
Equipment housing	Equipment shelters and buildings to house:

Component	Works required
	<ul style="list-style-type: none"> – Electrical, control, and operating equipment, critical spares, emergency response and site monitoring facilities. – Buildings will include appropriate building services e.g., HVAC, potable water, amenities, sewerage etc.
Site roadways, lighting and drainage	<ul style="list-style-type: none"> – Roads and car parking areas. – General lighting, earthing, lightning system. – Drainage system to tie into the existing Port Kembla drainage system.
Gas Pipeline	<p>A section of gas pipeline will be installed within the MBD Compound site as part of the Stage 2A works. Final safety studies will be prepared prior to the construction of the gas pipeline and prior to commencement of operation as per Schedule 3, Condition 21 of Infrastructure Approval (SSI 9471).</p>

3. Roles and responsibilities

The Project Team is responsible for all activities associated with Stage 2A, including the implementation and maintenance of the various mitigation/management measures outlined in this CTMP. Relevant roles and responsibilities of the Project Team are outlined in Table 3.1.

Table 3.1 Roles and responsibilities of Project Team

Project Role	Responsibility
AIE Project Director	<ul style="list-style-type: none"> – Responsible for the overall funding and direction of civil and environmental works associated with Stage 2A. – Ensuring provision of adequate resources to achieve the environmental objectives for the project including ensuring sufficient resourcing for the Environmental Team, Engineering and Construction Teams.
AIE Construction Manager	<ul style="list-style-type: none"> – Proactively stewards the effective implementation of Stage 2A in accordance with requirements of the Infrastructure Approval (SSI9471), this CTMP, EMS, and all related Sub-Plans. – Demonstrate proactive support for environmental requirements.
AIE HSE Manager	<ul style="list-style-type: none"> – Develops and update all Health, Safety and Environmental (HSE) Management Strategies and Sub-Plans. – Ongoing liaison and engagement with government agencies and point of escalation for any environmental incidents. – Identifying environmental issues as they arise and proposing solutions. – Coordinate and facilitate weekly environmental inspections with the key contractors. – Environmental Reporting.
Principal Contractor Project Manager	<ul style="list-style-type: none"> – On-site Project management and control. – Decision-making authority relating to environmental performance of the construction program. – Authority over Project construction and site activities in accordance with the EMS. – Ensure relevant training is provided to all Project staff prior to commencing individual activities. – Reports to AIE Construction Manager on environmental matters. – Ensures appropriate Contractor resources are allocated to implement the environmental requirements. – Responsible for planning and scheduling of construction, and to ensure operations are conducted in accordance with statutory requirements and the EMS. – Monitors performance against environmental Key Performance Indicators (KPI's). – Ensures that all environmental objectives associated with the Project are achieved. – Day-to-day decision-making authority relating to environmental performance of construction activities and direct site activities and construction. – To provide resources to ensure environmental compliance and continuous improvement. – Ensure all personnel are aware of any changes to EMS, this CTMP and improved procedures. – Ensure this CTMP is implemented for the duration of Stage 2A.
Principal Contractor Construction Foreman	<ul style="list-style-type: none"> – Implement requirements contained in the EMS and Sub-Plans, work procedures and standard drawings. – Maintaining open and transparent communication with other Project discipline managers and other areas of the Project. – Reporting of hazards and incidents and implementing any rectification measures. – Ensures appropriate contractor resources are allocated. – Orders STOP WORK for any environmental breaches and reports incidents to the Project Manager. – Ensure this CTMP is implemented for the duration of Stage 2A.
Principal Contractor Environmental Representative	<ul style="list-style-type: none"> – Delivers environmentally focussed toolbox talks and provides applicable site inductions. – Provides environmental advice, assistance, and direction to Project Manager to ensure construction activities are conducted in accordance with regulatory legislation and this EMS.

Project Role	Responsibility
	<ul style="list-style-type: none"> – Participate and cooperate with AIE HSE Manager with regards to undertaking of joint weekly environmental site inspections. – Coordinate / undertake wet-weather inspections as per EPL No. 21529 and report accordingly to the AIE HSE Manager. – Develop strong working relationships with the AIE team and Consultants. – Ensure environmental risks are appropriately identified, communicated, and effectively managed. – Ensure communication of relevant environmental information to Project personnel. – Provide specialist advice and input as required. – Ensure construction manager, superintendents and field supervisors fully understand the environmental constraints and how construction practices must ensure any such constraints are considered and mitigated against during construction. – Orders STOP WORK for any environmental breaches and immediately reports incidents to Principal Contractor Project Manager and AIE HSE Manager.
AIE Environmental Representative	<ul style="list-style-type: none"> – Develop strong working relationships with the Principal Contractor Team and Consultants. – Ensure environmental risks are appropriately identified, communicated, and effectively managed. – Instruct and advise management team on compliance issues. – Provide specialist advice and input as required. – Co-ordinate internal audits of this CTMP. – Conduct audit review as required. – Reports on the performance of this CTMP and recommends changes or improvements to Project Manager. – Orders STOP WORK for any environmental breaches and immediately reports incidents to the AIE Construction Manager and AIE HSE Manager. – Conducts investigation and response to environmental complaints and inquiries, where required.
Subcontractors and construction personnel	<ul style="list-style-type: none"> – Undertake an environmental induction prior to accessing to site. – Comply with legislative requirements. – Participate in weekly inspections and audits. – Follow environmental procedures. – Report all environmental incidents and hazards. – Introduce environmental topics to prestart meetings. – Ensure that all relevant permits and clearances are in place prior to commencing work.

4. Legislative requirements

The legislative requirements applicable to Stage 2A are listed in Table 4.1.

Table 4.1 Legislation and relevant policy applicable to this CTMP

Legislation and Regulation	Description	Applicability
State		
<i>Roads Act 1993</i> (Roads Act)	The objectives of the Roads Act are to establish roads classification, the role of TfNSW and other public authorities in road management and regulates any activity being carried out on public road. Part 9 outlines the regulation of road works, structure and activities carried out on roads and the various approvals required.	Section 138 of the Act requires applicants to obtain consent from the relevant road's authority for the erection of a structure, carrying out of work in or under a public road, digging up or disturbance to the surface of a public road. The proposed transportation routes are located within the NSW Ports lease boundary and are owned and managed by NSW Ports. No Section 138 permit will be required.
<i>Ports and Maritime Administration Act 1995</i>	The <i>Ports and Maritime Administration Act 1995</i> defines a 'port operator' as the person declared to be the port operator of a private port who is responsible for the management and operation of the port facilities. Under Section 38 a port operator may give directions to regulate driving, stopping and parking of vehicles and the movement and storage of goods. NSW Ports are the appointed port operator of Port Kembla.	The port road network (refer to Appendix C) is owned and controlled by NSW Ports. The road network has been designed to accommodate a variety of heavy vehicles up to and including B-double trucks. Roads located within the NSW Ports precinct that have been identified as transportation routes are outlined in Section 6.2. NSW Ports utilise Direction 4 of 2021 issued under Section 38 of the <i>Ports and Maritime Administration Act 1995</i> which prohibits any person from undertaking any works within the port lease boundary, including roads, without the written consent of NSW Ports. Additional information on notification of the Stage 2A works to NSW Ports is included in Section 7.4.
<i>Heavy Vehicle National Law</i> (NSW) (HVNL)	The HVNL outlines the regulation of heavy vehicles on roads in NSW regarding public safety, impact of heavy vehicles on the environment, road infrastructure and public amenity while promoting industry productivity and efficiency through heavy vehicle usage.	Chapter 4 Part 4.2 outlines the mass limit requirements of heavy vehicles to ensure public safety and minimise the impacts of excessively loaded vehicles on road infrastructure. Loading limits of vehicles must be complied with. Part A Section 1.1 states vehicles that exceed 3.5 metres wide or 26 metres long require at least one pilot vehicle during the day time. Vehicles which exceed 4.6 metres require at least 2 pilot vehicles. Vehicles that are wider than 2.5 metres or longer than 22 metres operating at night require at least one pilot vehicle, while vehicles wider than 3.5 metres or longer than 26 metres require 2 pilot vehicles.
<i>Road Rules 2014</i>	The <i>Road Rules 2014</i> consolidate all applicable road rules in NSW into one instrument. The Rules are based on the <i>Australian Road Rules</i> to ensure consistency with national road rules. <i>Road Rules 2014</i> applies to all roads and road related areas within NSW which drivers must abide by.	The NSW Ports Port Kembla road network comprises port road (common areas) and tenant roads. 'Road related areas' are defined under Rule 13 which applies to any area that divides a road and footpaths and nature strips. All traffic and parking controls within the NSW Ports boundary are enforceable by the <i>Road Rules 2014</i> and other applicable road legislation.

5. Planning requirements

5.1 Conditions of approval

The planning requirements and the corresponding traffic and access management measures applicable to Stage 2A are listed in Table 5.1. Management measures are detailed in Section 6, Appendix A and Appendix D.

The planning requirements include the conditions set out in the Infrastructure Approval (SSI 9471) dated 24 April 2019 and the mitigation/management measures outlined in the PKGT EIS.

Table 5.1 Planning requirements

Requirement	Reference	Responsibility	Evidence	Applicability to this CTMP
Infrastructure Approval Requirements (SSI 9471)				
The Proponent must not transport more than 360,000 cubic metres of spoil to the disposal area by road and must maintain records of the volume of spoil transported by road to track compliance against this condition.	Schedule 3, Condition 7	<ul style="list-style-type: none"> – AIE HSE Manager – AIE Construction Manager 	Section 7.6	Applicable
Prior to the commencement of construction, unless the Planning Secretary agrees otherwise, the Proponent must prepare a Construction Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:	Schedule 3, Condition 15	<ul style="list-style-type: none"> – AIE HSE Manager – AIE Construction Manager 	This CTMP	Applicable
Be prepared in Consultation with TfNSW, NSW Ports and Council.		<ul style="list-style-type: none"> – AIE HSE Manager – AIE Construction Manager 	Section 1.1	Applicable
Include details of the transport route to be used for all construction traffic.		<ul style="list-style-type: none"> – AIE HSE Manager – AIE Construction Manager 	Section 6.2 Appendix A	Applicable
Include details of the measures that would be implemented to minimise traffic safety issues and disruption to local users of the transport route/s during construction works, including: <ul style="list-style-type: none"> – facilitating the use of barges to transfer spoil to the disposal site 				Not applicable
<ul style="list-style-type: none"> – temporary traffic controls, including detours and signage – ensure loaded vehicles entering or leaving the site have their loads covered or contained – minimise dirt being tracked on the public road network from development-related traffic 		<ul style="list-style-type: none"> – AIE HSE Manager – AIE Construction Manager – Principal Contractor Project Manager – Principal Contractor Construction Foreman 	Section 6.9 Appendix B Appendix C Also refer to Erosion and Sediment Control Plan (ESCP)	Applicable
Include a driver's code of conduct that addresses: <ul style="list-style-type: none"> – Travelling speeds – Driver fatigue – Procedures to ensure that drivers adhere to the designated transport route/s – Procedures to ensure that drivers implement safe driving practices 		<ul style="list-style-type: none"> – AIE HSE Manager – AIE Construction Manager 	Appendix C	Applicable
The Proponent must implement the approved CTMP for the development.	Schedule 3, Condition 16	<ul style="list-style-type: none"> – AIE HSE Manager 	This Plan	Applicable

Requirement	Reference	Responsibility	Evidence	Applicability to this CTMP
		<ul style="list-style-type: none"> - AIE Construction Manager - Principal Contractor Project Manager 		
<p>Construction Hours</p> <p>Unless the Secretary agrees otherwise, the Proponent may only undertake construction activities on site between:</p> <ol style="list-style-type: none"> a. 7 am to 6 pm Monday to Friday b. 8 am to 1 pm Saturdays; and c. at no time on Sundays and NSW public holidays. <p>The following construction activities may be undertaken outside these hours without the approval of the Secretary:</p> <ol style="list-style-type: none"> a. the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons b. emergency work to avoid the loss of life, property and/or material harm to the environment c. construction works that cause LAeq (15 mins) noise levels that are: <ul style="list-style-type: none"> • no more than 5 dB(A) above the rating background level at any residence in accordance with the Interim Construction Noise Guideline (ICNG) (DECC, 2009); and • no more than the noise management levels specified in Table 3 of the ICNG (DECC, 2009) at other sensitive land uses; and • continuous or impulsive vibration values, measured at the most affected residence, are no more than those for human exposure to vibration, specified in Table 2.2 of <i>Assessing vibration: a technical guideline</i> (DEC, 2006); and • intermittent vibration values measured at the most affected residence are no more than those for human exposure to vibration, specified in Table 2.4 of <i>Assessing vibration: a technical guideline</i> (DEC, 2006); or (d) where a negotiated agreement has been reached with affected receivers. 	Schedule 3, Condition 27	<ul style="list-style-type: none"> - AIE HSE Manager - AIE Construction Manager - Principal Contractor Project Manager - Principal Contractor Environmental Representative 	Section 6 Appendix C Also refer to Noise and Vibration Management Plan	Applicable
PKGT EIS Management Measures				
Prepare a CTMP including:	EIS Measure T1	AIE HSE Manager	This CTMP	Applicable
Site access routes			Section 6.2 Appendix A	
Construction parking arrangement			Section 6.4	

Requirement	Reference	Responsibility	Evidence	Applicability to this CTMP
Traffic management			Appendix B	
Pedestrian and bicycle rider management			Section 6.8	
Roadside hazards			Appendix B	
A CTMP be prepared prior to the commencement of works with site induction for construction personnel being undertaken to outline the requirements of the CTMP. The aim of the CTMP is to maintain the safety of all workers and road users within the vicinity site including but not limited to: <ul style="list-style-type: none"> – site access routes – construction parking arrangement – traffic management – pedestrian and bicycle rider management – roadside hazards. 	EIS Measure T1	<ul style="list-style-type: none"> – Principal Contractor Project Manager – Principal Contractor Construction Foreman – Principal Contractor Environmental Rep 	Section 6 Section 7.1 Appendix C	Applicable
Develop a Traffic Control Plan in accordance with the TfNSW <i>Traffic control at work sites</i> and AS1742.3 – requirements <i>Traffic control devices for works on roads</i> .	EIS Measure T2	AIE HSE Manager	Appendix B	Applicable
Seek to minimise traffic movements where possible during the morning and afternoon peak hours.	EIS Measure T3	Principal Contractor Construction Foreman	Section 6.2	Applicable
Encourage construction workers to carpool or utilise public transport, where practicable.	EIS Measure T4			

5.2 Environmental Protection Licence

The NSW EPA has issued an EPL (EPL No. 21529) for the Project, with the relevant monitoring and reporting conditions incorporated in this plan. Conditions applicable to construction traffic movements and monitoring requirements are outlined in Table 5.2.

Table 5.2 EPL No. 21529 conditions

Condition	Reference	Evidence
<p>Activities must be carried out in a competent manner Licensed activities must be carried out in a competent manner. This includes:</p> <ul style="list-style-type: none"> a. the processing, handling, movement and storage of materials and substances used to carry out the activity; and b. the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity. 	Section O1.1	Section 6 Appendix C
<p>Maintenance of plant and equipment All plant and equipment installed at the premises or used in connection with the licensed activity:</p> <ul style="list-style-type: none"> a. must be maintained in a proper and efficient condition; and b. must be operated in a proper and efficient manner. 	Condition O2.1	Section 6.1 Section 9.1
The premises must be maintained in a condition that minimises and/or prevents the emission of dust from the premises at all times.	Condition O3.1	Section 6.9 Appendix C Refer to ESCP
Trucks entering and leaving the premises (including travelling between non-contiguous areas of the premises) that are carrying loads of dust generating materials must have their loads covered at all times, except during loading and unloading.	Condition O3.2	Section 6.9 Section 9.1 Section 9.2
<p>Processes and management The licensee must implement all feasible and reasonable erosion and sediment controls as may be necessary throughout the life of construction works and activities to minimise sediment leaving the premises.</p>	Condition O4.1	Section 6.9 Refer to ESCP
The licensee must ensure erosion and sediment controls are designed (stability, location, type and size), constructed, operated and maintained in accordance with Managing Urban Stormwater – Soils and Construction, Volume 1, 4th Edition (Landcom, 2004).	Condition O4.2	Refer to ESCP
<p>The licensee must ensure:</p> <ul style="list-style-type: none"> a. all vehicular access points to the premises are designed, constructed, maintained and stabilised to minimise tracking of materials onto public roads and to ensure all-weather entry and exit. b. mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer, motorised plant and equipment leaving the premises, is removed to the greatest extent practicable before it leaves the premises. 	Condition O4.3	Section 6.2 Section 6.9 Refer to ESCP
<p>All erosion and sediment control measures on the premises must be inspected and works undertaken to repair and/or maintain these controls:</p> <ul style="list-style-type: none"> a. weekly during normal construction hours; b. daily during periods of rainfall; and c. within 24 hours of cessation of a rainfall event causing runoff to occur on or from the premises. <p>The Licensee must record all such inspections including observations and works undertaken to repair and/or maintain erosion and sediment controls.</p>	Condition O4.4	Section 9 Refer to ESCP
<p>Monitoring records The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.</p>	Condition M1.1	Section 9.2
Recording of pollution complaints	Condition M7.1	Section 8.3

Condition	Reference	Evidence
The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.		
<p>The record must include details of the following:</p> <ol style="list-style-type: none"> a. the date and time of the complaint; b. the method by which the complaint was made; c. any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d. the nature of the complaint; e. the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f. if no action was taken by the licensee, the reasons why no action was taken. 	Condition M7.2	Section 8.3
The record of a complaint must be kept for at least 4 years after the complaint was made.	Condition M7.3	Section 8.3
The record must be produced to any authorised officer of the EPA who asks to see them.	Condition M7.4	Section 8.3
<p>Telephone complaints line</p> <p>The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.</p>	Condition M8.1	Section 7.3
The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Condition M8.2	Section 7.3

6. Traffic and access management

6.1 Construction vehicles and volume

Light and heavy vehicles will be required for the Stage 2A works. Light vehicle movements will primarily be due to the transportation of the construction workforce. Heavy vehicle movements will be used for the transport of piles to the MBD Site Compound, equipment to and from the MBD Site Compound and Emplacement Cell Construction Site, and excavated materials between the MBD Site Compound and Emplacement Cell Construction Site. All vehicles will be well maintained in a good working condition applicable to the vehicle specifications. Vehicles will be operated in a safe and proper manner by qualified drivers (refer to Appendix C).

An overview of the type and volume of heavy and light vehicles is provided in Table 6.1. Numbers given are approximate only based on the maximum expected, worse-case scenario of movements per vehicle and are subject to change based on construction works scope change. It is not anticipated that traffic generated will exceed these numbers.

Table 6.1 Approximate volume of construction vehicles for Stage 2A

Vehicle description	Number	Movement per vehicle per day	Duration
Heavy vehicles			
Prime mover and extendable trailer (pile material deliveries)	6	4 movements, 2 days per week	3 months
Prime mover and extendable trailer (general piling plant mobilisation & demobilisation)	30	2 movements anticipated in any one day	2 weeks
Prime mover and float trailer (crane car body mobilisation & demobilisation)	8	2 movements, 1 day per week	2 weeks
Truck and dog trailer (import/export of soil/fill materials)	35	2 movements, 5 days per week	8 months
MR/HR trucks	6	4 movements, 5 days per week	2 months
Concrete truck	6	8 movements, 1 day per week	3 months
Light vehicles			
Personnel vehicles	40	4 movements per day*	11 months
Pilot vehicles	2	4 movements, 2 days per week	3 months

*Accounts for 50% of workers leaving site for errands/lunch.

6.2 Site access

Light and heavy vehicles will access (enter/exit) the MBD Site Compound from the single entry and exit on Sea Wall Road, as shown in Appendix A and Appendix B. Sea Wall Road is considered a public road; however, it is currently closed to the public and is owned and managed by NSW Ports. Access is controlled via security access points on Port Kembla Road and Tom Thumb Road. As such, the MBD Site Compound is restricted to authorised personnel only. Traffic control signage will be initiated from the site entrance, as presented in Appendix B.

Light and heavy vehicles will access (enter/exit) the Emplacement Cell Construction Site via Flinders Street (which turns into Old Port Road), onto Christy Drive, and then Arawata Drive, as shown in Appendix A and Appendix B. Traffic control signage will be initiated from the site entrance, as presented in Appendix B.

Traffic movements will be minimised, where possible, during the morning and afternoon peak hours. Construction workers will be encouraged to carpool or to use public transport, where practicable.

6.3 Loading and unloading area

Loading and unloading of material and equipment (large or small) will be done within the boundaries of each site, the MBD Site Compound and Emplacement Cell Construction Site (refer to Figure 2.2). There will be no loading or unloading of materials outside the site boundaries. There will be a dedicated area for unloading, loading, and storing of materials on each site. Authorised traffic controllers may be required for major deliveries to ensure motorists, cyclists and pedestrian safety as trucks enter and exit the work site(s).

6.4 On-site parking

Designated parking areas will be established within the MBD Site Compound and the Emplacement Cell Construction Site (refer to Figure 2.3 and Appendix B). The largest parking requirement will be the MBD Site Compound, where an allocated parking area has been set out for at least 76 vehicles. Workers are encouraged to car share or use public transport to minimise the impact on surrounding streets, when possible and as per NSW Public Health Orders regarding COVID-19.

6.5 Transport of piles

Pile transportation involves the movement of piles being unloaded and transported to the storage area, and transportation between the storage area and MBD Site Compound. Transportation routes are described below.

6.5.1 Transport of piles to laydown area

Piles will be unloaded from the import berth adjacent to, and to the west of, the MBD Site Compound (Berth 1 or Berth 2, subject to availability). Piles will be loaded onto trucks and transported to the interim pile storage area off Morton Way via the AAT facility utilising Farrer Road. Vehicles will make a right hand turn onto Tom Thumb Road and right onto Morton Way to access the storage compound.

6.5.2 Transport of piles from laydown area to MBD Site Compound

The piles required for Stage 2A will be stored in the interim pile storage area off Morton Way within the NSW Ports precinct. When required, the piles will be transported to the MBD Site Compound through the port via two route options, Tom Thumb Road and Seawall Road, or Springhill Road and Port Kembla Road (refer to Construction Traffic Route D in Appendix A).

The pile transportation routes, vehicle movements and traffic controls are also included in the Vehicle Movement Plans provided in Appendix B. Traffic controls will only be engaged when transporting pile materials. The need for traffic controls is based on the size and weight of the vehicle as per the HVNL regulations, such as the use of pilot vehicles for oversize or overweight loads. Pilot vehicles are permitted for either nominated route.

6.6 Out of hours deliveries

Out of hours deliveries will only be permitted in accordance with Infrastructure Approval (SSI 9471). The following activities are approved outside the construction hours without approval from the Secretary:

- The delivery of materials as requested by the NSW Police Force or other authorities for safety reasons.
- Emergency work to avoid the loss of life, property and/or material harm to the environment.
- Construction works that cause LAeq (15 mins) noise levels that are:
 - no more than 5 dB(A) above the rating background level at any residence in accordance with the ICNG (DECC, 2009).
 - no more than the noise management levels specified in Table 3 of the ICNG (DECC, 2009) at other sensitive land uses.
 - continuous or impulsive vibration values, measured at the most affected residence, are no more than those for human exposure to vibration, specified in Table 2.2 of *Assessing vibration: a technical guideline* (DEC, 2006).

- intermittent vibration values measured at the most affected residence are no more than those for human exposure to vibration, specified in Table 2.4 of *Assessing vibration: a technical guideline* (DEC, 2006).
- Where a negotiated agreement has been reached with affected receivers.

6.7 Oversized vehicle movements

Oversized vehicle movements may be required to deliver equipment and materials to the MBD Site Compound and Emplacement Cell Construction Site. The approved oversized routes are included in Appendix D. Each oversized vehicle movement will have to obtain Oversize Over Mass (OSOM) permits and traffic controls, as required, from the National Heavy Vehicle Register and all other relevant authorities. Additionally, over-sized deliveries will be required to adhere to the working hour restrictions as outlined in Section 6.6. Where curfews are required, over-sized loads will be required to schedule access to the site and wait until working hours to commence unloading or loading.

Pilot vehicles will be utilised when applicable as per the HVNL (refer to Table 4.1).

6.8 Potential hazards

There would be negligible impact to pedestrians and cyclists, nor would there be any impact to public transport services, including bus infrastructure, in the vicinity of the MBD Site Compound or Emplacement Cell Construction Site (GHD, 2018a). Traffic control will be implemented at the access points to sites, as illustrated in the Vehicle Movement Plan in Appendix B.

The truck driver induction (Appendix C) outlines requirements drivers must comply with during the Stage 2A works, including in wet weather conditions. Drivers must operate vehicles on the road in a safe manner with consideration to weather conditions. Controls related to driving in wet weather include:

- Check daily weather reports to know in advance expected weather conditions for the day.
- Ensure vehicles have been serviced as per manufacturer's specifications e.g., tyre tread and pressure.
- Drive with headlights and windshield wipers on for increased visibility during inclement weather.
- Drive to the conditions and slow down travel speed.

6.9 Dust and mud control

All sites will implement controls to minimise mud tracked on to roads and subsequent dust generation. Controls include:

- Use of existing hard stand roads, where possible.
- Construction of granular haul roads.
- Construction of rumble grids at the MBD Site Compound and the Emplacement Cell Construction Site, similar to those pictured below in Figure 6.1 and Figure 6.2.
- Scheduling of regular road sweeping on as-needed basis across site access points.
- Additional road sweeping to be available in response to an observation of mud being tracked onto roads.

Additional road maintenance activities will be undertaken to ensure all roads are maintained in safe working order and to prevent any damage from truck movements i.e., potholes. All roads proposed as transport routes are sealed and, with the above controls implemented, would not increase tracking on surrounding public roads. A dilapidation survey of Seawall Road prior to the commencement of construction was undertaken by AIE to assess the road condition. Additional dilapidation surveys will be undertaken during construction stages of the Project (refer to Section 7.5).

Vehicles transporting soils and sediments will adhere to load limit sizes applicable to the vehicle specifications and covered prior to leaving either the MBD Site Compound or Emplacement Cell Construction Site. The truck driver induction (refer to Appendix C) outlines the requirements for ensuring soil and sediment loads are adequately secured and wheels free of dirt prior to entering or exiting of the MBD Site Compound or Emplacement Cell Construction Site. Routine inspections and monitoring will ensure loads are adequately covered (refer to Section 9). Additional information on transport of materials is included in Section 8.1 of the Stage 2A SMP.



Figure 6.1 Rumble grid to be installed at MBD Site Compound and Emplacement Cell Construction Sites



Figure 6.2 Gravel haul road to be installed at MBD Site Compound and Emplacement Cell Construction Sites

7. Compliance management

7.1 Training

All staff, including subcontractors, will undergo a site-specific induction which will include traffic management issues. Targeted training in the form of truck driver inductions will be supplied to regular truck drivers, specifically concrete trucks, and spoil trucks. A copy of the Truck Driver induction is included in Appendix C.

The driver induction addresses the planning requirements, including:

- Access and working hours.
- Approved designated transport routes.
- Two-way radio communication.
- Procedures to follow in the event of a spill.
- Procedures for securing (including covering) soil and sediment loads and ensuring wheels are free of dirt.
- Site hours:
 - 7 am to 6 pm Monday to Friday
 - 8 am to 1 pm Saturdays.
- Site speed limit (25 kilometres/hour).
- When exiting the site all pedestrians and light vehicles have right of way.
- No verbal communication with the public or media, refer them to the community hotline.
- Upon exit, all road rules will be complied with.
- Slow down at level crossings.
- All vehicles exiting the site are on display.
- Fatigue.
- Project contacts and community consultation contact numbers.

The Principal Contractor will develop and implement a Project Safe Driving Plan for drivers to refer to and comply with. All drivers will be taken through the nominated routes ahead of the commencement of the Stage 2A works

7.2 Traffic impact on local roads

Traffic associated with Stage 2A have been determined to operate well within the acceptable capacity for weekday mornings and evening peak periods. Traffic impacts will be minimal as traffic signals at Port Kembla will be used for phasing of trucks. Truck movements will also be scheduled and sequenced to the flow of traffic signals in and out of the MBD Site Compound and Emplacement Cell Construction Site.

In the event activities are required that could impact on the operational efficiency of the local road network outside of the NSW Ports lease boundary (refer to Appendix C), a Road Occupancy Licence Application will be submitted to TfNSW through their Online Planned Incident system (OPLINC) at least ten working days prior to the date occupancy is required.

7.3 Community engagement

Changes to traffic conditions will be notified to the community on a monthly basis, via the Project webpage and mail outs to the most impacted residents, neighbours, and NSW Ports. A forecast of upcoming road works and traffic plans will also be included in the update.

Throughout the Stage 2A works, a community hotline will be maintained where inquiries and complaints will be recorded and forwarded to the Project contact to respond and or investigate. Community consultation contacts are listed in Table 7.1. Complaints will be recorded on a project feedback and complaints register. Contact details will be included on site signage at the MBD Site Compound and Emplacement Cell Construction Site.

Table 7.1 Community consultation contacts

Media	Contact
Phone (community hotline)	1800 789 177
Website	https://ausindenergy.com/contact-us/
In person	Referred to AIE HSE Manager

7.4 NSW Ports notification

AIE have been provided with the notification process from NSW Ports when undertaking transportation within the NSW Ports road network. Traffic movements utilising internal NSW Ports roads require prior notification seven days in advance of proposed transportation activities being undertaken in accordance with the NSW Ports Direction 4. Notification will then be made to the relevant stakeholders within the NSW Port boundary that may be impacted by the Stage 2A works.

Consent from NSW Ports to utilise internal roads and the proposed pile laydown area on Morton Way has been obtained. All movements will be controlled as per this CTMP which has been reviewed by NSW Ports with applicable comments incorporated.

7.5 Dilapidation surveys

Prior to the commencement of the Project, a dilapidation survey was undertaken of the two primary access roads in and out of the site, Seawall Road and Arawata Road, which recorded the condition of the road surfaces, kerb, and gutters. Copies of the dilapidation report will be forwarded to TfNSW, Council and NSW Ports and reviewed at the completion of the Project to determine if rectification works are required.

At the conclusion of the Project, an additional dilapidation survey will be undertaken.

7.6 Monitoring

Monitoring of traffic management and mitigation measures will be undertaken, as required, by the Project Manager and/or Construction Foreman prior to, during, and following Stage 2A at both the MBD Site Compound and Emplacement Cell Construction Site.

Traffic monitoring is to include, but not be limited to:

- Weekly inspection of traffic signage
- Tallying of:
 - Daily truck movements transporting spoil from the MBD Site Compound to the Emplacement Cell Construction Site.
 - Total truck movements to ensure no more than 360,000 cubic metres of spoil materials will be transported via road in compliance with Infrastructure Approval (SSI 9471) Schedule 3, Condition 7. Additional information on monitoring spoil movements is included in Section 8 of the Stage 2A SMP.

The data will be available to respond to community inquiries and for assessment of traffic impacts on the surrounding areas.

A review of functionality of the CTMP will be undertaken following any traffic incident or complaint received around traffic matters.

8. Communication and complaints

Effective communication between the Principal Contractor and construction personnel, AIE project team, sub-contractors and external stakeholders will be undertaken throughout the Project to ensure effective implementation of this CTMP.

Project communication can be categorised into internal and external communications, as well as communications specifically dealing with complaints. The specific communication methods for each category are discussed below.

8.1 Internal communications

Communication on environmental issues related to traffic management within the Project team will be maintained, as a minimum, through the following forums (organiser as noted):

- Weekly project construction team meetings (AIE Construction Manager or delegate).
- Weekly Environmental management team meetings with relevant contractors (AIE HSE Manager or Delegate).
- Toolbox talks and daily pre-start briefings (Principal Contractor Project Manager or delegate).
- Minutes of formal meetings will be taken and distributed to record issues raised and actions required, with action status established at subsequent meetings.
- Monthly review of the internal AIE Environmental Compliance Tracking register (AIE HSE Manager or delegate).

All internal meetings include appropriate documentation in the form of agenda and formal distribution via the Project's document system.

In addition to the above, the AIE Environment Team will also undertake informal planning sessions and resource review meetings to plan and forecast for upcoming key construction dates, critical issues and other relevant matters associated with environmental planning and approvals.

8.2 External communications

AIE is committed to keeping the local community and relevant agencies informed about the development of the Project. The principal external communication objectives are, therefore, to:

- Continue to maintain open communication with relevant stakeholders.
- Minimise environmental impacts.
- Be proactive in addressing any concerns that the community / external stakeholder may express.

AIE will build upon the stakeholder and community engagement phase undertaken during project development including multiple group or one on one briefings. A project website (www.ausindenergy.com) has been developed and provides comprehensive, clear, and accessible information that is updated on a regular basis.

As well as the local Port Kembla and broader community of the Wollongong region, extensive engagement was also undertaken with a range of other interested key stakeholders, such as local commerce organisations, the Port Authority of NSW and local and state government.

Consultation with key stakeholders and the wider community on the Project will continue throughout Stage 2A and subsequent construction phases. These measures will ensure the stakeholders, including the wider community, remain informed of the project's progress.

Key methods of engagement are provided in the Stage 2A EMS.

8.3 Complaints management

All complaints where a third party has identified a construction activity as being unsatisfactory or unacceptable will be dealt with promptly and efficiently in accordance with the complaint and dispute response outlined in the Project's Stage 2A EMS.

AIE will operate a free 24-hour Community Information Line (1800 789 177) where members of the community can leave details about an inquiry, they may have regarding construction activities related to traffic. This message will be passed on to site personnel and/or the Stakeholder Engagement Team, as appropriate.

Initial responses to complaints will be provided within 24 hours of the complaint being received. As part of the response, a review of the activity will be undertaken. If required and possible, immediate changes will be made to reduce any impact on the community. In some cases, the issues cannot be resolved immediately, and ongoing actions might be required to resolve the issue.

All complaints related to traffic will be recorded in a Complaints and Disputes Register. The following information will be recorded for each complaint:

1. The date and time of the complaint.
2. The method by which the complaint was made.
3. Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect.
4. The nature of the complaint.
5. The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant.
6. If no action was taken by the licensee, the reasons why no action was taken.

The Complaints and Disputes Register will be maintained by the Project's HSE Manager or delegate, and will detail what the issue was, initial response provided, how and when the issue was resolved, and by whom. Records will be kept for at least four years after the complaint was made and will be produced on request by any authorised officer of the EPA.

Where resolving a complaint with a third party is protracted or develops into a dispute, the AIE HSE Manager shall escalate proactively to Senior Project Leadership (e.g., AIE Project Manager and/or Project Director) to assist with resolution. AIE will work proactively with the complainant to resolve the dispute including having face to face meetings, site familiarisation sessions and agreeing on actions to resolve the dispute. All communications and agreed actions shall be documented.

For the management and reporting of corrective actions (which may be required in response to a complaint), refer to the Project's Stage 2A EMS.

9. Inspections, monitoring and audits

Monitoring and auditing will be undertaken to determine the impact on the environment and identify opportunities for improvement. Monitoring to be implemented for specific actions or environmental issues (e.g., water quality monitoring, air quality monitoring) will be detailed in their relevant sub-plan and will specifically address the monitoring requirements for those issues.

9.1 Environmental inspections

9.1.1 AIE and Principal Contractor joint environmental weekly inspection

As a minimum, the AIE HSE Manager (or nominated delegate) will undertake weekly inspection of the work sites with the relevant Principal Contractor's environmental personnel (Environmental Representative or similar) to evaluate the effectiveness of environmental controls (inclusive of erosion and sediment control measures) and general compliance with the implementation of the CTMP for site-based activities.

If any maintenance and/or deficiencies in environmental controls or in the standard of environmental performance are observed, they will be recorded on the checklist form. Records will also include details of any maintenance required, the nature of the deficiency, any actions required and an implementation priority.

Actions raised during inspections will be documented on the *Weekly Environmental Site Checklist* and will be issued formally through the Project's document management system to the relevant Contractor for action. If they represent an actual or potential significant environmental risk, these issues shall be reviewed at the Project Planning meetings and will have non-conformances raised if not closed out in the nominated timeframe (Nonconformance Report).

9.1.2 Contractor environmental inspections

In addition to the joint weekly environmental site inspection with AIE, the Principal Contractor will be required to undertake daily site environmental inspections, targeting key environmental risks commensurate with the activity being undertaken. The daily environmental site inspection will be documented on a checklist, or similar, to be prepared and completed by the Principal Contractor.

Copies of the daily environmental site inspection records are to be provide to AIE on request.

The HSE Manager is responsible for the initial reporting of significant non-compliances with the CTMP or relevant legislation to the AIE Project Director and government authorities (refer to Section 10).

9.2 Monitoring

Monitoring will be undertaken to validate the impacts predicted for the work, to measure the effectiveness of management plans, environmental controls, and implementation of this CTMP, and to address approval requirements.

Monitoring requirements applicable to the CTMP include:

- Weekly inspection of traffic signage.
- Tallying of:
 - Daily truck movements transporting spoil from the MBD Site Compound to the Emplacement Cell Construction Site.
 - Total truck movements to ensure no more than 360,000 cubic metres of spoil materials will be transported via road in compliance with Infrastructure Approval (SSI 9471) Schedule 3, Condition 7. Additional information on monitoring spoil movements is included in Section 8 of the Stage 2A SMP.

Plant and equipment entering or exiting the MBD Site Compound or Emplacement Cell Construction Site will be continuously monitored to ensure soil and sediment loads are adequately secured and wheels free of dirt. This will include:

- Scheduling of regular road sweeping on an as-needed basis across site access points.
- Additional road sweeping to be available in response to an observation of mud being tracked onto roads.
- Inspection of all soil and sediment loads to ensure loads are properly covered prior to vehicle entering and/or exiting work site.

Additional details regarding dust management are included in the Stage 2A ESCP.

9.3 Auditing

AIE will conduct internal audits at frequencies as determined in the risk-based auditing schedule. The purpose of auditing is to verify compliance with:

- The EMS and this CTMP.
- Compliance with the requirements of relevant components outlined within the EMS and CTMP, including but not limited to, site inspection compliance, document control / management, non-compliance, and incident management etc.
- Monitoring and reporting requirements as set out under EPL No. 21529.

Additional details regarding the auditing process are detailed in the Project's Stage 2A EMS.

9.4 Environmental reporting

9.4.1 DPIE reporting

Regular reports on compliance and other matters will be provided during the construction phase of the Project. This will include reporting to the Department of Planning, Industry and Environment (DPIE) in accordance with Schedule 4, Conditions 7 and 8 of the Infrastructure Approval (SSI 9471), with specific reference to the *Compliance Reporting Post Approval Requirements (2020)*.

In addition, DPIE will be notified in writing of the date of commencement of each of the relevant phases of the Project in accordance with Schedule 2, Condition 8 of the Infrastructure Approval (SSI 9471).

Reporting applicable to this CTMP will consist of:

- Traffic movement monitoring results.
- Requirements of EPL No. 21529.
- Construction works progress and appraisal of traffic safety and movements quality controls.
- Environmental Incident Report(s), as required.
- Annual returns, as required by EPL No. 21529.

9.4.2 Other reporting requirements

A monthly environmental monitoring report will be developed for each calendar month which will include details of the monitoring results and frequencies and inclusion of any exceedance of EPL No. 21529 traffic monitoring limits / criteria. A copy of the monthly environmental monitoring report will be made available on the AIE Project website.

Further reporting requirements are provided in Section 9.6 and Section 10.

9.5 Compliance tracking register

A Compliance Tracking Register has been developed as a monitoring tool to assist with the compliance reporting requirement as set out under Condition 7, Schedule 4 of the Infrastructure Approval (SSI 9471) as follows:

Compliance Reporting

The proponent must provide regular compliance reports to the Department on the development in accordance with the relevant requirements of the Department's guideline Compliance Reporting Post Approval Requirements (2020), or its most recent edition.

The compliance tracking register includes a breakdown of the requirements from the following key approval and project documents:

- Infrastructure Approval (SSI 9471).
- EPL No. 21529.
- Requirements of this CTMP.

The Compliance Tracking Register includes tabulation of reference conditions, the requirements, responsibility, status (i.e., ongoing, close-out, not triggered, etc.) and supporting evidence where required.

A routine review of the Compliance Tracking Register is undertaken by the AIE HSE Manager (or delegate) with input sought from the relevant contractors as required. The Compliance Tracking is a live document which is kept up to date for each stage of the construction works.

9.6 Non-conformance, corrective, and preventative actions

Non-conformances or potential non-conformances are situations or events that do not comply with the safeguards and procedures stipulated in the EMS or this CTMP:

- As part of site inspections, supervision or monitoring of construction activities.
- During internal audits.
- Following justified / supported verbal or written third party complaints.

All non-conformances related to traffic safety and movements will be managed and reported using the non-conformance function of the Project's document management system. Each non-conformance event and follow-up action will be documented and traceable, including identification of key dates and responsible personnel.

Additional details regarding corrective and preventative actions are outlined in the Project's Stage 2A EMS.

The Department must be notified in writing to compliance@planning.nsw.gov.au within 7 days after the identification of any non-compliance issue. The notification must identify the development, including the application number, set out the condition of approval that the development is non-compliant with, the way in which it does not comply, the reasons for the non-compliance (if known) and what actions have been taken, or will be taken, to address the non-compliance.

10. Incident management and emergency response

10.1 Incident management

10.1.1 Overview

Incidents are defined as an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance. The consequences of such incidents may result in material environmental harm, damage, or asset loss. 'Near misses' are extraordinary events that could have reasonably resulted in an incident.

All incidents related to traffic, including those of the Principal Contractor, its subcontractors, and visitors that occur during the undertaking of the construction works for the Project will be managed to satisfy the requirements of AIE's Incident Reporting and Investigation System Requirements. Whilst it is noted that key Contractors will be implementing their own environmental management system procedures and processes, AIE will be responsible for ensuring that these systems and processes satisfy the requirements of the AIE EMS, including the incident management components. The Contractor will be responsible for providing all necessary documentation with regards to the incident investigation and close-out actions where required. The timing of the provision of this documentation is to align with the AIE requirements.

The AIE HSE Manager must be notified immediately of any environmental incident or near miss related to traffic. These may include, but are not limited to the following:

- Exceedance of air quality monitoring criteria from traffic movements as required under the Project EPL (EPL No. 21529).
- Spill of any dangerous goods or hazardous substance to ground or water.
- Substantiated complaints received from members of the community or regulatory authorities.
- Regulatory breaches such as fines, prosecutions, improvement notices, breaches of licence conditions.
- All incidents of third-party property damage or loss.
- Incidents involving impact or potential damage to items or places of cultural heritage significance.
- Land-based off-site sediment loss to the environment, including sediment tracking onto the roadway.

The AIE HSE Manager will be responsible for regulatory notification of all notifiable environmental incidents (refer to Section 10.1.3 for notifiable incidents). All environmental incidents will be reported immediately to DPIE in writing via the Planning Portal after AIE becomes aware of the incident, as per Schedule 4 Condition 5 of the Infrastructure Approval (SSI 9471). The notification must identify the development, including the application number, and set out the location and nature of the incident.

In the event of a notifiable non-compliance incident arising, the Principal Contractor will notify the AIE HSE Manager immediately to allow the AIE HSE Manager to notify DPIE in writing (via the Planning Portal) within 7 days of AIE becoming aware of the non-compliance, as per Schedule 4 Condition 6 of the Infrastructure Approval (SSI 9471). The notification must identify the development, including the application number, set out the condition of approval that the development is non-compliant with, the way in which it does not comply, the reasons for the non-compliance (if known) and what actions have been taken, or will be taken, to address the non-compliance.

10.1.2 Notifiable incident under the POEO Act

In the event of a Notifiable Incident as defined under the *Protection of the Environment Operations Act 1997* (POEO Act), AIE is responsible for immediately notifying the NSW Environment Protection Authority (EPA), and any other relevant authority, of pollution incidents on or around the site via the EPA Environment Line (telephone 131 555) in accordance with Part 5.7 of the POEO Act. The circumstances where this will take place include:

- *If the actual or potential harm to the health or safety of human beings or ecosystems is not trivial.*
- *If actual or potential loss or property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000.*

Follow-up written notification to the EPA and any other relevant authorities will be required in accordance with the POEO Act and requirements of the EPA. This includes the provision of written details of the notification to the EPA within 7 days of the date on which the incident occurred.

All notifiable incidents will also be managed, documented, and reported in accordance with the AIE *Incident Reporting and Investigation System Requirement*.

In addition, an authorised officer of the EPA has the right to request a written report (in accordance with Condition R3 of the EPL No. 21529) if they suspect on reasonable grounds that an event has occurred at the licensed premises which has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies). The written report is to address all the requirements under Condition R3 of the EPL.

10.1.3 Notifiable incident under the Infrastructure Approval (SSI-9471)

In accordance with Condition 5 of Schedule 4, DPIE must be notified in writing to compliance@planning.nsw.gov.au immediately after AIE becomes aware of an incident on site.

Additional details regarding notifiable incidents and procedures are outlined in the Project's Stage 2A EMS.

10.2 Emergency response

Actual or potential emergency situations will vary in type and severity. The required level of response and notification will be at the discretion of the AIE Construction Manager in consultation with the AIE HSE Manager.

Any emergency situation may require only isolated containment and control or may require the complete evacuation of the site and notification of relevant emergency services. Consideration should be made of the response requirements for different situations. If at any time there is uncertainty on how to proceed, response should be for the worst possible scenario. Ultimately, the AIE Construction Manager or representative has authority and responsibility to instigate an evacuation if he/she feels it is warranted.

In the event of an emergency, the following plans shall be consulted and implemented, as relevant:

- The Principal Contractor's site-specific Emergency Response Plan.
- AIE Port Kembla Gas Terminal Emergency Spill Plan.
- Pollution Incident Response Management Plan (PIRMP).
- AIE Emergency Management Procedures.

11. Document management and review

11.1 Record management

Records and registers specified in this CTMP for Stage 2A shall be maintained. Records to be kept may include but will not be limited to the following:

- Environmental Inspection Checklist.
- Environment Reporting.
- Environmental Monitoring Reports / Records.
- Fauna and Weed Register.
- Internal Audit Reports.
- Incident Reports and Register.
- Toolbox Talk Records.
- Induction Presentation and Register.
- Environmental Activities Safe Work Method Statement (SWMS).
- Corrective Actions Register.
- Waste and Resource Register.
- Material Tracking Register.
- Training Register / Matrix.
- Complaints Register.

11.2 Review and revision of CTMP

This CTMP will be reviewed and updated, as required under Condition 3 of Schedule 4 of Infrastructure Approval (SSI 9471) to ensure the objectives of the applicable approval conditions contained within are being met throughout Stage 2A.

In addition, as required under Condition 4 of Schedule 4 of Infrastructure Approval (SSI 9471), the CTMP must be reviewed, and if necessary, revised within 3 months (unless otherwise agreed with DPIE) for any of the following:

- Following the submission of an incident report as per Condition 5, Schedule 4 4 of Infrastructure Approval (SSI 9471) (refer to Section 10).
- Following approval of any modification to the conditions of approval outlined in Infrastructure Approval (SSI 9471).
- At the direction of the Planning Secretary as per Condition 4, Schedule 2 4 of Infrastructure Approval (SSI 9471).

Where a review leads to a revision of this plan, within four weeks the revised CTMP will be submitted to the Planning Secretary for approval unless otherwise agreed with the Planning Secretary.

11.3 Access to information

AIE will make the following information publicly available on the PKGT website, as per Schedule 4, Condition 12 of the Infrastructure Approval (SSI 9471) and the requirements as set-out under the Project EPL No. 21529:

- The PKGT EIS.
- Current statutory approvals for the Project.
- Approved strategies, plans or programs required under the conditions of Infrastructure Approval (SSI 9471).
- A comprehensive summary of the monitoring results of the development, reported in accordance with the specification of any conditions, or any approved plans and programs relating to Infrastructure Approval (SSI 9471).
- A summary of complaints (updated monthly).

- Any independent environmental audit, and responses to the recommendations in any audit.
- The approved premises map (EPL No. 21259, Condition A2.4).
- PIRMP (EPL No. 21529, Condition E2).
- Any other matter required by the Planning Secretary.

This information will be kept up to date by AIE when required.

References

Australian Standards 1742.3 – Manual of uniform traffic control devices, Part 3: Traffic control for works on roads.

DEC 2006, *Assessing Vibration: A Technical Guideline.*

DECCW 2009, *Interim Construction Noise Guideline.*

Environmental Protection Licence No. 21529, dated 5 October 2021.

GHD 2018, Port Kembla Gas Terminal Environmental Impact Statement.

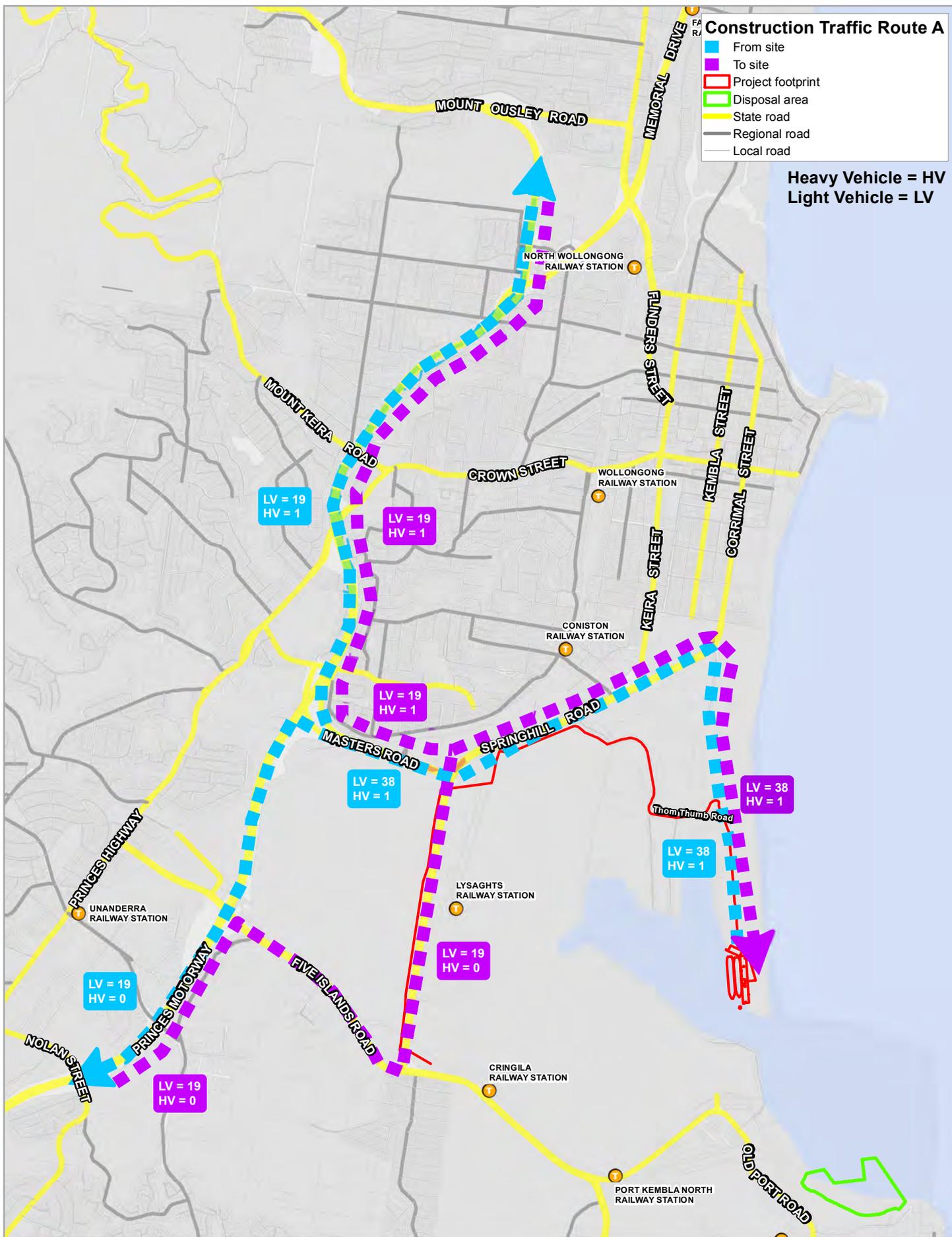
Infrastructure Approval SSI 9471 dated 24th April 2019.

TfNSW 2020, *Traffic control at work sites Technical Manual.*

Appendices

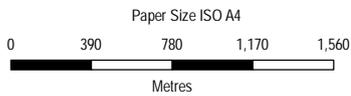
Appendix A

Construction traffic routes



- Construction Traffic Route A**
- ▬ From site
 - ▬ To site
 - Project footprint
 - Disposal area
 - State road
 - Regional road
 - Local road

Heavy Vehicle = HV
Light Vehicle = LV

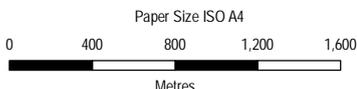
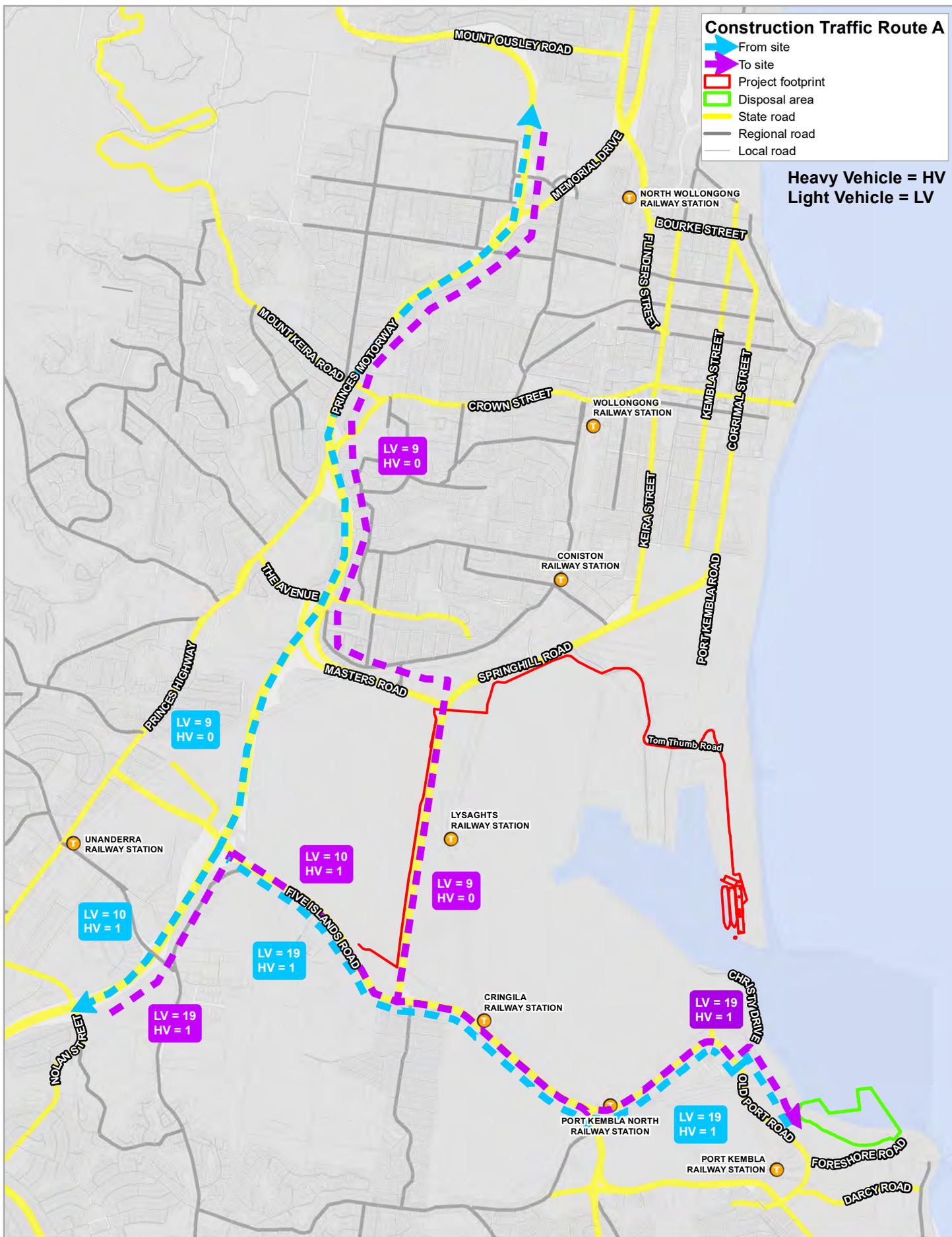


Australian Industrial Energy
Port Kembla Gas Project

Project No. 21-27477
Revision No. A
Date 01 Nov 2018

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

**Construction Traffic Route A:
Access to MBD Site Compound**



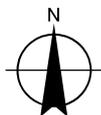
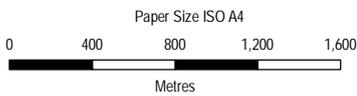
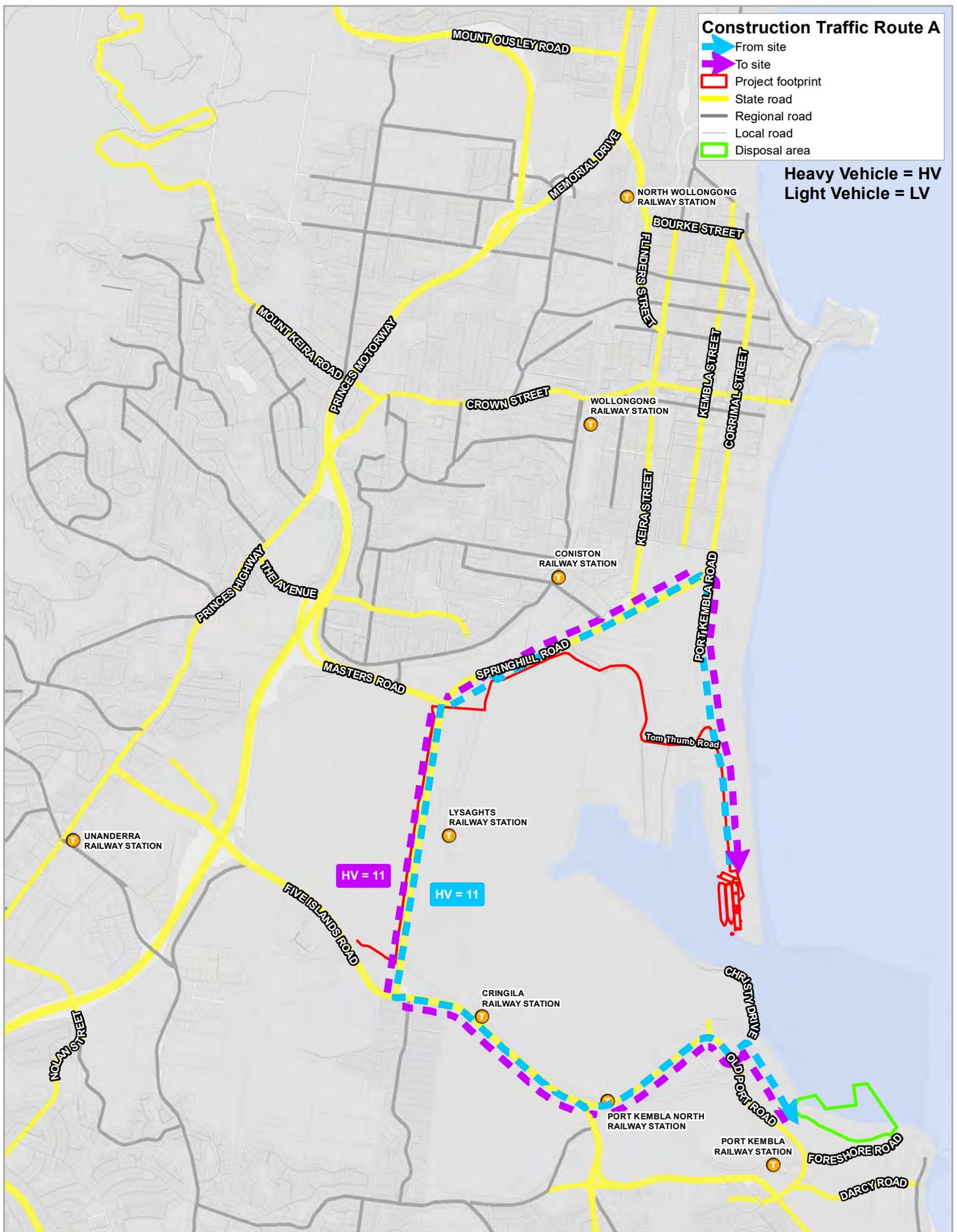
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56



Australian Industrial Energy
Port Kembla Gas Terminal

Project No. 21-27477
Revision No. A
Date 28 Apr 2021

Construction Traffic Route B: Access to Emplacement Cell Construction Site



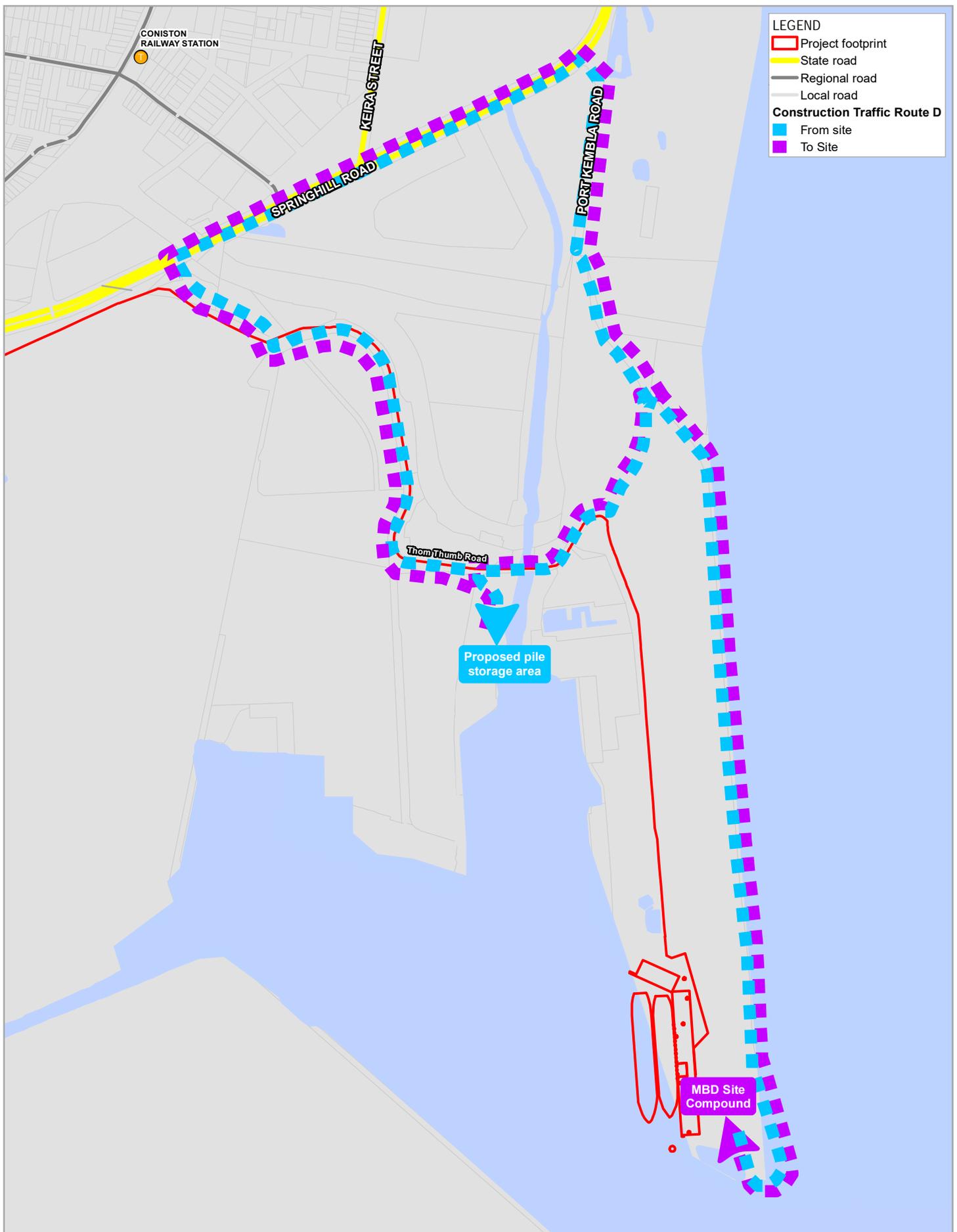
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56



Australian Industrial Energy
Port Kembla Gas Terminal

**Construction Traffic Route C: Access
between MBD Site Compound and
Emplacement Cell Construction Site**

Project No. 21-27477
Revision No. A
Date 28 Apr 2021

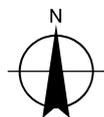
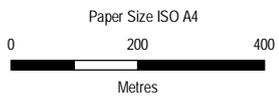


LEGEND

- Project footprint
- State road
- Regional road
- Local road

Construction Traffic Route D

- From site
- To Site



Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56



Australian Industrial Energy
Port Kembla Gas Terminal

**Construction Traffic Route D:
Route for pile transportation from lay
down area to MBD Site Compound**

Project No. 21-27477
Revision No. A
Date 11 Oct 2021

Appendix B

Vehicle movement plans

(02) 9603 38 20



Effective Date: 3/12/21
Version: 3

Client: Rare Environmental
Location: Tom Thumb Rd Port Kembla
Activity: Vehicle Movement Plan
TGS Number: DWRAE1

www.invarion.com

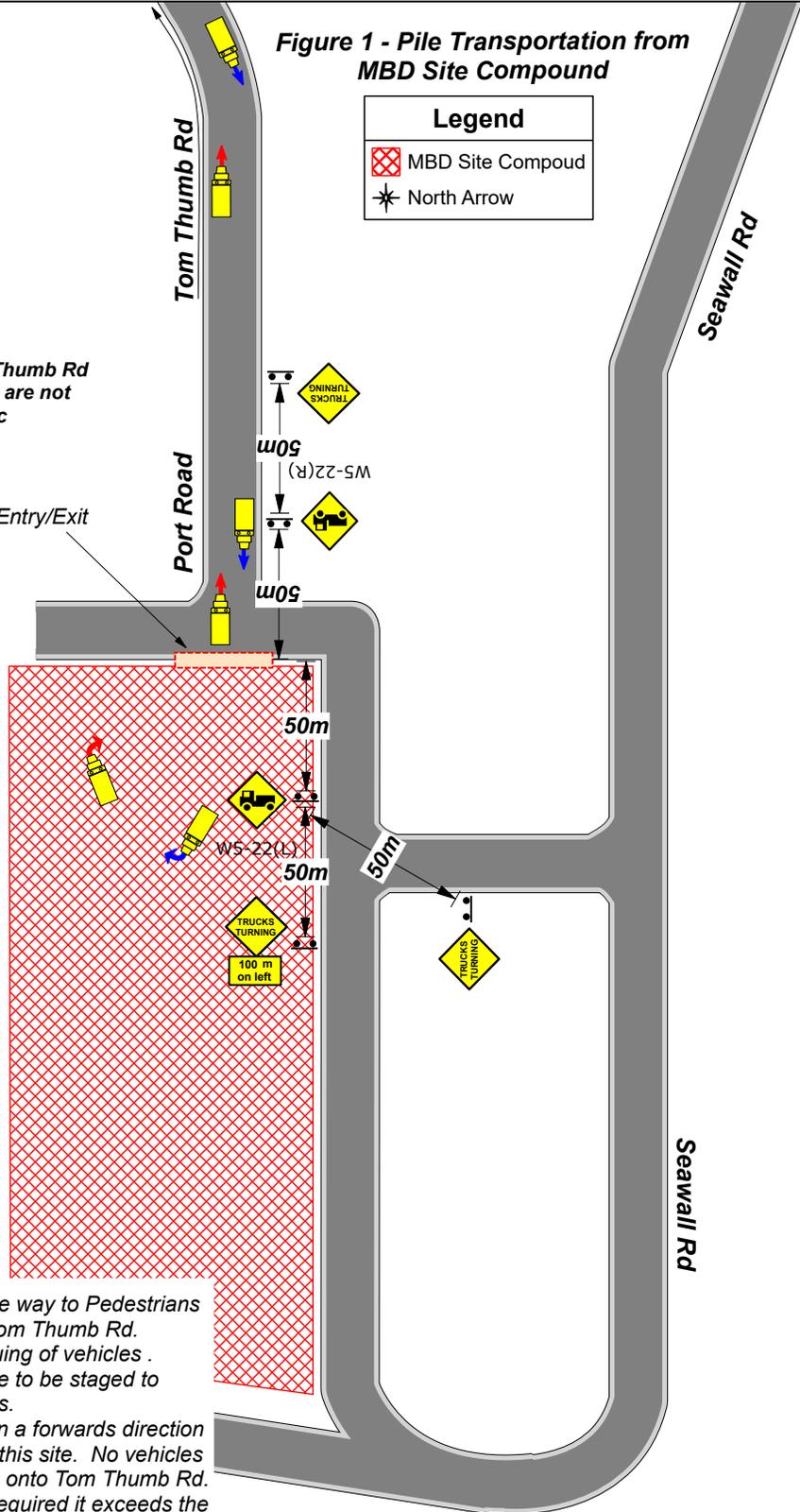
Figure 1 - Pile Transportation from MBD Site Compound

Legend

- MBD Site Compound
- North Arrow

Notes :-
Seawall Rd , Port Road & Tom Thumb Rd
are all internal port roads and are not
accessible to the public

Site Entry/Exit



Drivers at all times SHALL give way to Pedestrians
and through traffic on Tom Thumb Rd.
There SHALL be no queuing of vehicles .
Deliveries of materials are to be staged to
prevent this.

All vehicles SHALL be driven in a forwards direction
when entering and / or exiting this site. No vehicles
SHALL be permitted to reverse onto Tom Thumb Rd.
If such a vehicle maneuver is required it exceeds the
scope of this management plan.

Name:.....

Date of Modification:.....

Prepare WZTMP No:.....

Expiry Date:.....

Signature:.....

Date: 2/12/21 Author: Dean Woodward Project: Rare Enviro
Qualification: Prepare a Work Zone TMP - RIICWD503D Ticket No: 0052093919 Expiry Date: 01/08/2022

Comments:

The author has drawn this TGS based on the information provided by the client. Prior to the implementation of TGS a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Control Plans - RIWHS302D training. Modifications to this TGS must comply with the requirements of the RMS Traffic Control at Work Sites manual version 6 and AS1742.3-2019 Manual of uniform traffic control devices Traffic control for works on roads.



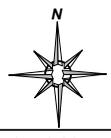
Prepare a Work Zone
Traffic Management Plan
Card No. 0052093919

DEAN
WOODWARD

Expiry Date:
01/08/2022



This card is not a proof of identity.



NOT TO SCALE

Direct Traffic Pty Ltd accepts no liability for the implementation or execution of this TGS unless implemented by authorized Direct Traffic Pty Ltd personnel. This TGS maintains the property of Direct Traffic Pty Ltd and is not transferable unless express permission is granted by management from Direct Traffic Pty Ltd.

(02) 9603 38 20



Effective Date: 3/12/21

Version: 3

Client: Australian Industrial Energy

Location: Seawall Rd Port Kembla

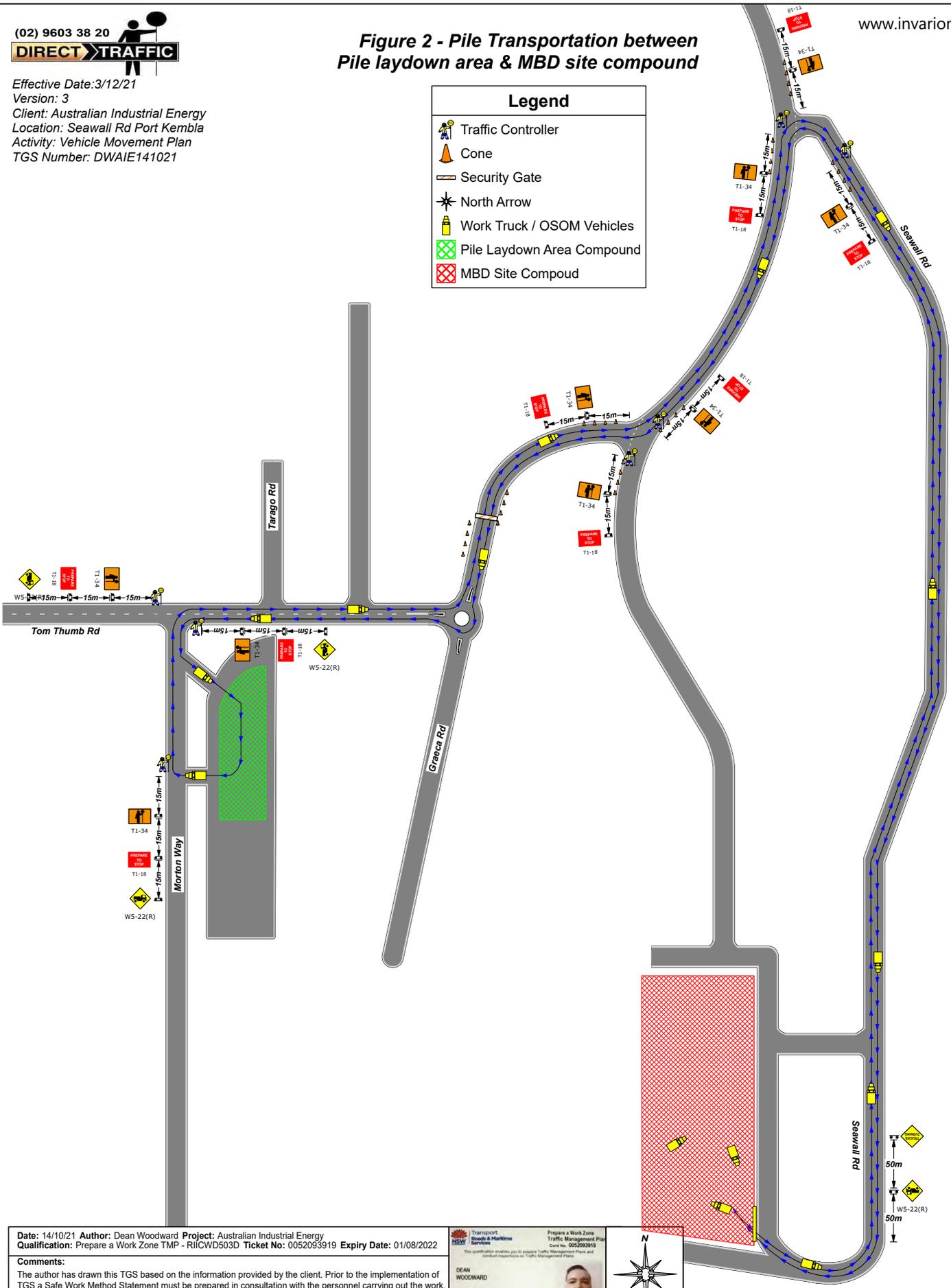
Activity: Vehicle Movement Plan

TGS Number: DWAIE141021

Figure 2 - Pile Transportation between Pile laydown area & MBD site compound

www.invarion.com

Legend	
	Traffic Controller
	Cone
	Security Gate
	North Arrow
	Work Truck / OSOM Vehicles
	Pile Laydown Area Compound
	MBD Site Compound



Date: 14/10/21 Author: Dean Woodward Project: Australian Industrial Energy
 Qualification: Prepare a Work Zone TMP - RIICWD503D Ticket No: 0052093919 Expiry Date: 01/08/2022

Comments:

The author has drawn this TGS based on the information provided by the client. Prior to the implementation of TGS a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Control Plans - RI/WH302D training. Modifications to this TGS must comply with the requirements of the RMS Traffic Control at Work Sites manual version 6 and AS1742.3-2019 Manual of uniform traffic control devices Traffic control for works on roads.

Transport NSW Prepare a Work Zone Traffic Management Plan
 This qualification enables you to prepare Traffic Management Plans and control of operations on Traffic Management Plans
 Card No: 0052093919

DEAN WOODWARD

Expiry Date: 01/08/2022



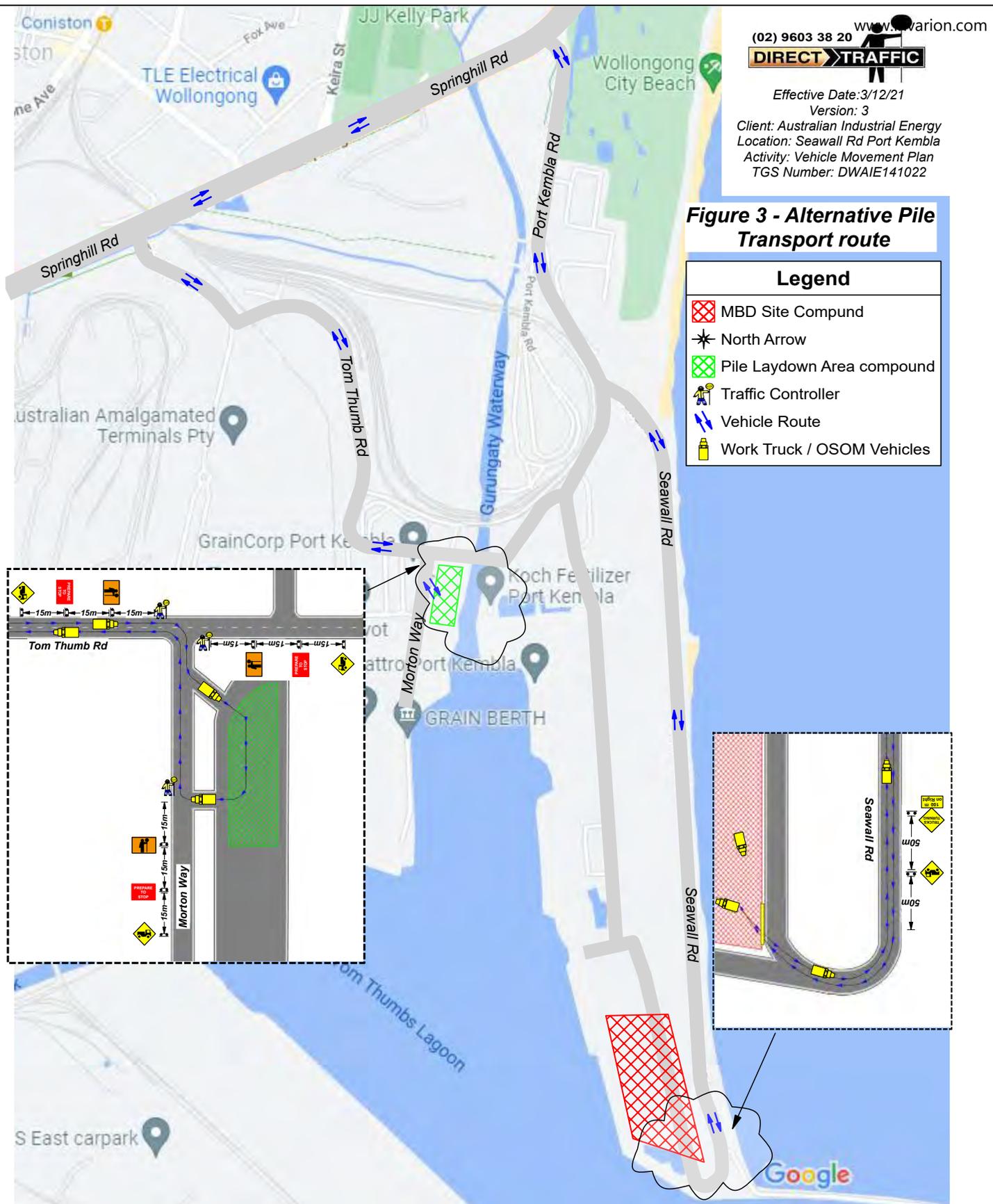
NOT TO SCALE

Direct Traffic Pty Ltd accepts no liability for the implementation or execution of this TGS unless implemented by authorized Direct Traffic Pty Ltd personnel. This TGS maintains the property of Direct Traffic Pty Ltd and is not transferable unless express permission is granted by management from Direct Traffic Pty Ltd.

Figure 3 - Alternative Pile Transport route

Legend

-  MBD Site Compound
-  North Arrow
-  Pile Laydown Area compound
-  Traffic Controller
-  Vehicle Route
-  Work Truck / OSOM Vehicles



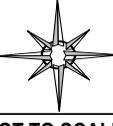
Date: 14/10/21 **Author:** Dean Woodward **Project:** Australian Industrial Energy
Qualification: Prepare a Work Zone TMP - RIICWD503D **Ticket No:** 0052093919 **Expiry Date:** 01/08/2022

Comments:
 The author has drawn this TGS based on the information provided by the client. Prior to the implementation of TGS a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Control Plans - RIWHS302D training. Modifications to this TGS must comply with the requirements of the RMS Traffic Control at Work Sites manual version 6 and AS1742.3-2019 Manual of uniform traffic control devices Traffic control for works on roads.

NSW Transport Roads & Maritime Services
 Prepare a Work Zone Traffic Management Plan
 Card No. 0052093919
 This qualification enables you to prepare Traffic Management Plans and conduct inspections on Traffic Management Plans.

DEAN WOODWARD
 Expiry Date: 01/08/2022





NOT TO SCALE

(02) 9603 38 20

DIRECT TRAFFIC



Effective Date: 3/12/21

Version: 5

Client: Rare-Enviro

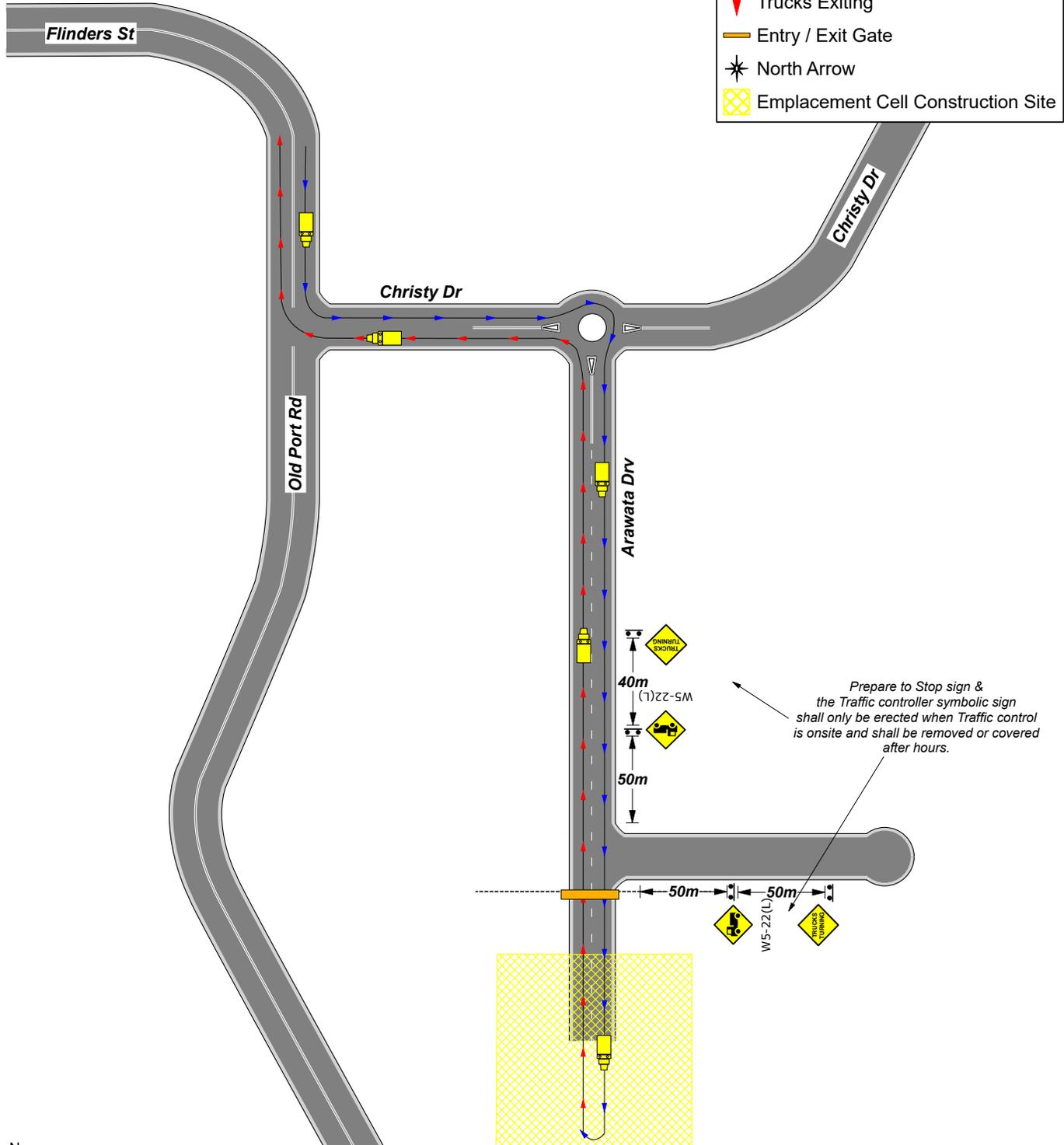
Location: Arawata Drv Port Kembla

Activity: Vehicle Movement Plan

TGS Number: DWRE29421

Figure 4 - Vehicle Movements to Emplacement cell construction site.

Legend	
	Work Truck / OSOM Vehicles
	Trucks Entering
	Trucks Exiting
	Entry / Exit Gate
	North Arrow
	Emplacement Cell Construction Site



Name:

Date of Modification:

Prepare WZTMP No:

Expiry Date:

Date: 29.4.21 Author: Dean Woodward Project: Rare Enviro
Qualification: Prepare a Work Zone TMP - RIICWD503D Ticket No: 0052093919 Expiry Date: 01/08/2022

Comments:
The author has drawn this TGS based on the information provided by the client. Prior to the implementation of TGS a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Control Plans - RI1WHS302D training. Modifications to this TGS must comply with the requirements of the RMS Traffic Control at Work Sites manual version 6 and AS1742.3-2019 Manual of uniform traffic control devices Traffic control for works on roads.

 DEAN WOODWARD Entry Date: 6/08/2022 	Prepare a Work Zone Traffic Management Plan Cert No: 0052093919 <small>This qualification enables you to prepare Traffic Management Plans and conduct operations on Traffic Management Plans.</small> <small>This card is not a proof of identity.</small>	 NOT TO SCALE

www.invarion.com
Signature

Appendix C

Truck driver induction

Truck Driver Induction

Attention Drivers

All drivers onsite must comply with the following conditions and sign on to the following that they will abide by these conditions during the Stage 2A works for the Project.

Transportation routes are shown in Figure 1 and Figure 2.



Figure 1: MBD Site Compound to Emplacement Cell Route

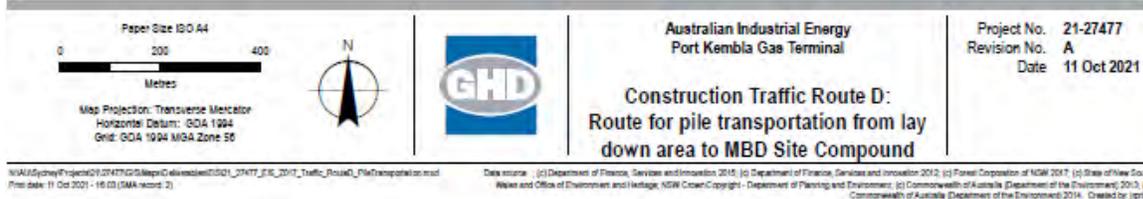
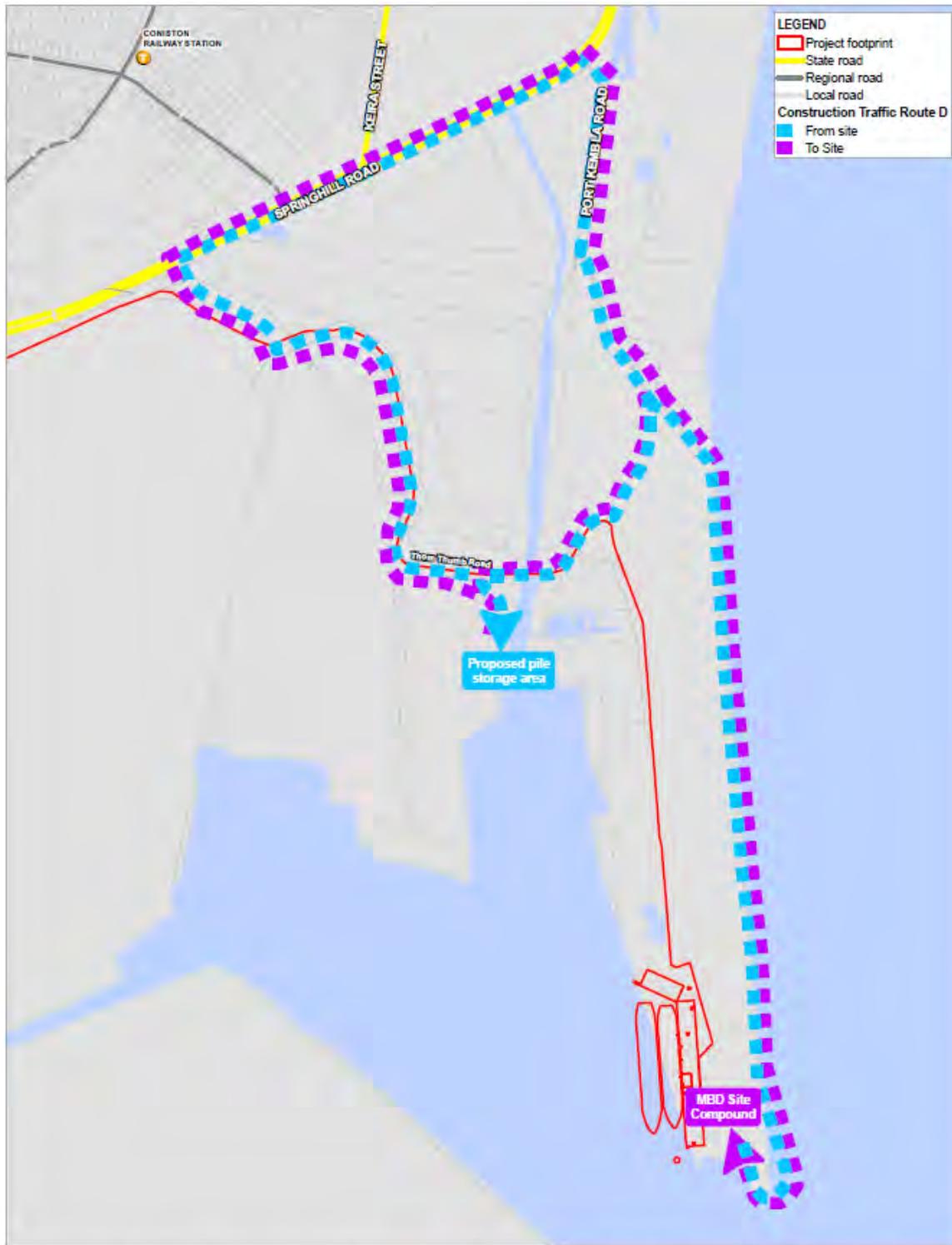


Figure 2: Pile transportation route from MBD Site Compound to storage area

Drivers Code of Conduct

For the safe construction of the Port Kembla Gas Terminal (PKGT), this Driver Code of Conduct applies to all PKGT users and full compliance is required. Users are those individuals operating a vehicle accessing the PKGT including all Principal Contractor employees or subcontractors, any person conducting business within the PKGT, visitors or on any project associated with the PKGT, whether a direct employee of a site operator / tenant or employed by some other organisation providing a service or product to a PKGT site operator / tenant. Failure to comply with the Drivers Code of Conduct may result in refusal of access to the PKGT.

General Requirements

All drivers must:

- a. Participate in a tool box talk prior to the commencement of works with the Principal Contractor and they logistics partners. This will include drivers being taken through the nominated routes (refer to Figure 4, Figure 5, Figure 6 and Figure 7) that drivers must follow when transporting vehicles.
- b. Comply with the Project Safe Driving Plan developed for the Stage 2A works and provided by the Principal Contractor.
- c. Hold a current and valid driver's licence for the class of vehicle that they operate.
- d. Operate a registered and roadworthy vehicle in accordance with the relevant vehicle standards regulations and laws.
- e. Operate on the road system in a safe and professional manner, with consideration for all road users and weather conditions.
- f. Comply with NSW road traffic regulations within the PKGT and NSW Ports lease boundary (refer to Figure 3); adhere to all parking and traffic controls (including load limits) on the public and internal roads. Be aware that the NSW Ports internal roads are subject to NSW road rules and therefore the normal fine and penalties apply to breaches of the road rules.
- g. Comply with any directions made by authorised officers of NSW Ports, Traffic Control Officers, Transport for NSW, NSW Police or other authorised parties.
- h. Be mindful of pedestrians and cyclists accessing the internal road areas and marked road crossings.
- i. Do not obstruct access to any public roads, internal roads, or pedestrian corridors.
- j. No verbal communication with the public or media, refer them to the community hotline (see contacts Section 4).
- k. Maintain a minimum of 3 metres clearance between truck and any excavation edges if possible and safe to do so.

Heavy Vehicles

All heavy vehicle drivers must:

- a. Be maintained in compliance to the appropriate Australian Vehicle Standards and Design Rules (AVSRs and ADRs).
- b. Undertake an education / induction program for heavy vehicle truck drivers prior to first accessing the PKGT site. This induction includes all relevant site rules and requirements and site specific operational TMPs; approved heavy vehicle routes to and from the PKGT; and local conditions including speed limits, other traffic controls, pedestrian routes within the site, safety, operation procedure etc.
- c. Report to gate security prior to entry and upon exiting
- d. Ensure the safety of their transport activities in relation to the National Heavy Vehicle Chain of Responsibility (CoR) laws. Drivers have a duty and must take positive steps to prevent a breach of the road transport mass, dimension, loading and work hours laws.

- e. Understand and follow the heavy vehicle routes that are to be used to and from the PKGT as presented in Section 3.
- f. Carry a working UHF and call up traffic control on (UHF TBC) where sign posted. NOTE multiple channels used within the PKGT project. All loads secured soil and sediment loads covered and wheels free of dirt.
- g. REMAIN AWARE OF OVERHEAD POWERLINES OVER SITE ENTRANCE.
- h. When closing tailgates or working around pinch points keep both hands on the tail gate and ensure all limbs and other personnel are well clear prior to closing.
- i. Creep tipping must be carried out under supervision.
- j. Any hazards must be reported to the Construction Foreman.
- k. Site hours:
 - i. Monday to Friday 700hrs to 1800hrs
 - ii. Saturday 800hrs to 1300hrs
- l. Ensure working hours and full period of breaks are adhered to.
- m. Ensure basic fatigue management rules are complied with.
- n. No shifts longer than 14 hours.
- o. Ensure log books diaries are up to date
- p. Any operators on medication that can affect your attention or work skills must be declared.

Vehicle Speed

All drivers must:

- a. Adhere to site speed limits on the public and internal roads, including temporary speed
- b. signage during roadworks or construction zones. The *PKGT* is subject to NSW road rules and fines apply. Vehicles in breach of site speed limits may be denied access to the site.
- c. 25km/h limit within all PKGT sites.
- d. Where road or weather conditions are poor (i.e.: rain or heavy traffic) maintain an appropriate speed for the conditions and vehicle load.
- e. All vehicles operating out of the PKGT are to observe the posted public road speed limits, with speed adjusted appropriately to suit the road environment and prevailing weather conditions.

Heavy Vehicle Noise

To reduce the impact of vehicle noise, in particular during nonstandard business hours, drivers should:

- a. Reduce vehicle speed to reduce instances and severity of compression breaking.
- b. No excessive or unnecessary use of horns, in particular during nonstandard working hours.
- c. Minimise reversing when possible.

Breakdowns and Incidents

To ensure that traffic impacts are minimised in the event of a breakdown or incident, drivers must contact the Project Manager as soon as the vehicle is safely secured (refer to Section 4).

As the operator of a vehicle within the PKGT you are subject to the environmental regulations and the Environmental Management Strategy.

If there is a product spill the driver must:

- a. Immediately warn persons in the area who may be at risk.

- b. Inform their Project manager/site manager/security immediately so that emergency services can be contacted, and a clean-up initiated.
- c. All spills must be adequately cleaned up and waste disposed of in an acceptable manner.
- d. Put out warning triangles where it is safe to do so.
- e. All bins completely down.

Contact the NSW Police Service or appropriate emergency services (refer to Section 4).

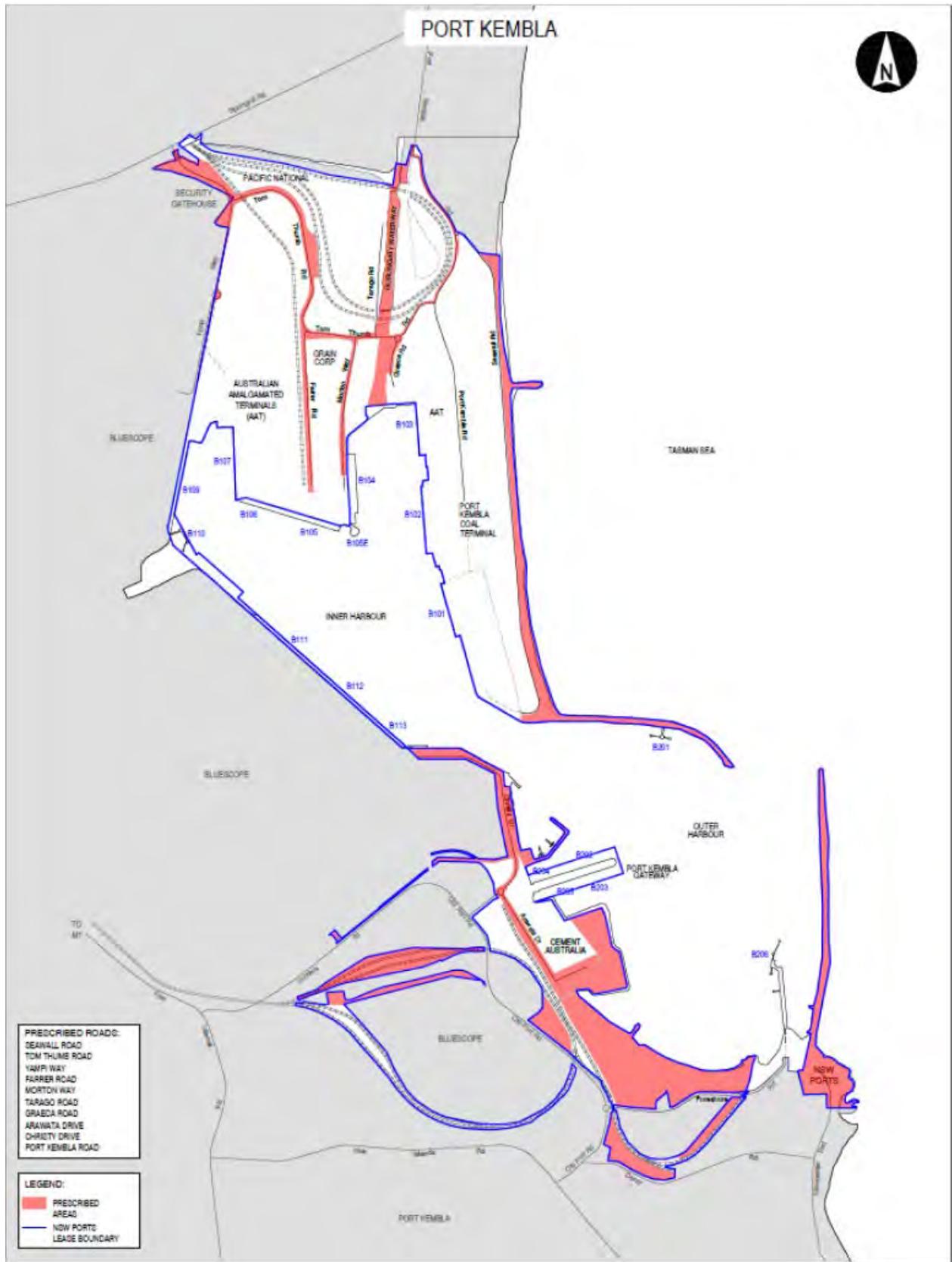


Figure 3: NSW Ports prescribed road network and lease boundary

Site Access – MBD Site Compound and Emplacement Cell Site

Site access for the MBD Site Compound is provided in Figure 4. Site access for the Emplacement Cell site is provided in Figure 5. Site access between the MBD Site Compound to the storage area is provided in Figure 6. The alternative pile transport route is provided in Figure 7.

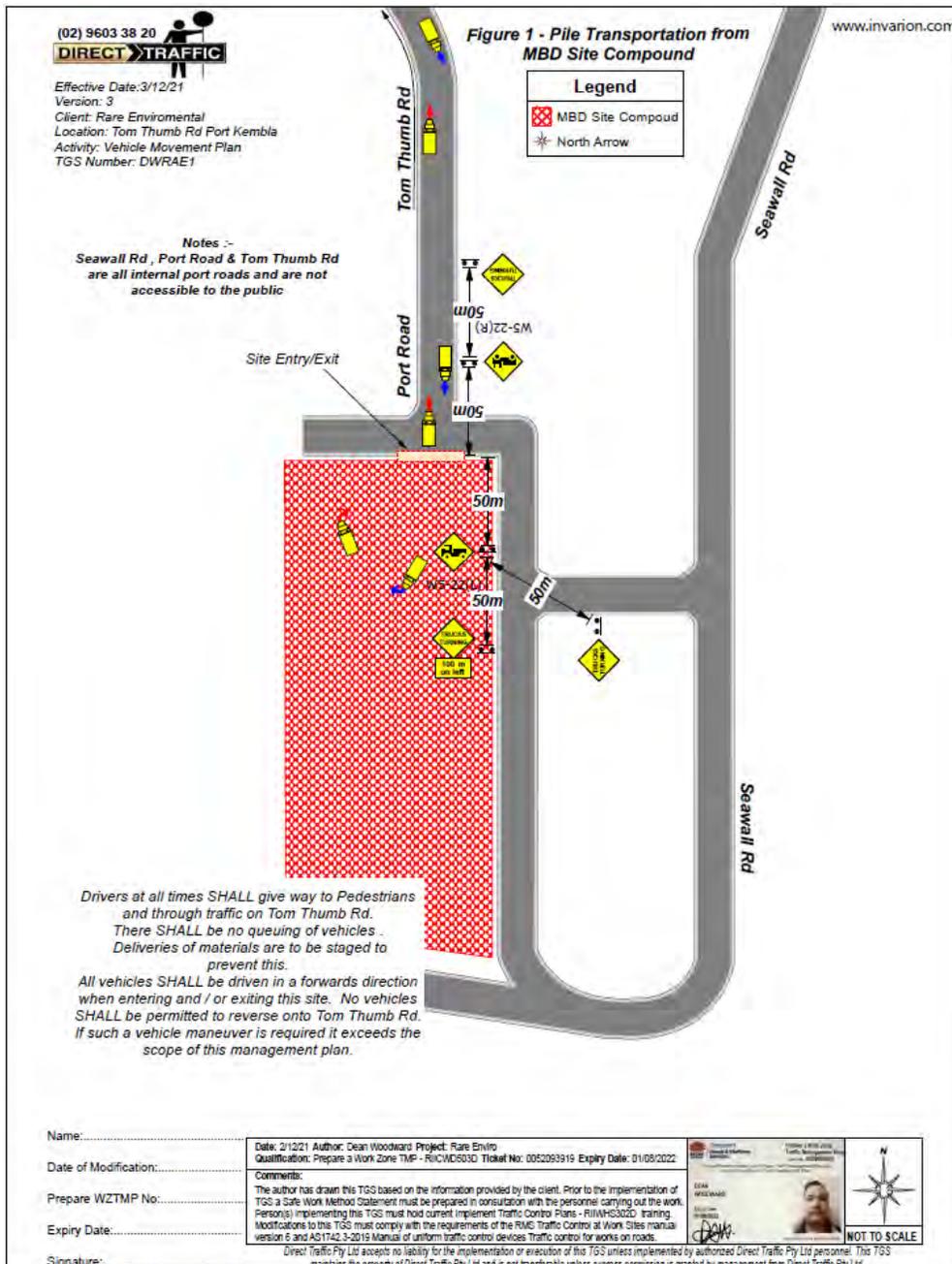


Figure 4: MBD Site Compound – Access via Seawall Road

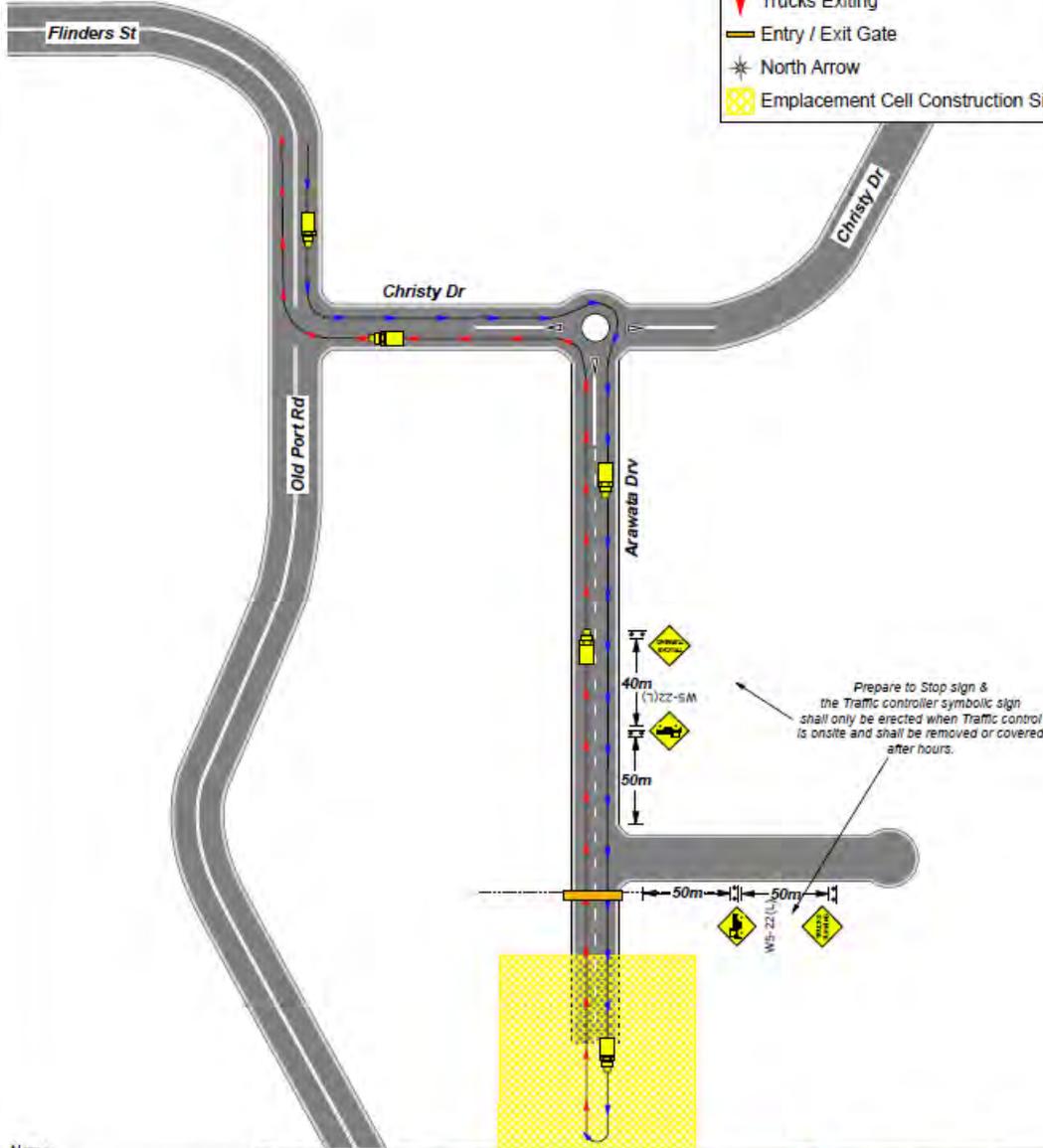
(02) 9603 38 20



Effective Date: 3/12/21
Version: 5
Client: Rare-Enviro
Location: Arawata Drv Port Kembla
Activity: Vehicle Movement Plan
TGS Number: DWRE29421

Figure 4 - Vehicle Movements to Emplacement cell construction site.

Legend	
	Work Truck / OSOM Vehicles
	Trucks Entering
	Trucks Exiting
	Entry / Exit Gate
	North Arrow
	Emplacement Cell Construction Site



Name:
 Date of Modification:
 Prepare WZTMP No:
 Expiry Date:

Date: 29.4.21 Author: Dean Woodward Project: Rare Enviro
 Qualification: Prepare a Work Zone TMP - RIICWDS03D Ticket No: 0052093919 Expiry Date: 01/08/2022

Comments:
 The author has drawn this TGS based on the information provided by the client. Prior to the implementation of TGS a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Control Plans - RI/WH302D training. Modifications to this TGS must comply with the requirements of the RMS Traffic Control at Work Sites manual version 6 and AS1742.3-2019 Manual of uniform traffic control devices Traffic control for works on roads.

Prepared by:
 Dean Woodward
 Approved by:

Project or Work Zone
 Traffic Management Plan
 Form No. 0052093919

NOT TO SCALE

Figure 5: Emplacement Cell Construction Site– Access via Arawata Drive

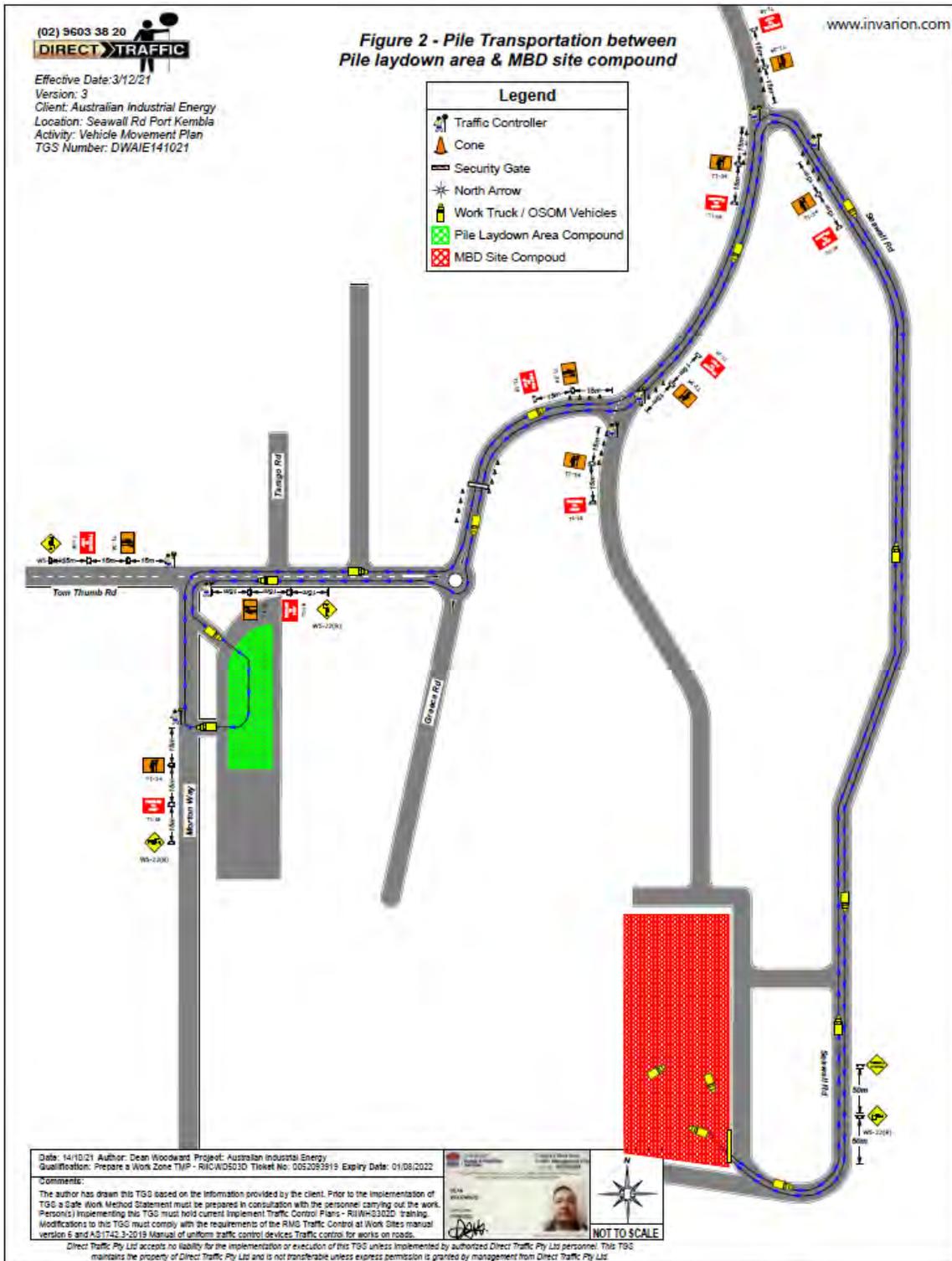


Figure 6: Pile storage area from Emplacement Cell Construction Site

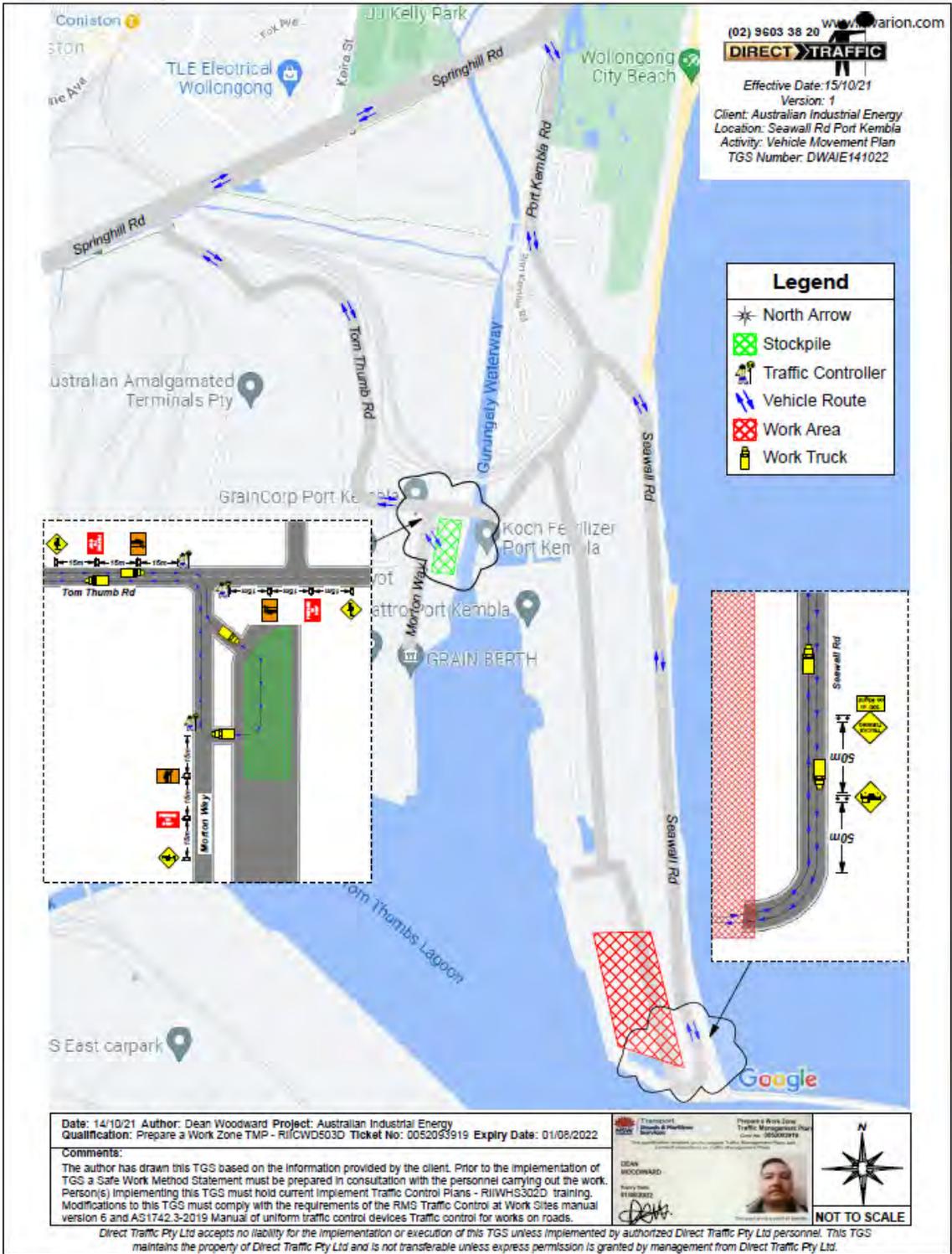


Figure 7: Alternative route between the MBD Site Compound and pile laydown area

Contacts

Company	Position	Contact	Phone
AIE	Community Hotline	Alex Lovell (HSE Manager)	1800 789 177
Principal Contractor (24 Hrs)	Project Manager		
NSW Ports	TBA	Bryan Beudeker (Environment Manager)	02 9316 1190 / 0408 015 185
	Port Kembla Police	-	(02) 4276 5199
	NSW EPA	-	131 555

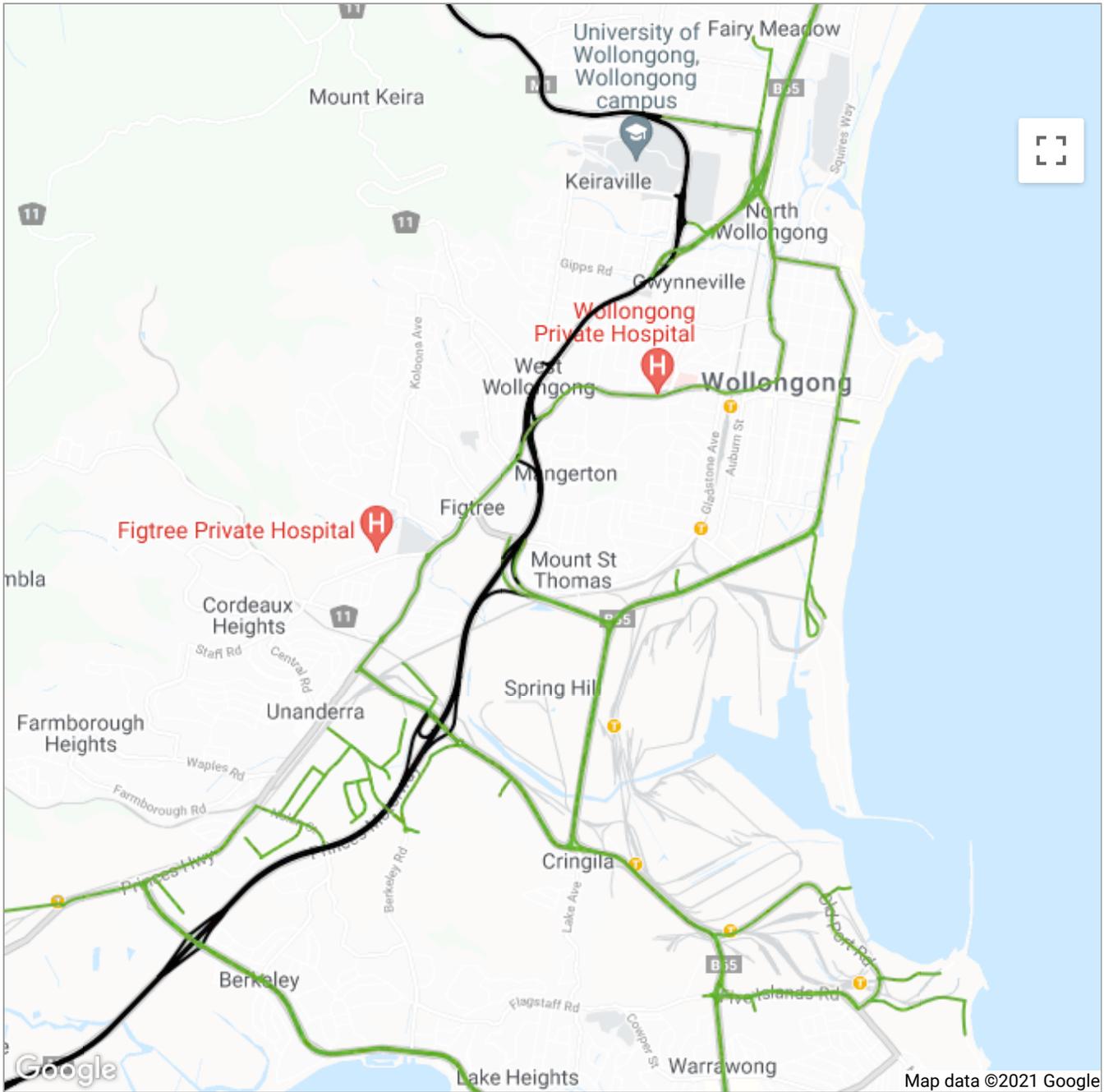
Appendix D

Oversized vehicle routes

NSW Oversize Overmass Load Carrying Vehicles Network Map



Map last updated: 05/11/2021



Legend

OSOM Network

NSW Oversize Overmass Load Carrying Vehicles Network Approved Roads

Exception Routes (not approved)

Limited Access Locations

Limited Access Zones

Restricted Structures - Bridges

Restricted Structures - Railway Level Crossings

Restricted Structures with Conditional Access - Railway Level Crossings

Network Disclaimer

The NSW Oversize Overmass Load Carrying Vehicles Network map displays the legally enforceable network for eligible vehicles operating under the Multi-State Class 1 Load Carrying Vehicles Mass Exemption Notice and the Multi-State Class 1 Load Carrying Vehicles Dimension Exemption Notice.



ghd.com

→ **The Power of Commitment**