Victorian Renewable Energy Terminal

Application Number: **01940** Commencement Date: **24/07/2023** Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Victorian Renewable Energy Terminal

1.1.2 Project industry type *

Transport - Water

1.1.3 Project industry sub-type

Terminal

1.1.4 Estimated start date *

01/01/2026

1.1.4 Estimated end date *

01/01/2046

1.2 Proposed Action details

1.2.1 Provide an overview of the proposed action, including all proposed activities. *

The Victorian Renewable Energy Terminal (The Terminal) is a proposal to develop and operate a facility to serve as a base for the assembly of Offshore Wind (OSW) farms along the coast of Victoria.

The total project area is 146 ha which is the same as the disturbance footprint (Refer to Att A - Project Area Map). Within the disturbance footprint the following activities are proposed:

- Clearing the vegetation on the existing reclaimed land site (25 ha)
- Reclamation of seabed for wharf structure (29 ha)
- Dredging to allow deeper ship access to wharf structure from the existing channel. Within the 92 ha potential dredging boundary some areas of seabed would need to levelled in order to ensure an 11 m clearance in the shipping channel (and turning circle) and to deepen the berth pocket to 15 m. It would not be necessary to dredge the entirety of the 92 ha. The quantities of dredged material are not known at this stage as detailed bathymetry has not been collected.

It is proposed that the new reclaimed land would be formed using the dredged material (if feasible) and further imported material. Once reclaimed; the existing reclaimed land and the new reclaimed land would be covered with heavy-duty pavements to allow for storage of cargo and associated handling equipment. Approximately two hectares of the land parcel would be required for warehousing, offices, car parks, and other ancillary facilities.

A wharf structure approximately 600 m long by 100 m wide would be built (primarily through piling) alongside/above the reclaimed land, and this would also be capped with a concrete apron.

The existing shipping channel and anchorages would be used to support the Terminal, no changes are proposed to these assets as part of the Project.

Project description development

The Project is in the early stages and a detailed description of the development and construction activities is not currently available. Outside the perimeter of the facility, there are likely to be extensions (and potentially some upgrades) required to electrical, communications, water and sewer services, and road infrastructure. Additionally, at this stage the dredged material has not been characterised. If the material is not suitable for use in reclamation it will be necessary to identify other options for disposal on land or at sea. A source for the imported material for the reclaimed land will also need to be identified. These options will be assessed as the project progresses.

Potential impacts

Key potential impacts on Matters of National Environmental Significance (MNES) include the following:

- Removal of habitat (including as part of land reclamation) within and adjacent to a Ramsar wetland (which is a key habitat for migratory birds).
- Potential indirect habitat loss or degradation resulting from ground disturbance such as surface hydrological changes, groundwater changes, lighting emissions, dust and noise.
- Direct or indirect loss and degradation of benthic communities and habitats such as seabed and seagrass areas critical to marine fauna during construction and seabed levelling.
- Indirect impacts to benthic communities and habitats due to short-term changes to water quality during construction activities and longer-term ongoing operations/maintenance activities (e.g., spills, hydrodynamic changes).
- The direct or indirect impact of increased sedimentation due to construction / dredging activities on benthic communities and habitat values related to MNES.
- Impacts to marine fauna and lifecycle processes (e.g., changes to behaviour including foraging, breeding) due to underwater noise generated during construction.
- Introduced pest or non-native species becoming established.

The area for off-site impacts is unable to be properly defined at this stage due to the early stage of the Project. Once a detailed project description has been developed, modelling will be undertaken to define this boundary. The modelling will include: coastal processes, groundwater, surface water, noise, air, light and traffic. The potential impacts from the project will also be identified and assessed by technical specialists and avoidance and mitigation measures recommended for inclusion into the Project description.

1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?

No

1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? *

The Victorian Commercial Ports Strategy (Link 1, Section 1, page 34) identified the key role of ports in the construction of OSW farms. Ports are required for the receiving of OSW components from overseas and hosting their assembly and storage. The strategy commits support to the ports sector in servicing the transition to a net zero emissions economy by 2050 and commits the Port of Hastings Corporation to preparing an investment case for a new facility capable of supporting OSW construction and bulk trades.

In October 2022, the Victorian Government released *Offshore Wind Implementation Statement 1* (see Link 2 Section 2, Page 16), outlining plans for the establishment of an OSW industry. This was later confirmed in the Victorian Government's *Offshore Wind Implementation Statement 2* (see Link 3 Section 3, Page 18). The Implementation Statements reaffirmed the government's position that the Port of Hastings is the preferred port to support OSW construction, subject to necessary community and industry consultation and environment and planning approvals. In the statement, the Victorian Government committed to providing early investment in the development of the Port of Hastings to support the establishment of the OSW sector.

Commonwealth legislation

The EPBC Act is relevant as there are Matters of National Environmental Significance (MNES) present in the proposed development area, the development is occurring in a Wetland of international importance and there is known habitat for one species of threatened Swamp Skink *Lissolepis coventryi*, potential habitat for eight threatened fauna species Australian Bittern *Botaurus poiciloptilus*, White-throated Needletail *Hirundapus caudacutus*, Bar-tailed Godwit *Limosa lapponica baueri,* Australian Fairy Tern *Sternula nereis nereis*, Eastern Curlew *Numenius madagascariensis*, Curlew Sandpiper *Calidris ferruginea*, Red Knot *Calidris canutus*, Great Knot *Calidris tenuirostris* and potential habitat for migratory shorebirds (Att C- Terrestrial Values Assessment, Section 3.3, Page 16-18). Listed marine species are also known to frequent the area.

The development may impact on these MNES, according to the criteria given in the Significant Impact Guidelines.

State legislation

A referral under the Victorian *Environment Effects Act 1978*, has been submitted in tandem with this EPBC Referral for a decision on whether assessment will be required under this Act. Key approvals likely to be required under Victorian legislation include:

- Planning approvals under the *Planning and Environment Act 1987* (P&E Act)
- Cultural Heritage Management Plan (CHMP) under the *Aboriginal Heritage Act 2006*.
- Consent under the *Marine and Coastal Act 2018.*

- FFG Permit under the *Flora and Fauna Guarantee Act 1988* (FFG Act).

1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. *

The Victorian Government announced in October 2022 that the Port of Hastings is the likely preferred location for development of infrastructure to support construction of offshore wind, as part of the release of the Victorian Government's Offshore Wind Implementation Plan.

In March 2023 the Victorian Government confirmed the Port of Hastings as the preferred location to support OSW farm construction.

Since October 2022, the Port of Hastings has spoken to key stakeholders, including local government, offshore wind developers, key community groups, and their existing Community Consultative Committee. These conversations have been constructive, with stakeholders broadly supporting the offshore wind industry and accepting that infrastructure is needed to support its inception.

A Communications and Engagement Strategy has been prepared to inform and involve local and First Nations communities, stakeholders, industry and government in the development of the proposed Terminal.

The primary focus is the preparation of the project's design and Environment Effects Statement (EES) including the statutory preparation, exhibition and independent inquiry process.

The EES Communication and Engagement Strategy applies for the period of 2023 -2026 as the EES is prepared, exhibited and assessed. It is designed to:

- Inform communities and stakeholders about the proposed project, and opportunities for participation.
- Promote an understanding of the Project and EES process.
- Encourage participation and seek targeted input during the design development, to identify issues of potential concern, gain local insight and seek feedback on measures that respond to stakeholder concerns.
- Use and respond to community and stakeholder feedback and demonstrate how it has been considered in the development of the Project.

1.3.1 Identity: Referring party

Privacy Notice:

Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable.

By completing and submitting this form, you consent to the collection of all personal information contained in this form. If you are providing the personal information of other individuals in this form, please ensure you have their consent before doing so.

The Department of Climate Change, Energy, the Environment and Water (the department) collects your personal information (as defined by the Privacy Act 1988) through this platform for the purposes of enabling the department to consider your submission and contact you in relation to your submission. If you fail to provide some or all of the personal information requested on this platform (name and email address), the department will be unable to contact you to seek further information (if required) and subsequently may impact the consideration given to your submission.

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1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	33737350749

Organisation name	PORT OF HASTINGS CORPORATION
Organisation address	3919 VIC

Referring party details

Name	Natasha Reifschneider
Job title	Environment Lead
Phone	0400052298
Email	natasha.r@portofhastings.vic.gov.au
Address	1d Stony Point Road, Crib Point

1.3.2 Identity: Person proposing to take the action

1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? *

No

1.3.2.2 Is Person proposing to take the action an organisation or business? *

Yes

Person proposing to take the action organisation details

ABN/ACN	33737350749
Organisation name	PORT OF HASTINGS CORPORATION
Organisation address	3919 VIC

Person proposing to take the action details

Name	Malcolm Geier
Job title	Chief Executive Officer
Phone	03 5979 5512
Email	malcolm.geier@portofhastings.vic.gov.au
Address	1d Stony Point Road, Crib Point

1.3.2.14 Are you proposing the action as part of a Joint Venture? *

No

1.3.2.15 Are you proposing the action as part of a Trust? *

No

1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. *

The Port of Hastings Corporation has a satisfactory record of responsible environment management since its establishment in January 2012.

The Port of Hastings Corporation has one incident of prosecution due to native vegetation clearance under *Victorian Planning Scheme Clause 52.17*. This incident involved a contractor undertaking bushfire management vegetation clearance works, with inadequate supervision leading to unpermitted vegetation clearance.

1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

The Port of Hastings is located within a listed Ramsar site, is part of an Urban Biosphere Reserve and contains three Marine National Parks and five Special Management Areas. The PoHC's Environment Policy (see Att B - PoHC Environment Policy) has been developed with the environmental values of its locality at the forefront. The key Environment Policy Statement is:

'We endeavour to go beyond compliance and conservation by leading changes in our business and behaviours that will protect and restore the environment'

The POHC Environment Policy includes eight pillars:

- Ensuring a healthy Western Port
- Managing Risk
- Maintaining a strong system
- Going beyond compliance
- Investing sustainably
- Empowering people
- Avoiding waste
- Being proactive and accountable

1.3.3 Identity: Proposed designated proponent

1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? *

Yes

Proposed designated proponent organisation details

ABN/ACN	33737350749
Organisation name	PORT OF HASTINGS CORPORATION
Organisation address	3919 VIC

Proposed designated proponent details

Name	Malcolm Geier
Job title	Chief Executive Officer
Phone	03 5979 5512
Email	malcolm.geier@portofhastings.vic.gov.au
Address	1d Stony Point Road, Crib Point

1.3.4 Identity: Summary of allocation

Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

ABN/ACN	33737350749
Organisation name	PORT OF HASTINGS CORPORATION
Organisation address	3919 VIC
Representative's name	Natasha Reifschneider
Representative's job title	Environment Lead
Phone	0400052298
Email	natasha.r@portofhastings.vic.gov.au
Address	1d Stony Point Road, Crib Point

Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	33737350749
Organisation name	PORT OF HASTINGS CORPORATION
Organisation address	3919 VIC
Representative's name	Malcolm Geier
Representative's job title	Chief Executive Officer
Phone	03 5979 5512
Email	malcolm.geier@portofhastings.vic.gov.au
Address	1d Stony Point Road, Crib Point

Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

1.4 Payment details: Payment exemption and fee waiver

1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? *

No

1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? *

No

1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?

No

1.4.7 Has the department issued you with a credit note? *

No

1.4.9 Would you like to add a purchase order number to your invoice? *

No

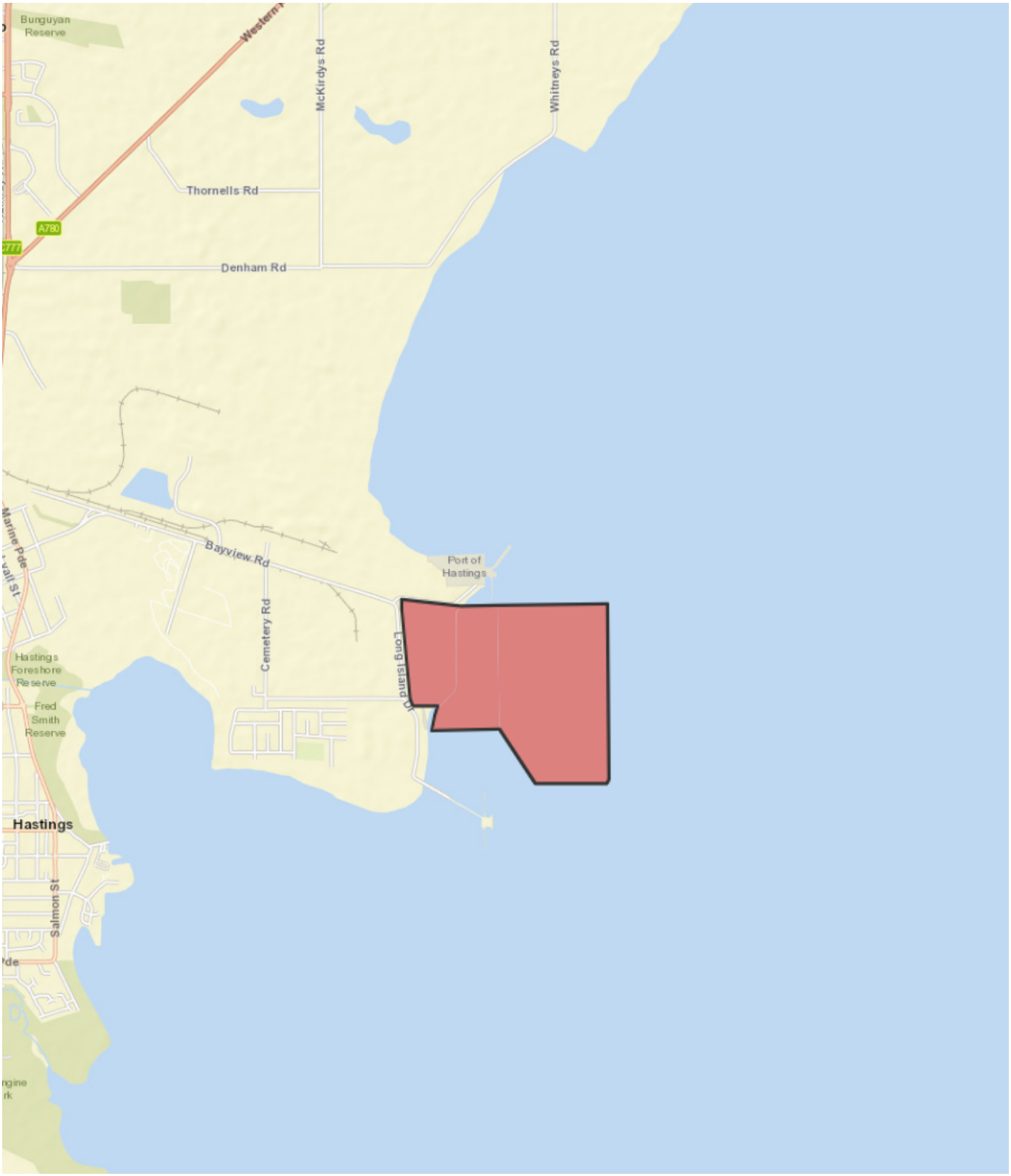
1.4 Payment details: Payment allocation

1.4.11 Who would you like to allocate as the entity responsible for payment? *

Person proposing to take the action

2. Location

2.1 Project footprint



2.2 Footprint details

2.2.1 What is the address of the proposed action? *

5 Long Island Drive Hastings

2.2.2 Where is the primary jurisdiction of the proposed action? *

Victoria

2.2.3 Is there a secondary jurisdiction for this proposed action? *

No

2.2.5 What is the tenure of the action area relevant to the project area? *

The Old Tyabb Reclamation Area (the Existing Reclaimed Land) is identified as Crown Allotment 76L Parish of Tyabb. Pursuant to section 14(2) and 14(3) of the *Crown Land (Reserves) Act 1978*. The Port of Hastings Corporation has been appointed as the Committee of Management for the land and the land is considered Crown land reserved for port purposes.

The intertidal zone and seabed is unreserved crown land and located within the declared port waters of the Port of Hastings.

3. Existing environment

3.1 Physical description

3.1.1 Describe the current condition of the project area's environment.

The Project Area for the Victorian Renewable Energy Terminal (the Terminal) is situated within the Port of Hastings, approximately 72km from the Melbourne CBD, and 2.6km northeast of the centre of Hastings township.

The Project is situated between BlueScope steelworks and Esso's Long Island Point fractionation plant and is comprised of existing reclaimed land (the Old Tyabb Reclamation Area), Proposed Reclaimed Land and a Potential Dredging Boundary (See Att A Project Area Map V2 2023-09-20). The Existing Reclaimed Land is not currently being utilised for any specific purpose.

Terrestrial Ecology

Ground conditions within the Existing Reclaimed Land are comprised of a variable thickness of fill, overlying a limited thickness of clay and sand, overlying more competent stiff clay and sand deposits.

The tidal zone near the existing shoreline is comprised of sands and clays, with layers of shells, and organic matter. Existing investigation information indicates very soft dark grey clayey silt materials overlying medium dense to very dense sand and clayey sand, interbedded with silt and clay layers.

Biosis (2023) completed an ecological site assessment of the existing reclaimed land to ascertain the terrestrial ecological values (See Att C – Terrestrial Values Assessment, Section 3.1, page 14). Being entirely composed of reclaimed land, the existing reclaimed land is dominated primarily by introduced pasture grasses namely Toowoomba Canary-grass *Phalaris aquatica*, Yorkshire Fog *Holcus lanatus* and Tall Fescue *Festuca arundinacea*. The south of the area is dominated by Pampas Grass *Cortaderia selloana* and Spiny Rush *Juncus acutus.* Native vegetation has colonised areas around the south section of the site, and it is considered that these species may have originated from revegetation works. The small marsh area in the south of the Project Area includes suitable habitat for wader birds while the intertidal zone in the quayside area may provide suitable foraging habitat for migratory shorebirds.

Marine Environment

Within the Proposed Reclaimed Land and the Potential Dredging Boundary, the seabed is generally comprised a surficial layer of loose sand/silty sand/clayey sand, overlying silty sand/clayey sand and sandy clay.

Seagrass species that are typically found in Western Port are likely to be found in the muddy to sandy seabeds and the lower intertidal areas of the marine component of the site. Species of epifauna that may be found in the project area include small red algae, small sponges, ascidians, the small seapen dwelling polychaetes, brachiopods and hydroids. The Project Area is also likely to support epifauna, infauna, plankton, phytoplankton, zooplankton, icthyoplankton, marine mammals and fish species. Marine ecology will be confirmed through marine ecology surveys.

Site Zoning

The Old Tyabb Reclamation Area (existing reclaimed area) is located within the Port Zone (PZ) of the Mornington Peninsula Planning Scheme. The purpose of the PZ is:

- *To recognise the significant transport, logistics and prime maritime gateway roles of Victoria's commercial trading ports in supporting Victoria's economy.*
- *To provide for shipping, road and railway access and the development of each of Victoria's commercial trading ports as key areas of the State for the interchange, storage and distribution of goods.*
- *To provide for uses which derive direct benefit from co-establishing with a commercial trading port.*
- *To provide for the ongoing use and development of Victoria's commercial trading ports that support the relevant port development strategy prepared pursuant to the Port Management Act 1995.*

The land surrounding the PZ site is in a Special Use Zone 1, and Public Use Zone 7.

Further assessment is being undertaken to ascertain whether the zoning of the Terminal site will require changes to facilitate the project. After completion, this document will be available to the Department upon request.

Transport

During construction of the project, it is anticipated development will rely on the use of the surrounding road network to deliver construction material to the site and allow access for construction contractors. During operation of the Terminal offshore wind components will be shipped in and out of the site by sea along the existing shipping channel.

3.1.2 Describe any existing or proposed uses for the project area.

The Existing Reclaimed Land is regularly slashed and is not currently being utilised for any specific purpose. The only development on site is a concrete helicopter pad that is located south of the centre of the site along the eastern boundary.

The proposed use for the site is only the Victorian Renewable Energy Terminal.

3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.

The project area includes the Western Port Ramsar wetland.

Western Port contains three marine national parks:

- Yaringa Marine National Park
- French Island Marine National Park
- Churchill Island Marine National Park

3.1.4 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

The proposed landside development area is a large open expanse and is relatively flat with a small depression in the south that has accumulated water. The site ranges from 6m to 2m (above sea level). Google Earth levels were used to determine existing surface profile and grading. The offshore ranges from 0m to a maximum depth of 14m.

3.2 Flora and fauna

3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

MARINE ENVIRONMENT

CEE (2023) completed a desktop study of the marine environments (see Att D - Marine Ecosystems Assessment) of the Project Site which pertain to the Potential Reclaimed Area and Potential Dredging Area. The environment includes littoral seagrass bed, sublittoral seagrass beds, sublittoral coarse sediment.

Seagrass species typically found in Western Port and likely to be found in the Project Area include *Zostera muelleri* (found in muddy to sandy seabeds in lower intertidal areas), *Zostera nigricaulis* (subtidal areas to 5 m depth) and *Halophila australis* (similar to *Zostera nigricaulis* and to greater depths). *Zostera nigricaulis* is listed as threatened under the FFG Act.

Epifauna are species that grow on or are attached to the surface of the seabed. Species of epifauna that may be found in the Project Area include small red algae, small sponges, ascidians *Pyura stolonifera* and *Stolonica australis,* the small seapen *Sarcophyllum* sp., dwelling polychaetes, brachiopods *Magellania flavescens* and hydroids.

The Project Area is also likely to support epifauna, infauna, plankton, phytoplankton, zooplankton, icthyoplankton, marine mammals and fish species.

Fish species found in pelagic habitats would likely include small clupeoid species such as Australian Anchovy, Sandy Sprat and Australian Sardine, which form part of the food chain for larger fish and birds.

In seagrass habitat fish species likely to be found include Southern Longfin Goby *Favonigobius lateralis,* Bridled Goby *Arenigobius bifrenatus,* Common Weedfish *Heteroclinus perspicillatus,*and juvenile King George Whiting, Australian Salmon and Yellow-eye Mullet.

On the unvegetated mud flats, Smooth Toadfish, King George Whiting, Greenback Flounder, Longsnout Flounder and Yelloweye Mullet are likely to be found.

The nearest seal colony to the Project Area is Seal Rock off the western tip of Phillip Island.

The nearest penguin colony to the Project Area is located at Phillip Island.

There are FFG Act listed marine species that occur in the Project Area which may be impacted by the project. These include the seagrass species *Zostera nigricaulis* and Western Port ghost shrimp *Calliax tooradin.*

MIGRATORY AND WATERBIRDS

Nature Advisory (2023) completed a desktop review of biodiversity databases to ascertain the EPBC Act and FFG Act-listed migratory and waterbirds that may be impacted by the project (see Att E - Waterbirds Assessment)

They identified 26 EPBC Act-listed species (of which 24 are listed as migratory and seven are listed as threatened) and eight FFG Act-listed species as potentially occurring in the Project Area.

Suitable habitat for wader birds includes the small marsh area in the south of the existing reclaimed land (e.g. Australasian Bittern and Australian Painted Snipe) while the intertidal zone in the Potential Reclaimed Area may provide suitable foraging habitat for migratory shorebirds (e.g. Bar-tailed Godwit, Common Greenshank and Curlew Sandpiper).

There are important roosting and foraging areas for waterbirds, particularly migratory shorebirds, in the vicinity of the study area The closest roosting site is located south of the project area.

TERRESTRIAL FLORA AND FAUNA

Biosis (2023) completed a site assessment of the Existing Reclaimed Land to ascertain the terrestrial ecological values of the Project Area (see Att C - Terrestrial Values Assessment)

Being a human-constructed landform, the Existing Reclaimed Land is a dominated primarily by introduced pasture grasses namely Toowoomba Canary-grass *Phalaris aquatica,* Yorkshire Fog *Holcus lanatus* and Tall Fescue *Festuca arundinacea.* The south of the area is dominated by Pampas Grass *Cortaderia selloana* and Spiny Rush *Juncus acutus.*

Approximately 3.9 ha of native vegetation was recorded within the Existing Reclaimed Land consisting of two ecological vegetation classes (EVCs): Tall Marsh (EVC 821) and Damp Sands Herb-rich Woodland (EVC 3).

Native vegetation has also colonised areas around the southern bund including Coast Tea-tree *Acacia sophorae,* Coast Beard-heath *Leucopogon parviflorus,* Large-leaf Bush-pea *Pultenaea daphnoides* and Drooping Sheoak *Allocasuarina verticillata.* These species may have originated from revegetation works.

Fauna species regularly recorded during the site assessment included Black Swan *Cygnus atratus,* Australian White Ibis *Threskiornis Molucca,* Pacific Black Duck *Anas superciliosa* and Australian Shell Duck *Tadorna tadornoides.* Amphibian species were also heard calling including Pobblebonk *Limnodynastes dumerilii,* Spotted Marsh Frog *Limnodynastes tasmaniensis* and Common Froglet *Crinia signifera.*

One EPBC Act-listed fauna species was recorded in the Existing Reclaimed Land: Swamp Skink *Lissolepis coventryi*.Two FFG Act-listed fauna species were recorded in the site: Glossy Grass Skink *Pseudemoia rawlinsoni, and* Swamp Skink *Lissolepis coventryi*.

Suitable habitat for both skink species includes patches of Tall Marsh and immediately adjoining areas. No threatened flora species are likely to occur in the Project Area.

Targeted surveys for the EPBC Act-listed Orange-bellied Parrot *Neophema chrysogaster* and Southern Brown Bandicoot *Isoodon obesulus obesulus* have been completed within the site (Biosis Research 2009, 2011). Neither species was recorded and both are considered unlikely to occur in the Project Area (Biosis 2023).

3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

Biosis (2023) completed a native vegetation assessment of the Existing Reclaimed Land (see Att C - Terrestrial Values Assessment). Being entirely composed of reclaimed land, the Existing Reclaimed Land is dominated primarily by introduced pasture grasses namely Toowoomba Canary-grass *Phalaris aquatica*, Yorkshire Fog *Holcus lanatus* and Tall Fescue *Festuca arundinacea*. The south of the area is dominated by Pampas Grass *Cortaderia selloana* and Spiny Rush *Juncus acutus.* This area is regularly slashed and, given its origins, retains little to no remnant flora.

Ground conditions within the Existing Reclaimed Land are generally comprised of a variable thickness of fill, overlying a limited thickness of very soft to firm clay and very loose to loose sand, overlying more competent stiff clay and medium dense to very dense sand deposits.

Biosis (2023) identified approximately 3.9 ha of native vegetation including six patches and two small scattered trees. The native vegetation belongs to two ecological vegetation classes (EVCs): Tall Marsh (EVC 821) and Damp Sands Herb-rich Woodland (EVC 3), which have a Bioregional Conservation Status of Least Concern and Vulnerable respectively.

Tall Marsh occurs in the south of the Existing Reclaimed Land in a small water-body which is dominated by Common Reed *Phragmites australis.* This area had previously been assessed as Coastal Saltmarsh (EVC 9) by Ecocentric (2021); however, due to high rainfall recently has transitioned to a more aquatic ecosystem.

Tall Marsh also occurs along the northern boundary of the Existing Reclaimed Land in a drainage line and is dominated by Narrow-leaf Cumbungi *Typha domingensis* and Sea Rush *Juncus krausii.*

Damp Sands Herb-rich Woodland occurs along Long Island Drive and is associated with the power easement. It is the most species diverse part of OTRA site, supporting Veined Spear-grass *Austrostipa rudis,* Hedge Wattle *Acacia paradoxa,* Coast Tea-tree *Leptospermum laevigatum,* Cherry Ballart *Exocarpus cupressiformis* and Golden Wattle *Acacia pycnantha.*

None of the EVCs qualify as a threatened ecological community under the EPBC Act or FFG Act.

3.3 Heritage

3.3.1 Describe any Commonwealth heritage places overseas or other places recognised as having heritage values that apply to the project area.

No Commonwealth heritage places or other places were identified within the Project Area

3.3.2 Describe any Indigenous heritage values that apply to the project area.

The traditional owners of the land and waters on the project site and surrounds are the Bunurong people.

The Bunurong Land Council Aboriginal Corporation (BLCAC) is the Registered Aboriginal Party for and on behalf of the Bunurong people.

Port of Hastings Corporation has engaged the BLCAC to undertake a Cultural Values Assessment to inform the project understanding and development. This assessment has not yet been completed. After completion, this document will be available to the Department upon request.

3.4 Hydrology

3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. *

The entirety of the Existing Reclaimed Land is situated in land that drains into the Western Port Ramsar Wetland. The Existing Reclaimed Land is a large open expanse with no discernible internal drainage systems. However, there is an existing swale drain along the northern edge that conveys runoff from the Existing Reclaimed Land to an outfall into Western Port. The Existing Reclaimed Land includes a marsh area in the south where there is a shallow depression. Water also pools around the bunds surrounding the Existing Reclaimed Land. The rest of the Project Area are intertidal and marine environments and forms part of Western Port.

Groundwater, surface water and coastal processes investigations have all been engaged to determine the potential impact of the project on the respective disciplines.

4. Impacts and mitigation

4.1 Impact details

Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	Yes	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	Yes	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes

EPBC Act section	Controlling provision	Impacted	Reviewed
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no World Heritage Properties within 10 km of the terminal site

4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no National Heritage Places within 10 km of the terminal site

4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Ramsar wetland
Yes	Yes	Western Port

4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.3.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

The entirety of the Project Area is located within the Western Port Ramsar Site. Baseline studies were conducted in 2023 to characterise the Marine and Terrestrial Values within the Project Area and its immediate surrounds and to identify potential threatened and migratory birds that may utilise the site. Biosis (Att C - Terrestrial Values Assessment, Section 3, page14) outlines the terrestrial values of the Project Area and its surrounds, CEE (Att D – Marine Ecosystems Assessment, Section 2, page 4) outlines the marine ecosystems within the Project Area and its surrounds, and Nature Advisory (Att E - Waterbirds Assessment, Table 1, Page 7-10) identifies the migratory birds likely utilise the Project Area.

Prior to the implementation of any avoidance or mitigation measures, the Project will likely directly and indirectly impact the Ramsar site. Construction activities such as site clearance, reclamation in the intertidal zone and dredging will likely directly impact the Ramsar site through the removal of potential habitat, likely utilised by endangered species and species key to the ecological character of Western Port. Chance collisions with marine and bird species during construction and operation of the Project may also impact the ecological character of Western Port.

Site clearance and dredging will likely also indirectly impact Western Port through increased suspended sediment in the water column due to increased site run off and sediment leakage during dredging. Construction of the onshore facilities and the reclamation area may also indirectly impact the Ramsar site through increased noise generation and light spill, potentially impacting local local terrestrial and marine species important to Western Port.

The following studies have been scoped to identify potential risks to the Ramsar site and its ecological character:

- Seabirds, shorebirds and migratory birds
- Marine ecology
- Coastal processes
- Offshore noise and vibration
- Air quality
- Groundwater
- Surface water
- Onshore noise and vibration
- Onshore ecology
- Lighting and lux
- Contaminated land

4.1.3.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

Yes

4.1.3.5 Describe why you consider this to be a Significant Impact. *

The project will require vegetation clearance (both marine and terrestrial) as part of the development of the Existing Reclaimed Land. Additional reclamation and dredging activities before any avoidance or mitigation measures are applied will increase turbidity and sediment deposition within the Ramsar site, this may have an indirect impact on seagrass and other marine species within the vicinity of the Project.

Construction methods will likely lead to noise disturbances that may impact marine species and migratory birds. Without adequate avoidance or mitigation measures these impacts may modify the ecological character of Western Port, and potentially affect the habitat or lifecycle of native species. The following studies have been scoped to identify potential risks to the Ramsar site:

- Seabirds, shorebirds and migratory birds
- Marine ecology
- Coastal processes
- Offshore noise and vibration
- Air quality
- Groundwater
- Surface water
- Onshore noise and vibration
- Onshore ecology
- Lighting and lux
- Contaminated land

4.1.3.7 Do you think your proposed action is a controlled action? *

Yes

4.1.3.8 Please elaborate why you think your proposed action is a controlled action. *

The project is likely to be a controlled action due to the scale of works within a Ramsar wetland.

4.1.3.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Dredging will be conducted in accordance with the EPA's *Best Practice Environmental Management Guidelines for Dredging* (EPA 2001).

Further management measures will be assessed as the Project progresses.

4.1.3.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

No offsets have been determined at this time

4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Threatened species

Direct impact	Indirect impact	Species
No	No	Amphibromus fluitans
No	No	Antechinus minimus maritimus
No	No	Anthochaera phrygia
No	No	Balaenoptera musculus
Yes	Yes	Botaurus poiciloptilus
No	No	Caladenia orientalis
Yes	Yes	Calidris canutus
Yes	Yes	Calidris ferruginea
Yes	Yes	Calidris tenuirostris
No	No	Callocephalon fimbriatum
No	No	Carcharodon carcharias
No	No	Caretta caretta
No	No	Charadrius leschenaultii
No	No	Charadrius mongolus
No	No	Chelonia mydas
No	No	Climacteris picumnus victoriae
No	No	Dasyurus maculatus maculatus (SE mainland population)
No	No	Dermochelys coriacea
No	No	Diomedea antipodensis
No	No	Diomedea antipodensis gibsoni
No	No	Diomedea epomophora
No	No	Diomedea exulans
No	No	Diomedea sanfordi
No	No	Eubalaena australis

Direct impact	Indirect impact	Species
No	No	Falco hypoleucos
No	No	Fregetta grallaria grallaria
No	No	Galaxiella pusilla
No	No	Galeorhinus galeus
No	No	Glycine latrobeana
No	No	Grantiella picta
No	No	Halobaena caerulea
Yes	Yes	Hirundapus caudacutus
No	No	Isoodon obesulus obesulus
No	No	Lathamus discolor
No	No	Lepidium aschersonii
Yes	Yes	Limosa lapponica baueri
Yes	Yes	Lissolepis coventryi
No	No	Litoria raniformis
No	No	Macronectes giganteus
No	No	Macronectes halli
No	No	Melanodryas cucullata cucullata
No	No	Nannoperca obscura
No	No	Neophema chrysogaster
No	No	Neophema chrysostoma
Yes	Yes	Numenius madagascariensis
No	No	Pachyptila turtur subantarctica
No	No	Pedionomus torquatus
No	No	Petaurus australis australis
No	No	Phoebetria fusca
No	No	Potorous tridactylus trisulcatus
No	No	Prasophyllum spicatum
No	No	Prototroctes maraena
No	No	Pseudomys novaehollandiae
No	No	Pterodroma leucoptera leucoptera
No	No	Pterodroma mollis
No	No	Pteropus poliocephalus
No	No	Pterostylis chlorogramma
No	No	Pterostylis cucullata
No	No	Rostratula australis

Direct impact	Indirect impact	Species
No	No	Senecio psilocarpus
No	No	Seriolella brama
No	No	Stagonopleura guttata
Yes	Yes	Sternula nereis nereis
No	No	Thalassarche bulleri
No	No	Thalassarche bulleri platei
No	No	Thalassarche carteri
No	No	Thalassarche cauta
No	No	Thalassarche chrysostoma
No	No	Thalassarche impavida
No	No	Thalassarche melanophris
No	No	Thalassarche salvini
No	No	Thalassarche steadi
No	No	Thelymitra orientalis
No	No	Thunnus maccoyii
No	No	Xerochrysum palustre

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Natural Damp Grassland of the Victorian Coastal Plains
No	No	Subtropical and Temperate Coastal Saltmarsh

4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Prior to the submission of the referral, baseline studies were conducted in 2023 to identify threatened species likely to occur and their suitable habitat within the Project Area and its immediate surrounds. Biosis (Att C- Terrestrial Values Assessment, Section 6, page 44) identified the terrestrial EPBC listed species most likely to occur in the Project Area and its surrounds, CEE (Att D – Marine Ecosystems Assessment, Section 9.3, page 33) identified the marine EPBC listed species most likely to occur within the Project Area and its surrounds and Nature Advisory (Att E - Waterbirds Assessment, Table 1, page 7) identified the EPBC listed waterbird species most likely to occur within the Project Area and its surrounds.

Waterbird Species – Direct and Indirect Impacts

The Project has the potential to directly and indirectly impact the following threatened shorebird and waterbird species:

- *Calidris tenuirostris* - Great knot
- *Numenius madagascariensis*- Far eastern curlew
- *Calidris ferruginea* - Curlew sandpiper
- *Limosa lapponica baueri*- Western Alaskan bar-tailed godwit
- *Sternula nereis nereis* – Australian Fairy Tern
- *Hirundapus caudacutus* - White-throated needletail
- *Botaurus poiciloptilus* – Australasian bittern
- *Calidris canutus* – Red Knot

The potential direct and indirect impacts on waterbird species are likely to be similar and therefore have been discussed together as a group.

The potential direct impacts on these species are the potential loss of habitat due to the establishment of the Project on undeveloped marshland and intertidal/marine waters. Construction activities have the potential for direct impact in the form of land clearance and reclamation within the marsh area and intertidal zone which may be potential foraging habitat for waterbird species.

During construction, the potential indirect impacts for the above listed waterbird species include disturbance of species foraging activities due to construction noise such as piling and dredging operation, and increased sedimentation on impacting potential foraging sites.

During operation, the waterbirds may be indirectly impacted by increased ship movements and associated noise and light spill from shipping movements to and from the Victorian Renewable Energy Terminal.

Nature Advisory (Att E - Waterbirds Assessment, page 4) concluded that suitable habitat for shorebirds and waterbirds within the project area**,** namely the marsh area and intertidal area, are unlikely to support large populations of migratory species and therefore a significant impact is unlikely.

There are no endangered communities within the project area or that may be indirectly impacted by the works.

Terrestrial Species

A survey completed by Biosis (Att C- Terrestrial Values Assessment, Section 6, page 44) identified a population of the Swamp skink *Lissolepis coventryi* within the site, further targeted surveys are currently being scoped surrounding the Existing Reclaimed Land to understand the species presence in the region. This species is likely to be directly impacted by the Project through land clearance, establishment of drainage lines and change in topography on the project site.

4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

Yes

4.1.4.5 Describe why you consider this to be a Significant Impact. *

Further investigation is required to understand the extent and magnitude of impacts. The precautionary approach has been adopted and at this stage it is considered possible that construction impacts may reduce the area of occupancy of shorebird and waterbird species as discussed in the Nature Advisory report (Att E - Waterbirds Assessment, page 10-11) and the swamp skink (Att C- Terrestrial Values Assessment, Section 3.5, page 21).

The action will not have a significant impact on endangered communities. There are no endangered communities within the project area or that may be indirectly impacted by the works.

4.1.4.7 Do you think your proposed action is a controlled action? *

Yes

4.1.4.8 Please elaborate why you think your proposed action is a controlled action. *

Until further investigation on the extent and magnitude of impacts is completed, it assumed that the action is a controlled action.

4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Dredging will be conducted in accordance with the EPA's *Best Practice Environmental Management Guidelines for Dredging* (EPA 2001).

Further management measures will be assessed as the Project progresses.

4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

Offsets have not been determined at this time

4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species
Yes	Yes	Actitis hypoleucos
No	Yes	Apus pacificus
No	No	Ardenna carneipes
No	No	Ardenna grisea
Yes	Yes	Ardenna tenuirostris
Yes	Yes	Arenaria interpres
No	No	Balaenoptera musculus
Yes	Yes	Calidris acuminata
Yes	Yes	Calidris canutus

Direct impact	Indirect impact	Species
Yes	Yes	Calidris ferruginea
No	No	Calidris melanotos
Yes	Yes	Calidris ruficollis
Yes	Yes	Calidris tenuirostris
No	No	Caperea marginata
No	No	Carcharodon carcharias
No	No	Caretta caretta
Yes	Yes	Charadrius bicinctus
No	No	Charadrius leschenaultii
Yes	Yes	Charadrius mongolus
No	No	Chelonia mydas
No	No	Dermochelys coriacea
No	No	Diomedea antipodensis
No	No	Diomedea epomophora
No	No	Diomedea exulans
No	No	Diomedea sanfordi
No	No	Eubalaena australis
Yes	Yes	Gallinago hardwickii
No	No	Gallinago megala
No	No	Gallinago stenura
Yes	Yes	Hirundapus caudacutus
Yes	Yes	Hydroprogne caspia
Yes	Yes	Lagenorhynchus obscurus
No	No	Lamna nasus
No	No	Limicola falcinellus
Yes	Yes	Limosa lapponica
Yes	Yes	Limosa limosa
No	No	Macronectes giganteus
No	No	Macronectes halli
No	No	Megaptera novaeangliae
No	No	Motacilla flava
No	No	Myiagra cyanoleuca
Yes	Yes	Numenius madagascariensis
No	Yes	Numenius minutus
Yes	Yes	Numenius phaeopus

Direct impact	Indirect impact	Species
No	No	Orcinus orca
No	No	Phoebetria fusca
Yes	Yes	Pluvialis fulva
Yes	Yes	Pluvialis squatarola
No	No	Rhipidura rufifrons
Yes	Yes	Sternula albifrons
No	No	Thalassarche bulleri
No	No	Thalassarche carteri
No	No	Thalassarche cauta
No	No	Thalassarche chrysostoma
No	No	Thalassarche impavida
No	No	Thalassarche melanophris
No	No	Thalassarche salvini
No	No	Thalassarche steadi
Yes	Yes	Thalasseus bergii
Yes	Yes	Tringa brevipes
No	No	Tringa glareola
No	Yes	Tringa incana
Yes	Yes	Tringa nebularia
No	No	Tringa stagnatilis
Yes	Yes	Xenus cinereus

4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.5.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Nature Advisory (Att E - Waterbirds Assessment, Appendix 1, Page 18) identified 24 migratory-listed shorebirds and waterbirds that may occur within the project area, these species have the potential to be directly and indirectly impacted by the project:

- Australian Gull-billed Tern *Gelochelidon macrotarsa*
- Bar-tailed Godwit *Limosa lapponica*
- Black-tailed Godwit *Limosa limosa*
- Caspian Tern *Hydroprogne caspia*
- Common Greenshank *Tringa nebularia*
- Common Sandpiper *Actitis hypoleucos*
- Crested Tern *Thalasseus bergii*
- Curlew Sandpiper *Calidris ferruginea*
- Double-banded Plover *Charadrius bicinctus*
- Eastern Curlew *Numenius madagascariensis*
- Great Knot *Calidris tenuirostris*
- Grey Plover *Pluvialis squatarola*
- Grey-tailed Tattler *Tringa brevipes*
- Latham's Snipe *Gallinago hardwickii*
- Lesser Sand Plover *Charadrius mongolus*
- Little Tern *Sternula albifrons*

- Pacific Golden Plover *Pluvialis fulva*
- Red Knot *Calidris canutus*
- Red-necked Stint *Calidris ruficollis*
- Ruddy Turnstone *Arenaria interpres*
- Sharp-tailed Sandpiper *Calidris acuminata*
- Short-tailed Shearwater *Ardenna tenuirostris*
- Terek Sandpiper *Xenus cinereus*
- Whimbrel *Numenius phaeopus*

The potential direct and indirect impacts on the above 24 waterbird species are likely to be similar and therefore have been discussed together as a group.

The potential direct impacts on these species are the potential loss of habitat due to the establishment of the Project on undeveloped land, and marine waters. Construction activities have the potential for direct impact on the terrestrial environment in the form of land clearance, vegetation removal which could result in habitat removal. The establishment of new reclamation of land in the intertidal zone will remove the intertidal zone foraging habitat for waterbird species.

During construction, the potential indirect impacts for the above listed waterbird species include disturbance of species foraging activities (due to construction noise from piling and dredging) as well as impacts arising from potential changes in food availability, linked to both intertidal food resources and fish availability.. There is also the potential for increase in turbidity and sedimentation from construction activities potentially impacting on foraging habitat and availability of food resources.

During operation, waterbirds may be indirectly impacted by increased ship movements and associated noise and light spill from shipping movements to and from the Victorian Renewable Energy Terminal. Waterbirds may also be impacted by light spill from the Victorian Renewable Energy Terminal, however the project design and associated lighting has not yet been considered or designed. Finally, there is potential for alteration to intertidal bathymetry and subsequently time that the benthos is exposed and available for birds to forage.

Nature Advisory (Att E - Waterbirds Assessment, page 4) concluded that suitable habitat for shorebirds and waterbirds within the project area**,** namely the marsh area and intertidal area, are unlikely to support large populations of migratory species and therefore a significant impact is unlikely.

Port of Hastings has commenced studies to ascertain the extent of waterbird use of the Project Area and surrounding habitats. After completion, this document will be available to the Department upon request.

4.1.5.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

Yes

4.1.5.5 Describe why you consider this to be a Significant Impact. *

Further investigation is required to understand the important roosting and foraging areas for waterbirds, particularly shorebirds in the vicinity of the project area as discussed in Attachment E- Waterbirds Assessment, page 10-11. The precautionary approach has been adopted and at this stage it is considered possible that construction impacts in particular dredging could impact habitat for migratory shorebirds.

4.1.5.7 Do you think your proposed action is a controlled action? *

Yes

4.1.5.8 Please elaborate why you think your proposed action is a controlled action. *

Until further investigation on the extent and magnitude of impacts is completed, it assumed that the action is a controlled action.

4.1.5.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Avoidance and mitigation measures wil be determined through project design.

Dredging will be conducted in accordance with the EPA's Best Practice Environmental Management Guidelines for Dredging (EPA 2001).

Further management measures will be assessed as the Project progresses.

4.1.5.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

Offsets have not been determined at this time

4.1.6 Nuclear

4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The project is not a nuclear action.

4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Commonwealth marine area
No	No	EEZ and Territorial Sea

4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The shipping movements to and from the Terminal will pass by Defence land HMAS CERBERUS and is less than 1 km from WEST HEAD GUNNERY RANGE which is Commonweath land. Shipping movement will be within an existing shipping channel and are unlikely to result in impact on Commonwealth land

4.1.8 Great Barrier Reef

4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The project is not located near the Great Barrier Reef.

4.1.9 Water resource in relation to large coal mining development or coal seam gas

4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.9.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The project is not in relation to large coal mining development or coal seam gas.

4.1.10 Commonwealth Land

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Commonwealth land area
No	No	Defence - HMAS CERBERUS

4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The shipping movements to and from the Terminal will pass by Defence land HMAS CERBERUS and is less than 1 km from WEST HEAD GUNNERY RANGE which is Commonwealth land. Shipping movement will be within an existing shipping channel and are unlikely to result in impact on Commonwealth land.

4.1.11 Commonwealth Heritage Places Overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no heritage places within 10 km of the project area.

4.1.12 Commonwealth or Commonwealth Agency

4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? *

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

- Ramsar Wetland (S16)
- Threatened Species and Ecological Communities (S18)
- Migratory Species (S20)

Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? *

No

4.3.8 Describe why alternatives for your proposed action were not possible. *

As part of early works and assessment of the Project, a narrow wharf option was considered. This option did not include reclamation and contained the landside marshalling area within the Existing Reclaimed Land with connections to a narrow wharf through three separate access bridges. The option was originally considered as potentially a less environmentally impactful option which may be more economically viable than the reclaimed land option.

Early engineering showed that the wharf would most likely be required to be built as a 'deck-on-piles' structure comprising up to 3,000 steel tubular piles in five metre by five metre spacings driven into place and capped with a reinforced concrete deck.

The narrow wharf option was not found to be economically viable for the following reasons:

- The landside marshalling area was limited to approximately 23.5 ha on the existing land parcel – which did not meet the minimum requirement to support the requirements of early OSW projects.
- The construction methodology was complex, lengthy and would be considerably more expensive than the land backed quay option.
- Operationally, the narrow pile wharf was sub-optimal.

Additionally, from an environmental perspective:

- The extensive piling program involved in the narrow wharf option would result in a significant increase in marine traffic, underwater noise and suspended sediment during construction.
- Hydrodynamic modelling to investigate the impact on coastal process during operation of the facility showed that the narrow wharf option had similar impacts to current option under consideration.

As noted in Section 1.2.1 the project is still in its early stages and there are several different alternatives that will need to be considered as the construction methodology and detailed project description are developed. The dredging method and dredged materials disposal requires analysis along with the source of the imported fill and any ancillary extensions / modifications in relation to electrical, communications, water and sewer services and road infrastructure.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A Project Area Map. V2 2023-09-20.pdf Project Area Map V2 - disturbance footprint and project area shown	20/09/2023	No	High

1.2.6 Commonwealth or state legislation, planning frameworks or policy documents that are relevant to the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	Offshore Wind Energy - Implementation Statement 2 https://www.energy.vic.gov.au/__data/assets/pdf_..			High
#2.	Link	Offshore Wind Implementation Statement 1 https://www.energy.vic.gov.au/__data/assets/pdf_..			High
#3.	Link	Victorian Commercial Ports Strategy https://dtp.vic.gov.au/ports-and-freight/victori..			High

1.3.2.18 (Person proposing to take the action) If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att B - PoHC Environment Policy.pdf Port of Hastings Environment Policy	24/07/2023	No	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A Project Area Map. V2 2023-09-20.pdf Project Area Map V2 - disturbance footprint and project area shown	19/09/2023	No	High

#2.	Document	Att C - Terrestrial Values Assessment.pdf Terrestrial Ecological Existing Conditions Report	30/05/2023	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att C - Terrestrial Values Assessment.pdf Terrestrial Ecological Existing Conditions Report	31/05/2023	No	High
#2.	Document	Att D - Marine Ecosystems Assessment.pdf Marine Ecosystem Existing Conditions Assessment	31/05/2023		High
#3.	Document	Att E - Waterbirds Assessment.pdf Migratory and Waterbirds Desktop Assessment	31/05/2023		High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att C - Terrestrial Values Assessment.pdf Terrestrial Ecological Existing Conditions Report	30/05/2023		High

4.1.3.2 (Ramsar Wetland) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att C - Terrestrial Values Assessment.pdf Terrestrial Ecological Existing Conditions Report	30/05/2023	Yes	High
#2.	Document	Att D - Marine Ecosystems Assessment.pdf Marine Ecosystem Existing Conditions Assessment	30/05/2023	Yes	High
#3.	Document	Att E - Waterbirds Assessment.pdf Migratory and Waterbirds Desktop Assessment	30/05/2023		High

4.1.4.2 (Threatened Species and Ecological Communities) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att C - Terrestrial Values Assessment.pdf Terrestrial Ecological Existing Conditions Report	30/05/2023		High
#2.	Document	Att D - Marine Ecosystems Assessment.pdf Marine Ecosystem Existing Conditions Assessment	30/05/2023		High
#3.	Document	Att E - Waterbirds Assessment.pdf Migratory and Waterbirds Desktop Assessment	30/05/2023	Yes	High

4.1.4.5 (Threatened Species and Ecological Communities) Why you consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att C - Terrestrial Values Assessment.pdf Terrestrial Ecological Existing Conditions Report	30/05/2023		High
#2.	Document	Att E - Waterbirds Assessment.pdf Migratory and Waterbirds Desktop Assessment	30/05/2023	No	High

4.1.5.2 (Migratory Species) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att C - Terrestrial Values Assessment.pdf Terrestrial Ecological Existing Conditions Report	30/05/2023	No	High
#2.	Document	Att D - Marine Ecosystems Assessment.pdf Marine Ecosystem Existing Conditions Assessment	30/05/2023	No	High
#3.	Document	Att E - Waterbirds Assessment.pdf Migratory and Waterbirds Desktop Assessment	30/05/2023		High

4.1.5.5 (Migratory Species) Why you consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att E - Waterbirds Assessment.pdf Migratory and Waterbirds Desktop Assessment	30/05/2023	No	High

5.2 Declarations

Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

ABN/ACN	33737350749
Organisation name	PORT OF HASTINGS CORPORATION
Organisation address	3919 VIC
Representative's name	Natasha Reifschneider
Representative's job title	Environment Lead
Phone	0400052298
Email	natasha.r@portofhastings.vic.gov.au
Address	1d Stony Point Road, Crib Point

☑ Check this box to indicate you have read the referral form. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

☑ By checking this box, I, **Natasha Reifschneider of PORT OF HASTINGS CORPORATION**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

Completed Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	33737350749
Organisation name	PORT OF HASTINGS CORPORATION
Organisation address	3919 VIC
Representative's name	Malcolm Geier
Representative's job title	Chief Executive Officer
Phone	03 5979 5512
Email	malcolm.geier@portofhastings.vic.gov.au
Address	1d Stony Point Road, Crib Point

☑ Check this box to indicate you have read the referral form. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

☑ I, **Malcolm Geier of PORT OF HASTINGS CORPORATION**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

✔ Completed Proposed designated proponent's declaration

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

☑ Check this box to indicate you have read the referral form. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

☑ I, **Malcolm Geier of PORT OF HASTINGS CORPORATION**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *