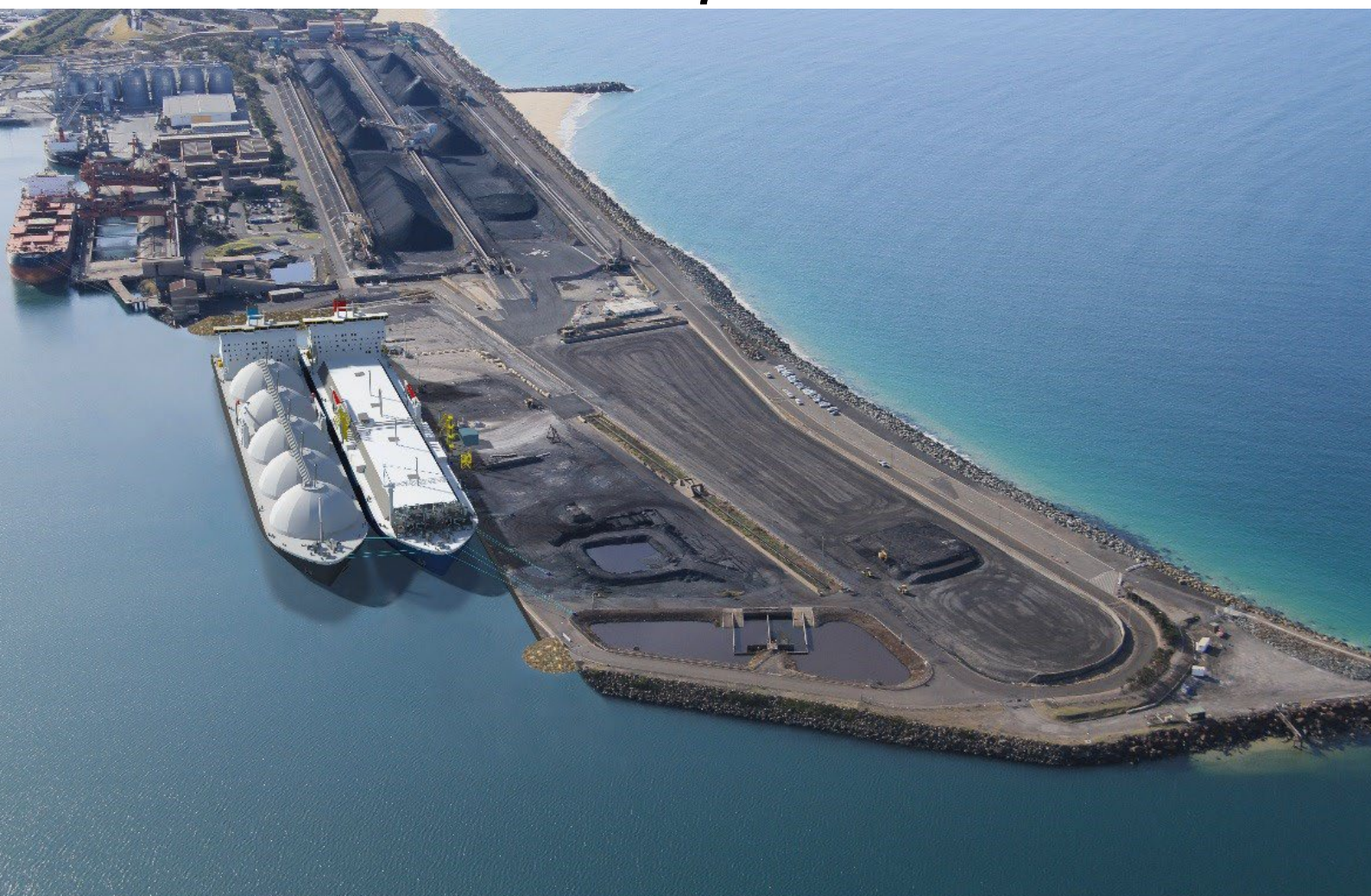
Port Kembla Gas Terminal

Heritage Unexpected Finds Protocol Stage 2A and 2B Marine Berth Construction and Dredging – Land and Marine Based

Australian Industrial Energy

30 May 2022

→ **The Power of Commitment**



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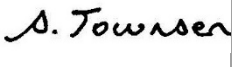
0	Emily Kate Marsh	Sophy Townsend		Karl Rosen		15/03/22
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Acronyms

Acronym	Definition
AHIP	Aboriginal Heritage Impact Permit
AIE	Australian Industrial Energy
ANSDB	Australian National Shipwreck Database
ATSHIP Act	*Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth)
BCD	Biodiversity and Conservation Division
Berth 101	MBD Site Compound
CA Act	*Coroner's Act 2009*
CSSI	Critical State Significant Infrastructure
CTMP	Construction Traffic Management Plan
DAWE	Department of Agriculture, Water and the Environment
DEMP	Dredge and Excavation Management Plan
DP&E	Department of Planning and Environment
ECR	Emplacement Cell Report
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EPA	NSW Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPL	Environment Protection Licence
FSRU	Floating Storage and Re-gasification Unit
GHD	GHD Pty Ltd
GML	General Mass Limits
Heritage Act	*Heritage Act 1977*
HM	Harbour Muds
HS	Harbour Silts
HSE	Health, Safety and Environment
HUFP	Heritage Unanticipated Finds Protocol
ILALC	Illawarra Local Aboriginal Land Council
KPIs	Key Performance Indicators
LNG	Liquefied natural gas
m^3	Cubic metres
MBD	Marine Berth Construction and Dredging
MLA	Marine Loading Arms
Native Title Act	*Native Title Act 1993*
NPW Act	*National Parks and Wildlife Act 1974*
OHDSCA	Outer Harbour Dredged Spoil Containment Area
ORF	Onshore receiving facilities
PANSW	Port Authority of NSW
PASS	Potential Acid Sulfate Soils

Acronym	Definition
PIRMP	Pollution Incident Response Management Plan
PKGT	Port Kembla Gas Terminal
PKGT EIS	Port Kembla Gas Terminal Environmental Impact Statement
Planning Systems SEPP	State Environmental Planning Policy (Planning Systems) 2021
POEO Act	*Protection of the Environment Operations Act 1997*
POMP	Port Operations Management Plan
RAP	Registered Aboriginal Parties
RL	Reduced level
SMEC	SMEC Australia Pty Ltd
The Project	Port Kembla Gas Terminal Project
UCH Act	*Underwater Cultural Heritage Act 2018*

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1. Introduction

1.1 Overview

This Heritage Unexpected Finds Protocol (HUFP) has been developed as a Sub - Plan to the Port Kembla Gas Terminal Project (the Project) Environmental Management Strategy (EMS). This HUFP has been prepared by GHD Pty Ltd (GHD) on behalf of Australian Industrial Energy (AIE) to apply to construction activities associated with Stage 2A and Stage 2B construction of the Project. This Stage 2A and Stage 2B HUFP supersedes the Stage 2A HUFP.

This HUFP interfaces with the other associated sub-plans, which together describe the proposed structure for environmental management and monitoring requirements for the Project. This HUFP addresses the requirements of the Port Kembla Gas Terminal Environmental Impact Statement (PKGT EIS) and associated Infrastructure Approval (SSI 9471) and Environment Protection Licence (EPL) No. 21529 and has been prepared in consultation with the Biodiversity and Conservation Division (BCD) of the Department of Planning and Environment (DP&E) and the Illawarra Local Aboriginal Land Council (ILALC).

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 percent 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 (Planning Systems) 2021 (Planning Systems 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 and Stage 2B works located at Berth 101 (referred to as the 'Marine Berth Construction and Dredging (MBD) Site Compound') and the Outer Harbour Dredged Spoil Containment Area (referred to as 'OHDSCA' or the Emplacement Cell). Collectively, these two locations are referred to as "the site". The Stage 2A works include:

– Completion of excavation works undertaken during Stage 1 (including transport of spoil materials to the Emplacement Cell Construction Site).
– Construction of the quay wall at the MBD Site Compound.
– Construction of Onshore Receiving Facilities (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.
– Installation of gas pipeline within the MBD Site Compound as part of ORF.

The Stage 2B works include:

– Continuation of Stage 2A works.
– Excavation and dredging of the MBD Site Compound in the Inner Harbour and the Emplacement Cell in the Outer Harbour.
– Construction of the Emplacement Cell in the Outer Harbour.
– Marine based construction activities including installation of navigational aids and revetments at the MBD Site Compound.

1.3 Purpose

This HUFP has been prepared in accordance the PKGT EIS and associated Infrastructure Approval (SSI 9471). It describes how the management measures and commitments in the PKGT EIS and Infrastructure Approval (SSI 9471) relating to the management of unexpected Aboriginal Heritage and non-Aboriginal Heritage finds are to be implemented by the Principal Contractors during Stage 2A and Stage 2B construction of the Project. Specifically, this plan includes requirements regarding:

– Obligations under the:
  - *Heritage Act 1977 NSW* (Heritage Act).
  - *National Parks and Wildlife Act 1974 NSW* (NPW Act).
  - *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* Cth (ATSHIP Act).
  - *Coroner's Act 2009 NSW* (CA Act).
– Consistent methodology to manage unexpected heritage items (both Aboriginal and non-Aboriginal) that may be discovered during Stage 2A and Stage 2B.

AIE and its contractors acknowledge the importance of managing unanticipated Aboriginal Heritage and non-Aboriginal Heritage items in the vicinity of the Project site is paramount to the successful delivery of the construction phase of the Project. AIE is committed to ensuring this HUFP is implemented, 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 HUFP is applicable to all staff, employees, subcontractors, and any statutory service authorities undertaking the Stage 2A and Stage 2B works described in Section 2 of this HUFP. The HUFP 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, Warrawong 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.

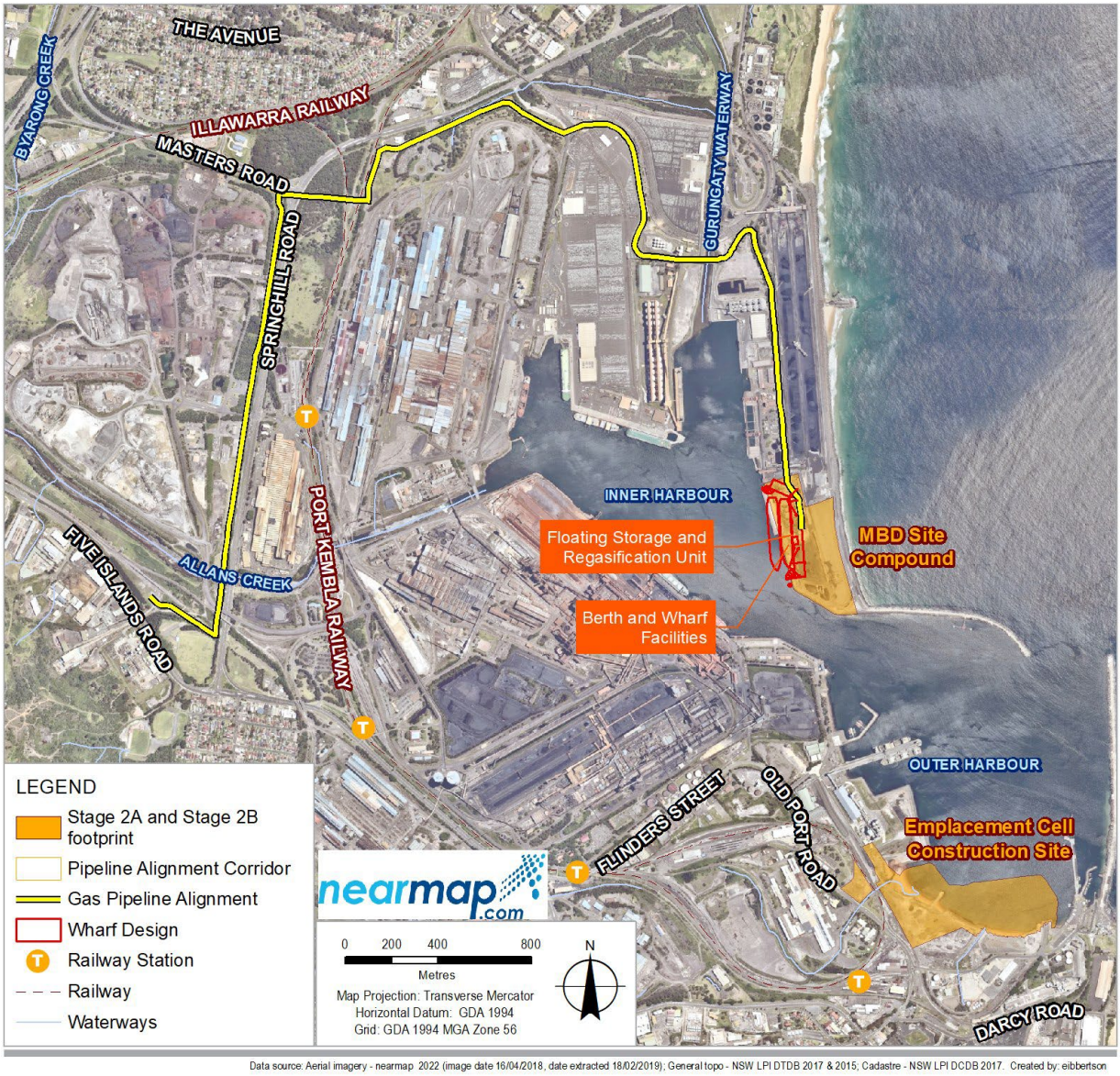


Figure 2.1 Site overview

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 DP&E dated 27 October 2021. This HUFP applies only to the works associated with Stage 2A and Stage 2B.

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 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 the 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 of the MBD Site Compound in the Inner Harbour 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.

*Proposed dates and may be subject to change.

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

– Construction of the quay wall at MBD Site Compound incorporating finalisation of excavation works undertaken during Stage 1 (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.

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

– Continuation of Stage 2A works.
– Installation of site facilities and preparatory earthworks at Emplacement Cell Construction Site.
– Marine-based construction activities including installation of silt curtains, navigational aids, and revetment shore protection at the MBD Site Compound.
– Construction of the Emplacement Cell in the Outer Harbour.

– Excavation and dredging of the MBD Site Compound in the Inner Harbour.

An outline of the tasks associated with Stage 2A and Stage 2B is provided in Section 2.3 through Section 2.7. The site includes the MBD Site Compound, the Emplacement Cell Construction Site, and the Emplacement Cell located in the Outer Harbour. The location of the Stage 2A and Stage 2B works is shown in Figure 2.2.

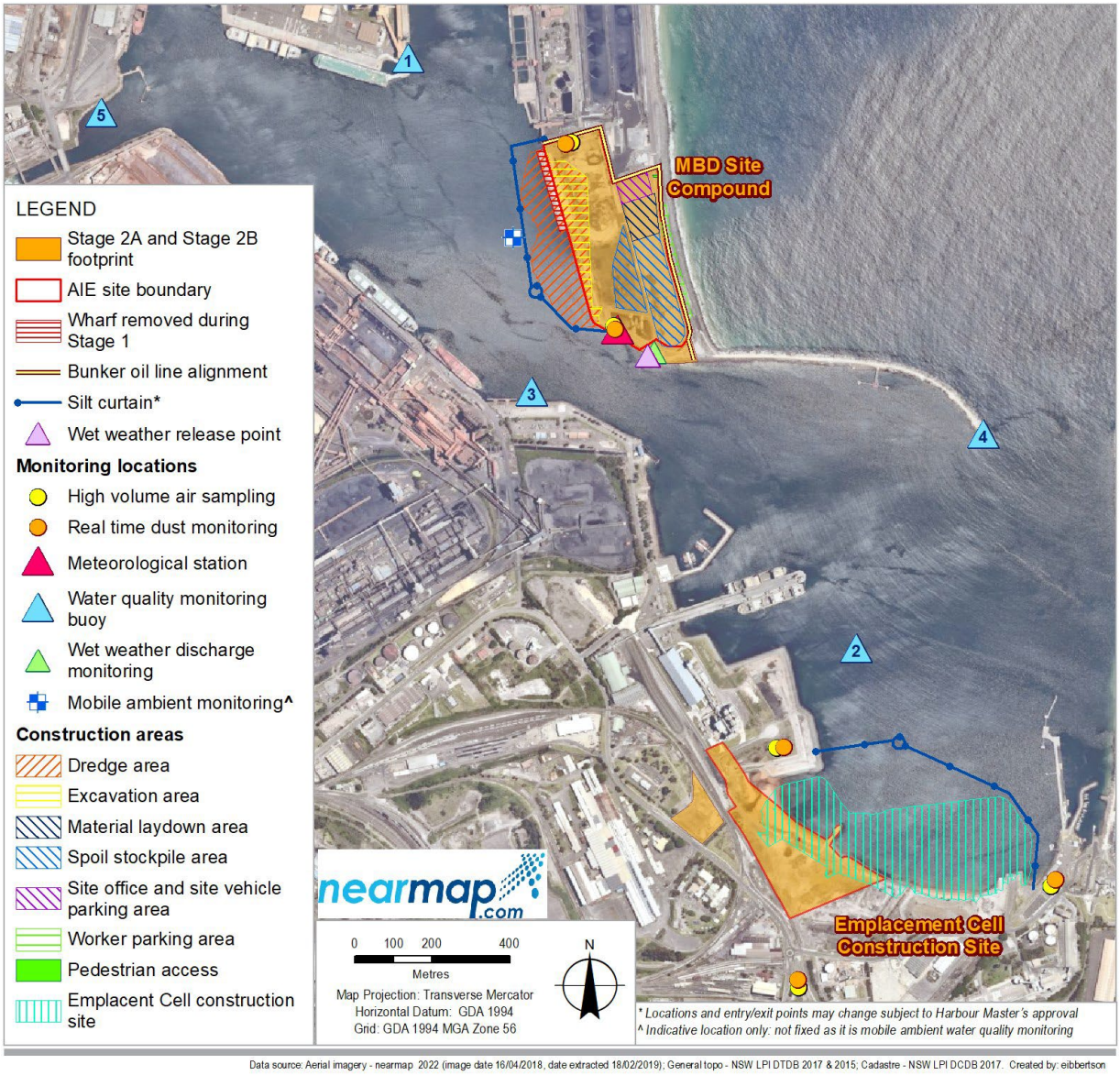


Figure 2.2 ***Stage 2A and Stage 2B works and location of MBD Site Compound, Emplacement Cell and Emplacement Cell Construction Site***

2.2.2 Traffic

Road traffic generated by Stage 2A and Stage 2B 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.

In addition to the material that has already been transported to Emplacement Cell Construction Site (Outer Harbour Laydown Area) during Stage 2A, up to 30,000 cubic metres (m^3) of material from the MBD Site Compound is anticipated to be transported via road to the Emplacement Cell Construction Site during Stage 2B.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 and Emplacement Cell Construction Site. Parking will be provided for up to approximately 100 workers on the MBD Site Compound and approximately 37 workers at the Emplacement Cell Construction Site (refer to Figure 2.3 and Figure 2.4).

Road traffic movements will be undertaken in accordance with the Stage 2A and Stage 2B Construction Traffic Management Plan (CTMP).

The road traffic generated by Stage 2B will mainly be associated with the delivery of the quarry materials from quarries located in the surrounding area. It is anticipated that about 40-50 daily truck movements will be required, consisting of three - five axle semi-trailers or rigid truck and five axle dog-trailers of less than 40 tonnes (GML). The activities will take place during the standard daytime construction working hours, averaging approximately eight heavy truck movements per hour (four vehicles in and out of site). The total number of vehicles required for the operation will be 12-16.

The majority of traffic generated during Stage 2B activities will be marine traffic movements during dredging operations. Marine traffic navigation and management will be undertaken in accordance with a Port Navigation Plan, herein referred to as the Port Operations Management Plan (POMP). The POMP has been produced by the Stage 2B Principal Contractor in consultation with the Port Authority of NSW (PANSW) and is consistent with the principles in the CTMP for Stage 2A

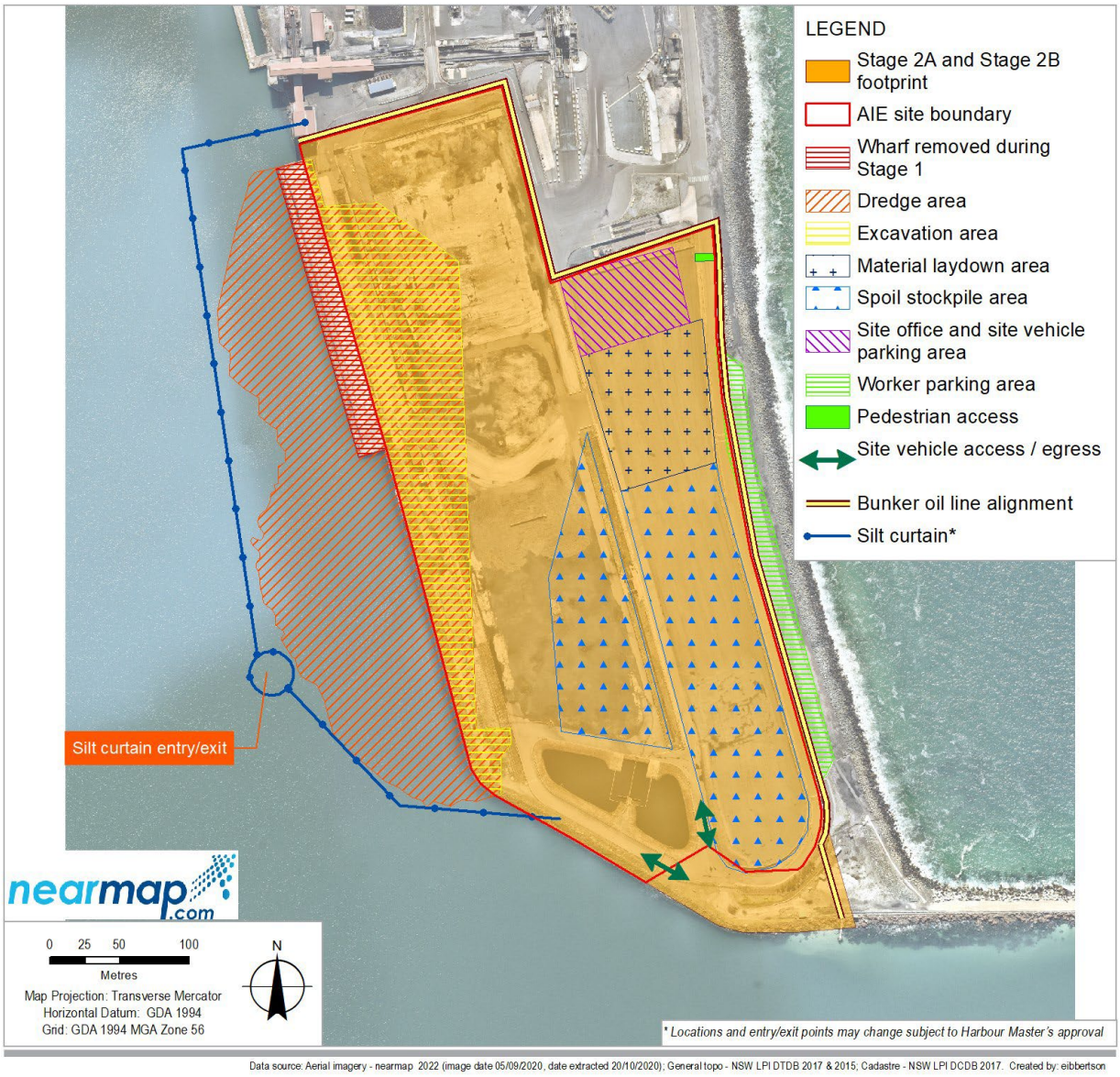


Figure 2.3 Layout of MBD Site Compound

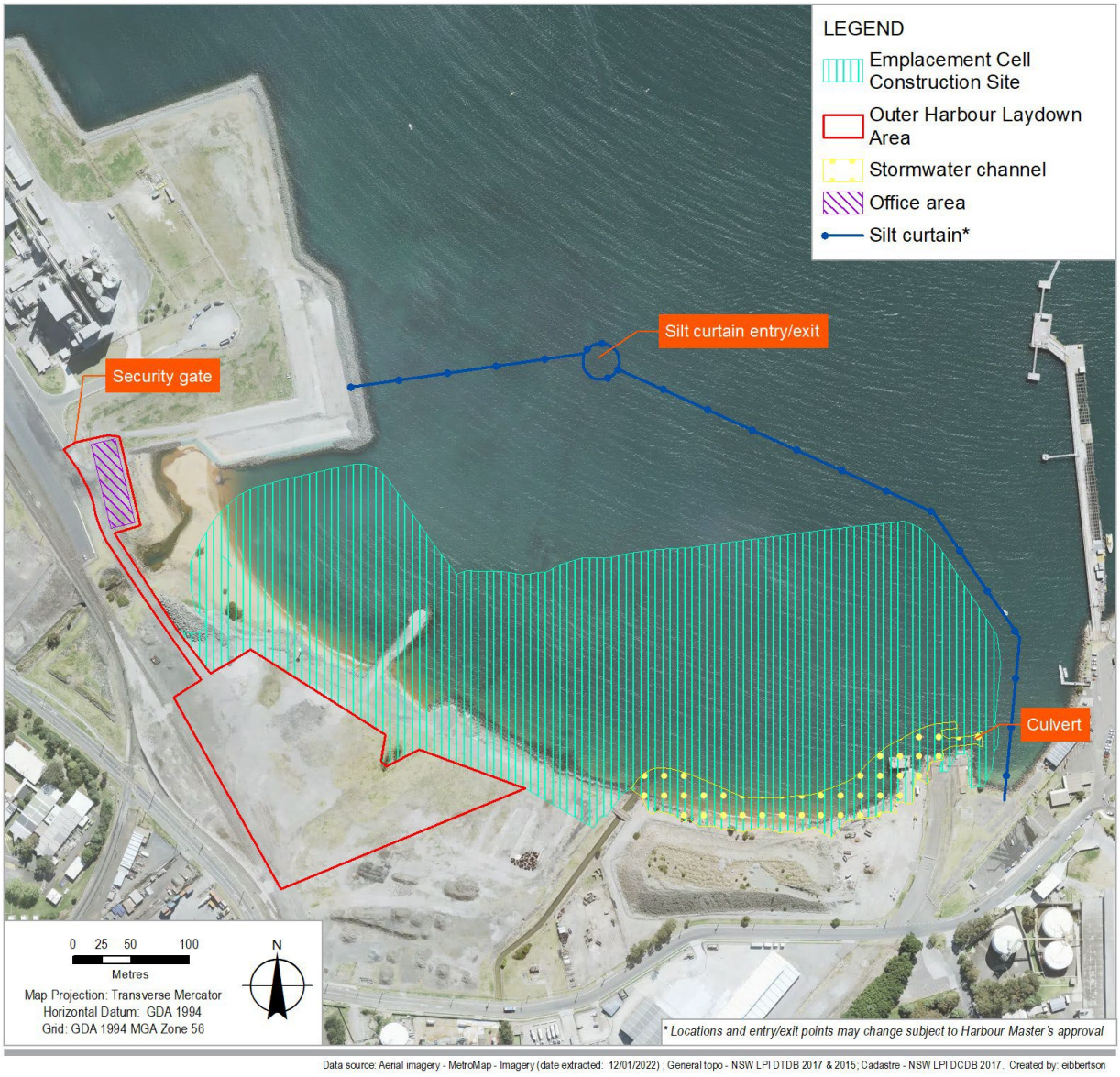


Figure 2.4 Layout of Emplacement Cell Construction Site

2.2.3 Program

The Stage 2A works commenced in January 2022. Stage 2B, which includes the continuation of land-based construction and marine-based works, are then anticipated to commence in March 2022 (refer to Table 2.1 for construction staging). As noted in Section 2.2, these dates are only proposed and may be subject to change.

2.3 Stage 2A: 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 2.5.

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

Component	Works required
Earthworks and stockpiles	– Completion of excavation and backfilling works from Stage 1 Early Enabling Works. – 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 at the MBD Site Compound include: • Approximately 9,700m³ of demolished concrete crushed to nominal 70mm minus. • Approximately 12,500m³ of heavily bound base course crushed to nominal -150mm minus. • Approximately 33,900m³ of mixed slag, general fill, and coal nominally < 150mm in size. • Approximately 10,700m³ of predominantly sand material. • Approximately 8,600 m³ of asbestos impacted soils. – The excavated materials stockpiled at the Emplacement Cell Construction Site include: • Approximately 44,000 m³ of sand material.* – 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	– Construction of a new piled quay wall keyed into bedrock where necessary 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	– Installation of landside mooring dolphin structures on reinforced concrete platforms supported by steel piles. – Mooring equipment will be installed and comprise the following: • 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 (MLA) 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.

*The volumes provided are approximate and may vary.

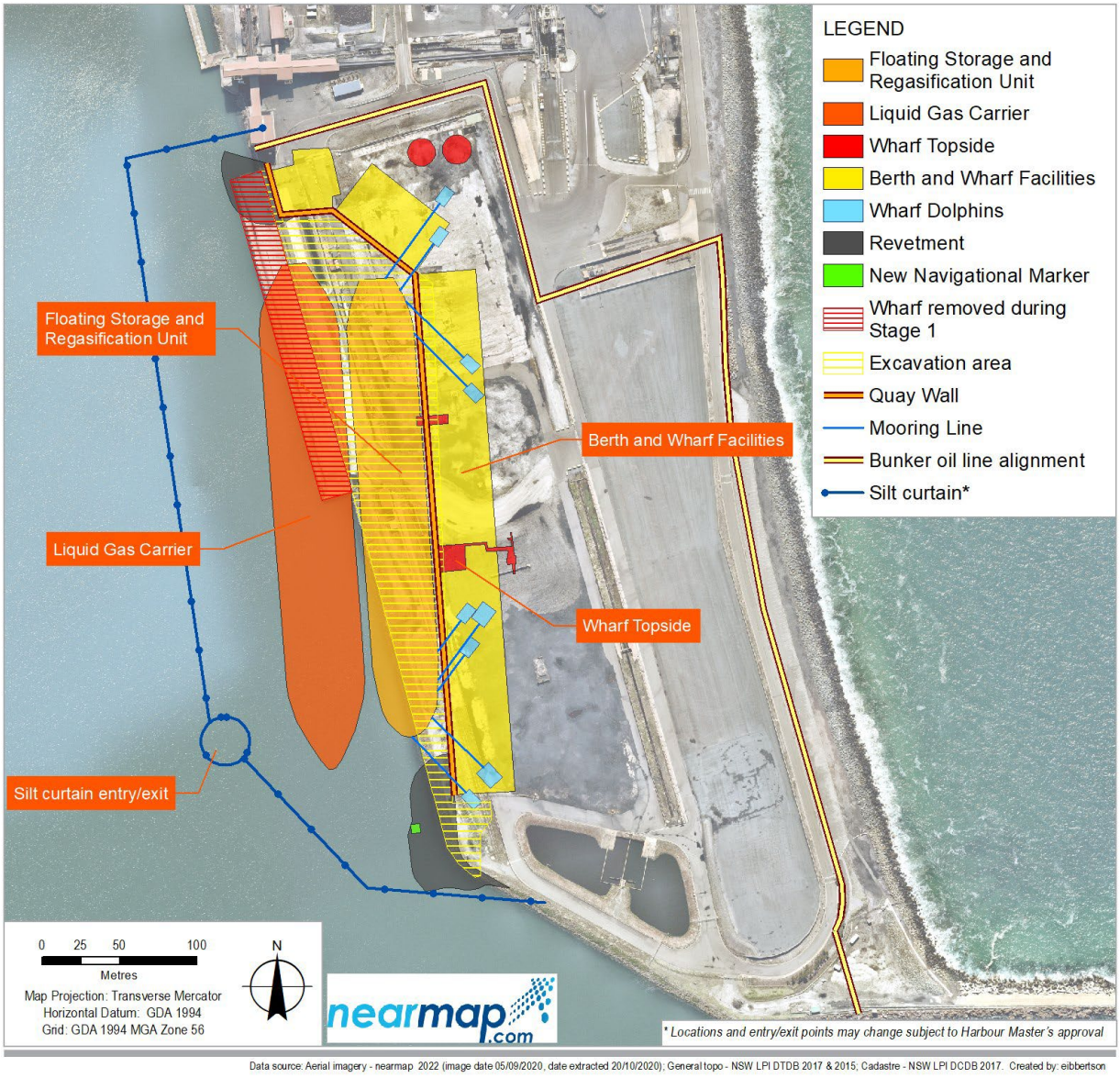


Figure 2.5 Location of quay wall and layout of MBD and ORF

2.4 Stage 2A: Power, communications, and water connections

Works required for power, communications, and water connections for Stage 2A are summarised in Table 2.3.

Table 2.3 Construction of utility connections for Stage 2A

Component	Works required
Power and communications	– 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	Extension of existing potable water line within MBD Site Compound.

2.5 Stage 2A: Construction of ORF

The general layout of the ORF areas is shown in Figure 2.5. Works required for the three ORF areas during Stage 2A are summarised in Table 2.4.

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

Component	Works required
Wharf Topside Area	
MLAs	Installation of MLAs, including: – Civils and structures. – Associated works such as piping, hydraulics, electrical, instrumentation, and auxiliary systems.
Piping and valving	– All necessary piping and valving. – Odorant injection facilities. – Pig launcher, downstream of the MLAs to tie-in to the natural gas pipeline.
Gangway	– Gangway access tower to provide connection between the wharf and FSRU.
Utility connections	FSRU utilities connections for: – Communications. – Marine Diesel Oil. – Freshwater. – Sewage, bilge, and grey water.
Utility Area	
Site Utilities	Site utilities including: – 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: – Firewater storage. – Pumps. – Firewater monitors.
Security systems and equipment	– CCTV. – Fencing and gates. – Security access and monitoring systems.

Component	Works required
Equipment housing	Equipment shelters and buildings to house: – Electrical, control, and operating equipment, critical spares, emergency response and site monitoring facilities. – Buildings will include appropriate building services e.g., heating, ventilation and air conditioning, potable water, amenities, sewerage etc.
Site roadways, lighting, and drainage	– Roads and car parking areas. – General lighting, earthing, lightning system. – Drainage system to tie into the existing Port Kembla drainage system.
Gas Pipeline	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).

2.6 Stage 2B: Excavation and dredging

An Emplacement Cell Report (ECR) has been developed by SMEC Australia Pty Ltd (SMEC) titled 'Port Kembla Gas Terminal Development – Emplacement Cell Report' in accordance with Infrastructure Approval (SSI 9471) Schedule 3, Condition 8 and 9. The ECR outlines the design and construction methodology of the Emplacement Cell.

Approximately 450,000 m^3 of materials will be excavated / dredged from the MBD Site Compound and placed within the boundaries of the Emplacement Cell. Further details, including detailed design drawings, can be found in the ECR (SMEC, 2022). A summary of the excavation and dredging works is provided in Section 2.6.2 and Section 2.6.3.

2.6.1 Silt curtains

Prior to the commencement of dredging activities, silt curtains will be installed within the Inner Harbour (MBD Site Compound) and Outer Harbour (Emplacement Cell). A fixed gate or bubble curtain gate will be installed to allow for the entrance and exit of barges whilst also controlling the dispersion of silt.

Silt curtains will be suitable for tidal and working harbour conditions.

Navigation and special markers will be installed to the satisfaction of the Harbour Master to alert marine vessels operating in the port harbours of the presence of silt curtains any other risks to navigation.

Further information regarding the use of silt curtains is provided in the Dredge and Excavation Management Plan (DEMP) for Stage 2A and Stage 2B.

2.6.2 Excavation and dredge staging

Construction activities undertaken during Stage 1 involved the excavation of fill materials at the MBD Site Compound. Excavation has continued through Stage 2A and will continue as part of Stage 2B. On completion of existing fill materials being excavated, dredging operations will commence at the MBD Site Compound as part of the Stage 2B works.

Dredging activities at the MBD Site Compound and Emplacement Cell will be staged to accommodate other construction works occurring at the MBD Site Compound.

Construction staging for excavation and dredging activities to be undertaken are summarised in the ECR (SMEC, 2022). Excavation and dredging at the MBD Site Compound is shown in Figure 2.6. An overview of the Emplacement Cell is shown in Figure 2.7.

2.6.3 Marine-based construction activities at MBD Site Compound

Marine based construction works required at the MBD Site Compound during Stage 2B are summarised in Table 2.5.

Table 2.5 Marine based construction works during Stage 2B

Component	Works required
Navigational aids	– Construction of new navigation aid pile through the new southern revetment. – Installation of navigation platform, tower, and lights, including all access requirements such as ladders, platforms, and handrails. – Lights will be battery powered and charged via solar panels. – Existing navigation aid to be removed after the commission of the new navigation aid.
Revetment shore protection	– Revetments will be constructed at the north and south embankments of the new MBD Site Compound wharf (refer to Figure 2.6) following completion of dredging works. – Works will comprise: • Laydown of Texcel 1200R geotextile. • Placement of thick quarry run to a depth of 190mm. • Placement of underlay rock to a depth of 400mm. • Placement of armour rock to a depth of 900 mm.
Revetted Trench	– Dredging of an approximate 10x10m trench to -14.5 reduced level (RL) Port Kembla Height Datum (PKHD) for accommodating the under-keel requirements of the FSRU strainers. An approach channel may also be required. – The trench should have sufficient scour protection.
Berthing box	– Dredging will be undertaken to facilitate berthing boxes to be constructed.

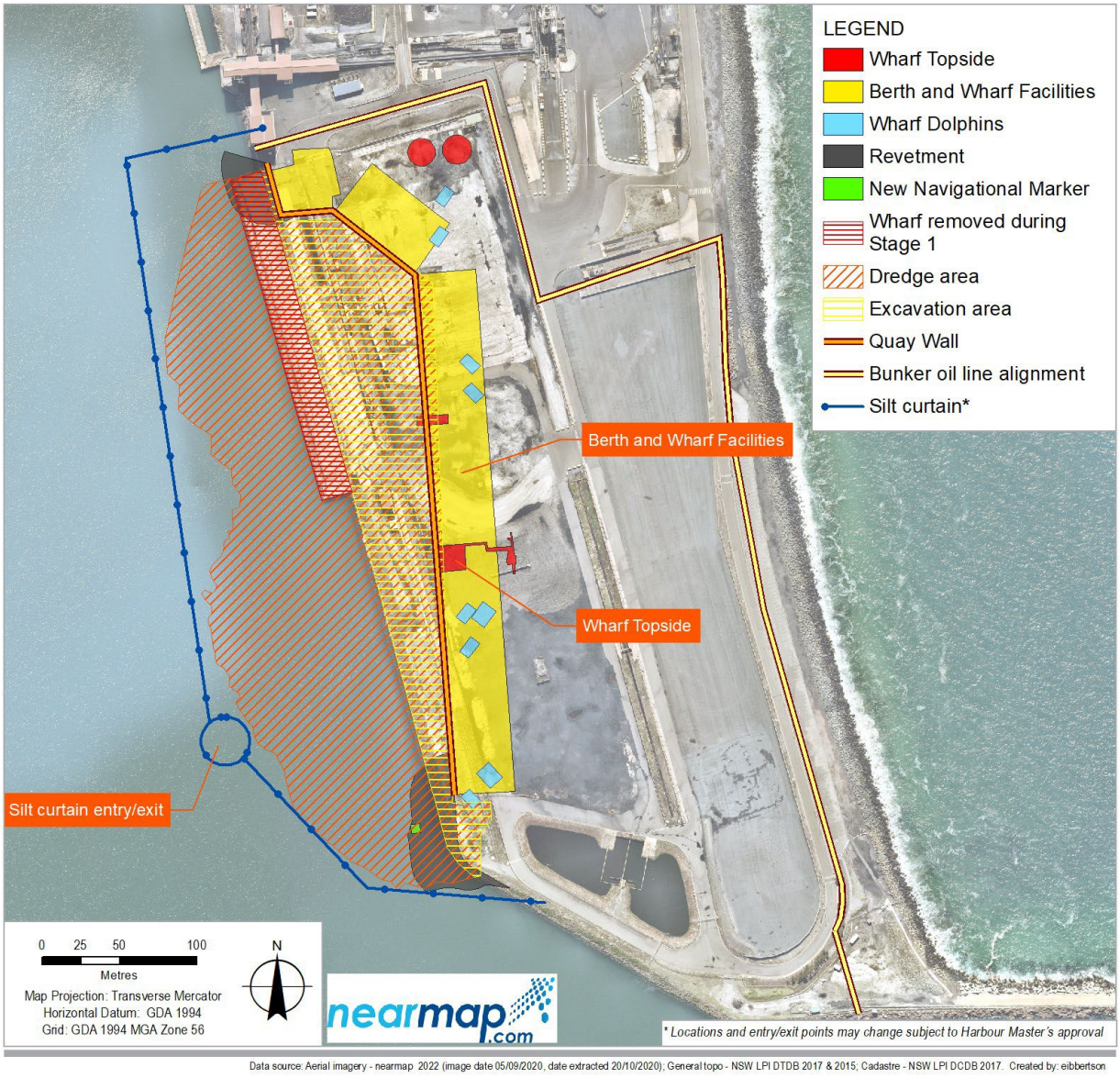


Figure 2.6 Dredging and excavation works for MBD Site Compound (Stage 2B)

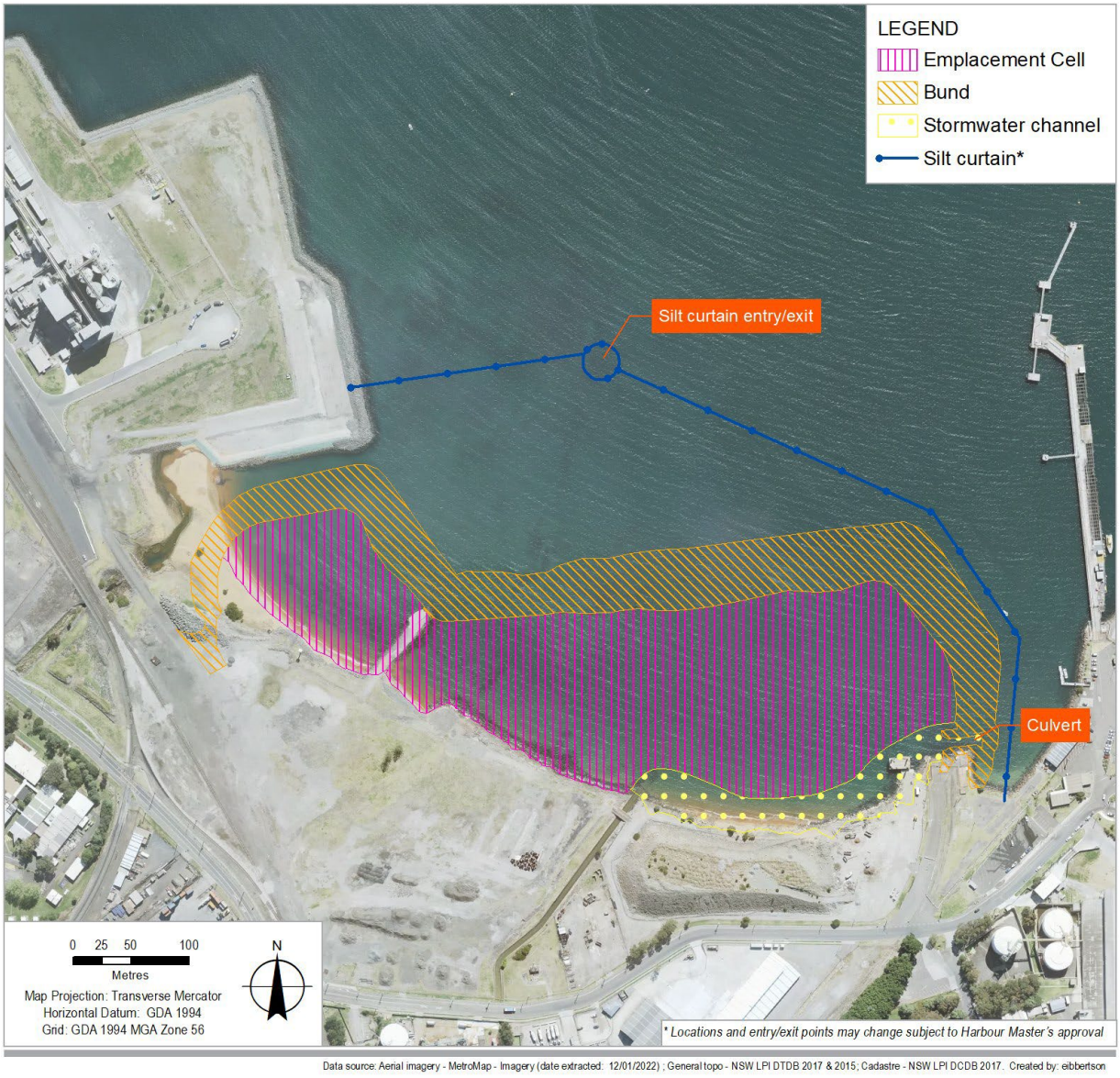


Figure 2.7 Emplacement Cell overview (Stage 2B)

2.7 Stage 2B: Construction of the Emplacement Cell

The Emplacement Cell will be located within the Outer Harbour, comprising of an approximate 800-metre perimeter bund. The Emplacement Cell has been designed and constructed to receive approximately 450,000 m³ of dredged materials from the MBD Site Compound. Harbour Muds (HM)/Harbour Silts (HS) is to be placed below -1 m PKHD and at a maximum below LAT (below ~-0.02 m PKHD), and Potential Acid Sulfate Soils (PASS) will be placed below +0.9m PKHD within the Emplacement Cell.

The construction work components and key features of the Emplacement Cell are summarised in Table 2.6. An overview of the Emplacement Cell is shown in Figure 2.7. Further details are provided in the ECR (SMEC, 2022).

Table 2.6 Emplacement Cell key features – Stage 2B

Component	Description
Emplacement Cell	– All contaminated soils, including HM/HS and PASS, will be placed within the Emplacement Cell generally below lower than -1.0m PKHD and in no instances above the LAT (~-0.02m PKHD). – The final Emplacement Cell levels will be graded towards the proposed stormwater channel. – Design life of 15 years.
Perimeter bund	– The design bund crest level was derived based on tide, storm surge, sea level rise and wave overtopping and assumed to be +3.55m PKHD. The adopted crest level also includes allowance for assessed post-construction settlement of up to 250mm. – Minimum crest width of 6m and 11m at passing bays. – Maximum permanent batter slopes of 1V:3H for seaward slopes and 1V:2H for landward/internal slopes. – The bund is to accommodate a 110t long reach excavator, fully loaded semi-trailer and temporary material stockpiles.
Rock revetment	– Rock revetment structure will extend to the toe of the main bund to provide protection to the bund structure against coastal processes.
Stormwater channel	– Stormwater channel to extend from the existing Darcy Road drain outlet to the eastern side of the Emplacement Cell. – Stormwater channel outlet is to comprise a box culvert structure on the eastern end of the Emplacement Cell, providing vehicular access onto the bund at the Jetty 3 abutment and within the NSW Ports property boundary.

3. Roles and responsibilities

The Project Team is responsible for all activities associated with Stage 2A and Stage 2B, including the implementation and maintenance of the various mitigation/management measures outlined in this HUFP. 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	– Responsible for the overall funding and direction of works associated with Stage 2A and Stage 2B. – 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	– Proactively stewards the effective implementation of Stage 2A and Stage 2B in accordance with requirements of the Infrastructure Approval (SSI 9471), this HUFP, Environmental Strategy, and all related Sub - plans. – Demonstrate proactive support for environmental requirements.
AIE HSE Manager	– 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 periodic environmental inspections with the key contractors. – Environmental Reporting.
Emplacement Cell Auditor	– Audit the construction of the Emplacement Cell and verify that works have been completed in accordance with the design intent (Emplacement Cell), The auditor role is to satisfy Condition 10 Schedule 3 of the Infrastructure Approval and any other relevant conditions therein.
Stage 2A Principal Contractor Project Manager and Stage 2B Principal Contractor Project Manager	– 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 HUFP and improved procedures. – Ensure this HUFP is implemented for the duration of Stage 2A. and Stage 2B.
Stage 2A Principal Contractor Construction Foreman and Stage 2B Principal Contractor Construction Foreman	– 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.

Project Role	Responsibility
	– Orders STOP WORK for any environmental breaches and reports incidents to the Project Manager. – Ensure this HUFP is implemented for the duration of Stage 2A and Stage 2B.
Stage 2A Principal Contractor Environmental Representative and Stage 2B Principal Contractor Environmental Representative	– 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 HUFP. – Participate and cooperate with AIE HSE Manager with regards to undertaking of joint periodic 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 and AIE Environmental Contractor	– 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 HUFP. – Conduct audit review as required. – Reports on the performance of this HUFP 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. – Undertake all required environmental monitoring for this phase of the Project.
Subcontractors and construction personnel	– Undertake an environmental induction prior to accessing to site. – Comply with legislative requirements. – Participate in 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 relevant legislative requirements associated with the management of Aboriginal and non-Aboriginal heritage applicable to Stage 2A and Stage 2B are listed in Table 4.1.

Table 4.1 Legislation and relevant policy applicable to this HUFP

Legislation and Regulation	Description	Applicability
Federal		
ATSIHP Act	The ATSIHP Act provides protection for areas in Australia and Australian waters that are of particular significance to Aboriginals in accordance with Aboriginal traditions. This includes areas and objects. The Act also provides provisions for the discovery and disposal of Aboriginal remains.	The Port Kembla harbour area is not considered to be an area of Aboriginal significance. The Project does not require approval from the Department of Agriculture, Water and the Environment (DAWE) Minister. Division 3 of the Act provides the process for the discovery and disposal of Aboriginal remains. In the event that unexpected Aboriginal remains are uncovered during Stage 2A and Stage 2B, a report to the Minister must be made.
Native Title Act 1993 (Native Title Act)	The Native Title Act provides for the recognition and protection of native title across Australia. It provides for the process by which native title rights can be established and compensation determined and a future regime where native title rights are protected, and conditions imposed on acts which affect native title land and waters.	A registered native title claim made by the South Coast People (Tribunal File No. NC2017/003) covers the land and waters in NSW between Port Hacking in the north, the Towamba River in the south, the coast region between those rivers, and the eastern edge of the Southern Highlands. The Port Kembla harbour area is included in this native title claim area. Section 23B outlines areas of land and water from native title claims if they are: a. Scheduled interest b. freehold estate c. commercial lease that is neither an agricultural lease nor a pastoral lease d. an exclusive agricultural lease or an exclusive pastoral lease e. a residential lease f. a community purpose lease g. a lease dissected from a mining lease and referred to in s 23B(2)(c)(vii) of the Act; and h. any lease (other than a mining lease) that confers a right of exclusive possession over particular land or waters. As the Stage 2A and Stage 2B footprint is located on freehold land it is not included with the South Coast People's native title claim.
Underwater Cultural Heritage Act 2018 (UCH Act)	The UCH Act provides for the identification, protection, and conservation of Australia's underwater cultural heritage. It enables the cooperative implementation of national and international maritime heritage responsibilities; and promotes public awareness, understanding, appreciation and appropriate use of Australia's underwater cultural heritage.	The heritage assessment undertaken for the PKGT EIS did not identify any known maritime heritage values (e.g., shipwrecks) registered on the Australian National Shipwreck Database (ANSDB) within the vicinity of the Stage 2A and Stage 2B works. In the event that an unexpected maritime heritage item/relic is uncovered during Stage

Legislation and Regulation	Description	Applicability
		2B, the item / relic must be assessed for heritage significance under the UCH Act.
State		
NPW Act	The NPW Act provides for the protection of Aboriginal objects (sites, objects, and cultural material) and Aboriginal places. Under the NPW Act, an Aboriginal object is defined as any deposit, object or material evidence relating to indigenous and non-European habitation, being habitation both prior to and concurrent with the occupation of that area by persons of European extraction and includes Aboriginal remains. It is an offence under Section 86 of the NPW Act to harm or desecrate an object the person knows is an Aboriginal object. It is also a strict liability offence to harm an Aboriginal object or to harm or desecrate an Aboriginal place, whether knowingly or unknowingly. Section 87 of the NPW Act provides a series of defences against the offences listed in Section 86 which includes if the harm was authorised by and conducted in accordance with the requirements of an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the NPW Act.	An AHIP was not required for the Project under Section 5.23 of the EP&A Act. An AHIP is not required for Stage 2A or Stage 2B as they were approved as part of the overall Infrastructure Approval.
Heritage Act	The Heritage Act is concerned with all aspects of heritage conservation ranging from basic protection against indiscriminate damage and demolition of buildings and sites, through to restoration and enhancement. Heritage places and items of particular importance to the people of NSW are listed on the State Heritage Register. Approval under Section 60 of the Heritage Act is required for any direct impacts on an item on the register. Approval from the NSW Heritage Council under Section 139 of the Heritage Act is required prior to any activities likely to disturb a relic while Section 140 of the Heritage Act provides for the application for a permit for excavation likely to disturb a relic.	Approval under Section 139 or an excavation permit under Section 140 of the Heritage Act is not required for CSSI under Section 5.23 of the EP&A Act. The heritage assessment undertaken for the PKGT EIS anticipated a low potential impact on known heritage items. In the event an unexpected find is discovered, Heritage NSW will be notified under Section 146 of the Act.
CA Act	The CA Act provides provisions related to the investigation of certain kinds of death and enables coroners to make recommendations in connection with an inquest or inquiry.	Chapter 9, Section 100 states that a person must not dispose of human remains unless the appropriate disposal authorisation has been given. In the unlikely even human remains are discovered during Stage 2A and Stage 2B the applicable provisions of Chapter 4 Section 35 of the Act must be followed in reporting the remains to the NSW Police and coroner / assistant coroner as soon as possible.

5. Planning requirements

The planning requirements and the corresponding heritage management measures applicable to Stage 2A and Stage 2B are listed in Table 5.1. Management measures are outlined in Section 6 through Section 8, and in **Error! Reference source not found.**.

The planning requirements include the conditions set out in the Infrastructure Approval (SSI 9471) dated 13 October 2021 and the mitigation / management measures outlined in the PKGT EIS.

Table 5.1 Planning requirements

Requirement	Reference	Responsibility	Evidence	Applicability to this HUFP
Infrastructure Approval Requirements (SSI 9471)				
Protection of Heritage Items The Proponent must ensure the development does not cause any direct or indirect impacts on heritage items located outside the approved development footprint.	Schedule 3, Condition 17	– AIE HSE Manager – AIE Environmental Representative	Section 6	Applicable
Unexpected Finds Protocol – Heritage Prior to commencement of construction, the Proponent must prepare an Unexpected Finds Protocol for managing heritage items identified during construction of the development, in consultation with BCD of DP&E and the ILALC, to the satisfaction of the Planning Secretary.	Schedule 3, Condition 18	– AIE HSE Manager	Section 8	Applicable
Discovery of Human Remains If human remains are discovered on site, then all work surrounding the area must cease, and the area must be secured. The Proponent must notify BCD as soon as possible following the discovery, and work must not recommence in the area until this is authorised by BCD.	Schedule 3, Condition 19	– AIE HSE Manager – AIE Environmental Representative – Stage 2A Principal Contractor Project Manager and Stage 2B Principal Contractor Project Manager Stage 2A Principal Contractor Environmental Rep and Stage 2B Principal Contractor Environmental RepStage 2A Principal Contractor Construction Foreman and Stage 2B Principal Contractor Construction ForemanSubcontractors and construction personnel	Section 7.1.3 Section 8	Applicable
PKGT EIS Management Measures				
The construction workforce would be given a heritage induction and supporting material to be able to identify materials of potential heritage value and how to respond.	EIS Measure H1	– AIE Environmental Representative – Stage 2A Principal Contractor Environmental Rep and Stage 2B Principal Contractor Environmental Rep – Stage 2A Principal Contractor Construction Foreman and Stage 2B Principal Contractor Construction Foreman	Section 7.2	Applicable
A protocol to be followed in the event of an unexpected find would be developed and would include clear lines of communication and stop work procedures to be followed.	EIS Measure H2	– AIE HSE Manager – Stage 2A Principal Contractor Project Manager and Stage 2B Principal Contractor Project Manager	Section 8	Applicable

Requirement	Reference	Responsibility	Evidence	Applicability to this HUFP
		– Stage 2A Principal Contractor Environmental Rep and Stage 2B Principal Contractor Environmental Rep – Stage 2A Principal Contractor Construction Foreman and Stage 2B Principal Contractor Construction Foreman		

6. Existing heritage context

The Project site has undergone significant modification for port development and extensive industrial development. Due to the highly disturbed nature of the site, there is limited Aboriginal and non-Aboriginal heritage values present.

Detailed heritage assessments were undertaken for the EIS which identified known Aboriginal and non-Aboriginal heritage values and items within the vicinity of the PKGT (refer to Figure 6-1 and Figure 6-2). As stated in the PKGT EIS, there are no known maritime heritage values (e.g., shipwrecks) registered on the ANSDB, State Heritage Register or OEH Register within the vicinity of the Stage 2A and Stage 2B works.

Stage 2A and Stage 2B works would not have any direct or indirect impacts on the previously recorded Aboriginal and non-Aboriginal heritage values present due to the proximity of works from the heritage items (all are located over two kilometres from the MBD Site Compound and the Emplacement Cell Construction Site). There would be no direct or indirect impacts on previously recorded maritime heritage values as none have been recorded in the vicinity of the Stage 2A and Stage 2B works.

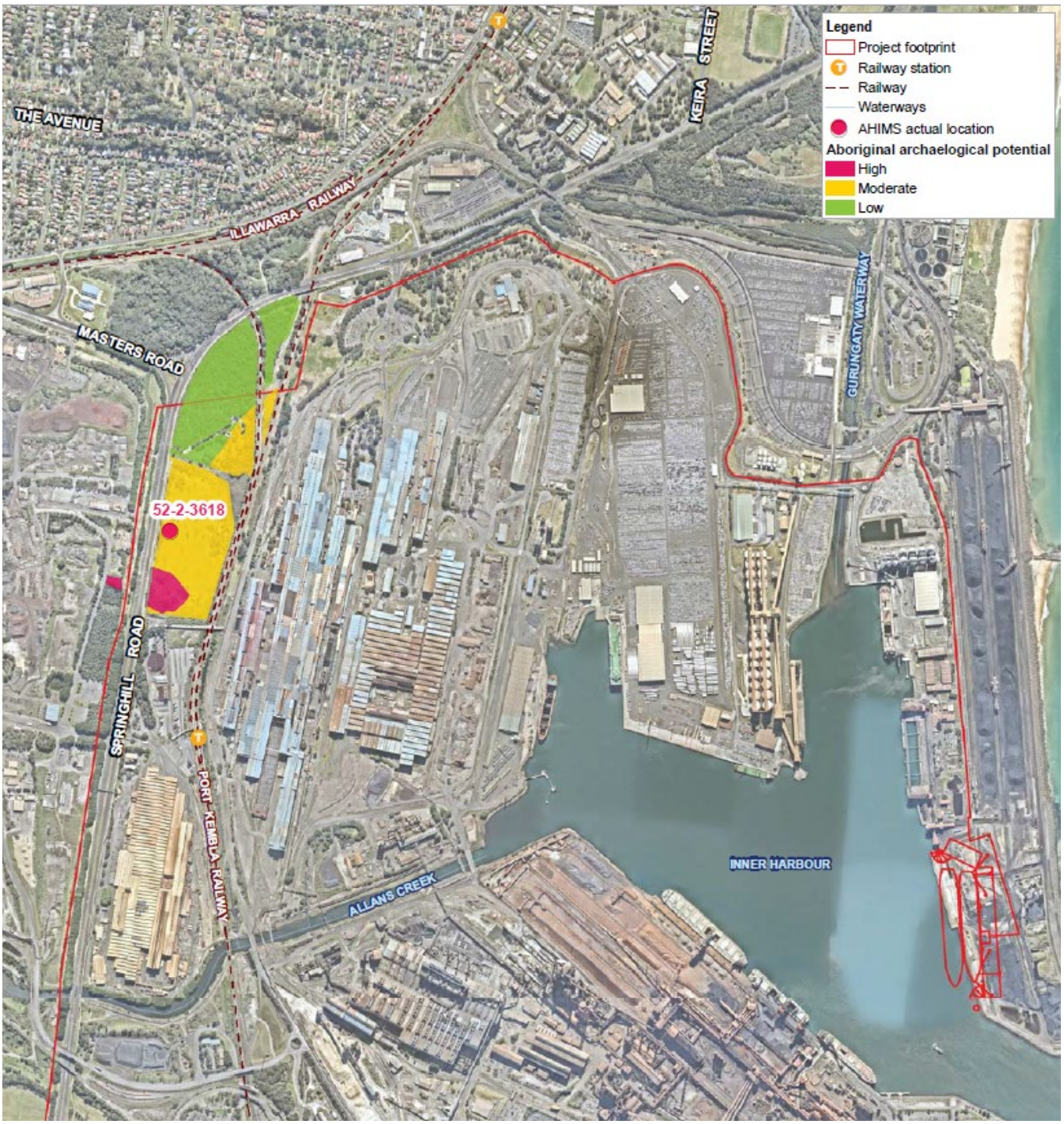


Figure 6-1 Aboriginal heritage areas and items within the Project area

Figure 6-2 Non-Aboriginal heritage items within the Project area

7. Unexpected heritage items and heritage induction

7.1 Unexpected heritage items

An ‘unexpected heritage item’ means any unanticipated discovery of an actual or potential heritage item, for which AIE and its contractor does not have approval to disturb or does not have a safeguard in place (apart from this procedure) to manage the disturbance.

Unanticipated discoveries are categorised as either:

– Aboriginal objects.
– Historic (non-Aboriginal) heritage items (including maritime heritage).
– Human skeletal remains.

Images of examples of terrestrial Aboriginal and non-Aboriginal heritage items are provided in **Error! Reference source not found.**.

7.1.1 Aboriginal objects

The NPW Act protects Aboriginal objects which are defined as:

“any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains”.

Examples of Aboriginal objects include:

– Stone tool artefacts.
– Shell middens.
– Axe grinding grooves.
– Pigment or engraved rock art.
– Burial sites.
– Scarred trees.

7.1.2 Non-Aboriginal heritage items

The Heritage Act protects non-Aboriginal heritage items which are defined as:

“Any deposit, artefact, object or material evidence that relates to the settlement of the area that comprises NSW, not being Aboriginal settlement; and is of State or local heritage significance”.

Non-Aboriginal heritage items may include:

– Archaeological ‘relics.
– Other historic items (i.e., works, structures, buildings, or movable objects).

Relics are archaeological items of local or state significance which may relate to past domestic, industrial or agricultural activities in NSW. Relics can include bottles, remnants of clothing, pottery, building materials and general refuse. Relics can also include maritime heritage such as historic shipwrecks.

7.1.3 Human skeletal remains

Human skeletal remains can be identified as either an Aboriginal object or non-Aboriginal relic depending on ancestry of the individual (Aboriginal or non-Aboriginal) and burial context (archaeological or non-archaeological). Remains are considered to be archaeological when the time elapsed since death is suspected of being 100 years or more.

All bones must be treated as potential human skeletal remains and work around them must stop while they are protected and investigated urgently. Under the applicable legislation outlined in Section 4, the following agencies must be notified in the event of human remains being discovered:

– NSW Police.
– NSW Coroner's Office.
– Heritage NSW (in the event Aboriginal remains are uncovered).
– DAWE Minister (in the event Aboriginal remains are uncovered).

In the event that work must stop due to human remains being uncovered, works will not recommence within the area until authorised by the applicable agencies listed above.

7.2 Heritage induction

Prior to Stage 2A and Stage 2B commencing, individuals involved with the works will be given an induction on heritage matters related to the works and unexpected finds included in the general induction package. This includes any person involved in undertaking or supervising ground disturbance works, and excavation and dredging works. Visitors to site need not be given a heritage induction.

Personnel will be provided with supporting material with descriptions of potential heritage features and relics, how to visually identify materials of potential heritage value (both Aboriginal and non-Aboriginal) and how to appropriately respond to the unexpected find.

The induction will also include the protocols in the event of unexpected human remains being uncovered during Stage 2A and Stage 2B and the appropriate notification and response process to be undertaken. The unexpected finds procedure is provided in Section 8.

Heritage inductions may be carried out on site and will be delivered by Principal Contractors Environmental Representatives.

8. Unexpected finds protocol

The Unexpected Finds Protocol that must be followed by any work personnel in the event of an unexpected heritage item being discovered is outlined in Table 8.1. This procedure has been prepared in consultation with the Heritage NSW and the ILALC.

Table 8.1 Unexpected Heritage items find procedure

Step	Action
1	**Stop work, protect item and inform the site supervisor**
1.1	Stop all work in the immediate area of the item and notify the AIE Project Manager.
1.2	Establish a 'no-go zone' around the item. On land, use high visibility fencing, where practical. On water, record coordinates of heritage item and add buffer zone of minimum 30 metres.
1.3	Inform all site personnel about the no-go zone.
1.4	Inspect, document, and photograph the item.
1.5	*Is the item likely to be bone?* Where it is obvious that the bones are human remains, you must notify the local police by telephone immediately and the NSW Coroners Office. The police may take command of all or part of the site. Where human remains are likely to be Aboriginal ancestral remains, also contact the Heritage NSW on (02) 9873 8500 and the DAWE Minister. Contact details are provided in Section 9.
1.6	Confirm with the applicable site environment representative that the site is unexpected.
1.7	Following confirmation of discovery Heritage NSW will be notified immediately. Works will not recommence in the area until authorised by Heritage NSW. Any verbal conversations with regulators must be noted on the Project file for future reference. Heritage NSW Environment Line ph. (02) 9873 8500. Email: mailto: heritagemailbox@environment.nsw.gov.au. Registered Aboriginal Parties (RAP) will be notified at this point to inform them of unexpected find.
2	**Contact and engage an Aboriginal or Historical archaeologist and/or an Aboriginal heritageconsultant**
2.1	Contact a qualified Aboriginal or Historical archaeologist to discuss the location and extent of the item and arrange a site inspection, if required. Preference will be given to using an archaeologist supplied by the ILALC for local context or assigned Consultant Archaeologist who completed the heritage assessments for the PKGT EIS. If requested, provide photographs.
3	**Preliminary assessment and recording of the find**
3.1	In a minority of cases, the Aboriginal or Historical archaeologist or ILALC Representative may determine from the photographs that no site inspection is required because no archaeological constraint exists for the Project (e.g., the item is not a 'relic', a 'heritage item' or an 'Aboriginal object'). Any such advice should be provided in writing to the AIE HSE Manager (e.g., via email).
3.2	Arrange site access for the Aboriginal or Historical archaeologist/Aboriginal heritageconsultant to inspect the item as soon as practicable.
3.3	Subject to the Aboriginal or Historical archaeologist/Aboriginal heritage consultant's assessment, work may recommence at a set distance from the item. Existing protective fencing or buffer zones established in Step 1 may need to be adjusted to reflect the extent of the newly assessed protective area. No works are to take place within this area once established.
3.4	The Aboriginal or Historical archaeologist/Aboriginal heritage consultant may provide advice after the site inspection and preliminary assessment that no heritage constraint exists for the Project (e.g., the item is not a 'relic' or a 'heritage item' or an 'Aboriginal item'. Any such advice should be provided in writing (e.g., via email or letter with the consultant's name and company details clearly identifiable) to the AIE HSE Manager.
3.5	Where required, seek additional specialist technical advice (such as a forensic or physical anthropologist to identify skeletal remains. The Aboriginal or Historical archaeologist/Aboriginal heritage consultant can provide contacts for such specialist consultants.

Step	Action
3.6	Where the item has been identified as a 'relic' or 'heritage item' or an 'Aboriginal object' the Aboriginal or Historical archaeologist should formally record the item. Where an Aboriginal object is recorded it must be registered on the Aboriginal Heritage Information Management System in accordance with section 89A of the NPW Act.
4	**Aboriginal or Historical Archaeologist to prepare management requirements for site**
4.1	An archaeological or heritage management plan is developed outlining management actionsto ensure damage to the site is minimised and work can recommence. This plan will be developed by the Aboriginal or Historical archaeologist in consultation with the RAP's, Heritage NSW and DP&E as required.
5	**Notify the regulator, if required.**
5.1	If notification is required, complete the template notification letter, including the archaeological/heritage management plan and other relevant supporting information. For historical relics a Section 146 notification form will be required to be submitted to the Heritage NSW.
5.2	Forward the signed notification letter to Heritage NSW and the Planning Secretary.
5.3	A copy of the final signed notification letter, archaeological or heritage management plan and the site recording form is to be kept on file and a copy sent to the Project Managers.
6	**Resume work**
6.1	The management plan is implemented, and the Project's EMS is updated to reflect any additional controls and requirements.
6.2	Seek written clearance to resume Project work from the AIE HSE Manager and the Aboriginal or Historical Archaeologist / Aboriginal heritage consultant. Clearance would only be given once all archaeological excavation and/or heritage recommendations and approvals (where required) are complete. Resumption of Project work must be in accordance with all relevant Project / heritage approvals / determinations.
6.3	If required, ensure archaeological excavation/heritage reporting and other heritage approval conditions are completed in the required timeframes. This includes artefact retention repositories, conservation and/or disposal strategies.

9. Contact details

Contact details applicable to this Stage 2A and Stage 2B HUFP are listed in Table 9.1.

Table 9.1 Contact details

Position	Name	Phone Number
Stage 2A Principal Contractor Project Manager	Ivan Bota	0447 804 373
Stage 2B Principal Contractor Project Manager	To be confirmed	To be confirmed
AIE	Alex Lovell	0413 250 961
Wollongong Local Police station		(02) 4226 7899
Consultant Archaeologist	Asher Ford Maaci (GHD)	(03) 8687 8891
ILALC		(02) 4226 3338
Heritage NSW		131 555

10. Communication and complaints

Effective communication between the Project Director, Project team, contractors and external stakeholders will be undertaken throughout the Project to ensure effective implementation of this HUFP.

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.

10.1 Internal communications

Communication on environmental issues related to heritage 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).
– Periodic Environmental management team meetings with relevant contractors (AIE HSE Manager or Delegate).
– Toolbox talks and daily pre-start briefings (Principal Contractor Project Managers 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.

10.2 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 PANSW and local and state government.

Consultation with key stakeholders and the wider community on the Project will continue throughout Stage 2A and Stage 2B 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 and Stage 2B EMS.

10.3 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 and Stage 2B 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 heritage. This message will be passed on to site personnel and/or the Stakeholder Engagement Team as appropriate. The phone number is listed on the AIE website (https://ausindenergy.com/contact-us/) and will be provided on all community newsletters. The AIE HSE Manager has notified the Port Kembla Harbour Environment Group of the Community Information Line.

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, if the issues cannot be resolved immediately, ongoing actions might be required to resolve the issue.

All complaints related to heritage 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 and Stage 2B EMS.

11. 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.

11.1 Environmental inspections

11.1.1 AIE and Principal Contractor joint environmental inspection

As a minimum, the AIE HSE Manager (or nominated delegate) will undertake periodic 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 HUFP 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 *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-compliances raised if not closed out in the nominated timeframe (Non-compliance Report).

11.1.2 Contractor environmental inspections

In addition to the joint periodic 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 environmental site inspection will be documented on a checklist, or similar, to be prepared and completed by the Principal Contractors.

Copies of the 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 HUFP or relevant legislation to the AIE Project Director and government authorities (refer to Section 12).

11.1.3 EPL inspection requirements

In accordance with Condition O4.4 of the EPL No 21529, the Contractor will undertake wet-weather inspections daily during periods of rainfall and within 24 hours of cessation of a rainfall event causing runoff to occur on or from the premises (based on site observation, this equates to 10 millimetres of rainfall in a 24-hour period).

Daily inspections of water pollution controls will be undertaken in accordance with Condition M.10.1 of the EPL No 21529 and recorded. Records will include the date and time of inspection, location of dredging operations and conditions of silt curtains and other water pollution controls. Records will be produced to an EPA authorised officer on request.

The Principal Contractors must record all such inspections including observations and works undertaken to repair and/or maintain erosion and sediment controls.

11.2 Monitoring

Monitoring will not be required with respect to this HUFP.

11.3 Auditing

AIE will conduct a program of internal audits for the purpose of verifying compliance with the following:

– The EMS and this HUFP.
– Compliance with the requirements of relevant components outlined within the EMS and HUFP, 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 and Stage 2B EMS.

11.4 Environmental reporting

11.4.1 DP&E reporting

Regular reports on compliance and other matters will be provided during the construction phase of the Project. This will include reporting to the DP&E 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, DP&E 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 HUFP will consist of Environmental Incident Report(s), as required.

11.4.2 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 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 11.6 and Section 12.

11.5 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).

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 HUFP.
– *Compliance Reporting Post Approval Requirements* (DPIE, 2020), or its most recent edition.

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.

11.6 Non-compliance, corrective, and preventive actions

Non - compliances or potential non - compliances are situations or events that do not comply with the safeguards and procedures stipulated in the EMS or this HUFP.

Non - compliances or potential non-compliances may be identified in any of the following situations:

– 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 - compliances related to heritage will be managed and reported using the non - compliance 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 and Stage 2B EMS.

The Department must be notified in writing via the Department's Major Projects Website within seven 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.

12. Incident management and emergency response

12.1 Incident management

12.1.1 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 heritage, including those of the Principal Contractors, 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 Principal Contractors 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 heritage. These may include, but are not limited to the following:

– Exceedance of monitoring criteria 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 12.1.2 for notifiable incidents). All environmental incidents will be reported immediately to DP&E in writing via the Department's Major Projects Website 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 Contractors will notify the AIE HSE Manager immediately to allow the AIE HSE Manager to notify DP&E in writing (via the Department's Major Projects Website) within seven 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.

12.1.2 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 seven 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.

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

In accordance with Condition 5 of Schedule 4, DP&E must be notified in writing via the Department's Major Projects Website 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 and Stage 2B EMS.

12.2 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 listed in Table 12.1 shall be consulted and implemented, as relevant.

Table 12.1 Emergency plans

Plan	Reference	Application
Principal Contractor Local Emergency Response Plan	-	Principal Contractor's emergency response plan implemented in the event of any incident occurring during a Project activity as per the Contractor's policies and management framework.
AIE Port Kembla Gas Terminal Emergency Spill Plan	PKGT-AIE-PRO-039	Developed as a Sub — plan to the EMS to be implemented detailing: – Response plans in the event of land or water-based spill events. – Inspections, notification, and incident management requirements in accordance with the Infrastructure Approval (SSI 9471) and EPL No 21529 in relation to spills.
Pollution Incident Response Management Plan (PIRMP)	PKGT-AIE-PRO-007	Implemented immediately in the event of a pollution incident occurring during a Project activity. The PIRMP: – Outlines the actions to be taken during or immediately after a pollution incident. – Lists details of relevant authorities to be notified, as required. – Outlines community and neighbour notification details, as required.

Plan	Reference	Application
AIE Emergency Management Procedures	PKGT-AIE-PRO-014	Implemented immediately in the event of any emergency incident occurring during the Project. Procedures include: – Types of emergencies and the detailed steps to be taken in response. – Notification details to relevant authorities and AIE Project team. – Incident response to follow up from incident and preventative actions to be implemented, if applicable.

13. Document management and review

13.1 Record management

Records and registers specified in this HUFP for Stage 2A and Stage 2B 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.

13.2 Review and revision of HUFP

This HUFP 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 and Stage 2B.

In addition, as required under Condition 4 of Schedule 4 of Infrastructure Approval (SSI 9471), the HUFP must be reviewed, and if necessary, revised within three months (unless otherwise agreed with DP&E) 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 12).
- 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 HUFP will be submitted to the Planning Secretary for approval unless otherwise agreed with the Planning Secretary.

13.3 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

DPIE 2020, *Compliance Reporting Post Approval Requirements*.

Environment Protection Licence No. 21529, dated 3 December 2021.

GHD 2018, Port Kembla Gas Terminal Environmental Impact Statement.

Infrastructure Approval SSI 9471, dated 13 October 2021.

National Native Title Tribunal, NC2017/003 - South Coast People.

SMEC March 2022, Port Kembla Gas Terminal Development – Emplacement Cell Report.

Appendices

Appendix A

Identifying unexpected heritage items

Identifying unexpected heritage items

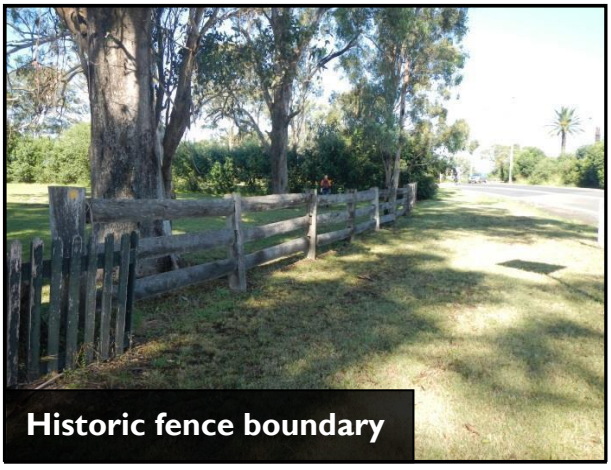
The following images can be used to assist in the preliminary identification of potential unexpected items (both Aboriginal and non-Aboriginal) during construction and maintenance works. Please note this is not a comprehensive typology.

Top left hand picture continuing clockwise: Stock camp remnants (Hume Highway Bypass at Tarcutta); Linear archaeological feature with post holes (Hume Highway Duplication), Animal bones (Hume Highway Bypass at Woomargama); Cut wooden stake; Glass jars, bottles, spoon and fork recovered from refuse pit associated with a Newcastle Hotel (Pacific Highway, Adamstown Heights, Newcastle area).

Top left hand picture continuing clockwise: Woodstave water pipe with tar and wire sealing (Horsley Drive); Tram tracks (Sydney); Brick lined cistern (Clyde); Retaining wall (Great Western Highway, Leura).

Top left hand picture continuing clockwise: Road pavement (Great Western Highway, Lawson); Sandstone kerbing and guttering (Parramatta Road, Mays Hill); Telford road (sandstone road base, Great Western Highway, Leura); Ceramic conduit and sandstone culvert headwall (Blue Mountains, NSW); Corduroy road (timber road base, Entrance Road, Wamberai).

Top left hand corner continuing clockwise: Alignment Pin (Great Western Highway, Wentworth Falls); Survey tree (MR7, Albury); Survey tree (Kidman Way, Darlington Point, Murrumbidgee); Survey tree (Cobb Highway, Deniliquin); Milestone (Great Western Highway, Kingswood, Penrith); Alignment Stone (near Guntawong Road, Riverstone). Please note survey marks may have additional statutory protection under the *Surveying and Spatial Information Act 2002*.



Top left hand corner continuing clockwise: Remnant bridge piers (Putty Road, Bulga); Wooden boundary fence (Campbelltown Road, Denham Court); Dairy shed (Ballina); Golden Arrow Mine Shaft.

Top left hand corner: Culturally modified stone discovered on Main Road 92, about two kilometres west of Sassafras. The remaining images show a selection of stone artefacts retrieved from test and salvage archaeological excavations during the Hume Highway Duplication and Bypass projects from 2006-2010.

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