Gladstone Ports Corporation

Growth, prosperity, community.

Port of Bundaberg

LAND USE PLAN 2020

GLADSTONE PORTS CORPORATION LIMITED
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1 Introduction

1.1 PURPOSE OF THIS LAND USE PLAN

The *Port of Bundaberg Land Use Plan 2020* (LUP 2020) is a statutory instrument prepared under the *Transport Infrastructure Act 1994* (Qld) (TIA). The LUP 2020 manages land use and development considerations, and provides a framework for the management and assessment of development on Gladstone Ports Corporation Limited (GPC) strategic port land and in the strategic port land tidal area at the Port of Bundaberg. The LUP 2020 is administered by the TIA and is an assessment benchmark under the *Planning Act 2016* (Qld) (Planning Act).

The LUP 2020 applies to all land, waterways and tidal areas within GPC's strategic port land boundaries in accordance with the TIA and the Planning Act. In accordance with section 285(4) of the TIA, this LUP:

- Specifies the details of the strategic port land of the Port of Bundaberg in Figure 1, Appendix B
- States no additional land is to become strategic port land in Section 2
- Coordinates and integrates the core matters (land use and development, port facilities and valuable features) relevant to the LUP 2020 in Section 2 and 3
- Identifies the Port of Bundaberg vision and desired environmental outcomes (DEOs) in Section 3
- Includes measures to help achieve the DEOs in the form of land use precincts in Section 5 and development codes for proposed development in Section 6.

Development on strategic port land or in strategic port land tidal areas is not subject to a local categorising instrument (such as the *Bundaberg Regional Council Planning Scheme 2015* {BRC Planning Scheme}) under section 287 of the TIA. Therefore, the LUP 2020 is the principal tool for land use planning and assessment of development on strategic port land or in strategic port land tidal areas at the Port of Bundaberg.

All new development on GPC's strategic port land and in strategic port land tidal areas must comply with the provisions of the LUP 2020. The LUP 2020 includes development codes, contained in Section 6. The development codes provide performance outcomes and acceptable outcomes to ensure development complies with the intent of each relevant precinct and delivers the Port of Bundaberg vision and DEOs sought by the LUP 2020.

1.2 COORDINATING AND INTEGRATING CORE MATTERS

The TIA specifies that core matters must be coordinated and integrated into the LUP 2020. Core matters relate to land use and development, port facilities and valuable features (refer Section 2 and 3).

All new development and operations must comply with the LUP 2020 and will be subject to the requirements of a range of State legislation, including (but not limited to) the Planning Act, the *Environmental Protection Act 1994* (Qld) (EP Act), the *Queensland Heritage Act 1992* (Qld) (QH Act), the *Aboriginal Cultural Heritage Act 2003* (Qld) (ACH Act) and/or the *Torres Strait Islander Cultural Heritage Act 2003* (Qld) (TSICH Act).

Additionally, any new proposed development that has, will have, or is likely to have a significant impact on a Matter of National Environmental Significance (MNES) will also be subject to the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act).

1.3 LAND USE PLAN STRUCTURE

1.3.1 Overview

The LUP 2020 consists of six sections, as shown in Figure 1.1.

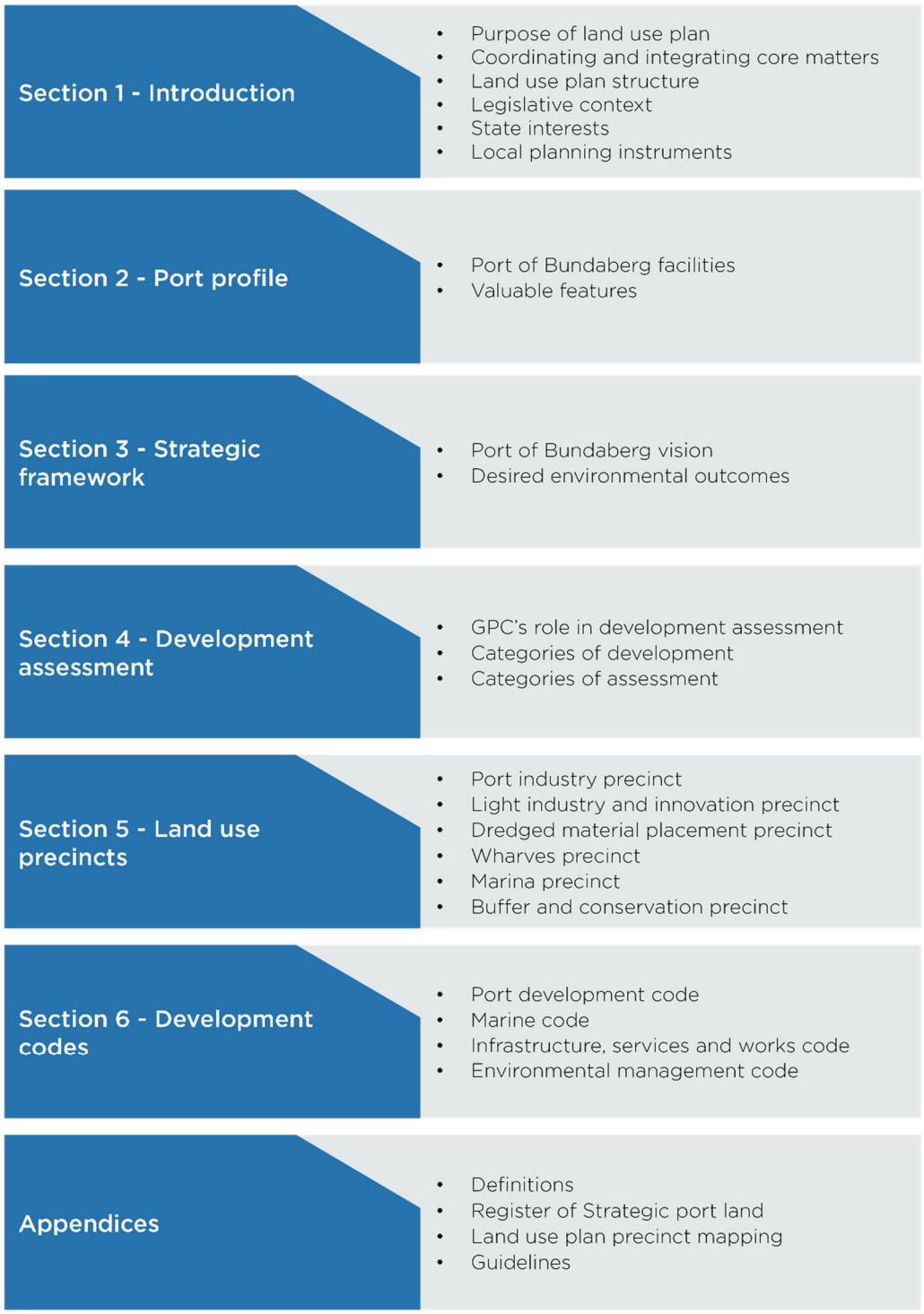


Figure 1.1 **Port of Bundaberg Land Use Plan 2020 structure**

1.3.2 Hierarchy of the Land Use Plan 2020

Where there is inconsistency between provisions within the LUP 2020, the following rules apply:

- The strategic framework prevails over all other components to the extent of the inconsistency for assessable development.
- The precinct intent, specific outcomes and consistent land uses prevail over the development codes to the extent of the inconsistency.

1.4 LEGISLATIVE CONTEXT

1.4.1 Transport Infrastructure Act 1994 (Qld)

The TIA provides for and supports effective integrated planning and efficient management of a system of transport infrastructure. Among other things, one of the objectives of the TIA is to allow the State to have a strategic overview of the provision and management of all transport infrastructure, including ports.

The TIA is the principal legislation that establishes a system of land use planning for strategic port land. The strategic port land of the Port of Bundaberg is shown in Figure 1, Appendix B.

GPC is the port authority for the Port of Bundaberg, and one of its primary functions is to establish, manage and operate effective and efficient port facilities and services, in accordance with the TIA.

The TIA requires port authorities to prepare and implement port land use plans to regulate the planning and development of their strategic port land. Port land use plans are required to be reviewed and updated at least every eight years or as required to ensure the land use plan responds appropriately to changes at the local, regional and State level.

This LUP 2020 has been prepared in accordance with these statutory requirements of the TIA.

1.4.2 Planning Act 2016 (Qld)

The Planning Act is Queensland's principal planning legislation which establishes an efficient, effective, transparent, integrated, coordinated, and accountable system for land use planning, development assessment and related matters that facilitates the achievement of ecological sustainability. The Port of Bundaberg is located in the Bundaberg Regional Council (BRC) local government area. While strategic port land is not subject to the provisions of a local planning instrument, it is important that GPC's vision for the Port of Bundaberg aligns with the general intent of the BRC Planning Scheme so that land use planning and development within the region is considered in a coordinated and consistent manner.

The *Planning Regulation 2017* (Qld) (Planning Regulation) prescribes development assessment matters, including development that is assessable under the Planning Act, as well as the relevant Assessment Manager, referral agencies and assessment benchmarks that apply to assessable development.

The Planning Regulation designates the following assessment benchmarks for port authorities:

a) *If the port authority is the Assessment Manager – the land use plan for the strategic port land; and*

b) *Where the chief executive of the port authority is a Referral Agency – the port authority functions under chapter 8, part 3 of the TIA.*

1.4.3 State Development and Public Works Organisation Act 1971 (Qld)

The *State Development and Public Works Organisation Act 1971* (Qld) (SDPWO Act) provides for State planning and development through a coordinated system of public works organisation, for environmental coordination, and for related purposes. Under the SDPWO Act, a streamlined process is provided for the assessment of coordinated projects and the management of land and infrastructure assets in a development assessment process separate to the requirements of the LUP 2020. In doing so, the SDPWO Act seeks to facilitate timely, coordinated and environmentally responsible land use and infrastructure planning to support Queensland's economic and social development.

The SDPWO Act includes provisions for the planning, establishment and regulation of State Development Areas (SDAs) by the Coordinator-General, with the approval of the Governor in Council and the involvement of the Minister administrating the SDPWO Act. SDAs are areas typically established to promote economic development in Queensland.

Part of the Port of Bundaberg strategic port land is located within the Bundaberg State Development Area (BuSDA). Section 1.5.3 provides further detail about development in the BuSDA.

1.5 STATE INTERESTS

1.5.1 State planning policy

Under the Planning Act, the *State Planning Policy 2017* (SPP) is a state planning instrument and a key component of the Queensland land use planning system. The SPP expresses the State's interests (as defined under the Planning Act) in land use planning and development, and is required to be integrated into regional plans and local planning instruments.

While the LUP 2020 is not a local planning instrument pursuant to section 8 of the Planning Act, or a local categorising instrument pursuant to section 43 of the Planning Act, section 286 of the TIA requires that port land use plans must not adversely affect State interests. The relevant State interests set out in the SPP have been integrated into the LUP 2020 (refer Table 1.1).

Table 1.1 State Planning Policy 2017 integration within the LUP 2020

State interest	LUP 2020 integration
Economic growth	
Agriculture	The LUP 2020 recognises the agricultural industry as important to the economic prosperity of the Wide Bay Burnett region, and supports the provision of effective and efficient port facilities, which function as critical supply chain infrastructure to support industry growth.
Development and construction	The LUP 2020 supports development and construction by regulating the planning and development of strategic port land. The LUP 2020 sets out a port vision and DEOs for the Port of Bundaberg, and identifies land use precincts and land uses which are consistent with the intent of each precinct. The LUP 2020 also sets out development codes to ensure development delivers the strategic outcomes being sought. The LUP 2020 also recognises the role of the BuSDA.
Tourism	The LUP 2020 recognises and supports growth of the tourism industry including, but not limited to, encouraging opportunities for nature based tourism and for the Port of Bundaberg to become a future boutique cruise ship destination.
Mining and extractive resources	This State interest has not been fully integrated within the LUP 2020. There are no Key Resource Areas or areas identified as having mineral, coal, petroleum or gas resources within the Port of Bundaberg. However, the LUP 2020 recognises the mining industry as important to the economic prosperity of the region and facilitates the use of the port for this industry, particularly for export of materials.
Environment and Heritage	
Biodiversity	The LUP 2020 recognises the rich biodiversity of the Wide Bay Burnett region, including areas within and surrounding the Port of Bundaberg that have important terrestrial and marine ecological values and features, including but not limited to matters of environmental significance. The LUP 2020 identifies land use precincts having regard to important environmental areas and values, and sets out development codes to ensure potential environmental impacts and risks are assessed and managed. Further to this, the Buffer and conversation precinct is located and developed to identify and conserve areas of high value.
Coastal environment	The LUP 2020 includes provisions to ensure development appropriately responds to coastal processes and hazards, including the predicted effects of climate change. The LUP 2020 prioritises waterfront land for coastal dependent development and identifies areas where the reclamation of land under tidal water could occur to support the Port of Bundaberg as a State strategic port, subject to development controls.
Water quality	The LUP 2020 includes provisions to ensure that development is appropriately located, designed and operated to avoid or minimise potential impacts to land, stormwater, groundwater and waterways (including tidal waters) and the ecosystems that depend on these.
Cultural heritage	The LUP 2020 considers potential impacts to cultural heritage and ensures appropriate management strategies are implemented in accordance with the *Australian Underwater Cultural Heritage Act 2018* (Cth), QH Act, ACH Act, Aboriginal Cultural Heritage Duty of Care Guidelines and the Gladstone, Rockhampton and Bundaberg Ports Project Indigenous Land Use Agreement.

State interest	LUP 2020 integration
Safety and resilience to hazards	
Emissions and hazardous activities	The LUP 2020 includes provisions that ensure development is appropriately located, designed and operated to avoid or minimise potential impacts associated with emissions and hazardous activities on sensitive land uses, and avoid reverse amenity impacts on major infrastructure and industry. The LUP 2020 also includes provisions to ensure management of land uses that involve the storage or transport of hazardous or flammable materials. The LUP 2020 includes provisions for acid sulfate soils, including requirements for identification and management.
Natural hazards, risk and resilience	The LUP 2020 includes provisions to ensure development appropriately responds to natural hazards and risks to protect people and property, having regard to bushfire, flood, landslide, storm tide inundation and erosion prone areas.
Infrastructure	
Energy and water supply	The LUP 2020 supports the provision of major electricity infrastructure and bulk water supply infrastructure to ensure development at the Port of Bundaberg is serviced with infrastructure in accordance with relevant standards. The LUP 2020 also supports the development and supply of renewable energy and sustainable practices, including tidal, wave and ocean energy.
Infrastructure integration	The LUP 2020 requires that development, including development for linear infrastructure, provides for the efficient use of corridors and opportunities to integrate and co-locate with existing infrastructure in a manner that maximises resource efficiency and avoids obstructing the future use of the surrounding land.
Transport infrastructure	The LUP 2020 integrates the transport infrastructure state interest to the extent that it relates to existing and future transport corridors. The LUP 2020 seeks to ensure the safe, efficient and orderly integration of development with existing transport infrastructure, having regard to key transport corridors, transport modes and the surrounding road network.
Strategic airport and aviation facilities	The LUP 2020 includes provisions to ensure that development is appropriately located, designed and operated to ensure that it does not cause a temporary or permanent intrusion or hazard to the safe movement of aircraft within the operational airspace of the Bundaberg Airport.
Strategic ports	The Port of Bundaberg is one of the State's strategic ports. The LUP 2020 is a statutory land use plan prepared under the TIA to manage land use and development considerations and provide a framework for the management of strategic port land and strategic port land tidal areas at the Port of Bundaberg.
Liveable communities and housing	
Liveable communities	The LUP 2020 includes provisions to ensure development is appropriately located, designed and operated to promote community wellbeing and quality of life having regard to urban design, the appropriate and coordinated provision of infrastructure and services, and the need for safety of people and property. The LUP 2020 also includes provisions to ensure development appropriately responds to valuable features, including environmental areas, landscapes and amenity, heritage places and artefacts of cultural significance.
Housing supply and diversity	This State interest has not been integrated within the LUP 2020. Whilst section 285(4) of the TIA requires that a port land use plan coordinate and integrate core matters, these core matters do not include the provision of land for housing or well-serviced housing.

1.5.2 Regional plan

The Port of Bundaberg is located within the Wide Bay Burnett region, where the *Wide Bay Burnett Regional Plan 2011* (Regional Plan) applies as the relevant statutory regional plan. The Regional Plan recognises the Port of Bundaberg as an important economic contributor to the State, identifying that future expansion and growth at the Port of Bundaberg will in turn support economic growth across a range of industries within the region. The Regional Plan also recognises infrastructure development opportunities to support growth, including upgrades to existing infrastructure corridors and the strengthening of freight networks. These factors have accordingly been considered in the preparation of the LUP 2020.

1.5.3 Bundaberg State Development Area Development Scheme

The BuSDA was declared in February 2017, in response to a growing demand for land for port-related and industrial activities around the Port of Bundaberg. A significant portion of land on the eastern side of the Burnett River within the BuSDA comprises GPC strategic port land (refer Figure 2, Appendix B).

Development within the BuSDA is regulated by the *Bundaberg State Development Area Development Scheme 2017* (BuSDA Development Scheme). Where development is located on strategic port land and within the BuSDA, then the following applies:

- The BuSDA Development Scheme regulates the development stated (i.e. a material change of use), in place of the LUP 2020;
- The Coordinator-General is the decision maker for development that is regulated by the BuSDA Development Scheme; and
- If development is not regulated by the BuSDA Development Scheme (e.g. operational work), it is regulated under the Planning Act through the LUP 2020, the BRC Planning Scheme or in some instances the Planning Regulation.

1.6 LOCAL PLANNING INSTRUMENTS

1.6.1 Bundaberg Regional Council Planning Scheme

The BRC Planning Scheme sets out the intention of Bundaberg Regional Council (BRC) for future development in the BRC Planning Scheme area to 2031. Whilst strategic port land and strategic port land tidal areas at the Port of Bundaberg are not subject to the provisions of the BRC Planning Scheme, there are circumstances where BRC is the Assessment Manager under the Planning Regulation in this plan area including:

- Development that is for operational work that is for prescribed tidal works (being where the prescribed tidal works are completely within BRC's tidal areas and not within GPC's strategic port land tidal areas)
- Development made assessable under the BRC Planning Scheme, where the development is not within GPC's strategic port land;
- Development made assessable under the BRC Planning Scheme, where the development is not assessable under the BuSDA Development Scheme.
- Development made assessable under the BRC Planning Scheme, where the development is within BRC's local government road reserves (i.e. all roads at the Port of Bundaberg other than Wharf Drive and Sugar Terminal Crescent).

2 Port profile

2.1 PORT OF BUNDABERG FACILITIES

The Port of Bundaberg is identified as one of the State's 15 strategic ports, reflecting its contribution to providing important supply chain connections to global markets that support the Queensland economy. The Port of Bundaberg is centrally located on the eastern seaboard of Australia within 14 days sailing of all major ports in Asia, enabling it to be well positioned to trade in both import and export bulk and break-bulk commodities.

GPC is a port authority under the TIA. Additionally at the Port of Bundaberg, GPC is a landlord and port operator as it owns cargo handling facilities. The Port of Bundaberg is serviced by two wharves; the Sir Thomas Hiley Wharf and the John T Fisher Wharf. The Sir Thomas Hiley Wharf, which is owned by Sugar Terminals Ltd, functions as a dry bulk, break bulk and general cargo facility, whilst the John T Fisher Wharf, owned by GPC, supports wet bulk molasses loading. Future expansion of facilities and common user infrastructure has been identified within the Port of Bundaberg to enhance the capability of this port to facilitate the development of strategic port land for bulk material/minerals handling and storage.

Whilst the Port of Bundaberg's imports and exports have traditionally been bulk sugar and molasses, commodity types have diversified in recent years and now include wood pellets, silica sand and gypsum.

2.1.1 Strategic port land

As a port authority, GPC can identify land within its port area and its port limits, to be its strategic port land. Strategic port land is defined by a port authority through its land use plan. Strategic port land is identified as such because of its primary role in accommodating port land uses.

For the purposes of this LUP 2020, GPC's strategic port land is located at three key localities across the Port of Bundaberg, being Burnett Heads, Fairymead and Town Reach. Strategic port land is shown in Figure 1, Appendix B.

Burnett Heads extends from Harbour Esplanade, through Marina Drive south to Strathdees Road. There is significant vacant land in the Buss Street area of Burnett Heads which is available for port industry development that requires access to import/export facilities. Existing key industries within this area include plasterboard manufacturing and the export of silica sands and forestry products. This area also incorporates land currently used for dredged material placement. This locality also includes the Port of Bundaberg Marina and Burnett Heads Boat Harbour for boating facilities.

Fairymead includes land for future port industry development on the western side of Burnett River opposite the existing Burnett Heads port industry area.

Town Reach includes tidal land in the Burnett River near the Bundaberg central business district for boating facilities.

2.1.2 Future strategic port land

GPC has not identified any land under this LUP 2020 that is intended to become strategic port land in the future.

2.2 VALUABLE FEATURES

The Port of Bundaberg is situated within the Wide Bay Burnett region. Agriculture, forestry and fishery, manufacturing and mining industries are important to the economic prosperity of the Wide Bay Burnett region. The region is considered the 'food bowl' of Queensland and is capitalising on the diversification of traditional manufacturing and food processing industries, like sugar. The Wide Bay Burnett timber and forestry industry comprises two thirds of the State's softwood plantation resources.

The Wide Bay Burnett region has a rich biodiversity, including wetlands, coral reefs, stream systems and forests, relatively intact hinterland areas, as well as a variety of ancient, rare and threatened fauna and flora species. Most notably, the region includes Fraser Island which is located to the south of the Port of Bundaberg.

In closer proximity to the Port of Bundaberg are a number of marine parks and protected areas, including the Great Sandy Marine Park, the Commonwealth and State significant Mon Repos Conservation Park and Mon Repos Turtle Rookery, as well as the State protected Barrubra Island Conservation Park.

The Mon Repos Conservation Park supports the largest concentration of nesting marine turtles on the eastern Australian mainland, and has the most significant loggerhead turtle nesting population in the South Pacific region.

The low lying coastal areas of the Port of Bundaberg, including areas of the Great Sandy Marine Park provide important habitat for International, Commonwealth and State significant migratory shorebirds.

In addition to the high ecological value waters associated with the marine parks and protected areas, there are a number of other important terrestrial ecological values within and surrounding the Port of Bundaberg, including Commonwealth and State protected threatened ecological communities (Sub-tropical lowland rainforest), State significant regulated vegetation (endangered and of concern regional ecosystems), mapped areas of essential habitat (for species including the Koala and Wallum froglet).

The Port of Bundaberg also contains important wetland areas, including the Wallace Creek wetland area adjacent to the marina and Burnett Heads Boat Harbour, which has been established as an environmental management area in recognition of its ecological importance, migratory shorebird habitat and role in stormwater management of the inner area east of Buss Street.

The Wide Bay Burnett region is of importance to the Gooreng Gooreng, Gurang and Taribelang Bunda People. GPC is aware of several culturally significant indigenous sites and features in the Port of Bundaberg. An existing cultural heritage management plan applies to all land within the Port of Bundaberg. GPC acknowledges that the LUP 2020 must take into consideration the 'duty of care' provisions under the ACH Act.

The Bailai, Gooreng Gooreng, Gurang and Taribelang Bunda People's native title rights and interests were formally recognised by the Federal Court of Australia on 28 November 2017. The native title determination took effect on 3 May 2018 and covers areas of strategic port land. GPC recognises the rights of Traditional Owners, including their rights to be consulted in accordance with the *Native Title Act 1993* (Cth) (NT Act) through the implementation of the Gladstone, Rockhampton and Bundaberg Ports Project Indigenous Land Use Agreement. Furthermore, GPC acknowledges that any future determinations made under the NT Act will be reviewed by GPC and where required, reflected or amended in the LUP 2020.

3 Strategic framework

3.1 PORT OF BUNDABERG VISION

The Port of Bundaberg was transferred to GPC in November 2009. Since this time, GPC has been working to develop the Port of Bundaberg's potential in line with the Corporation's mission to responsibly manage, develop and operate port facilities and services in an economically, environmentally and socially sustainable manner for the prosperity of the Bundaberg region, Queensland and Australia.

The vision of GPC is to manage and operate Australia's premier multi-commodity ports. To facilitate this vision, land use planning for the Port of Bundaberg is focussed upon the following key considerations:

- Efficient operation of the Port of Bundaberg to deliver financial and economically sustainable benefits for Queensland and the Wide Bay Burnett region;
- Strategic and responsible planning for resilience into the future;
- Sustainable development and maintenance with a focus on continuous improvement to minimise environmental impacts;
- Sustainably managing strategic infrastructure and assets, including the valuable marina asset;
- Facilitating regional trade to support regional development, including a focus on bulk materials, manufacturing opportunities and ecologically sustainable industries;
- Planning for appropriate infrastructure and services to support and enable tourism, including cruise ship tourism;
- Forging enduring connections and integration within the community in which the Port of Bundaberg operates.

The strategic framework ensures that the DEOs are considered in the delivery of this planning vision for strategic port land for the life of this LUP 2020. Although each of the DEOs can be read individually, collectively they provide the strategic intent for the Port of Bundaberg port area to provide a balanced direction for development and operations.

3.2 DESIRED ENVIRONMENTAL OUTCOMES

The DEOs set the policy direction for the LUP 2020, form the basis for ensuring appropriate development occurs on strategic port land and integrate the core matters (i.e. land use and development, port facilities and valuable features) as stipulated by the TIA. The DEOs consist of three themes based upon the strategic intent above, which are:

- Economic development;
- Community wellbeing; and
- Natural environment.

The DEOs for development are outlined in the following sections.

3.2.1 Economic development

The Port of Bundaberg is important State government infrastructure which must remain commercially viable and continue to contribute to the local, regional, state and national economies as well as returning profits to the State government (via GPC, as a Government Owned Corporation). The management and operation of the Port of Bundaberg will focus upon facilitating trade through the Port of Bundaberg and maximising the region's prosperity. The DEOs for economic development are that:

a) Capital investment is directed into facilities to maintain the Port of Bundaberg as a State strategic port and world class port facility.

b) Development optimises existing infrastructure prior to the construction of new infrastructure.

c) Development advances the role of the Port of Bundaberg as an economic, freight and logistics hub and supports improvements in supply chain efficiency and resilience.

d) Development involving port facilities and services will meet customer needs including consideration of potential cargo and shipping requirements.

e) Land use planning outcomes respond to and accommodate changes in user demands, regional factors and global market trends to support existing and new trade options into and from the Port of Bundaberg.

f) Development provides local and regional employment opportunities that contribute to the local, regional, state and national economies.

g) Development and land use planning complements the desired outcomes of the BuSDA.

h) Development and land use planning recognises and supports growth of the tourism industry and the opportunity for the Port of Bundaberg to become a future boutique cruise ship destination.

i) Land is identified and will be available for future expansion to accommodate new trade pathways and infrastructure requirements to meet the Port of Bundaberg's long term strategic needs.

j) Development and land use planning recognises and supports tourism, recreational and commercial fishing and other maritime uses in the marina precinct.

3.2.2 Community wellbeing

As the land manager of the Port of Bundaberg, GPC maintains its role as a good corporate citizen and carries out its operations in a socially responsible manner. The DEOs for community wellbeing are:

a) Operations at the Port of Bundaberg are conducted in a manner that is safe for people and property.

b) Development within the Port of Bundaberg contributes to building enduring connections with the community to ensure the functions of the Port of Bundaberg can service the State and the Nation in perpetuity.

c) Development within the Port of Bundaberg minimises adverse amenity impacts on nearby residential areas by progressively expanding buffers between strategic port land and sensitive land uses as well as management strategies, development requirements for new operations (e.g. as technological improvements become available) and improved onsite practices.

d) Development within the Port of Bundaberg restricts public access unless it can be demonstrated that the access will not result in unacceptable risks to people or property.

e) Heritage places, landscapes and artefacts of cultural significance, either in built form or natural sites, are an important part of the fabric of the Bundaberg region.

f) Development within the Port of Bundaberg considers potential impacts to cultural heritage and ensures appropriate management strategies are implemented in accordance with the ACH Act, Aboriginal Cultural Heritage Duty of Care Guidelines and the Gladstone, Rockhampton and Bundaberg Ports Project Indigenous Land Use Agreement.

3.2.3 Natural environment

In its operation of the Port of Bundaberg, GPC continues its commitment to ecologically sustainable development and manages strategic port land in an environmentally responsible manner. The DEOs for the natural environment are that:

a) Development ensures that potential environmental risks are continually assessed and managed.

b) Activities and development undertaken at the Port of Bundaberg which involves port-related facilities has regard to its potential environmental impacts, including land, water, air, odour and noise quality as well as potential impacts on matters of environmental significance, including but not limited to protected flora and fauna and wetlands when assessing options or alternatives.

c) The Regional Plan, the *Coastal Management Plan 2013,* SPP, *Environmental Code of Practice for Dredging and Dredged Material Management 2016* and *Leading Practice: Port Master Planning 2013* will be considered in future long term planning and development decision making in relation to strategic port land.

d) Development provides open space and environmental buffers between port operations and important ecological values.

e) Development limits artificial light impacts on aquatic wildlife and migratory shorebird species.

f) Development avoids light directly visible from the beach or the ocean and ambient lighting that contributes to sky glow seen from sea turtle nesting areas, in particular the very significant sea turtle nesting area of the Woongarra Coast and Mon Repos Conservation Park.

g) Development considers principles of sustainable design and incorporates high energy efficiency and renewable energy outcomes.

h) Development considers the potential impact of natural hazards and climate change to people and property, and includes an appropriate layout and design to mitigate against potential impacts where possible.

i) Development will comply with air, water, land contamination, waste and noise policies administered under the EP Act and other relevant legislative requirements.

j) The disturbance of acid sulfate soils is avoided where possible or managed to protect the environment, people and property.

4 Development assessment

4.1 GPC'S ROLE IN DEVELOPMENT ASSESSMENT

Development assessment is the process by which applications for development are made, assessed and decided. This section outlines GPC's role in development assessment as an Assessment Manager and Referral agency, and also details the process required for owner's consent and land tenure.

Editor's note – GPC Development Application Guideline for the Port of Bundaberg is provided on GPC's website.

4.1.1 Assessment Manager

Under the Planning Regulation, GPC is the Assessment Manager for development on GPC's strategic port land or in GPC's strategic port land tidal area (refer to Section 1.5.3 for information on strategic port land in the BuSDA). Development is assessed in accordance with the Planning Act and the Planning Regulation.

Where a development application requires referral to one or more State government agency/ies or authority, the applicant is required to refer the development application to the State Assessment and Referral Agency (SARA) and/or other referral entities as required for assessment. Schedules 9 and 10 of the Planning Regulation sets out all referral agencies and their jurisdictions. The referral agencies responses will be included in a decision notice issued by GPC. The same process applies to local government referrals, where applicable.

4.1.2 Referral agency

GPC is a Referral agency (which may be limited to providing advice) for development that is prescribed assessable development (defined in the Planning Regulation, schedule 24) proposed outside GPC's strategic port land and strategic port land tidal areas and within the port limits of the Port of Bundaberg as shown in Figure 3, Appendix B (prescribed under the *Transport Infrastructure (Ports) Regulation 2005*). In this instance, the Assessment Manager will be the relevant entity prescribed in schedule 8 of the Planning Regulation.

Where GPC is a Referral agency for a development application pursuant to the Planning Regulation, this LUP 2020 is to be taken as a policy applied by GPC.

4.1.3 Owner's consent and land tenure

For development or works proposed on all GPC owned freehold land, GPC will formally consider requests for owner's consent in written form to their Property Department. This usually occurs once tenure has been obtained through a lease, sub-lease or permit to occupy from GPC.

For all State-owned land, the Department of Natural Resources, Mines and Energy (DNRME) will formally consider requests for owner's consent once tenure has been obtained through a lease or sub-lease. Where a material change of use for loading and unloading on a multi-user facility is proposed and where tenure is not available, DNRME will consider requests for owner's consent on a case by case basis (see GPC Development Application Guideline for compliance criteria). If a premises is leased by GPC from DNRME, written consent must be obtained from GPC as the Head Lessee.

4.2 CATEGORIES OF DEVELOPMENT

The LUP 2020 is the relevant assessment benchmark for development on strategic port land and in strategic port land tidal areas. Development on strategic port land and in strategic port land tidal areas is categorised as either accepted or assessable within this LUP 2020, in accordance with section 44 of the Planning Act and schedule 10, section 20 of the Planning Regulation. The LUP 2020 does not include any prohibited development.

4.2.1 Accepted development

Accepted development is development on strategic port land or in strategic port land tidal areas for which a development approval under the LUP 2020 is not required. The LUP 2020 provides for two types of accepted development. These are:

- 'Accepted', where the categories of assessment tables identify the development is not assessable, therefore does not require assessment against any provisions under the LUP 2020.
- 'Accepted, subject to requirements' where the categories of assessment tables identify the development is not assessable, subject to the development being able to comply with the relevant stated assessment requirements under the LUP 2020.

For the purposes of the LUP 2020, development that is identified as accepted development under Schedule 7 of the Planning Regulation is also accepted development under the LUP 2020. Where development is accepted in Schedule 7 and also 'Accepted, subject to requirements' in the LUP 2020, only the requirements in Schedule 7 apply.

4.2.2 Assessable development

Assessable development on strategic port land or in strategic port land tidal areas requires development approval. Schedule 10, Part 13, Division 5 of the Planning Regulation states that development on strategic port land (as it relates to the Port of Bundaberg, which is not a priority port pursuant to the *Sustainable Ports Development Act 2015* (Qld)), is assessable if either:

a) the land use plan for the strategic port land states the development is assessable development; or

b) the development is a material change of use that is inconsistent with the land use plan.

Assessable development on strategic port land, where for a material change of use and/or operational work, is subject to code assessment as prescribed under Schedule 10, Part 13, Division 5, Subdivision 2 (or as amended) of the Planning Regulation with the assessment benchmark being the LUP 2020.

Assessable development for a material change of use that is inconsistent with the LUP 2020 also triggers referral to the Minister responsible for administering the TIA, for assessment against section 287A of the TIA (Schedule 10, Part 13, Division 5, Subdivision 3 of the Planning Regulation {or as amended}).

In some circumstances, GPC functions as a Referral agency under Schedule 10, Part 13, Division 3 (or as amended) of the Planning Regulation (where the chief executive of the port authority is the referral agency). In this Referral agency capacity, GPC may choose to apply this LUP 2020 as a policy where it considers a matter is relevant to the development.

For the purposes of the Planning Regulation, the following LUP 2020 land use precincts are urban areas:

- Port industry precinct;
- Light industry and innovation precinct;
- Dredged material placement precinct;
- Wharves precinct; and
- Marina precinct.

4.2.3 Building works, and plumbing and drainage works

For development that is for building work and plumbing and drainage works as defined in Schedule 2 of the Planning Act, GPC does not act as either Assessment Manager or Referral agency and these works are not assessed under the LUP 2020. Proponents must engage the services of a private certifier or BRC, as appropriate, to assess these works.

4.2.4 Reconfiguring a lot

For development that is for reconfiguring a lot as defined in Schedule 2 of the Planning Act, GPC does not act as either Assessment Manager or Referral agency and these works are not categorised under the LUP 2020 (section 44(6)(a) of the Planning Act).

4.3 CATEGORIES OF ASSESSMENT

The tables in this section identify where development is accepted and assessable. The tables in this section also provide the relevant LUP 2020 requirements for accepted and assessable development.

4.3.1 Interpreting the tables

Accepted

Where development is listed as **accepted** in Table 4.1 or Table 4.2, it does not require development approval and therefore does not require assessment against any provisions under the LUP 2020.

Accepted, subject to requirements

Where development is listed as **accepted, subject to requirements** in Table 4.1 or Table 4.2, the development does not require development approval under the LUP 2020 where the development can demonstrate compliance with the acceptable outcomes (AO) set out in the relevant provisions column.

Where development is listed as **accepted, subject to requirements** in Table 4.1 or Table 4.2 and the development cannot comply with one or more of the AOs set out in the relevant provisions column, the development becomes assessable development and requires **code assessment**.

Code assessment

Where development is listed as requiring **code assessment** in Table 4.1 or Table 4.2, the development will be assessed against the items set out in the relevant provisions column. When assessing development that is subject to **code assessment**, the following decision-making hierarchy applies. If development:

- Meets all the AOs related to a performance outcome (PO) —it complies with the PO;
- Does not meet all the AOs related to a PO, but meets the corresponding PO—it complies with that part of the code;
- Does not meet the AOs or POs of a code, but meets the purpose and overall outcomes for the code—it complies with the code;
- Does not meet the AOs, POs, or purpose and outcomes for the code—it does not comply with the code;
- Does not comply with one or more code, but can demonstrate compliance with the precinct intent and outcomes, strategic framework (vision and DEOs), GPC will assess the development application on its merits having regard to the whole of the LUP 2020.

It is noted that under a bounded assessment subject to the provisions of the Planning Act, where development does not comply with a code or is in conflict with provisions within the benchmark (LUP 2020) and compliance cannot be achieved by the imposition of reasonable and relevant development conditions, the development application may be refused.

4.3.2 Material change of use

Table 4.1 identifies the category of assessment for making a Material change of use under the LUP 2020.

Table 4.1 Material change of use categories of assessment under the LUP 2020

Use	Categories of development and assessment	Relevant provisions
Port industry precinct		
• Emergency services • Landing, if undertaken by, or on behalf of a public sector entity • Port infrastructure, if undertaken by, or on behalf of a public sector entity • Substation • Temporary construction hardstand or laydown area • Utility installation, if undertaken by, or on behalf of, a public sector entity	**Accepted** subject to requirements	• Acceptable outcomes AO2.1, AO3.1-AO3.2, AO6.1, AO7.1, AO9.1, AO10.1, AO11.1, AO13.1, AO14.1-AO14.2 AO15.2, AO19.1-19.2, AO21.1, AO23.1, AO26.1-26.2, AO28.1-28.4, AO29.1-29.2, AO29.4-29.6, AO30.1 and AO34.1 of the Port development code • Acceptable outcomes AO1.1, AO6.1-6.2, AO12.1-12.2, AO13.1-AO132, AO15.1, AO28.1-28.3, AO29.1 and AO34.1 of Infrastructure, service and works code • Acceptable outcome AO1.1, AO4.2, AO8.1, AO18.1, AO19.1, AO20.2, AO21.1-21.2, AO24.1, AO29.1-AO29.3 and AO30.1 of the Environment management code
	Otherwise, **assessable development - code assessment**	• The intent, specific outcomes and consistent land uses for the Port industry precinct (Table 5.1) • Port development code • Infrastructure, service and works code • Environmental management code
• Animal keeping • Bulk storage infrastructure and activities • Extractive industry • High impact industry • Landing, where not undertaken by, or on behalf of, a public sector entity • Loading and unloading infrastructure and activities • Low impact industry • Major electricity infrastructure • Marine industry • Medium impact industry • Passenger terminal • Port infrastructure, where not undertaken by, or on behalf of, a public sector entity • Port services - Dredging • Port services – Dredged material placement • Port services – Pilotage and support services	**Code assessment**	• The intent, specific outcomes and consistent land uses for the Port industry precinct (Table 5.1) • Port development code • Marine code, where for Port services - Dredging • Infrastructure, service and works code • Environmental management code

Use	Categories of development and assessment	Relevant provisions
• Research and technology industry • Special industry, where in the Fairymead locality • Utility installation, where not undertaken by, or on behalf of, a public sector entity • Warehouse infrastructure and activities		
Light industry and innovation precinct		
• Emergency services • Landing, if undertaken by, or on behalf of, a public sector entity • Port infrastructure, if undertaken by, or on behalf of, a public sector entity • Substation • Temporary construction hardstand or laydown area • Utility installation, if undertaken by, or behalf of, a public sector entity	**Accepted** subject to requirements	• Acceptable outcomes AO2.1, AO3.1-AO3.2, AO6.1, AO7.1, AO9.1, AO10.1, AO11.1, AO13.1, AO14.2-AO14.2, AO15.2, AO19.1-AO19.2, AO21.1, AO23.1, AO26.1-26.2, AO28.1-AO28.4, AO29.1-29.2, AO29.4-29.6, AO30.1 and AO34.1 of the Port development code • Acceptable outcomes AO1.1, AO12.1-AO12.2 AO15.1, AO28.1-AO28.3 and AO29.1 of Infrastructure, service and works code • Acceptable outcomes AO1.1, AO4.2, AO8.1, AO18.1, AO19.1, AO20.2, AO21.1-21.2, AO24.1, AO29.1-AO29.3 and AO30.1 of the Environment management code
	Otherwise, **assessable development - code assessment**	• The intent, specific outcomes and consistent land uses for the Light industry and innovation precinct (Table 5.2) • Port development code • Infrastructure, service and works code • Environmental management code
• Aquaculture • Community use • Educational establishment • Food and drink outlet • Landing, where not undertaken by, or on behalf of, a public sector entity • Loading and unloading infrastructure and activities • Low impact industry • Marina services • Marine industry • Outdoor sales • Parking station • Passenger terminal	**Code assessment**	• The intent, specific outcomes and consistent land uses for the Light industry and innovation precinct (Table 5.2) • Port development code • Infrastructure, service and works code • Environmental management code

Use	Categories of development and assessment	Relevant provisions
• Port infrastructure, where not undertaken by, or on behalf of, a public sector entity • Port Services – Dredged material placement or reclamation • Port Services – Pilotage and support services • Research and technology industry • Transport depot • Utility installation, where not undertaken by, or on behalf of, a public sector entity • Warehouse infrastructure and activities		
Dredged material placement precinct		
• Port Services – Dredged material placement or reclamation, if undertaken by, or on behalf of a public sector entity	**Accepted** subject to requirements	• Acceptable outcomes AO2.1-AO2.2 AO3.1, AO5.1, AO7.1, AO9.1 and AO15.1-AO15.3 of the Marine code • Acceptable outcomes AO1.1, AO20.1, AO28.1-AO28.3 and AO29.1 of Infrastructure, service and works code • Acceptable outcomes AO1.1, AO4.2, AO8.1, AO18.1, AO19.1, AO20.2, AO21.1-21.2, AO24.1, AO29.1-AO29.3 and AO30.1 of the Environment management code
• Bulk storage infrastructure and activities • Extractive industry • Loading and unloading infrastructure and activities • Port Services – Dredged material placement or reclamation, where not undertaken by, or on behalf of, a public sector entity • Temporary construction hardstand or laydown area	**Code assessment**	• The intent, specific outcomes and consistent land uses for the Dredged material placement precinct (Table 5.3) • Port development code • Marine code, where applicable • Infrastructure, service and works code • Environmental management code
Wharves precinct		
• Emergency services • Landing, where undertaken by, or on behalf of, a public sector entity • Port infrastructure, if undertaken by, or on behalf of, a public sector entity • Port Services – Dredged material placement or reclamation, where undertaken by, or on behalf of a public sector entity	**Accepted** subject to requirements	• Accepted outcome AO34.1 of the Port development code • Acceptable outcomes AO2.1-AO2.2, AO3.1, AO5.1, AO7.1, AO9.1-AO9.2, AO14.1 and AO16.1-AO16.5 of the Marine code • Acceptable outcomes AO1.1, AO6.1, AO20.1, AO28.1-AO28.3 and AO29.1 of Infrastructure, service and works code

Use	Categories of development and assessment	Relevant provisions
• Substation • Temporary construction hardstand or laydown area • Utility installation, where undertaken by, or on behalf of a public sector entity		• Acceptable outcome AO1.1, AO8.2, AO18.1, AO19.1, and AO20.1-AO20.2 of the Environment management code
	Otherwise, **assessable development - code assessment**	• The intent, specific outcomes and consistent land uses for the Wharves precinct (Table 5.4) • Marine code • Infrastructure, service and works code • Environmental management code
• Landing, where not undertaken by, or on behalf of, a public sector entity • Loading and unloading infrastructure and activities • Passenger terminal • Port infrastructure • Port services – Dredging • Port Services – Dredged material placement or reclamation, where not undertaken by, or on behalf of, a public sector entity • Port Services – Pilotage and support services • Renewable energy facility, where for ocean, wave or tidal energy • Utility installation, where not undertaken by, or on behalf of, a public sector entity • Transhipping	**Code assessment**	• The intent, specific outcomes and consistent land uses for the Wharves precinct (Table 5.4) • Marine code • Infrastructure, service and works code • Environmental management code
Marina precinct		
• Emergency services • Landing, where undertaken by, or on behalf of, a public sector entity • Marina service, where undertaken by, or on behalf of, a public sector entity • Port Services – Dredged material placement or reclamation, where undertaken by, or on behalf of, a public sector entity • Substation • Utility installation, where undertaken by, or behalf of, a public sector entity	**Accepted** subject to requirements	• Acceptable outcomes AO2.1-AO2.2, AO3.1, AO5.1, AO7.1, AO8.1, AO9.1-AO9.2, AO14.1, AO15.1-AO15.3 and AO16.1-AO16.5 of the Marine code. • Acceptable outcomes AO1.1, AO6.1, AO20.1, AO28.1-AO28.3 and AO29.1 of Infrastructure, service and works code • Acceptable outcomes AO1.1, AO4.2, AO8.1, AO18.1, AO19.1, AO20.2, AO21.1-21.2, AO29.1-AO29.3 and AO30.1 of the Environment management code
	Otherwise, **assessable development - code assessment**	• The intent, specific outcomes and consistent land uses for the Marina precinct (Table 5.5) • Marine code

Use	Categories of development and assessment	Relevant provisions
		• Infrastructure, service and works code • Environmental management code
• Community use, where coastal dependent • Landing, where not undertaken by, or on behalf of, a public sector entity • Loading and unloading infrastructure and activities • Marina • Marina service, where not undertaken by, or on behalf of, a public sector entity • Marine industry • Passenger terminal • Port Services – Dredged material placement or reclamation, where not undertaken by, or on behalf of, a public sector entity • Port Services – Pilotage and support services • Utility installation, where not undertaken by, or behalf of, a public sector entity	**Code assessment**	• The intent, specific outcomes and consistent land uses for the Marina precinct (Table 5.5) • Marine code • Infrastructure, service and works code • Environmental management code
Buffer and conservation precinct		
• Emergency services • Landing, where undertaken by, or on behalf of, a public sector entity • Park • Port infrastructure, where undertaken by, or on behalf of, a public sector entity • Substation • Utility installation, where undertaken by, or behalf of, a public sector entity	**Accepted** subject to requirements	• Acceptable outcomes AO2.1, AO3.1-AO3.2, AO6.1, AO7.1, AO9.1, AO10.1, AO11.1, AO13.1, AO15.2, AO19.1-AO19.2, AO21.1, AO23.1, AO26.1-AO26.2, AO28.1-AO28.4, AO29.1-29.2, AO29.4-29.6, AO30.1 and AO34.1 of the Port development code • Acceptable outcomes AO1.1, AO6.1, AO20.1, AO28.1-AO28.3 and AO29.1 of Infrastructure, service and works code • Acceptable outcomes AO1.1, AO4.2, AO7.1, AO8.1- AO8.2, AO18.1, AO19.1, AO20.2, AO21.1-AO21.2, AO29.1-AO29.3 and AO30.1 of the Environmental management code
	Otherwise, **assessable development - code assessment**	• The intent, specific outcomes and consistent land uses for the Buffer and conservation precinct (Table 5.6) • Port development code • Marine code • Infrastructure, service and works code • Environmental management code

Use	Categories of development and assessment	Relevant provisions
• Animal husbandry • Community use • Environmental facility • Landing, where not undertaken by, or on behalf of, a public sector entity • Market • Nature based tourism • Outstation • Park • Port infrastructure, where not undertaken by, or on behalf of, a public sector entity • Port Services – Dredged material placement or reclamation, where undertaken by, or on behalf of, a public sector entity • Utility installation, where not undertaken by, or on behalf of, a public sector entity	**Code assessment**	• The intent, specific outcomes and consistent land uses for the Buffer and conservation precinct (Table 5.6) • Port development code • Marine code • Infrastructure, service and works code • Environmental management code
All precincts		
Any material change of use that is an inconsistent use for the relevant precinct Note: Refer to section 5 of this Land Use Plan for clarification	**Code assessment** Note: Triggers referral under the Planning Regulation for assessment by the Minister responsible for administering the TIA against section 287A of the TIA.	• The LUP 2020
Any undefined use or use not listed		

4.3.3 Other development

Table 4.2 identifies the categories of assessment for other development under the LUP 2020.

Table 4.2 Level of assessment for other development within all precincts of the LUP 2020

Type of development	Categories of development and assessment	Relevant provisions
Operational work		
All precincts		
Navigational aids or signage	**Accepted** subject to requirements	• Acceptable outcomes AO5.1 of the Marine code
Tidal works, where not excluded tidal works	**Code assessment**	• Marine code • Environmental management code • Infrastructure services and works code
Operational work involving placing an advertising device on premises, where	**Accepted** subject to requirements	• Acceptable outcomes AO29.1-AO29.7 and AO30.1 of the Port development code

Type of development	Categories of development and assessment	Relevant provisions
not in the Marina precinct or Wharves precinct.	Otherwise, **assessable development - code assessment**	• The intent, specific outcomes for the relevant precinct – either Port industry precinct (Table 5.1), Light Industry and Innovation precinct (Table 5.2), Buffer and conservation precinct (Table 5.6) or Dredged material placement precinct (Table 5.3), whichever is applicable. • Port development code
Operational work involving placing an advertising device on premises, where in the Marina precinct or Wharves precinct.	**Accepted** subject to requirements	• Acceptable outcomes AO16.1 and AO16.5 of the Marine code
	Otherwise, **assessable development - code assessment**	• The intent, specific outcomes for the Marina precinct (Table 5.5) or Wharves precinct (Table 5.4), whichever is applicable. • Marine code
Operational work involving excavating and filling	**Accepted** subject to requirements if: a) Undertaken by or behalf of a public sector entity; or b) Involving: i) Excavating or filling of not more than 50m³ of material; and ii) Filling of not more than 10m³ with an average depth not more than 150mm above natural ground level; and iii) Excavating to a depth of not more than 1m; and iv) Filling does not cause ponding of overland runoff flows on adjacent land.	• Acceptable outcomes AO15.1-, AO18.1, AO20.1, AO28.1- AO28.3, AO29.1 and AO32.1-AO32.2 of the Infrastructure, services and works code • Acceptable outcomes AO14.1-14.3 and AO16.1 of the Port development code • Acceptable outcomes AO18.1 and AO19.1 of the Environmental management code
	Otherwise, **assessable development - code assessment**	• Infrastructure, services and works code • Environmental management code
Operational work involving engineering work or landscaping work associated with a material change of use	**Accepted**, subject to requirements	• Acceptable outcomes AO2.1, AO6.1, AO14.1-AO14.2, AO19.1, AO21.1, AO24.1, AO26.1-AO26.3 andAO28.1-AO28.4 of the Port development code • Acceptable outcomes AO6.1, AO20.1, AO28.1-AO28.3, AO29.1 andAO32.1-AO32.2 of the Infrastructure, services and works code
Operational work involving engineering work or landscaping work not associated with a material change of use, where not considered minor works.	**Code assessment**	• Port development code • Infrastructure, services and works codes • Environmental management code
Operational work not otherwise specified in this table		

Type of development	Categories of development and assessment	Relevant provisions
Operational work not otherwise specified in this table	**Code assessment**	• Port development code • Marine code • Infrastructure, services and works code • Environmental management code

Table note:
Any Operational work in a road reserve is regulated by either the Department of Transport and Main Roads or BRC through the BRC Planning Scheme, including but not limited to, engineering work, landscaping and access driveways.

5 Land use precincts

Land use precincts organise the LUP 2020 in a way that designates the location of preferred (consistent) land uses and delivers the DEOs and strategic intent at a specific site level. The LUP 2020 identifies six land use precincts. The boundaries of each of these land use precincts reflects the current and future land use intent and specific outcomes for the Port of Bundaberg. The LUP 2020 land use precincts are:

- Port industry precinct;
- Light industry and innovation precinct;
- Dredged material placement precinct;
- Wharves precinct;
- Marina precinct; and
- Buffer and conservation precinct.

The intent, specific outcomes and consistent uses for each precinct are contained within the following sections. Mapping showing the location and extent of each land use precinct is provided in the land use plan precinct maps contained in Appendix C.

5.1 PORT INDUSTRY PRECINCT

The intent, specific outcomes and consistent land uses for the Port industry precinct are provided in Table 5.1.

Table 5.1 Port industry precinct

Port industry precinct **Designates onshore strategic port land that is critical to the function of current and future port industry activities.**	
Intent	a) Development involving land uses that rely on or benefit from access to the waterfront and associated port facilities for the purposes of exports/imports is preferred. b) Development is primarily related to core port operations, activities and infrastructure, including storage, transfer and loading and unloading of bulk, break bulk and container cargos for import and/or export and associated ancillary uses (such as office, car parking). c) Development within Lot 5 on SP274161 between Hoffmans Road and Bundaberg-Port Road is primarily related to linear infrastructure corridors. d) Development provides key capital investment in port infrastructure and industry. e) Development may include areas that are required or intended for the placement, storage, dewatering and settlement and/or potential removal of dredged material or reclamation. f) Development provides for low and medium impact industries. g) Development for high impact industry uses may be considered where environmental values are protected. h) Development involving defence related facilities and infrastructure is supported. i) Development involving cruise ship facilities and infrastructure is supported.
Built form outcomes	a) Development ensures that land resources are utilised efficiently and developed in a coordinated manner. b) Development ensures the security of property, safe storage of onsite materials and cargos and operational safety of people. c) Development provides for safe and efficient vehicle access, parking, manoeuvring and loading/unloading areas.

Port industry precinct

Designates onshore strategic port land that is critical to the function of current and future port industry activities.

	d) Development is at a height that is compatible with and reflects the character of the surrounding area and minimises the visual impact. e) Development provides a built form that incorporates the principles of ecologically sustainable development, including (but not limited to) elements of sustainable design and materials, water conservation, high energy efficiency, appropriate landscape design and stormwater design and management. f) Development provides adequate building articulation and landscaping treatment to achieve an attractive streetscape along road frontages.
Infrastructure outcomes	a) Development prioritises the integration and co-location of existing and new infrastructure, including linear infrastructure. b) Development supports and enhances the function of Bundaberg-Port Road as a high speed major through road for freight to and from the Port of Bundaberg. c) Development that involves new infrastructure is utilised efficiently and is constructed to accommodate potential future development and does not unreasonably prejudice the future use of the area. d) Development promotes waste minimisation and manages the generation, storage, disposal recycling and reuse of waste products. e) Development incorporates renewable energy generating systems (e.g. solar panels), where possible. f) Water sensitive urban design is incorporated into all parts of the infrastructure delivery to minimise external impacts (wastewater, runoff, etc.).
Environmental and community outcomes	a) Development avoids, minimises or mitigates potential environmental impacts and maintains compliance with relevant legislation and polices. b) Development avoids, minimises and/or mitigates potential impacts to sea turtle nesting and foraging areas, in particular the very significant sea turtle nesting area of the Woongarra Coast and Mon Repos Conservation Park by minimising light spillage and sky glow. c) Development provides appropriate investigation, management and mitigation measures for potential and actual acid sulfate soils. d) Development is located an appropriate distance from sensitive land uses. e) Emissions (e.g. dust) are managed onsite, minimising any impacts to adjacent sites, operations or products. f) Contamination of land is remediated as soon as possible after it occurs, and sites are rehabilitated upon cessation of activities. g) Development avoids, minimises or mitigates any potential impacts to cultural heritage in accordance with relevant legislation, policies and guidelines.
Consistent land uses	• Animal keeping • Bulk storage infrastructure and activities • Emergency services • Extractive industry • High impact industry • Landing • Loading and unloading infrastructure and activities • Low impact industry • Major electricity infrastructure • Marine Industry • Medium impact industry • Passenger terminal

Port industry precinct **Designates onshore strategic port land that is critical to the function of current and future port industry activities.**	
	• Port infrastructure • Port Services - Dredging • Port services – Dredged material placement or reclamation • Port Services – Pilotage and other support services • Research and technology industry • Special industry, where not in proximity to a sensitive use i.e. Fairymead • Substation • Temporary construction hardstand or laydown area • Utility installation • Warehouse infrastructure and activities.

5.2 LIGHT INDUSTRY AND INNOVATION PRECINCT

The intent, specific outcomes and consistent land uses for the Light industry and innovation precinct are provided in Table 5.2.

Table 5.2 Light industry and innovation precinct

Light industry and innovation precinct **Designates areas of strategic port land that are suitable for low impact industry, educational/research and innovation activities.**	
Intent	a) Development for low impact industry and commercial uses that supports or is compatible with port operations. b) Development provides for a diverse range of innovative and educational including industry, science, technology and research that provides employment opportunities within the Port of Bundaberg. c) Development provides a transition at the edge of the waterfront land from medium to high impact industrial uses. d) Development limits public access to suitable points that are safe and secure. e) Development provides buffer areas where required to address potential impacts to the amenity of adjacent sensitive land uses and/or environmental areas. f) Development may include areas that are required or intended for the placement, storage, dewatering and settlement and/or potential removal of dredged material or reclamation. g) Development involving bulk storage infrastructure and activities are not supported in this precinct. h) Development involving defence related facilities and infrastructure is supported. i) Development involving new educational establishments are limited to those related to port/ marine operations or other industrial development
Built form outcomes	a) Development ensures that land resources are utilised efficiently and developed in a coordinated manner. b) Development ensures the security of property, safe storage of dredged material and cargo and operational safety of people. c) Development provides for safe and efficient vehicle access, parking, manoeuvring and loading/unloading areas. d) Development is at a height that is compatible with and reflects the character of the surrounding area and minimises the visual impact.

Light industry and innovation precinct

Designates areas of strategic port land that are suitable for low impact industry, educational/research and innovation activities.

	e) Development provides a built form that incorporates the principles of ecologically sustainable development, including (but not limited to) elements of sustainable design and materials, water conservation, high energy efficiency, appropriate landscape design and stormwater design and management. f) Development provides adequate building articulation and landscaping treatment to achieve an attractive streetscape along road frontages.
Infrastructure outcomes	a) Development prioritises the integration and co-location of existing and new infrastructure including linear infrastructure. b) Development that involves new infrastructure is utilised efficiently, is constructed to accommodate potential future development and does not unreasonably prejudice the future use of the area. c) Development promotes waste minimisation and manages the generation, storage, disposal recycling and reuse of waste products. d) Development incorporates renewable energy generating systems (e.g. solar panels), where possible. e) Water sensitive urban design is incorporated into all parts of the infrastructure delivery to minimise external impacts (wastewater, runoff, etc.).
Environmental and community outcomes	a) Development avoids, minimises or mitigates potential environmental impacts and maintains compliance with relevant legislation and polices. b) Development avoids, minimises and/or mitigates potential impacts to sea turtle nesting and foraging areas, in particular the very significant sea turtle nesting area of the Woongarra Coast and Mon Repos Conservation Park by minimising light spillage and sky glow. c) Development provides appropriate investigation, management and mitigation measures for potential and actual acid sulfate soils. d) Development is located an appropriate distance from sensitive land uses. e) Emissions (e.g. dust) are managed onsite, minimising any adverse impacts to adjacent sites, operations or products. f) Contamination of port land is remediated as soon as possible after it occurs, and sites are rehabilitated upon cessation of activities. g) Development avoids, minimises and mitigates any potential impacts to cultural heritage in accordance with relevant legislation, polices and guidelines.
Consistent land uses	• Aquaculture, where existing facilities are available • Community use • Educational establishment • Emergency services • Food and drink outlet • Landing • Loading and unloading infrastructure and activities • Low impact industry • Marina services • Marine industry • Outdoor sales • Parking station • Passenger terminal • Port infrastructure • Port Services – Dredged material placement or reclamation

Light industry and innovation precinct **Designates areas of strategic port land that are suitable for low impact industry, educational/research and innovation activities.**	
	• Port Services – Pilotage and other support services • Research and technology industry • Substation • Temporary construction hardstand or laydown area • Transport depot • Utility installation • Warehouse infrastructure and activities.

5.3 DREDGED MATERIAL PLACEMENT PRECINCT

The intent, specific outcomes and consistent land uses for the Dredged material placement precinct are provided in Table 5.3.

Table 5.3 Dredged material placement precinct

Dredged material placement precinct **Designates areas of strategic port land intended for the placement, storage, dewatering, handling and reuse of dredged material.**	
Intent	a) Development located on Lots 5 and 6 on RP7193 and Lot 6 on SP166192 allows for dredged material placement, storage, dewatering, handling and reuse. b) Development within the precinct does not impede or adversely impact upon the efficient use of adjoining land resources and effective management of dredged material. c) Development does not compromise the long term, efficient operation of the Port of Bundaberg or marina.
Built form outcomes	a) Development ensures that land resources are utilised efficiently and developed in a coordinated manner. b) Development ensures the security of property, safe storage of dredged material and operational safety of people.
Infrastructure outcomes	a) Development prioritises the integration and co-location of existing and new infrastructure. b) Development that involves new infrastructure is utilised efficiently, is constructed to accommodate potential future development and does not unreasonably prejudice the future use of the area. c) Development incorporates renewable energy generating systems (including forms of renewable energy), where possible.
Environmental and community outcomes	a) Development avoids, minimises and mitigates potential environmental impacts and maintains compliance with relevant legislation and polices. b) Development avoids, minimises and/or mitigates potential impacts to sea turtle nesting and foraging areas, in particular the very significant sea turtle nesting area of the Woongarra Coast and Mon Repos Conservation Park by minimising light spillage and sky glow. c) Development avoids, minimises and/or mitigates potential impacts to migratory shorebird habitat. d) Development provides appropriate investigation, management and mitigation measures for potential and actual acid sulfate soils. e) Development is located an appropriate distance from sensitive land uses. f) Emissions (e.g. dust) are managed onsite, minimising any impacts to adjacent sites, operations or products.

Dredged material placement precinct

Designates areas of strategic port land intended for the placement, storage, dewatering, handling and reuse of dredged material.

	g) Contamination of land is remediated as soon as possible after it occurs, and sites are rehabilitated upon cessation of activities. h) Development avoids, minimises and mitigates any potential impacts to cultural heritage in accordance with relevant legislation, polices and guidelines.
Consistent land uses	• Bulk storage infrastructure and activities • Extractive industry • Loading and unloading infrastructure and activities • Port Services – Dredged material placement or reclamation • Temporary construction hardstand or laydown area.

5.4 WHARVES PRECINCT

The intent, specific outcomes and consistent land uses for the Wharves precinct are provided in Table 5.4.

Table 5.4 Wharves precinct

Wharves precinct **Designates areas of strategic port land that is critical to the function of current and future port operations (i.e. ship manoeuvring, berthing, loading/unloading).**	
Intent	a) Development provides for maritime operations, port facilities and structures, including wharves, berths**,** shipping channels, jetties, conveyors, pipelines, loading/unloading equipment, tug and pilot boat mooring and barge and ferry facilities related to port operations. b) Development accommodates maritime based port operations, facilities, activities and infrastructure primarily related to the transfer and the loading and unloading of bulk cargos, break bulk cargos and container cargos for import and/or export. c) Development is appropriately located to maximise export/import capacity of associated waterfront developments which rely on or benefit from access to marine infrastructure. d) Development may include areas that are required or intended for the placement, storage, dewatering and settlement and/or potential removal of dredged material or reclamation. e) Development that involves land uses such as marinas are not supported in this precinct. f) Development addresses risks associated with coastal erosion and coastal processes.
Built form outcomes	a) Development ensures that tidal land resources are utilised efficiently and developed in a coordinated manner. b) Development ensures the security of property, safe handling of materials and cargos and operational safety of people. c) Development provides safe and efficient vessel access, manoeuvring and berthing areas. d) Development provides safe and efficient vehicle access, parking, manoeuvring and loading/unloading areas. e) Development provides a built form that incorporates the principles of ecologically sustainable development, including (but not limited to) elements of sustainable design and materials, water conservation, high energy efficiency, appropriate landscape design and stormwater design and management.
Infrastructure outcomes	a) Development prioritises the integration and co-location of existing and new infrastructure, including linear infrastructure. b) Development that involves new infrastructure is utilised efficiently, is constructed to accommodate potential future development and does not unreasonably prejudice the future use of the area. c) Development incorporates renewable energy generating systems (e.g. solar panels), where possible.
Environmental and community outcomes	a) Development avoids, minimises and mitigates potential environmental impacts and maintains compliance with relevant legislation and polices. b) Development avoids, minimises and/or mitigates potential impacts to sea turtle nesting and foraging areas, in particular the very significant sea turtle nesting area of the Woongarra Coast and Mon Repos Conservation Park by minimising light spillage and sky glow. c) Development provides appropriate investigation, management and mitigation measures for potential and actual acid sulfate soils. d) Development is located an appropriate distance from sensitive land uses. e) Emissions (e.g. dust) are managed onsite or within loading/unloading infrastructure, minimising any impacts to adjacent sites, operations or products. f) Contamination within port limits is remediated as soon as possible after it occurs, and sites are rehabilitated upon cessation of activities.

Wharves precinct

Designates areas of strategic port land that is critical to the function of current and future port operations (i.e. ship manoeuvring, berthing, loading/unloading).

	g) Development avoids, minimises and mitigates any potential impacts to cultural heritage in accordance with relevant legislation, polices and guidelines.
Consistent land uses	• Emergency services • Landing • Loading and unloading infrastructure and activities • Passenger terminal • Port infrastructure • Port services – Dredging • Port Services – Dredged material placement or reclamation • Port Services – Pilotage and other support services • Renewable energy facility, where for ocean, wave or tidal energy • Substation • Temporary construction hardstand or laydown area • Transhipping • Utility installation.

5.5 MARINA PRECINCT

The intent, specific outcomes and consistent land uses for the Marina precinct are provided in Table 5.5.

Table 5.5 Marina precinct

Marina precinct **Designates marine water area for current and future maritime marine industries and associated maritime services that are critical to the functions of a marina.**	
Intent	a) Development involving offshore facilities or structures, including pontoons, berths, jetties, and service facilities associated with a marina are supported. b) Development does not include shipping facilities associated with exports and imports. c) Development does not compromise the long term, efficient operation of the Port of Bundaberg or marina. d) Development supports and encourages local employment opportunities. e) Development may include areas that are required or intended for the placement, storage, dewatering and settlement and/or potential removal of dredged material or reclamation. f) Public access within this precinct is generally unrestricted, unless it can be demonstrated that the access will result in unacceptable risks or potential impacts to port operational, safety and security requirements, or property that is privately or commercially owned. g) Commercial vessel repair and maintenance is not supported in this precinct. h) Development for the provision of safe harbour for vessels is supported.
Built form outcomes	a) Development ensures that tidal land resources are utilised efficiently and developed in a coordinated manner. b) Development ensures the security of property and operational safety of people. c) Development provides safe and efficient vessel access, manoeuvring and berthing areas.
Infrastructure outcomes	a) Development ensures that existing and new marina facilities are utilised efficiently and optimally. b) Marine industries have or will have appropriate/approved links to adjacent land uses where required. c) Development ensures that the operations of existing and new single and multi-user marina services are coordinated to manage potential conflicts. d) Development incorporates renewable energy generating systems (e.g. solar panels), where possible.
Environmental and community outcomes	a) Development avoids, minimises or mitigates potential environmental impacts and maintains compliance with relevant legislation and polices. b) Development avoids, minimises and/or mitigates potential impacts to sea turtle nesting and foraging areas, in particular the very significant sea turtle nesting area of the Woongarra Coast and Mon Repos Conservation Park by minimising light spillage and sky glow. c) Development provides appropriate investigation, management and mitigation measures for potential and actual acid sulfate soils. d) Development is located an appropriate distance from sensitive land uses. e) Contamination within port limits is remediated as soon as possible after it occurs, and site is rehabilitated upon cessation of activities. f) Development avoids, minimises and mitigates any potential impacts to cultural heritage in accordance with relevant legislation, polices and guidelines. g) Development supports small scale and low impact, community uses, for activities that are coastal dependent i.e. sailing.
Consistent land uses	• Community use, where for coastal dependent activities • Emergency service • Landing • Loading and unloading infrastructure and activities

Marina precinct

Designates marine water area for current and future maritime marine industries and associated maritime services that are critical to the functions of a marina.

	• Marina • Marina service • Marine industry, where for the service or servicing of vessels • Passenger terminal • Port services – Dredging • Port services – Dredged material placement or reclamation • Port services – Pilotage and other support services • Substation • Utility installation.

5.6 BUFFER AND CONSERVATION PRECINCT

The intent, specific outcomes and consistent land uses for the Buffer and conservation precinct are provided in Table 5.6.

Table 5.6 Buffer precinct

Buffer and conservation precinct **Designates areas of strategic port land identified as having ecological significance, as well as areas that separate port operations from surrounding sensitive land uses.**	
Intent	a) The buffer and conservation precinct may be used to separate potentially incompatible port industry activities or may be used to separate port industry activities from surrounding sensitive land uses. b) Development does not have significant adverse impacts on wetland protection areas, including Wallace Creek. c) Development manages potential impacts on sensitive land uses and matters of environmental significance. d) New development is limited and must be compatible with or contribute to the values/outcomes of the precinct. e) Development involving linear infrastructure and utility installations may be accommodated. f) Development is limited within this precinct to ensure that it does not adversely compromise the ability to use that land for port purposes in the future, including use for a buffer. g) Development includes suitable stormwater management and acts as a visual buffer to established port infrastructure. h) Development may include areas that are required or intended for the placement, storage, dewatering and settlement and/or potential removal of dredged material or reclamation. i) Development addresses risks associated with coastal erosion and coastal processes.
Built form outcomes	a) Development on a small scale may be accommodated where consistent with ecological values. b) Development achieves or enhances existing amenity, scenic values and landscape character to the extent practicable.
Infrastructure outcomes	a) Development prioritises the integration and co-location of existing infrastructure, including linear infrastructure. b) Development that involves new infrastructure is utilised efficiently and is constructed to accommodate potential future development and does not unreasonably preclude any future land use or development in the area. c) Development incorporates renewable energy generating systems (e.g. solar panels), where possible.
Environmental and community outcomes	a) Development does not have any residual impact on matters of environmental significance. b) Development avoids, minimises and/or mitigates potential impacts to sea turtle nesting and foraging areas, in particular the very significant sea turtle nesting area of the Woongarra Coast and Mon Repos Conservation Park by minimising light spillage and sky glow. c) Development provides appropriate investigation, management and mitigation measures for potential and actual acid sulfate soils. d) Development ensures that habitat corridors are maintained and enhanced by avoiding fragmentation of matters of environmental significance. e) Development ensures that open space and environmental buffers are provided between port facilities and nearby sensitive land uses as well as ecological values. f) Development avoids, minimises and/or mitigates any potential impacts to cultural heritage in accordance with relevant legislation, polices and guidelines. g) Development complies with relevant environmental legislation and policies. h) Development provides opportunities for educational or interpretative experience of the environment, where possible. i) Development avoids, minimises and/or mitigates potential impacts to migratory shorebird habitat.

Buffer and conservation precinct

Designates areas of strategic port land identified as having ecological significance, as well as areas that separate port operations from surrounding sensitive land uses.

Consistent land uses	• Animal husbandry • Community use • Environmental facility • Emergency services • Landing • Market • Nature based tourism • Outstation • Park • Port infrastructure • Port Services – Dredged material placement or reclamation • Substation • Utility installation.

6 Development codes

6.1 OVERVIEW

Development codes are codes for assessment where identified as an applicable code in Section 4.3 of the LUP 2020.

The development codes for the LUP 2020 are:

- Port development code;
- Marine code;
- Infrastructure, services and works code; and
- Environmental management code.

Each development code consists of the following elements:

- Purpose and overall outcomes – identifies the purpose of the code and the overall outcomes to be met in achieving the purpose of the code; and
- Criteria for assessment – specific criteria against which development is assessed that includes performance outcomes and acceptable outcomes.

6.2 PORT DEVELOPMENT CODE

6.2.1 Purpose and overall outcomes

The purpose of the Port development code is to ensure port services are designed and operated in a manner which meets the needs of the industry users, protects public safety, protects environmental values and appropriately responds to amenity considerations.

The purpose of the Port development code will be achieved through the following overall outcomes:

a) Development facilitates the establishment, operation and/or expansion of new uses that support the role of the Port of Bundaberg as a strategic port and the operational nature of port development, facilities and activities, while having regard to the Port of Bundaberg as an economic, freight and logistics hub.

b) Development is efficient, coordinated and where possible, shared to optimise utilisation and maximise the benefits of port infrastructure.

c) Development involving buildings and structures incorporates a variety of building forms, materials and façade treatments responding to the existing locality.

d) Development design, construction and maintenance contributes to the visual amenity and character of the surrounding area and protects the amenity of any nearby residential areas and environmental values.

e) Development is appropriately serviced and considers planned future port activities and other infrastructure.

f) Development achieves safe, efficient and orderly integration with the existing transport infrastructure, having regard to the surrounding road network, including key transport corridors, State controlled and local government roads, and transport modes (refer Figure 4, Appendix B).

g) Development provides for the safe and efficient access and parking for vehicles and pedestrians which does not interfere with port operations.

h) Development provides high-quality landscaping, fencing and signage which does not detract from the visual amenity and character of the surrounding area.

i) Development that involves temporary development does not compromise or adversely impact upon existing or planned future port operations.

j) Development ensures that port operations are safe and secure and do not pose a safety or hazard risk to adjoining people or property.

Editor's note—Development must be in accordance with the Building Code of Australia, the relevant Australian Standards and be approved by a building certifier.

Editor's note—Direct access or otherwise from a State-controlled road will be determined by the Department of Transport and Main Roads.

6.2.2 Performance outcomes and acceptable outcomes

Table 6.1 contains the assessment criteria for the Port development code for assessable development.

Table 6.1 Port development code assessment criteria

Performance outcome	Acceptable outcome
Land use	
PO1 Development complements surrounding land uses and does not compromise port operations or port facilities.	**AO1.1** No acceptable outcome is prescribed.
Port optimisation	
PO2 Development: a) Optimises existing facilities and infrastructure. b) Minimises new building footprints, where co-located on or within existing multi-user areas; and c) Where new structures are required, development integrates and maximises the use of this.	**AO2.1** Development is co-located on or within existing operational multi-user areas and on shared infrastructure (e.g. conveyors, pipelines etc.).
Buildings and structures	
PO3 Building and structures do not result in amenity impacts such as overshadowing.	**AO3.1** Buildings and/or structures have a minimum setback of: a) 10 m from a State-controlled road or an arterial on sub-arterial road; b) 6 m from any other road frontage; and c) 3 m from side or rear boundaries.
	AO3.2 Development that adjoins a sensitive land use is setback a minimum of 6 m from the shared boundary.
PO4 Development that involves linear infrastructure provides for efficient use of corridors and opportunities to integrate with existing infrastructure, while not compromising the future use of the surrounding land.	**AO4.1** Linear infrastructure is: a) Co-located with, above or below existing linear infrastructure in common trenches wherever possible; or b) Located separately but parallel to existing linear infrastructure in a manner that minimises the area of land utilised for this purpose.
PO5 Development ensures that the building height is consistent with surrounding development.	**AO5.1** No acceptable outcome is prescribed.

Performance outcome	Acceptable outcome
PO6 Development does not cause an obstruction or hazard to the safe movement of aircraft through the temporary or permanent intrusion of physical structures into the airports operational airspaces.	**AO6.1** Development and vegetation at its mature height do not intrude into the obstacle limitation surface (OLS) of the airport. Note: The airports OLS is identified within the SPP interactive mapping system under the 'infrastructure' theme, subsection 'Strategic airports and aviation facilities'
PO7 Development has a site cover which is appropriate for use and locality and incorporates adequate dimensions for: a) Setbacks; b) Landscaping; c) Vehicle parking; d) Loading and unloading areas; and e) Vehicle manoeuvring and access.	**AO7.1** Development provides a maximum site cover of 80%.
PO8 Development incorporates a variety of forms, materials and treatments that are consistent with the character of the surrounding area. The built form is: a) Of a type and scale which contributes to a high quality and attractive streetscape; b) Constructed of materials and finishes complementary to the area; and c) Minimises the visual bulk of buildings by articulating facades visible from the street, open space or the water.	**AO8.1** Development achieves a high standard of visual amenity and incorporates a range of external design elements which includes: a) Façade treatments, such as window placement, screening, articulation, decorative items; b) Varied roof pitch and design; c) Building recesses, overhangs and shading; and d) Colours and building textures consistent with surrounds.
PO9 Development provides site entrances which: a) Provide safe, secure and convenient access to the site for workers and visitors; b) Provide lighting; and c) Provide clear building signage and numbering for emergency access.	**AO9.1** Development provides for: a) A clear pedestrian path of travel from the footpath to building entry; and b) A building entry that is oriented towards the primary road frontage and well lit to be clearly visible at night; c) Clear building numbering for emergency access; and d) Signage that is visible from the street.
PO10 Development is appropriately designed and located to minimise impacts on existing services.	**AO10.1** Development for a building and ancillary structures is not located over, and maintains access to: a) Potable and raw water supply mains; b) Sewerage or stormwater infrastructure; c) Power services; and d) Telecommunication and fibre optic services.
PO11 Open storage areas are adequately screened to minimise impacts on the visual amenity of the surrounding area, including adjoining public spaces, street frontages and sensitive uses.	**AO11.1** Development that involves an open storage area provides screening that includes: a) 1.8 m high solid fence; b) Screened enclosures; or c) Dense vegetated screening (e.g. direct seeded or planted trees, gardens, etc.).
Sustainable design and energy efficiency	

Performance outcome	Acceptable outcome
PO12 Development incorporates passive and active sustainable design operation and management features, including but not limited to: a) Consideration of water usage; b) Waste management systems; c) Lighting; d) Building design; e) Renewable energy options; and f) Transport and vehicle movement efficiencies.	**AO12.1** Development incorporates design elements that use energy efficient infrastructure, including: a) Natural ventilation; b) Energy efficient lighting technologies are adopted; and c) Use of renewable energy.
	AO12.2 Development incorporates design elements that promote water usage efficiency, including: a) Process water reuse, stormwater capture and reuse (segregation of clean water from any pollutants); and b) Improved operational processes to reduce requirement for water use.
	AO12.3 Development incorporates waste management/minimisation strategies, including the capture, segregation/separation of wastes, material reuse and recycling minimisation or process wastes.
	AO12.4 Development includes sustainable materials that are sustainably made or sourced materials such as those that are locally produced, have recycled components/composition, durable and low-maintenance or have lower chemical/toxic substances.
Natural hazards and risks	
PO13 Development within the Flood Hazard Area and Storm Tide Inundation Area is resilient to flooding and storm tide inundation by ensuring that: a) Building and structures are sited, designed, constructed and located to avoid or minimise risk to people and damage to property; b) Buildings and structures are located and designed so that floor levels (except areas used for car parking) optimise flood resilience by ensuring that the structures are elevated and located on the highest part of the site; c) Essential community infrastructure effectively maintains its function during and immediately after flood and storm tide events; and d) Building and structures respond to the predicted effects of climate change, including sea level rise (0.8m by 2100). Note: Refer to the State Planning Policy interactive mapping regarding flood hazard and storm tide inundation mapping for the Bundaberg region Note: Certification from a Registered Professional Engineer of Queensland (RPEQ) that the development avoids or mitigates risks from the Flood Hazard Level and Defined Flood Event may be used to demonstrate compliance with this performance outcome.	**AO13.1** Development: a) Is not located within the Flood Hazard Area and Storm Tide Inundation Area; or b) Complies with the minimum flood planning levels, i.e. Defined Flood Level plus a relevant freeboard. Note: Refer to the State Planning Policy interactive mapping regarding flood hazard and storm tide inundation mapping for the Bundaberg region. Note: The freeboard for a lot in a Flood Hazard Area is where a local government has declared a freeboard for the part of the area where the lot is located, under Section 13 of the *Building Regulation 2006* – the height above the defined flood level declared to be the freeboard or otherwise a height of at least 300 mm.
	AO13.2 Development has an emergency evacuation plan for people to evacuate to a gathering point above the Flood Hazard Area and Storm Tide Inundation Area.
	AO13.3 Development does not result in the intensification of residential uses or extensions to existing dwelling houses on premises within the Flood Hazard Area and Storm Tide Inundation Area.

Performance outcome	Acceptable outcome
	AO13.4 Development involving infrastructure that is necessary to service the Port of Bundaberg and port-related industry is designed and constructed to resist hydrostatic and hydrodynamic forces as a result of inundation or coastal processes. Note: The relevant building assessment provisions under the *Building Act 1975*, including QDC MP3.5 – Construction of Buildings in Flood Hazard Areas, apply to building work within a Flood Hazard Area.
PO14 Development does not directly, indirectly or cumulatively change flood characteristics which may cause adverse impacts external to the development site.	**AO14.1** Development within the flood hazard area does not result in a reduction in flood storage capacity.
	AO14.2 Development does not increase the flood hazard (e.g. by way of increased depth, duration or velocity of flood waters or a reduction in warning times) for premises external to the development site.
	AO14.3 No earthworks (including filling of land or reduction of flood storage capacity) occurs on land below the DFL, unless – a) An assessment, undertaken by a suitably qualified consultant, demonstrates that the reforming of the land does not negatively impact on the overall hydrology, hydraulics and flood capacity of the watercourse and does not in any way result in the reduction of flood storage capacity on the site. Note: GPC may consider acceptable tolerances for changes to flood behaviour compared to existing conditions where included in an approved floodplain management plan.
PO15 Development is located and designed to minimise the risk to all persons from coastal hazards, including consideration of the predicted effects of climate change, including sea level rise (0.8m by 2100).	**AO15.1** Development: a) Installs and maintains coastal protection works to mitigate any potential impacts to people and property from coastal hazards; or b) Is located and designed to withstand coastal erosion impacts.
	AO15.2 Development is only located within an erosion prone area, where involving: a) Coastal dependent development; b) Essential infrastructure (e.g. stormwater outlets, etc); c) Essential community infrastructure; d) Marina/wharf/berth infrastructure to support the Port of Bundaberg; or e) Port supporting development.

Performance outcome	Acceptable outcome
PO16 Development incorporates design measures to ensure it is not adversely impacted by the threat of landslide by ensuring: a) The long term stability of the development site considering the full nature and end use of the development; b) Site stability during all phases of construction and development; c) That the development is not adversely affected by landslide activity originating on sloping land above the site; and d) Emergency access and egress from the site for the public and emergency vehicles is available and is not a risk from landslide. Note: A site-specific geotechnical assessment report prepared in accordance with AGS2007 can assist in demonstrating achievement of this performance outcome.	**AO16.1** Development located in or near a landslide hazard area (being an area with slope greater than 15%) does not: a) Involve an extension greater than 20 m^2 of gross floor area; b) Involve vegetation clearing; and c) Alter ground levels.
PO17 Development maintains the safety of people, property and the surrounding environment from hazardous materials stored in bulk from the risk of landslide.	**AO17.1** Development does not include the storage or handling of hazardous chemicals in a landslide hazard area (being an area with a slope greater than 15%).
PO18 Development is sited, designed and maintained taking account of all relevant factors affecting the bushfire hazard on the site to: a) Minimise the number of buildings and people working, living or visiting a site exposed to bushfire risk; and b) Increase the survival of buildings and structures during a bushfire. Note: A bushfire management plan can assist in demonstrating achievement of this performance outcome.	**AO18.1** No acceptable outcome is prescribed.
Transport, access and parking	
PO19 Development provides onsite access, manoeuvring, circulation and parking areas that: a) Are safe and convenient; b) Do not interfere with the planned function, safety, capacity, efficiency and operation of the road network; c) Meets onsite requirements and anticipated demand; and d) Limits potential for conflict between vehicles and pedestrians. Note: A traffic impact assessment or traffic management plan may be required addressing the impacts of the development and associated vehicle activity on the road network. Note: The acceptable outcome and performance outcome can be demonstrated through certification by a RPEQ that the development complies with *GPC's Transport, Access and Car Parking Guideline*.	**AO19.1** Development complies with the standards for access, manoeuvring, circulation and parking areas in accordance with GPC's *Transport, Access and Car Parking Guideline*, including Table 1 Vehicle Parking Rates. **AO19.2** Development provides parking areas that are located close to building entrances and well lit to enable safe access at night.

Performance outcome	Acceptable outcome
PO20 Development provides access, manoeuvring, circulation and parking areas to accommodate vehicles without adversely affecting the overall amenity and streetscape quality of the surrounding area, including: a) Contamination of port network roads with product, pavement or other material; and b) Air emissions e.g. dust from product or pavement.	**AO20.1** No acceptable outcome is prescribed.
PO21 Development is to comply with the relevant State and local government standards for State and local government roads respectively, or other standards adopted by GPC for port roads for: a) New roads and intersections; b) Upgrading requirements of existing roads and intersections; and c) Specifications for pavement types for port roads. Note: The Department of Transport and Main Roads standards and specifications will apply in relation to the State-controlled road network, including intersections and access.	**AO21.1** Development involving new roads, road upgrades and pavement types demonstrates compliance with GPC's *Transport, Access and Car Parking Guideline.*
PO22 Development must identify and demonstrate the suitability of heavy vehicles access and routes required:: a) To or from the site on the local and State-controlled road network; and b) Between the premises and wharf.	**AO22.1** Heavy vehicle routes on Port of Bundaberg roads must be identified and compliance demonstrated with GPC's *Transport, Access and Car Parking Guideline.* **AO22.2** Heavy vehicle routes on other roads within the Port of Bundaberg road network must be identified and compliance demonstrated with the Department of Transport and Main Roads' *Guide to Traffic Impact Assessment.*
PO23 Development has no significant impact on the safety, efficiency, function, convenience of use or capacity of the road network. Note: Development may be referred to Bundaberg Regional Council for Third Party Advice in relation to the local road network and the Department of Transport and Main Roads in relation to the State-controlled road network. Note: A traffic impact assessment or traffic management plan may be used to demonstrate compliance with this performance outcome.	**AO23.1** The impact of traffic generated by the development on the road network has been assessed in accordance with the with GPC's *Transport, Access and Car Parking Guideline* and any impact mitigation measures identified and implemented. Note: Development may be referred to the Department of Transport and Main Roads or Bundaberg Regional Council for Third Party Advice in relation to the State-controlled and local road networks respectively. Note: The Department of Transport and Main Road's *Guide to Traffic Impact Assessment* can be used when preparing documentation to demonstrate compliance with this acceptable outcome.

Performance outcome	Acceptable outcome
PO24 Development provides for and enhances public access, including (but not limited) to parking areas, walkways and recreational facilities in a way that is designed to achieve safety for property, staff and the community, having regard to: a) Line of sight; b) Protection from traffic (safe pathways) c) Lighting.	**AO24.1** Development delivers pedestrian access that is: a) Provided along direct and practical routes; b) Clearly delineated and identifiable with clear way-finding and awareness signage and markings; and c) Is restricted through loading and unloading areas, freight docks, wharves, medium rigid vehicle (MRV) manoeuvring areas and other high conflict areas.
Shade structures	
PO25 Development that involves any shade structure visible from or within, a public space is: a) Compatible with the streetscape character; and b) Constructed to ensure safety of pedestrians.	**AO25.1** Development that involves a shade structure is designed: a) With a minimum clearance height of 2.7 m for public safety; and b) Consistent with the setback and character of the area.
Fencing	
PO26 Development provides fencing that maximises safety and security without adversely affecting overall amenity and streetscape quality.	**AO26.1** Development for fencing is: a) A minimum of 1.8 m high, and transparent with black PVC plastic coated, chain wire mesh fence and black posts; or b) A minimum of 1.8 m high, and solid (e.g. metal, timber, plastic or brick, etc.).
	AO26.2 Development provides secure access which includes gates that: a) Are a minimum of 1.8 m high and consistent with existing or proposed fencing; and b) Slide or open inwards to the site.
	AO26.3 Development provides for acoustic fencing with a minimum of 10/kg/m^3 density where adjoining sensitive land uses.
PO27 Development that involves the storage and management of hazardous goods provides fencing that restricts public access.	**AO27.1** No acceptable outcome is prescribed.
Landscaping	
PO28 Development provides landscaping areas: a) To the site frontage and where adjoining other public spaces to enhance the overall amenity of the streetscape and soften the visual impacts of the land use; b) That provide a visual landscape buffer between port operations and residential or community based land uses;	**AO28.1** Development that involves buildings or structures exceeding 2 storeys are complemented by vegetation species that attain a mature height of at least 10 m in 5 years.
	AO28.2 Development complies with GPC's *Landscaping Guideline.* Note: refer to Appendix D for GPC's Landscaping Guideline.

Performance outcome	Acceptable outcome
c) That require limited watering and maintenance; d) That maintains a clear line of sight for vehicles; e) That are integrated with onsite stormwater management; f) That enhance staff recreation areas; and g) That are used to screen air conditioning plant and refuse facilities.	**AO28.3** Where fencing is proposed as transparent (e.g. chain link fence) or solid (e.g. metal, timber, plastic, brick): a) Solid fencing is setback 2 m from the front boundary with an area of landscaping provided between the fence and front boundary; or b) Transparent fencing is located on the front boundary with landscaping provided behind the fence.
	AO28.4 Development provides landscaping that is a minimum of: a) 10% of the site area; and b) 2 m wide along the front boundary.
Signage	
PO29 Development that involves signage does not impact public safety or the amenity of the natural or built environment.	**AO29.1** Signage is located within the boundary of the premises.
	AO29.2 Development does not include on-roof signage, or signage that protrudes above the roofline.
	AO29.3 Development ensures that signage: a) Complements the built form; b) Does not impact on the vehicle line of sight; c) Uses complementary colours and designs consistent with the surrounding area; d) Is structurally sound; e) Uses high quality materials; and f) Will not deteriorate in weather conditions. Note: Certification from a RPEQ may be used to demonstrate compliance with this acceptable outcome to ensure the signage is structurally sound.
	AO29.4 One sign is provided per site.
	AO29.5 Signage: a) Does not exceed 10 m in height; and b) Has a total surface area that does not exceed 10 m^2.
	AO29.6 Development does not include third party advertising.
	AO29.7 Development provides signage that contains the business name and street address and is clearly visible from the street.

Performance outcome	Acceptable outcome
PO30 Advertising devices that are visible from a State-controlled road must not compromise road safety or traffic efficiency of the road.	**AO30.1** Advertising devices that are within 50 m of a State-controlled road are to be designed and located in accordance with the Department of Transport and Main Roads *'Roadside Advertising Manual,* Edition 3, September 2019, or as amended by the Department of Transport and Main Roads'.
Temporary development	
PO31 Development involving temporary development does not jeopardise the planned future use of strategic port land or quarantine it from future use for port infrastructure. Note: A Decommissioning Environmental Management Plan and Rehabilitation Environmental Management Plan may be used to demonstrate compliance with this performance outcome. Refer to Appendix D for GPC's *Environmental Management Guideline*.	**AO31.1** No acceptable outcome is prescribed.
Hazards and safety	
PO32 Development which operates at night ensures that outdoor work areas, vehicle parking and pedestrian areas incorporate appropriate safety measures.	**AO32.1** Development incorporates motion-sensor security and safety energy efficient lighting for night time operations.
PO33 Development that involves the storage, management and transport of hazardous or flammable materials ensures that: a) There is no danger to any person in the natural or built environment; b) Separation distances from adjoining land uses are established.	**AO33.1** No acceptable outcome is prescribed.
PO34 Development does not cause an obstruction or hazard to the safe movement of aircraft within an airport's operational airspace through the emission of particulates, gases or other materials that may cause air turbulence, reduce visibility or affect aircraft engine performance.	**AO34.1** Development does not release the following emissions into operational airspace: a) Gaseous plumes with a velocity exceeding 4.3m/second; b) Smoke, dust, ash or steam; or c) Emissions with depleted oxygen content.

6.3 MARINE CODE

6.3.1 Purpose and overall outcomes

The purpose of the Marine code is to ensure development involving tidal works is designed and operated in a manner which meets the needs of the Port of Bundaberg use, protects public safety and environmental values and appropriately responds to amenity considerations.

The purpose of the Marine code will be achieved through the following overall outcomes:

a) Facilitate activities requiring the establishment, operation and/or expansion of port facilities involving tidal works and coastal dependent development on strategic port land, supporting the role of the Port of Bundaberg as an economic, freight and logistics hub, having regard to the specific operational nature of port/marina development, infrastructure and activities.

b) Sustainable development principles are integrated in the design, construction and operation of port facilities involving tidal structures, including loading and unloading infrastructure.

c) Development involving port facilities, including excluded tidal works (for coastal development), is certified by a RPEQ.

d) Development achieves safe, efficient and orderly integration between transport, transfer and loading/unloading infrastructure, having regard to the surrounding infrastructure.

e) Development protects existing and future port operations, facilities, services and uses of the premises.

f) Development for port facilities are appropriately designed and located to acceptable standards and does not impede existing maritime operations.

6.3.2 Performance outcomes and acceptable outcomes

Table 6.2 contains the assessment criteria for the Marine code for assessable development.

Table 6.2 Marine code assessment criteria

Performance outcome	Acceptable outcome
Section A – All development	
Development optimisation	
PO1 Development supports and contributes to the immediate and long term viability of the strategic port land through the inclusion of compatible land uses and exclusion of sensitive land uses.	**AO1.1** No acceptable outcome is prescribed.
PO2 Development footprint is minimised having regard to optimisation of existing facilities and infrastructure.	**AO2.1** Development footprints are kept to the minimum area required to construct and operate the use.
	AO2.2 Development is: a) Co-located on or within existing operational multi-user areas and on shared infrastructure (e.g. wharves, jetties, conveyors, pipelines etc.); or b) Co-located on or within existing decommissioned multi-user areas or infrastructure (e.g. repurposing or co-locating on or within redundant or decommissioned facilities); or

Performance outcome	Acceptable outcome
	c) Where it can be demonstrated that co-location is not feasible, the development has considered maximising the use of new infrastructure.
Development design	
PO3 Development that involves tidal works, including but not limited to: a) Port infrastructure; b) Marina; c) Marina services; d) Marine industry e.g. dock; e) Landing; f) Dredging or excavation tidal land; or g) Reclamation of tidal land is located and designed such that it will be carried out and operated safely and efficiently. Note: a dredge management plan may be required for the dredging and dredge material disposal activities. Note: a sediment sampling and analysis report conforming with the *National Assessment Guidelines for Dredging 2009* may be required. Note: a risk assessment in relation to potential flood impacts, coastal erosion and coastal process may be required.	**AO3.1** Development design and construction complies with GPC's *Tidal Works Guideline*. Note: refer to Appendix D for GPC's *Tidal Works Guideline*.
PO4 Development within the Flood Hazard Area and Storm Tide Inundation Area is resilient to flooding and storm tide inundation by ensuring that: a) Building and structures are sited, designed, constructed and located to avoid or minimise risk to people and damage to property; b) Buildings and structures are located and designed so that floor levels (except areas used for car parking) optimise flood resilience by ensuring that the structures are elevated and located on the highest part of the site; and c) Essential community infrastructure effectively maintains its function during and immediately after flood and storm tide events. Note: Refer to the State Planning Policy interactive mapping regarding flood hazard and storm tide inundation mapping for the Bundaberg region Note: Certification from a Registered Professional Engineer of Queensland (RPEQ) that the development avoids or mitigates risks from the Flood Hazard Level and Defined Flood Event may be used to demonstrate compliance with this performance outcome.	**AO4.1** Development involving infrastructure that is necessary to service the Port of Bundaberg and port related industry is designed and constructed to resist hydrostatic and hydrodynamic forces as a result of inundation or coastal processes. Note: The relevant building assessment provisions under the *Building Act 1975*, including QDC MP3.5 – Construction of Buildings in Flood Hazard Areas, apply to building work within a Flood Hazard Area. Note: Certification from a Registered Professional Engineer of Queensland (RPEQ) that the development is designed for this purpose may be used to demonstrate compliance with this outcome.
Port operation	
PO5 Development does not have any adverse impacts on the current and long term operation of the Port of Bundaberg.	**AO5.1** Development operation does not impact on: a) Operation of ships entering or leaving the Port of Bundaberg; b) Loading or unloading operations at the Port of Bundaberg; c) Stevedoring operations at the Port of Bundaberg; and d) Dredging operations of the Port of Bundaberg.

Performance outcome	Acceptable outcome
Hazards and safety	
PO6 Development does not present hazards which lead to unacceptable risks to public safety.	**AO6.1** No acceptable outcome is prescribed.
PO7 Development involving the storage, management and transport of hazardous or flammable materials is appropriately managed so that it: a) Does not pose a safety, environmental or health threat to any adjoining/adjacent areas or people; b) Demonstrates that the development is appropriately separated from adjoining/adjacent land uses; and c) Demonstrates that the development is appropriately separated from adjoining land uses.	**AO7.1** Development does not involve the storage, management and transport of hazardous or flammable materials.
Transport, access and parking	
PO8 Development on wharves provides sufficient vehicle manoeuvring, circulation and access.	**AO8.1** An access, circulation and manoeuvring plan is to be provided which illustrates the following details: a) Dimensions of wharves, jetties and approaches; b) Turning manoeuvring templates for largest vehicle to be used; and c) Height clearances.
PO9 Onsite vehicle access is designed to be safe and efficient in accordance with GPC *Transport, Access and Car Parking Guideline*. Note: A vehicle turning template may be used to demonstrate compliance with this performance outcome.	**AO9.1** Development provides appropriate access for the type of vehicles expected to access the site.
	AO9.2 Vehicle manoeuvring is provided onsite so that the expected type of vehicles accessing the site can enter and leave the site in a forward motion.
PO10 Development must provide for safe and efficient vehicle movements on port, local and State-controlled roads. Note: A traffic impact assessment or traffic management plan may be used to demonstrate compliance with this performance outcome.	**AO10.1** No acceptable outcome is prescribed.
PO11 Development involving the use of mobile facilities for loading and unloading activities do not adversely impact upon port operations or infrastructure, including roads, wharves, jetties, shipping channels or berth pockets.	**AO11.1** No acceptable outcome is prescribed.
PO12 Development that involves the transfer of bulk, break bulk or general cargo: a) From vessel to another vessel (including use of barges); or b) Between wharf and vessel within port limits, is undertaken in a manner that reduces the risk and adverse impacts of emergencies including, but not limited to spills and cyclones.	**AO12.1** No acceptable outcome is prescribed.

Performance outcome	Acceptable outcome
Note: A Spill Management and Response Plan (oils/fuels/pollutants) and an Emergency Management Plan, including a Cyclone Management Plan may be required for transfer activities	
Marina based development	
PO13 Development in the marina precinct is designed so it does not impede existing navigational channels or berths, and allows for the safe movement and manoeuvring of existing and proposed vessels.	**AO13.1** No acceptable outcome is prescribed.
PO14 Development in the marina precinct is designed to acceptable Australian engineering and design standards.	**AO14.1** Development complies with Australian Standard AS3962-2001 *Guidelines for design of marinas*.
PO15 Development in the marina precinct provides facilities for the handling and disposal of ship-sourced pollutants. Note: Refer to Australian and New Zealand Environment and Conservation Council (ANZECC), 1997 Best Practice Guidelines for Waste Reception Facilities at Ports, Mariners and Boat Harbours in Australia and New Zealand.	**AO15.1** Access is provided to facilities for the handling and disposal of ship-sourced pollutants, including oil, garbage and sewerage.
	AO15.2 Equipment to contain and remove spillages is stored in a near the marina and is available for use.
	AO15.3 Vessels visiting the marina are able to use the ship-sourced pollutant reception facilities.
Signage	
PO16 Development that involves signage does not cause visual clutter or impact public safety or the amenity of the natural or built environment.	**AO16.1** Signage is located within the premises.
	AO16.2 Development ensures that signage: a) Complements the form of the surrounding area and proposed development; b) Does not impact on marmite safety; c) Uses complementary colours and designs consistent with the surrounding area; d) Is structurally sound; e) Uses high quality materials; and f) Will not deteriorate in weather conditions. Note: Certification from a RPEQ may be used to demonstrate compliance with this acceptable outcome to ensure the signage is structurally sound.
	AO16.3 Signage: a) Does not exceed 4 m in height; and b) Has a total surface area that does not exceed 8 m^2.
	AO16.4 Development does not include third party advertising.
	AO16.5 Development does not include illumination of the advertising device.

Performance outcome	Acceptable outcome
Flood hazard	
PO17 Development does not directly, indirectly or cumulatively change flood characteristics which may cause adverse impacts external to the development site.	**AO17.1** Development within the flood hazard area does not result in a reduction in flood storage capacity.
	AO17.2 Development does not increase the flood hazard (e.g. by way of increased depth, duration or velocity of flood waters or a reduction in warning times) for premises external to the development site.
	AO17.3 No earthworks (including filling of land or reduction of flood storage capacity) occurs on land below the DFL, unless: a) An assessment, undertaken by a suitably qualified consultant, demonstrates that the reforming of the land does not negatively impact on the overall hydrology, hydraulics and flood capacity of the watercourse and does not in any way result in the reduction of flood storage capacity on the site. Note: GPC may consider acceptable tolerances for changes to flood behaviour compared to existing conditions where included in an approved floodplain management plan.
Section B – Additional criteria for development involving operational work for tidal works	
Port operations	
PO18 Development that involves operational work has no adverse impacts upon current and planned future operations.	**AO18.1** Development involving operational work that is tidal works does not result in any adverse impacts to: a) The operation of ships arriving or departing; b) Loading or unloading operations; c) Stevedoring operations; or d) Dredging operations.
	AO18.2 Development involving the demolition of structures, including piling, ensures the entire structure is removed.

6.4 INFRASTRUCTURE, SERVICES AND WORKS CODE

6.4.1 Purpose and overall outcomes

The purpose of the Infrastructure, services and works code is to ensure port industry activities are provided with infrastructure and services that meet the needs across all port precincts, protect public safety and environmental values and appropriately responds to amenity considerations.

The purpose of the Infrastructure, services and works code will be achieved through the following overall outcomes:

a) Development provides services in a cost-effective, efficient and equitable manner.

b) Development provides infrastructure that is integrated with the existing surrounding network.

c) Development is provided with an appropriate standard of water supply, wastewater treatment and disposal, drainage, energy and communications infrastructure and other services.

d) Development provides infrastructure, services and utilities that are designed to accommodate future planned development.

e) Development provides infrastructure that is designed and constructed in a manner which maximises resource efficiency and achieves acceptable maintenance, renewal and adaptation costs.

f) Development involving earthworks, including filling and excavation does not adversely or unreasonably impact upon the stability of the land of the site or adjoining land.

g) Development does not directly, indirectly or cumulatively impact upon flood characteristics or cause adverse impacts external to the development site.

h) Development provides appropriate construction management procedures that mitigate adverse impacts on the surrounding uses.

Editor's note—Development must be in accordance with the Building Code of Australia, the relevant Australian Standards and approved by a building certifier.

6.4.2 Performance outcomes and acceptable outcomes

Table 6.3 contains the assessment criteria for the Infrastructure, services and works code for assessable development.

Table 6.3 Infrastructure, services and works code assessment criteria

Performance outcome	Acceptable outcome
General infrastructure services	
PO1 The development is adequately serviced by reticulated infrastructure, such as water supply, sewage disposal, street lighting, telecommunications and energy.	**AO1.1** The development is serviced with infrastructure in accordance with GPC relevant standard (and local government standards where applicable), including: a) Reticulated water; b) On site or reticulated sewerage; c) Drainage; d) Grid electricity or renewable energy where possible; e) Telecommunications; and f) Gas services. Where reticulated supply is not available (e.g. sewerage) adequate onsite treatment must be provided. Onsite treatment must be designed and engineered to treat expected volumes.

Performance outcome	Acceptable outcome
PO2 The development does not adversely impact upon overhead powerlines. Note: The applicant is encouraged to consult with Ergon Energy regarding legal and safety requirements for buildings and structures near powerlines.	**AO2.1** The development avoids building within 5 m of overhead powerlines.
PO3 Development provides the following at the front of the site: a) Kerb and channel; b) Construction of a carriageway with sufficient width to accommodate the land use and associated activities; c) Forming and grading walkways; d) Drainage works; e) Installation of underground electrical conduits; f) Construction of and required alterations to, public utility mains, services or installations; and g) Landscaping and/or street trees and furniture.	**AO3.1** No acceptable outcome is prescribed.
PO4 The site layout and building design provides areas for storing waste and waste collection that do not affect the amenity of the site and surrounding areas. Waste collection includes: a) Rubbish and recycling collection; and b) Trade waste removal.	**AO4.1** No acceptable outcome is prescribed.
PO5 Fire fighting infrastructure (e.g. fire hydrants, boosters) are located appropriately to fulfil its intended purpose. Note: Written confirmation may be required by the Queensland Fire and Rescue Service that all fire fighting infrastructure and emergency response procedures are acceptable for the development.	**AO5.1** No acceptable outcome is prescribed.
PO6 Infrastructure, utilities and services, whether reticulated or not, accommodate future planned development of any other infrastructure and/or services.	**AO6.1** The design and operation of relevant infrastructure, utilities and services does not impact on existing land uses and infrastructure, and includes: a) Alignments demonstrating efficient land use and location; b) Discharge and/or connection points; and c) Sufficient additional design capacity.
	AO6.2 Linear infrastructure is: a) Co-located above or below existing linear infrastructure in common corridors wherever possible; or b) Located separately but parallel to existing linear infrastructure in a manner that minimises the area of land or structure utilised for this purpose.

Performance outcome	Acceptable outcome
Utility Installation	
PO7 Development for a utility installation is located such that it: a) Maximises its contribution to the infrastructure network it services; b) Uses co-location where possible to reduce costs, and environmental and social impacts; and c) Can be accessed for maintenance and in an emergency.	**AO7.1** No acceptable outcome is prescribed.
PO8 Development for a utility installation is sited and designed to: a) Minimise adverse visual impacts beyond the boundaries of the site; and b) Minimise adverse impacts on the amenity of nearby residential, community or other sensitive land uses.	**AO8.1** No acceptable outcome is prescribed.
PO9 Development for a utility installation provides an attractive street front address, including screening by walls and landscaping strips.	**AO9.1** No acceptable outcome is prescribed.
PO10 Development for a utility is designed, constructed and operated in a manner that a) Minimises energy use; b) Minimises the use of water; and c) Maximises the reuse and recycling of by-products associated with the operation of the utility.	**AO10.1** No acceptable outcome is prescribed.
PO11 The siting and design of any buildings or structures associated with the utility are compatible with the setting and character of the local area in which the facility is located.	**AO11.1** No acceptable outcome is prescribed.
PO12 Development for a utility installation restricts public access where there is a health or safety risk.	**AO12.1** Security fencing is provided to prevent unauthorised access to those parts of the utility that pose a health or safety risk.
	AO12.2 Safety and warning signage is displayed where the utility poses a health or safety risk.
Outdoor lighting	
PO13 Development includes outdoor lighting that: a) Facilitates a safe and secure working environment; b) Does not have an adverse impact on navigation; and c) Does not have an adverse impact on sea turtle nesting areas.	**AO13.1** Outdoor lighting structures are of a sufficient standard to provide: a) Enhanced safety and security of an area; and b) Safe night time working environment if relevant. Note: Details of proposed lighting location and design should be provided on engineering drawings to demonstrate compliance.

Performance outcome	Acceptable outcome
	AO13.2 Permanent outdoor lighting complies with AS4282-*1997 Control of the Obtrusive Effects of Outdoor Lighting.*
PO14 Energy efficient lighting technologies are adopted for outdoor lighting.	**AO14.1** No acceptable outcome is prescribed.
Land stability and safety	
PO15 Ground level geotechnical conditions are constructed to a sufficient engineering standard to allow for imposed loadings.	**AO15.1** All ground level pavements, slabs and hardstand areas are certified by a Registered Professional Engineer of Queensland to withstand proposed loadings of buildings, vehicles, structures and container staking where applicable.
PO16 The carrying out of any excavation or filling does not create any land or structure instability, a personnel safety risk or reduce the utilisation of the adjoining land or structures by its users. Note: Evidence will need to be provided. This should be provided through a landslide hazard assessment prepared by a Registered Professional Engineer that any land with a slope greater than 15% is not prone to landslide.	**AO16.1** No acceptable outcome is prescribed.
PO17 The development includes measures that ensure: a) The long term stability of the development site; and b) The development site will not be adversely affected by landslide activity originating on sloping land above the development site.	**PO17.1** No acceptable outcome is prescribed.
Excavation and filling	
PO18 Excavation and filling: a) Does not cause environmental harm; b) Does not impact adversely on visual amenity; c) Does not impact adversely on adjoining properties; d) Maintains natural landforms as far as reasonably practicable; e) Is stable in both the short and long term; f) Does not prevent or create difficult access to the property; and g) Does not result in ponding, concentration or diversion of overland runoff flows that cause damage to adjacent lands or infrastructure.	**AO18.1** Development provides that: a) Where the site has a slope of: i. 15% or more, the extent of excavation (cut) and fill does not involve a total change of more than 1.5 m relative to the pre-design levels in the first instance, otherwise the natural ground level; or ii. Less than 15%, the extent of excavation (cut) and fill does not involve a total change of more than 1 m relative to the natural ground level at any point. b) Development involving cut or fill does not result in batter that extends beyond the site boundary; c) Retaining walls are no greater than 1 m high; d) Retaining walls are constructed a minimum of 150 mm from property boundaries; and e) The extent of filling or excavation is less than 1.5 m high within 2 m of a property boundary.
PO19 The carrying out of excavation or filling does not impact upon infrastructure or services on the premises.	**AO19.1** No acceptable outcome is prescribed.

Performance outcome	Acceptable outcome
PO20 The carrying out of any excavation or filling or backfilling does not contaminate the premises.	**AO20.1** Development provides that no contaminated material or untreated acid sulfate soil is used as fill or backfill material.
PO21 Excavating and filling does not adversely impact overland flow and groundwater.	**AO21.1** No acceptable outcome is prescribed.
Bridge and culvert works	
PO22 Bridges and culverts for flood immunity minimise traffic disruption and consider public safety and fauna habitat movement.	**AO22.1** No acceptable outcome is prescribed.
Telecommunications facility	
PO23 Development for a telecommunications facility does not adversely impact or limit existing or future port activities and port-related industry.	**AO23.1** No acceptable outcome is prescribed.
PO24 Development for a telecommunications facility does not adversely impact upon the amenity of nearby residential, community or other sensitive land uses.	**AO24.1** Development for a telecommunications facility: a) Is no more than 5 m higher than surrounding structures or vegetation; and b) Has a colour and finish that reduces visual recognition in the landscape.
	AO24.2 Except where co-located with an existing telecommunications facility, the telecommunications facility is located at least: a) 400 m from a residential activity; b) 500 m from any child care centre, community care centre, educational establishment or park; c) 20 m from any public pathway; and d) 1 km from any other existing or approved telecommunications facility (excluding co-located facilities).
	AO24.3 Any building associated with a telecommunications facility is setback from any street front boundary a distance at least equal to the front setback required for the adjoining use.
	AO24.4 A 3 m wide landscaping strip is provided between any building associated with the telecommunications facility and any street front boundary or adjoining use.
PO25 Development for a telecommunications facility is designed and operated to restrict human exposure to electromagnetic radiation in accordance with the: a) Radio Communications (Electromagnetic Radiation – Human Exposure) Standards 2003; and	**AO25.1** No acceptable outcome prescribed.

Performance outcome	Acceptable outcome
b) Radio Protection Standard for Maximum Exposure Levels to Radiofrequency Fields.	
PO26 The telecommunications facility is publicly inaccessible.	**AO26.1** Security fencing is provided to prevent unauthorised entry to a telecommunications facility.
	AO26.2 Safety and warning signage is displayed where necessary.
PO27 Development for a telecommunications facility is designed to facilitate co-location with other telecommunications facilities.	**AO27.1** The structural elements of a telecommunications facility are designed to support co-location with other carriers.
Construction management	
AO28 Air emissions, noise or lighting arising from construction activities and works do not cause environmental harm to surrounding areas.	**AO28.1** Dust emissions do not extend beyond the boundary of the premises.
	AO28.2 Air emissions, including odours, are not detectable at the boundary of the premises.
	AO28.3 Construction lighting complies with AS4282-*1997 Control of the Obtrusive Effects of Outdoor Lighting.*
PO29 Development ensures that the hours of construction are: a) Consistent with reasonable expectations for the use and are consistent with the purpose of the precinct; and b) Controlled so that the development does not impact on the amenity of nearby sensitive land uses.	**AO29.1** Development construction hours are limited to between 6:30 am to 6:30 pm Monday to Saturday, excluding public holidays.
PO30 The construction of the development includes measures to avoid impacts from lighting, noise and vibration on sea turtle activity, including foraging and sea turtle nesting beaches. Note: A Construction Environmental Management plan can assist in demonstrating achievement of this performance outcome.	**AO30.1** No acceptable outcome prescribed.
PO31 The development includes measures to avoid impacts from operational lighting, noise and vibration on sea turtle activity, including foraging and sea turtle nesting beaches. Note: An Operational Environmental Management plan can assist in demonstrating achievement of this performance outcome.	**AO31.1** No acceptable outcome prescribed.
PO32 Construction activities and works (including traffic and parking generated by construction activities) are managed to ensure that:	**AO32.1** Existing utilities and road and drainage infrastructure are protected in accordance with the *Austroads – Guide to Road Design standards.*

Performance outcome	Acceptable outcome
a) Existing utilities and road and drainage infrastructure continue to function efficiently and can be accessed by the relevant authority for maintenance purposes; b) Impacts on the transport network and on the amenity of the surrounding area are minimised; and c) The environmental values of water and the functionality of stormwater infrastructure are protected from the impacts of erosion, turbidity and sedimentation. Note: A traffic impact assessment or traffic management plan may be required in addressing the impacts of the development and associated vehicle activity on the local and State-controlled road network. Note: Development may be referred to BRC for Third Party Advice in relation to the local road network and the Department of Transport and Main Roads in relation to the State-controlled road network. Note: Development demonstrates compliance with the International Erosion and Sediment Control: Best Practice Erosion and Sediment Control or its equivalent can assist in demonstrating achievement of this performance outcome. Note: A Construction Environmental Management Plan may assist in demonstrating compliance with this performance outcome.	**AO32.2** Development demonstrates that site access, manoeuvring, circulation, parking and transport on port roads during construction does not result in: a) Contamination of port network roads with cargo, pavement, mud or other material; and b) Air emissions e.g. dust from cargo or pavement.
PO33 Construction activities and works on tidal land (including vessel traffic and anchorage activities) are managed to ensure that: a) Vessels and floating plant and equipment do not impact on port operations; b) Vessels, floating plant and equipment can be refuelled during construction without spills to tidal water; and c) Materials or debris dropped on the seabed during construction are logged and retrieved prior to completion of the works. Note: An anchorage plan may be required to demonstrate safe anchorage of vessels and floating plant and equipment during construction and during emergencies e.g. cyclones.	**AO33.1** No acceptable outcome prescribed.
Temporary development	
PO34 Where development is a temporary use, infrastructure is still required having regard to the nature of the use.	**AO34.1** No acceptable outcome prescribed.

6.5 ENVIRONMENTAL MANAGEMENT CODE

6.5.1 Purpose and overall outcomes

The purpose of the Environmental management code is to provide for the environmentally sustainable management of terrestrial, freshwater and marine environments, matters of environmental significance, environmental values, ecological processes, coastal processes, landscape character and scenic amenity, community wellbeing and cultural heritage.

The purpose of the Environmental management code will be achieved through the following overall outcomes:

a) Development incorporates the principles of ecologically sustainable development.

b) Potential adverse impacts on sensitive land uses and matters of environmental significance within and surrounding the Port of Bundaberg are avoided; where impacts cannot be reasonably avoided, they are minimised.

c) Potential adverse impacts to environmental values that contribute to ecological health, public amenity or safety and community wellbeing are avoided, minimised and/or managed.

d) Open space and environmental buffers are provided between port facilities and nearby sensitive land uses and ecological values.

e) Development is undertaken in an environmentally responsible manner, having regard to appropriate planning, design, construction, operation and decommissioning management throughout all phases of the development.

f) Development avoids, minimises and/or manages potential impacts to sea turtle nesting and foraging by minimising light spillage and sky glow.

g) Development avoids, minimises and/or manages potential impacts to migratory shorebird habitat.

h) Development complies with air, water and noise policies administered under the EP Act.

i) Development complies with the waste and resource management hierarchy (e.g. avoid, reduce, re-use, recycle, recover, treat and dispose).

j) Development responds sensitively to onsite and surrounding environmental values and supports port optimisation through the consolidation and sharing of infrastructure prior to new infrastructure being built.

k) The design, construction and operation of new buildings ensures high energy efficiency and incorporates renewable energy generating systems.

l) Development appropriately responds to risks associated with natural hazards to protect people and property including, but not limited to, having regard to flood, bushfire, acid sulfate soils and landslide.

m) Development appropriately responds to risks associated with coastal erosion and coastal processes, and is appropriately designed and located having regard to projected impacts of climate change and sea-level rise.

n) Development achieves a high level of visual amenity and maintains existing scenic values and landscape character.

o) Aboriginal and Torres Strait Islander cultural heritage and European heritage is protected and managed in accordance with relevant legislation, polices and guidelines.

p) Ecological processes and connectivity is maintained or enhanced by avoiding fragmentation of matters of environmental significance.

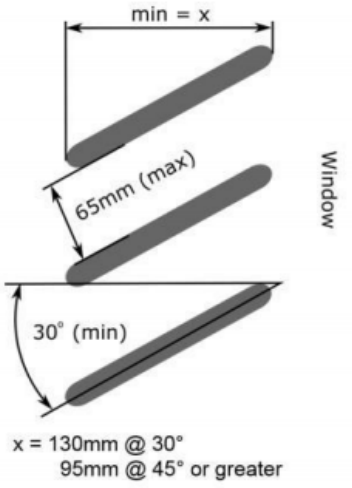
6.5.2 Performance outcomes and acceptable outcomes

Table 6.4 contains assessment criteria for the environmental management code for assessable development.

Table 6.4 Environmental management code assessment criteria

Performance outcome	Acceptable outcome
Section A – All development	
Management plans	
PO1 Development is undertaken in an environmentally responsible manner and does not adversely impact the environment of any person, property or operation. Note: An Environmental Management Plan can assist in demonstrating achievement of this performance outcome. Refer Appendix D for GPC's Environmental Management Plan Guideline	**AO1.1** Development is undertaken in accordance with an Environmental Management Plan that has been prepared and submitted, which is relevant to the phase of activity (i.e. construction, operational) and addresses potential impacts and mitigation measures relating to: a) Air quality (e.g. chemical emissions, odour, fumes, dust); b) Noise and vibration; c) Light; d) Waste; e) Acid sulfate soils; f) Land contamination; g) Water quality (e.g. stormwater, groundwater and waterways (including tidal water)); h) Sedimentation and erosion; i) Ecological values; j) Social amenity; and k) Cultural heritage.
	AO1.2 Development provides for a Decommissioning Environmental Management Plan and a Rehabilitation Environmental Management Plan. Note: refer to Appendix D for GPC's Environmental Management Plan Guideline
Ecological values	
PO2 Development does not have any significant residual impact on matters of environmental significance. Note: Guidance for determining if the development will have a significant residual impact on the MNES is provided in *Significant Impact Guidelines 1.1 - Matter of national environmental significance* and for MSES is provided in the *Queensland Significant Residual Impact Guideline*. The Commonwealth and/or State may impose a requirement to provide an environmental offset where there is a significant residual impact. Note: MSES are mapped on the Queensland Government State Planning Policy Interactive Mapping System. MNES are mapped in the Australian Government Protected Matters Search Tool.	**AO2.1** Development: a) Avoids any disturbance to matters of environmental significance; or b) Where development demonstrates that disturbance cannot be avoided, the extent of the disturbance has been minimised and mitigated.
Hours of operation	
PO3 Development ensures that the hours of operation are: a) Consistent with reasonable expectations for the use and are consistent with the purpose of the precinct; and b) Controlled so that the development does not impact upon the amenity of nearby sensitive land uses.	**AO3.1** No acceptable outcome is prescribed.
Air quality and noise	

Performance outcome	Acceptable outcome
PO4 Development ensures environmental harm or nuisance is not caused at sensitive land uses and receiving environments and avoids, minimises and/or manages any emissions including, but not limited to Indicators listed in Schedule 1 of the *Environmental Protection (Air) Policy 2019*: a) Odour; b) Fumes; c) Dust; d) Light; e) Noise; and f) Vibration. Note: Odour impacts to be assessed in accordance with the Guideline – Odour impact assessment from developments – Department of Environment and Science. Note: A noise assessment may be required to demonstrate compliance with this performance outcome.	**AO4.1** Development complies with the provisions of the *Environmental Protection Act 1994* and associated regulations and policies to: a) Achieve the acoustic quality objectives set out in the *Environment Protection (Noise) Policy 2019*; and b) Achieve the air quality objectives set out in the *Environmental Protection (Air) Policy 2019*. **AO4.2** Noise generating plant and equipment is appropriately enclosed, shielded or acoustically treated and operated (e.g. hours of operation).
PO5 Development avoids, minimises and/or manages the potential for cross contamination of products: a) With other port land uses; and b) In multi-user facilities and shared infrastructure (e.g. wharves, conveyors, storage sites).	**AO5.1** Product cross-contamination between premises boundaries is avoided.
PO6 Development for sensitive land uses is appropriately located, sited and designed in a manner that minimises any operational effects on port operations.	**AO6.1** No acceptable outcome is prescribed.
Outdoor lighting	
PO7 Development provides outdoor lighting that does not result in harm or nuisance to: a) Sensitive land uses; and b) Surrounding properties.	**AO7.1** Outdoor lighting complies with AS4282-1997 Control of the Obtrusive Effects of Outdoor Lighting. **AO7.2** Development provides outdoor lighting that minimises light spillage and adverse impacts on the environment either directly or by reflection, by directing lights downwards and away from sensitive land uses.
Sea turtle and migratory shorebird sensitive controls	
PO8 All outside lighting provided as part of the development avoids direct illumination of the beach, ocean and sky at night. Note: The *National Light Pollution Guidelines for Wildlife Including marine turtles, seabirds and migratory shorebirds* provides relevant guidance material.	**AO8.1** Use outside lighting that is: a) Shielded by 25 cm shades/shields; b) Mounted down low to avoid direct horizontal light or downwards glare onto the beach or ocean; c) Positioned to face away from sensitive uses; and d) Directed away from the coast. **AO8.2** All outside lights are fitted with light motion detection sensors and/or timers to ensure lighting is turned off when not required.
PO9 Development minimises the use and intensity (brightness/luminance) of outside lighting required to	**AO9.1** No acceptable outcome is provided.

Performance outcome	Acceptable outcome
achieve the light's purpose to avoid reflection from the ground, buildings and other surfaces. Note: The *National Light Pollution Guidelines for Wildlife Including marine turtles, seabirds and migratory shorebirds* provides relevant guidance material.	
PO10 Development minimises reflective glare that contributes to sky glow. Note: The *National Light Pollution Guidelines for Wildlife Including marine turtles, seabirds and migratory shorebirds* provides relevant guidance material.	**AO10.1** External building materials, colours and finishes have low reflectivity.
	AO10.2 Impervious areas use coloured (non-reflective) concrete or other pavement material.
	AO10.3 Building design, architectural elements or landscaping treatments block or reduce excessive reflective glare.
PO11 All interior lighting provided as part of the development avoids direct illumination of the beach, ocean and sky at night. Note: The *National Light Pollution Guidelines for Wildlife Including marine turtles, seabirds and migratory shorebirds* provides relevant guidance material.	**AO11.1** All windows and glass doors visible from the coast are: a) Tinted with non-reflective tinting, or utilise smart glass technology, to block a minimum of 50% of light to reduce light transmission or spill from indoor lighting (i.e. allows a maximum of 50% of light to pass through); or b) Shielded by external screens to reduce light spill from indoor lighting.
	AO11.2 All windows are shielded with external fixed louvres, and are to be: a) Solid (i.e. no holes); b) Directed downward from the window at a minimum angle of 30°; or c) In accordance with the dimensions identified within Figure 2 (Fixed louvres detail).  **Figure 2 Fixed louvres**
PO12 Development involving sport and recreation activities avoids new floodlighting.	**AO12.1** No accepted outcome is prescribed.
PO13 Where development involves advertising devices, illuminated signage is avoided or minimised.	**AO13.1** Development for an advertising device does not involve illumination.

Performance outcome	Acceptable outcome
Note: The *National Light Pollution Guidelines for Wildlife Including marine turtles, seabirds and migratory shorebirds* provides relevant guidance material.	
Migratory shorebird habitat	
PO14 Development avoids, mitigates and/or manages potential impacts on migratory shorebird habitat. Note: A supporting technical assessment prepared by a suitably qualified and experienced person in migratory shorebirds may assist in addressing this performance outcome. Guidance on avoiding, assessing and mitigating impacts on migratory shorebirds is provided in *EPBC Act Policy Statement 3.21 Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species.* Note: An Environmental Management Plan can assist in demonstrating achievement of this performance outcome. Refer to Appendix D for GPC's Environmental Management Plan Guideline	**AO14.1** No accepted outcome is prescribed.
Waste	
PO15 Development is designed and operated in accordance with the waste and resource management hierarchy: a) Avoid; b) Reduce; c) Reuse; d) Recycle; e) Recover; f) Treat; and g) Dispose.	**AO15.1** No acceptable outcome is prescribed.
PO16 Waste facilities are provided, located and maintained so as to not cause environmental harm or nuisance onsite or to adjacent land uses.	**AO16.1** Waste facilities are located, designed and maintained, including: a) The number and types of receptacles provided is sufficient for the proposed types and volumes of waste to be generated, including regulated waste; b) The location of the waste and recyclable material storage areas to mitigate the noise and odour generated; c) Solid or vegetation screening of waste storage areas to enhance visual amenity; d) The number and types of receptacles provided is sufficient for the proposed collection, maintenance and use of the receptacles; e) The durability of the receptacles and security from pest incursion; and f) Avoiding spillage, seepage or leakage from receptacles to land or into adjacent areas and sensitive receiving waters and environments.
PO17 Waste and spillage from loading and unloading activities does not enter stormwater drainage systems or tidal waters.	**AO17.1** No acceptable outcome is prescribed.
Acid sulfate soils	

Performance outcome	Acceptable outcome
PO18 Areas within the development site containing acid sulfate soils are accurately identified.	**AO18.1** Acid sulfate soils within the development site are identified by undertaking an acid sulfate soils investigation conforming to the latest national and Queensland guidelines and soil analyses according to the Laboratory Methods Guidelines or Australian Standard AS 4969. Note: Refer to Appendix D for GPC's *Tidal Works Guideline*.
PO19 Development avoids disturbing acid sulfate soils or, where this cannot be achieved, disturbances are managed to prevent the release of acid, iron and associated pollutants into the environment. Note: If acid sulfate soils are to be disturbed, an Environmental Management Plan outlining how the proposed development will ensure that the mobilisation and release of acid, iron and other associated pollutants into the environment will be prevented may be required. The Environmental Management Plan should use strategies documented in the latest National and Queensland Soil Management Guidelines.	**AO19.1** The development avoids disturbing acid sulfate soils by: a) Not excavating or otherwise removing soil or sediment identified as containing acid sulfate soils; b) Not permanently or temporarily dewatering that results in the oxygenation of previously saturated acid sulfate soils; c) Not undertaking filling that results in: i. actual acid sulfate soils being moved below the water table, i. previously saturated acid sulfate soils being aerated. Note: Refer to Appendix D for GPC's *Tidal Works Guideline*.
Land and water contamination	
PO20 Development avoids and minimises the potential for contamination of land and water. Note: A Baseline Contaminated Land Report prepared by a suitably qualified person to determine pre-existing contamination levels can assist in demonstrating achievement of this performance outcome. Note: Compliance with the National Environment Protection (Assessment of Site Contamination) Measure can assist in demonstrating achievement of this performance outcome.	**AO20.1** Development on a site listed on the Environmental Management Register (EMR) or Contaminated Land Register (CLR), incorporates practices to minimise and manage environmental impacts from contamination, including the preparation and implementation of a management plan.
	AO20.2 No contaminated material or untreated acid sulfate soil is used as fill material.
	AO20.3 Development is designed, constructed, operated and maintained in a manner that avoids and minimise contamination of land, stormwater, groundwater, and waterways (including tidal waters) having regard to proposed: a) Onsite processes and materials and products; b) Potential contaminant storage, handling and use; and c) Waste generation, emissions and storage.
PO21 In the event of an incident resulting in contamination of land, or water an incident response plan is immediately enacted and the environment remediated as soon as practicable.	**AO21.1** Procedures for responding to contamination of land, including spills, are to be incorporated into the development. These procedures are to include, but are not limited to: a) Containment of the spill as soon as practicable; b) Provision of appropriate clean up equipment; c) Clean up procedures and staff training; and d) Remediation of land in a timely manner. Note: An Environmental Management Plan may assist to demonstrate compliance with this acceptable outcome. Refer to Appendix D for GPC's Environmental Management Plan Guideline.
	AO21.2 Development ensures that following an incident, remediation of land and any proposed residual contamination or ongoing management requirements are to be implemented.
	AO21.3

Performance outcome	Acceptable outcome
	Development that is near, on or above tidal waters that poses a risk of spills to tidal waters provides a Marine Spill Response Plan.
	AO21.4 The disposal of contaminated soils, water and clean up materials is to be conducted by licenced contractors for disposal at licenced facilities.
PO22 The development site can be remediated and land rehabilitated upon cessation of activities. Note: A Rehabilitation Environmental Management Plan may be required to demonstrate compliance with this performance outcome. Refer to Appendix D for GPC's Environmental Management Plan Guideline.	**AO22.1** No acceptable outcome is prescribed.
Water quality	
PO23 Environmental values and water quality objectives of receiving waters within or downstream of the development are protected or enhanced.	**AO23.1** Development complies with the referenced standards and any requirements including, but not limited to, the *Environmental Protection (Water and Wetland Biodiversity) Policy 2019* (Qld). Relevant water quality objectives for receiving waters are identified and site specific discharge standards are met.
Stormwater and drainage	
PO24 Stormwater infrastructure has sufficient capacity for storm events and includes water sensitive urban design.	**AO24.1** Development provides stormwater infrastructure of sufficient capacity for the site and proposed activities and complies with the *Queensland Urban Drainage Manual*.
	AO24.2 Engineering drawings of all stormwater infrastructure design are provided, including discharge points, catchment areas, overland flow paths or outfalls and details of proposed treatment devices where relevant.
	AO24.3 Site layout incorporates the use of water sensitive urban design elements to effectively manage and treat stormwater before release to the GPC drainage system or the receiving environment including by way of: a) Sediment basins; b) Bioretention swales/basins; c) Sand filters; d) Other swales or buffer systems; e) Rainwater tanks; and f) Ponds or constructed wetlands where appropriate.
PO25 Development is planned, designed, constructed and operated to avoid or minimise adverse impacts on stormwater quality by: a) Achieving stormwater quality objectives; b) Protecting water environmental values; and c) Maintaining waterway hydrology.	**AO25.1** Stormwater quality treatment measures must be incorporated and reflect land use constraints, such as: a) Erosive, dispersive and/or saline soil types; b) Landscape features (including landform); c) Acid sulfate soil and management of nutrients of concern; and d) Rainfall erosivity. Note: A stormwater quality management plan is an appropriate method to demonstrate compliance.

Performance outcome	Acceptable outcome
	AO25.2 Development include velocity reduction measures, including the maintenance and re-establishment of native vegetation in drainage patterns.
	AO25.3 Development includes the retention of natural drainage patterns.
	AO25.4 Development includes stabilisation of exposed surface through sediment fencing, erosion protection (matting or vegetation), vegetation buffers or retention, temporary sediment basins or other controls as appropriate.
PO26 Development responds sensitively to onsite and surrounding topography, drainage patterns, access, vegetation and visual amenity from surrounding areas, such that: a) Any earthworks are minimised; b) The retention of natural drainage lines are maximised; and c) The retention of existing vegetation is maximised.	**AO26.1** No acceptable outcome is prescribed.
PO27 The development ensures that stormwater does not contaminate waterways and marine waters and provides for the collection, treatment and disposal of all waste such that: a) There is no offsite release of contaminants via stormwater; b) All wastes are adequately collected and disposed of to avoid contaminating stormwater; and c) There are no adverse impacts on the quality of surface water or groundwater resources.	**AO27.1** Areas where potentially contaminating substances are handled, stored or used: a) Are roofed and designed to prevent intrusion from stormwater where practical; and b) Make provision for potential spills to be bunded and retained onsite for removal and disposal by an approved means.
	AO27.2 Development includes stormwater quality improvement devices optimising the interception and removal of water borne pollutants (i.e. contaminate control measure to remove waste from stormwater).
	AO27.3 Wastewater associated with an industrial use is disposed of through: a) Council's sewerage system; or b) An onsite industrial waste system.
	AO27.4 No discharge of waste occurs to tidal water, local watercourses (including dry watercourses) or wetlands.
PO28 Development does not result in worsening of, stormwater, flooding or drainage impacts on a State-controlled road.	**AO28.1** No accepted outcome is prescribed.
PO29 Run-off from the development site is not unlawfully discharged to a State-controlled road.	**AO29.1** Development does not create any new points of discharge to a State-controlled road.
	AO29.2 Stormwater run-off is discharged to a lawful point of discharge. Note: Section 3.9 of the Queensland Urban Drainage Manual, Institute of Public Works Engineering Australasia (Queensland Division), Fourth

Performance outcome	Acceptable outcome
	Edition, 2016, provides further information on lawful points of discharge.
	AO29.3 Development does not worsen the condition of an existing lawful point of discharge to the state-controlled road.
PO30 Run-off from the development site during construction does not cause siltation of stormwater infrastructure affecting a state-controlled road.	**AO30.1** Run-off from the development site during construction is not discharged to stormwater infrastructure for a state-controlled road.
Erosion and sediment control	
PO31 Earthworks prevent any worsening or accelerating of soil erosion on the site, any adjoining land, or land upstream or downstream of the site as a consequence of the work to ensure that: a) Environmental values and objectives of receiving waters within or downstream of the site are protected or enhanced during the construction, operation and maintenance phases; and b) The release of sediment-laden stormwater for all land disturbances is minimised through the use of all reasonable and practicable erosion and sediment control measures with degraded areas reinstated. Note: Demonstrating compliance with the *International Erosion and Sediment Control: Best Practice Erosion and Sediment Control* or its equivalent may assist in demonstrating achievement of this performance outcome.	**AO31.1** Development complies with the best practice erosion and sediment control provisions by the International Erosion Control Association 2008 (or as amended). Note: The submission of an Erosion and sediment control plan addressing these requirements would be an acceptable method for compliance with this provision.
	AO31.2 Development implements the following measures to mitigate soil erosion: a) Avoiding land clearing or earthworks in the riparian corridor to a designated stream; b) Restricting slope batters to 1:5 or 20%; c) Vegetation or mulching batters to minimise erosion; d) Managing and controlling surface drainage by using natural flow paths wherever possible; e) Rehabilitating disturbed areas as soon as practical after completion of works by re-establishing the vegetation, including native seeding, planting of seedling and mulching; and f) Where appropriate, construct ponds for collection of surface drainage from areas disturbed for prolonged periods such as quarries, material extraction sites, reclamation areas.
	AO31.3 Development provides for a comprehensive stormwater rehabilitation program, including: a) The grading and reshaping of the disturbed areas to provide controlled and stable drainage flow paths; b) The construction of drainage paths which divert high velocity flows away from disturbed areas; c) The re-shaping of stored topsoil stripped from the site prior to commencement of construction works; and d) The planting of the disturbed area with native species of grasses, ground covers and trees and placing mulch in between on the surface.
PO32 Progressive rehabilitation of disturbed areas within the site is undertaken as part of the completion of each stage of	**AO32.1** No acceptable outcome is prescribed.

Performance outcome	Acceptable outcome
development, or where there are no stages, within three months of the completion of the works.	
Amenity	
PO33 Development is located and designed to ensure it maintains or enhances the scenic values and landscape character of the precinct, including, but not limited to, the values of any adjacent environmental areas.	**AO33.1** No acceptable outcome is prescribed.
PO34 Development does not cause environmental harm to surrounding sensitive land uses and receiving environments. The design, construction and maintenance of the development incorporates measures to minimise any associated impacts, in relation to (and not limited to): a) Soils and geology (e.g. erosion and sediment control, land contamination); b) Traffic; c) Lighting; d) Signage; e) Social impacts and visual amenity; f) Loss of ecological values (i.e. flora and fauna); and g) Waste.	**AO34.1** No acceptable outcome is prescribed.
Cultural heritage	
PO35 Development avoids, minimises or manages disturbance to places of identified cultural heritage significance.	**AO35.1** No acceptable outcome is prescribed.
PO36 Tidal work that involves extraction of material avoids, minimises or manages disturbance cultural heritage significance. Note: All shipwrecks, aircraft wrecks and associated relics older than 75 years (from the time they were wrecked) are protected under either the *Australian Underwater Cultural Heritage Act 2018* (Commonwealth) or the QH Act.	**AO36.1** No acceptable outcome is prescribed.
Additional criteria for operational work	
PO37 Effective measures are implemented during the construction of development to avoid impacts from lighting, noise and vibration on sea turtle foraging and sea turtle nesting beaches.	**AO37.1** No acceptable outcome is prescribed.
PO38 Effective measures are implemented during the operation of development to avoid impacts from lighting, noise and vibration on sea turtle foraging and sea turtle nesting beaches.	**AO38.1** No acceptable outcome is prescribed.

Performance outcome	Acceptable outcome
Section B – Additional criteria for development located in the buffer precinct	
Ecological values – Buffer and conservation precinct	
PO39 Development does not have a significant residual impact on matters of environmental significance. Note: For guidance on determining if the development will have a significant residual impact on a MNES, refer to the *Significant Impact Guidelines 1.1 - Matter of national environmental significance* and for a MSES refer to the Queensland *Significant Residual Impact Guideline.* The Commonwealth and/or State may impose a requirement to provide an environmental offset where there is a significant residual impact. Note: MSES are mapped on the Queensland Government State Planning Policy Interactive Mapping System. MNES are mapped in the Australian Government Protected Matters Search Tool.	**AO39.1** Development avoids where possible any disturbance to matters of environmental significance; or Development demonstrates that disturbance cannot be avoided, and the extent of the disturbance has been minimised and mitigated by: a) Focusing development in existing cleared or disturbed areas to minimise impact to existing habitat; b) Consolidating and co-locating compatible uses to minimise the development footprint; c) Ensuring alterations to natural landforms, hydrology and drainage patterns on the site do not negatively impact ecologically important areas; and d) Ensuring significant fauna habitat is protected; and e) Incorporating measures that allow for the safe movement of fauna through the site.
PO40 The health and stability of retained vegetation is maintained during development construction activities by: a) Clearly marking vegetation to be retained with flagging tape; b) Preventing any filling, excavation, stockpiling, storage of chemicals, fuel or machinery within the flagged protection area; and c) Using low impact construction techniques in the vicinity of vegetation to minimise interference with the vegetation. Note: An Environmental Management Plan may be required to demonstrate compliance with this performance outcome. Refer to Appendix D for GPC's Environmental Management Plan Guideline.	**AO40.1** No acceptable outcome is prescribed.
PO41 Where construction activities will result in adverse impacts upon fauna and/or the clearing and/or removal of fauna habitat: a) All vacant hollows and nests are relocated or rendered unusable by a suitably trained/ qualified person to prohibit fauna return during clearing works; and b) All fauna is suitably relocated or humanely dealt with by suitably trained/ qualified person during the preclearing inspections or during clearing. Note: An Environmental Management Plan may be required to demonstrate compliance with this performance outcome. Refer to Appendix D for GPC's Environmental Management Plan Guideline.	**AO41.1** No acceptable outcome is prescribed.

Gladstone Ports Corporation

Growth, prosperity, community.

Appendix A

USE DEFINITIONS

Appendix A

Use definitions

Use	Definition	Includes the following examples	Does not include the following examples
Air services	Use of premises for any of the following: • The arrival and departure of aircraft • The housing, servicing, refuelling, maintenance and repair of aircraft • The assembly and dispersal of passengers or goods on or from an aircraft • Any ancillary activities directly serving the needs of passengers and visitors to the use • Associated training and education facilities • Aviation facilities.	Airport, airstrip, helipad, public or private airfield	-
Animal husbandry	Use of premises for production of animals or animal products on either native or improved pastures or vegetation. The use includes ancillary yards, stables and temporary holding facilities and the repair and servicing of machinery.	Cattle studs, grazing of livestock, non-feedlot dairying	Animal keeping, intensive animal industry, aquaculture, feedlots, piggeries
Animal keeping	Use of premises for temporary or permanent holding facilities in connection with a port operation and ancillary repair and servicing of machinery.	Livestock holding areas, pens, sheds and yards.	Aquaculture, cattle studs, domestic pets, feedlots, grazing of livestock, non-feedlot dairying, piggeries, poultry meat and egg production, animal husbandry
Aquaculture	Use of premises for the cultivation of aquatic animals or plants in a confined area whether for sale or not.	Pond farms, tank systems, hatcheries, raceway system, rack and line systems, sea cages	Intensive animal industry
Bar	Use of premises primarily to sell liquor for consumption on the premises and that provides for a maximum capacity to seat sixty persons at any one time. The use may include ancillary sale of food for consumption on the premises and entertainment activities.	-	Club, hotel, nightclub entertainment facility, tavern
Bulk storage infrastructure and activities	Use of premises for the storage and wholesale of bulk liquids, gases and solids/ materials. May include a site office, where ancillary to the use.	Buildings, sheds, tanks, silos, stockpiles and laydown areas, whether or not bunded/walled or roofed.	Warehouse infrastructure and activities
Caretaker's accommodation	Use of premises for a dwelling for a caretaker of a non-residential use on the same premises	-	Dwelling house

Use	Definition	Includes the following examples	Does not include the following examples
Cemetery	Use of premises for interment of bodies or ashes after death.	Burial ground, crypt, columbarium, lawn cemetery, pet cemetery, mausoleum	Crematorium, funeral parlour
Club	Use of premises by persons associated for social, literary, political, sporting, athletic or other similar purposes for social interaction or entertainment. The use may include the ancillary preparation and selling of food and drink.	Club house, guide and scout clubs, surf lifesaving club, RSL, bowls club	Hotel, nightclub entertainment facility, place of worship, theatre
Commercial use	Includes the use of premises for the provision of goods or services for sale to the public, not related to port operations	Agricultural supply stores Bulk landscape supplies Car wash Garden centre Funeral parlour Hardware and trades supplies Service Station Office Shop Veterinary Service	Sales of goods including bulk and packaged goods associated with operations at a port.
Community care centre	Use of premises to provide social support to members of the public where no accommodation is provided. Medical care may be provided but is ancillary to the primary use above.	Drop in centre, integrated Indigenous support centre	Child care centre, family day care,
Community use	Use of premises for providing artistic, social or cultural facilities and community support services to the public. May include the ancillary preparation and selling of food and drink.	Art gallery, community centre, community hall, library, museum, mission to seafarers	Cinema, club, hotel, nightclub entertainment facility, place of worship
Dwelling house	A residential use of premises for one household that contains a single dwelling. The use includes domestic outbuildings and works normally associated with a dwelling and may include a secondary dwelling.	-	Caretaker's accommodation, dual occupancy, rooming accommodation, short-term accommodation, student accommodation, multiple dwelling
Dwelling unit	A single dwelling within a premises containing non-residential use(s).	'Shop-top' apartment	Caretaker's accommodation, dwelling house
Educational establishment	Use of premises for training and instruction designed to impart knowledge and develop skills. The use may include ancillary outside hours school care for students or on-site student accommodation.	Special education, college, university, technical institute, outdoor education centres, training centre	Child care centre, home based child care, family day care
Emergency services	Use of premises by government entity or community organisations to provide essential emergency services or disaster management services or management support facilities for	State emergency service facility, ambulance station, rural fire brigade, auxiliary fire and rescue station, urban fire and rescue station, police	Community use, hospital, residential care facility

Use	Definition	Includes the following examples	Does not include the following examples
	the protection of persons, property and the environment.	station, emergency management support facility, evacuation centres, marine rescue and water police	
Environment facility	Use of premises for facilities used for the conservation, interpretation and appreciation of areas of environmental, cultural or heritage value. Does not include providing accommodation for tourists and travellers	Nature based attractions, walking tracks, seating, shelters, boardwalks, observation decks, bird hides	-
Extractive industry	Use of premises for the extraction and/or processing of extractive resources and associated activities, including their transportation to market. This use may include extracting from tidal land via dredging.	Quarry, dredging, screening, explosives use for extraction, stockpiles at extractive industry site	Port services – dredging
Food and drink outlet	Use of premises for preparation and sale of food and drink to the public for consumption on or off the premises. The use may include the ancillary sale of liquor for consumption on site.	Bistro, café, coffee shop, drive-through facility, kiosk, milk bar, restaurant, snack bar, take-away, tearoom, food van	Bar, club, hotel, shop, theatre, nightclub
Function facility	Use of premises for receptions or functions that may include the preparation and provision of food and liquor for consumption on the premises as part of a reception or function.	Conference centre, reception centre	Community use, hotel
Hazardous chemical facility	Means the use of premises for a facility at which a prescribed hazardous chemical is present or likely to be present in a quantity that exceeds 10% of the chemical's threshold quantity under the Work Health and Safety Regulation, schedule 15.	oil refineries, chemical plants and large fuel and chemical storage sites where large quantities of hazardous materials are stored, handled or processed	Extractive industry
High impact industry	Use of premises for industrial activities that include the manufacturing, producing, processing, repairing, altering, recycling, storing, distributing, transferring or treating of products and have one or more of the following attributes: • Potential for significant impacts on sensitive land uses due to offsite emissions including aerosol, fume, particle, smoke, odour and noise • Potential for significant offsite impacts in the event of fire, explosion or toxic release	Abattoirs, concrete batching plant, boiler making and engineering, workshops and metal foundry, manufacturing fertilisers, bulk fuel or chemical storage and/or distribution facilities	Tanneries, rendering plants, oil refineries, waste incineration, manufacturing or storing explosives, power plants, manufacturing fertilisers, service industry, low impact industry, medium impact industry, special industry

Use	Definition	Includes the following examples	Does not include the following examples
	• Generates high traffic flows in the context of the locality or the road network • The use may involve night time and outdoor activities • Onsite controls are required for emissions and dangerous goods risks.		
Hotel	Use of premises primarily to sell liquor for consumption. The use may include short-term accommodation, dining and entertainment activities and facilities.	Pub, tavern	Nightclub entertainment facility
Intensive animal industry	Use of premises for the intensive production of animals or animal products in an enclosure that requires the provision of food and water either mechanically or by hand. The use includes the ancillary storage and packing of feed and produce, but does not include the cultivation of aquatic animals.	Feedlots, piggeries, poultry and egg production	Animal husbandry, aquaculture, drought feeding, milking sheds, shearing sheds, weaning pens
Intensive horticulture	Use of premises for the intensive production of plants or plant material indoors on imported media or where outdoors, artificial lights or containers are used. The use includes the storage and packing of produce and plants grown on the premises but does not include the cultivation of aquatic plants.	Greenhouse and shade house plant production, hydroponic farms, mushroom farms	Wholesale nursery, aquaculture
Landing	Use of premises or a structure for mooring, launching, storage and retrieval of vessels and from which passengers embark and disembark *as* defined in *the Planning Regulation 2017*	Boat ramp, jetty, pontoon	Marina, passenger terminal
Loading and unloading infrastructure and activities	Use of premises for activities associated with loading and unloading gas, liquid and solid materials, general cargo, livestock, packaged material, containers, vehicles, machinery etc. in connection to operations at a port.	Weighbridge, hoppers, conveyor or pipeline, shiploader, use of cranes and front end loaders, vehicle access, rail infrastructure, ship to ship transfers when docked at port, transfer of materials within and between storage locations Terminals for loading and unloading bulk gas, liquids, solids, materials, minerals, packaged goods, containers, general cargo.	Port infrastructure, linear infrastructure
Low impact industry	Use of premises for industrial activities that include the manufacturing, producing, processing, repairing, altering, recycling, storing, distributing,	Repairing motor vehicles, fitting and turning workshop, seafood processing	Panel beating, spray painting or surface coating, tyre recycling, drum re-conditioning, wooden and laminated product

Use	Definition	Includes the following examples	Does not include the following examples
	transferring or treating of products and have one or more of the following attributes: • Negligible impacts on sensitive land uses due to offsite emissions including aerosol, fume, particle, smoke, odour and noise • Minimal traffic generation and heavy-vehicle usage • Demands imposed upon the local infrastructure network consistent with surrounding uses • The use generally operates during the day (e.g. 7 am to 6 pm) • Offsite impacts from storage of dangerous goods are negligible • The use is primarily undertaken indoors.		manufacturing, service industry, medium impact industry, high impact industry, special industry
Major electricity infrastructure	Use of premises for a transmission grid or supply network as defined under the *Electricity Act 1994*. The use may include ancillary telecommunication facilities. The use does not include a supply network or private electricity works unless the use involves a new zone substation or bulk supply substation; or the augmentation of a zone substation or bulk supply substation that significantly increases the input or output standard voltage.	Powerlines greater than 66kV	Minor electricity infrastructure, substation
Marina	A buoy mooring, jetty or pile mooring or combination of these where, for a fee or reward, a ship is or may be, anchored, berthed or moored (as defined under the *Transport Operations (Marine Pollution) Act 1995*), with more than 6 vessel berths.	Marina, buoy or piles moorings, pontoons for mooring/berthing vessels including recreational and commercial vessels.	Port infrastructure, marina service, landing, marine industry, passenger terminal
Marina service	Use of premises that is a marina (as defined in *Transport Operations (Marine Pollution) Act 1995*), for the following: • The arrival and departure of vessels • The movement of passengers or goods on or off vessels • Any ancillary activities directly serving the needs of passengers and visitors or the housing, servicing, maintenance, fuelling and repair of vessels.	Wharf, jetty, pontoon, gangway, barge services	Landing, marina, passenger terminal
Marine industry	Use of waterfront premises, or premises that is associated with a waterfront location, for manufacturing, storing, repairing or	Boat building, boat maintenance, boat storage, dry dock,	Marina service, Marina, Port infrastructure

Use	Definition	Includes the following examples	Does not include the following examples
	servicing vessels and maritime infrastructure. The use may include the provision of fuel and disposal of waste. The use does not include servicing passengers.	slipway, travel lift, and ancillary services	
Market	Use of premises on a regular basis for the sale of goods to the public, where goods are primarily sold from temporary structures such as stalls, booths or trestle tables. The use may include ancillary entertainment provided for the enjoyment of market customers.	Flea market, farmers market, car boot sales	Shop, roadside stall
Medium impact industry	Use of premises for industrial activities that include the manufacturing, producing, processing, repairing, altering, recycling, storing, distributing, transferring or treating of products and have one or more of the following attributes: • Potential for noticeable impacts on sensitive land uses due to offsite emissions including aerosol, fume, particle, smoke, odour and noise • Potential for noticeable offsite impacts in the event of fire, explosion or toxic release • Generates high traffic flows in the context of the locality or the road network • Generates an elevated demand on the local infrastructure network • Onsite controls are required for emissions and dangerous goods risks • The use is primarily undertaken indoors • Evening or night activities are undertaken indoors and not outdoors.	Spray painting and surface coating, wooden and laminated product manufacturing (including cabinet making, joining, timber truss making or wood working), biofuels facility	Concrete batching, tyre manufacturing and retreading, metal recovery (involving a fragmentiser), textile manufacture, chemically treating timber and plastic product manufacture, service industry, low impact industry, high impact industry, special industry
Multiple dwelling	A residential use of premises containing three or more dwellings, whether attached or detached, for separate households.	Apartments, flats, units, townhouses, row housing, triplex	Rooming accommodation, dual occupancy, duplex, granny flat, residential care facility, retirement facility
Nature based tourism	Use of premises for a tourism activity, including tourist and visitor short-term accommodation, that is intended for the conservation, interpretation and appreciation of areas of environmental, cultural or heritage value or local ecosystem and attributes of the natural environment.	Environmentally responsible accommodation facilities including lodges, cabins, huts and tented camps	Environment facility

Use	Definition	Includes the following examples	Does not include the following examples
Non-resident workforce accommodation	Use of premises for providing accommodation for non-resident workers. The use may include provision of ancillary recreational and entertainment facilities for the exclusive use of residents and their visitors.	Contractor's camp, construction camp, single person's quarters, temporary workers' accommodation	Relocatable home park, short-term accommodation, tourist park
Outdoor sales	Use of premises for the display, sale, hire or lease of products where the use is conducted wholly or predominantly outdoors and may include construction, industrial or farm plant and equipment, vehicles, boats and caravans. The use may include ancillary repair or servicing activities and sale or fitting of accessories.	Agricultural machinery sales yard, motor vehicles sales yard, boat sales	Bulk landscape supplies, market
Outdoor sport and recreation	Use of premises for a recreation or sport activity that is carried on outdoors and requires areas of open space. The use may include ancillary provision and selling of food and drink and the provision of ancillary change room facilities and storage facilities.	Driving range, golf course, swimming pool, tennis courts, football ground, cricket oval	Major sport, recreation and entertainment facility, motor sport, park, community use
Outstation	Use of premises for cultural and/or recreational activities undertaken by Aboriginal and Torres Strait Islander people. The use provides for ancillary short-term or long-term camping.	Indigenous camp site	Dwelling house, hostel, multiple dwelling, relocatable home park, short-term accommodation, tourist park
Park	Use of premises accessible to the public free of charge for sport, recreation and leisure activities and facilities, and may include ancillary structures and carparking	Informal sports fields, children's playground, urban common	Tourist attraction, outdoor sport and recreation
Parking station	Use of premises for parking vehicles where the parking is not ancillary to another use.	Car park, 'park and ride', bicycle parking	
Passenger terminal	Use of premises, where not in a marina (as defined in *Transport Operations (Marine Pollution Act 1995*), for: • Berthing and mooring vessels, and • The embarkation and/or disembarkation of passengers and associated vehicles. This use may include a boat ramp for a roll on-roll off / barge facility. The use may include ancillary facilities directly serving the needs of passengers.	Ferry terminal, cruise ship terminal, wharf, jetty, pontoon, gangway, RORO barge ramp	Port infrastructure, landing, marina, marine industry, marina service
Permanent plantation	Use of premises for growing, but not harvesting, plants for carbon sequestration, biodiversity, natural		Forestry for wood production, biofuel production

Use	Definition	Includes the following examples	Does not include the following examples
	resource management or another similar purpose.		
Port infrastructure	Use of premises for: structures for berthing and mooring vessels for port operations. The use may include ancillary structures e.g. site office, saferoom, security hut, monitoring equipment, tidal power generation, navigation on tidal land or on adjacent land. This use may include a boat ramp for a roll on-roll off facility.	Wharf, jetty, dolphin, gangway, roll on – roll off facility, dock	Port loading and unloading infrastructure and activities, port services – dredging maritime infrastructure, transhipping, marina, passenger terminal, landing
Port Services – Dredged material placement or reclamation	Use of premises for the following: • Placement of dredged material on land or at sea; and/or • Reclamation, as defined under *Coastal Protection and Management Act* 1995, and/or • The rehandling of dredged material. This use may involve the reuse or sale of dredged material.	Transport of dredged material to disposal site. Placement of dredged material into: • Dredged material storage area, • Sea disposal site or • Beneficial reuse site Placement of solid material into reclamation area. Dewatering infrastructure (e.g. internal bund walls, weir boxes or discharge outlets).	
Port Services – Dredging	Use of premises for shipping channels, access channels, swing basins and berth pockets within port limits.	Capital dredging as defined in *Sustainable Ports Development Act 2015.*	Extractive industry
Port Services – Pilotage and support services	Use of premises for a maritime support service facility provided for the operation of a port.	Facility for customs, pilotage, quarantine, security, maritime safety, shipping agency, tug services, ship bunkering, waste receipt and disposal.	Marina, passenger terminal, Wharf infrastructure and activities
Renewable energy facility	Use of premises for the generation of electricity or energy from renewable sources including sources of geothermal energy, hydropower, ocean, wave or tidal energy, solar energy or wind energy. This use does not include the generation of electricity or energy to be used mainly on the premises.	Solar farm, wind farm, tidal power	Tidal turbines supplying energy for port use
Research and technology industry	Use of premises for innovative and emerging technological industries involved in research design, manufacture, assembly, testing, maintenance and storage of machinery, equipment and components.	Aeronautical engineering, computer component manufacturing, medical laboratories, computer server facility	-

Use	Definition	Includes the following examples	Does not include the following examples
	The use may include emerging industries such as energy, aerospace, and biotechnology.		
Rooming accommodation	Use of premises for the accommodation of one or more households where each resident: • Has a right to occupy one or more rooms • Does not have a right to occupy the whole of the premises in which the rooms are situated • May be provided with separate facilities for private use • May share communal facilities or communal space with one or more of the other residents. The use may include: • Rooms not in the same building on site • Provision of a food or other service • On site management or staff and associated accommodation. Facilities includes furniture and equipment as defined in the *Residential Tenancies and Rooming Accommodation Act 2008.*	Boarding house, hostel, monastery, off-site student accommodation	Hospice, community residence, dwelling house, short-term accommodation, multiple dwelling
Service industry	Use of premises for industrial activities that have no external air, noise or odour emissions from the site and can be suitably located with other non-industrial uses.	Audio visual equipment repair, film processing, bicycle repairs, clock and watch repairs, computer repairs, dry cleaning, hand engraving, jewellery making, laundromat, locksmith, picture framing, shoe repairs, tailor	Small engine mechanical repair workshop, cabinet making, shop fitting, sign writing, tyre depot, low impact industry, medium impact, high impact industry, special industry
Shopping centre	Use of premises for an integrated shopping complex consisting mainly of shops.	-	-
Short-term accommodation	Use of premises to provide accommodation for less than three consecutive months to tourists or travellers or a manager's residence, office, or recreation facility for exclusive guest use if ancillary to the use. The use does not include a hotel, nature based tourism, resort complex or tourist park.	Motel, backpackers accommodation, cabins, serviced apartments, hotel, farm stay	Hostel, rooming accommodation, tourist park
Special industry	Use of premises for industrial activities that include the manufacturing, producing, processing, repairing, altering, recycling, storing, distributing, transferring or treating of products and have one or more of the following attributes:	Tanneries, rendering plants, oil refineries, waste incineration, manufacturing or storing explosives, power plants,	Low impact industry, medium impact industry, high impact industry, service industry

Use	Definition	Includes the following examples	Does not include the following examples
	• Potential for extreme impacts on sensitive land uses due to offsite emissions including aerosol, fume, particle, smoke, odour and noise • Potential for extreme offsite impacts in the event of fire, explosion or toxic release • Onsite controls are required for emissions and dangerous goods risks • The use generally involves night time and outdoor activities • The use may involve the storage and handling of large volumes of dangerous goods • Requires significant separation from non-industrial uses.		
Substation	Use of premises as part of a transmission grid or supply network under the *Electricity Act 1994*, for: • Converting or transforming electrical energy from one voltage to another • Regulating voltage in an electrical circuit • Controlling electrical circuits • Switching electrical current between circuits or • Communication facilities for words as defined under the *Electricity Act 1994* (12(1)) or for workforce operational and safety communications.	Substations, switching yards	Major electricity infrastructure, minor electricity infrastructure
Telecommunications facility	Use of premises for a facility that is capable of carrying communications and signals by guided or unguided electromagnetic energy.	Telecommunication tower, broadcasting station, television station	Aviation facility, 'low-impact telecommunications facility' as defined under the *Telecommunications Act 1997,* Fibre optic cabling
Temporary construction hardstand or laydown area	Use of premises for the receipt, temporary storage of construction equipment and other supplies for a period of up to one year. The area may be near to, or on the construction site and may be covered with a surface of rock or gravel to allow vehicles to manoeuvre, or may be paved if necessary.	Construction/ contractors yard, temporary laydown area	Warehouse, Bulk storage infrastructure and activities, loading and unloading infrastructure and activities, industry, Transport depot
Tourist attraction	Use of premises for providing entertainment to, or a recreation facility for the general public. The use may include provision and sale of food and drink for consumption on the premises if ancillary to the use.	Aquarium, zoo, theme park	Hotel, major sport, recreation and entertainment facility, nightclub entertainment facility
Tourist park	Use of premises to provide for accommodation in caravans, self-contained cabins, tents and similar	Camping ground, caravan park, holiday cabins	Relocatable home park, tourist attraction, short-term accommodation, non-

Use	Definition	Includes the following examples	Does not include the following examples
	structures for the public for short term holiday purposes. The use may include, where ancillary, a manager's residence and office, kiosk, amenity buildings, food and drink outlet, or the provision of recreation facilities for the use of occupants of the tourist park and their visitors, and accommodation for staff.		resident workforce accommodation
Transhipping	Use of premises for ship to ship transfer of bulk cargo, where not docked, where ship is defined by *Transport Operations (Marine Safety) Act 1994.*	Ship to ship transfer of bulk cargo including gas, liquid or solid cargos such as sand, ores, coal, grain etc.	Ship bunkering, port infrastructure i.e. ship to ship transfers when docked at a port.
Transport depot	Use of premises for the storage, for commercial or public purposes, of more than one motor vehicle. The use includes premises for the storage of taxis, buses, trucks, heavy machinery and uses of a like nature. The term may include the ancillary servicing, repair and cleaning of vehicles stored on the premises and may include an ancillary office.	Contractor's depot, bus depot, truck yard, heavy machinery yard	Home based business, warehouse, low impact industry, service industry
Utility installation	Use of premises to provide the following services: • Supply or treatment of water, hydraulic power or gas • Sewerage, drainage or stormwater services • Transport services including road, rail or water or • Waste management service. The use includes maintenance and storage depots and other facilities for the operation of the use.	Sewerage treatment plant, mail depot, pumping station, water treatment plant, rail line, roads	Telecommunications tower, major electricity infrastructure, minor electricity infrastructure, substation, renewable energy facility, transport depot,
Warehouse infrastructure and activities	Use of premises for the storage, intermodal transfer or distribution of packaged or containerised goods whether or not in a building. The use may include the wholesale of goods where ancillary to storage or an ancillary office.	Storage shed, cold storage building, yard or storage area, whether or not bunded, walled or roofed e.g. for vehicles, machinery, fish stock, containers, packaged goods and materials, break bulk, infrastructure components, modules, pipes, logs etc.	Bulk storage infrastructure and activities, hardware and trade supplies, outdoor sales, showroom, shop

Administrative definitions

Word/Phrase	Definition
Acceptable outcome	Means a precise measure that does not require the exercise of discretion whether a proposed development complies. Acceptable solutions are those measures considered suitable to achieve the development outcomes required by the performance criteria.
Acid sulfate soils	Means soils, sediments, or other materials containing iron sulfides and/or acidity generated by their oxidation.
Adjoining use	Premises that share a common boundary, including premises that meet at a single point on a common boundary.
Advertising device	A permanent sign, structure or other device used, or intended to be used, for advertising; and a) includes a structure, or part of a building, the primary purpose of which is to support the sign, structure or device.
Assessment Manager	The assessment manager for a development application is the person prescribed by regulation as the assessment manager for the application. the assessment manager for a properly made application is responsible for: a) Administering and deciding the application; and b) Assessing all or part of the application. See the *Planning Act 2016*, Section 48.
Ancillary	Associated with, but incidental and subordinate to
Areas of environmental significance	Areas of environmental significance are identified: Biodiversity areas, Wetlands, Waterways and riparian corridors and declared fish habitat areas.
Articulation	Design a building, or the façade of a building, with clearly distinguishable parts
Australian height datum (AHD)	The datum used for the determination of elevations in Australia. The determination uses a national network of benchmarks and tide gauges and sets mean sea level as zero elevation.
Beneficial reuse	Dredged material that provides social, economic or environmental benefits (or a combination of these). That is, the dredged material is managed as a valuable resource rather than a product destined for disposal. Beneficial reuse can involve the placement of dredged material on-land and in the aquatic zone (i.e. underwater or in intertidal areas). Consideration of beneficial reuse in the Queensland context to date has been focused on applications that provide economic benefits such as on-land processing and industry reuse or land reclamation (Royal Haskoning DHV and AMA 2016).
Best practice	The management of the activity to achieve an ongoing minimisation of the activity's environmental harm through cost-effective measures assessed against the measures currently used nationally and internationally for the activity. See the *Environmental Protection Act 1994*, Section 21(1).
Berths	Means ship's allotted place at a wharf or dock used to accommodate or moor vessels (often has been dredged to obtain required depth, i.e. berth pocket).
Building height	Of a building, means, a) the vertical distance, measured in metres, between the ground level of the building and the highest point of the roof of the building, other than a point that is part of an aerial chimney, flagpole or antenna; or b) the number of storeys in the building above ground level.
Bulk / Bulk cargo	Means solid, liquid and gas cargos unpackaged or carried loose, that takes up the shape of the ships holds, and is handled by direct application of conveyors, pipelines, grabs, pumps and elevators.
Break bulk	Means generalised cargo that is not containerised, but may be baled, or in boxes, cases or drums, and may include goods such as timber, steel, pulp and machinery.
Coastal dependent development	See State Planning Policy 2017.
Coastal erosion	See State Planning Policy 2017.
Coastal processes	See State Planning Policy 2017.

Word/Phrase	Definition
Container cargo	Cargo carried in intermodal containers known as shipping, freight, cargo, ISO, sea or ocean containers for intermodal freight transport.
Defined flood level	The level to which it is reasonably expected flood waters may rise. The defined flood level for a flood hazard area is: a) the water level reached during the defined flood event (DFE) or defined storm tide event (DSTE) declared by Council under the Building Regulation 2006, section 13, to be the defined flood level for the part of the area where the lot is located; or b) if the defined flood level stated in a building development application for the lot is lower than the defined flood level declared by Council – the level stated in the application, subject to a referral agency's response.
Development	means— a) carrying out— i. building work; or ii. plumbing or drainage work; or iii. operational work; or b) reconfiguring a lot; or c) making a material change of use of premises. See *Planning Act 2016*, Schedule 2
Development approval	A development approval is— a) a preliminary approval; or b) a development permit; or c) a combination of a preliminary approval and development permit. See the *Planning Act 2016*, Section 49(1).
Development footprint	For development, means a part of the premises that the development relates to, including, for example, any part of the premises that, after the development is carried out, will be covered by— a) buildings or structures, measured to their outermost projection; or b) landscaping or open space; or c) facilities relating to the development; or d) on-site stormwater drainage or wastewater treatment; or e) a car park, road, access track or area used for vehicle movement; or f) another area of disturbance.
Dredged material	Means capital and maintenance dredged material required for the ongoing operation and future expansion of the Port of Bundaberg.
Dry bulk	Means solid commodities /cargos that are poured or placed into ships in bulk such as cement, coal, grain, cereals, fertilizers, sand, woodchips or cotton seed.
Ecologically sustainable development	Means using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased (DoEE 1992).
Environmental value	A quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or Another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation. See the *Environmental Protection Act 1994*, Division 1.
Erosion prone area	See the State Planning Policy and the Coastal Act
Essential community infrastructure	See State Planning Policy
Excluded tidal works	means operational work, other than work that section 166(4) of the Planning Act applies in relation to, that— a) is maintenance work on a lawful work; or b) is tidal works that alter a prescribed structure, other than an alteration that—

Word/Phrase	Definition
	i. creates a roofed structure, including a shed or a gazebo; or ii. changes the footprint of the prescribed structure; or iii. changes the dimensions or structural capacity of the prescribed structure; or iv. may affect safe navigable access to, or from, tidal water or to, or from, properties next to tidal water, including alterations to clearance heights or lighting; or c) is stated in subsection (1)(b)(i) or (iv), if the work is minor work that— i. has an insignificant impact on coastal management; and ii. is reversible or expendable. See the Planning Act, Schedule 10, Part 17, Division 1.
Fire fighting infrastructure	Infrastructure installed as part of a development to help firefighters quickly attack the fire e.g. fire hydrants, boosters, hose reels, automatic sprinkler system
Filling or excavation	Removal or importation of material to, from or within a lot that will change the ground level of the land.
Flood hazard area	An area, whether or not mapped, designated by a local government as a flood hazard area under the Building Regulation 2006, section 13. Note—section 13 of the Building Regulation requires a local government to keep a register of the flood hazard area it designates and when the designation was made.
Gross floor area	For a building, means the total floor area of all storeys of the building, measured from the outside of the external walls and the centre of any common walls of the building, other than areas used for— a) building services, plant or equipment; or b) access between levels; or c) a ground floor public lobby; or d) a mall; or e) parking, loading or manoeuvring vehicles; or f) unenclosed private balconies, whether roofed or not
Great Barrier Reef Coast Marine Park	The tidal waters and tidal land within the following areas— a) Mackay/Capricorn Management Area; b) Townsville/Whitsunday Management Area; c) Cairns/Cooktown Management Area; d) Far Northern Management Area; and e) Outer Islands Management Area. However, the Great Barrier Reef Coast Marine Park does not include— a) Freehold tidal waters and tidal land, other than the part of lot 1 on RP736304 that is within the Trinity Inlet fish habitat area; and b) Tidal waters and tidal land the subject of a lease under the Land Act 1994 that is granted in perpetuity; and c) An area that was a protected area under the Nature Conservation Act 1992 on 5 November 2004. See the *Marine Parks (Declaration) Regulation 200*6, Schedule 2.
Great Barrier Reef World Heritage Area	Means the Great Barrier Reef World Heritage Area described in schedule 1 under the *Great Barrier Reef Marine Park Act 1975* (Cth).
Ground disturbance	Means: a) The initial disturbance by machinery of the topsoil or surface rock layer of the ground, such as grubbing, ploughing or drilling; and b) The removal of native vegetation by disturbing root systems and exposing underlying soil.
Hazardous material	A substance with potential to cause harm to persons, property or the environment because of one or more of the following:

Word/Phrase	Definition
	a) The chemical properties of the substance; b) The physical properties of the substance; c) The biological properties of the substance. Without limiting the first paragraph, all dangerous goods, combustible liquids and chemicals are hazardous materials.
Highest astronomical tide	The highest level of the tides that can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions. See the *Planning Regulation 2017*, Schedule 24.
Consistent uses	A general indication of land use development that could potentially satisfy the precinct principles relevant to the precinct. The list is not intended to be exhaustive, and other uses may be approved where it can be shown that they satisfy the precinct intent and relevant precinct principles.
Landscaping	Landscaping incorporates trees, shrubs and groundcovers, including: a) Planting of trees, hedges, shrubs and lawn; b) Laying out of gardens; c) Paving of pathways or courtyards; d) Water features. Landscaping also includes: e) The formation and construction of footpaths and verges; f) Street tree planting.
Land use plan	Means a plan to facilitate the management and assessment of development on strategic port land and strategic port land tidal land. The plan is approved under the *Transport Infrastructure Act*, Section 286.
Land use precinct	Means an identified geographical area that illustrates GPC's intent for the use of strategic port land.
Linear infrastructure	Means infrastructure that is linear in nature e.g. for electricity distribution or transmission, a pipeline, a road, a railway, a conveyor etc. See *Planning Regulation 2017*, Schedule 11, Part 2
Local and state road network	Includes GPC roads, Bundaberg Regional Council roads and Queensland State Government roads (refer Figure 4, in Appendix B).
Lowest astronomical tide (LAT)	Means the lowest level which can be predicted to occur under average meteorological conditions and any combination of astronomical conditions.
Material change of use	Means: a) The start of a new use of the premises; b) The re-establishment on the premises of a use that has been abandoned; c) A material increase in the intensity or scale of the use of the premises See the *Planning Act 2016,* Schedule 2.
Major hazard facility	See the *Work Health and Safety Regulation 2011*, Schedule 19.
Matters of environmental significance	Means any of the following: a) Matters of national environmental significance b) Matters of state environmental significance c) Matters of local environmental significance.
Minor works	Works that have an insignificant impact on the subject premises or structure, do not materially affect the land, are reversible, and/or for the repair of minor damage.
Noise	Vibration of any frequency, whether emitted through air or another medium See the *Environmental Protection Act 1994*, Division 1.
Obstacle limitation surface (OLS)	Means the surface that establishes the limit to which objects may project into the airspace associated with an airport or aerodrome to maintain safe aeronautical operations. The OLS consists of an outer surface, a takeoff/approach surface and a transitional surface.
Operational airspace	See State Planning Policy 2017.

Word/Phrase	Definition
Planning Regulation 2017	Means the regulation enacted under the *Planning Act 2016*
Port authority	Means a port authority established under Section 268 or a body declared to be a port authority under a regulation under Section 274A; but Does not include a port authority that has been abolished under Section 270 or for which the declaration has been revoked under a regulation under Section 274A. See the *Transport Infrastructure Act 1995,* Schedule 6
Port entity	In relation to a port, other than the Port of Brisbane, means the port authority. See the *Transport Infrastructure Act 1995*, Section 267.
Port facilities	Of a port authority, means the facilities or land that are: a) Owned or controlled by: i. The port authority; or ii. If the port authority is a GOC port authority—a wholly owned subsidiary of the port authority; and b) Used in the operation or strategic management of the port authority's port; or Of a port entity other than a port authority, means the facilities or land that are: a) Owned or controlled by a port entity other than a port authority, or leased or licensed to or occupied by, or constructed, managed, provided or maintained by a port entity other than a port authority; and b) Used or intended to be used in connection with the management, operation, development, maintenance of, or access to, the port entity's port. Examples include: Wharf and port marine operational areas and shipping channels within port limits, marine and port structures, berths and berth pockets, ship building facilities and dry docks, offshore structures used for shipping purposes, wharf protection devices, hydraulic structures, bulk loading and unloading facilities, boat harbours and boat ramps, vehicle and railway ferry terminals, oil and liquid product terminals and other terminals within the port area , access roads and rail corridors, roads, access corridors and flyovers, conveyors, pipelines, weighbridges, monitoring facilities, security facilities, communication facilities, material handling or disposal areas, vehicle parking facilities, partially completed reclamation areas in areas designated as future strategic port land, partially completed port facilities. See the *Transport Infrastructure Act 1995*, Section 267A.
Port industry activities	Activities carried out for or in association with core port, industrial or commercial activities necessary for the efficient functioning of the Port of Bundaberg supply chain and future Port of Bundaberg trade and economic growth for the region.
Port operations	Uses, infrastructure and activities that are strategic to the existing and future operations and development of the Port of Bundaberg.
Port operator	A port lessee or port manager to whom functions have been delegated under Section 289Z of the *Transport Infrastructure Act 1994*; or Otherwise—the port lessor. See the *Transport Infrastructure Act 1995*, Section 267.
Port related	Land for trade, water related industries, for the operations of the Port of Bundaberg, for use by industries requiring port facilities or that would enhance the usage of the Port of Bundaberg, for integration between sea or air transport and another mode, or for a buffer between incompatible land uses.
Port users	Means companies or individuals using multi-user port facilities
Properly made application	An application made in accordance with Section 51 of the *Planning Act 2016*. See the *Planning Act 2016*, Section 51(5).
Rehabilitation environmental management plan	A plan that describes how environmental harm or contamination will be remediated as soon as possible after an incident or the cessation of a use.
Reclamation	See the *Coastal Protection and Management Act 1995*
Sensitive land use	Means— a) Caretaker's accommodation; or b) A childcare centre; or

Word/Phrase	Definition
	c) A community care centre; or d) A community residence; or e) A detention facility; or f) A dual occupancy; or g) A dwelling house; or h) A dwelling unit; or i) An educational establishment; or j) A health care service; or k) A hospital; or l) A hotel, to the extent the hotel provides accommodation for tourists or travellers; or m) A multiple dwelling; or n) Non-resident workforce accommodation; or o) A relocatable home park; or p) A residential care facility; or q) A resort complex; or r) A retirement facility; or s) Rooming accommodation; or t) Rural workers' accommodation; or u) Short-term accommodation; or v) A tourist park. See the *Planning Regulation 2017*, Schedule 24.
Setback	For a building or structure, the shortest distance measured horizontally from the outer most projection of a building or structure to the vertical projection of the boundary of the lot where the building or structure is.
Site	The extent of area, whether land or water upon which the development is to be carried out on. Examples: If development is to be carried out on part of a lot, the site of the development is that part of the lot. If development is to be carried out on part of 1 lot and part of an adjoining lot, the site of the development is both of those parts.
Site cover	The portion of the site, expressed as a percentage, that will be covered by a building or structure, measured to its outermost projection.
Strategic port land tidal area	Means- a) The part or parts of a river, stream or artificial waterway that are- a. Tidal water in or next to the area or land; and b. Between the high water mark and the middle of the river, stream or artificial waterway; and b) To the extent the boundary of the area or land is, or is seaward of, the high water mark and outside a river, stream or artificial waterway – tidal water that is seaward and within 50m of the high water mark. See the *Planning Act 2016* (Section 19)
Structure	Includes a constructed element that has a built presence on or above land. It includes a wall or fence, and anything fixed to or projecting from a building, wall, fence or other structure.
Site restoration and rehabilitation plan	A plan that describes what infrastructure is to be removed and the re-instatement of the site to its pre-existing condition. Can include reinstatement of items (e.g. drainage, pavement, grass etc.) as well as a Decommissioning environmental management plan.
State Development Area	A part of the State or of an area over which the State claims jurisdiction, delineated on a plan, and declared under the *State Development and Public Works Organisation Act 1971* to be a State development area. See the *State Development and Public Works Organisation Act 1971,* schedule 2.

Word/Phrase	Definition
Strategic port land	Land included in a port authority's current approved land use plan. See the *Transport Infrastructure Act 1994*, Section 286 (5).
Suitably qualified person	Means a person who— a) has qualifications and experience relevant to performing the function; and b) if a regulation prescribes an organisation for this paragraph—is a member of the organisation.
Temporary development	Means a use that: a) Does do not continue beyond 1 year; b) Is carried out on a non-permanent basis; and c) Does not involve the construction of, or significant changes to, permanent buildings or structures.
Tidal area	For a local government area or strategic port land, means— a) The part or parts of a river, stream or artificial waterway that are— i. Tidal water in or next to the area or land; and ii. Between the high water mark and the middle of the river, stream or artificial waterway; and b) To the extent the boundary of the area or land is, or is seaward of, the high water mark and outside a river, stream or artificial waterway—tidal water that is seaward and within 50m of the high water mark. See the *Planning Act 2016*, Section 19(3).
Tidal land	Includes reefs, shoals and other land permanently or periodically submerged by waters subject to tidal influence. See the *Fisheries Act 1994*, Schedule 1.
Tidal water	Means: a) The sea and any part of a harbour or watercourse ordinarily within the ebb and flow of the tide at spring tides; or b) The water downstream from a downstream limit as defined under the Water Act 2000. See the *Coastal Protection and Management Act 1995*, Schedule 1.
Traffic impact assessment	Means an assessment of traffic impacts conducted in accordance with *"Guide to Traffic Impact Assessment December 2018"* or as amended by the Department of Transport and Main Roads.
Traffic management plan	A plan prepared to ensure the safe and efficient movement of traffic during construction or maintenance that is conducted in accordance with the Manual of Uniform Traffic Control Devices Part 3 or as amended by the Department of Transport and Main Roads. GPC has prepared a *Traffic Management Plan Guideline* for guidance. There are no specified requirements for an Operational Traffic Management Plan.
Urban area	Means: a) An area identified in a gazette notice by the chief executive as an urban area; or b) If no gazette notice has been published – an area identified as an area intended for an urban purpose, or for an urban purpose in the future, on a map in a planning scheme that- (i) identifies the area using cadastral boundaries; and (ii) is used exclusively or mainly to assess development applications. *Example of a map for paragraph (b)-* *a zoning map* See the *Planning Regulation 2017,* Schedule 24.
Waste	Includes anything, other than an end of waste resource, that is—

Word/Phrase	Definition
	a) left over, or an unwanted by-product, from an industrial, commercial, domestic or other activity; or b) surplus to the industrial, commercial, domestic or other activity generating the waste. Waste can be a gas, liquid, solid or energy, or a combination of any of them. A thing can be waste whether it is of value. Example of paragraph (a)— Abandoned or discarded material from an activity is left over, or an unwanted by-product, from the activity. See the *Environmental Protection Act 1994*, Division 1.
Water sensitive urban design	See the *Environmental Protection Act 1994* and associated policies and regulations
Waterfront development	Development and/or structures (i.e. pontoons, jetties) located on the foreshore
Wet bulk	Means liquid cargo that cannot be containerised or packaged, and is poured or pumped into ships, such as crude petroleum, edible oils and petrochemicals.

Gladstone Ports Corporation

Growth, prosperity, community.

Appendix B

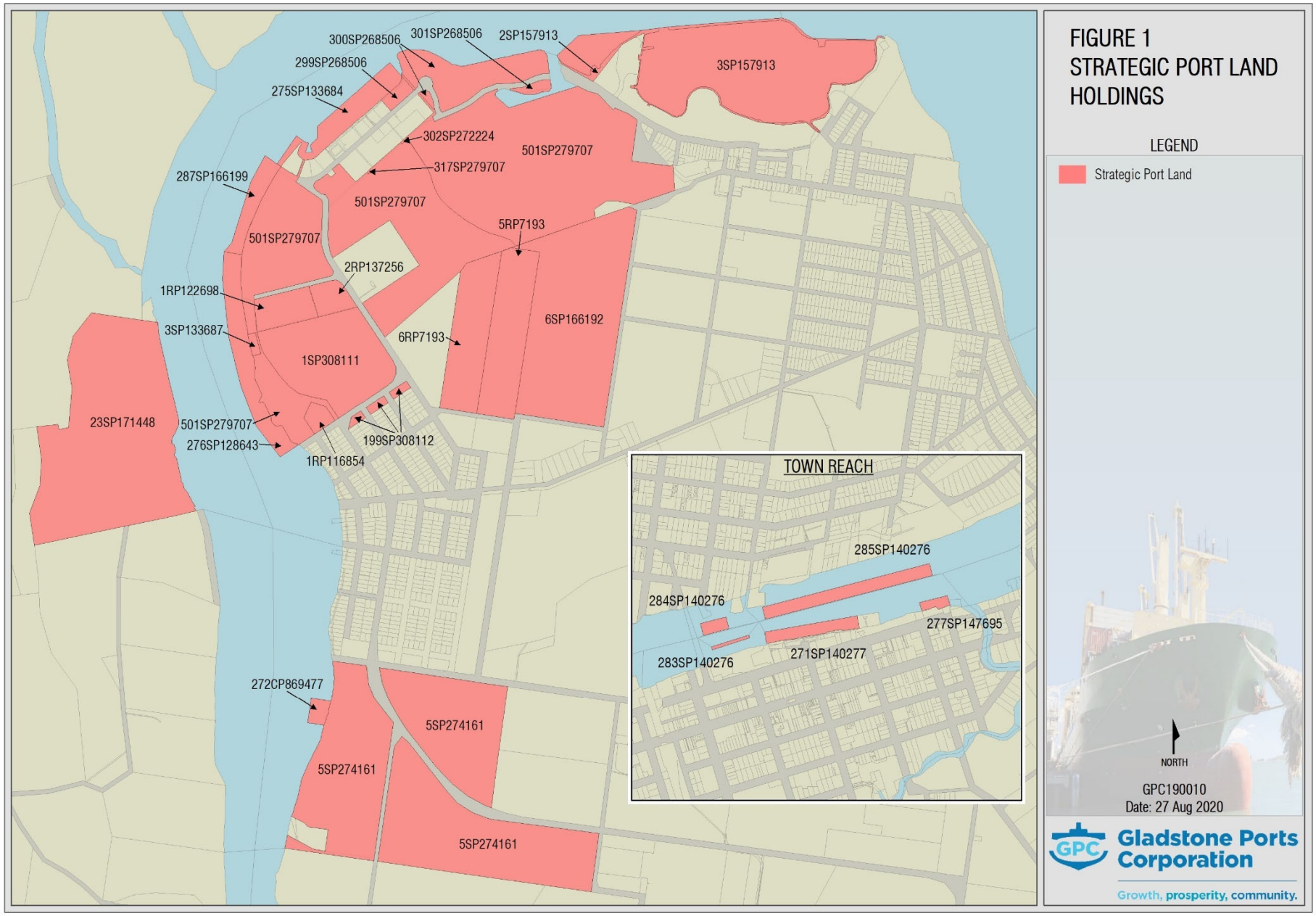
STRATEGIC PORT LAND

Appendix B

Register of strategic port land

Lot	Plan	Area (ha)	Tenure	*Land use plan 2020*	*Land use plan 2009* (Superseded)
1	SP308111	21.4800	Freehold	Port industry and Buffer and conservation precinct	Port industry precinct Light/commercial industry precinct
1	RP116854	1.3304	Freehold	Light industry and innovation and Buffer and conservation precinct	Port operations & support services precinct
1	RP122698	4.4670	Freehold	Port industry precinct	-
2	RP137256	2.6380	Freehold	Port industry precinct	Port industry precinct
2	SP157913	4.4800	Perpetual Lease	Marina precinct	-
3	SP157913	43.510	Perpetual Lease	Marina precinct	-
3	SP133687	0.4238	Freehold	Port industry precinct	Port industry precinct
5	SP274161	95.5190	Freehold	Port industry and Buffer and conservation precinct (portions within BuSDA)	Investigation area precinct Landscaped/buffer precinct Conservation precinct
5	RP7193	14.6800	Freehold	Dredged material placement area precinct (within BuSDA)	Investigation area precinct
6	SP166192	42.5700	Freehold	Dredged material placement area precinct (within BuSDA)	Investigation area precinct Conservation precinct
6	RP7193	13.4133	Freehold	Dredged material placement area precinct (within BuSDA)	Investigation area precinct
23	SP171448	58.9200	Freehold	Buffer and conservation and Port industry precinct	Future industry precinct
199	SP308112	1.1241	Freehold	Buffer and conservation precinct	Landscaped/buffer precinct
271	SP140277	1.7750	Perpetual Lease	Marina precinct	Special use precinct
272	CP869477	1.0600	Vested	Wharves precinct	-
275	SP133684	6.4710	Perpetual lease	Marina precinct	Marine operations-wet precinct
276	SP128643	8.5180	Perpetual lease	Wharves precinct	Terminals/wharves precinct
277	SP147695	0.4212	Perpetual Lease	Marina precinct	Special use precinct
283	SP140276	0.1848	Perpetual lease	Marina precinct	Special use precinct
284	SP140276	0.4992	Perpetual lease	Marina precinct	Special use precinct
285	SP140276	3.2640	Perpetual lease	Marina precinct	Special use precinct
287	SP166199	3.5100	Perpetual lease	Wharves precinct	Terminal/wharves precinct
299	SP268506	1.0950	Freehold	Light industry and innovation	Marine support/commercial precinct
300	SP268506	11.0200	Freehold	Light industry and innovation	Mixed use precinct
301	SP268506	0.8364	Freehold	Light industry and innovation	Recreation/open space parkland precinct
302	SP272224	0.0204	Freehold	Port industry precinct	Marine support/commercial precinct
317	SP279707	0.0192	Freehold	Port industry precinct	-

501	SP279707	122.2629	Freehold	Port industry Light industry and innovation and Buffer and conservation precinct (portions within BuSDA)	Port industry precinct Port operational & support services precinct Marine industry precinct Light/commercial industry precinct Dredge material handling precinct Landscaped/buffer precinct Conservation precinct Investigation area precinct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2SP157913
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501SP279707
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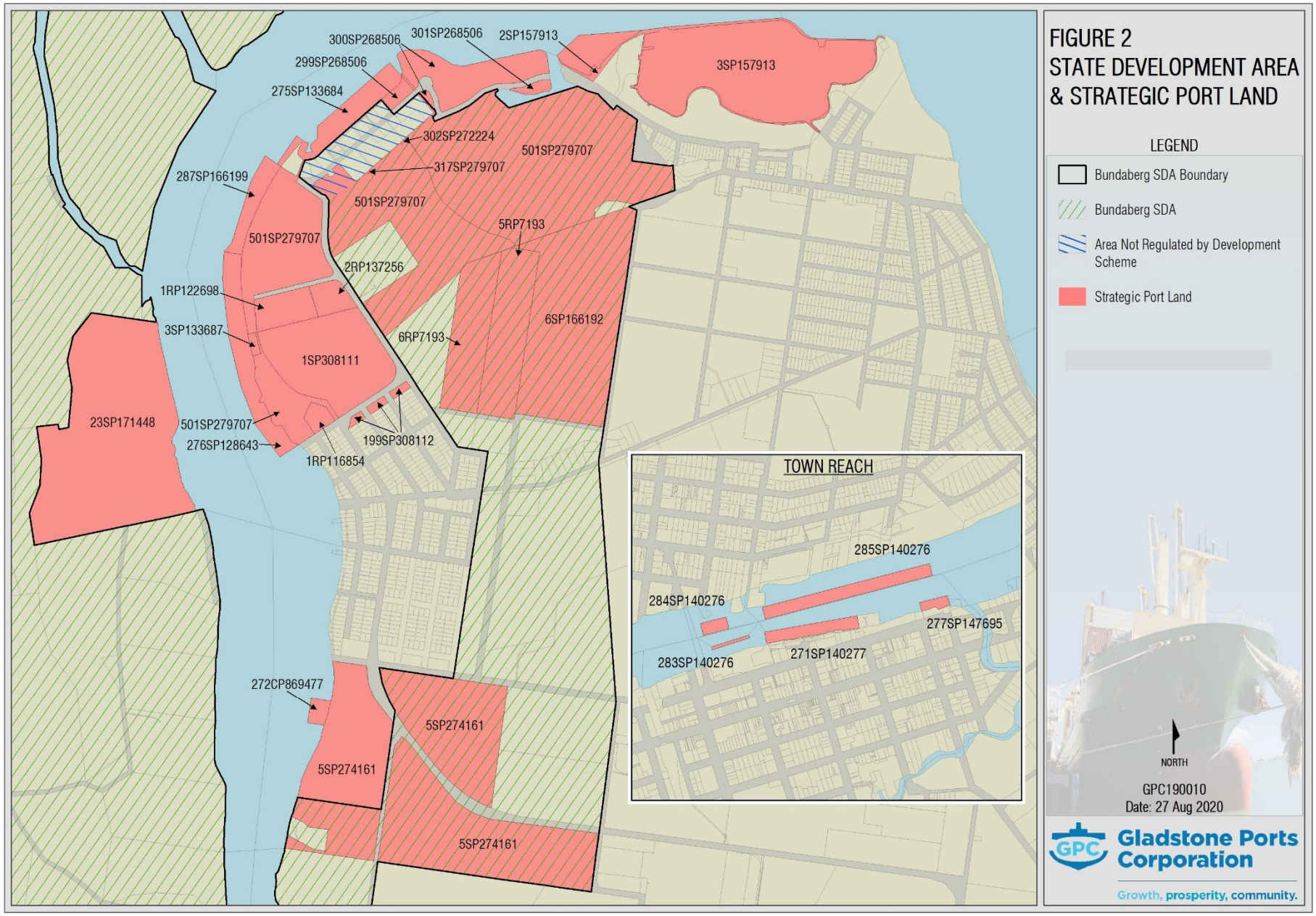
287SP166199
501SP279707
5RP7193
501SP279707
2RP137256
1RP122698
6SP166192
3SP133687
6RP7193
1SP308111
23SP171448
501SP279707
199SP308112
276SP128643
1RP116854
272CP869477
5SP274161
5SP274161
5SP274161
TOWN REACH
285SP140276
284SP140276
277SP147695
283SP140276
271SP140277
FIGURE 1
STRATEGIC PORT LAND HOLDINGS
LEGEND
Strategic Port Land
NORTH
GPC190010
Date: 27 Aug 2020
Gladstone Ports Corporation
Growth, prosperity, community.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2RP137256
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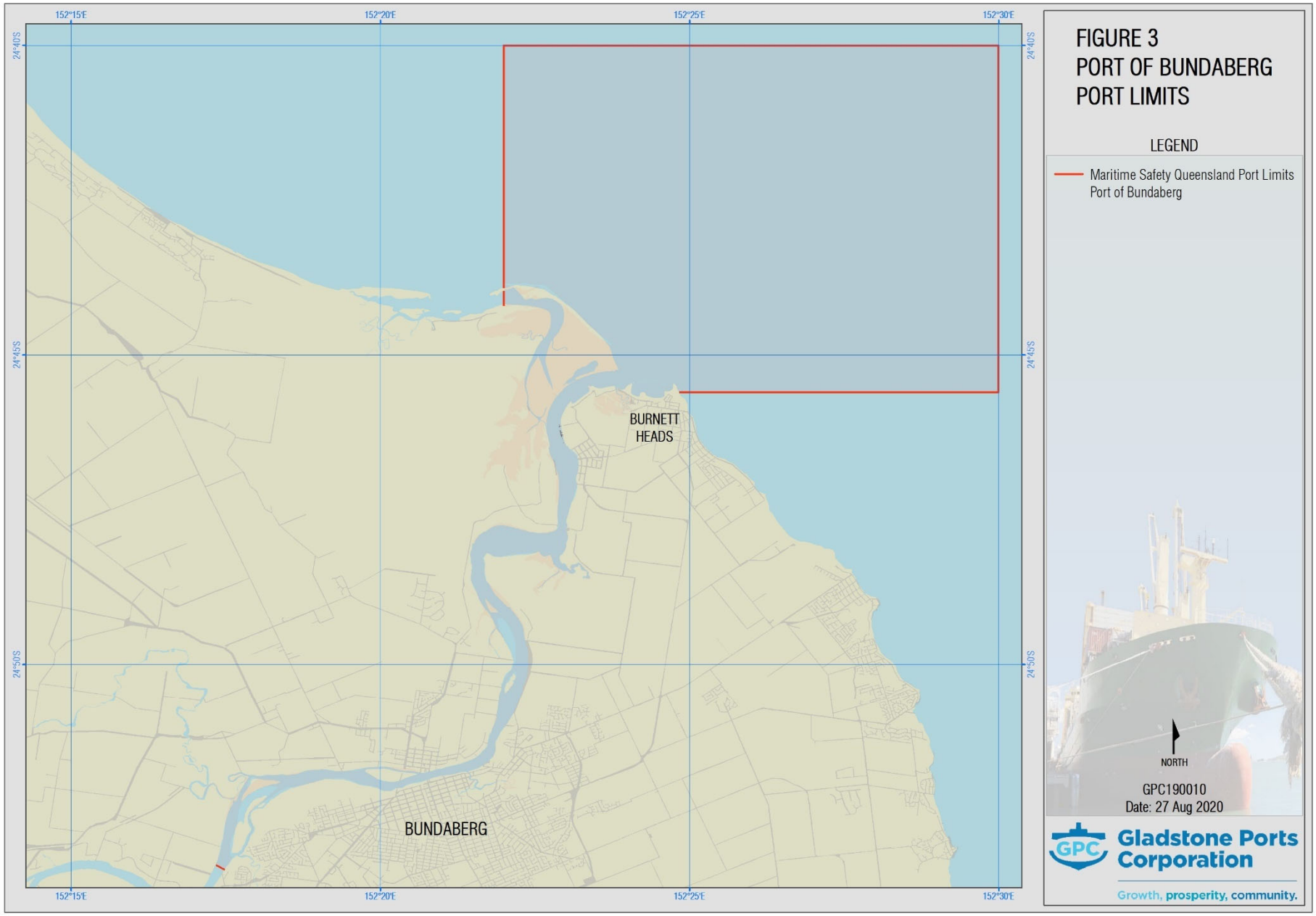
199SP308112
276SP128643
1RP116854
272CP869477
5SP274161
5SP274161
5SP274161
TOWN REACH
285SP140276
284SP140276
277SP147695
283SP140276
271SP140277
FIGURE 2
STATE DEVELOPMENT AREA
& STRATEGIC PORT LAND
LEGEND
Bundaberg SDA Boundary
Bundaberg SDA
Area Not Regulated by Development Scheme
Strategic Port Land
NORTH
GPC190010
Date: 27 Aug 2020
Gladstone Ports Corporation
Growth, prosperity, community.


152°15'E
152°20'E
152°25'E
152°30'E
24°40'S
24°45'S
24°50'S
BURNETT HEADS
BUNDABERG
FIGURE 3
PORT OF BUNDABERG
PORT LIMITS
LEGEND
Maritime Safety Queensland Port Limits
Port of Bundaberg
NORTH
GPC190010
Date: 27 Aug 2020
Gladstone Ports Corporation
Growth, prosperity, community.

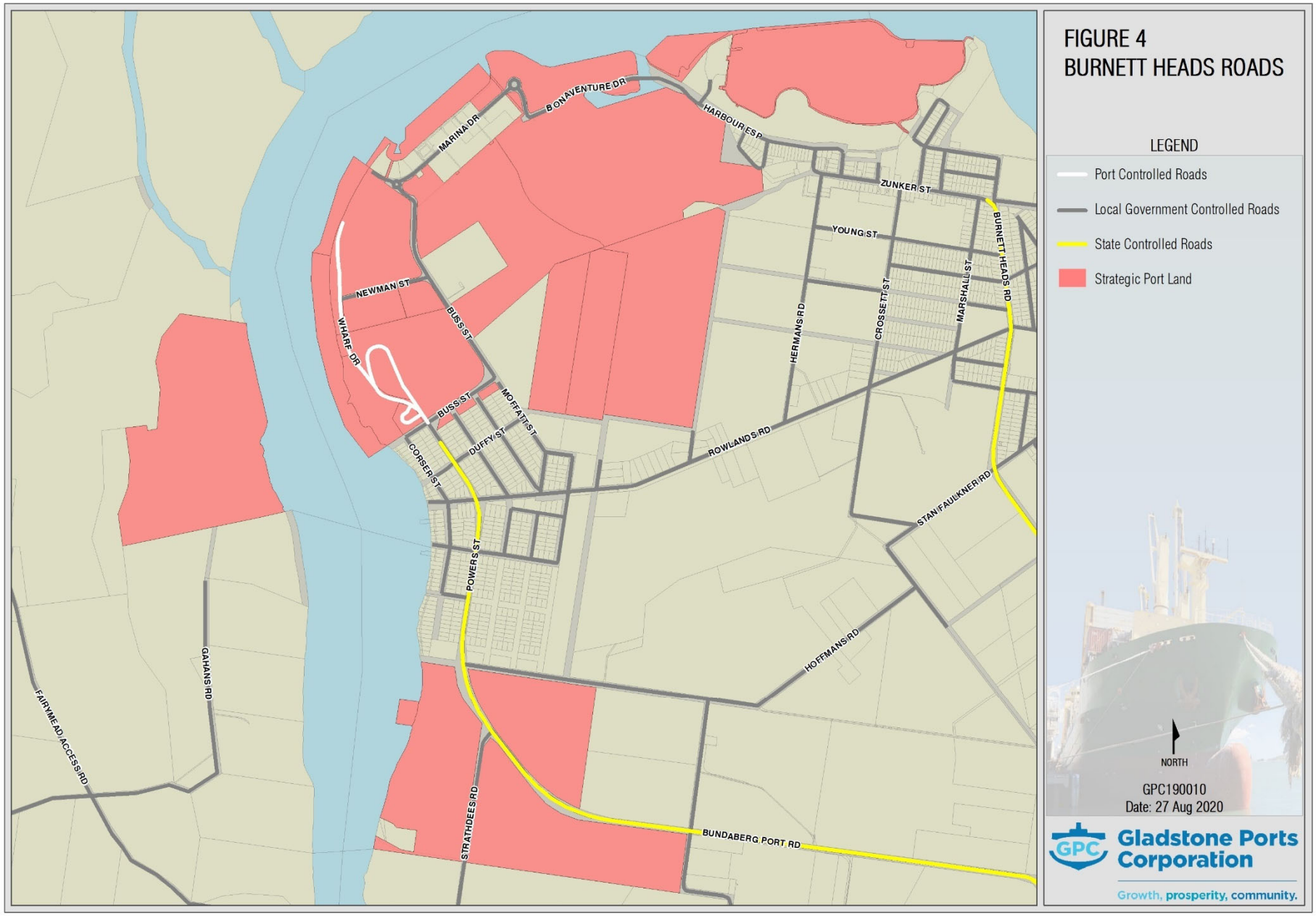


FIGURE 4
BURNETT HEADS ROADS
LEGEND
Port Controlled Roads
Local Government Controlled Roads
State Controlled Roads
Strategic Port Land
BONAVENTURE DR
MARINA DR
HARBOUR ESP
ZUNKER ST
YOUNG ST
BURNETT HEADS RD
NEWMAN ST
WHARF DR
BUSS ST
HERMANS RD
CROSSETT ST
MARSHALL ST
MOFFATT ST
DUFFY ST
GORSER ST
ROWLANDS RD
STAN FAULKNER RD
POWER ST
HOFFMANS RD
GAHANS RD
FAIRMEAD ACCESS RD
STRATHDEES RD
BUNDABERG PORT RD
NORTH
GPC190010
Date: 27 Aug 2020
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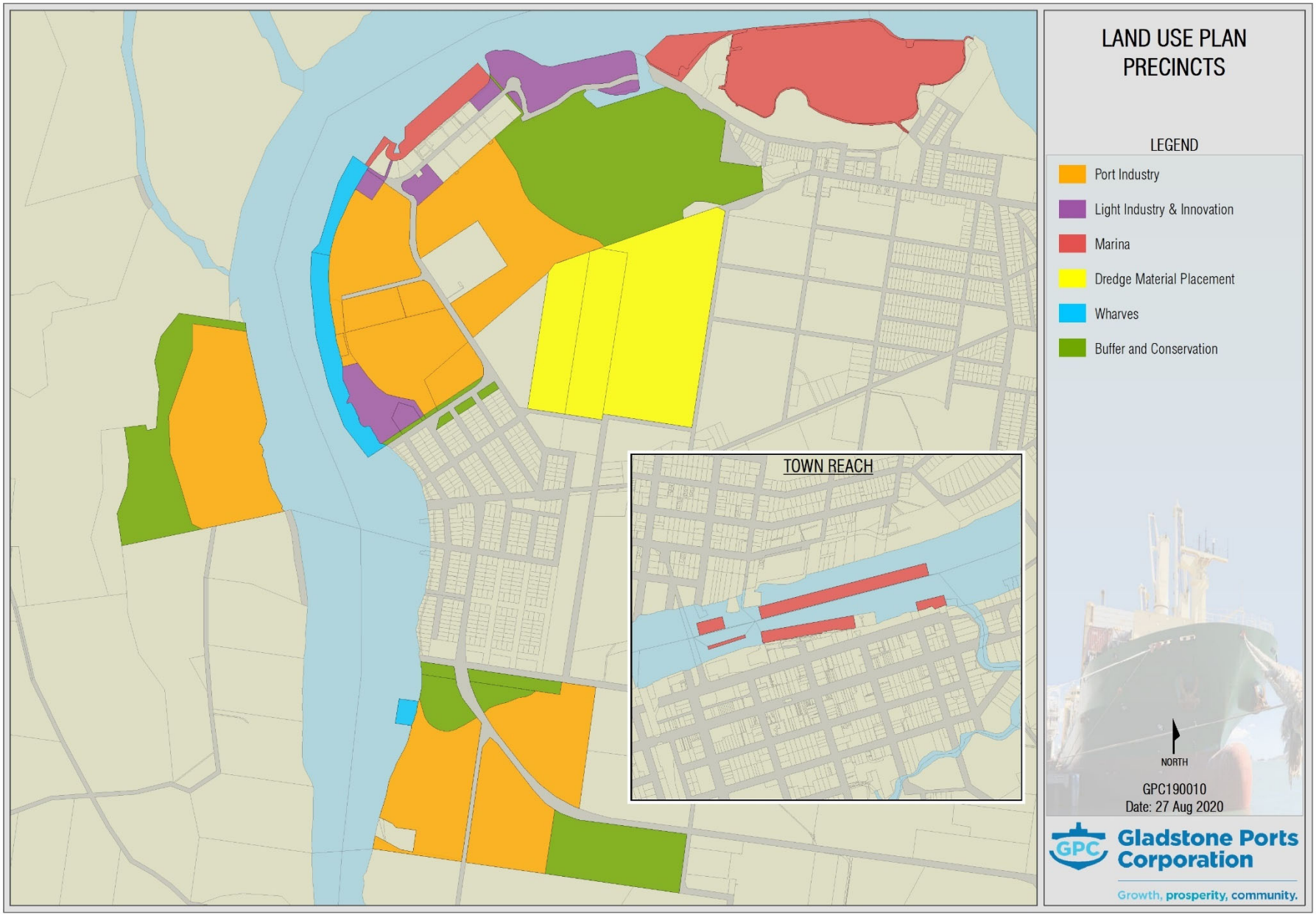
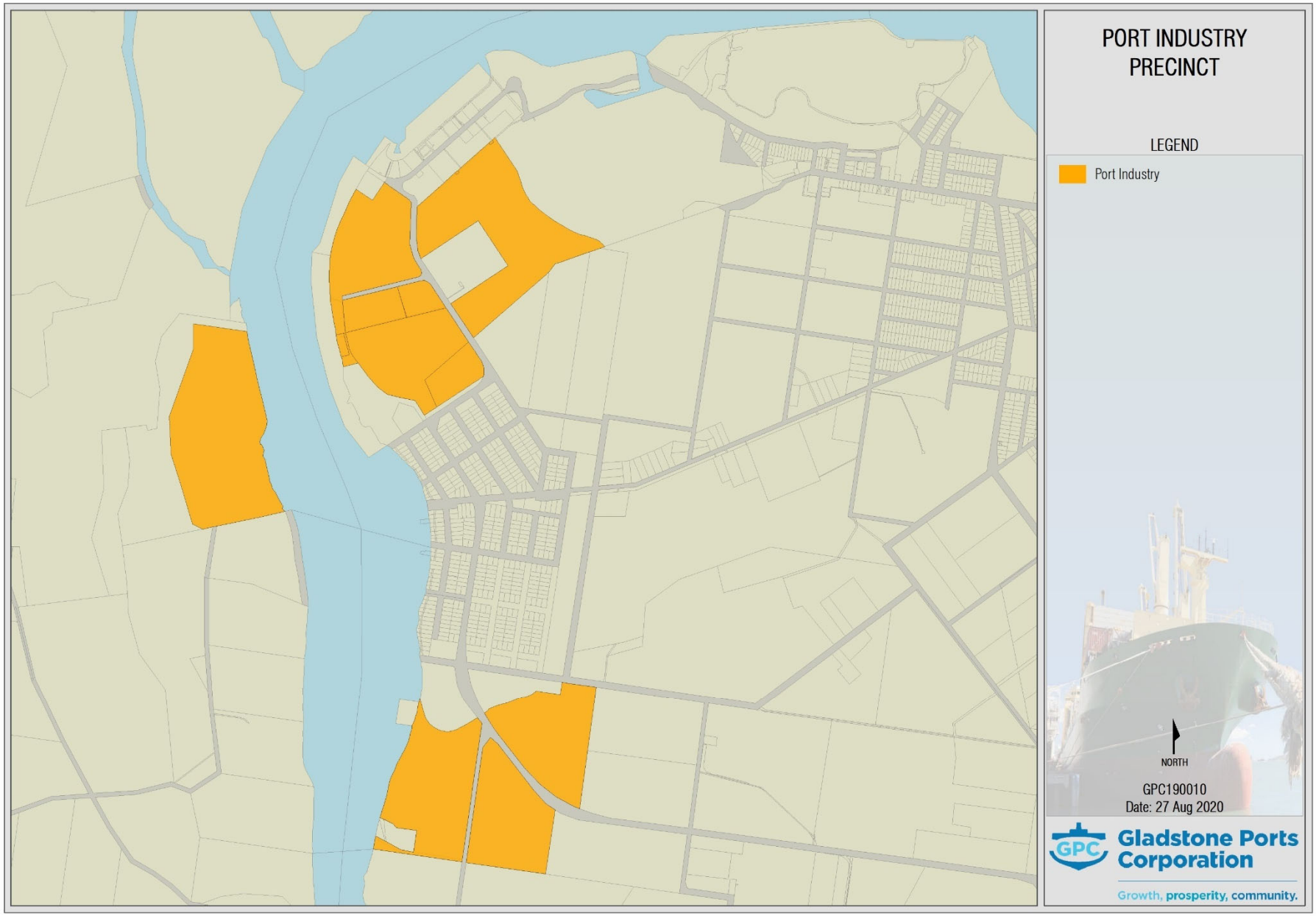
Appendix C

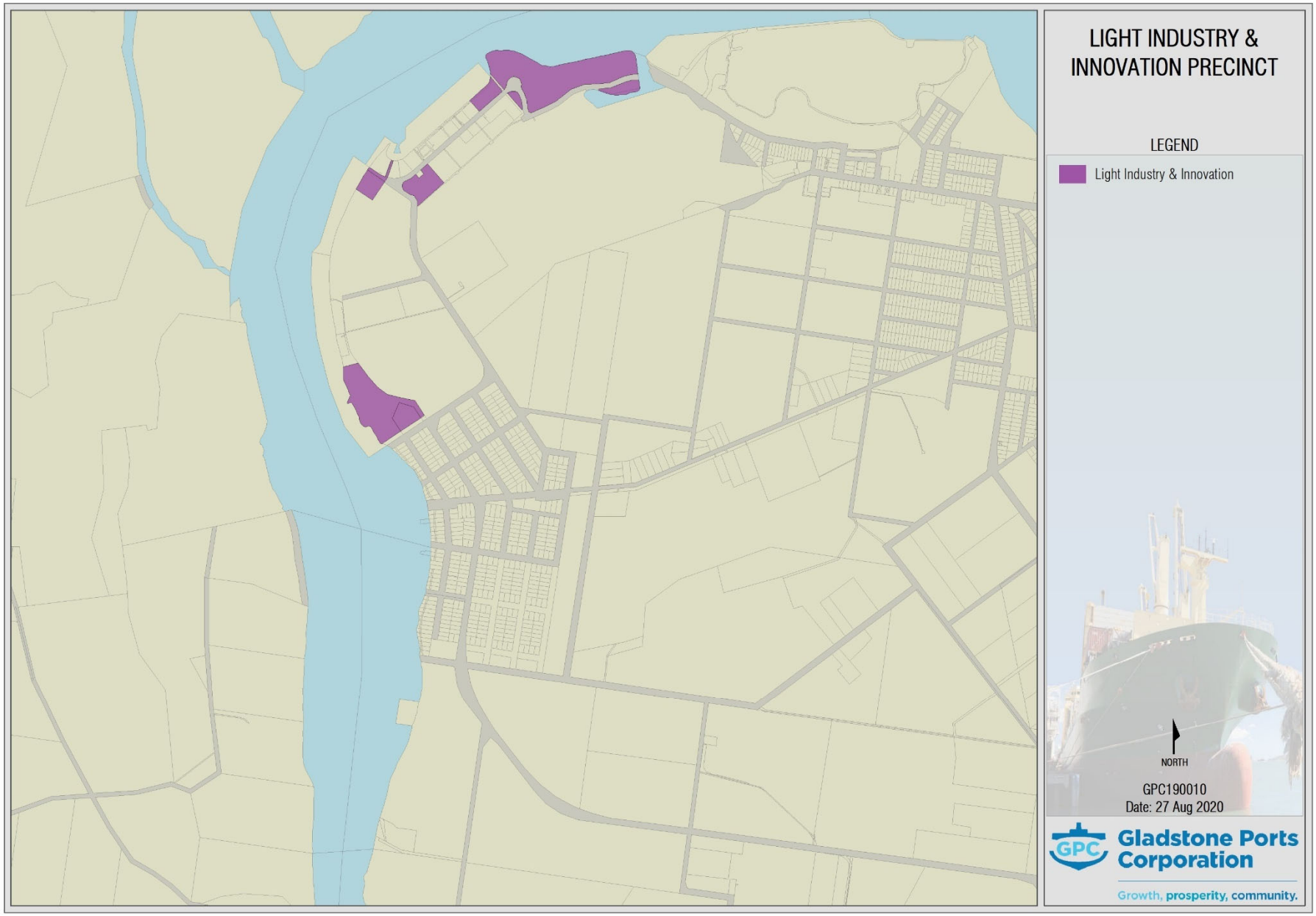
LAND USE PLAN PRECINCT MAPPING

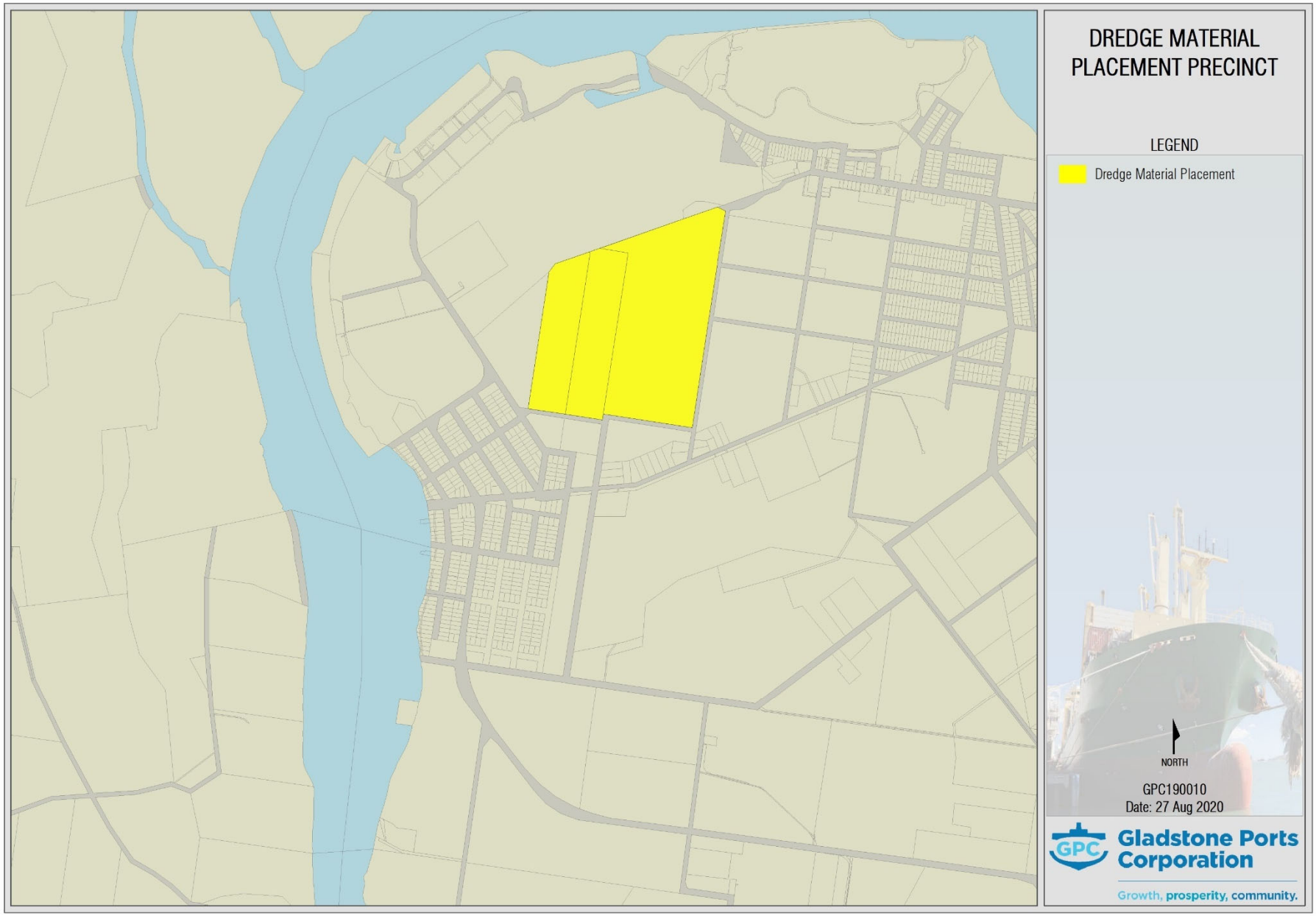
Appendix C

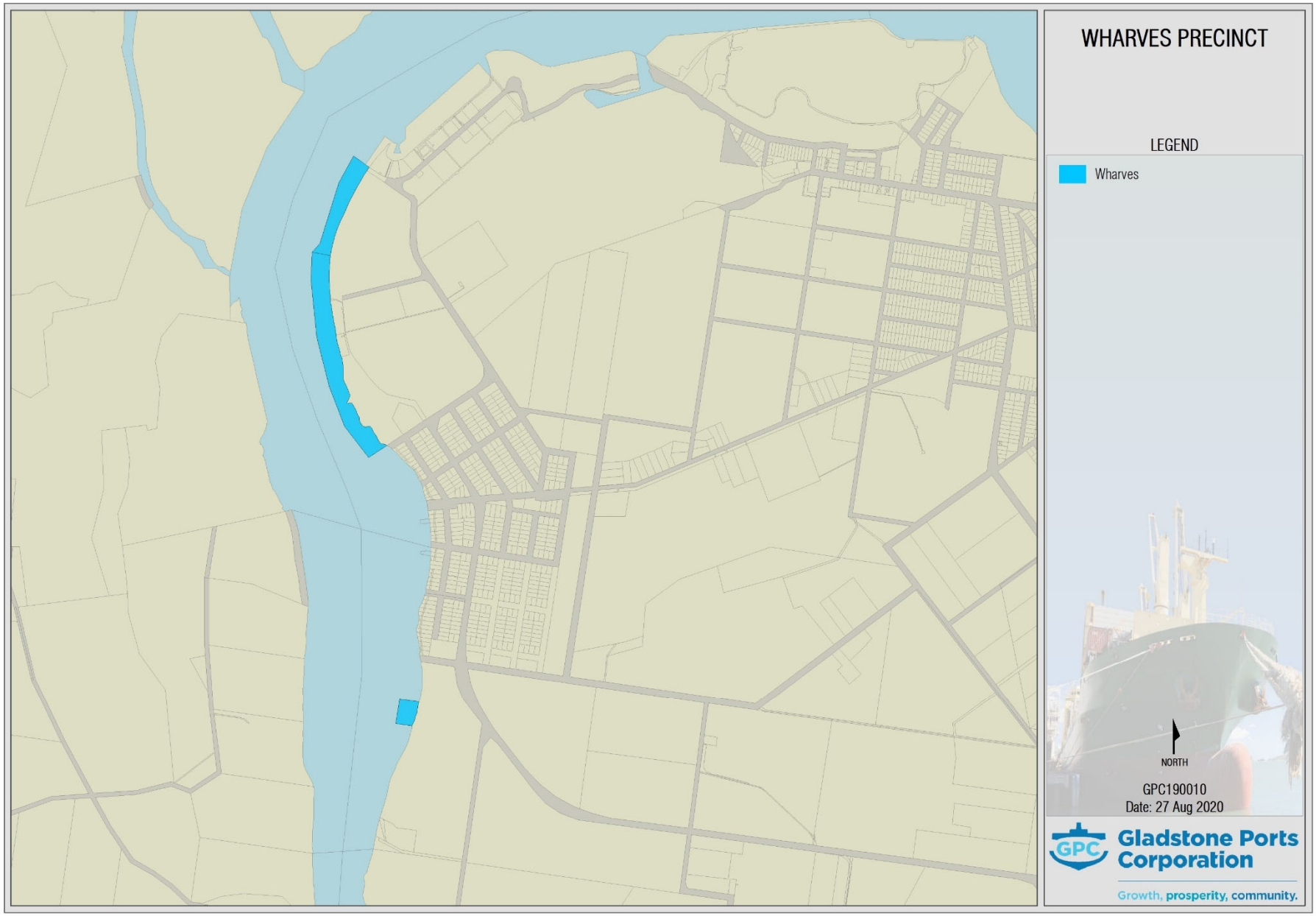
Land use plan precinct mapping

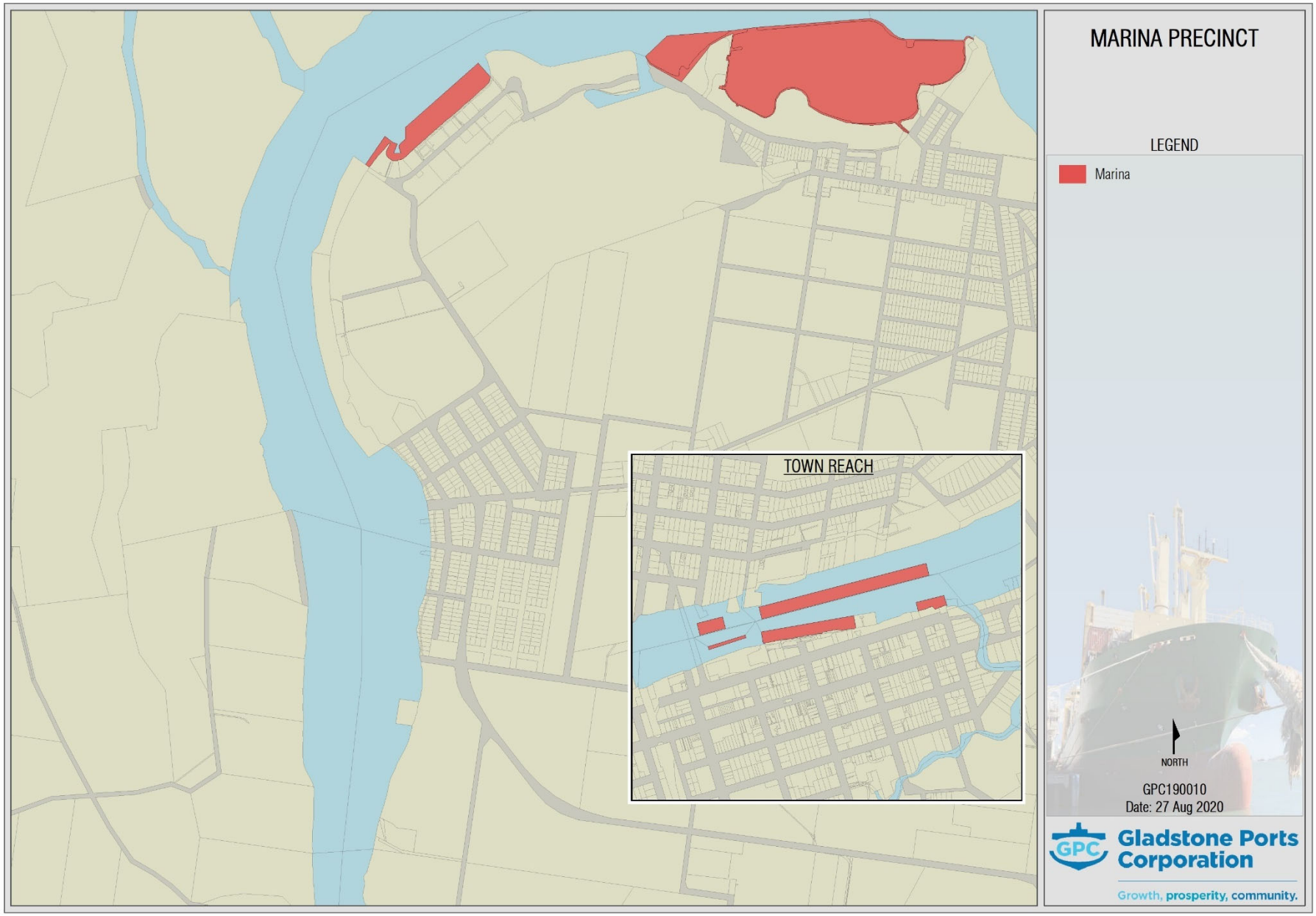

LAND USE PLAN
PRECINCTS
LEGEND
Port Industry
Light Industry & Innovation
Marina
Dredge Material Placement
Wharves
Buffer and Conservation
TOWN REACH
NORTH
GPC190010
Date: 27 Aug 2020
Gladstone Ports Corporation
Growth, prosperity, community.

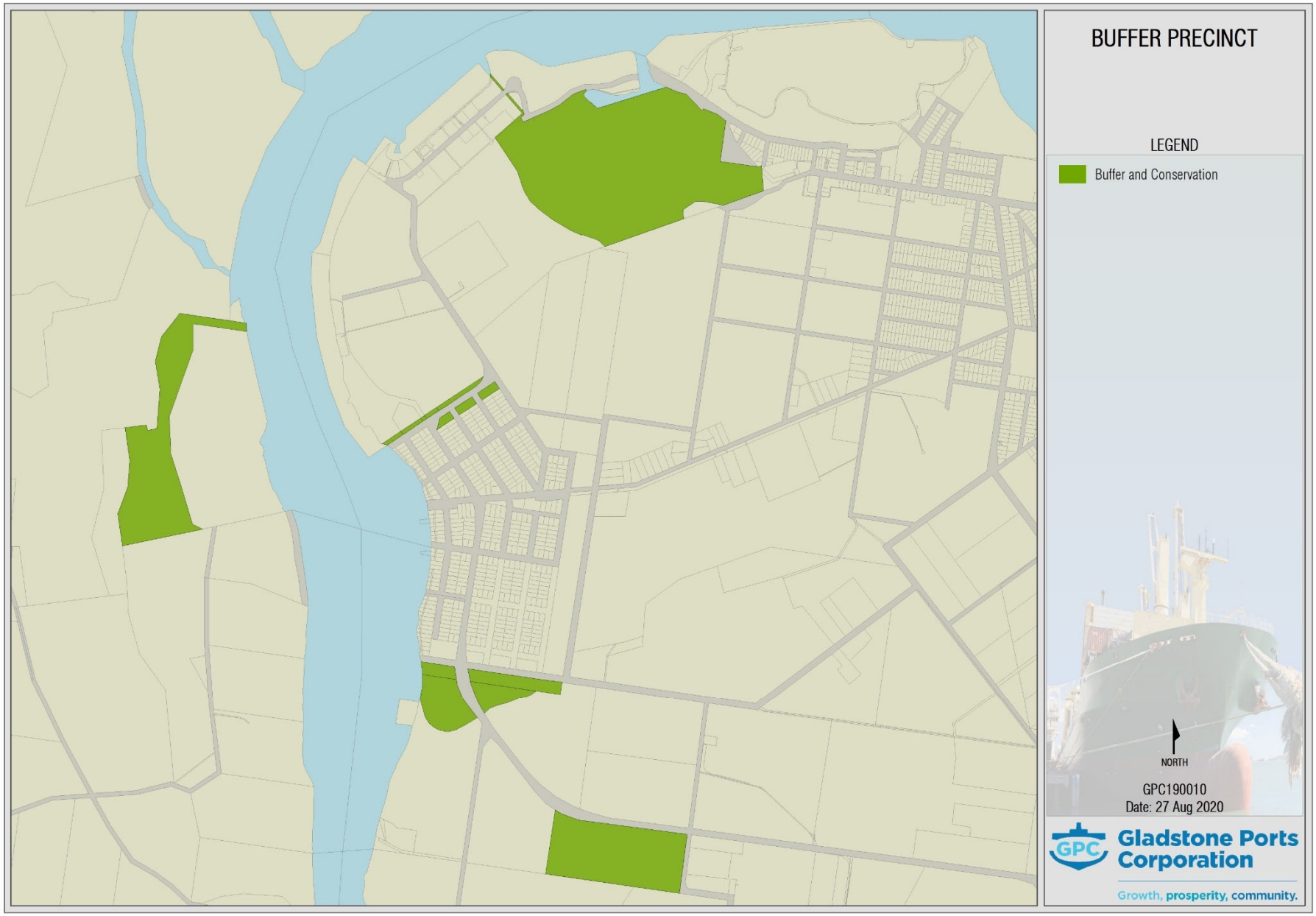

PORT INDUSTRY
PRECINCT
LEGEND
Port Industry
NORTH
GPC190010
Date: 27 Aug 2020
GPC
Gladstone Ports
Corporation
Growth, prosperity, community.


LIGHT INDUSTRY &
INNOVATION PRECINCT
LEGEND
Light Industry & Innovation
NORTH
GPC190010
Date: 27 Aug 2020
GPC
Gladstone Ports Corporation
Growth, prosperity, community.


DREDGE MATERIAL
PLACEMENT PRECINCT
LEGEND
Dredge Material Placement
NORTH
GPC190010
Date: 27 Aug 2020
Gladstone Ports Corporation
Growth, prosperity, community.


WHARVES PRECINCT
LEGEND
Wharves
NORTH
GPC190010
Date: 27 Aug 2020
Gladstone Ports Corporation
Growth, prosperity, community.


MARINA PRECINCT
LEGEND
Marina
TOWN REACH
NORTH
GPC190010
Date: 27 Aug 2020
Gladstone Ports Corporation
Growth, prosperity, community.


BUFFER PRECINCT
LEGEND
Buffer and Conservation
NORTH
GPC190010
Date: 27 Aug 2020
GPC
Gladstone Ports Corporation
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Gladstone Ports Corporation

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Appendix D

GUIDELINES

Appendix D

Transport, Access and Car Parking Guideline

The purpose of transport, access and car parking guideline is to:

- Provide information that GPC may request for a development application; and
- Provide guidance or advice about satisfying an assessment benchmark with the land use plan.

This policy contains the required rates of vehicle parking and design and construction standards for vehicle parking, access and manoeuvring areas for all land uses on port land. This policy also contains requirements for road construction and transport requirements within the port road network.

TRANSPORT

Port Road Network and Port of Bundaberg Roads

The port road network includes port owned existing and future roads on strategic port land and State government and local government roads adjacent to strategic port land. The port road network and wider regional road network is shown in Figure 4 Burnett Heads Roads.

Wharf Drive and Sugar Terminal Crescent are the only Port of Bundaberg roads on strategic port land and are open to the public to use. All other roads within and surrounding the port area are public roads within council and State government road reserves. Buss Street extends from Power Street, past Newman Street and Marina Drive and terminates at the Burnett River adjacent to the Port of Bundaberg Marina (Figure 4).

Road Rules and Traffic Management Plans

Port operators and their contractors operating within the port road network, including construction and operational traffic, are responsible for:

i. Complying with all Queensland road rules and the *Transport Operations (Road Use Management – Road Rules) Regulation 2009*;

ii. Ensuring all transport and vehicles used on strategic port land are roadworthy and registered with the Department of Transport and Main Roads; and

iii. Developing and implementing construction & operational traffic management plans for their activities, that ensure safe & efficient movement of traffic at all times. Refer to GPC's *Traffic Management Plan Guideline* for more details.

Traffic Impact Assessment Requirements

A traffic impact assessment may be required on a case by case basis.

An assessment of traffic impacts on Port of Bundaberg roads and state-controlled roads must comply with the Department of Transport and Main Roads *"Guide to Traffic Impact Assessment December 2018"* or as amended by the Department of Transport and Main Roads.

An assessment of traffic impacts on local government roads must comply with the requirements of the Bundaberg Regional Council.

PORT OF BUNDABERG ROAD REQUIREMENTS

Work on existing port roads i.e. Wharf Drive and Sugar Terminal Crescent or on new port roads must comply with the applicable standards specified in the Bundaberg Regional Council's "Planning scheme policy for development work" to the satisfaction of GPC or another standard applied by GPC.

For the purpose of road design, the hierarchy of port roads has been designated as follows:

Wharf Drive	Industrial Collector
Sugar Terminal Crescent	Access Road

STATE CONTROLLED ROAD REQUIREMENTS

Development on State-controlled roads is subject to approval by the Department of Transport and Main Roads.

Development on State-controlled roads is to comply with the *Road Planning and Design Manual 2nd edition* standards and specifications or as amended by the Department of Transport and Main Roads, for example for:

i. Upgrading requirements of an existing State-controlled road or intersection; and

ii. A new intersection on a State-controlled road.

ACCESS, CIRCULATION AND MANOEUVRING

Onsite vehicle access and egress is designed to be safe and efficient. Appropriate driveways and crossovers are provided to accommodate:

- The type of vehicles expected to access the site;
- Maintenance of infrastructure corridors; and
- Maintenance of storm water infrastructure or flows.

All premises (except dwelling houses, duplex apartments) enable vehicles to enter and leave the site in a forward direction.

Access pavement type on Port of Bundaberg roads is to be determined on a case by case basis to the satisfaction of GPC.

Access from State controlled roads is subject to approval from the Department of Transport and Main Roads.

Access from Council controlled roads is subject to approval from the Bundaberg Regional Council.

Site access, circulation and manoeuvring activities are not to result in:

iv. Contamination of port network roads with product, pavement or other material; and

v. Air emissions from product or pavement.

Access driveways and internal circulation routes function safely and efficiently and accommodate all expected traffic on site, including:

vi. Delivery and pick up services

vii. Loading, unloading and refuelling areas

viii. Wash-down, repair, service and inspection areas

ix. Movement between access points, parking and storage

x. Movement between outdoor and indoor areas

xi. Service vehicles, including rubbish collection

Circulation & manoeuvring area pavement type is to be determined on a case by case basis to the satisfaction of GPC.

Access driveways, circulation and manoeuvring areas on strategic port land comply with the requirements of the relevant Australian Standards, including but not limited to AS 2890.1 – 1993 and AS 2890.2 2002 or as amended from time to time, and designs are certified by appropriately qualified persons (e.g. Registered Professional Engineer QLD (RPEQ)).

CAR PARKING

A sufficient number of car parking spaces and service vehicle loading bays are to be provided to accommodate the amount and type of traffic expected to be generated by the use.

xii. The minimum number of on-site car parking spaces is to comply with Table 1 – Vehicle Parking Rates; and

xiii. When viewed from the principal street frontage, car parking areas and other hardstand areas are to account for less than 50% of the site's frontage.

The pavement type for parking areas is to be determined on a case by case basis to the satisfaction of GPC. Onsite parking activities are not to result in:

xiv. Contamination of port network roads with product, pavement or other material; and

xv. Air emissions from product or pavement.

The following lists the required design and construction standards for car parking areas for purposes of development:

xvi. The dimensions and areas of car parking spaces meet the design requirements of Australian Standards AS 2890.1 – 1993 and AS 2890.2 – 2002 or as amended from time to time.

xvii. Open car parking spaces where possible are to be designed and constructed to facilitate stormwater infiltration on-site. This may be achieved through being surfaced with resilient paving materials and are designed to accommodate stormwater infiltration.

xviii. Bicycle facilities and on street parking complies with AS 2890.3 – 1993 Bicycle Parking Facilities and AS 2890.5 On - Street Parking.

xix. Disabled access parking complies with AS2890.6 – 2009 Off-street parking for people with disabilities.

Other Parking Requirements

The following details the required standards for the provision of access and servicing requirements for parking:

xx. Two per cent of the number of vehicle parking spaces required are provided as marked and signed areas for motorcycles, with a minimum of 1 space, each measuring 2.5 m by 1.35 m.

xxi. Commercial development over 500 m^2 GFA are to provide and maintain dedicated facilities for the parking of push bikes suitable for securing a bike in an upright position at a rate of two push bikes per 500 m^2 GFA, or part thereof, within 30 m walking distance of a pedestrian entry to the building.

xxii. Commercial developments over 2500 m^2 GFA to provide a dedicated rank for one taxi rank for each 2500 m^2 GFA within 30 m walking distance of a pedestrian entry to the building.

xxiii. Commercial developments over 4000 m^2 GFA provide a bus set down shelter with seats for one bus for each 4000 m^2, within 50 m walking distance of a pedestrian entry to the building and public phone.

xxiv. Equitable parking access for vehicle occupants with disabilities is to be provided at a rate of 1 space per 100 ordinary parking spaces, or 1 space per 4,500m2 GFA for a business, or 1 space per 300m2 GFA for a restaurant.

VEHICLE PARKING RATES

Table 1 lists the required rates of vehicle parking to be provided for purposes of development.

Table 1 Vehicle Parking Rates

Use	Minimum car parking requirement	Additional standards
Animal husbandry	Not specified	
Animal keeping	Not specified	
Aquaculture	1 space per employee	
Bulk storage infrastructure and activities	1 space per 100 m^2 GFA.	Heavy vehicles must be able to be accommodated and turned on site.
Caretaker's accommodation	1 space adjacent to the residence	
Commercial use	1 space per 30 m^2 GFA	
Community use	1 space per 20 m^2 of GFA	
High impact industry, medium impact industry or low impact industry	1 space per employee; plus 2 visitor spaces	Heavy vehicles must be able to be accommodated and turned on site.
Multiple dwelling	1 space per apartment; plus 1 space per 2 apartments for visitors	
Dwelling house Dwelling unit	1 space per dwelling	
Educational establishment Research and technology industry	1 space per 2 staff for Primary Schools 1.5 spaces per 2 staff for other uses; plus Universities / Adult Learning Facilities – 1 space per student	Based upon maximum number of students at any given time.
Emergency service	Not specified	
Outdoor sales	2 spaces	
Extractive Industry	1 space per 2 employees; plus 2 visitor spaces.	Heavy vehicles must be able to be accommodated and turned on site.
Food and drink outlet	1 space per 15 m^2 GFA	For any drive-through facility, queuing space, clear of the road reserve, for 6 vehicles being served or awaiting service.
Outdoor sport and recreation	1 space per 20 m^2 GFA; or 1 space per 5 spectators able to be seated; or 4 spaces per court or lane.	Whichever is the greatest.
Hotel	1 space per apartment; plus 1 space per 2 apartments for visitors	

Use	Minimum car parking requirement	Additional standards
Landing	1 space per 50 m^2 GFA	
Loading and unloading infrastructure and activities	1 space per 50 m^2 GFA	
Machinery and Transport Depot	1 space per 50 m^2 GFA	Heavy vehicles must be able to be accommodated and turned on site.
Marina	1 space per 50 m^2 GFA; plus 1 space per berth or mooring facility available.	Heavy vehicles must be able to be accommodated and turned on site.
Marina service	1 space per 50 m^2 GFA; plus 1 space per berth or mooring facility available.	
Marine industry	1 space per 50 m^2 GFA; plus 1 space per berth or mooring facility available.	
Nature based tourism	Not specified	
Park	No spaces required.	
Port infrastructure	1 space per employee	Based on maximum number of employees per shift Heavy vehicles must be able to be accommodated and turned on site.
Passenger terminal	1 space per 50 m^2 GFA; plus 1 space per berth or mooring facility available.	
Port services	1 space per 50 m^2 GFA; plus 1 space per berth or mooring facility available.	
Service industry Special industry	1 space per 30 m^2 GFA	Heavy vehicles must be able to be accommodated and turned on site.
Tourist attraction Tourist park	Not specified	
Transport depot	1 space per 50 m^2 of GFA	Heavy vehicles must be able to be accommodated and turned on site.
Telecommunications Facilities	1 space for maintenance purposes to be available on the site, adjoining land or street reserve.	
Temporary construction hardstand or laydown area	Spaces available in accordance with the requirements listed in this table for the use proposed.	
Warehouse infrastructure and activities	1 space per 100 m^2 GFA	Heavy vehicles must be able to be accommodated and turned on site.

Table notes:

GFA means Gross Floor Area

m^2 = square metres

Traffic Management Plan Guideline

The purpose of the traffic management plan guideline is to assist Port operators and/or contractors identify the minimum requirements that are to be included in Construction and Operational Traffic Management Plans (TMP) for activities within the Port of Bundaberg. This document does not address Traffic Impact Assessments.

The TMP should be as straightforward as possible and contain only information of direct relevance to the project. It is required to be readily accessed and understood by all employees.

PORT OF BUNDABERG ROADS

The Port of Bundaberg road network includes Port owned existing and future roads on strategic port land and council and State-controlled roads adjacent to strategic port land.

Wharf Drive and Sugar Terminal Crescent are the only Port of Bundaberg roads on Port of Bundaberg land and are open to the public to use. All other roads within the Port of Bundaberg and the surrounding area are public roads within council and State government road reserves. Buss Street extends from Power Street, past Newman Street and Marina Drive and terminates at the Burnett River adjacent to the Port of Bundaberg Marina.

ROAD RULES

Port operators and their contractors are responsible for:

i. Complying with all Queensland road rules and the *Transport Operations (Road Use Management – Road Rules) Regulation 2009*; and

ii. Complying with road signs e.g. speed limits posted on Port roads.

TRAFFIC MANAGEMENT PLAN REQUIREMENTS

TMPs may be required for the construction phase and / or the operational phase, depending upon the type and scale of the proposed development.

All TMP's are to include, but are not limited to, the following requirements:

i. A description of the operation, its location and associated traffic requirements including:
   - The product being handled
   - Volumes of material to be loaded and unloaded
   - Location of sites where material/products are to be loaded or unloaded
   - Types of vehicles
   - Number of vehicles
   - Number of vehicle movements per day; and
   - Hours of operation.

ii. The scope of the TMP and who it applies to.

iii. The objectives of the TMP.

iv. A map or diagram showing there is sufficient vehicle manoeuvring room for:
   - The operation's site and safe ingress and egress of vehicles to the site;
   - All locations where loading/unloading occurs; and

- The wharf and safe ingress and egress of vehicles to the wharf (where relevant).

v. A description of and a map/s showing the relevant traffic route/s to be used within the Port of Bundaberg.

vi. Identification of the need for approved B-double routes.

vii. Procedures to be followed that will ensure the safety of other road users, pedestrians and port operators.

viii. Illustrations or descriptions of road signage proposed to be used to communicate with other road users and pedestrians and a map illustrating their placement within the Port of Bundaberg.

ix. Any other proposed communication strategies with port operators.

Tidal Works Guideline

The purpose of the tidal works guideline is to:

- Provide information that GPC may request for a development application involving operational work that is tidal work for port infrastructure, marina services, dredging or reclamation;
- Provide guidance or advice about satisfying an assessment benchmark under the land use plan.

Note: Tidal works is defined in the *Coastal Protection and Management Act 1995.*

APPLICATION DRAWING REQUIREMENTS

A tidal works application is required to include:

- 'For Construction' engineering drawings that are certified by a RPEQ of all the works for which approval is sought (including new and existing works and works proposed to be removed) including:
    - any necessary information relating to construction details of proposed works; and
    - the design criteria for the proposed works.
- Site layout plan showing property descriptions and boundaries adjacent to the proposed works.
- In relation to property boundaries, a plan view of:
    - the proposed works for the current application;
    - existing works on the waterfrontage of the property which would abut the proposed works, which are not included in the current application; and
    - existing works on adjacent properties where these works are within 20 m of the works for the current application.
- Plan/s showing the following level information:
    - the finished levels of the proposed works; and
    - the levels of lowest astronomical tide (LAT), mean high water springs (MHWS) and highest astronomical tide (HAT) and the datum for the levels shown.
- Plans of any proposed works on adjacent land for which approval has not been sought or is not included in the current application.

PORT INFRASTRUCTURE & MARINA SERVICES

Port infrastructure is structures used for the berthing and mooring of vessels for port operations. It includes wharves, jetties, dolphins, gangways, roll on-roll off facilities, docks etc.

Marine services include premises used for arrival and departure of vessels and movement of goods and passengers in the marina. These include structures such as wharves, jetties, pontoons, gangways and infrastructure associated with barge services.

Development that includes operational work that is tidal works for port infrastructure or marina services is required to demonstrate it can be constructed and operated safely and efficiently. To achieve this, the following design elements should be addressed in an application:

- Details of proposed structure
- Location of proposed structure and proximity to surrounding infrastructure

- How the structure will tie in with adjacent land
- Berthing and mooring arrangements/plans for all proposed vessel types e.g. tie up systems, tug operations etc.
- Details of any ancillary infrastructure on the structure or adjacent land
- Details of loading and unloading equipment
- Corrosion prevention systems for the structure
- Services to/on the structure e.g. electrical, water, communications etc.
- Navigation aids/warning signs e.g. lighting, buoys, markers, signs
- Fire fighting systems and man overboard recovery systems e.g. access ladders
- Method of certifying no material or debris has been left on the seabed upon completion of construction
- The vessels, floating plant and machinery to be used during construction and methods of refuelling
- Proposed anchorage of vessels, floating plant and machinery when not on the construction site or during severe weather e.g. cyclones.

DREDGED STRUCTURES

Capital dredging for new structures or extending existing structures can include shipping channels, access channels, swing basins and berth pockets.

Development that includes capital dredging is required to demonstrate it can be constructed and operated safely and efficiently. To achieve this, the following design elements should be addressed in an application:

- Details of proposed structure to be dredged e.g. dimensions, batter slopes etc. and its location in relation to surrounding infrastructure
- Current hydrographic survey plans of the area to be dredged
- No adverse impacts due to flooding, coastal erosion and coastal processes
- Volume of material to be dredged, method of dredging and dredge equipment details
- Description of the type of material to be dredged
- Disposal area to be used for dredged material and assessment of capacity of the area
- Types of proposed vessels to utilise the dredged structure, vessel frequency, product volumes, transport and berthing arrangements etc.
- Proposed anchorage of vessels when not on site or during severe weather e.g. cyclones.

When dredging activities are proposed, applicants are encouraged to utilise the following where relevant:

- the *National Assessment Guidelines for Dredging 2009* or as amended, published by the Australian Governments Department of Agriculture, Water and the Environment, for guidance in relation to sediment sampling, analysis and reporting; and/or
- the *Guideline Dredging – Dredging and allocation of quarry material* published by the Queensland Governments Department of Environment and Science.

RECLAMATION

Reclamation is the raising of tidal land to create land above Highest Astronomical Tide.

Development that includes reclamation is required to demonstrate it can be constructed and operated safely and efficiently. To achieve this, the following design elements should be addressed in an application:

- Details of proposed reclaimed area including bund construction, rock revetment works, sheet piling etc. and its location in relation to surrounding infrastructure
- Current hydrographic survey plans of the area to be reclaimed
- Risk assessment in relation to potential flood impacts, coastal erosion and coastal processes
- Description of the type of material to be deposited in the reclamation area
- Method of placing material into the reclamation area
- Environmental monitoring requirements
- Acid sulfate soil investigation report.

MANAGEMENT PLANS

Tidal works applications may be required to supply any of the following plans as deemed relevant:

- dredge management plan for the dredging and dredge material disposal activities.
- sediment sampling and analysis report conforming with the National Assessment Guidelines for Dredging 2009.
- a risk assessment in relation to potential flood impacts, coastal erosion and coastal process.
- an anchorage plan to demonstrate safe anchorage of vessels and floating plant and equipment during construction and during emergencies e.g. cyclones.
- a berthing and mooring plan including tie up systems, tug requirements etc.
- a spill management and response plan for oils/fuels/pollutants, burst hydraulic hoses etc.
- an emergency management plan including a cyclone management plan.
- a construction and/or operational environmental management plan.
- an acid sulfate soil investigation report
- acid sulfate soil management plan.

MARINE PLAINS

Soils consisting of marine plains are shown on the South and North Bundaberg Soils Maps located online. Refer to: **https://publications.qld.gov.au/dataset/soil-survey-bundaberg-bab**.

Where development cannot reasonably avoid being located on marine plains (see links to soils maps), proponents should refer to information on water table salting to**:** https://publications.qld.gov.au/dataset/salinity-management-handbook.

Where necessary, proponents should provide the assessment manager with the following information:

- Evidence that shows the change in land use will not result in secondary salinity—either within the subject land or offsite.
- Undertake salinity risk assessment in accordance with Part B of the *Salinity Management Handbook*, Investigating Salinity. In particular, consider how the project will change the hydrology of the project area. Provide results of the salinity risk assessment.

- Where a salinity risk is identified, the development must be managed so that it does not contribute to the degradation of soil, water and ecological resources or damage infrastructure via expression of salinity. See Part C of the Salinity Management handbook. Detail strategies to manage salinity where risks have been identified.
- Any design should take into account existing secondary salinity in the landscape.

ACID SULFATE SOILS

Acid sulfate soils are soils, sediments, or other materials containing iron sulfides and/or acidity generated by their oxidation. Development occurring on low lying land has the potential to come into contact with acid sulfate soils.

Undertaking an acid sulfate soil report

An acid sulfate soils investigation is to be undertaken by a suitably qualified and experienced professional. Where filling is proposed, a suitably qualified professional must carry out the investigation. The investigation must be undertaken early in the project life to allow redesign of earthworks to avoid or minimise disturbance of acid sulfate soils.

An acid sulfate soil investigation as a minimum must:

- characterise extent and severity of actual and potential soil acidity by undertaking:
    - sampling in accordance with the National Acid Sulfate Soils Sampling and Identification Methods Manual
    - laboratory analysis by a National Association of Testing Authorities (NATA) accredited laboratory in accordance with the National Acid Sulfate Soils Identification and Laboratory Methods Manual
- analyse the sites vulnerability to heave and displacement as a result of any filling activities.
- analyse the effect of activities such as dewatering or filling on existing groundwater.
- describe the potential impacts on surrounding environmental features.
- identify location and depth where acid sulfate soils return results above the action criteria.

Acid sulfate management plan

If an investigation establishes that acid sulfate soils are to be disturbed, including through any dewatering by the proposed development, an acid sulfate soil management plan is required to accompany the proponents Environmental Management Plan. A standalone acid sulfate soils management plan may be required, depending on the complexity of the site and proposed development.

An Acid Sulfate Soil Management Plan should apply the following management principles:

- The disturbance of ASS should be avoided wherever possible.
- here disturbance of ASS is unavoidable, preferred management strategies are:
    - minimisation of disturbance
    - neutralisation
    - hydraulic separation of sulfides either on its own or in conjunction with dredging; and
    - strategic reburial (re-internment)

Works should aim to achieve best practice environmental management, when it has been shown that the potential impacts of works involving ASS are manageable, to make sure that the potential short- and long-term environmental impacts are minimised.

The material being disturbed (including the in situ ASS and surface water and groundwater systems), and any potentially contaminated waters associated with ASS disturbance, must be considered in developing a management plan for ASS and/or in complying with the general environmental duty.

Receiving marine, estuarine, brackish or fresh waters are not to be used as a primary means of diluting and/or neutralising ASS or associated contaminated waters.

Management of disturbed ASS is to occur if the ASS action criteria are reached or exceeded.

Placement of untreated ASS above the permanent water table, with or without containment, is not an acceptable long-term management strategy

The following issues should be considered when formulating ASS environmental management strategies:

- the sensitivity and environmental values of the receiving environment. This includes the conservation, protected or other relevant status of the receiving environment (e.g. Declared Fish Habitat Area, Marine Park, Coastal Management District and protected wildlife)
- whether groundwaters and/or surface waters are likely to be directly or indirectly affected
- the heterogeneity, geochemical and textural properties of soils on site
- the management and planning strategies of local and/or state government, including statutory planning instruments

Where the disturbance of acid sulfate soils occurs, compliance with the following guidelines (or as amended) will be required:

- The latest Qld Sampling Guidelines are the ***National acid sulfate soil sampling and identification methods manua***l .
- For advice on dredging acid sulfate soils, refer to the ***Guidelines for the dredging of acid sulfate soil sediments and associated dredge spoil management***.
- For advice on acid sulfate soils laboratory methods, refer to the ***National acid sulfate soils identification and laboratory methods manual***, Australian Standard AS4969 and/or the ***2004 Queensland Laboratory Methods Guidelines*** (.
- For advice on dewatering acid sulfate soils, refer to the ***National acid sulfate soils guidance: guidance for the dewatering of acid sulfate soils in shallow groundwater environments***.
- For advice on monosulfidic black oozes, refer to the ***National acid sulfate soils guidance: overview and management of monosulfidic black ooze (MBO) accumulations in waterways and wetlands*** .
- For advice on development an Acid Sulfate Soil Management Plan, refer to *the* ***Queensland Acid Sulfate Soil Technical Manual.***

Landscaping Guideline

The purpose of the landscaping guideline is to:

- Provide information that GPC may request for a development application
- Provide guidance or advice about satisfying an assessment benchmark under the land use plan.

SOFT LANDSCAPE DESIGN

INTRODUCTION

Properly designed and constructed soft landscape treatments such as shrub beds, tree planting and grassing can create interesting places in the Landscape. As these elements generally require ongoing maintenance throughout the entire life of the landscape, their design should be carefully considered to ensure that they serve their intended purposes including:

- Providing solar screening around buildings;
- Providing amenity and distinct landscape character;
- Creating interest and visual stimulation;
- Defining boundaries between two or more facilities; and/or
- Screening of undesirable objects or unattractive activities.

Design to reduce maintenance

There is no such thing as a maintenance free landscape, however proper planning can keep maintenance to a minimum. Aim to achieve minimum maintenance by using the following guidelines:

- Ensuring that shrub beds and grassed areas have adequate surface drainage;
- Make sure trees in lawn areas are placed so that mowing around them is not impeded;
- Plant trees and shrubs in beds with a minimum 100 mm depth of mulch;
- Do not provide more plants than may be required so that plants don't need to be thinned out as they mature;
- Choose plants that are long lived, hardy and require minimal maintenance;
- Design paths and paving to accommodate desire lines; and/or
- Allow for adequate preparation of soil for planting and grassing.

Soils

Soil selection for plants is an important factor when designing for soft landscape elements. The selection of soil can mean the difference between a poorly performing landscape and a thriving landscape. In many areas, the existing soil cannot provide trees and shrubs with sufficient nutrients and water penetration for their survival. In these cases the site soil needs to be improved or soil imported to supplement the existing site soil. Within the Port of Bundaberg area, 100mm of good soil is required for turf for best results. Gardens will require a minimum of 200mm for good soil for best performance of plantings.

Sub grade soil is of stone clay type with higher than normal salt levels. To improve the sub-grade it is recommended to add gypsum then lightly rip the sub-grade which will allow topsoil to key into the sub-grade for better drainage. Gypsum will help open the clay soil up and assist with the salt problem.

Selection of species

The following tree, shrub, and ornamental grasses are recommended for use in the landscape or plants already used elsewhere in the Port of Bundaberg landscape. Design should also consider the site conditions, maintenance requirements and design intent when selecting species.

Recommended Plant Species List

Botanical Name	Common Name
Acalypha	Copperleaf and Jacob's coat
Acacia fimbriata	Brisbane wattle
Acacia podalyriifolia	Silver Wattle
Araucaria columnaris	Cook Pine
Banksia integrifolia	Coastal Banksia
Banksia robur	Swamp Banksia
Baeckea virgata	Heath Myrtle
Breynia oblongifolia	Coffee bush
Callistemon species	Captain cook
Carprobrotus glaucescens	Angular sea-fig or pigface
Casuarina equisetifolia	Beach she oak
Crinum pedunculatum	Swamp lily
Cupaniopsis anacardioides	Tuckeroo
Corymbia citriodora	Lemon Scented Gum
Corymbia tessellaris	Moreton Bay Ash
Dianella caerulea	Blue flax-lily, blueberry lily, or paroo lily
Dianella variegated	Tasman Flax-lily
Dietes bicolor	Yellow wild iris, peacock flower
Eugenia reinwardtiana	Beach Cherry
Ficus microcarpa hillii	Hills Weeping Fig
Ficus platypoda	Rock fig
Flindersia australis	Crows Ash
Harpullia pendula	Tulipwood
Hibbertia scandens	Snake Vine
Hymenocallis littoralis	Spider Lilly
Hibiscus tiliaceus	Cottonwood
Leptospermum petersoni	Lemon scented teatree
Livistonia decipiens	Cabbage Palm
Lomandra longifolia	Lomandra longifolia
Lonicera japonica	Japanese Honeysuckle
Macaranga tanarius	Parasol leaf tree, blush macaranga, nasturtium tree, David's heart and heart leaf

Botanical Name	Common Name
Melaleuca leucadendron "Broadleaf"	Weeping Paperbark
Melaleuca quinquenervia	Broad-leaved paperbark
Melaleuca viridifolia	Board-leaved tea tree
Myoporum ellipticum	Coastal Boobialla
Metrosideros thomasii	New Zealand Christmas Tree
Metrosideros species	Fiji fire
Metrosideros queenslandica	Satinash, Myrtle, Myrtle Satinash, Pink Myrtle
Myoporum parrifolium	Creeping boobialla, creeping myoporum, dwarf native myrtle or small leaved myoporum
Pandanus pedunculatus	Tahitian screwpine, thatch screwpine, hala tree, pandanus
Peltophorum pterocarpum	Yellow Poincana
Pleiogynium timorense	Burdekin plum
Pittosporum rhombifolium	Diamond-leaf pittosporum
Phyllanthus minutifolius	Phyllanthus
Rhaphiolepis intermedia	Indian Hawthorn
Strelitzia reginae	Crane flower or bird of paradise
Syzygium paniculata	Magenta cherry
Syzygium leuhmannii	Iberry, small leaved lilly pilly, cherry satinash, cherry alder, or clove lilli pilli
Terminalia cattopa	Indian Armond
Tristaniopsis laurina	Water Gum
Trachelospermum jasminoides	Star Jasmine
Xanthostomon species	Little Panda

Alternative species to that listed can be made by submitting the following information to GPC's Parks and Recreation Superintendent, Graham Gambie for review.

- Botanical name
- Common name
- Plant type (tree, shrub, ground cover, grass, climber)
- Typical height and width
- Description (shape, growth habit, foliage, flowers, fruit, nuts, bark)
- Environment required and tolerance (drainage, wind, frost, drought, sun,
- shade, salt)
- Maintenance requirements (pruning, irrigation, common pests or diseases)
- Landscape uses/advantages
- Does the plant have prickles?
- Does the plant have messy fruit?
- Does the plant have invasive roots?

- Are any parts of the plant poisonous?
- Is the plant related to a species on the QLD weeds list? If so, what characteristics of this plant make it less likely to be a potential weed?

Photographs of the plant would also be helpful.

Public safety

When designing soft landscape treatments for public spaces the following principles help improve public safety:

- Locate trees so that minimum clearance requirements from services and traffic sight lines are maintained
- Locate trees so that they do not conflict with existing or proposed buildings and access to switchboards, substations, service meters etc.
- Not using shrubs with sharp or spiky foliage in areas such as pathways where they may cause injuries
- Ensuring that the design of planting does not restrict or interfere with access
- Designing shrub beds or pathways so that they do not form a complete screen or enclosure where pedestrians may feel vulnerable.

Mulching materials

The type of mulching material to be used for planting areas should be selected on the basis of its general purpose and location of the bed within the environment. When applying mulch to newly constructed shrub beds, it should be applied so its settled depth is 100 mm. This will prevent most seed germination in the soil. Fine mulch should not be used as it is prone to being either blown or washed away and decompose too rapidly.

Pine chip

This mulch can be used to cover both non-irrigated and irrigated planting areas and can be used in almost any location. It is especially useful on sloping sites as the mulch binds to itself and in park areas and near buildings because it will not cause damage when thrown.

Hardwood Chip

As with pine chip can be used to cover both non-irrigated and irrigated planting areas and can be used in almost any location. It is especially useful on sloping sites as the mulch binds to itself and in park areas and near buildings because it will not cause damage when thrown. Hardwood chip appearance is much more appealing than pine chip and relatively high cost.

Pine bark

Pine bark is more expensive than woodchip and comes in a variety of sizes. Its attractive appearance suits its use in prestige areas. As larger pieces can be thrown or moved onto pathways, only screened material 1–2.5 cm should be used as a mulch over shrub beds.

Stones/pebbles

Stones and pebbles provide a suitable and attractive alternative to traditional mulch along watercourse plantings such as floodways. This type of mulch should not be used close to buildings where there is a possibility of rocks being thrown through windows or spread by mowers.

Protecting existing trees

Damage to existing trees during development typically occurs through physical and chemical injury and through changes in drainage. This may be caused through:

- Level Changes – Excavation Severs Roots And Filling Causes Suffocation Of The Feeder Roots
- Trenching for Underground Services, Kerbs And Gutters And Footings, Which Severs Roots, Affecting Both The Stability And Nutrient Intake Of The Tree

- Drainage Changes – Causes Drought Or Water Logging Of The Root Zone
- Compaction – Causes Physical Damage To Roots And Prevents Air And Water Reaching The Roots
- Chemicals – Including Engine Oil Leaks, Hydraulic Fluid And A Wide Range Of Chemicals That Are Taken Up By The Tree Roots
- Physical Injury – Wounding Affects Tree Health And Can Facilitate The Entry Of Disease And Decay.

TREES AND SERVICES

There is potential for conflict between trees and infrastructure such as powerlines, water pipes, streetlights, paving, kerbs and signs. The design and location of services must be coordinated with the design process at an early state to minimise conflict. In developing a landscape design, an awareness of the location of existing services is essential.

Conflicts may result in:

- Increased maintenance costs;
- Reduced longevity of the trees and loss of aesthetic value; and
- Reduced public safety.

Beneath power lines, plant only trees that will not encroach upon the acceptable safe distance from the power lines when mature. If your tree will grow to 5 m, it should be planted 5 m away from the power pole. If it will grow to 10 m, it should be 10 m away from the pole.

A clear line of sight must be provided to signs, lights and driveways. Low branching or weeping species should not be selected for use near these items.

Where possible, trees should be planted the maximum distance available away from kerbs, driveways and footpaths to reduce root interference. A one metre minimum clearance is required (for desirable deep or fine rooted smaller trees). A clear line of sight must be provided.

Species selection for use near buildings is important; consider the mature size of the tree. If adjacent green space is available then planting trees close to buildings should be avoided.

Trees with vigorous root systems are able to penetrate and interfere with underground services such as stormwater and sewer mains, and underground cabling such as telephone and electricity lines. Species selection is therefore just as important. Select trees that do not have vigorous root systems within service easements.

Environmental Management Plan Guideline

Assessment of the proponents proposed activities against the requirements of the environmental management code ensures that Gladstone Ports Corporation (GPC) manages port land in a manner that achieves its obligations under the Land Use Plan. To support this, GPC will condition that the proponent develops and provide for approval an Environmental Management Plan (EMP). The EMP relates more specifically to the day to day impacts that may occur from an approved activity, and also ensures a practical undertaking of the applicable controls in the environmental management code.

The EMP should reflect the nature of the works being undertaken, and in some situations, it may be conditioned that multiple EMPs be submitted at difference stages due to the ever changing nature of the works. GPC has broadly defined the potential EMPs that may be required over the course of the development into the following;

- Construction Environmental Management Plan (CEMP)
- Operational Environmental Management Plan (OEMP)
- Decommissioning Environmental Management Plan (DEMP)
- Rehabilitation Environmental Management Plan (REMP).

The objectives of the abovementioned EMPs are outlined in Table 1.

Table 1 – Objectives of various Environmental Management Plans

Environmental Management Plan	Objectives
Construction Environmental Management Plan (CEMP)	Addresses the potential environmental risks associated with the construction phases of the approved works.
Operational Environmental Management Plan (OEMP)	Addresses the potential environmental risks associated with the operational phase of the approved works. In cases where the applicant is also required to provide equivalent management plans to the Environmental regulator, this single plan can be submitted to GPC provided it also addresses GPC's concerns.
Decommissioning Environmental Management Plan (DEMP)	Addresses the potential environmental risks associated with the decommissioning phase of the approved works.
Rehabilitation Environmental Management Plan (REMP)	Addresses the potential environmental risk associated with rehabilitating the site.

It is the intent of GPC that the EMP is a living document to be reviewed and updated as required. GPC does however stipulate (through development conditions) that any changes to the EMP are to be provided to GPC for approval prior to implementation.

GPC has identified through ongoing tenant inspections, community concern and incidents, that the receptors most at risk from tenants activities can be defined to;

- Land
- Air
- Water (including marine and groundwater).

Each of the risks to these receptors and their impacts are summarised in Table 2.

Table 2 – Risks and resulting impacts on GPC receptors

Receptor	Risk	Impacts
Land	Waste	Release of debris (waste, litter etc)
	Spills	Contamination of land from one off spills from hydrocarbons, chemicals, sewage etc. > 10,000L, or the accumulation of multiple small spills <250L)
	Contamination/degradation	Disturbance of Acid Sulfate Soils (ASS) /Potential Acid Sulfate Soils (PASS)
		Land is placed on the Environmental Management Register (EMR)/Contaminated Land register (CLR)
		Loss of land through poor Erosion and Sediment Control (ESC) practices
	Weeds/pests	Proliferation of weeds/pests as a result of poor practices
Air and light[1]	Degradation of the surrounding air quality	Impacts on surrounding neighbours, community and port users as a result of noise, vibration, odour, light, dust, litter, product, smoke and other potential pollutants.
	Light spill	Impacts on sea turtle nesting beaches and foraging
Waters (including marine and groundwater)	Stormwater	Release of product/contaminants to stormwater drains
	Spills	Contamination of waters from spills of any size
Fauna	Vessel strike	Marine fauna injury and/or mortality
	Noise and vibration	Alter behavioural patterns and displacement to fauna

Table note:

1 *National Light Pollution Guidelines for Wildlife Including marine turtles, seabirds and migratory shorebirds* provide guidance to proponents for ambient light impacts

These more defined risks and impacts require that tenants undertaking assessable development ensure that the applicable risks and impacts are managed through the implementation of an approved EMP. The EMP does not have to be limited to these, however it is preferable that they are addressed accordingly. An EMP template has been provided below to assist proponents with the development of an EMP that will address GPC's requirements.

In the event that the proponent already has an effective environmental management plan developed as a requirement of other approval processes / obligations, or company policy, a separate document does not need to be developed, however an appendix should be attached to the EMP to highlight the relevant sections that cover off on GPC's requirements to allow for ease of reference.

ENVIRONMENTAL MANAGEMENT PLAN TEMPLATE

Guidance for Use of Template

This template can be used prior to work commencing when management of potential environmental impacts is required.

For projects with a relatively low environmental impact, a significant number of the elements will not be relevant and therefore not be required to be addressed. GPC Environmental staff will assist a project proponent to refine the list below to determine which issues are appropriate for an individual project.

For some small scale projects, involving minor risks, GPC may consider the project proponent to incorporate their environmental risk assessment and controls into a sub-tier document such as a *Job Safety and Environment Analysis* (JSEA) or *Job Risk Analysis* (JRA or suitable equivalent).

In all cases, the proponent is responsible for undertaking an environmental risk assessment to identify potential environmental risks and controls relevant to their scope of works.

These steps must be undertaken prior to commencement of works.

Use of this guideline does not alleviate the proponent of any environmental duty / obligations required under law. Nor does it authorise any activities that may require additional approvals.

Instructions for Use of Template

x. Complete the italics section under each Heading and Sub-Headings. The italics will give you a guide as to what information the proponent is to include. Once complete delete that italics.

xi. Complete all tables as applicable with the proponent's information

xii. Insert all maps and figures

Should you require any assistance with this please do not hesitate to contact GPC. However, while GPC will assist the proponent, GPC will not complete the EMP on the proponent's behalf. As the proponent is the operator of the approved activity, the proponent must be able to demonstrate their awareness of the environmental risk and how they will be managed.

TABLE OF CONTENTS

INTRODUCTION

Scope of EMP

(Describe where and what activity the EMP covers……for example….This EMP has been developed for construction of the assessable activity)

Objectives of EMP

(What is the EMP trying to achieve? For example……The objective of this EMP is to describe what systems and controls are in place to provide effective environmental management for the applicable assessable activity)

Overview

(Provide a detailed summary of the works associated with the assessable activity within the scope of this EMP)

Boundaries and land use

(The physical footprint of the assessable activity (include map / google image show boundary))

Key stakeholders

(Complete Table 1 - Who are the key stakeholders involved in these works, for example…..sub-contractors, Regulatory Authorities, neighbouring works which may be affected by these works etc.)

Table 1 – Key Stakeholders

Stakeholder	Contact
Gladstone Ports Corporation	Environmental Specialist 4976 1255
Include other stakeholders	
Include other stakeholders	

1. ENVIRONMENTAL MANAGEMENT SYSTEM

1.1. Policy

(Insert a copy of the company environmental policy or equivalent environmental commitment)

1.2. Environmental aspects and impacts

(Complete Table 2 as applicable to the works - How are environmental risks (aspects and impacts) in relation to the scope of the EMP identified and documented?)

The following environmental receptors have been considered in the risk identification process:

Table 2 - Environmental receptors, Risk and Impact

Receptor	Risk	Impacts
Land	*Waste*	*Release of debris (waste, litter etc)*
	Spills	*Contamination of land from one off spills from hydrocarbons, chemicals, sewage etc. > 10,000L, or the accumulation of multiple small spills <250L)*
	Contamination / Degradation	*Disturbance of Acid Sulfate Soils (ASS) / Potential Acid Sulfate Soils (PASS)*
		Land is placed on the Environmental Management Register (EMR) / Contaminated Land register (CLR)

		Loss of land through poor Erosion and Sediment Control (ESC) practices
	Weeds / Pests	*Proliferation of weeds / pests as a result of poor practices*
Air	*Degradation of the surrounding air quality*	*Impacts on surrounding neighbours, community and port users as a result of noise, vibration, odour, light, dust, litter, product, smoke and other potential pollutants.*
Waters (including marine and groundwater)	*Stormwater*	*Release of product/contaminants to stormwater drains*
	Spills	*Contamination of waters from spills of any size*

1.3. Environmental legal and other obligations

(Complete Table 3 – include all environmentally related approvals issued by other regulatory agencies at local, state and federal levels. It has been populated with common GPC approvals that might be applicable to the proponent)

Table 3 – Approvals

Approvals	Approval Number
Gladstone Ports Corporation Development Approval	
Gladstone Ports Corporation Lease Agreement	
Gladstone Port Corporation Wharf Access Agreement	
Gladstone Ports Corporation Permit to Occupy	
Other regulatory agencies as applicable i.e. Department of Environment and Science	

1.4. Environmental roles and responsibilities

(Complete Table 4 – Roles and Responsibilities. It has been populated as an example for guidance)

Table 4 – Roles and Responsibilities

Title	Contact Numbers	Environmental Responsibilities
General Manager	*Office:* *Mobile:*	*Responsible for overall management……*
Site Manager	*Office:* *Mobile:*	*Responsible for the day to day environmental management and implementation of the EMP.* *Ensure environmental management, reporting and auditing responsibilities are met. Responsible for ensuring work practices and activities comply with legal and other obligations.*
Supervisors/Managers	*Office:* *Mobile:*	*Responsible for ensuring works are planned based on the level of risk they present. Comply with and maintain an awareness of policies and procedures, respond to and immediately report incidents, near-misses and hazards; and participate in training.*
Workers	*Office: n/a* *Mobile: n/a*	*Responsible for complying with and maintaining an awareness of policies and procedures, responding to and immediately reporting incidents, near-misses and hazards; and participating in training.*

1.5. Environmental monitoring

(How is the performance of the activity monitored?)

1.6. Environmental audits and inspections

(What are the scheduled and ad-hoc audits and inspections and how are corrective actions managed?)

1.7. Incidents and Complaints

(Describe how incidents and complaints are recorded, reported and managed including corrective actions)

1.8. Emergency Preparedness and Response

(What contingencies are in place in the event of an emergency? i.e. Emergency Plans, spill kits etc.)

1.9. EMP Review process

(How and when is the EMP reviewed for accuracy and currency?)

2. ENVIRONMENTAL RISK MANAGEMENT

(Complete the Risk Assessment Template as applicable to the works. Identify activities, potential impacts and operational controls specific to the scope of the EMP. The proponent should be aware that obligations provided for via other management plans / procedures i.e. Stormwater Management Plan, may be required to provide these as a part of the assessment process. Two examples have been provided below for reference. The detailed risk assessment should be included in the Appendices of the EMP.

Table 5 – Risk Management Template

Activity			
Sub activity:	**Potential impacts:**	**Current controls:**	**Responsibilities:**
Sub activity:	**Potential impacts:**	**Current controls:**	**Responsibilities:**
Summary of the key risks			

3. APPENDICES

Example 1 – NOT FOR USE – REFERENCE ONLY

<table>
<tr><th colspan="4">Fuel and Chemicals Storage</th></tr>
<tr><td rowspan="3">Sub activity:

Storage, use and disposal of hazardous chemicals, cleaning products, flammable gases and liquids, corrosives.</td><td>Potential Impacts: Land

Spills; Contamination of land from one off spills from hydrocarbons, chemicals, sewage etc. > 10,000L, or the accumulation of multiple small spills <250L)</td><td>Current Controls:

• Design of workshops and storage areas.
• Bunded storage areas
• Environmental Management Plan
• Spill response equipment with trained personnel.
• Incident management</td><td>Responsibilities:
• Manager
• Supervisor
• Environmental Representative</td></tr>
<tr><td>Potential Impacts: Air

Degradation of the surrounding air quality. Impacts on surrounding neighbours, community and port users as a result of noise, odour, light, product, and other potential pollutants</td><td>Current Controls:

• Design of workshops and storage areas
• Bunded storage areas.
• Environmental Management Plan.
• Incident management</td><td>Responsibilities:
• Manager
• Supervisor
• Environmental Representative</td></tr>
<tr><td>Potential Impacts: Water

Spills; Contamination of waters from spills of any size

Stormwater; Release of product/contaminants to stormwater drains</td><td>Current Controls:

• Design of workshops and storage areas
• Bunded storage areas.
• Environmental Management Plan
• Spill response equipment with trained personnel.
• Incident management</td><td>Responsibilities:
• Manager
• Supervisor
• Environmental Representative</td></tr>
<tr><td colspan="4">Summary of the key risks

The risk of the incorrect application, storage or disposal of fuels or chemicals resulting in the contamination of land, air and water.</td></tr>
</table>

Example 2 – NOT FOR USE – REFERENCE ONLY

Earthworks and excavation activities			
Sub activity ***Civil works – clearing land***	***Potential Impacts: Land*** *Spills; Contamination of land from one off spills from hydrocarbons, chemicals, sewage etc. > 10,000L, or the accumulation of multiple small spills <250L)*	***Current Controls:*** • *Environmental Management Plan* • *Spill response equipment with trained personnel* • *Maintenance of equipment* • *Incident management*	***Responsibilities:*** • *Manager* • *Supervisor* • *Environmental Representative*
	Potential Impacts: Land *Contamination / Degradation; Loss of land through poor Erosion and Sediment Control (ESC) practices*	***Current Controls:*** • *Erosion and Sediment Control Plan*	***Responsibilities:*** • *Manager* • *Supervisor* • *Environmental Representative*
	Potential Impacts: Land *Proliferation of weeds / pests as a result of poor practices*	***Current Controls:*** • *Weed / Pest management plan* • *Wash down of vehicles*	***Responsibilities:*** • *Manager* • *Supervisor* • *Environmental Representative*
	Potential Impacts: Air *Degradation of the surrounding air quality. Impacts on surrounding neighbours, community and port users as a result of noise, dust, vibration and other potential pollutants*	***Current Controls:*** • *Environmental Management Plan.* • *Incident management* • *Water trucks*	***Responsibilities:*** • *Manager* • *Supervisor* • *Environmental Representative*
	Potential Impacts: Water *Release of product/contaminants to stormwater drains*	***Current Controls:*** • *Environmental Management Plan* • *ESC controls* • *Incident management*	***Responsibilities:*** • *Manager* • *Supervisor* • *Environmental Representative*
Summary of the key risks *The risk of earthworks and excavation activities:* • *Spills from hydrocarbons and chemicals* • *Causing loss of land from erosion* • *Proliferation of weeds / pests* • *Degradation of air quality from dust, noise and vibration* • *Contamination of water ways via sediment runoff from poor ESC controls*			

Gladstone Ports Corporation

Growth, prosperity, community.

Gladstone Ports Corporation Limited

40 Goondoon St / PO Box 259
Gladstone, QLD, 4680, Australia

Tel +61 7 4976 1333
Fax +61 7 4972 3045
www.gpcl.com.au

ACN 131 965 896
ABN 96 263 788 242