Brisbane Port Land Use Plan 2020

PORT of BRISBANE
Here for the future

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Part 1
Introduction

Brisbane Port Land Use Plan 2020

1.1 The Land Use Plan (LUP)

1.1.1 Application

Section 283Y of the *Transport Infrastructure Act 1994* (TIA) outlines that the Port of Brisbane Pty Ltd (PBPL), as private operators of Brisbane core port land (BCPL) under a 99-year lease of the port from the Queensland Government, is required to have a land use plan.

The Brisbane Port Land Use Plan 2020 (LUP) is therefore the primary planning and regulatory instrument for areas identified as BCPL and is given statutory force under the *Transport Infrastructure Act 1994 ('TIA')*. Where development occurs within BCPL, the provisions of the LUP apply instead of Brisbane City Council's (BCC) *Brisbane City Plan 2014*. Figure 1.1 illustrates the relationship between the LUP, other non-statutory port related planning documents (e.g. the *Port of Brisbane Masterplan 2018-2048* and the *Port of Brisbane Technical Standards*) and relevant government policies / legislation.

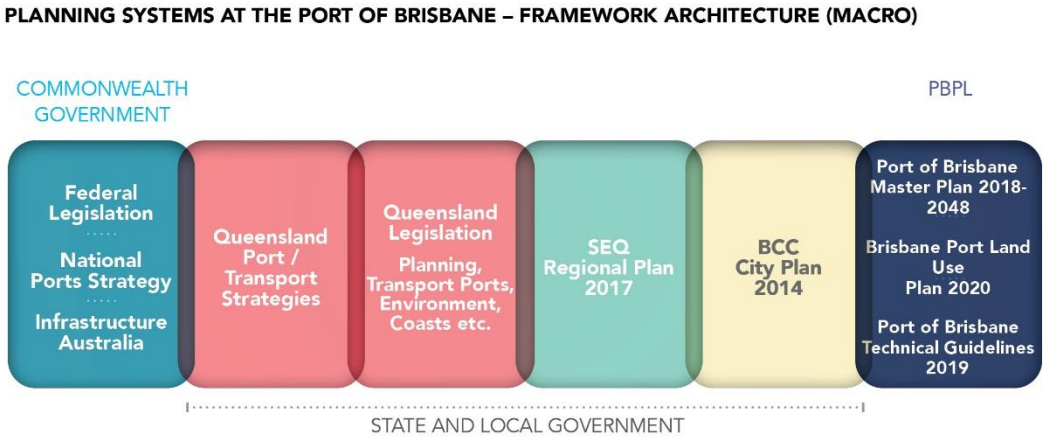


Figure 1.1 – LUP relationship with other legislation

This version of the LUP has been gazetted in April 2021, following approval by the Queensland State Government. It is the third major amendment of the LUP since the port's privatisation in 2010 and reflects the emerging business focus of the PBPL whilst satisfying the requirements of TIA.

1.1.2 Statutory Requirements and Assessment Functions

Amending the LUP

Section 283U of the Act further requires the LUP to be reviewed at least every 10 years. The review must include an assessment of the achievement of the strategic outcomes, which are set out in Part 2 of this plan.

PBPL (as the 'port manager') may also propose other amendments at any time. The Transport Minister and Planning Minister may also jointly issue directions requiring minor corrections or updates to this plan at any time.

The Queensland State Government Planning and Transport Ministers have joint responsibility for approving new or amended LUPs for BCPL, and for issuing any directions requiring minor corrections or updates (known as 'minor amendment (LUP)').

Assessment Functions

The assessment functions and processes under the LUP are different to those undertaken under the *Development Assessment Rules* identified under the *Planning Act 2016*. The responsibilities for each relevant agency are illustrated by Figure 1.2.

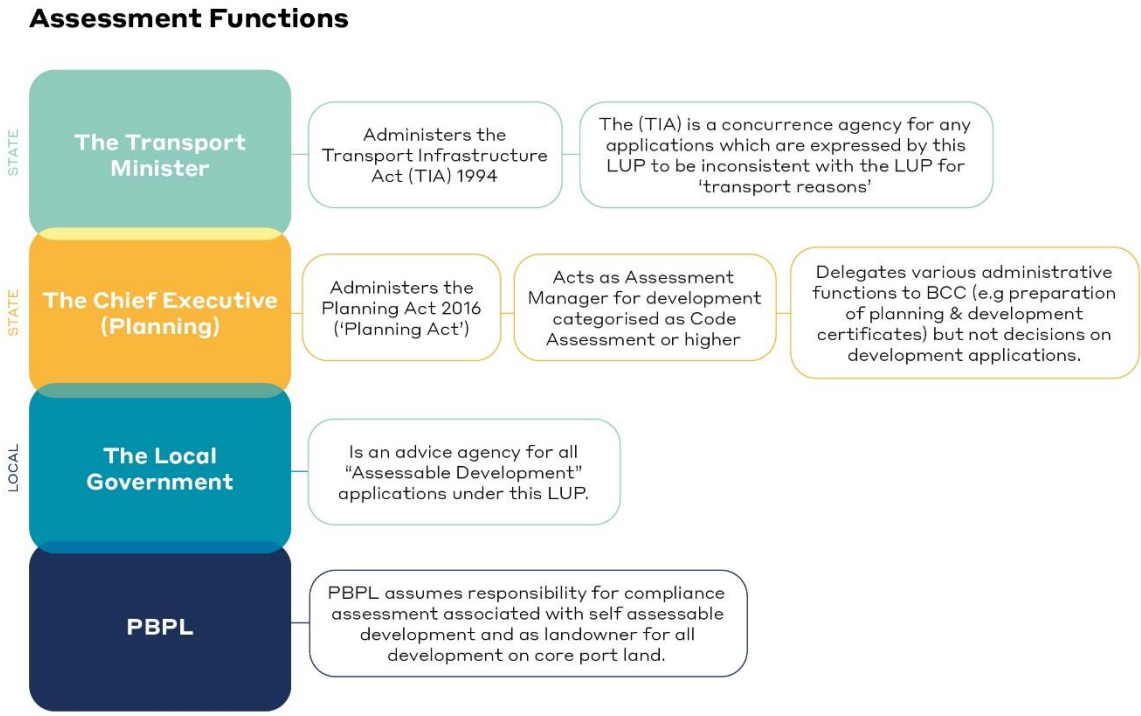


Figure 1.2 – Assessment functions under the LUP

A range of other referral agencies are also specified in the TIA, for applications under this LUP. Section 3.2 of the LUP defines the level of assessment relevant to specific development on BCPL.

Figure 1.3 – About the Port of Brisbane

1.2 The Role of the Port

The Port of Brisbane is one of Australia's largest and most diverse ports and serves Australia's East Coast communities. The Port is recognised as a strategic asset of national importance, providing critical links to world markets and is essential to Queensland's economy.

Over the next 30 years, trade volumes through the Port of Brisbane will increase sustainably and the vital role the Port plays in servicing a growing population will become even more important. Forecasted port growth is characterised by, but not limited to:

- Container growth from ~1.35M to ~4.8M TEUs
- ongoing increases in car imports following the cessation of vehicle manufacturing in Australia
- Dry bulk growth of 60% from 12MT tonnes to ~20MT
- ~1,100 cruise ship vessel visits in the first five years operations of the new Brisbane International Cruise Terminal (BICT)

Growth of this scale will be supported by:

- **Increased and efficient port access.** Rail, road and ship access to the port will be improved in response to growth in both trade volumes and SEQ's population. PBPL supports plans for the development of a segregated freight rail corridor to the port, the optimising of channel capacity, developing improved road access and harnessing emerging freight transport technologies.
- **Developing additional port capacity.** To optimise port capacity PBPL will support initiatives including:
    - expanded pipeline connectivity
    - the development of new warehousing and distribution centres, additional freight handling and storage infrastructure and supply chain logistics initiatives
    - the upgrading of existing and development of new wharf, quay line and terminal infrastructure
    - improved transport logistics and port amenity
    - the ongoing management of dredged material placement and strategic land reclamation

The LUP therefore seeks to protect and reinforce the economic importance of the Port and its relationship to other economic assets in Brisbane, Queensland and Northern New South Wales.

PBPL, as operators / managers of the Port, have a primary role of facilitating trade growth.

PBPL's role does not, however, include control port movements, vessel traffic services, marine operations such as tugs or pilots, or stevedoring activities. These operations are carried out by others including private operators and the Queensland Department of Transport and Main Roads. The LUP therefore does not focus on vessel operations and logistics, but rather on how land use planning and environmental management support PBPL's business.

Further information on the role of the Port and its strategic aspirations over the next 30 years can be found in the *Port of Brisbane Master Plan 2018-2048 (*https://www.portbris.com.au/Property/Masterplan/), and within the policy presented in the LUP from Part 2 onwards.

Figure 1.4 – The Role of the Port of Brisbane

1.3 Brisbane Core Port Land (BCPL)

'Brisbane core port land' (BCPL) is land that has been identified in the TIA as being suitable for core port infrastructure, port-related development, or buffer land, although this does not necessarily prevent other land uses[1] in certain circumstances.

The extent of BCPL land relevant to this LUP is conceptually identified by Figure 1.5. The real property descriptions of this land are set out in Appendix 1 and in Maps 1 and 2 of Appendix 4.

These lands include estates in the suburbs of Port of Brisbane (Fisherman Islands and Port Gate), Lindum (Port West) and Pinkenba, Myrtletown and Bulwer Island (Port North). Collectively, these estates accommodate 30 operating berths over more than 8.2 kilometres (km) of quay line.

The TIA provides processes enabling further land to be added, or for existing land to be excised, from the BCPL in the future.

Normally, BCPL will be leased or sub-leased by the 'port lessor' (the State) to the 'port manager' (PBPL), as defined in the TIA.

[1] For example, land earmarked in the long term for future core port infrastructure may potentially be used in the interim for compatible temporary industrial purposes, to avoid land use sterilisation.

Figure 1.5 – Brisbane Core Port Land

1.4 State and Local Planning Context and Core Matters

1.4.1 Introduction

This section of the LUP addresses the following mandatory content requirements under Section 283S of the TIA:

- Integration of the *State Planning Policy* under the *Planning Act 2016*.
- Integration of Shaping SEQ – South East Queensland Regional Plan 2017.
- Core matters relevant to the plan, which are defined under the TIA as:
  - land use and development
  - core port infrastructure
  - valuable features
- The relationship between BCPL and neighbouring land, and how this adjacent land is dealt with by BCC's planning scheme (i.e. City Plan 2014)

The above matters are introduced in the following sections for context and form the planning foundations for the balance of the LUP (i.e. these elements are directly addressed in the LUP's Strategic Plan, Precinct and Infrastructure Planning, Precinct Intents, Table of Assessment and Codes etc.).

1.4.2 State Planning Policy Aspects

It is a mandatory requirement for this LUP to integrate relevant State interest matters under the *State Planning Policy* (SPP). Table 1.1, below, identifies aspects of the SPP that are reflected, not reflected or not applicable to this LUP. Commentary on each aspect is also provided after the table.

Table 1.1 – SPP aspects reflecting in LUP

SPP Aspect	Reflected	Comments
Planning for liveable communities and housing		
 Housing supply and diversity  Liveable communities	Not relevant	This LUP does not include any residential development, community facilities or social infrastructure as this would conflict with the primary purpose and operation of the land. BCPL is protected for industrial uses, logistics, cruise terminal purposes, port infrastructure and environmental buffering. Such buffering assists with broader planning efforts to segregate industrial uses from nearby residential communities.
Planning for economic growth		
 Agriculture	Reflected	PBPL is adjacent to Moreton Bay Marine Park and close to the Moreton Bay RAMSAR site which is identified as a key fisheries resource for the State. The LUP indicates various areas which are significant for fisheries resources, including over 170 hectares of mangroves at the mouth of the river, which provide a feeding habitat for a variety of fish and crustaceans. These areas are preserved under this LUP through Strategic Planning, precinct planning (Maps 1 and 2 in Appendix 4) and Parts 2 to 4. The precinct-based approach to planning at the port promotes the location of appropriate land uses in and around the coastal fringe areas of the port, including the prohibition of certain uses in sensitive areas.

SPP Aspect	Reflected	Comments
		Works in tidal and coastal areas are subject to a range of additional approvals under the *Coastal Protection and Management Act 1995* and the *Fisheries Act 1994.* In addition, PBPL regularly engages with industry bodies including the Moreton Bay Seafood Industry Association (MBSIA) and the Queensland Seafood Industry Association (QSIA). PBPL monitors the conditions of the port's stormwater to assess the effectiveness of control measures and quality of waters discharged into the environment to ensure port development and operations do not adversely impact on water quality, including fisheries resources and breeding areas. The LUP requires developers to comply with the Port of Brisbane Technical Standards, which includes provisions for new development to manage and treat stormwater. PBPL also undertakes upstream stormwater treatment in the Lockyer Valley to rehabilitate and stabilise degraded sections of Laidley Creek. These works deliver significant environmental benefits, including water quality improvements to the Brisbane River and Moreton Bay. There is no Good Quality Agricultural Land, important agricultural areas or Stock Route networks mapped over or adjacent to BCPL.
 Development and construction	Reflected	The Port is an important provider of construction materials to SEQ, while also facilitating development to reinforce it as a major industry and logistics hub. The LUP facilitates development through: (a) Precincts that provide for a range of Port-related uses and that respond to the physical constraints of the land and support new industrial uses that provide employment and opportunity for port-focussed innovation; (b) Forward planning and provision of infrastructure through Precincts, development codes and the Priority Infrastructure Interface Plan (PIIP); (c) Enabling port-related development and infrastructure through limiting consistent development to self-assessment; (d) Supporting a range of lease / lot sizes to align with the land needs of different development; and (e) Preventing uses that are not aligned with the strategic aspirations of the Port.
 Mining and extractive resources	Reflected	There are no Key Resource Areas within BCPL. BCPL includes petroleum pipelines / wharves owned by various petro-chemical companies, as shown on the maps in Appendix 4. The identification of these pipeline locations and alignments meet the requirements of policies (3), (4) and (5) of the State Interest, as the LUP: (a) considers areas of importance which have valuable petroleum resources; (b) facilitates opportunities for mutually beneficial co-existence between petroleum uses and other land uses; and (c) identifies the location of specified petroleum infrastructure.
 Tourism	Reflected	BCPL is reserved primarily for industrial development and aside from the new Brisbane International Cruise Terminal at Luggage Point, has limited opportunity for other, non-maritime tourism development. Outcomes provided in the port's precincts do however support: (a) the protection and continued operation and enhancement of Brisbane International Cruise Terminal (BICT); (b) ferry services to Moreton Island; (c) future small-craft operations complementing the BICT; and

SPP Aspect	Reflected	Comments
		(d) the port Visitors' Centre. More broadly, significant natural, character and environmental areas are also protected and enhanced. Marine tourism opportunities requiring or benefiting from port infrastructure / access may also be considered. Refer to Strategic Themes 1, 3 and 4 as well as outcomes in the Conservation/Buffers Precinct, Open Space Precinct, Terminals (Bulk, General Purpose) Precinct and the Development and Standards codes.
Planning for the environment and heritage		
 Biodiversity	Reflected	Large areas of BCPL, including wetlands, beaches, sandbanks, mangrove forests and mudflats are contained within the "Conservation/Buffer", "Buffer/Investigation" and/or "Open Space" designations of the LUP and may also be located within the Moreton Bay Marine Park; the latter of which is designated as an area of National and State Environmental Significance (MNES and MSES). These features are also designated for conservation purposes under the key land use criteria of the LUP's Strategic Plan. Strategic Theme #3 seeks to protect, manage and enhance the multiple environmental values of the area and the Conservation/Buffers precinct and Buffer/Investigation precinct support this by protecting land from more intensive / higher-order port development for its environmental and port buffering values. The policy restricts incompatible uses and requires development to avoid or minimise impacts on sensitive receiving environments.
 Coastal environment	Reflected	The port is defined as a coastal-dependent land use. The extent of uses provided for in the LUP support the ongoing and effective operation of the port as a major industry and logistics hub of state and national economic significance. The precinct-based approach of the LUP prioritises port uses and associated development in areas adjoining state coastal land. These uses must be located in coastal areas. Sensitive areas with wetlands and native vegetation on the coastal fringe are identified and protected through the Conservation/Buffers Precinct. PBPL, as landowner, also implements operational requirements to provide further certainty on reducing coastal hazards and as such the SPP code and the provisions of Appendix 4 of the SPP are not required to be reflected in this document. Public access to the port and associated foreshore areas is limited and managed to maintain public safety and to ensure compliance with Commonwealth maritime security legislation.
 Cultural heritage	Not relevant	There is no state heritage listed places or known areas of Indigenous cultural heritage significance on BCPL. However, should Indigenous artefacts be encountered during development, cultural heritage management will be undertaken in accordance with the Aboriginal Cultural Heritage Act (ACHA) and its Duty of Care guidelines.
 Water quality	Reflected	The Environmental Management Code and Landscape, Stormwater and Water Sensitive Urban Design Code in sections 4.3.1 and 4.3.2 of the LUP require best practice stormwater management measures to ensure water quality objectives are maintained, particularly in relation to the sensitive receiving environment of Moreton Bay. PBPL, as landowner, also monitors stormwater quality to ensure the relevant measures of the SPP and their own benchmarks are achieved and maintained. The water supply buffer area requirements are not applicable.

SPP Aspect	Reflected	Comments
Planning for safety and resilience to hazards		
 Emissions and hazardous activities	Reflected	The LUP applies a precinct-based approach that supports medium and high impact, hazardous and chemical facilities, explosive reserves, and major gas, waste and sewer infrastructure. These uses are accommodated in areas furthest away from sensitive uses, while the LUP also prohibit residential and other sensitive uses. BCPL is also well separated from sensitive uses and not susceptible to amenity or reverse amenity impacts. The environment is also protected by prohibiting incompatible development in "Conservation/Buffer", "Buffer/Investigation" and/or "Open Space" designations of the LUP. Further, the Environmental Management Code and Landscaping, Stormwater and Water Sensitive Design Code manage water quality. PBPL also performs a regulatory compliance function and monitors environmental performance in all areas of BCPL. An Acid Sulphate Soils Management Plan is also in place, which has been accepted by the department administering this SPP, and this plan (along with similar provisions for soil management / disposal) is reflected in the relevant codes within this plan (specifically, the Environmental Management Code).
 Natural hazards, risk and resilience	Reflected	Some areas of BCPL are subject to flood, coastal hazard (e.g. storm tide and erosion prone areas) and climate change impacts (primarily sea level rise). The port is located within an urban area in *City Plan 2014* (Special Purpose) and the urban footprint of *ShapingSEQ and* is a coastal-dependent land use by its very nature. Some port uses by necessity, must locate within the erosion prone area. There are no feasible alternative locations for port development in Brisbane. As an existing major industry and logistics hub of state and national economic significance, the ongoing operability of the port is required regardless of development constraints which would have existed if it had been developed after the commencement of the SPP. Accordingly, future development of the port, based on its growth projections and reserved footprint has been identified as having an overriding need in the public interest. The LUP includes provisions that require development to mitigate the risk (to people and property) of coastal hazards and provide for expected flood immunity including potential future impacts of sea level rise. Relevant provisions[2] of this LUP provide outcomes that specifically seek to mitigate impacts to an acceptable or tolerable level. Access to and from the port has also been designed to provide safe evacuation. There is also sufficient early warning for evacuation if necessary. The port has also undertaken risk assessments of potential climate change and coastal hazards and the LUP ensures new development addresses these issues and incorporates appropriate measures and strategies to mitigate or manage this risk to an acceptable level.
Planning for Infrastructure		
 Energy and water supply	Reflected	BCPL does not contain any energy or water supply activities that are regulated by the State government. However, SEQ Water has infrastructure within and adjacent to BCPL The LUP provides requirements for the protection of this infrastructure to ensure efficient and effective ongoing operation. This includes the requirement to uphold relevant aspects of SEQ Water's *Network Consent Guidelines (November 2019).*

[2] Overall outcomes of the Precincts (s.3.1), Port Development Code, Commercial Code, Land Preparation Code, Roadworks, Utilities and Other Infrastructure Code and Landscaping, Stormwater and Water Sensitive Urban Design Code.

SPP Aspect	Reflected	Comments
		PBPL will continue to explore opportunities for the generation / use of renewable energy in accordance with the provisions of its head lease and government policy / legislation.
 Infrastructure integration	Reflected	The LUP and PIIP provide an integrated platform for the delivery of infrastructure in BCPL over the next 20 years. This includes the protection of existing infrastructure and consideration of upgrades to roads, rail and other infrastructure (water, sewer, stormwater, telecommunications etc.). Where possible, the PIIP and LUP look to effectively and efficiently use existing or upgraded infrastructure to reduce installation and operational costs. Precincts of the LUP provide for development that is complementary to existing and planned infrastructure, while non-industrial and logistics-based development is not supported.
 Transport infrastructure	Reflected	Two State (land-based) transport infrastructure assets are relevant to BCPL: 1. A state-controlled rail corridor that terminates (via a loop) within BCPL at the Port Industry precinct; and 2. Two state-controlled roads (Lytton Road and the Port of Brisbane Motorway) that terminate outside of the BCPL boundary in Lytton. The LUP identifies the infrastructure and requires development to protect the integrity and efficiency of road and rail transport. Precincts and preferred land uses are aligned and compatible with existing and planned transport infrastructure and the design and layout for road and rail forms a logical expansion of the existing network. The LUP also identifies a hierarchy and roles of the transport networks within the BCPL.
 Strategic airports and aviation facilities	Reflected	Brisbane Airport is located across the Brisbane River from Fisherman Islands. This LUP and the related planning provisions of the TIA generally improve the port's interface with the airport, as a 'good neighbour', by prohibiting residential and some other potentially sensitive uses within BCPL and by expressly considering the requirements of the airport regarding obstacle limitations, surfaces and lighting. The LUP provides an OLS contour map and PAN-OPS map (Appendix 4). Structural height issues are addressed in the codes, and it is not anticipated that buildings of significant height will occur on BCPL. Some BCPL is also affected by restrictions on lighting, plume velocities from permanent stacks and landscaping designed to reduce risks from birds and bats. Appendix 4 identifies locations where these restrictions apply while the LUP Codes measures to ensure compliance with airport requirements. As residential development and other sensitive uses are prohibited under this LUP, it is not considered that ANEF requirements for the airport are likely to be relevant to BCPL.
 Strategic ports	Not relevant	As this LUP applies to BCPL and not land adjoining it, the provisions are not considered necessary.

1.4.3 Integration of relevant matters under ShapingSEQ – South East Queensland Regional Plan 2017

The *South East Queensland Regional Plan 2017* (*ShapingSEQ*) is the statutory regional planning instrument relevant to BCPL. The SEQ Regional Plan also establishes other regional initiatives and requirements through the *South East Queensland Natural Resource Management Plan.*

Shaping SEQ provides a regional framework for growth management and sets planning direction for sustainable growth, global economic competitiveness and high-quality living in the region. *SEQ* advances a range of state interests defined in the *State Planning Policy* (SPP) by providing a spatial context, defining key outcomes, and establishing planning strategies and directions to achieve these outcomes in response to SEQ's unique values, drivers, expectations, projections and constraints.

BCPL and adjoining lands (with the exception of some parcels of land at Fisherman Islands and Lytton) are generally included within the Urban Footprint under the SEQ Regional Plan. The intent of the Urban Footprint is to identify land that can meet the region's urban development needs until 2041.

Shaping SEQ's vision is underpinned by five key themes, namely – *'Grow, Prosper, Connect, Sustain and Live'*. The themes provide further dimension and greater clarity about what the plan seeks to achieve in SEQ.

The SEQ Regional Plan acknowledges the significant importance of the port and the Australia TradeCoast in a sub-regional, regional, state, national and international sense, particularly in terms of employment, exports and logistics. BCPL is identified in the plan as part of a Regional Economic Cluster.

In addition to supporting growth of the port, the SEQ Regional Plan seeks to protect identified environmental values along the coastline.

Values identified around the port include wetland, marine park and conservation areas of ecological significance. Part of Fisherman Islands is also identified as having regionally significant scenic amenity importance.

The aspects of ShapingSEQ relevant to this LUP are identified below:

- Supporting a desire to provide security in resources;
- Consideration of new and changing technology and the Port's adaptation and facilitation of this;
- Consideration of the Port's role in improved movement of goods and people;
- Supporting a desire to take advantage of the Port's position relative to Asia and other locations can assist in unlocking a globally competitive economy and value adding industries;
- Ensuring land and use capacity to support emerging key export-oriented industries;
- Reinforcing the role of the Port and its land use to support SEQ's position as Australia's eastern global gateway to Asia and beyond;
- Prioritise economic enabling infrastructure that supports improved efficiency and relationships with other key economic clusters in SEQ, especially the Australia Trade Coast precinct;
- Updates to reflect the PIIP and its promotion of increased infrastructure capacity and to ensure policy protects major infrastructure connections (roads, rail, pipelines etc);
- Protection, maintain and enhance the value and connectivity of regional biodiversity corridors;
- Consideration of how the LUP can integrate public and active transport connections; and
- Identifying future investigations for a dedicated freight rail connection to the Port.

South East Queensland Natural Resource Management Plan

The *South East Queensland Natural Resource Management Plan 2009-2031* (SEQ NRM Plan) provides a non-statutory natural resource management plan for the SEQ region. The SEQ NRM Plan is intended to provide a framework to link and guide future planning, strategies, investment and actions to achieve a range of natural resource management targets for the region.

The Plan identifies measurable regional targets for the condition and extent of environment and natural resources. The NRM Plan focuses on water, air and atmosphere, coastal and marine, community, land, nature conservation, regional landscape areas and Traditional Owners. Although not a statutory document,

these targets are relevant to the SEQ Regional Plan in supporting the achievement of the vision, strategic outcomes and strategies desired for the SEQ Regional Plan.

The application of a precinct-based approach to land use planning for BCPL, including the preservation of large areas for conservation and buffering purposes, supports the framework of the SEQ NRM plan.

Beyond these regional planning instruments, Section 283S of the TIA, also requires that the LUP addresses the following *'core matters'* (as defined within section 283I of the TIA):

- land use and development;
- core port infrastructure;
- valuable features.

1.4.4 Core Matter 1 - Land use and development

1.4.4.1 What is meant by 'land use and development'?

Section 283I of the TIA defines 'land use and development' as including:

'(a) the location of, and the relationships between, the land uses in the area;

(b) *the current effects of land use in the area;*

(c) *the likely effects of any proposed development of BCPL;*

(d) *the accessibility to, and within, BCPL.'*

These themes are explored below.

(a) the location of, and the relationships between, the land uses in the area:

The locations of, and relationships between, existing and planned land uses for the BCPL are primarily shown through Map 2 (Appendix 4) – Precinct Plan and through relating this precinct planning to the table of assessment for each precinct.

A description is also provided in section 1.4.6 and 1.4.8 of this LUP.

(b) the current effects of land use in the area:

The intrinsic nature of core port infrastructure, associated other forms of major transport infrastructure and some types of port-related development, necessarily involves significant current and potential effects, particularly in relation to heavy vehicle traffic, road and rail noise and emissions, health and safety requirements for high levels of lighting and a range of other issues.

The Port of Brisbane can address the majority of these issues primarily through its significant locational advantages, as indicated in Maps 1 to 3 (Appendix 4) and as described in section 1.4.3 (i.e. the geographic separation of most precincts facilitating core port infrastructure from sensitive off-site land uses).

Integrated Strategic Planning and precinct planning by PBPL, BCC and the State for the maintenance of significant buffering is also a key component of minimising conflicts between land uses.

Various Codes in this LUP also seek to minimise the potential for adverse impacts associated with potential land use conflicts. Matters including, but not limited to, lighting, noise, air quality, biosecurity, height and operational safety and risk management aspects are addressed in these Codes.

(c) the likely effects of any proposed development of BCPL;

The effects and likely impacts of proposed future development of BCPL, are determined and mitigated via consideration of the LUP's precinct intents and Tables of Assessment, Code and PIIP requirements and PBPL's complementary *Technical Standards.*

The development of the LUP initially has regard to the appropriateness of particular land uses and possible effects at the highest level. This is manifest through the determination of land use precincts, intents and code provisions. The detailed consideration of specific developments is conducted at the time of individual proposals being developed.

The Precinct Plans (see Appendix 4) identify:

- the precinct planning for existing BCPL; and

- additional 'wet' and 'dry' areas (identified in the LUP as 'Possible Future BCPL') which are not currently subject to a registered interest held by the port lessor or port manager but have been identified as having strategic interest/future importance to the port (see Table 1.2 below and Maps 2A i to iv in Appendix 4).

These additional 'wet' and 'dry' areas are not currently BCPL but may become BCPL at such time as a registered interest/tenure is acquired by the port lessor or port manager. The proactive identification of these areas will facilitate and streamline the inclusion of additional BCPL in the LUP (following the creation of a registered interest) without the need to immediately amend the LUP.

Until land becomes BCPL, development of the land is not regulated under the LUP. However, once a registered interest is acquired and land becomes BCPL, development will be regulated under the LUP. The areas identified within Table 1.2 provide a strategic importance to port operations.

Table 1.2 – Areas of Possible Future Brisbane Core Port Land

Location	Strategic intent	Proposed Land Use Precinct
Pinkenba / Port North + cross-river pipelines Map 2Ai-iv References Appendix 4: 1 – additional 'wet' areas at Port North	Additional 'wet areas' adjoining the Port North Common User Berth and Brisbane International Cruise Terminal	Wharves / Loading / Unloading Facilities
2a-2d – new / enhanced pipeline corridors	Widening existing pipeline corridors and reserving an additional pipeline corridor (via the inclusion of additional 'wet' areas) linking the Caltex Crude Wharf on Fisherman Islands to Bulwer Island / Luggage Point.	Pipeline Infrastructure
3 – Yarra Street	Incorporating the 'dry' land area of the presently unmade Yarra Street road reserve in order to provide an additional access point to the river and/or a services corridor linking to the existing Port North estate.	Transport Infrastructure
4a and 4b – Farrer and Souter Street.	Regularising access to the Pinkenba Estate by including the 'gaps' in Farrer and Souter Streets.	Transport Infrastructure
Port entrance corridor adjoining the Port of Brisbane Motorway / Port Drive (Map 2Ai-iv Reference 5a-5c): Appendix 4	Promoting improved buffering of / access to port lands by augmenting existing transport corridors and the buffers separating the industrial areas of Hemmant/Lytton (including the adjoining port) from higher order land uses in North Wynnum.	Transport Infrastructure Buffer / Investigation
Waterfront 'wet' areas at Pinkenba and Port West/Port Gate (Map 2Ai-iv Reference 6a-6b and 7a-b): Appendix 4	Incorporating existing commercial wharves, the actual berthing footprints of trade-related shipping and complementing adjacent 'dry' areas of port land with regularised 'wet' areas within a "Wharves / Loading / Unloading Facilities" zoning	Wharves / Loading / Unloading Facilities

Location	Strategic intent	Proposed Land Use Precinct
Port Gate widening the entrance to IOR (Map 2Ai-iv Reference 8): Appendix 4	Widening the access to the IOR facility for safety and efficiency reason by procuring a narrow strip of existing road reserve at Port Gate.	Special Industry

(d) the accessibility to, and within, BCPL:

Not all areas within BCPL are intended to be completely accessible. The Future Port Expansion (FPE) area, for example, is heavily restricted in terms of access for safety and risk management reasons. Additionally, this area also adjoins the maritime security zone along the quay line which is also heavily restricted for Commonwealth maritime security reasons.

General port land uses are also restricted areas due to various Australian Quarantine and Inspection Service and Border Force protection reasons. In addition, the general protection of commodities transiting the port also requires a strict access regime across port lands.

The bulk of core lands are subject to 24-hour security monitoring including parts of the Conservation / Buffer and Open Space precincts.

Section 2.5.1 addresses road, rail and sea access to the Port more specifically while Map 4 (Appendix 4) addresses fundamental Surface Transport Linkages to, from and on BCPL.

The port manager also has clear obligations under the terms of the lease from the State regarding maintenance and assurance of port access in conjunction with relevant government agencies.

1.4.5 Core Matter 2- Core port infrastructure

The term *'core port infrastructure'* is defined in the TIA, in Schedule 5B Part 2 and the following are core port infrastructure for BCPL:

- berths
- bulk loading and unloading facilities
- communications or telecommunications facilities and fibre optics
- conveyors and pipelines
- customs, immigration and quarantine facilities, including facilities for underbody storage and housing of animals
- defence facilities
- emergency service facilities and infrastructure (including, for example, a base for water police, training facilities and fire-fighting systems)
- facilities for handling dredged material
- freight warehouse or depot, bulk / break-bulk / container storage areas and associated ancillary facilities (e.g. fuel / chemical storage, wash bays, mechanical workshops, fumigation facilities)
- monitoring facilities, including, for example, a facility to monitor weather or tides
- open space and associated recreational amenities for port workers
- port terminal facilities
- roads, driveways, flyovers and other accesses
- security facilities
- shipbuilding facilities and dry docks
- signage, other than advertising billboards
- storage yard
- transport and equipment depot
- transport infrastructure

- utilities for water supply, sewerage, drainage, waste storage and collection, electricity generation, supply and transmission
- vehicle parking facilities
- weighbridges
- wharves and associated structures, including hydraulic structures, structures used for shipping purposes and wharf protection devices
- ancillary offices for infrastructure mentioned above.

Many of these terms are, in turn, defined in Schedule 5B Part 1, and extracts from those definitions are included for convenient reference in Appendix 2 and Appendix 3 of this LUP.

1.4.5.1 Outline of core port infrastructure

The primary statutory significance of the term 'core port infrastructure' in the TIA is that:

- Under the Strategic Plan in this LUP, there needs to be planning for core port infrastructure (and also port-related development) for the next 20 years (that is, for twice the statutory lifespan of the LUP), together with measures to achieve that planning in the longer term.
- The LUP may state that development that is a material change of use of premises for core port infrastructure and is consistent with the plan for a precinct is, within that precinct, accepted development or accepted development (subject to compliance with relevant benchmarks) for the *Planning Act* under the plan. This highlights the importance of core port infrastructure (within appropriate precincts).
- Reconfiguring a lot by lease is accepted development for the *Planning Act* under the plan, if the stated permitted purposes under the lease are core port infrastructure, transport infrastructure or a combination of these. This is intended to facilitate flexibility for the port manager to grant long-term subleases of land for those purposes.

Planning for future core port infrastructure is set out in the LUP's Strategic Plan. This LUP encourages the active expansion and maintenance of port facilities and infrastructure, while preserving the port's buffering and surrounding natural environmental values.

An outline of significant existing core port infrastructure and general trade trends are also addressed in the Strategic Plan, to provide a 'snapshot' of the port's business at the commencement of this LUP.

NB: *This 'snapshot' is only intended to provide a background for the future development of the port. The conceptual growth projections outlined in this commentary are not intended to be either a legally binding component of this LUP or a comprehensive description of future business dynamics / responses to all factors influencing global trade (e.g. changes in regional and international economics, the impact of changing geopolitical factors and/or unforeseen global events).*

The historic investment in port infrastructure means that Brisbane is already endowed with sophisticated and efficient port facilities, including:

Wharves

Wharves are the port's operational interface between the water and dry land. Wharves are designed to accommodate the loading and unloading of particular commodities, passengers or both. At the commencement of this LUP, there were 30 wharves (with approximately 8,200m of quay line) within Port Limits.

These wharves and their uses are listed within Table 1.3.

Table 1.3 – Wharf Facilities

Wharf	Location	Wharf Operator	Predominant Wharf use
Wharf 12	Port of Brisbane	Brisbane Container Terminals	Containers
Wharf 11	Port of Brisbane	Brisbane Container Terminals	Containers
Wharf 10	Port of Brisbane	Patrick	Containers
Wharf 9	Port of Brisbane	Patrick	Containers

Wharf	Location	Wharf Operator	Predominant Wharf use
Wharf 8	Port of Brisbane	Patrick	Containers
Wharf 7	Port of Brisbane	DP World	Containers
Wharf 6	Port of Brisbane	DP World	Containers
Wharf 5	Port of Brisbane	DP World	Containers
Wharf 4	Port of Brisbane	DP World	Containers
Wharf 3	Port of Brisbane	AAT	Motor vehicles, general cargo, containers
Wharf 2	Port of Brisbane	AAT	Motor vehicles, general cargo, containers
Wharf 1	Port of Brisbane	AAT	Motor vehicles, general cargo, containers
Grain Wharf	Port of Brisbane	PBPL	Dry bulk (predominantly grain, woodchip, sugar and cotton seeds), motor vehicles, cruise liners
Bulk Wharf 1	Port of Brisbane	Queensland Bulk Handling	Coal and dry bulk
General Purpose Wharf	Port of Brisbane	PBPL	Dry bulk and break bulk
Pinkenba Bulk Terminal	Pinkenba	PBPL	Dry bulk (predominantly grain, silica sand, soybean meal and fertiliser), general cargo
Caltex Crude	Port of Brisbane	PBPL	Crude oil/Fuels
Caltex Products*	Lytton	Caltex Refineries	Fuels
Queensland Bulk Terminals*	Colmslie	Wilmar Gavilon	Bulk and break-bulk
Brisbane Cruise Wharf (Portside)*	Hamilton	Brookfield	Cruise vessels
Hamilton 4*	Hamilton	Qube / Economic Development Queensland	Break-bulk
Viva*	Pinkenba	Shell Oil Company of Australia	Fuels
Port North Common User Berth	Pinkenba	PBPL	Fuels
BP Products Berth*	Pinkenba	BP Oil Australia	Fuels
Brisbane International Cruise Terminal	Pinkenba	PBPL	Cruise vessels
Cement Australia*	Pinkenba	Cement Australia	Dry bulk products
Wagners*	Pinkenba	Wagners	Dry Bulk Products
GrainCorp Liquid Terminal*	Pinkenba	GrainCorp Liquid Terminals Australia Pty Ltd	Bulk liquids
Incitec North*	Pinkenba	Incitec Ltd	Wet and dry bulk
Incitec South*	Gibson Island	Incitec Ltd	Wet and dry bulk

**Denotes facilities owned and operated by private operators*

Terminals

Terminals support the facilities where commodities and/or people are loaded and unloaded and are connected to the facilities they support (e.g. wharves, storage and transport depots etc). At the commencement of this LUP, there are five primary types of terminals on BCPL, namely:

- Container terminals: Container terminals are located adjacent to the container wharves. Container terminals are predominantly used for container handling when a ship is docked at a container wharf. Break bulk and motor vehicles may also be handled in such areas, subject to the operator obtaining the relevant planning and environment approvals.
- Bulk terminals: Bulk terminals are connected to wharves that have the infrastructure to handle 'wet' and/or 'dry' bulk products. Bulk terminals are predominantly used for the storage, transfer, loading and unloading of bulk commodities. The primary bulk commodities processed on BCPL are coal, cereals, cement, woodchip, iron, steel, crude oil and fuel. Motor vehicles and some break-bulk / project cargos may also be handled in some of these terminals. From time to time, some bulk terminals may also be used as transhipment areas or as military / back-up cruise vessel processing areas.
- General cargo and motor vehicles terminals: The general cargo and motor vehicles terminal is located at Port of Brisbane adjacent to Wharves 1, 2 and 3. This terminal is predominantly used for break-bulk and project cargos and motor vehicles. However, it can also accommodate containers and other machinery. Some general / project cargo unloading can also be accommodated adjacent to the General Purpose Berth (Fisherman Islands) and the Pinkenba Bulk Terminal (Port North).
- Brisbane International Cruise Terminal (BICT): The BICT is located near the Brisbane Airport at Luggage Point and provides deep water access for cruise vessels including mega cruise ships greater than 270m in length, with a height of up to 73.5m (above water). This new terminal avoids the constraints imposed by:
    - up-river height and draft restrictions imposed by the Sir Leo Hielscher Bridges and Lytton Rocks crossing
    - the smaller Hamilton swing basin
    - immediate adjacent residential encroachment at Hamilton

  This common user facility is designed to accommodate the largest cruise ships in the world without the need for dredging.
- Brisbane Multimodal Terminal: The Brisbane Multimodal Terminal (BMT) is the rail head at the port. The BMT facilitates the movement of containers, project cargo and bulk products to and from of the port by rail. The BMT's strategic location and latent capacity has the potential to accommodate far greater volumes of interstate and intrastate cargo movements in and out of the port.

Shipping channels within port limits

While shipping channels are generally beyond the boundaries of BCPL they are defined as 'port facilities' that:

- PBPL retains responsibility for constructing, improving and maintaining; and
- impact directly on port land use planning regarding the management of dredged material placement and the resultant supply of reclaimed land for port development purposes.

At the commencement of this LUP, PBPL (as port manager) is responsible for maintaining the 90km navigational shipping channels, berth pockets and swing basins between Caloundra, through Moreton Bay and upstream of the Brisbane River mouth to Breakfast Creek.

While the channels generally follow the deeper sections of the bay, approximately 10-30% of the port's local sea linkage requires dredging to maintain the current MSQ-declared depth needed for ships to safely and efficiently access Brisbane's port facilities (as detailed by Table 1.4 below).

Table 1.4 – Channels, reaches and swing basin depths

Location	Depth at Lowest Astronomical Tide
Channels and Reaches	
North West Channel	15.0m (280m wide)
Spitfire Channel	15.0m (300m wide)
East Channel	15.0m (300m wide)
Main and Bay Crossing	14.7m
Bar Cutting (river entrance)	14.0m (180m wide)
Pelican Banks Cutting to Hamilton Reach	9.1m (120m wide)
Swing Basins	
Fisherman Islands	14.0m (493m wide)
Koopa	14.0m (532m wide)
Lytton and Quarantine	9.1m (255m wide)
Pinkenba	9.1m (331m wide)
Hamilton	9.1m (397m wide)

Intermodal Transport Infrastructure

Map 4 (Appendix 4) shows existing and planned inter-modal transport infrastructure corridors. These primarily comprise:

- The Brisbane port rail corridor
- The Port of Brisbane Motorway (including those sections of Port Drive managed by PBPL under a Road Franchise Agreement with DTMR)
- Private road corridors (including the heavy transport corridor) within BCPL.

Apart from these primary corridors, other types of access also comprise 'core port infrastructure' under the TIA, such as conveyors, pipelines and driveways.

Reclamation Area (current facility for handling dredged material)

Throughout its history, the development of the Port of Brisbane has involved the progressively reclamation of land using strategically placed dredged material.

In accordance with existing approvals, the area of additional port land which is presently the focus of this ongoing reclamation effort is the area at the downstream end of Fisherman Islands known as the shown as the Future Port Expansion (FPE). In keeping with historic precedent, this reclamation work serves a dual purpose, namely:

(a) it provides a 'contained' area for the placement and management of dredge material, which is a necessary by-product of the port's need to upgrade and maintain shipping channels, berth pockets and swing basins (noting that, at the commencement of this LUP, some dredged material is also placed at sea at the Mud Island Dredged Material Placement Area in accordance with State government approval conditions).

(b) the land reclaimed will progressively provide an expanded area for future port growth and related transport infrastructure. These areas and facilities will be systematically developed in accordance with PBPL's strategic planning to accommodate anticipated growth in trade and shipping (refer to Map 5 in Appendix 4).

Government and community facilities

A range of government facilities are located on (or adjacent to) BCPL including the Queensland Combined Emergency Services Academy and the Queensland Water Police base at Port Gate.

Government entities located on Fisherman Islands also include the Department of Agriculture and Water Resources (previously including AQIS) and Department of Home Affairs (previously including the Australian Customs Service / Border Force).

Additional utilities such as street lighting and open space (including recreational amenities for port workers), which are traditionally provided by Local/State Government, have also been provided by the PBPL in a context which reflects the industrial primacy of BCPL.

Associated core port infrastructure

Apart from the above facilities, port customers have also developed a range of facilities which are defined as 'core port infrastructure'. Such development includes warehousing, storage and distribution facilities, transport and equipment depots, workshops, vehicle and equipment parking and ancillary offices and amenities. Such trade-related development is complemented by supporting signage, services and transport infrastructure, utilities, weighbridges, environmental monitoring stations etc.

1.4.6 Core Matter 3 - Valuable Features

Under Schedule 6 of the TIA, the definition of 'valuable features' is *'each of the following, whether terrestrial or aquatic:*

(a) *resources or areas that are of ecological significance, including, for example, habitats, wildlife corridors, buffer zones, places supporting biological diversity or resilience, and features contributing to the quality of air, water (including catchments or recharge areas) and soil*

(b) *areas contributing significantly to amenity, including, for example, areas of high scenic value, physical features that form significant visual backdrops or that frame or define places or localities, and attractive built environments*

(c) *areas or places of cultural heritage significance, including, for example, areas or places of indigenous cultural significance, or aesthetic, architectural, historical, scientific, social or technological significance, to the present generation or past or future generations*

(d) *resources or areas of economic value, including, for example, extractive deposits, fishery resources, forestry resources, water resources, sources of renewable and non-renewable energy and good quality agricultural land.'*

These features are expanded upon as follows:

(a) Features of Ecological Significance

BCPL sustains numerous significant features of ecological significance, including:

- extensive intertidal flats, which provide a feeding habitat for resident and migratory shorebirds
- over 170 hectares of mangroves at the mouth of the river, which provide a feeding habitat and nursery area for a variety of fish and crustaceans (noted also below in relation to fisheries resources)
- seagrass areas, which provide food for dugongs and turtles and are among the largest in the western Moreton Bay region
- a purpose built 12-hectare migratory shorebird roost for resting and feeding shorebirds
- bushland corridors that provide local habitat and bolster physical buffers between the port and nearby sensitive land uses.

The provisions of this LUP ensure that development of BCPL must consider Moreton Bay's high ecological and natural conservation values. Moreton Bay extends from Caloundra to the Gold Coast, and provides ecological, cultural, recreational and economic opportunities for Queensland. The bay, which is recognised internationally under the Ramsar Convention and managed as a Marine Park, offers many important estuarine and marine habitats for species such as migratory shorebirds, dugongs, turtles, fish and crustaceans.

Map 7 (Appendix 4) indicates various areas which are significant for fisheries resources, including over 170 hectares of mangroves at the mouth of the river, which provide a feeding habitat for a variety of fish and crustaceans. Adjoining seagrass areas, which provide food for dugongs and turtles are among the largest in the western Moreton Bay region. Apart from the requirements of various statutes, these areas are preserved under this LUP through Strategic Planning, precinct planning (Maps 1 and 2 in Appendix 4) and Parts 2 to 4.

(b) Features Contributing Significantly to Amenity

There is obviously an overlap between the features of ecological significance described above and the features of BCPL which contribute significantly to amenity. For example, areas of ecological significance also provide notable views from publicly accessible PBPL's office building within Port Central and the viewing hides adjoining the shorebird roost.

Precinct planning for buffers is a fundamental feature of this LUP. Such buffers bolster the industrial amenity of the port and surrounding BCC-controlled industry precincts and the residential amenity of nearby suburban areas.

The historic integration of port and city planning in this regard has provided a bulwark against of the risks of land use conflict caused by the encroachment of sensitive land uses into industrial areas (including those captured under the *State Planning Policy* (SPP) interest for emissions and hazardous activities) and vice versa (Refer to Maps 2 and 3 in Appendix 4) PBPL intend to continue their port interface planning with BCC and the State to maintain this enviable planning legacy.

(c) Features of Cultural Heritage Significance

As the vast majority of BCPL has been established by land reclamation, there is a reduced likelihood of finding sites with cultural heritage significance. Moreover, activities (including construction techniques) on BCPL do not involve extensive excavation, tunnelling or boring activities which could unearth scuttled maritime infrastructure / shipwrecks which are buried significantly below the surface of some port land (e.g. Fisherman Islands).

At the commencement of this LUP, there are no heritage places listed at National, State or Local level within the BCPL.

It is however acknowledged that there may be items of cultural heritage significance below reclaimed port land or along the edge of the river and there is always the possibility that features of cultural heritage significance may be identified in the future. In such instances, and depending on the nature of the feature, appropriate procedures and/or agreed principles are included in the LUP Codes and PBPL's standard Development Consent and Construction Environmental Management Plan conditions to ensure compliance with relevant legislation / government policies regarding cultural heritage (including but not limited to Sections 89-91 of the *Queensland Heritage Act 1992*).

(d) Features of Economic Significance

The port itself is a feature of key economic significance to the region, the State and the nation. This reality is discussed further in the Strategic Plan.

The TIA definition of 'valuable features' specifically refers to the following examples: 'extractive deposits, fishery resources, forestry resources, water resources, sources of renewable and non-renewable energy and good quality agricultural land'.

At the commencement of this LUP, BCPL is not identified as providing any significant resource in relation to extractive deposits, forestry, water resources, sources of renewable or non-renewable energy or good quality agricultural land.

1.4.7 Relationship with Coastal Planning

Due to the coastal location of BCPL, the relationship between the LUP and the State's coastal planning and policy framework is particularly important.

If development is proposed completely or partly within a coastal management district or involves tidal works, applications are required to be referred to the State Government for assessment. If the application does not involve assessable development under the LUP, but the development is otherwise identified as Assessable Development for coastal protection reasons under the *Planning Regulation 2017,* the application must still be assessed in accordance with the provisions of that regulation. Also, there is a special referral agency trigger for a development application under this LUP for material change of use or operational work, if the application is also partly in relation to tidal works or work within a coastal management district, under Section 283ZW TIA. If the application does not at least partly relate to assessable development under this LUP, but the development is otherwise assessable development for coastal protection reasons under the *Planning Act 2016*, then the normal position under the *Planning Act 2016* applies.

The precinct-based approach to planning at the port promotes the location of appropriate land uses in and around the coastal fringe areas of the port, including the prohibition of certain uses in sensitive areas.

Works in tidal and coastal areas are subject to a range of additional approvals under the *Coastal Protection and Management Act 1995* and the *Fisheries Act 1994.*

1.4.8 The relationship between the Port and neighbouring land

It is a mandatory requirement for this LUP to outline existing land uses on land adjoining or neighbouring BCPL and to consider how that land is dealt with by *Brisbane City Plan 2014*. Map 3 (see Appendix 4) shows land use and planning for neighbouring land at the time of commencement of this LUP[3].

Figure 1.6 provides an illustrated summary of land use relationships in relation to the LUP area.

A Recognised Industrial Hub

Figure 1.6 illustrates the following industrial land use relationships and values that support the continued growth and operation of the LUP:

(a) Nearly all core port infrastructure areas within the Port of Brisbane are surrounded by water or buffered by other parcels of BCPL and/or BCC industrial / buffer zoned land.

(b) Areas surrounding BCPL are mainly contained in four Council-specified 'zones', namely: Industry (General Industry Areas A, B and C), Special Industry, Industry Investigation and Conservation Zone. These zones are compatible with port activities and act as a buffer to sensitive uses.

(c) Port North Common User Berth, the new Brisbane International Cruise Terminal and Brisbane Airport land are buffered from sensitive uses, supported by a range of logistics and industrial uses and have direct access to major roads that connect the broader region.

(d) Petroleum activities adjoining Port Gate support port-based activities, are close to export infrastructure and service a large hinterland and consequently support and drive economic development and growth throughout Queensland and northern New South Wales.

(e) The Brisbane Airport landholdings, various industrial uses[4] north and south of the Brisbane River and BCPL combine to create Australia TradeCoast, which is to be protected for its significant contribution to the region's industrial land supply, economy, logistical functions and employment. The continued protection of land for this function is protected by all 3 plans (the LUP, City Plan 2014 and the Airport Master Plan).

(f) *The State Planning Policy – Planning for Infrastructure (Strategic Airports and Aviation Facilities)* requires the protection of operational airspace under the *Civil Aviation Act 1988 (Cmwth)*, through obstacle limitations surfaces and lighting, which are addressed in this LUP primarily through codes and overlay mapping (See the Airport Maps 8-10 in Appendix 4).

[3] Map 3 (in Appendix 2) will need to be amended from time to time to reflect changes made to the *Brisbane City Plan 2014* (the City Plan) or its replacement.

[4] Industrial warehousing, logistics operations, the Caltex Refinery and various petroleum storage facilities (including the BP terminal), Lytton wastewater treatment facility, the Lytton Industrial Estate (developed by the State of Queensland), various marine-based industries around the Hemmant area, and the various industrial/bulk terminals land uses along both sides of the Pinkenba reach of the Brisbane River.

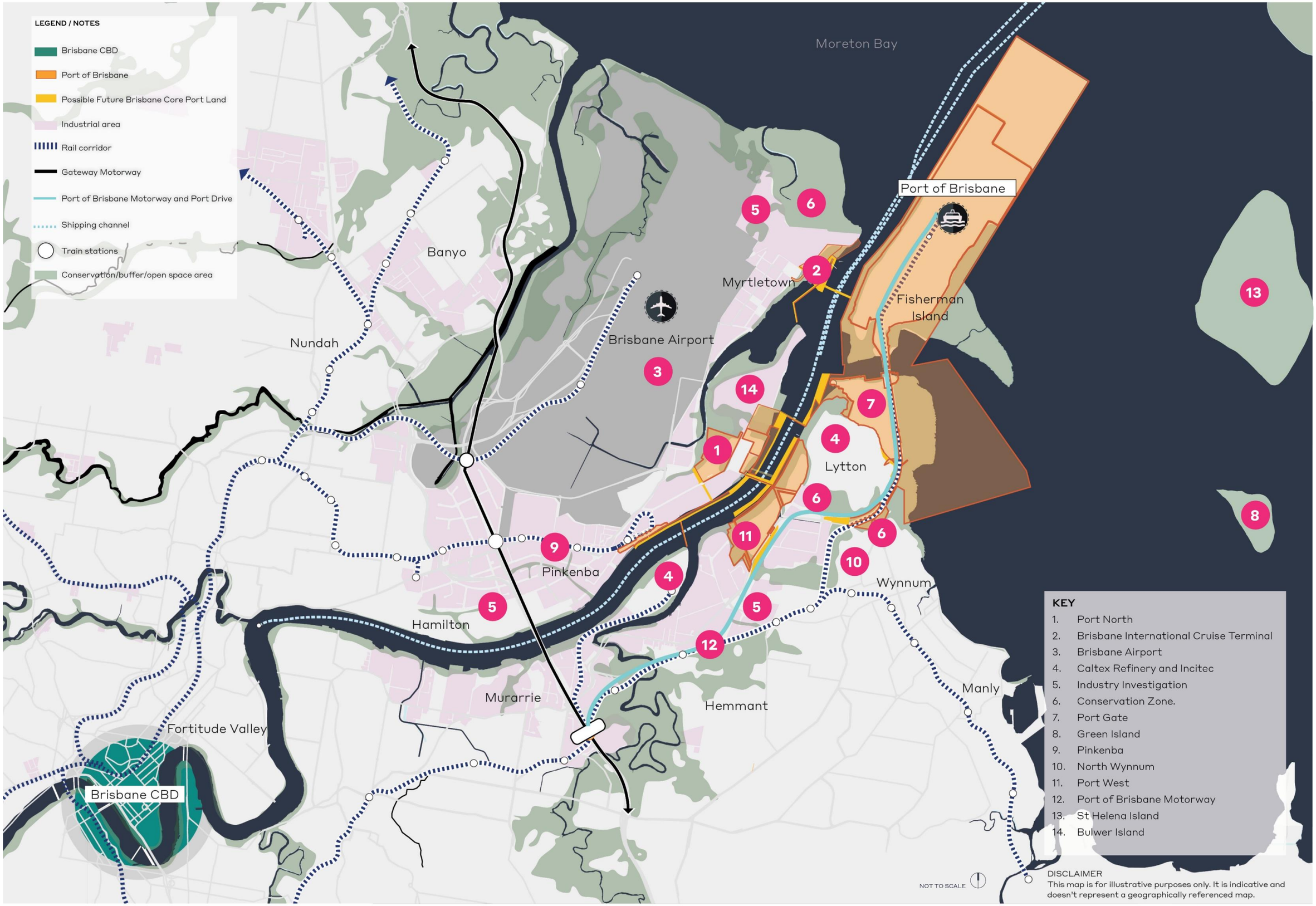


Figure 1.6 – LUP surrounding land uses

Buffered from Residents

There are some residential communities in proximity to the Port, notably, the Pinkenba community to the south west of Bulwer Island, and parts of the North Wynnum community to the south / east of Fisherman Islands, Port Gate and Port West.

Historically, a positive interface between these residential and industrial precincts has been maintained by:

- proactive community engagement by BCC and PBPL – for example, via PBPL's Community Consultative Committee and sponsorship programs.
- the integration of port and BCC land use planning to effectively segregate industrial uses from residential areas via buffering and thus maintaining / enhancing the amenity of both land use types while augmenting the benefits to fauna afforded by the 'Lytton Buffer Corridor'.
- undertaking ongoing modelling and monitoring of key environmental aspects of concern (i.e. air quality) to ensure that likely impacts are well understood and appropriately managed to minimise any detrimental effects on the health and amenity of the neighbouring communities.

Both *City Plan 2014* and this LUP work together to minimise conflicts between core port infrastructure and residential or other sensitive uses. Both plans and ongoing planning in the area will continue to protect the buffer, manage land use conflicts and support the ongoing role of the Port and surrounding land for their significant industrial, logistic, economic and employment contribution to the broader region.

Surrounding Neighbourhood Plans

At the commencement of this LUP, there are three BCC neighbourhood plans for areas surrounding BCPL. Each are discussed below:

(a) ***Pinkenba / Eagle Farm Neighbourhood Plan***. This plan applies to land north of the Brisbane River and surrounding BCPL in the Terminals (Bulk, General Purpose), Special Industry and Wharves / Loading / Unloading Facilities Precincts of the LUP. The neighbourhood plan promotes the competitive advantage and role of the area as an economic and employment hub and encourages the development of industrial and other uses that support the operation of the Port of Brisbane, Brisbane Airport and other major industries. The protection of land for industrial uses, recognition of the synergies to the Port of Brisbane and containment of sensitive nearby uses ensures that the neighbourhood plan supports the continued operation and development of BCPL in accordance with the outcomes of the LUP. The neighbourhood plan supports the operation of the Port by:

- Encouraging a wide range of industrial land uses that are difficult to locate elsewhere within the city,
- Maintaining physical buffers between residential and industrial areas,
- Supporting access to the Brisbane River in appropriate locations for Waterfront Industry,
- Ensuring the transport network is progressively upgraded to meet the needs of business and industry in the neighbourhood plan area,
- Facilitating the orderly development of appropriate interim land uses to protect the long-term viability of the Pinkenba / Eagle Farm neighbourhood area as an important industrial node.

(b) ***Hemmant-Lytton Neighbourhood Plan***. This plan applies to land south of the Brisbane River and surrounding BCPL at Port Gate, Port West and Lytton. The neighbourhood plan adjoins the Special Industry, Port Industry, Conservation / Buffers and Port Operational and Support Services – Area 2 Precincts of the LUP at the southern end of BCPL. The neighbourhood plan promotes the continued development of industry, high impact uses, logistics, marine industry and other uses that reinforce the role of the Port of Brisbane as a significant local industry on the western side of the Port of Brisbane Motorway/rail corridor. The plan also actively seeks to contain residential development to existing locations (predominantly to the east of the Port of Brisbane Motorway/rail corridor) and preserve environmental areas that act as buffers between high impact uses and sensitive locations. The neighbourhood plan aligns with and supports the Port of Brisbane's development outcomes provided in the LUP by:

- Accommodating regionally significant industry and supporting business activities that focus on transport and logistics, transport support services and other intensive industrial activities,
- Limiting non-industrial activities only to those which support or complement waterfront marine industries,

- Restrict new residential development to areas south of the railway corridor and requires new development to be separated from industrial areas to ensure the long-term viability of industrial areas,
- Identifying land within the Rural Zone, Environmental Management Zone and Rural Residential Zone that is unsuitable for urban development.

(c) ***Australia Trade Coast Neighbourhood Plan***. This plan applies to land north and south of the river, including Brisbane Airport, land at Hamilton and Pinkenba adjacent to the river and Gateway Motorway, Fisherman Islands and Port Gate. The Neighbourhood Plan seeks to ensure that development occurs in a manner which ensures the efficient provision of sewerage, water, stormwater and transport infrastructure and facilitate industrial development in the Australia TradeCoast. While the neighbourhood plan includes BCPL, the plan clearly identifies that development within these areas is assessable under this LUP. The neighbourhood plan supports the operation of the Port by:

- Identifying the location of trunk infrastructure corridors, greenspace, low cost, moderate cost and high cost infrastructure provision works for water, sewer, stormwater and transport infrastructure,
- Encouraging waterfront and marine activities to gradually relocate to the mouth of the river and enabling these activities to be redeveloped for high quality industrial uses,
- Ensuring development only provides public access to the river where this does not conflict with industrial activities or impact on public safety,
- Facilitating appropriate types of development which require the use of over mass vehicles to be located in precincts adjacent to the Gateway Motorway and/or the Port of Brisbane Motorway,
- Identifying Whyte Island as a location for industry which requires separation as it is a strategic location for high impact industry and special industry.

1.4.9 Relevant Local Policy Documents

BCC has also developed several local strategic policy documents which reflect and reinforce the role and importance of the port now and into the future.

A summary of the key BCC Policy documents that are important to consider in preparing this LUP are provided below.

Brisbane Industrial Strategy 2019

The *Brisbane Industrial Strategy 2019* was developed in response to the strong demand for Brisbane's limited supply of industrial land and seeks to ensure the city is well placed to support job and economic growth into the future, while protecting the environment and way of life. There are a number key messages within the strategy which supports the operation of the port and highlights the importance of protecting BCPL for industrial uses which benefit from close access to strategic freight networks, the location within the Australia TradeCoast and synergies between uses which facilitates an efficient supply chain:

- The port is identified as a Major Industrial Area (MIA) and a key employment area which needs to be enhanced and protected in order to develop as a vibrant and attracter precinct that supports Brisbane's industrial economy and global businesses.
- It is expected that Brisbane's MIAs will experience industrial employment growth, providing 46% of employment outside of the inner five-kilometre sector by 2041.
- The strategy highlights that Brisbane's future industrial growth is significantly constrained by a lack of industrial land and is in strong demand for both industrial and non-industrial uses. This is likely to place pressure on core port land to accommodate industry uses which relocate from land which has been rezoned for other purposes (e.g. industrial areas near the Brisbane River).

Transport Plan for Brisbane – Strategic Directions

The *Transport Plan for Brisbane – Strategic Directions* seeks to guide how Brisbane's transport network will grow and adapt for the next 25 years and beyond. The plan sets out how transport will contribute to BCC achieving the vision for the city and articulates how the transport networks link into regional, state, national and international networks.

The plan reinforces the role the port plays to the economy and highlights the importance of safe, fit-for purpose and integrated freight transport networks for the operation of the port and industries located at the port. The plan also acknowledges:

- The Australia TradeCoast is a major employment and economic activity area which will continue to generate a high demand for efficient freight and commercial transport networks.
- The role of the Port as Australia's third-busiest container port and the strategic location of the port, including rail links to markets in QLD and NSW provide substantial opportunity for future import and export growth.
- The existing Portside cruise ship facility at Hamilton, the new Brisbane International Cruise Ship Terminal and the Fisherman Islands Multi-User Terminal are all recognised in the strategy for the contribution these key pieces of cruise / tourism transport infrastructure.
- The protection of port land and facilities from encroachment of incompatible land uses and continued development of landside transport access to and from the Port is required to maintain the Port's competitive advantage as a freight hub.
- Rail freight capacity, efficiency and safety can be improved by maximising the use of rail for container and bulk movements. Better utilisation of the rail network in the movement of freight within Brisbane is reliant on the delivery of the future Inland Rail project and a dedicated rail link to the Port.

PORT of BRISBANE
Here for the future

Part 2
Strategic Plan

Brisbane Port Land Use Plan 2020

2.1 Context

2.1.1 Statutory Context

Under the TIA, this LUP is required to include a 'Strategic Plan' for BCPL which:

'(a) outlines, by way of concept plans and words, for a period of at least 20 years after the plan commencement day:

(i) *planning for core port infrastructure and proposed port-related development for the land; and*

(ii) *anticipated infrastructure requirements relating to development mentioned in subparagraph (i), and*

(b) include a part identifying the strategic outcomes for the land and stating measures that facilitate achieving the strategic outcomes.'

It is significant that this Strategic Plan sets a direction for a period of at least 20 years, contrasted with the normal life of the LUP itself, which is only for 10 years. This supports shorter term planning and ensures that development does not undermine the longer-term vision for the Port which is set out in the *Port of Brisbane Master Plan 2018-2048.*

The fundamental importance of this Strategic Plan is in establishing the development philosophy and direction for BCPL (as underpinned in the TIA), in that:

'(a) The other parts of the Brisbane port LUP are required to be consistent with the Strategic Plan; and

(b) *Referral is required to the Transport Minister for any development application which is inconsistent with the LUP for transport reasons. The TIA defines transport reasons to include 'the elements of the Strategic Plan for the Brisbane port LUP relating to:*

(i) *planning for core port infrastructure, port-related development and other transport infrastructure; and*

(ii) *maintaining buffer land for the infrastructure or development'.*

The Transport Minister's overseeing of these elements of the Strategic Plan is intended to ensure that long-term Strategic Planning is not undermined by incremental inconsistent development applications.

The Strategic Plan addresses:

- Section 2.2 – "*Strategic Themes*" which provides the underpinning considerations for port land use decisions
- Section 2.3 – "*Strategic Overview: Port Land Use Activities*" which provides details on anticipated port development types across the various precincts and considers the port manager's obligations under the Port Lease
- Section 2.4 – "*Trade Forecasts by Commodity Type, Infrastructure Responses and Staged Development Scenarios*" which sets out the likely trading volumes over a 20-year period and the subsequent response in terms of infrastructure planning and provision
- Section 2.5 – *"Infrastructure and Land Development Outcomes"*

These strategic outcomes and measures are intended to be treated as legally binding, in terms of the requirements under the TIA for the balance of the LUP to remain generally consistent with this Strategic Plan and in terms of the Transport Minister's referral jurisdiction for inconsistency with the LUP for transport reasons which includes the Strategic Plan[5].

The balance of this Strategic Plan and supporting concept plans are intended to provide interpretive background or guidance, for the purpose of understanding the outcomes and measures specified in the strategic outcomes and measures. The whole of this Strategic Plan is also generally implemented through precinct planning, overlay mapping, the table of assessment and codes under this LUP.

[5] *Notwithstanding the LUP's role as guiding Ministerial jurisdiction, the Strategic Plan sections of this document are, as stated previously, intended to provide a background for the future development of the port. The conceptual growth projections outlined in this commentary are not intended to be either a legally binding component of this LUP or a comprehensive description of future business dynamics / responses to all factors influencing global trade (e.g. changes in regional and international economics, the impact of changing geopolitical factors and/or unforeseen events such as the COVID-19 pandemic).*

2.1.2 Practical Context

The Port of Brisbane:

- provides a critical link to world markets and is considered seaport infrastructure of National importance.
- serves one of Australia's fastest-growing urban areas, South East Queensland (SEQ), which comprises 11 regional and city councils and is expected to experience continued strong population growth to 2041 and beyond. This underlying population growth supports the strong trade forecasts outlined in this plan and the need for continued infrastructure investment and development at the Port of Brisbane.
- is located at the entrance to the Brisbane River, and on the edge of the Moreton Bay Marine Park. Being a 'river-mouth port' provides a strategic advantage, as there is generally a separation of BCPL from residential and other sensitive land uses, supported by substantial buffer areas. This Strategic Plan seeks to preserve these strategic advantages.
- economically serves a growing economy, and associated primary trading hinterland, including all of Queensland and a large proportion of northern New South Wales. A diverse range of commodities transfer through the port, providing a firm foundation of economic stability through differing market cycles.

2.2 Strategic Themes

There are four 'strategic themes' which drive the policy direction for the Strategic Plan:

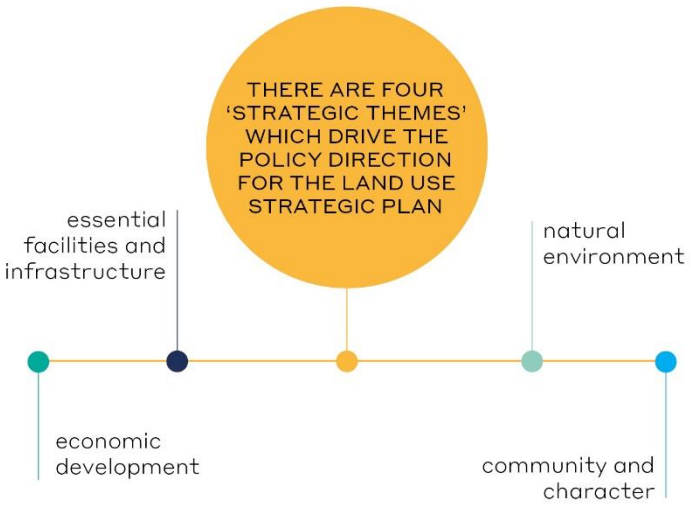


Figure 2.1 – Strategic Themes for the Land Use Strategic Plan

2.2.1 Strategic Theme #1 – Economic Development

To maintain the role of the port as a key driver for the regional, state and national economies, development at the port must facilitate increased trade and fiscal returns by:

a) commercially responding to market trends, user requirements and other relevant economic indices;
b) developing a 'system' of port industrial and commercial precincts, where development occurs in logical sequence with the necessary infrastructure;
c) reinforcing and protecting the viability of existing core port infrastructure, industry and development within the main port area;
d) maximising the efficient use of land and the supporting transport system, including the ability to use BCPL for temporary/short-term developments and land uses which support the efficient functioning of the port area, without prejudicing their longer-term development;
e) ensuring that areas adjoining the river front and Moreton Bay are efficiently utilised for core port activities, except where designated as having high ecological values;

f) recognising and ensuring the sustainable use of natural economic resources such as sand or dredged material;
g) sustaining capital investment in port facilities, infrastructure and commercial buildings;
h) establishing synergies with adjoining enterprises in the Australia TradeCoast region;
i) ensuring facilities, land use and infrastructure facilitates growth in relevant sectors in accordance with forecasts and estimates provided in section 2.4;
j) protecting established transport networks and hierarchy of major surface transport infrastructure;
k) accommodating short-term and seasonal fluctuations in market demand by providing land for interim and short-term storage of bulk goods and motor vehicles close to existing areas dedicated for the same purpose; and
l) ensuring port land use, infrastructure and development considers the risk of coastal hazards including impacts of sea level rise and includes measures to avoid, mitigate or manage the risk of coastal hazards to an acceptable level.

2.2.2 Strategic Theme #2 – Essential Facilities and Infrastructure

The port requires purpose built and, in some cases, industry-specific infrastructure and facilities that meet the various needs of port industries and tenants. As such, all development must be designed to meet these needs by:

a) recognising (primarily through codes under this LUP) the need for tailored infrastructure solutions and land configurations for the port environs;
b) taking into consideration relevant maritime security regulations administered at the Commonwealth level;
c) maximising the value of existing and planned infrastructure facilities by consolidating appropriate development in well-serviced precincts;
d) co-locating facilities with existing infrastructure to maximise capacity, reduce inefficient expansion/upgrades and capitalise on planned physical networks;
e) ensuring infrastructure is of an adequate type and capacity to meet the demand of specific uses;
f) where reasonable, relocating and amalgamating complementary port industries within dedicated clusters, to assist increased efficiency in infrastructure use;
g) ensuring only compatible land uses and development occur in proximity to core port infrastructure;
h) protecting existing and planned rail and freight networks and associated facilities to accommodate planned growth in logistics associated with the operation of the port;
i) encouraging effective planning, design and use of transport corridors to maintain and develop multi-modal access to and from the port;
j) minimising development which could place significant additional strain on road corridors, without appropriate mitigation measures;
k) maximising the use of rail facilities where reasonably practicable, to avoid placing an unnecessary significant additional strain on road corridors;
l) incorporating sufficient on-site vehicle parking, access and manoeuvrings areas to meet the operational requirements of the development;
m) ensuring that the port's channels are developed and maintained to meet user need, safety and efficiency;
n) accommodating design parameters of Brisbane Airport in relation to issues of height restriction and lighting attenuation; and
o) providing for building finished floor levels which take account of natural hazards.

The above strategic themes are primarily addressed through a combination of codes and overlay plans under this LUP. The TIA also requires this LUP to include a Priority Infrastructure Interface Plan (PIIP) to consider the specific interactions between the LUP and the Local Government Infrastructure Plans (LGIP) that identify the capital investment plans of BCC and various utility providers serving (directly or indirectly) the developments within the designated core port lands.

2.2.3 Strategic Theme #3 – Natural Environment and Amenity

The natural environmental values and resources at the port are managed in a sustainable manner to maintain biodiversity and ecological processes by ensuring that port land use and development:

a) protects the identified significant natural ecosystems within and adjoining the BCPL, including:
   - the beaches, sandbanks, wetlands, mangrove forests and mudflats within the adjacent Moreton Bay Marine Park, which offers many important estuarine and marine habitats for fauna such as migratory shorebirds and other water and sea birds, dugongs, turtles, whales and dolphins and commercial bait, fish and crab species;
   - valuable, natural environmental features located on BCPL within:
     - riparian zones adjoining allotments along the Brisbane River and tributaries at the Port West and Pinkenba precincts;
     - bushland corridors providing buffers and links to riparian zones;

b) in areas with potential acid sulfate soils, is managed so that it does not cause unlawful environmental harm to water quality and complies with State Planning Policy state interest – water quality;

c) effectively manages dredged material disposal, wastes, emissions and pollution sources to within acceptable environmental limits, to minimise impacts upon environmental values;

d) complies with water quality, air quality and noise standards administered under the *Environmental Protection Act 1994*;

e) incorporates appropriate environmental management measures within the planning, development and operational stages, through implementation of Environmental Management Plans (EMPs) or maintains an accredited Environmental Management System (EMS)

f) in appropriate locations, is landscaped predominantly with locally native species;

g) provides and maintains the appropriate buffer zones between port facilities and vulnerable ecological features; and

h) conserves the use of potable water supplies and explores rainwater storage options.

The above Natural Environment and Amenity strategic themes are primarily addressed in this LUP through a combination of precinct planning (particularly buffer planning), 'port-prohibited development', codes and associated overlay mapping. Long-term strategic planning to preserve natural buffers is also shown in Maps 2 and 7 (Appendix 4).

2.2.4 Strategic Theme #4 – Community and Character

The community character and associated underpinning values of the port and its relationship with stakeholders and nearby sensitive land uses are protected and strengthened by:

a) integrating planning and development activities with local and state government land use planning in matters including buffering, compatibility of adjoining land uses, protection of the safety and operational integrity of core port infrastructure, intermodal transport infrastructure and timely planning for associated infrastructure to meet ongoing needs;

b) recognising and protecting indigenous cultural heritage values;

c) promoting the underpinning philosophy of safe and secure port operations

d) operating as a 'good neighbour';

e) providing and maintaining appropriate buffers between port development and sensitive receiving environments;

f) providing appropriate support facilities and places for workers and visitors to the port area;

g) requiring major industrial development or development constituting a safety risk or hazard, to demonstrate it can meet acceptable safety standards;

h) avoiding, mitigating and managing adverse impacts generated by core port activities, such as air, noise and odour impacts, on nearby sensitive environments and land uses, to the extent practical without compromising the operational capacity of the port;

i) protecting BCPL from the development of sensitive land uses that are incompatible with the purpose and operation of core port activities.

These strategic themes are primarily addressed in this LUP through precinct planning (particularly in relation to Port Central / Visitors' Centre) provisions encouraging port-related development and other compatible development, precinct planning and Strategic Plan mapping relating to buffering, codes and the contribution schedule.

2.3 Strategic Overview: Port Land Use Activities

2.3.1 Indicative concept plan of key land use activities

Table 2.1 (below) is an indicative concept plan outlining the key land use activities envisaged for BCPL, over approximately the next 20 years. The key land use classifications and their primary strategic intent (as illustrated in Appendix 4, Map 1) are as follows:

Table 2.1 – Concept Plan – Key Land Use Activities

Strategic Level Classifications	Primary Strategic Intent
Wharves	Premises intended primarily for wharf structures and associated core port infrastructure (including wharf protection and port monitoring facilities). These areas may possibly include 'port-related development' which is directly related to the core port infrastructure. or temporary uses.
Port Terminals	Uses in this area are intended to be predominantly for: • 'port terminal facilities' and other facilities requiring proximity to quay line / wharf areas; and • uses focused on / complementing trade activities and/or the berthing, loading and unloading of cargo, cruise and/or military vessels. Development and infrastructure in this area should be primarily 'core port infrastructure' that requires a direct physical link / line of sight to the quay line or immediate water access, to operate safely, efficiently and effectively. Activities related to marine and port safety, security and monitoring are also likely to be in this precinct. After adequately providing land for the aforementioned core port infrastructure, there may potentially be land available within this precinct for compatible and supportive port-related development (including temporary uses). Land adjoining the river at Port West may also be supported for general port industry, transport terminals, manufacturing, container/motor vehicle storage, freight stations, niche / shallow-draft water-front and processing industries and/or general warehousing where there is a demonstrated need and no adverse impact on port uses. Local amenities such as food and beverage vendors and waterfront open space, and back-up storage facilities for motor vehicles and general-purpose hardstand areas are also supported where ancillary and not impacting on the primary function of the precinct. The Brisbane International Cruise Terminal (BCIT) at Luggage Point will: • Be protected for core terminal building facilities including passenger check-in facilities, Customs and AQIS services, baggage transfer infrastructure;

Strategic Level Classifications	Primary Strategic Intent
	• Provide ancillary services such as tourism booking, retail, hospitality offerings and amenities that are small-scale and do not compete with other services and facilities provided in designated centres across Brisbane; • Include ancillary access roads, car/bus parking, public transport infrastructure (such as bus stations, small-craft vessel access and a ferry stop), vessel provisioning facilities and landscaping; • Be protected from incompatible development that would impact on the efficient and effective operation of the facility; • Provide, in the longer term, for a second wharf and/or terminal facility expansion where demand for additional cruise infrastructure can be demonstrated and all relevant development approvals are obtained; and • Provide, in the longer term, complementary industrial uses that support the cruise industry.
Port Industry	Priority is intended to be given to uses primarily related to, or dependent on, shipping / trade (e.g. the uses defined as 'freight warehouse or depot', 'transport and equipment depot', 'bulk loading or unloading facilities', 'storage yards', related infrastructure and similar activities). After giving priority to uses which are directly related to or dependent on shipping / trade, land within this precinct may also be available for port-related development, including, but not limited to: warehouses (general), motor vehicle / break-bulk / project cargo storage or service stations. Compatible temporary uses or other compatible industrial or ancillary development may also be considered. A 3ha area of undeveloped land fronting the boat passage at Port Gate (west of Port Drive) is to be developed in the short term for port related warehousing, logistics and marine related development. Land at Port West is supported for a mixture of trade-related warehousing and distribution centres. Local amenities such as food and beverage vendors and waterfront open space, and back-up storage facilities for motor vehicles and general-purpose hardstand areas are also supported where ancillary and not impacting on the primary function of the precinct (and allowing for a HAT + 20m riparian buffer when development does not require direct river access). The Special Industry designation at Port Gate is the only port area south of the river where noxious and hazardous industries and major hazard facilities can be accommodated. These areas are to be protected for this continued purpose, while adjoining areas are not to include uses that would impact on their continued, uninhibited operation. Port North is supported for wet bulk, dry bulk, special industries, dangerous goods storage, processing industries and freight stations, as demand requires.
Port Commercial	These areas are intended primarily for the Port Central development, the Visitors' Centre, expanded port-related development and associated infrastructure to service the needs of port businesses, their employees and customers. These areas are shown at three distinct 'Special Activity Site' (SAS) precincts – Port Central (including the Visitors' Centre) and the Port Gate

Strategic Level Classifications	Primary Strategic Intent
	Service Station area (located on the approach to Fisherman Islands). The SAS designation recognises the importance of these sites as critical supporting land uses to the overall port system. Importantly, they represent sites on BCPL which will see a large percentage of non-typical port industrial type activities and visitations. Port Central area is to include, for example, development that supports the day-to-day needs of the port community (such as employees and customers) including business, food premises, health, recreational and service activities, office and administrative uses and limited small-scale retail uses. Development in the Service Station area would be classified as either 'core port infrastructure' or 'port-related development' and would primarily accommodate activities which support port activities such as service stations, vehicle repair and servicing facilities, food and drink outlets and a small scale supermarket / shops for the convenience shopping of port users and/or patrons of the ferry service to Moreton Island. After giving priority to port-related development, office / administration functions and associated infrastructure, the Port Commercial precinct areas may potentially also include other uses, provided that these are compatible with existing and planned port-related development, including amenities appropriate for these areas, temporary storage and/or lower-order industrial uses that could easily be replaced with/redeveloped as higher-order commercial uses (e.g. motor vehicle storage facilities, smaller scale warehousing, etc).
Port Operational Support	Intended for a range of general support services to the port industry, marine-based businesses, customs and quarantine facilities, public boat ramps or emergency services facilities. After giving priority to uses which are directly related to or dependent on water frontage, potentially land within this precinct may also be available for port-related development including, but not limited to: warehouses (general); motor vehicle parking; storage yards; truck or rail marshalling areas or small-scale convenience shopping facilities. Potentially, compatible temporary uses or other compatible industrial or ancillary development may also be considered.
Parkland / Open Space / Education	Intended for open space / recreation facilities for port workers and port industry-related training / education purposes. Development in this area would be primarily classified as 'port-related development' and may include: • linear open space provision; • buffering to roads, • landscaping, • urban design elements • stormwater infrastructure.
Buffer / Conservation and Buffer / Investigation	These areas are intended: • primarily for buffering purposes to other environmentally sensitive areas or residential communities outside of BCPL; • to protect identified significant ecological values;

Strategic Level Classifications	Primary Strategic Intent
	• to preserve environmentally significant and sensitive areas; • to promote biodiversity values; and/or • provide amenity for people employed at the Port. These areas provide significant strategic benefit to the port and play a role in providing ecological habitat and corridors through the lower catchment of the Brisbane River and in areas covered by the Moreton Bay Marine Park. Most of this land is intended to remain completely undeveloped. Any development in these areas would be low impact such as monitoring equipment, nature-based recreation facility; or park. All other forms of development are to be avoided. Complementing the Buffer/Conservation designation are areas shown as "Buffer/Investigation". These areas presently bolster the buffers between the port and nearby areas of higher land use sensitivity and include a mix of ecological values that warrant further scientific investigation. PBPL may undertake detailed investigations of these precincts to verify existing ecological values, the suitability of future land uses and/or environmental restoration / offsetting. If future scientific investigations verify limited potential for rehabilitation in these areas, PBPL may consider future alternative uses for this land. **NB:** no future alternative use of these areas has been identified by PBPL and any future change in the use of a Buffer/Investigation area would only proceed after the following actions have occurred: (i) site-specific scientific investigations, (ii) engagement with key stakeholders to discuss the findings of investigations, (iii) a future amendment to the LUP has been approved by the state (and reviewed by relevant state agencies); and (iv) the lodgement of applications and procurement of all relevant government approvals for the use(s) in question. Items iii and iv are ***not*** contemplated within the life of this LUP.
Transport Infrastructure (including 'primary' and 'secondary' roads)	Corridors intended for rail and major road transport routes / infrastructure (other than the 'heavy transport corridor' which is specifically identified). These areas provide a critical role at the port by providing the space to efficiently move goods and products around the port precinct. Land uses and infrastructure directly supports the trading operations of the port.
Heavy Transport Corridor	Corridor identified for the efficient transfer of cargoes at the port primarily between port terminals, the BMT and Port Operational Support facilities. Protect undeveloped areas of the Heavy Transport Corridor (HTC) in reserve, while making use of those areas for temporary/short-medium term use related to hard-stand storage.

A 20-year Strategic Plan (see Map 1, Appendix 4) captures these broad land use intents in a manner.

NB: *this plan is not intended to be interpreted strictly on a cadastral basis, but rather at an indicative conceptual level, allowing for common-sense flexibility, particularly considering the Key Drivers in Section 2.3.2.*

2.3.2 Key Drivers of Port Planning and Development

Strategic planning considers each of the broad 'strategic themes' listed in Section 2.2, but many of the issues listed under those strategic themes are implemented primarily through land use designations, levels of assessment tables and codes. For the purpose of interpreting the indicative concept plan in Map 1, Appendix 4, the fundamental drivers are:

- compliance with the terms of the Port Lease
- anticipated planning need, particularly for core port infrastructure, considering market cycles, baseline economic conditions and competition
- improved efficiency through allocation of spatial areas which streamline activities and add value to the port operational system
- the practical interrelationship between geographic / ecological constraints and operational characteristics (including for example, the natural position of the access channel and the subsequent physical location of marine terminals – which then in turn drives the location of supporting industries which add logistical benefits and streamlining)
- protection of the existing location of the Brisbane port railway lands, the BMT, accessibility to these facilities and the relationship with heavy vehicle transport corridors
- constraints and opportunities arising from existing major land uses and approvals, particularly existing or proposed significant core port infrastructure
- existing / proposed trunk infrastructure in and around the BCPL
- the need to ensure adequate land and appropriate management of dredged material disposal in the longer term, consequential upon the port's ongoing responsibilities for shipping channels and associated dredging
- the related issue of the rate at which reclaimed land is reasonably anticipated to become available for future development, particularly in the location indicated as the 'future port expansion area'
- the Moreton Bay Marine Park boundary to the southern side of the port's main operational complex and other significant identified environmental values
- the protection of, and integration of the port with, regional transport corridors that will optimise the efficiency and safety of port access into the longer term.

2.3.3 Staged Development

The indicative land use activities outlined in the Strategic Plan (see Map 1, Appendix 4) and the list of 'key drivers' outlined in Section 2.3.2 are given further context by the conceptual staging plan shown in Map 5, Appendix 4.

Ultimately, the timing of staged land availability and development will be driven by:

- the time that reclaimed land becomes available for development, which is in turn dependent on:
    - ongoing dredge material management
    - dredged material settlement and drying times
    - seasonal weather variances
    - the availability of dredging plant and equipment
- demand for core port infrastructure development considering baseline trade growth across a range of commodity types, market cycles (e.g. domestic and global, commodity-based and broader market cycles), competition and potentially operational changes
- related demand for associated infrastructure, particularly intermodal transport infrastructure

Consequently, the indicative timeframes for staging shown on Map 5 (Appendix 4) should not be interpreted strictly. Rather these conceptual timeframes are indicative only and, based on forecasts at the commencement of this LUP.

However, the order of staging is intended to be closely monitored, to provide for orderly planning and infrastructure provision. Also, the indicated future permanent land use classifications for those precincts (see Map 2, Appendix 4) is generally intended to be followed, while providing flexibility (where appropriate) for temporary uses and re-handling of dredged material.

2.3.4 Land Preparation

The allocation of land for dredge spoil re-handling may also occur at various locations during the life of the Strategic Plan as part of standard PBPL land preparation works.

Such allocation may vary from time to time depending upon new technology, improved dredge material handling techniques, reduced or increased annual dredging volumes due to seasonal or economic drivers, or improved dredged material drying and stabilisation procedures.

Additionally, alternative options for dredged material re-handling and or disposal may also influence the ultimate area of land to be allocated on the BCPL. Detailed commentary on this issue is contained in Section 2.5.3.

2.3.5 Temporary Uses

Due to the long lead times involved in strategic planning to anticipate future need for major port infrastructure, it is possible that areas of BCPL may be temporarily vacant leading up to ultimate port development.

Provided temporary uses do not undermine the long-term availability of this land for its intended strategic purpose, short-term, port-related uses may be accommodated by PBPL.

Appropriate temporary uses may include, for example:

- general warehousing,
- storage of project-related cargoes;
- overflow areas for the storage and handling of commodities traded through the port (including motor vehicles, agricultural equipment and mining / energy resources infrastructure);
- storage areas associated with seasonal peaks in import and export goods; and/or short-term storage of construction materials (e.g. wharf piles, preformed concrete structures, storage of machinery and/or transport-related activities).

Not all temporary uses will require an approval under this LUP. Where PBPL deems the use does require approval, development assessment for temporary uses should consider imposing conditions setting 'sunset periods' for the temporary development, including requirements relating to removal of improvements and, if applicable, restoration of the land.

The individual Table of Assessment for each precinct addresses these matters further.

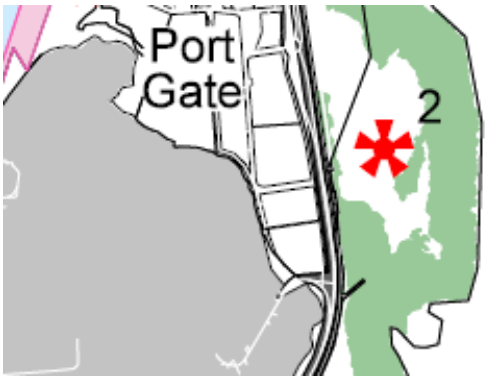
2.3.6 Strategic Investigation Areas

Strategic Investigation Areas (SIA) are shown in Map 6 – Appendix 4. The purpose of these designations is to highlight issues which are intended to be investigated during the life of this LUP. These investigations areas are envisaged to influence the content of future or amended LUPs as detailed within Table 2.2.

Table 2.2– Strategic Investigation Areas

SIA #1 – Eastern End of Fisherman Islands	
	This area of BCPL, located at the eastern end of Fisherman Islands, has been identified as a potential site for longer-term port operational needs. At the commencement of this LUP, the area was undeveloped, other than being used for the progressive placement of dredged material (as previously approved by the State) and the natural mixing of approved stormwater / treated reclamation tail-water discharge from the outer edge of the port's bund wall structure. No additional development (beyond the ongoing placement of dredged material) is planned over this area within the statutory life of this LUP. However, further investigations will be undertaken to assess alternative port operational uses for this area.

SIA #2 – The Eastern Edge of Port Gate



This area, located to the east of Port Drive in the Port Gate area (nominated as Buffer/Investigation), requires more detailed scientific analysis to determine the nature and extent of its geotechnical and ecological values.

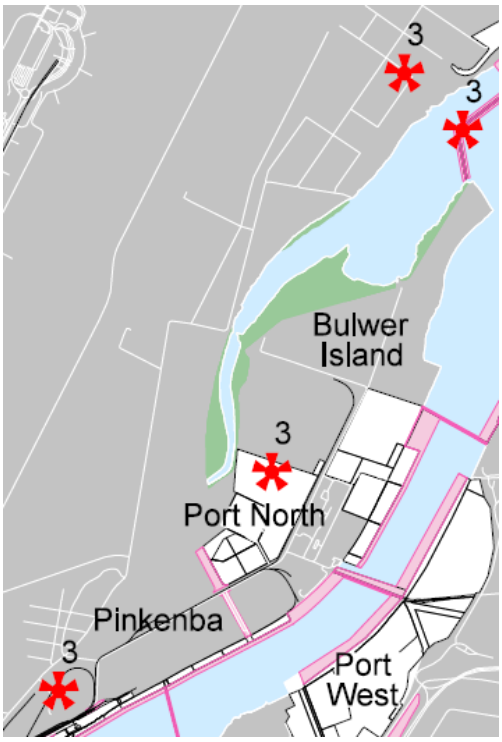
This SIA designation has matured from previous versions of the LUP in order that the opportunities and constraints for any future use and/or heightened conservation of all or part of this area may be objectively determined.

Finer-grained clarification of the mapping of this area is also provided in this LUP to accommodate minor upgrades to existing rail infrastructure within / bordering the LUP's Transport Infrastructure precinct.

It is recognised that, although much of the area is lower value / degraded intertidal habitat, it is within the Moreton Bay Marine Park and specific approvals for any alternative use would be required.

NB: The 'coastal section' of the Lytton buffer (Conservation / Buffers) is not intended to be developed and is proposed to remain as conservation / buffer for the long term. In addition, development of the area indicated would be subject to addressing any native title issues.

SIA #3 – Port North Baseline Investigations

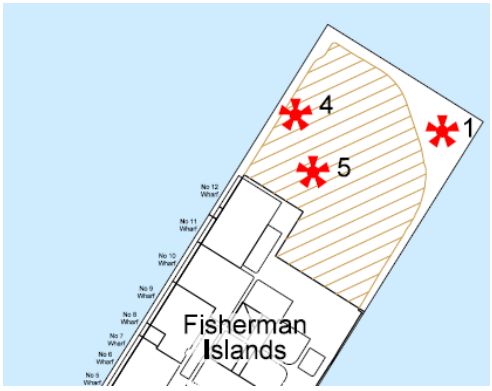


Port North is to be developed during the life of this LUP for core port infrastructure (potentially including the storage and distribution of wet bulk products as well as industry ancillary to the new Brisbane International Cruise Terminal (BCIT) and bulk shipping).

However, there is a portion of this area, close to its northern boundary, which would first need to be 'ground-truthed' both in relation to ecological values and whether it is required for buffering purposes (that is, subject to local government planning review relating to adjoining land). Depending on the outcomes of those further investigations, PBPL may be able to proceed with development given the consistency with intended uses as outlined in the Strategic Plan.

The pursuit of ancillary, strategic port development on the north side of the river (i.e. in areas not presently included within PBPL's suite of BCPL) has also been flagged for further investigation (e.g. at Myrtletown and Pinkenba, PBPL may pursue the procurement of additional land / tenure for port related development – subject to all relevant approvals and leasing protocols). Development in this location may need to investigate avoiding, mitigating and managing potentially adverse impacts of air, noise and odour emissions on the nearby Pinkenba residential community and to any sensitive uses that might be established on BCPL.

SIA# 4 – Fisherman Islands Quay line

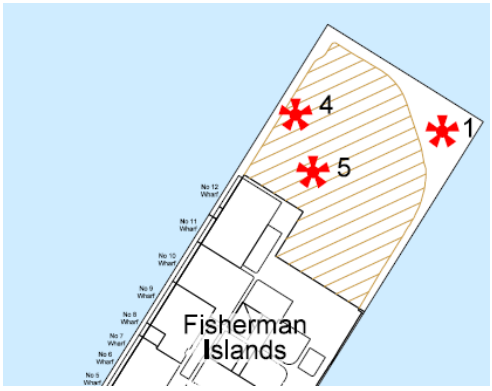


The development of additional quay line and terminal capacity at Fisherman Islands (i.e. beyond Berth 12) will continue to be reviewed in the light of:

- how trade demand for containerised, bulk products, break bulk, and general /project cargo (including cruise / defence facilities) evolve; and
- what impact the technologies employed / efficiencies gained by the port's stevedores have with respect to optimising the productivity of their existing land holdings (i.e. focusing on optimisation of trade throughput per quay line metre rather than unnecessarily duplicating wharf and terminal development).

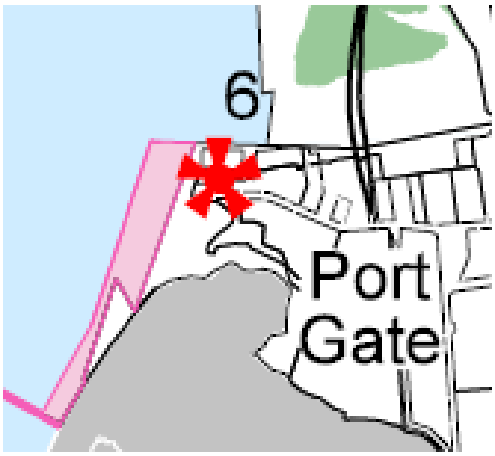
In this regard, the scheduling / nature of future development of waterfront land beyond Berth 12 will be regularly examined to determine the optimal mix of land and infrastructure to meet demand for a range of trades and services.

SIA's #5 and #6 – Fisherman Islands Bulk and Motor Vehicle Capacity



The existing supply of land on Fisherman Islands (SIA #5) is being reviewed to proactively model future demand for the storage and handling of additional bulk products and processing and distribution facilities. Demand for the latter of these trades may also be accommodated in the short to medium term at Port Gate.

The costs and benefits of developing additional land for such uses within these areas will be examined with a view to optimising the use of existing storage and handling capacity while minimising the unnecessary duplication of infrastructure and resources.



SIA #6 has been identified for scientific investigations to determine the nature and extent of its geotechnical and ecological values of areas at the mouth of Crab Creek where notable vegetation die-back has been noted over several years.

2.3.7 Responsibilities under the Port Lease

Strategic Planning under this LUP has regard to the port manager's obligations under the Port Lease.

However, this LUP does not override the need to comply with the Port Lease.

As the Port Lease also contains provisions affecting the use of the BCPL, port users should also refer to the Port Lease to avoid the risk of progressing development proposals under this LUP which are inconsistent with the provisions of the Port Lease.

2.4 Trade Forecasts by Commodity Type, Infrastructure Requirements and Staged Development Scenarios

The Port of Brisbane is one of Australia's largest and most diverse ports. The Port serves Australia's East Coast Communities and is recognised as a strategic asset of national importance providing critical links to world markets.

As a major driver of the local, state and national economy, the port handles a broad range of containerised, bulk, break-bulk and project cargo commodities. Such diversity provides firm foundations for economic stability and is presently characterised as follows:

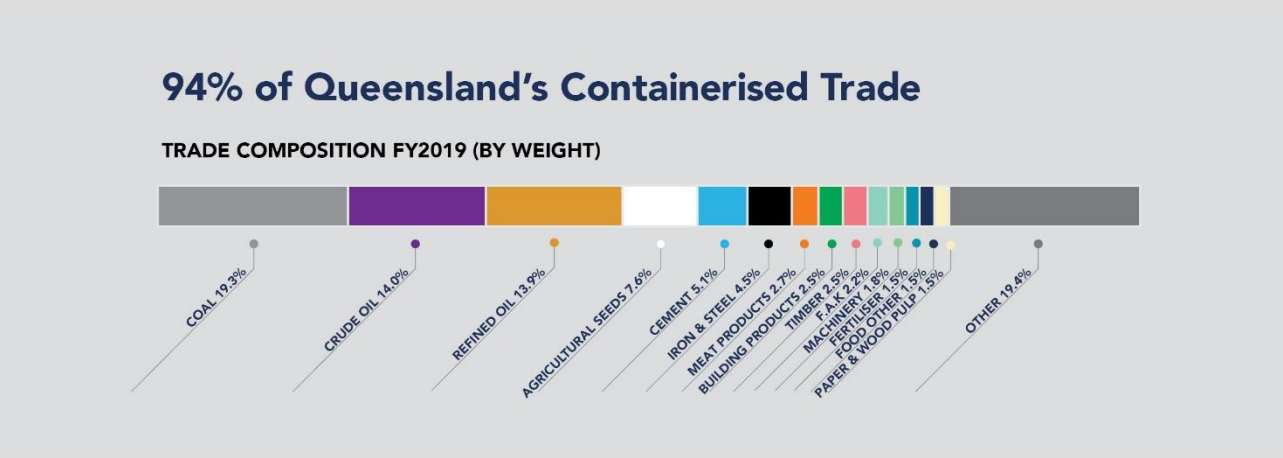


Figure 2.2 – Trade composition (by weight) Financial Year 2019

The future planning and development of the port is largely a function of projected growth and changes in trade. The forecasts identified in this section of the LUP will underpin key development decisions made by PBPL and are important for:

1. Understanding the context in which the Port operates;
2. Maintaining a nationally and internationally competitive operation;
3. Understanding the growth needs and challenges facing the Port over its short- and long-term future;
4. Providing an evidence base supporting key decisions.

The following overview of trade forecasts, while indicative and not contracted, is provided below as a means of illustrating the need for, and staging of, port development and infrastructure provision through the life of this LUP.

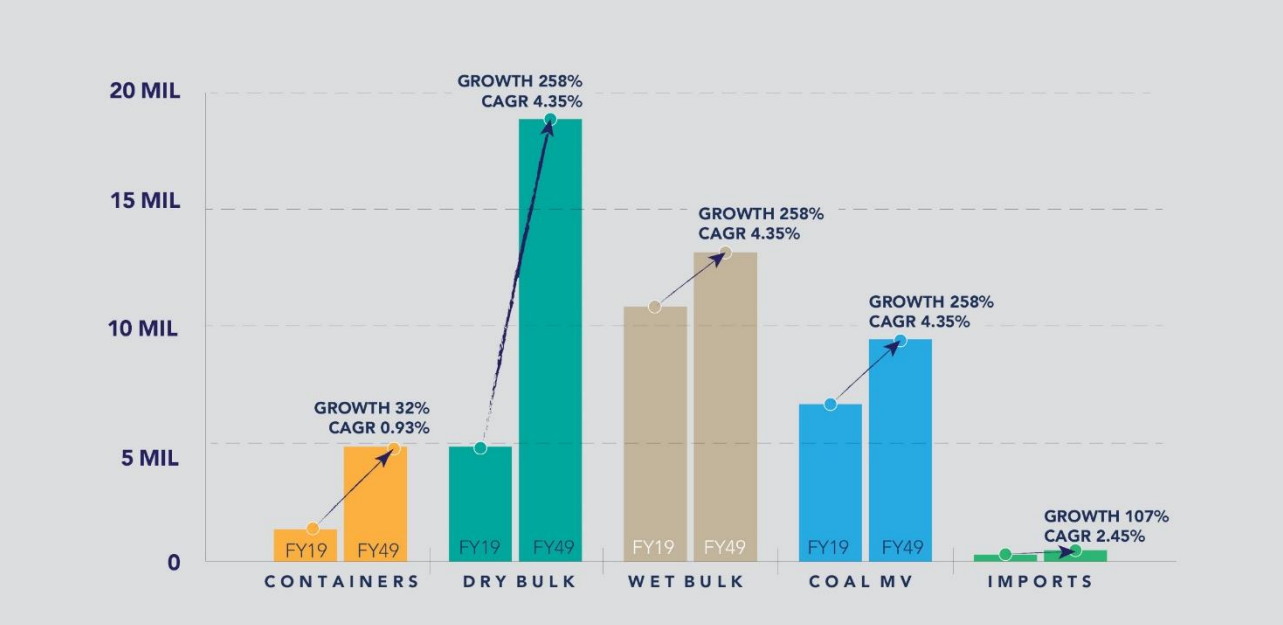


Figure 2.3 – Trade Forecasts (FY19 and FY49)

This information is based on targets that are subject to change and based on information available at the time of gazetting the LUP. The assumptions relating to a period of 30 years need to be treated with caution.

General targets are, however, necessary to support forecasted land use and infrastructure outcomes and PBPL separately considers and updates these projections regularly.

Key considerations relating to trade forecast estimates are grouped according to themes and further described below.

Containers. At the present time, PBPL handles ~1.34M TEU per annum. This trade is characterised as follows:

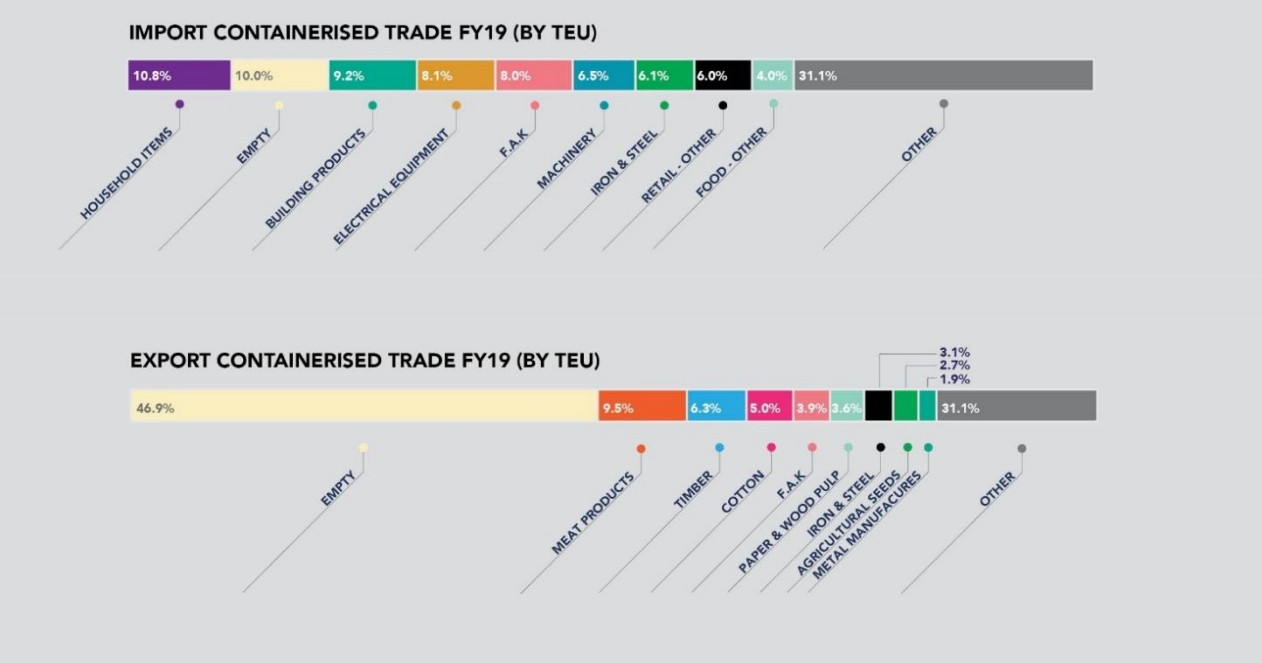


Figure 2.4 – Containerised Trade (Import and Export) by TEU Financial Year 2019

The existing nine dedicated container berths (comprising approximately 2,460 metres of quay line) are expected to maintain capacity to 2040 with growth and high productivity (1,600 TEUs per quay line metre).

After that, new berths may be progressively required, though this demand will be subject to efficiency and technology improvements. A change in these assumptions and a range of external market factors may necessitate a reassessment of infrastructure delivery timeframes.

Increasing productivity from 1,600 TEUs per quay line metre to 2,000 TEUs per quay line metre would further extend the sufficiency of already-committed quay line well beyond the life of these forecasts (based on long-term trade growth assumptions).

The wharves are inevitably integrated with the terminal operations immediately adjacent to the wharves. The land immediately behind the wharves is therefore to be preserved to ensure that this integration can occur beyond 2040.

Other initiatives supporting growth dynamics in containerised trade (see Figure 2.5 below) include:

1. Reducing supply chain costs by improving road, rail and ship access;
2. Expanding the port's trade catchment further into New South Wales (within the limits of the logistics chain);
3. Improving the productivity and efficiency of port operations;
4. Providing 'overflow' and temporary storage areas close to wharves to accommodate peaks in containerised trade; and
5. Developing additional storage areas for project cargo near the terminals and the BMT.

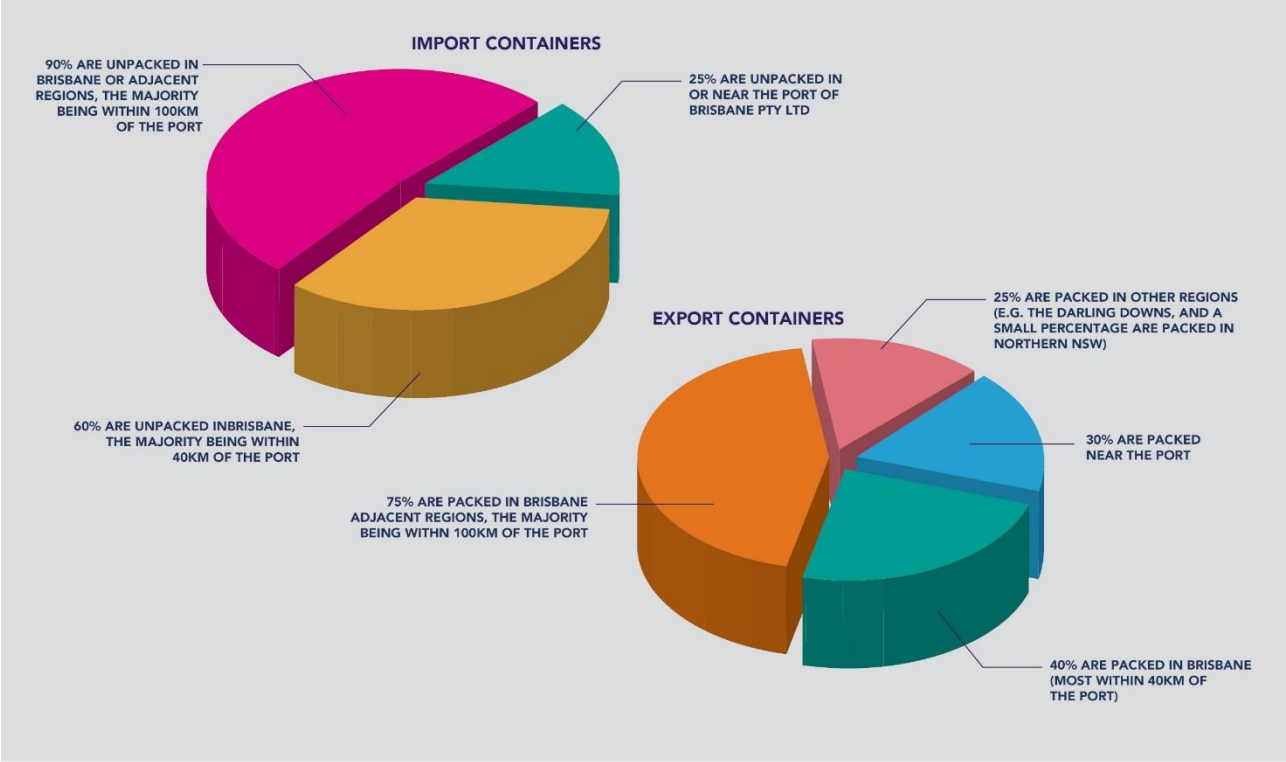


Figure 2.5 – Initiatives supporting growth in containerised trade

Additional landside infrastructure. Container trade growth needs to be supported by Cargo handling facilities and improved operational management. The cargo areas will occur primarily within the "Port Industry" areas (see Map 2 – Appendix 4) and are likely to include container parks, pack/unpack facilities and specialised warehousing and logistics operations, while operational management may include cross docking, truck marshalling and more efficient modes of container movement within the port.

Heavy transit corridor. In order to optimise the flexibility and efficiency of future terminal and complementary landside development, a reserve was established for a future Heavy Transit Corridor (HTC).

It is intended that this corridor ultimately accommodates an extension of road access, though this is likely in the long-term future, once the corridor reaches 350,000 TEUs processed through the BMT per annum. The corridor is conceptually outlined in Figure 2.6 (below). Where deemed viable, the final design and function of the HTC will be determined following further investigations including an analysis of the viability of using autonomous vehicles within this corridor.

Container parks. Forecasts predict trade will become increasingly unbalanced in the future, as Brisbane's full import containers exceed the number of full export containers leaving the port.

As a result, demand for container storage facilities (container parks) is predicted to increase, particularly for the storage of empty containers for export packing or for empty exports, as well as for repairing, cleaning and upgrading boxes to meet the needs of exporters.

While some of this demand will be met with increased handling of empty containers within the terminal areas in the medium term, the development of additional container parks to service the island will be important in the long term.

Warehousing and freight distribution. In addition to providing appropriate container park storage, PBPL's container strategy is focused on providing back-up facilities to the terminals through additional warehousing and freight distribution that support and attract trade.

Apart from available "Port Industry" land on Fisherman Islands, Port Gate (Whyte Island) and Port West (Lindum) have also been identified as potentially suitable to accommodate container storage / repair, warehousing and freight distribution facilities.

Motor vehicles. As of 2017 all motor vehicles purchased in Queensland and northern New South Wales are imported, primarily through the Port of Brisbane.

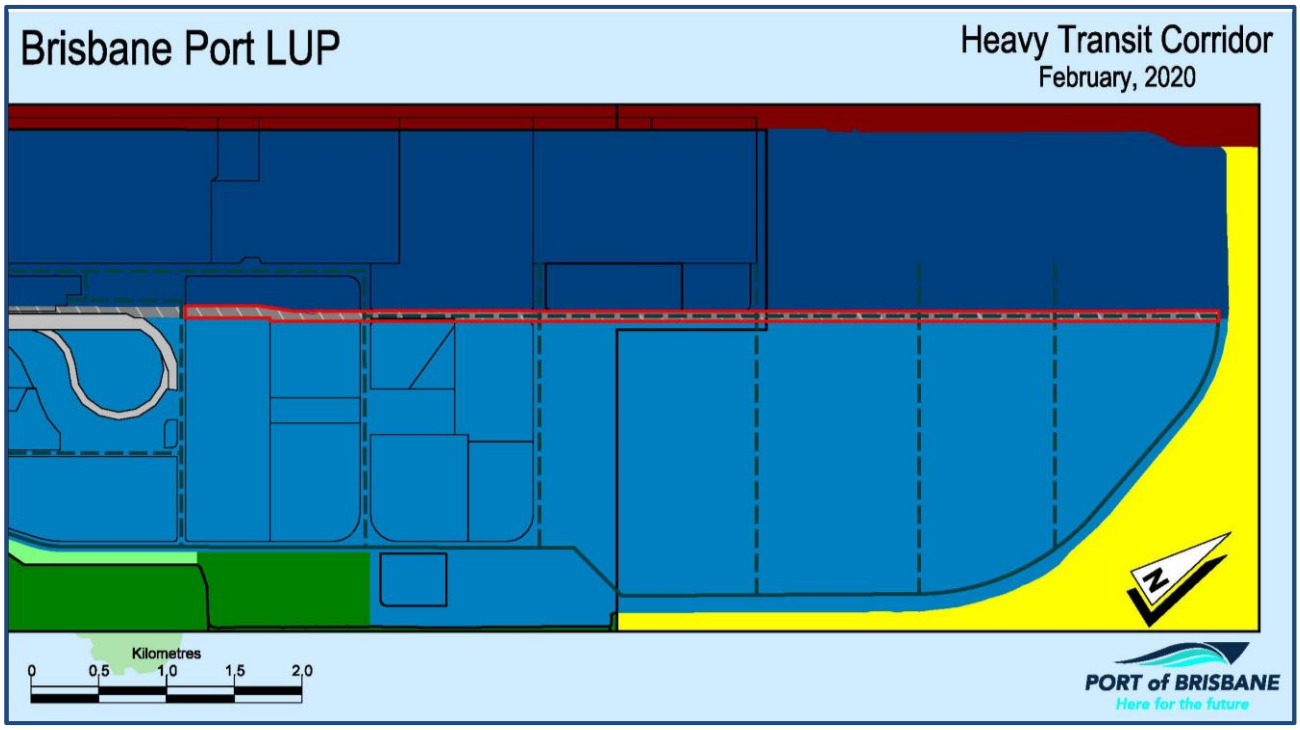


Figure 2.6 – Location of the Heavy Transit Corridor Reserve

Motor vehicle imports are a strategically important commodity to PBPL, particularly given the port's availability of land and proximity to our large regional catchment area.

Population growth will further drive this demand into the foreseeable future, and this plan seeks to maintain space for growing facilities. Strategies supporting growth in the LUP include:

1. Protecting land in close proximity to the wharves for overflow and short-term storage of vehicles as demand requires;
2. Maintaining efficiencies by utilising the amount of land available on Fisherman Islands for PDI operations; and
3. In the medium- to longer-term, supporting options for multi-level car storage as demand necessitates.

General cargo. The general cargo trade in Brisbane is made up of imports including steel, machinery and equipment supporting (primarily) the building, major infrastructure, mining and agricultural industries.

While growth in these trades is likely to remain stable or experience marginal growth for some time, the volume of such goods is predicted to steadily increase.

Based on current capacities, utilisation assumptions and projections, terminal capacity is sufficient to handle projected volumes over the next 30 years and additional facilities are not required within the life of this Strategic Plan. However, if growth increases beyond current projections and productivity improvements are not achieved then additional facilities on Fisherman Islands may be required sooner.

Consideration is given to the land needed for interim storage of project cargo, once this cargo is offloaded at the General Purpose (GP) Berth or at AAT.

The BMT with its ability to expand is considered a viable proposition to serve this demand both now and in the future, considering the unpredictable nature and type of project cargo. Vacant land available at the time should be considered for one-off large project cargo events. Presently this demand is being met by vacant land at Port Gate and the grain pad area, as well as other short-term lay-down areas such as the 'Balloon-loop'.

Strategies supporting general cargo aspirations under this LUP include:

1. Protecting the role and operation of Fisherman Islands for dedicated general cargo facilities;

2. Protecting general cargo facilities' proximity to the single rail head at the BMT;
3. Protecting the significant storage areas for general cargoes in their current locations;
4. Improving terminal capacity through operational efficiencies and productivity;
5. Protecting the role, operation and availability of land surrounding the BMT as a key distribution and logistics asset of the Port.

Dry bulk commodities. The port's dry bulk primarily comprises of coal, grain and cereal, cement, woodchips and sand. Facilities (predominantly at Fisherman Islands and Pinkenba) have flexible operational arrangements, with some fully dedicated to a particular user, and others sharing wharf facilities with other bulk and non-bulk trades.

All wharves owned by PBPL currently have multi-user and common-user capabilities in order to maximise utilisation, affordability and reduce duplication of infrastructure. It is PBPL's intent that these precincts will remain a focus for the consolidation of dry-bulk trade streams. While PBPL's preference will be to optimise the efficiency and capacity of these areas, the development of new dry bulk facilities in areas downstream of Fisherman Islands' Terminal 13 may be considered.

Coal exports will be dictated by global prices and demand and evolution in the world's energy mix, as well as the rate at which supplies commit significant capital to capacity expansions.

The potential growth beyond 12MTpa is capped by constraints of the port's existing freight rail network, and at this point in term there are no short to medium term plans to expand or upgrade these facilities.

To facilitate predicted growth and operational efficiencies in this sector, initiatives supported by the LUP include:

1. Protecting Fisherman Islands and Pinkenba as a focus for the consolidation of dry-bulk trade streams;
2. Supporting additional capacity for export of grain products and bulk agricultural product from Northern New South Wales as a medium-term aspiration;
3. Achieving an export capacity for coal of up to 15Mtpa (if required);
4. Monitoring the need to bring forward channel deepening infrastructure works if bulk volumes intensify or change; and
5. Supporting short-term, interim and seasonal storage close to dry bulk facilities on an as-needed basis.

Wet bulk commodities. The main wet bulk commodities traded through the port include crude and refined oil, bitumen, chemicals, tallow (fats and oils) and liquid fertiliser.

The majority of wharves and land used to exchange, and store wet bulk products are privately owned and operated, located primarily in facilities at Pinkenba, Bulwer Island and Lytton, with additional facilities provided in the existing Fisherman Islands Bulk Precinct.

Total wet bulk trades are expected to increase over the long-term, largely as Queensland's population continues to grow.

In response, the initiatives identified by PBPL as part of this LUP and the *Port of Brisbane Masterplan 2018-2048*, to accommodate increased total wet bulk trade growth include:

1. Consolidating and protecting existing facilities for wet bulk handling and storage, while providing additional land for growth in appropriate locations, particularly relating to petroleum, Liquid natural Gas and Coal Seam Gas;
2. Reinforcing Port North as a preferred location for wet bulk activities;
3. Investigating the opportunity for a dedicated wet bulk precinct on the north side of the Brisbane River for the import of refined products. This would complement existing facilities and Port North;
4. Protecting and improving access to deep water for third parties; and
5. In the medium-term, develop suitable multi-user wharf and commodity handling infrastructure to meet estimated demand growth.

Cruise Shipping. Cruise shipping is an emerging business area and service for the Port.

Until recently, Brisbane had only one dedicated cruise terminal at Hamilton (Portside), though this facility is only able to accommodate smaller vessel classes.

With the recent development of the Brisbane International Cruise Terminal (BICT), appropriate berthing and terminal facilities have been opened to mega cruise ships in a location superior to the former PBPL arrangements for larger vessel berthing at the Fisherman Islands Grain Wharf.

Over the next 20 years, the cruise industry in Brisbane has the potential to triple as a result of BICT.

The BICT provides 14.22Ha of dry and 6.43Ha of wet area at Luggage Point, which will:

- Provide deep water access and appropriate swing basins for ships over 270 metres in length at higher than 73.5 metres (above water);
- Avoid current constraints presented by the Sir Leo Hielscher Bridges and Lytton Rocks cutting;
- Have capacity to accommodate additional tourists to Brisbane through the largest ships in the world;
- Provide a dedicated cruise facility without the need for dredging; and
- Provide for a common user terminal.

It is this LUP's intent to protect the BICT and immediately surrounding land:

1. From urban encroachment of incompatible uses;
2. For additional, ancillary facilities that increase the amenity of cruise ship passengers at a scale that does not compete with existing centres and services already provided in Brisbane.

2.5 Infrastructure and Land Development

The port's infrastructure requirements include:

- development accommodating the safe and efficient movement of good and people to and from the port via road, rail and sea channels,
- the provision of services and utilities such as water, sewage, electricity and telecommunications,
- the ongoing, progressive reclamation and improvement of land on Fisherman Islands and other port land via the strategic placement of dredged material.

It is essential that infrastructure is provided in a timely manner to match the requirements of trade growth and land development, which would otherwise inhibit port development or result in congestion and inefficiencies.

The following sections summarise key infrastructure characteristics of the port, with a more detailed account of existing infrastructure provision, interface and future development being provided in Part 6 and PBPL's *Priority Infrastructure Interface Plan 2020.*

2.5.1 Port Access

Efficient transport linkages to the Port of Brisbane are vitally important in facilitating trade growth and managing increasing traffic and trading volumes.

As a result, maintaining and improving sea, road and rail access to the port forms a key part of PBPL's operational strategies and capital works program.

2.5.1.1 Road Access

Approximately 97.5% of the port's container trade is presently handled by road, making this form of transport a key consideration in the development of current and future land use. Road transport within SEQ presently remains the most effective and cost-efficient mode of transporting export and import containers to and from the port, when compared with rail (over shorter distances).

That said, given that road congestion in SEQ is predicted to increase considerably in coming years, this distance may reduce and more long-haul freight may move to rail (particularly where improved rail freight infrastructure and services are provided).

Existing Port Road Network

Key strategic features of the existing road network (see Figure 2.7) on, or adjacent to, BCPL include:

- The longitudinal arterial road corridors of Port and Lucinda Drives on Fisherman Islands (Port Drive is presently the primary access route to the DP World container terminal, the BMT and the Fisherman Islands' bulk and general cargo precincts).

- The recently completed upgrades of Port and Lucinda Drives linking Fisherman Islands to the Port of Brisbane Motorway in accordance with the PBPL's Road Franchise Agreement (RFA) with DTMR. PBPL is responsible for the management of Port Drive (from near Pritchard Street to the Captain Bishop Bridge) under the RFA with the state. These works were completed in December 2018.

- Ongoing provision, operations and maintenance of heavy load bearing roads including Port Drive and all internal street networks within port precincts.

- Lucinda Drive providing direct access to Whimbrel Street, Bingera, Bishop and Peregrine Drives and the businesses these supports, together with the Port Central precinct off Sandpiper Avenue.

  NB: Lucinda Drive is a limited access road, allowing free flow of traffic direct from the Port Motorway directly into the centre of Fisherman Islands. It is anticipated that Lucinda Drive will ultimately provide direct access to the development on the southern side of the FPE running parallel to Curlew Street which, with accompanying spur roads, will service quay line development beyond Terminal 12.

- Port and Lucinda Drives' geometry allowing 'out-of-gauge vehicles' to gain access from the wharves to the Port of Brisbane Motorway.

- The recent 'off-Island' extension of Radar Street (2018) to accommodate for more development as part of the southern part of the Port West Estate and Farrer Street has been upgraded to improve access to part of the Port North Estate.

- The ongoing reservation for the development of a Heavy Transit Corridor (HTC). Conceptually, the HTC would provide connectivity between port terminals, the BMT and associated logistics facilities areas. Although originally conceived as a road and/or rail access, the preference at this time is for the HTC to be a non-road registered vehicle access road. Accordingly, a 30m wide reserve has been maintained.

- The provision of access to the Port Gate estate via the port-owned roads – Kite Street, and Osprey and Howard Smith Drives. Including the recent upgrade (completed in December 2018) of Port Drive and the connection of Tanker Street to Osprey Drive. These roads are designed to cater for Higher Productivity Vehicles (HPV) such as Super B-doubles and other similar vehicles.

- Principal cycle routes through Pinkenba, Hemmant, Lytton and Wynnum which form part of the SEQ Principal Cycle Network (noting that for safety reasons cycling is banned on the private, heavy vehicle roads of Fisherman Islands).

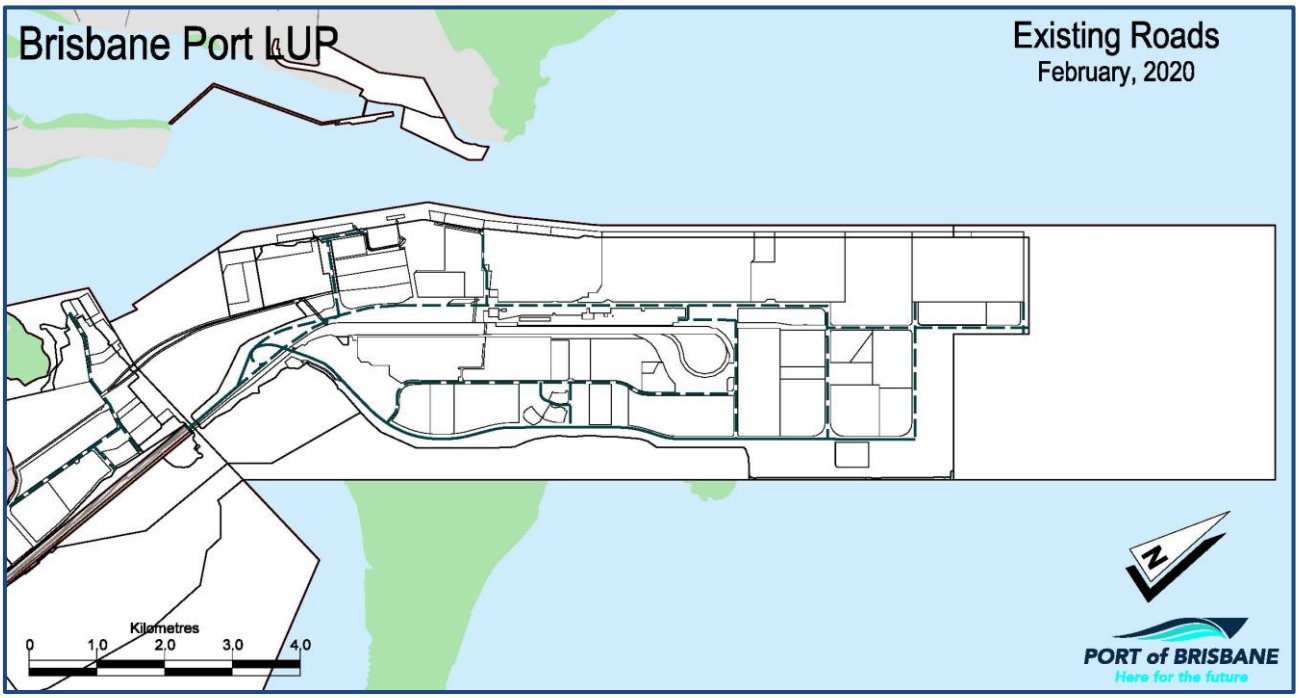


Figure 2.7 – Existing Port of Brisbane Roads (Fisherman Islands)

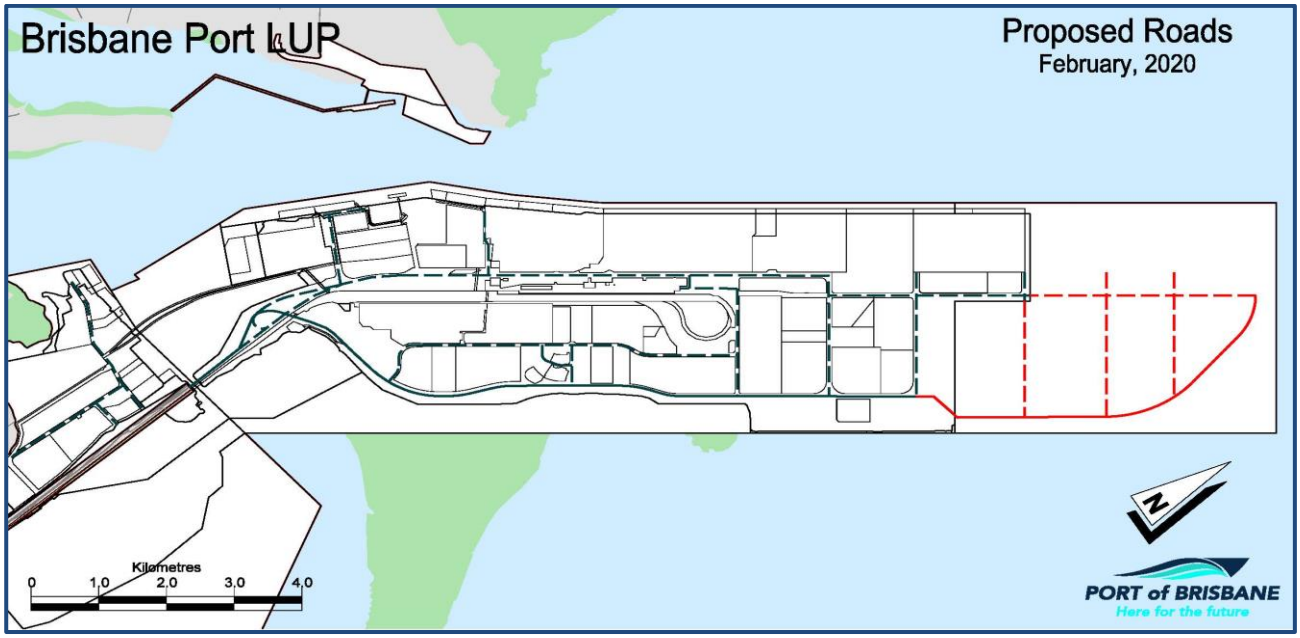


Figure 2.8 – The Internal Port Road Network (proposed roads on Fisherman Islands)

Future Port Road Network

Under the RFA, PBPL has taken the responsibility for upgrades to road capacity of Port Drive between the Captain Bishop Bridge and the start of the PoBM.

Ultimately, Lucinda Drive will become the main thoroughfare for port traffic, with Port Drive only providing access as far as the DP World terminal.

The Lucinda to Peregrine Drive link road maintains access for the Brisbane Container Terminal (BCT) operations and other industrial development recently completed or under construction, whilst providing access to the initial 15ha (available to develop from mid-2020) of FPE land being developed north of Peregrine Drive for future 'port industry' development.

Anticipated roadwork within the life of this Strategic Plan will include:

- Upgrades to Lucinda Drive, which will progressively be widened to four lanes over its entire length as the two lanes eventually become inadequate. As part of this project intersections with Lucinda Drive will be upgraded to cater for increased traffic volumes
- Continue to manage “on-island” freight congestion

As the FPE is developed, the existing road network will be extended using a strategy that will nominally involve:

- All off-island traffic travelling via Lucinda Drive to the new port areas via a road parallel to Lucinda Drive, which runs north from Peregrine Drive
- One or two roads parallel to Peregrine Drive (most likely aligning with the boundary of Terminal 12 and Terminal 13, Terminal 14-Terminal 15 and at the northern end of Terminal 16) will be developed to link to the rest of the network. As a minimum, these roads will be designed to the Main Roads standard for Type E industrial roads
- The development of the road along the HTC as new quay line development and potential logistical benefits warrant (for either general movement or restricted to heavy vehicles only).

PBPL is also cognisant of the need to promote improved port efficiency and will encourage the use of new freight efficient and Higher Productivity Vehicles (HPVs) (e.g. the new four TEU A-double trucks that have recently started transporting heavy containers from the Darling Downs to the port. The use of such vehicles will provide significant benefits to port stakeholders in terms of supply-chain efficiencies. These and other HPVs are to be considered during the design and road reserve planning for future roads.

Improving Efficiency of Road Access (Internal and External)

More broadly the efficiency of road access to, and vehicle movement within, the port is presently or may become more constrained by:

- Existing container park facilities:
  - not employing a Vehicle Booking System (VBS)
  - lacking capacity to handle existing / projected container inflows
  - facing potential disparities between collective truck throughput and stevedoring capacity (i.e. where truck traffic volumes are in excess of the capacity of stevedores to accommodate / process associated trade volumes).
- Notable spikes in truck volumes that correspond with particularly productive grain seasons
- Increasing congestion on the major (road) freight routes servicing the port as a function of SEQ’s population growth and the projected doubling of the region’s freight task over the next 30 years
- Significant gaps/weaknesses in the region’s road freight infrastructure set the deterioration of road conditions on major freight routes)
- The vulnerability of port access routes to disconnection, resulting from accidents and natural disasters where alternative freight routes are not available.

To address these constraints, PBPL strongly advocates:

- A policy requiring all new development to maximise the amount of on-site truck queuing that can be accommodated to address envisaged truck movement requirements
- The adoption of Vehicle Booking Systems and related technologies by key tenants
- The provision of additional truck marshalling areas (as a back-up to the above points)
- The State’s investment in the securing and upgrading of dedicated truck freight routes throughout the region
- The improvement of rail freight capacity as a means of increasing the proportion of freight moved to/from the port on trains rather than trucks.

2.5.1.2 Rail Access and Capacity

The current freight line to the port shares the same corridor as a number of Brisbane’s metropolitan passenger rail services. The potential to maintain and/or grow rail freight using this line is constrained as a result of the increasing frequency of passenger rail services and the limitations of below rail infrastructure. Without the separation of freight and passenger rail, rail modal share through the Port of Brisbane will further

decline, leading to trade and community/liveability challenges., trade through the Port of Brisbane will become increasingly constrained, as the long-term potential to accommodate additional trade on the road network is limited.

Rolling upgrades of road infrastructure alone are not seen as providing a long-term solution for the region's freight transport challenges due to:

- the capital and higher maintenance cost of road infrastructure
- the negative environmental impacts of road transport
- increased overall logistics costs associated with road usage (particularly when the true cost of road usage is factored in)
- safety issues of increasing freight on road (ultimately) increasing congestion at pinch-points even with continual expansion.

In line with global transport trends, SEQ must plan for an appropriate modal split for its landside logistics function. The existing transport network does not have the capacity to meet the future freight task in the long-term due to the expected strong, long-term growth in trade. Approximately 2.5% of container trade through the port is currently handled on rail; the projected increase in population and therefore growth in container trade will lead to a threefold increase in the number of trucks on the road by 2050. This means around 13M truck movements annually, this is not sustainable, desirable or affordable for SEQ.

The capacity of the rail network is also a consideration in determining future rail forecasts. Predicting bulk network capacity is subject to various factors including the constraints associated with:

- passenger volume growth in, and conflicts with, the Brisbane metropolitan network especially the impact of passenger timetables moving to 15-minute intervals (passenger trains are given priority over freight under State Government Legislation)
- existing restrictions on freight train lengths
- restrictive axle-loading limits that reduce freight train load capacity / payload
- seasonal fluctuations in demand for agricultural bulk rail services (e.g. reductions in grain train sets)
- restrictions on bulk movements resulting from the limitation of range crossing infrastructure / path slots (that would open exports through Brisbane from the Surat Basin).

PBPL's on-island rail facility, the BMT, aims to provide rail facilities that deliver an efficient link for transporting containerised and bulk cargo to/from the port.

The advantages of using the BMT single rail head (as opposed to developing multiple spur lines within the port) include:

- the ability to rationalise land allocated for intermodal activity
- avoiding costs associated with shunting, breaking and multiple stops
- avoiding on-terminal congestion
- providing efficient train turnarounds, which improve rolling stock and locomotive utilisation.

Containerised rail exports through the Port of Brisbane are predominantly primary products (e.g. meat, grain and cotton) but, due to rail capacity / infrastructure constraints, the volume of such trade is presently restricted as is the potential to carry imported products by rail.

There are several different factors that could impact future rail demand through the port. These include:

- the possible development and influence of intermodal terminals within the region
- the investigation of dedicated freight rail infrastructure to the port from its hinterland that overcomes existing capacity limitations
- the construction of the Brisbane to Melbourne inland rail link
- increasing integration of port logistics chains
- changing demand for containerised grain
- increasing demand for coal exports through Brisbane
- securing cotton trade out of northern New South Wales

- the potential for user-pays road freight charging.

2.5.1.3 Channel Access

Cargo Shipping

Maintaining deep-water access to the port via the channels in Moreton Bay is required to safely accommodate future trade. Over the next 30 years, shipping traffic into Brisbane will increase and new vessels are expected to increase in size and capacity. These factors make it essential that PBPL provides appropriate channel width and depth, berth and swing-basin depths as part of its Port Access Strategy.

Port access channel initiatives include the Spitfire Channel widening and realignment, which will shorten the overall length of the channel and remove two sharp turns. The Spitfire Channel forms part of the 90km navigational shipping channel, which stretches from the northern tip of Bribie Island to the mouth of the Brisbane River. Utilising a range of existing approvals, PBPL will remove 15 million cubic metres (m^3) of sand from the Spitfire Channel over the next 30 years (with existing development approvals requiring review within the next 15 years). Sand removed will be subsequently used in the reclamation of the FPE and land improvements at Port North and Port West.

Monitoring and investigation of future channel depth is an ongoing safety and environmental requirement and involves:

- more detailed dredging investigations;
- developing a greater appreciations of industry demand and the progressive trend toward the use of larger cargo ships; and
- the ongoing reviews of how changes in channel depth will impact upon the FPE Reclamation Program; and
- ensuring the minimisation of any adverse environmental impacts associated with additional dredging activity. In the event that additional channel deepening may be pursued, the relevant State and Federal approvals would be sought in accordance with all relevant legislation (including requirements to engage / consult with the community).

In the *MSQ Report 2008*, channel capacity is estimated to be at between 20-30%, with 2,500 movements per annum. Therefore, there is adequate capacity for at least the next 30 years before we could anticipate any channel congestion impeding efficient port access based on current vessel drafts. However, vessel drafts, especially for container ships, are expected to increase in the next five to ten years. Accordingly, an optimisation of the shipping channel depths and widths may be necessary over this timeframe.

A critical aspect of maintaining Port access is maintaining a dredge material disposal area for material dredged from channel maintenance, channel deepening and development of new berths, this includes both on shore and offshore placement areas.

2.5.2 Port Infrastructure and Utilities

To optimise the port's efficiency and development potential, the provision of infrastructure and utilities is a key strategic consideration. PBPL therefore makes provisions for the development of additional services infrastructure based on projected growth. In this regard, PBPL seeks within its Strategic Planning and development assessment suite to:

- Maximise the efficiency, safety and profitability of future port development via the optimisation of port road, rail and channel access, and the provision of water, sewerage, electricity and communications services.
- Apply the principles of sustainable development within its Development Codes as a means of ensuring that individual development projects provide, and make the most efficient use possible of available / approved infrastructure (e.g. the development of energy efficient buildings and lighting systems, the harvesting and use of stormwater, water sensitive urban design, etc)
- Establishing cost recovery mechanisms from port users from the development of new infrastructure, potentially through the revision of the PAC as infrastructure costs are incurred.

2.5.2.1 Water & Sewer Networks

Strategy

Water is supplied to the Port of Brisbane via the trunk water main network controlled by Urban Utilities (UU). For Fisherman Islands and Whyte Island, this network delivers water at a connection on Port Drive (at Port

Gate) from a trunk main running from the Wellers Hill Reservoir. PBPL is the registered water service provider for port lands and is responsible for the operation and management of the distribution network from there.

At present, properties in other port precincts (e.g. Port West, Port North and Pinkenba) all have direct frontages to public roads where there are UU controlled mains. This situation is likely to continue in the near term for most of these properties, although development of areas at Port West is likely to involve some water being supplied from a distribution network operated by PBPL.

Development over, or immediately adjacent to SEQ Water's bulk supply water infrastructure (e.g. areas in Port North near the BICT – refer to Appendix 4, Map 13) should be assesses in accordance with the requirements of the SPP and SEQ Water's *Network Consent Guidelines (November 2019)*.

Future Works Over the Next 30 Years

Currently, pressures in the mains at the port are around 800-900 kPa, compared to the normal standard of 225 kPa. While this high pressure indicates supply volumes are likely to be adequate for many years to come, it also means that the level of leakage in the network may be higher than it would be with a lower pressure. Consequently, PBPL's *System Leakage Management Plan* includes a further investigation into the potential to install a pressure reducing valve on the incoming supply.

It is not expected that any augmentation of existing mains (i.e. those on the current road network) will be required. However, over time the older mains laid in the period 1979-87 (predominantly the AC sections) will require replacement as they reach the end of their useful lives. As the existing road network is extended beyond Peregrine and Heron Drives in a north-eastern direction and into the FPE, the water supply network will also be extended into this area.

Existing System

Sewage from port lands is discharged into the Cross-River Sewerage Link (CRSL) which runs from Fisherman Islands to the Luggage Point Wastewater Treatment Plant. The CRSL is owned by UU, who also operates the Luggage Point Wastewater Treatment Plant. As the registered water service provider for sewerage services on port lands, PBPL was (at the time of this Plan's adoption) negotiating a Service Agreement with UU to cover sewage discharge into UU's system for subsequent treatment. Upstream of the connection point, sewerage services are provided to port tenants within the service area via PBPL's reticulation network.

In total, the network consists of six company operated pumping stations, including Osprey Drive, Howard Smith Drive, Port Drive, SP106, Bingera Drive and General Purpose Berth and Amenities as part of 14.3km of mains. Of this total, around 59% are rising mains (110mm-225mm dia), 15% are gravity mains (225mm–300mm) and 26% are vacuum mains (110mm–150mm dia).

At present, properties in other port precincts (e.g. Port North and Pinkenba) are not connected to any sewerage system. It is expected that as areas at Port North e.g. BICT are developed, PBPL will play a similar role to its involvement in the provision of sewerage services at Fisherman Islands, Port Gate and Port West (i.e. become a water service provider supplying sewerage services).

Future Works Over the Next 30 Years

Since the port was developed there have been several different systems installed. For new systems, the preferred option is to provide individual properties with their own small pumping systems to discharge into a larger pumping station, operated by PBPL, which then discharges into the trunk rising main.

The existing system adequately provides sewerage services to areas currently serviced and no specific augmentation of this system is required. However, over time it is expected that the performance of the gravity system will deteriorate to such an extent that new infrastructure over that part of the service area serviced by this system may be required. In this case, the pumped system described above for new systems is expected to be adopted.

No upgrade of the CRSL is expected to be required within the 20-year horizon of this plan.

2.5.2.2 Electricity Network

The electrical supply network on port lands is owned and operated by Energex Ltd. The network into the port area is designed to provide as reliable a supply as possible. To this end, the main feeders to Fisherman Islands are connected to Powerlink's Murarrie Bulk Supply Station, via a double-circuit (largely) overhead transmission line, designed to provide as high a protection as possible against lightning strikes. This line is presently energised to 33kV, however in the future it can be energised to 110kV. This line is routed via Energex's Lytton Bulk Supply Substation, which forms the only other connection into the line from the Murarrie bulk supply point. It therefore provides a high degree of reliability against power outages.

Currently, at Fisherman Islands the incoming supply is fed into the Energex 110kV-33kV- 11kV Bulk Supply Substation (SSFBS) off Lucinda Drive adjacent to the rail overpass. The Sunstate Cement Energex 33/11 kV substation (SSSSC) has been relocated from the corner of Bulk Terminals & Port Drives to the Energex SSFBS site. The 11kV supply which is supplied directly from the SSFBS site is connected to the Sunstate Cement facility via underground conduits installed along Port Drive and Bulk Terminals Drive. Since being completed in September 2015, the incoming feeders to Fisherman Islands, designed to 110kV voltage, provide a 'downstream' connection via the Energex SSFBS to the Port Drive Energex Zone Substation (SSFIS) remaining at 33kV.

A network of 11kV underground mains radiate from this substation to service individual consumers. Most of these mains are located in road corridors, although there are some which are within individual lease areas. Energex has established ring main connectivity on some sections of this network to ensure a higher degree of reliability. Virtually every property is fed via an 11kV supply, with 11kV-415/240V substations within each property, with lessees of individual properties having supply contracts in place with the retailer of their choice.

Within the life of this Strategy Plan, PBPL also intends to explore and develop the potential for greater renewable energy generation and use on BCPL.

Network Improvements

Energex will further improve the existing distribution network when deemed necessary to ensure there is adequate capacity and reliability of supply for port users with the establishment of a second Energex Zone (33-11kV) Substation (SSFIN) at the northern end of Fisherman Islands. This substation will be supplied from SSFBS on Lucinda Drive via the existing Energex underground conduit network along Port Drive and Curlew Drive. An expanded network of 11kV underground lines will radiate from this substation, with appropriate connectivity into the existing 11kV network supplied from the Port Drive SSFIS Zone Substation.

2.5.2.3 Communications Network

The main communications network at the port is owned by Telstra. The Telstra network includes cabling (the majority of which are in road corridors), a small telephone exchange and mobile phone tower installation adjacent to the BMT. Two other service providers, Optus and Crown Castle also have mobile phone base stations on Fisherman Islands. If additional providers, including the National Broadband Company, do decide to develop a fixed network there is sufficient space within the road corridors to allow these networks to be placed there, albeit with some restrictions.

Land for the phone exchange and the mobile phone towers within the port area are leased to the relevant provider. However, no specific tenure arrangements are in place over cable routes as the *Telecommunications Act (1997)* gives carriers access rights for such installations, subject to appropriate notification procedures.

PBPL has its own connection into the general communications network via dedicated fibre optic links. Currently, it also provides a broadband internet connection service (PortNET) to its clients via fibre optic cable and high-speed wireless technology. PBPL also operates a two-way radio network for its vessel and vehicle fleets and for survey/security purposes. Sites for base stations for this network not on port property are tenured through the relevant licence arrangement.

Future Works Over the Next 30 Years

As Fisherman Islands is developed the PBPL fibre optic network will be extended along road corridors to provide connectivity to future sites.

2.5.3 Completion of the Future Port Expansion Area (FPE)

Currently, material dredged during maintenance of the port's channels in the Brisbane River (including the Bar Cutting) is used as the initial filling layers in the FPE to create new land which will be used in the future for port-related development. The river frontage of the FPE will ultimately be developed as shipping terminals and new berths will be dredged along this frontage. The exact timing for such uses will depend on demand as trade growth continues.

The FPE is divided into a series of paddocks that:

- require the construction of internal walls within the outer rock wall formations
- are progressively filled and surcharged to create areas that will eventually be used for port-related development
- primarily use material sourced from capital and maintenance dredging in the Brisbane River and Moreton Bay.

It takes approximately 10 years from the commencement of dredged material placement in a paddock, to have land in a geotechnical state capable of supporting port-related industrial development.

PBPL's port reclamation modelling takes into account factors including:

- The anticipated volumes of river material to be dredged (i.e. ~300,000 m^3 per annum until 2026 and ~200,000 m^3 per annum, due to fulfilment of dredging obligations upstream of Pinkenba)
- The receiving capacity of each FPE paddock (including surcharge requirements, ground improvement timings and the requirements for channel deepening)
- Obtaining relevant approvals to place certain 'clean' material (i.e. from the bar cutting and future berth pockets), as well as emergency flood material, at the Mud Island Placement Area
- The requirements for future channel deepening and berth development (e.g. Berths 13-16 at Fisherman Islands).

Based on the factors above, it is anticipated that the FPE could be managed to enable it to receive dredged material from port operations until ~2044. This date is subject to change, as land reclamation rates may need to be increased to cater for additional land demand for port industry.

Despite this capacity, a critical issue for the port remains the ongoing need to have a site for disposing / handling of the material dredged from the river. In this regard, strategies are currently being investigated to prolong the life of the FPE as a dredged material placement site, while accommodating envisaged demand for additional port land. These strategies include raising the level of the land as much as possible and using approved offshore disposal locations (e.g. the placement site at Mud Island). The latter option will be subject to the material being suitable (in terms of contaminant levels and dredgeability using trailing suction hopper dredgers) and the port gaining the necessary environmental approvals.

Should the timing for development of additional infrastructure, such as berths 13-16 and channel deepening, and approvals for placing dredged berth material at Mud Island not be obtained, then the capacity of the FPE could be consumed at a much faster rate.

2.5.3.1 Post Completion of the FPE

To mitigate a key strategic risk, various strategies have been identified for the disposal / handling of material once the FPE can no longer be used for this purpose. Final conclusions on this issue will not be determined for some time, as implementation of a preferred strategy is some years away and future environmental management requirements are presently unknown.

Subject to these limitations, possible dredged material disposal strategies are noted to include:

- Drying of the material in a designated site at the port before removal to a suitable land fill site remote from the port

  This strategy will require the designation of an area on Fisherman Islands for drying. The exact location and boundaries for such a use within the existing FPE has not yet been determined and consideration will need to be given to adjoining land use needs as well as securing and managing the necessary land area. Preliminary investigations have also been undertaken to identify suitable disposal sites in SEQ. No specific sites have yet been identified and it may be difficult to find a suitable location in the future. This approach is likely to be very costly to handle, dry and transport the material to a remote location

- Placement of material offshore

  PBPL is keen to establish if the current offshore material placement site near Mud Island, and/or another site deemed acceptable to the State, may be available for placement of material provided contaminant levels of the material are within acceptable limits. Currently, maintenance material is generally not accepted for offshore disposal. It may be possible in the future that some offshore material placement will be permitted in conjunction with other options. The pursuit of such options would, of course, be subject to the obtaining of appropriate environmental controls / permits. However, given the position of the Port, there is significant steaming time to any suitable offshore locations, as well as significant perceived environmental risks

- The development of an additional dredged material placement and handling site

  The design and establishment of a purpose-built area may be explored involving an extension of the FPE further into the bay. Any such development would be subject to the relevant feasibility analyses and the obtaining of all relevant environmental approvals. This approach is effectively an extension of the current model where the existing land area is extended to handle dredge material and provide land for future use and additional capacity to meet future demand for growth.

As the current placement strategies are expected to meet the needs of the port for the medium-term PBPL, in consultation with Government, will continue to develop and refine strategies for material placement beyond this time in accordance with our general obligations under the lease from the State of Queensland.

2.5.4 Strategic outcomes and measures to facilitate achieving strategic outcomes

The following is a broad summary of the strategic outcomes sought for BCPL and the implementation measures that PBPL intend to pursue to meet the requirements of Section 283S of the TIA:

Strategic Outcomes	Implementation measures
Strategic outcome 1 – Orderly planning for priority to be given to core port infrastructure Priority is intended to be given to development of those areas identified on Maps 2 and 2A (i-iv) (Appendix 4) as 'Wharves', 'Port Terminals', 'Port Industry' and 'Port Operational Support' for core port infrastructure purposes, in an orderly staged manner, generally in accordance with the staging outlined in Map 5 (Appendix 4) and the precinct planning in Map 2 and responsive to the 'key driver' factors outlined in Section 2.3.2. This is not intended to prevent temporary uses which do not undermine the staging program.	**Implementation measures** For the life of this LUP, this outcome is implemented primarily through the Map 2 (Appendix 4) and table of assessment.
Strategic outcome 2 – Buffer/conservation areas Subject to 'strategic investigation areas' (and low impact use restrictions applicable to certain tenure), those areas identified in Map 2 – Appendix 4 as 'Conservation/Buffers' are intended to be retained for the purpose of: (a) protecting identified significant ecological values; (b) for providing an adequate buffer between port development and neighbouring sensitive land uses (such as residential development); and (c) segregating / minimising the encroachment of high-impact development or development which may reduce the health, safety or level of amenity enjoyed by sensitive land uses, or the environmental performance and functioning of ecological values. Unless further investigations demonstrate limited, fragmented or no ecological value, these areas are to be protected from development. Areas identified as containing Matters of State Environmental Significance (MSES) and Matters of National Environmental Significance (MNES) are not to be developed except for small scale uses directly associated with the environmental values.	**Implementation measures** This outcome is implemented primarily through port-prohibited development, table of assessment and the Environmental Management Code. This outcome is also implemented through the development assessment processes identified in Section 3.3 of this LUP of development as inconsistent with the LUP for transport reasons, requiring referral to the Transport Minister.
Strategic outcome 3 – Strategic investigations It is intended that investigations for the purposes outlined in Section 2.3.6 of this Strategic Plan should commence during the normal life of this Strategic Plan, that is, within 20 years of commencement. In particular, strategic priority and encouragement is given to investigation of the options for long-term disposal of dredged material, including suitable on-	**Implementation measures** For strategic outcome 3, implementation measures are the same as the strategic outcomes.

site management and re-handling of dredged material. Each of the purposes outlined in Section 2.3.6 which is specified as dependent on further investigations is only intended to proceed subject to the satisfactory outcome of those investigations, including all approvals required under other laws.	
Strategic outcome 4 – Intermodal transport infrastructure The strategic intent in relation to expansion and protection of intermodal transport within the BCPL is to ensure: (a) future development and augmentation of inter-modal transport corridors in a timely and orderly way, in response to, and in anticipation of, planning need (b) protection of the safety and operational integrity of intermodal transport corridors and the infrastructure contained within those corridors (c) a high standard of accessibility to and within BCPL (d) an intent to avoid development which leads to unnecessary significant increases in road traffic, that is, development other than core port infrastructure which would be likely to place a significant additional strain on road corridors (e) conversely, a general planning intent to ensure ongoing accessibility to, and utilisation of, rail facilities where reasonably practicable, so as to avoid placing an unnecessary significant additional strain on road corridors.	**Implementation measures** It needs to be acknowledged that the timely implementation of part (a) of strategic outcome four is partly a commercial/contractual matter which is beyond the scope of land use planning. Parts (b) and (c) of strategic outcome 4 are intended to be implemented primarily through codes of this LUP. This outcome is also implemented through the identification in Section 3.3.3 of this LUP of particular development as inconsistent with the LUP for transport reasons, requiring referral to the Transport Minister. Part (b) is also implemented to a significant extent through identified 'port-prohibited development' within transport corridors. Parts (d) and (e) of strategic outcome 4 are intended as considerations in the assessment of development applications for material change-of-use and are intended only as a general common-sense guide, and not as a code requirement. At the commencement of this LUP, there is no current or planned public transport corridor within or adjoining BCPL. If a future public transport corridor is identified during the life of this LUP, this LUP should be amended to provide protection for that corridor similar to the protection for other identified transport corridors.
Strategic outcome 5 – servicing the port community It is intended to encourage the development of the areas shown as Port Central and Commercial Uses and Ancillary Services (Map 2 – Appendix 4) in accordance with the 'primary strategic intent' (Port Commercial) set out in Section 2.3.1 and subject to high standards of amenity, to facilitate convenient services for the port community. Areas shown as Parkland/Open Space/Education on Map 2 are also intended to provide increased amenity and service the port community with the kinds of services identified in Section 2.3.1.	**Implementation measure** This strategic outcome is implemented through tables of assessments and codes.

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Part 3
Precinct Planning

Brisbane Port Land Use Plan 2020

Maps 2 and 2A (i to iv) – Appendix 4 (Precinct Plan) designates land into precincts.

In this part:

- Section 3.1 (Precinct intents) describes the purpose for each LUP precinct and the overall outcomes sought for the precinct
- Section 3.2 (Table of Assessment) sets out a table of assessment for each precinct, explains how the levels of assessment have been determined, what each level of assessment means and where assessment is required, the rules for determining compliance with this LUP
- Section 3.3 (Assessment managers and referral agencies) notes the assessment manager and referral agency requirements in the TIA and, for the purpose of one of those referral triggers, identifies development that is inconsistent with this LUP for transport reasons
- Section 3.4 (Owner's consent and evidence of State resource entitlement) flags who particular entities are likely to be, for the purpose of statutory and contractual requirements for making a development application.

NB: The additional 'wet' and 'dry' areas illustrated in Maps 2A (i to iv) are not currently subject to a registered interest held by the port lessor or port manager but have been identified as having strategic interest/importance to the port (see Maps 2A i to iv). Consequently, these additional areas are not currently BCPL but will become BCPL at such time as a registered interest/tenure is acquired by the port lessor or port manager. The proactive identification of these areas will facilitate and streamline the inclusion of additional BCPL in the LUP (following the creation of a registered interest) without the need to further amend the LUP. Until land becomes BCPL, development of the land is not regulated under the LUP. However, once a registered interest is acquired and land becomes BCPL, development will be regulated under the LUP.

3.1 Precinct intents

3.1.1 Terminals (Containers, Motor Vehicles, General Cargo) Precinct

Purpose	To accommodate activities and development that are directly related or ancillary to the direct operations of the container, motor vehicle and general cargo berths.

The precinct supports activity and development that service the wharves / loading / unloading precinct – primarily container, motor vehicle and general cargoes and associated / ancillary offices, workshops, fuel storage and warehouses*.

Development must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

Non-industrial uses (such as offices and seafarers' centres) may only be located in the precinct, where they are ancillary to the primary operation of the site and do not adversely affect the operational effectiveness or efficiency of the activity in the precinct.

This precinct will accommodate uses including, but not limited to marine terminals; associated offices and control facilities, freight warehouses or depots; temporary, seasonal and permanent storage and processing facilities (viz: motor vehicles, etc in T1-3); associated infrastructure and conveyance systems.

*Bulk loading or unloading and the servicing of military and cruise vessels may also be undertaken in this precinct designation where such uses can be shown to not be incompatible with, or have adverse impacts upon, adjoining land uses.

Overall outcomes sought	The overall outcomes sought for the precinct are:

- site layout and management ensure efficient utilisation of land and contributes to site safety and security of people and facilities, including those on adjoining lands
- the site development density provides for sufficient vehicle queuing, parking, access, manoeuvrings, loading and unloading areas
- existing infrastructure is utilised in an efficient and effective manner and does not place unnecessary strain or require significant upgrades beyond those contemplated in the PIIP
- development is located, designed and constructed to protect (or alternatively accommodate) the operational integrity of existing and planned infrastructure
- traffic generated by the development does not significantly impact the capacity of the road network system
- the construction and operation of development minimises adverse environmental impacts, including impacts of climate change such as predicted sea level rise
- activities and development incorporate sustainable features and practices
- development utilises best practice techniques and operating procedures to contribute to the achievement of water quality objectives and to minimise adverse impacts of stormwater runoff and other potentially water or soil contaminating substances
- development does not create any physical intrusions, transient obstructions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport
- multi-level vehicle storage is contemplated where these is a demonstrated need and no impact on the operational efficiency of surrounding uses
- ancillary uses provide a direct and demonstrated support function to the primary use, are small in scale and do not compromise the intended function of the precinct

3.1.2 Terminals (Bulk, General Purpose) Precinct

Purpose	To accommodate activities and development that are directly related or ancillary to the operations of bulk and general cargo terminals.

The precinct supports activity and development that service the wharves / loading / unloading precinct – primarily bulk and general cargo commodities and cruise shipping and associated / ancillary offices, workshops, fuel storage and warehouses.

Development must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

Non-industrial uses may only be located in the precinct, where they are ancillary to the primary operation of the site and do not adversely affect the operational effectiveness or efficiency of the activity in the precinct.

The precinct also includes the Brisbane International Cruise Terminal (BICT) at Luggage Point. The role, function and operation of this facility is to be protected from incompatible development.

This precinct will accommodate uses including, but not limited to marine terminals, associated offices and control facilities, bulk loading and unloading facilities, storage facilities (including temporary and seasonal storage areas), freight warehouses or depots, associated infrastructure and conveyance systems.

*The loading or unloading and the servicing of military and cruise vessels may be undertaken in this precinct designation where such uses can be shown to not be incompatible with, or have adverse impacts upon, adjoining land uses.

Overall outcomes sought	The overall outcomes sought for the precinct are:

- site layout and management ensure efficient utilisation of land and contributes to site safety and security of people and facilities, including those on adjoining lands
- the site development density provides for sufficient vehicle queuing, parking, access, manoeuvrings, loading and unloading areas
- existing infrastructure is utilised in an efficient and effective manner and does not place unnecessary strain or require significant upgrades beyond those contemplated in the PIIP
- development is located, designed and constructed to protect (or alternatively accommodate) the operational integrity of existing and planned infrastructure
- traffic generated by the development is accommodated within the capacity of the road network system
- the construction and operation of development minimises adverse environmental impacts including impacts of climate change such as predicted sea level rise
- activities and development incorporate sustainable features and practices
- development utilises best practice techniques and operating procedures to contribute to the achievement of water quality objectives and to minimise adverse impacts of stormwater runoff and other potentially water or soil contaminating substances
- development does not create any physical intrusions, transient obstructions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport
- the Brisbane International Cruise Terminal (BCIT) at Luggage Point is to:
    - be protected for core terminal building facilities including passenger check-in facilities, Customs and AQIS services, baggage transfer infrastructure;
    - provide ancillary services such as tourism booking, retail, hospitality offerings and amenities that are small-scale and do not compete with other services and facilities provided in designated centres across Brisbane;
    - include ancillary access roads, car/bus parking, public transport infrastructure (such as bus stations and a ferry stop), vessel provisioning facilities and landscaping;

- be protected from incompatible development that would impact on the efficient and effective operation of the facility;
- provide, in the longer term, for a second wharf where growth in the cruise industry demonstrates an economic and planning need; and
- provide, in the longer term, complementary industrial uses that support the cruise industry.

- ancillary uses provide a direct and demonstrated support function to the primary use, are small in scale and do not compromise the intended function of the precinct

3.1.3 Wharves / Loading / Unloading Precinct

Purpose	To accommodate development and infrastructure which contributes to the safe and efficient berthing of various vessels and the loading / unloading of goods.

The precinct supports activity, development and associated infrastructure that facilitate the movement of goods between wet and dry areas.

The precinct is predominantly located over water areas alongside terminals and/or BCPL.

This precinct will accommodate uses including, but not limited to berth pockets, marine wharves with associated infrastructure, conveyance systems, marine/terminal cranes, pumps and conveyors.

Any short-term, non-trading related use in the precinct (e.g. cruise or military vessels) is considered compatible upon the approval of the port manager.

Development must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

Overall outcomes sought	The overall outcomes sought for the precinct are:

- infrastructure is located, designed and managed to ensure operations are safe and efficient
- development does not adversely impact the natural environment and minimise impacts on adjacent lands
- adverse impacts on natural features and processes both on-site and from adjoining areas are minimised through location, design, operation and management of development
- development considers, and responds to, the impacts of climate change such as predicted sea level rise
- development does not create any physical intrusions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport
- stormwater is managed in accordance with relevant standards to contribute to the achievement of water quality objectives and to minimise the water quality impacts associated with runoff.

3.1.4 Port Industry Precinct

Purpose	The purpose of the precinct is to accommodate port activities and development that support and facilitate trading activities.

This precinct provides for activities that directly support the primary role and function of the port.

Development in this precinct must contribute to improving port efficiency, shortening the supply chain, increasing trade capacity or providing logistical benefits.

Development must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

This precinct will accommodate uses including, but not limited to: large-scale warehousing; container parks; manufacturing (for export or where reliant on the import of goods); hardstand areas; pack and unpack facilities; storage and distribution activities of various commodity types; transport terminals; and the storage, repair, cleaning, maintenance and transfer of containers.

Non-industrial uses may only be located in the precinct, where they are ancillary to the primary operation of the site, or directly support the needs of employees (such as takeaway food outlets) and do not adversely affect the operational effectiveness or efficiency of the activity in the precinct.

Land at Port West is also supported for smaller waterfront developments such as general port industry, transport terminals, manufacturing, container storage, freight stations, niche water-front (un)loading/storage/processing industries and warehousing. Where development at Port West does not require direct Brisbane River access, a riparian setback corridor of 20m above HAT will be maintained.

Overall outcomes sought	The overall outcomes sought for the precinct are:

- site layout and management of land contributes to site safety and security of people and facilities, including those on adjoining lands
- site layout provides sufficient vehicle access, queuing, parking, manoeuvrings and loading/unloading areas
- traffic generated by the development is accommodated within the capacity of the road network system
- land is utilised efficiently and developed in a coordinated manner
- built form in relation to building height, width, depth and bulk minimises the visual impacts of the large-scale development expected in the precinct
- development includes adequate building articulation/detailing and landscaping treatment to achieve an attractive streetscape along all road and river frontages (in particular major movement corridors)
- existing infrastructure is utilised in an efficient and effective manner and does not place unnecessary strain or require significant upgrades beyond those contemplated in the PIIP
- development is located, designed and constructed to protect (or alternatively accommodate) the operational integrity of existing and planned infrastructure
- development is reflective of, and responsive to, the environmental and operational constraints of the land and surrounding environment including impacts of climate change such as predicted sea level rise
- development manages the generation, storage, disposal, recycling or reuse of waste to a standard commensurate with the specific activities of the use
- development does not encroach on corridors set aside for future expansion
- activities and development must incorporate sustainable features and practices
- development utilises best practice techniques and operating procedures to contribute to the achievement of water quality objectives and to minimise adverse impacts of stormwater runoff and other potentially water or soil contaminating substances

- development does not create any physical intrusions, transient obstructions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the port or Brisbane Airport
- all operational works undertaken in accordance with best practice science and techniques to minimise adverse environmental impacts
- vehicle storage (potentially including multi-level storage) is contemplated where there is a demonstrated need and no impact on the operational efficiency of surrounding uses
- ancillary uses provide a direct and demonstrated support function to the primary use, are small in scale and do not compromise the intended function of the precinct
- non-industrial uses may only be located in the precinct, where they are ancillary to the primary operation of the site, or directly support the needs of employees / customers (e.g. takeaway food outlets, small scale retail activities), and do not adversely affect the operational effectiveness or efficiency of the activity in the precinct
- development immediately adjoining the Special Industry Precinct does not compromise its efficient and effective operation as the only area south of the Brisbane River that supports noxious and hazardous industry.
- the conservation of a (minimum) 20m riparian buffer corridor inland of HAT at Port West where development does not require access to / interface with the Brisbane River.

3.1.5 Transport Infrastructure Precinct

Purpose	To accommodate existing and planned transport corridors and intermodal nodes.

The precinct supports transport infrastructure that contributes to improving port efficiency, shortening the supply chain, increasing trade capacity or providing logistical benefits.

Transport infrastructure must be delivered in a cost-effective and sustainable manner.

Development must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

The precinct will accommodate uses including, but not limited to truck queuing and parking hardstand areas, weighbridges, refuelling facilities/infrastructure, roads, rail links and infrastructure and other access ways through port-owned land, intermodal terminals.

Protect undeveloped areas of the Heavy Transport Corridor (HTC) in reserve, while making use of those areas for temporary/short-medium term use related to hard-stand storage.

Overall outcomes sought	The overall outcomes sought for the precinct are:

- site layout and management ensure efficient utilisation of land and contributes to site safety and security of people and facilities, including those on adjoining lands
- existing transport infrastructure is utilised in an efficient and effective manner and does not place unnecessary strain or require significant upgrades beyond those contemplated in the PIIP
- further extension of infrastructure is provided in an orderly and cost-effective manner
- development achieves an integrated transport network that accommodates a range of transport needs
- development does not inhibit the potential for the precinct to be utilised for expansion and extension of key transport linkages and hubs
- development does not create any physical intrusions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport
- the construction and operation of transport infrastructure minimises adverse environmental impacts, including light, noise and exhaust emissions
- stormwater is managed to best-practice standards to contribute to the achievement of water quality objectives and to minimise the water quality impacts associated with runoff
- development construction and operation minimise risk of soil and water contamination
- development within the Heavy Transport Corridor (HTC) for alternative purposes is to be temporary, reversible and for at-grade hardstand storage purposes only.

3.1.6 Motor Vehicle Storage, Processing and Distribution Precinct

Purpose	To accommodate activities and development associated with vehicle processing, storage and distribution to markets.

This precinct supports car import and processing activities. Longer-term vehicle storage will be permitted in this precinct.

Development must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

This precinct will accommodate uses including, but not limited to: motor vehicle storage (including multi-level vehicle storage), processing, storage and distribution activities, minor vehicle repairs facilities, vehicle warehousing/covered storage areas, associated infrastructure and transfer systems / infrastructure (e.g. ramps, flyovers and gatehouses).

Storage of other traded commodities (e.g. break-bulk, project cargo and/or bulk products) may also be accommodated in these areas where they do not present conflicts with the longer-term intent of the precinct and/or adjacent areas of motor vehicle storage / processing.

Non-industrial uses may only be located in the precinct, where they are ancillary to the primary operation of the site, or directly support the needs of employees (such as takeaway food outlets), and do not adversely affect the operational effectiveness or efficiency of the activity in the precinct.

Overall outcomes sought	The overall outcomes sought for the precinct are:

- site layout and management of land and contributes to site safety and security of people and facilities, including those on adjoining land
- site layout provides sufficient manoeuvrings and loading/unloading areas
- land is utilised efficiently and developed in a coordinated manner
- development includes adequate building articulation/detailing and landscaping treatment to achieve an attractive streetscape and security along all road frontages (in particular major movement corridors)
- existing infrastructure is utilised in an efficient and effective manner and does not place unnecessary strain or require significant upgrades beyond those contemplated in the PIIP
- development is located, designed and constructed to protect (or alternatively accommodate) the operational integrity of existing and planned infrastructure
- traffic generated by the development is accommodated within the capacity of the road network system
- development does not encroach on corridors set aside for future expansion
- activities and development must incorporate sustainable features and practices
- development considers, and responds to, the impacts of climate change such as predicted sea level rise
- development does not create any physical intrusions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport
- development utilises best practice techniques and operating procedures to contribute to the achievement of water quality objectives and to minimise adverse impacts of stormwater runoff and other potentially water or soil contaminating substances
- the construction and operation of development minimises adverse environmental impacts
- multi-level vehicle storage in the medium- to longer-term may be contemplated in this area where these is a demonstrated demand for such development and no adverse impact on the operational efficiency of surrounding uses is expected
- ancillary uses provide a direct and demonstrated support function to the primary use, are small in scale and do not compromise the intended function of the precinct

3.1.7 Dredge Rehandling Area

Purpose	To identify an area on BCPL which may be subject to permanent use for longer-term dredged material placement, handling and disposal infrastructure

This precinct is reserved as an area that may accommodate future dredged material placement and handling. Section 2.5.3 of the LUP addresses this precinct further.

3.1.8 Port Operational and Support Services (Area 1) Precinct

Purpose	To identify an area which may be subject to future port operational development (subject to rigorous assessment of potential impacts on the environment and coastal processes).

It is intended that this precinct may be investigated for specific uses to support sustainable port operations. The future uses may include, but not be limited to:

- additional / emergency dredged material placement areas
- dredge / tug / barge / military bases
- conservation and/or parkland/recreation areas
- research activities.

Periodic reviews of the extent of the area set aside for this purpose will be undertaken. It is not expected development will occur in these areas during the life of this plan, other than for possible general utilities (such as stormwater and electricity supply) if required/applicable).

Investigations and rigorous assessment of impacts and suitability for the longer-term role and function of this land and the range of consistent uses, will be undertaken, at some future time.

Development within the precinct must be designed to avoid adverse impacts on and protect the surrounding environment, including the environmental values of receiving waters and to achieve relevant water quality objectives.

Development must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

Overall outcomes sought	The overall outcomes sought for the precinct are:

- land is protected in its current state for the foreseeable future, unless investigations and rigorous assessments of the impacts and suitability for the longer-term role and function of this land and the range of consistent uses has been undertaken and demonstrate a need to 'bring forward' development of the land
- development does not create any physical intrusions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport
- where additional development demonstrates a need:
  - development considers, and responds to, the impacts of climate change such as predicted sea level rise
  - development is reflective of, and responsive to, the environmental and operational constraints of the land and surrounding environment activities and development must incorporate sustainable features and practices
  - site layout and management of land contributes to site safety and security of people and facilities, including those on adjoining lands
  - site layout provides sufficient vehicle access, queuing, parking, manoeuvrings and loading/unloading areas

- traffic generated by the development is accommodated within the capacity of the road network system
- land is utilised efficiently and developed in a coordinated manner
- infrastructure is limited, considers future development aspirations and is provided in an efficient and orderly manner
- activities and development must incorporate sustainable features and practices
- development utilises best practice techniques and operating procedures to contribute to the achievement of water quality objectives and to minimise adverse impacts of stormwater runoff and other potentially water or soil contaminating substances
- development does not create any physical intrusions, transient obstructions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport
- water-based activities are conducted in full compliance of relevant maritime legislative requirements
- adverse impacts on natural systems, both on-site and adjoining land, are minimised, through the location, design and management of development

3.1.9 Port Operational and Support Services (Area 2) Precinct

Purpose	To accommodate activities and development that provide critical support to the operation of the port, marine and construction industries.

This precinct supports land uses that support port operations, maritime industries and services and general port industries deemed compatible with the marine services focus of this area.

Development must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

This precinct will accommodate uses including, but not limited to, moorings and mechanical workshops for dredging, tugs, pilots, hydrographic surveying and maintenance vessels (or similar), workshops, maritime equipment storage, ferry services, emergency services bases / training facilities, marine engineering, boat building and storage and fuel storage and dispensing. General warehousing, container storage, bulk and break-bulk storage, pipelines and ancillary offices / amenities may also be accommodated in this precinct.

Non-industrial uses may only be located in the precinct, where they are ancillary to the primary operation of the site, or directly support the needs of employees / customers (e.g. takeaway food outlets, small scale retail activities), and do not adversely affect the operational effectiveness or efficiency of the activity in the precinct.

Overall outcomes sought	The overall outcomes sought for the precinct are:

- site layout and management of land contributes to site safety and security of people and facilities, including those on adjoining lands
- water-based activities are conducted in full compliance of relevant maritime legislative requirements
- site layout provides sufficient vehicle access, parking, queuing, manoeuvrings and loading/unloading areas
- land is utilised efficiently and developed in a coordinated manner
- built form relating to building height, width, depth and bulk minimises the visual impacts of the large-scale development expected in the precinct
- development includes building articulation / detailing and landscaping treatment to achieve an attractive streetscape along all road frontages
- existing infrastructure is utilised in an efficient and effective manner and does not place unnecessary strain or require significant upgrades beyond those contemplated in the PIIP
- development is located, designed and constructed to protect (or alternatively accommodate) the operational integrity of existing and planned infrastructure
- development is reflective of, and responsive to, the environmental and operational constraints of the land and surrounding environment including impacts of climate change such as predicted sea level rise
- development does not create any physical intrusions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport
- traffic generated by the development is accommodated within the capacity of the road network system
- development manages the generation, storage, disposal, recycling or reuse of waste to a standard commensurate with the specific activities of the use
- activities and development must incorporate sustainable features and practices
- development utilises best practice techniques and operating procedures to contribute to the achievement of water quality objectives and to minimise adverse impacts of stormwater runoff and other potentially water or soil contaminating substances
- non-industrial uses are ancillary to the primary operation of the site, or directly support the needs of employees / customers without adversely affecting the operational effectiveness or efficiency of primary uses within the precinct.

3.1.10 Special Industry Precinct

Purpose	To accommodate large-scale industrial activities which may involve processing activities or the storage and distribution of dangerous goods.

The precinct supports port-related development that is associated with manufacturing, bulk storage and distribution, assembly and processing plants.

Development in the special industry precinct is often subject to detailed risk assessment. Where relevant, the risk assessment must demonstrate: the activity's compliance with the State-administered dangerous goods and environmental protection legislation; and that the activity will not adversely affect the efficient and safe operation of the port or surrounding land uses, including the Brisbane Airport.

This precinct will accommodate noxious and hazardous uses including, but not limited to processing facilities, large dangerous goods storage facilities, Major Hazard Facilities (where deemed appropriate after detailed environmental and cumulative risk assessment) and manufacturing facilities. This may include ancillary office and development that is direct associated with the operation of special industry and that will not impact on the continued effective operation of those uses.

Uses that are not directly related to noxious and hazardous uses identified above, or in support of those uses, are not supported in this precinct.

Overall outcomes sought	The overall outcomes sought for the precinct are:

- site layout and management of land contributes to site safety and security of people and facilities, including those on adjoining lands
- development is reflective of and responsive to the environmental and operational constraints of the land
- the scale, character and built form of development contributes to a high standard of amenity
- the development site provides for sufficient vehicle parking, access, manoeuvrings, loading and unloading areas
- the density of uses in the precinct allows for adequate vehicle parking and queuing
- existing infrastructure is utilised in an efficient and effective manner and does not place unnecessary strain or require significant upgrades beyond those contemplated in the PIIP
- development is located, designed and constructed to protect (or alternatively accommodate) the operational integrity of existing and planned infrastructure
- traffic generated by the development is accommodated within the capacity of the road network system
- the construction and operation of development minimises adverse environmental impacts
- development construction and operation reduces risk of soil and water contamination
- activities and development must incorporate sustainable features and practices
- stormwater is managed to best practice standards to contribute to the achievement of water quality objectives and to minimise the water quality impacts associated with runoff
- development does not create any physical intrusions, transient obstructions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport
- ancillary uses provide a direct and demonstrated support function to the primary use, are small in scale and do not compromise the intended function of the precinct
- uses not directly in support of the intended uses in the precinct, or those that have the potential to compromise the continued effective operation of the precinct are not supported.

3.1.11 Conservation/Buffers Precinct

Purpose	The purpose of the precinct is to protect areas which have significant environmental values, such as wetlands, mangroves, mudflats, important remnant vegetation, riparian corridors and other coastal habitats. These areas also present significant port buffering advantages to nearby sensitive land uses.
	This precinct supports minor activities associated with the values of the land. Development is to protect the land / water for environmental conservation purposes and must not adversely impact on ecological features and processes or other surrounding land uses, including the Brisbane Airport. Uses that are small scale, low impact and do not adversely affect these values (e.g. bird watching facilities, outdoor recreation, fauna enhancement strategies, small parking areas adjoining existing roads and research activities etc.) are facilitated where a need exists and the use does not detrimentally affect the values of the area, the amenity enjoyed by nearby sensitive land uses or port operations. All other development is not supported in this precinct. Adverse impacts from on-site and adjoining sites must be avoided. Where avoidance is not possible, impacts must be mitigated or minimised through the location, design and management of development and activities.
Overall outcomes sought	The overall outcomes sought for the precinct are:
	• development must demonstrate a direct connection to the environmental values of the land • identify and protect habitats necessary for the viability of migratory birds, native plants, native animals and ecosystems whether significant for biodiversity or ecological reasons at the federal, state, regional or local level • maintain or enhance ecological connectivity to facilitate wildlife movement • maintain the historical, cultural and/or ecological values of inter-tidal land, bushland, coastal land, waterways and wetland habitats • protect or enhance habitat for native animals, native plants and ecosystems, any of which are common, vulnerable, rare or endangered as defined in the Nature Conservation Act 1992 • a high standard of environmental and visual amenity is achieved through protecting places of cultural significance and scenic values associated with the natural landscaping • port buffering which prevents sensitive land uses encroaching on the port industries and operational areas • any necessary stormwater infrastructure is designed to replicate the function, capacity and appearance of natural systems and contribute to the achievement of water quality objectives. • adverse impacts on natural systems, both on-site and adjoining land, are minimised, through the location, design and management of development • uses that create air, noise and odour impacts are avoided • development must be small scale, low impact and is preferably located in existing disturbed areas or adjacent to like infrastructure (i.e. car parks are located adjacent to roads) • development does not create any physical intrusions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport

3.1.12 Open Space Precinct

Purpose	To promote visual amenity and provide additional buffering of linear infrastructure elements (e.g. roads and stormwater) on BCPL.

The precinct will accommodate a restricted range of uses including, but not limited to: buffering linear development elements; dedicated walkways and infrastructure to support safe access, recreational facilities for the port workforce and essential management of the port (such as new roadways and associated infrastructure or natural/constructed stormwater infrastructure).

Where open space areas include natural habitats such as inter-tidal land, bushland, wetlands or waterways, or act as a buffer between natural and developed areas, adverse impacts on ecological values must be avoided.

Development must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

Overall outcomes sought	The overall outcomes sought for the precinct are:

- development is reflective of and responsive to the environmental and operational constraints of the land
- where appropriate and safe, open space is accessible to the general public for a range of outdoor activities
- development is designed to incorporate sustainable practices including maximising energy efficiency and water conservation
- where necessary, ancillary structures and buildings may be provided
- land, which is susceptible to flooding or drainage problems, including high ground water tables, is protected from inappropriate activities or facilities
- the use of open space areas does not affect the use of adjacent areas, particularly industrial development or transport infrastructure
- open space areas are planned and designed to potentially enhance community engagement, scenic amenity and provide a retreat from developed areas.

3.1.13 Buffer / Investigation Precinct

Purpose	To provide port buffers and areas which may be subject to future port operational development (subject to rigorous assessment of potential impacts on the environment and coastal processes).

This precinct supports minor activities; however, any development within the precinct must not adversely impact on ecological features and processes or create potential health and safety risks to the community and nearby sensitive land uses and must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

Ground investigations, including a detailed review of environmental factors, may highlight the ability of these areas to be used for core port infrastructure, subject to relevant approvals being obtained.

Overall outcomes sought	The overall outcomes sought for the precinct are:
	• where areas remain primarily as buffer, uses that do not adversely affect underlying values (e.g. bird watching facilities, outdoor recreation, fauna enhancement strategies, etc) are facilitated where a need exists, and the use does not adversely affect the values of the area or port operations. • adverse impacts of air, noise and odour from on-site and adjoining sites must be avoided, mitigated or minimised through the location, design and management of development and activities.

3.1.14 Port Central Precinct

Purpose	To provide for a mix of commercial, industrial, retail and recreational uses and activities which provide localised / convenience services.

The precinct will accommodate a range of uses including, but not limited to: commercial offices; serviced offices; food and drink outlets; small scale shops and convenience services (e.g. postal / banking services / newsagency / small supermarket facilities); recreation facilities; medical service facilities or other ancillary uses that are essential for servicing the localised / convenience needs of the port community. Interim motor vehicle storage, storage yards, smaller-scale general warehousing and temporary port industrial uses will also be supported.

Retail activities must be small scale and limited to serving the day-to-day convenience needs of the community at, or visiting, the Port of Brisbane. Catchments for retail activities do not extend beyond the boundary of the Port of Brisbane.

The activities undertaken in this precinct will not adversely affect the primacy of the centre's hierarchy in the BCC local government area. Development must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

The precinct will accommodate a range of uses that contribute to the economic and social vitality of the port community.

Overall outcomes sought	The overall outcomes sought for the precinct are:

- development achieves a high standard of built form and design that utilises unique architectural features to reinforce a 'sense of place' within the precinct and contribute to an attractive streetscape along all road frontages
- commercial office buildings must achieve a minimum of '5 Star, Green Star' design certification under the Green Building Council of Australia 'Green Star' rating scheme
- a legible, integrated, efficient, attractive and safe movement network is incorporated within the precinct which minimises the opportunity for conflict between traffic and pedestrians
- development effectively uses the available land and provides areas for public space, landscaping and streetscape works
- existing infrastructure and access to all sites is provided in an efficient and effective manner and does not place unnecessary strain or require significant upgrades beyond those contemplated in the PIIP
- development is located, designed and constructed to protect (or alternatively accommodate) the operational integrity of existing and planned infrastructure
- high-quality landscaping and streetscape works complement the built form and reflect the function of the precinct
- retail uses are small scale and limited to serving the day to day convenience needs of people working in or visiting the Port of Brisbane
- development is not of a scale or intensity that would compete with other nearby centres within the BCC local government area.
- development does not create any physical intrusions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport

NB: where demand for 'higher-order' retail, commercial and recreational land use is not immediately evident, this precinct may be used for interim / temporary 'lower-impact' industrial uses (e.g. motor vehicle storage, storage yards, smaller-scale warehousing) that could be easily moved or converted to accommodate the ultimately preferred high-order uses / urban design outcomes noted above.

3.1.15 Commercial Uses and Ancillary Services Precinct

Purpose	To accommodate localised services and retail activities complementary to port activities. The activities undertaken in this precinct will not adversely affect the primacy of the centre's hierarchy in BCC's local government area and their catchments do not extend beyond the boundary of the Port of Brisbane.

Development in this precinct will serve the needs of the port community by providing local convenience services that accommodate the day-to-day needs of the local workforce and port visitors. The precinct will accommodate uses including, but not limited to:

- on Fisherman Islands: port-related visitors' centre, cafes, restaurants, offices, conference facilities, recreation facilities, medical services, and convenience shopping (small supermarket and retail / service outlets, as well as interim motor vehicle storage, storage yards, smaller-scale general warehousing and temporary port industrial uses; AND
- off Fisherman Islands: service station, retail/service outlets, uses providing increased amenity for port users and ancillary uses including machinery/vehicle servicing, washing and repairs and convenience shopping (small supermarket, food and beverage vendors, café, restaurant) for the port community and those accessing public boat ramps and the Moreton Island ferry service.

Development within these areas forms part of a community node, providing a focus for community interaction and activity. Development must not adversely affect the efficient operation of the precinct or other surrounding land uses, including the Brisbane Airport.

Overall outcomes sought	The overall outcomes sought for the precinct are:

For development on Fisherman Islands, the overall outcomes sought for the precinct are:

- retail uses are small scale and limited to serving the day to day convenience needs of people working in or visiting the Port of Brisbane
- development is not of a scale or intensity that would compete with other nearby centres within the BCC local government area
- catchments for non-industrial activities, particularly retail uses, do not extend beyond the Port of Brisbane boundary
- the scale of development achieves a high standard of built form that reinforces the 'sense of place' of the surrounding area, maintains a low-rise appearance, contributes to an attractive streetscape along all road frontages and ensures a high level of physical and visual interaction and pedestrian access at ground level
- development is reflective of, and responsive to, the environmental and operational constraints of the land including impacts of climate change such as predicted sea level rise
- site layout ensures efficient utilisation of land and contributes to site safety and security of people and facilities
- traffic generated by the development is accommodated within the capacity of the road network system
- development manages the generation, storage, disposal, recycling or reuse of waste to a standard commensurate with the specific activities of the use
- high-quality landscaping and streetscape works complement the built form and reflect the function of the centre
- development provides useable public places and communal open space
- activities and development must incorporate sustainable features and practices
- stormwater is managed to best practice standards to contribute to the achievement of water quality objectives and to minimise the water quality impacts associated with runoff
- development is located, designed and constructed to protect (or alternatively accommodate) the operational integrity of existing and planned infrastructure
- development does not create any physical intrusions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport

For development off Fisherman Islands, the overall outcomes sought for the precinct are:

- retail uses are small scale and limited to serving the day to day convenience needs of people working in or visiting the Port of Brisbane
- catchments for non-industrial activities, particularly retail uses, do not extend beyond the Port of Brisbane boundary
- development is not of a scale or intensity that would compete with other nearby centres within the BCC local government area
- site layout and management of land contributes to site safety and security of people and facilities, including those on adjoining lands
- site layout provides sufficient vehicle access, parking, queuing, manoeuvrings and loading/unloading areas
- land is utilised efficiently and developed in a coordinated manner
- built form incorporates a building height, width, depth and bulk that minimises the visual impacts of the large-scale development expected in the precinct
- development includes adequate building articulation / detailing and landscaping treatment to achieve an attractive streetscape along all road frontages (in particular major movement corridors)
- existing infrastructure is utilised in an efficient and effective manner and does not place unnecessary strain or require significant upgrades beyond those contemplated in the PIIP
- development is located, designed and constructed to protect (or alternatively accommodate) the operational integrity of existing and planned infrastructure
- development is reflective of, and responsive to, the environmental and operational constraints of the land and surrounding environment
- traffic generated by the development is accommodated within the capacity of the road network system
- development manages the generation, storage, disposal, recycling or reuse of waste to a standard commensurate with the specific activities of the use
- development does not create any physical intrusions, lighting hazards, wildlife hazards or gaseous plumes that could affect the safe and efficient operation of the Brisbane Airport
- development does not encroach on corridors set aside for future expansion
- activities and development must incorporate sustainable features and practices
- development utilises best practice techniques and operating procedures to contribute to the achievement of water quality objectives and to minimise adverse impacts of stormwater runoff and other potentially water or soil contaminating substances
- the construction and operation of development minimises adverse environmental impacts.

NB: where demand for ‘higher-order’ retail, commercial and recreational land use is not immediately evident on or off Fisherman Islands, this precinct may be used for interim / temporary ‘lower-impact’ industrial uses (e.g. motor vehicle storage, storage yards, smaller-scale warehousing) that could be easily moved or converted to accommodate the ultimately preferred high-order uses/urban design outcomes noted above.

3.2 Table of Assessment

The table of assessment (Table 3.2) identifies the relevant levels of assessment for development in each precinct.

The table of assessment is to be read subject to sections 283(6) and (7) of the TIA, which provide respectively that:

- accepted development prescribed under the *Planning Act*, section 44(4) is, for that Act, is accepted development for this LUP;
- assessable development prescribed under the *Planning Act*, section 45 is assessable development for this LUP.

In the event of any inconsistency between the levels of assessment in the table of assessment and the above TIA provisions, the TIA provisions prevail.

Table 3.1 explains:

- how the levels of assessment in the table of assessment have been determined
- what each level of assessment means
- where assessment is required, the rules for determining compliance with this LUP.

Section 283I of the TIA identifies that a Table of Assessment for the Brisbane Port LUP may state whether particular development is accepted or assessable development, 'port prohibited development' or development that is 'consistent or inconsistent' with the Brisbane port LUP. Schedule 5B of the TIA defines 'port-related development', 'port-prohibited development' and 'inconsistent development'. The latter two are discouraged or prevented to protect the integrity of port infrastructure and operations.

Note: *The reason for these rules is that the TIA (in relation to consistent port-related development) and the Planning Act set out an assessment process and decision rules which identifies what are relevant instruments, however, those Acts do not provide rules for determining compliance within each relevant instrument. For example, under the TIA, consistent port-related development must be approved if it 'complies with all applicable codes'. The table below explains how compliance with an applicable code under this LUP is determined.*

Note: *If development proposed is not assessable under this LUP, it may nevertheless constitute 'assessable development' for other reasons under the Planning Act and regulation.*

In such circumstances, the normal requirements for that type of assessable development are applicable.

For example, if development is assessable building work under Planning Act 2016 and/or involves Operational Work for Tidal Works in a coastal management district and/or the removal, damage or destruction of marine plants and/or an Environmental Authority for an Environmentally Relevant Activity (ERA) etc. a development permit under the Planning Act will be required and will be assessed and decided in the normal way under that Act.

This assessment will be undertaken in accordance with the Planning Act after PBPL has assessed the proposal and (where deemed appropriate) issuing a Development Consent Notice as the port manager.

Table 3.1 – Information to assist interpreting the Tables of Assessment and determining compliance with the LUP

Level of assessment	Rules for determining compliance with the LUP
Accepted – Accepted development is always consistent development. Development Consent is required[6]. – A development permit is not required and compliance with the LUP is not required	Not applicable as accepted development need not comply with the LUP.
Accepted - Subject to Requirements – Development Consent is required. – A development permit is not required provided there is compliance with all applicable assessment benchmarks.	a. Development must comply with the acceptable outcomes of the applicable codes; b. Where development does not comply with the acceptable outcomes of the applicable codes, the development is taken to be A-I-C (Assessable –Inconsistent-Code).
Assessable – Consistent – Development Consent is required. – A development permit is required. – The development application is code assessable.	a. Where acceptable outcomes are identified for performance outcomes, development which complies with the acceptable outcomes complies with the code; b. Development which complies with the performance outcomes complies with the code (that is, an alternative outcome may be presented).
Inconsistent development Development classified in the table of assessment as Assessable – Inconsistent – Code or Assessable – Inconsistent - Impact are regarded as being inconsistent with the Precinct Plan (Map 2 - Appendix 4) because of one or more of the following reasons: • it is expected that there is a fundamental conflict between the development and the intent for the precinct or a code; • to avoid a proliferation of uses with only limited demand or need in the port area, and so to indicate those areas where these activities are considered more appropriate and desirable; • the proposed development utilises limited port land for an activity that is unrelated or does not necessarily support Core Port Infrastructure or Port Related Development activities; • the use has not reasonably been anticipated by the LUP; • the development has an impact on, or diminishes the role and function of, the buffer land; and • the proposed use would have a major impact on the fundamental safety, security or day-to-day operations of the port. It is important to note that the identification of inconsistent development in the table of assessment is only for the purpose of setting a level of assessment. It does not constitute the identification of inconsistent development for transport reasons triggering referral to the Transport Minister (which is separately identified in Section 3.3 of this LUP).	

[6] In order to confirm a project's / land use's status as 'Accepted' development, PBPL may still require written confirmation of the development's / use's scope and the subsequent issuing of a conditional, non-object to the project to complement any PBPL-issued Permit to Occupy and/or Lease associated with the activity in question.

Level of assessment	Rules for determining compliance with the LUP
Assessable – Inconsistent – Code – Development Consent is required. – A development permit is required. – The development application is code assessable.	a. Development must be consistent with the relevant Precinct intent; and b. Development must achieve the purpose of the applicable codes; and c. Development must comply with acceptable outcomes or provide alternative outcomes that comply with the performance outcomes for all applicable codes.
Assessable – Inconsistent – Impact – A development permit is required. – Development Consent is required. – The development application is impact assessable, requiring public notification.	a. Development must be consistent with the Strategic Plan; and b. Development must be consistent with the relevant Precinct intent; and c. Development must achieve the purpose of the applicable codes; and d. Development must comply with acceptable outcomes or provide alternative outcomes that comply with the performance outcomes.
Prohibited Development A development application cannot be made for port prohibited development.	Not applicable as development is prohibited.

Table 3.2 – Tables of Assessment

Use / Activities / Works	Category of Assessment
Communications or telecommunication facilities	**Accepted** development in all precincts
Emergency response systems and equipment	**Accepted** development in all precincts
Monitoring facilities *E.g. a facility to monitor weather, environmental elements, traffic or tides*	**Accepted** development in all precincts
Signage, other than advertising billboards	**Accepted** development in all precincts
Advertising Billboards	**Accepted** development where in the following precincts: - Port Central - Terminals (Containers, Motor Vehicles, General Cargo)
	Accepted - Subject to Requirements all other precincts.
Emergency Works	**Accepted** development in all precincts
Reconfiguring a Lot by Lease, if the reconfiguring is for one of the following permitted purposes under the lease: a) core port infrastructure b) transport infrastructure c) core port infrastructure and transport infrastructure.	**Accepted** development in all precincts
Any other **reconfiguration of a lot**	**Assessable – Consistent** in the Port Operational and Support Services - Area 1
Transport Infrastructure / Truck Marshalling	**Accepted** in the following precincts: - Commercial Uses and Ancillary facilities - Port Operational and Support Services – Area 2
	Assessable – Consistent in the Port Operational and Support Services - Area 1

Use / Activities / Works	Category of Assessment
	Accepted - Subject to Requirements in all other precincts where not identified as Accepted or Assessable - Consistent
Berths	**Accepted - Subject to Requirements** in the following precincts: - Special Industry - Port Operational and Support Services – Area 2 - Port Industry - Wharves / Loading / Unloading Facilities - Terminals (Bulk, General Purpose) - Terminals (Containers, Motor Vehicles, General Cargo)
	Assessable – Impact – Consistent in the Transport Infrastructure Precinct
	Assessable – Impact – Inconsistent in the following precincts: - Buffer / Investigation - Open Space - Conservation / Buffers - Port Operational and Support Services – Area 1 - Dredge Re-handling Area - Motor Vehicle Storage Processing & Distribution
	Prohibited development in the following precincts: - Commercial Uses and Ancillary Services - Port Central
Bulk loading, unloading and storage facilities	**Accepted - Subject to Requirements** in the following precincts: - Special Industry - Port Operational and Support Services – Area 1 - Dredge Re-handling Area - Transport Infrastructure - Port Industry

Use / Activities / Works	Category of Assessment
	- Wharves / Loading / Unloading Facilities - Terminals (Bulk, General Purpose) - Terminals (Containers, Motor Vehicles, General Cargo) - Motor Vehicle Storage Processing and Distribution
	Assessable – Impact – Inconsistent in the following precincts: - Buffer / Investigation - Open Space - Conservation / Buffers - Port Operation and Support Services – Area 1
	Prohibited in the following precincts: - Commercial Uses and Ancillary Services - Port Central
Conveyors and Pipelines	**Assessable – Inconsistent – Code** in the following precincts where any part of the conveyor / pipeline is above-ground: - Commercial uses and Ancillary Services - Buffer / Investigation - Open Space - Conservation / Buffers Where the conveyor / pipeline is below ground and is deemed safe and environmentally benign, development is classified as **Assessable - Consistent**
	Assessable – Inconsistent – Impact in the Port Central Precinct
	Accepted - Subject to Requirements in all other precincts

Use / Activities / Works	Category of Assessment
Customs, immigration and quarantine facilities, including facilities for under bond storage and housing of animals	**Assessable – Inconsistent – Impact** in the following precincts: - Port Central - Buffer / Investigation - Conservation / Buffers - Special Industry
	Accepted - Subject to Requirements in all other precincts.
Defence Facilities	**Assessable – Inconsistent – Impact** in the following precincts: - Buffer / Investigation - Conservation / Buffers - Special Industry
	Accepted - Subject to Requirements in all other precincts.
Emergency services facilities including (for example a training facility / base for police, ambulance, fire and/or marine rescue services etc.)	**Assessable – Inconsistent – Impact** in the following precincts: - Buffer / Investigation - Conservation / Buffers - Special Industry
	Accepted - Subject to Requirements in all other precincts.
Facilities for handling dredging material	**Assessable – Inconsistent – Impact** in the following precincts: - Commercial uses and Ancillary Services - Port Central - Buffer / Investigation - Special Industry
	Prohibited Development in the Conservation / Buffers precinct
	Accepted - Subject to Requirements in all other precincts.

Use / Activities / Works	Category of Assessment
Freight Warehouse or Depot	**Assessable – Inconsistent – Impact** in the following precincts: - Port Central - Buffer / Investigation
	Prohibited Development in the following precincts: - Port Operational and Support Services – Area 1 - Conservation / Buffers precincts
	Accepted - Subject to Requirements in all other precincts.
Manufacturing Facility	**Accepted - Subject to Requirements** in the following precincts: - Special industry - Port Operational and Support Services – Area 2 - Port Industry
	Assessable – consistent in the following precincts: - Motor vehicle storage, processing & distribution - Terminals (Bulk, General Cargo) - Terminals (Containers, Motor Vehicles, General Cargo) - Wharves / Loading / Unloading facilities
	Assessable – Impact – Consistent in the following precincts: - Transport infrastructure
	Prohibited in all other precincts
Port Terminal Facilities	**Prohibited** in the following precincts: - Commercial uses and Ancillary Services - Port Central - Open Space - Buffer / investigation

Use / Activities / Works	Category of Assessment
	- Conservation / Buffers
	Assessable – Impact – Inconsistent in the following precincts: - Port Operational and Support Services – Area 1
	Accepted - Subject to Requirements in all other precincts
Roads, driveways, flyovers and other accesses other than Port Drive (including road maintenance)	**Assessable – Impact – Inconsistent** in the Port Operational and Support Services – Area 1 Precinct.
	Prohibited Development - Conservation / Buffers precincts
	Accepted - Subject to Requirements in all other precincts
Port Drive Roadworks / Maintenance	**Accepted** development in all precincts
Cruise Terminal Services and Infrastructure	**Prohibited** in the following precincts: - Buffer / Investigation - Conservation / Buffers - Port Operational and Support Services – Area 1 - Dredge Re-handling Area
	Assessable – Consistent in the following precincts: - Special Industry - Motor Vehicle Storage Processing & Distribution
	Accepted - Subject to Requirements in all other precincts

Use / Activities / Works	Category of Assessment
Tourism Facility / Retail	**Prohibited** in the following precincts: - Port Operational and Support Services – Area 1 - Dredge Re-handling Area - Special Industry
	Assessable – Impact – Consistent in the Buffer/Investigation precinct
	Assessable – Impact – Inconsistent development in the Conservation / buffers precinct (only where nature-based / eco-tourism)
	Accepted - Subject to Requirements in all other precincts
Security Facilities	**Prohibited Development -** Conservation / Buffers precincts
	Accepted - Subject to Requirements in all other precincts
Storage yards (including container storage)	**Assessable – inconsistent – code** in the buffer/ investigation precinct
	Assessable – inconsistent – impact in the following precincts: - Buffer / Investigation - Special Industry
	Prohibited in the Conservation / Buffers precinct
	Accepted - Subject to Requirements in all other precincts
Transport and equipment depot	**Assessable – inconsistent – impact** in the following precincts: - Port Central - Buffer / Investigation

Use / Activities / Works	Category of Assessment
	Prohibited in the following precincts: - Open Space Precinct - Port Operational and Support Services – Area 1 - Conservation/Buffer
	Accepted - Subject to Requirements in all other precincts
Utilities for water supply, sewerage, drainage, waste storage and collection, electricity supply and transmission including renewables	**Assessable – inconsistent – code** in the Commercial Use and Ancillary Services precinct
	Accepted - Subject to Requirements in all other precincts
Vehicle parking facilities (including cruise related parking)	**Assessable – inconsistent – code** in the following precincts: - Buffer / Investigation - Conservation / Buffers
	Prohibited in the Port Operational and Support Services – Area 1
	Accepted - Subject to Requirements in all other precincts
Weighbridges	**Assessable – inconsistent – code** in the Buffer / Investigation precinct
	Prohibited in the following precincts: - Conservation / Buffers - Port Operational and Support Services – Area 1
	Accepted - Subject to Requirements in all other precincts

Use / Activities / Works	Category of Assessment
Wharves and associated structures, including hydraulic structures, structures used for shipping purposes and wharf protection devices	**Prohibited** in the following precincts: - Commercial uses and ancillary services - Port Central - Motor Vehicle Storage Processing & Distribution - Buffer/ Investigation - Conservation / Buffers
	Assessable – Inconsistent – Code in the following precincts: - Open Space - Port Operational and Support Services – Area 1 - Dredge Re-handling area - Transport Infrastructure
	Accepted - Subject to Requirements in all other precincts
Ancillary offices for core port infrastructure where the core port infrastructure is listed as 'Accepted'.	**Prohibited** in the following precincts: - Buffer/ Investigation - Conservation / Buffers
	Assessable – inconsistent – code in the Port Operational and Support Services – Area 1 precinct
	Accepted - Subject to Requirements in all other precincts
Temporary Construction Site Offices	**Prohibited** in the Conservation / Buffers precinct
	Assessable – inconsistent – code in the following precincts: Buffer / Investigation
	Assessable – Consistent in the Port Operational and Support Services – Area 1

Use / Activities / Works	Category of Assessment
	Accepted - Subject to Requirements in all other precincts
Gatehouses	**Prohibited** in the Conservation / Buffers precinct
	Assessable – Inconsistent – Code in the following precincts: - Buffer / Investigation - Open Space - Port Operational and Support Services – Area 1
	Accepted - Subject to Requirements in all other precincts
Ship building facilities and dry docks	**Accepted - Subject to Requirements** in the following precincts: - Port Industry - Port Operational and Support Services – Area 2
	Assessable – Inconsistent – Impact in the Buffer / Investigation precinct
	Prohibited in the following precincts: - Commercial Uses and Ancillary Services - Port Central - Open Space - Conservation / Buffers
	Assessable – inconsistent – code in all other precincts
Food and Drink Outlet	**Assessable – Inconsistent – Code** in the Open Space precinct.
	Prohibited in the following precincts: - Buffer / Investigation - Port Operational and Support Services – Area 1

Use / Activities / Works	Category of Assessment
	- Dredge Re-handling Area - Conservation / Buffers
	Accepted - Subject to Requirements in all other precincts
Nature based recreation facility	**Accepted - Subject to Requirements** in the following precincts: - Open Space - Conservation / Buffers
	Assessable – Consistent in the following precincts: - Commercial Uses and Ancillary Services - Port Central - Buffer / Investigation
	Prohibited in the following precincts: - Terminals (Bulk, General Purpose) - Terminals (Containers, Motor Vehicles, General Cargo)
	Assessable – Inconsistent – Impact in all other precincts.
Office (Where not ancillary to a port industry)	**Accepted - Subject to Requirements** development in the following precincts: - Commercial Uses and Ancillary Services - Port Central - Port Operational and Support Services – Area 2
	Prohibited in the following precincts: - Conservation / Buffers - Buffer / Investigation - Open Space - Port Operational and Support Services – Area 1

Use / Activities / Works	Category of Assessment
	Assessable – Inconsistent – Code in all other precincts.
Seafarers' centre	**Accepted - Subject to Requirements** development in the following precincts: - Commercial Uses and Ancillary Services - Port Central - Port Operational and Support Services – Area 2
	Assessable – Inconsistent – Code in the Wharves / Loading / Unloading Facilities
	Assessable – Inconsistent – Impact in the following precincts: - Special Industry - Dredge Re-handling Area - Buffer / Investigation precinct
	Prohibited in the Port Operational and Support Services – Area 1 and Conservation / Buffers precincts
	Assessable – Consistent in all other precincts
Warehouse (General)	**Assessable – Inconsistent – Code** in the Port Central Precinct
	Assessable – Inconsistent – Impact in the following precincts: - Open Space - Dredge Re-Handling Area - Wharves / Loading / Unloading Facilities
	Prohibited in the following precincts: - Conservation / Buffers - Buffer / Investigation

Use / Activities / Works	Category of Assessment
	- Port Operational and Support Services – Area 1
	Accepted - Subject to Requirements in all other precincts
Boat Ramps and associated infrastructure	**Accepted - Subject to Requirements** in the following precincts: - Port Operational and Support Services – Area 2 - Transport Infrastructure
	Prohibited in the following precincts: - Commercial Uses and Ancillary Services - Port Central - Motor Vehicle Storage Processing and Distribution
	Assessable – Inconsistent – Code in all other precincts
Maintenance Workshops/ Repair Facilities	**Prohibited** in the following precincts: - Buffer / Investigation - Conservation / Buffers
	Assessable – Inconsistent – Code in the following precincts: - Port Central - Open Space
	Accepted - Subject to Requirements in all other precincts
Major Hazard Facility/ Possible Major Hazard Facility	**Assessable – Consistent** in the Special Industry Precinct
	Assessable – Inconsistent – Code in the Port Operational and Support Services – Area 2

Use / Activities / Works	Category of Assessment
	Prohibited in the following precincts: - Commercial Uses and Ancillary Services - Port Central - Buffer / Investigation - Open Space - Conservation / Buffers - Port Operational and Support Services – Area 1
	Assessable – Inconsistent – Impact in all other precincts
Marine Related Educational Establishment	**Accepted - Subject to Requirements** in the following precincts: - Commercial Uses and Ancillary Services - Port Central - Port Operational and Support Services – Area 2 - Terminals (Bulk, General Purpose)
	Assessable – Inconsistent – Impact in the Special Industry Precinct
	Prohibited in the following precincts: - Buffer / Investigation - Open Space - Conservation / Buffers
	Assessable – Consistent development in all other precincts
Medical Centre	**Accepted - Subject to Requirements** in the following precincts: - Commercial Uses and Ancillary Services - Port Central - Port Operational and Support Services – Area 2

Use / Activities / Works	Category of Assessment
	Assessable – Inconsistent – Impact in the Transport Infrastructure precinct
	Prohibited development in all other precincts
Park / Recreation Facilities	**Accepted - Subject to Requirements** in the following precincts: - Open Space - Port Central - Port Industry
	Assessable – Consistent in the following precincts: - Buffer / Investigation - Conservation / Buffers - Terminals (Containers, Motor Vehicles, General Cargo)
	Assessable – Inconsistent – Impact in the following precincts: - Port Operational and Support Services – Area 1 - Terminals (Bulk, General Purpose)
	Assessable – Inconsistent – Code in all other precincts
Service Station	**Assessable – Inconsistent – Impact** in the following precincts: - Port Central - Open Space - Terminals (Bulk, General Purpose) - Terminals (Containers, Motor Vehicles, General Cargo)

Use / Activities / Works	Category of Assessment
	Prohibited in the following precincts: - Buffer / Investigation - Port Operational and Support Services – Area 1 - Dredge Re-handling Area - Wharves / Loading / Unloading Facilities - Conservation / Buffers
	Assessable – Consistent in all other precincts
Fuel Storage Facility	**Assessable – Consistent** in the Port Central precinct
	Prohibited in the following precincts: - Buffer / Investigation - Open Space - Conservation / Buffers - Port Operational and Support Services – Area 2
	Accepted - Subject to Requirements in all other precincts
Processing Activities	**Prohibited** in the following precincts: - Buffer / Investigation - Open Space - Conservation / Buffers
	Accepted - Subject to Requirements in the following precincts: - Special Industry - Port Industry - Terminals (Bulk, General Purpose) - Port Operational and Support Services – Area 2

Use / Activities / Works	Category of Assessment
	Assessable – Consistent in the following precincts: - Transport Infrastructure - Terminals (Containers, Motor Vehicles, General Cargo) - Motor Vehicles Storage and Distribution
	Assessable – Inconsistent – Code in the Port Operational and Support Services (Area 2)
	Assessable – Inconsistent – Impact in all other precincts
Shop (Minor, excluding Cruise related retail)	**Accepted - Subject to Requirements** in the following precincts: - Commercial Uses and Ancillary Services - Port Central - Port Operational and Support Services – Area 2
	Prohibited in the following precincts: - Buffer / Investigation - Conservation / Buffers - Special Industry - Port Operational and Support Services – Area 1 - Dredge Re-handling Area - Wharves / Loading / Unloading Facilities
	Assessable – Inconsistent – Code in all other precincts
Shift Worker Amenities	**Assessable – Consistent** in the Special Industry Precinct

Use / Activities / Works	Category of Assessment
	Prohibited in the following precincts: - Buffer / Investigation - Open Space - Conservation / Buffers - Port Operational and Support Services – Area 1
	Accepted - Subject to Requirements in all other precincts
Wash Bay / Spray Booth / Fumigation Facility	**Assessable – Consistent** in the Port Central Precinct
	Prohibited in the following precincts: - Buffer / Investigation - Open Space - Conservation / Buffers - Dredge Re-handling Area
	Accepted - Subject to Requirements in all other precincts
Visitors' Centre	**Accepted - Subject to Requirements** in the following precincts: - Commercial Uses and Ancillary Services - Port Central
	Assessable – Consistent in the Open Space precinct
	Assessable – Inconsistent – Code in the following precincts: - Port Operational and Support Services – Area 2 - Motor Vehicle Storage Processing & Distribution - Transport Infrastructure

Use / Activities / Works	Category of Assessment
	- Port Industry
	Prohibited in all other precincts
Sports and Fitness Centre	**Accepted - Subject to Requirements** in the following precincts: - Commercial Uses and Ancillary Services - Port Central
	Prohibited in all other precincts
Child Care Facilities	**Assessable – Inconsistent – Impact** in the Port Central precinct **Prohibited** in all other precincts
Hospital	**Prohibited** in all precincts
Sport and Recreation (Major)	**Prohibited** in all precincts
Shopping Facility (Major)	**Prohibited** in all precincts
Tourist attraction (Major)	**Prohibited** in all precincts
Wind Farm	**Prohibited** in all precincts
Cemetery	**Prohibited** in all precincts
Crematorium	**Prohibited** in all precincts
Indoor Entertainment	**Prohibited** in all precincts
Educational Establishment (port related)	**Accepted - Subject to Requirements** in the following precincts: - Commercial Uses and Ancillary Services - Port Central - Port Operational and Support Services – Area 2 - Port Operational and Support Services – Area 1

Use / Activities / Works	Category of Assessment
	Prohibited in all other precincts
Educational Establishment (non-port related)	**Accepted - Subject to Requirements** in the following precincts: - Commercial Uses and Ancillary Services - Port Central
	Prohibited development in all other precincts
Putrescible Waste Disposal Facility	**Prohibited** development in all precincts
Junk Yard	**Prohibited** development in all precincts
Kennels (unrelated to Customs, immigration and quarantine facilities)	**Prohibited** development in all precincts
Any other material change of use	**Assessable – Inconsistent – Code** development in all precincts
Temporary Use for core port infrastructure or port-related development	**Prohibited** in the following precincts: - Buffer / Investigation - Conservation / Buffers - Dredge Re-handling Area
	Assessable – inconsistent – code development in the Port Operational and Support Services – Area 1 precinct
	Accepted - Subject to Requirements development in all other precincts
Any other Temporary Use	**Prohibited** in the following precincts: - Buffer / Investigation - Conservation / Buffers

Use / Activities / Works	Category of Assessment
	Assessable – inconsistent – code development in the following precincts: - Open Space - Port Operational and Support Services – Area 1
	Assessable - Consistent development in all other precincts
Ancillary infrastructure / development associated with the primary use being core port infrastructure	**Accepted - Subject to Requirements** development in all precincts
Operational work referenced in Schedule 10, Part 13, Division 1, Subdivision 2 of the *Planning Regulation 2017*	**Assessable - Consistent** development in the following precincts: - Buffer / Investigation - Conservation / Buffers
	Accepted - Subject to Requirements development in all other precincts
Operational work – • not associated with a Material Change of Use; or • not referenced in Schedule 10, Part 13, Division 1, Subdivision 2 of the *Planning Regulation 2017;* or • not listed elsewhere within this table.	**Accepted - Subject to Requirements** development in all other precincts

3.3 Assessment manager and referral agencies

3.3.1 Role of the Port as Landowner

While PBPL administers the application of the LUP in the review of new development proposals in accordance with the provisions of State legislation, it does not act as an "Assessment Manager" (as defined in the *Planning Act 2016)*.

For all development occurring on freehold BCPL, an applicant is required to obtain PBPL's landowner's consent from the Port, including for Accepted development and Assessable development under the plan.

3.3.2 Assessment manager

If development is 'assessable' under this LUP, then the TIA requires a development application be lodged with the chief executive administering the *Planning Act*, as the 'assessment manager'.

The chief executive (that is, the chief executive of the State government department administering the *Planning Act 2016*, i.e. Department State Development, Infrastructure, Local Government and Planning), is responsible for administering development applications and development approvals for "Assessable Development" under this LUP (or partly under this LUP) and is known as the 'Assessment Manager'.

Figure 3.1 illustrates the requirements and process for development / applications that involve freehold BCPL.

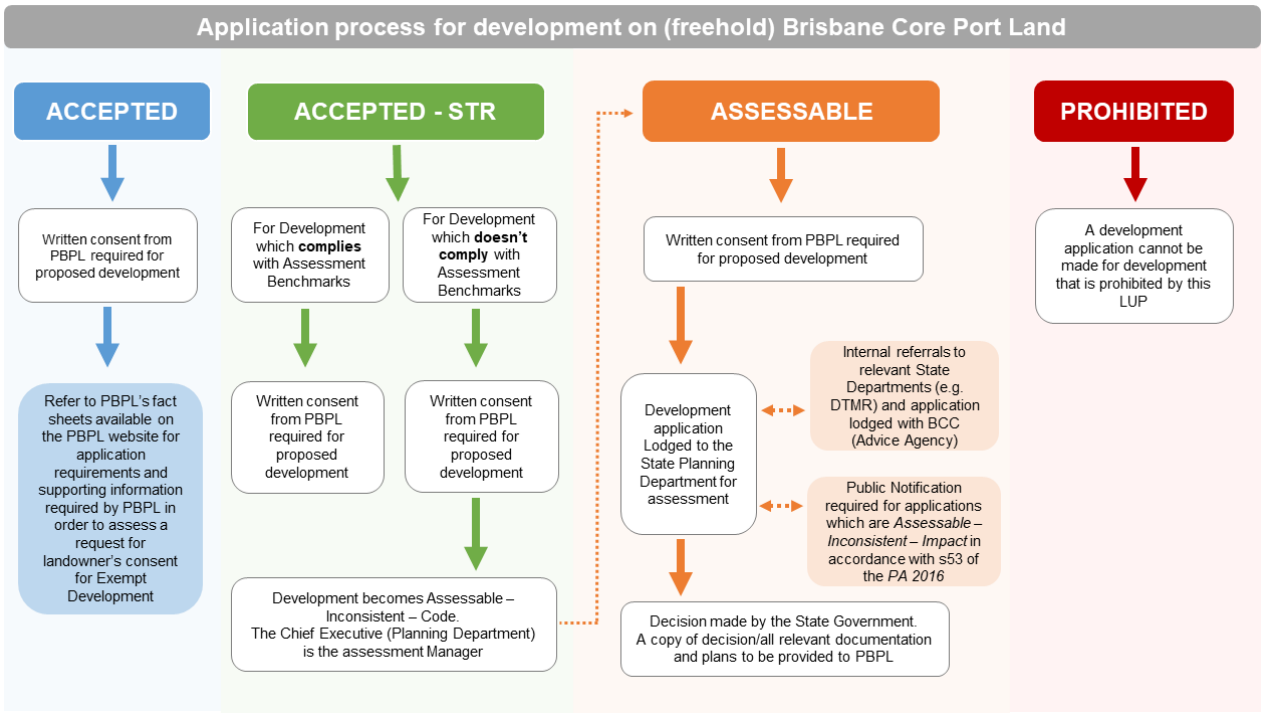


Figure 3.1 – Application process for development on (freehold) BCPL

3.3.3 Referral agencies generally

The Transport Minister is a concurrence agency for any applications which are inconsistent with the LUP for 'transport reasons'.

The local government (BCC) is an advice agency for all "Assessable Development" applications under this LUP. The Planning Chief Executive can also delegate various administrative functions to BCC (such as preparation of planning and development certificates) but not to delegate decisions on development applications.

The TIA prescribes triggers for when other agencies are referral agencies for the application.

3.3.4 Referral agency for development inconsistent with this LUP

One of the referral agency triggers in the TIA is where development is inconsistent with this LUP for transport reasons, the Transport Minister is a concurrence agency.

The TIA provides that the Brisbane Port LUP may state that particular development is inconsistent with the plan, or a part of the plan relating to a particular precinct, for transport reasons.

For other ports around Queensland, any inconsistency with the land use plan triggers a requirement for the application to be referred to the Transport Minister.

In contrast, for BCPL, it is only the particular development that is stated in the LUP as being inconsistent *for transport reasons* that triggers referral to the Transport Minister.

Table 3.3 states the particular development that is inconsistent with this LUP for transport reasons. If development that is assessable development in this LUP is development of one or more of the types listed in the following table, the TIA requires that:

- the development application must be referred to the Transport Minister as a concurrence agency
- the Transport Minister's jurisdiction is the list of transport reasons set out in the definition of 'transport reasons' in the TIA.

Table 3.3 – Particular development that is inconsistent with the LUP for Transport reasons

Development that is inconsistent with this LUP for transport reasons:
1. Material change of use that: a) is wholly or partly in one or more of the 'Port Industry' precincts in Map 2; and b) is for a purpose other than: i) core port infrastructure; or ii) port related development that has a level of assessment of 'E', 'SA' or 'A-C'; or iii) a temporary use for a core port infrastructure or port-related development purpose.
2. Temporary use that is not for a core port infrastructure or port-related development purpose.
3. Development that: a) is wholly or partly in one or more of the 'Environment' precincts in Map 2; and b) has a level of assessment of 'A-I-C' or 'A-I-I'.
4. Development that does not comply with acceptable outcome A17 of the Port Development Code.
5. Development that does not comply with acceptable outcome A18 of the Port Development Code.

It is important to note that the identification of inconsistent development for transport reasons does not alter the levels of assessment in the table of assessment.

3.4 Owner's consent/evidence of State resource entitlement

This section is not exhaustive of the statutory and contractual requirements for making a development application. It serves only to flag who the particular entities are likely to be for the purpose of those requirements.

3.4.1 Owner's consent

For an assessable development application on freehold land within the BCPL, owner's consent is required by the *Planning Act.*

For example any development deemed to be Assessable under the LUP and/or requiring a license under legislation or a policy not administered under the LUP requires owners consent from PBPL (e.g. an

Environmentally Relevant Activity, Operational Works (Tidal Works), a Development Permit for Building Approval, a Trade Waste License, and a permit to disturb or remove marine plants etc). The owner of the freehold land is the port lessor.

For the information of applicants, note that under the Port Lease [clause 13.5] provides:

'13.5 Port Lessor's consent

> *The Port Lessor will, if requested by the Port lessee, consent to the lodgement of any valid application for a license or Approval required in relation to the Port or the Leased Area and which is consistent with this Port Lease.*
>
> *If requested by the Port Lessor, the Port lessee must provide to the Port Lessor a copy of the application (including all supporting material).'*

Applicants must consult with the port manager (or its delegate) prior to submitting applications to the port lessor for owner's consent and obtain evidence of the satisfaction of the port manager with lodgement of the application.

3.4.2 State resource entitlement

An applicant may apply for a state resource allocation or entitlement prior to, concurrently with, or following the development application process. It *does not mean* that the development, if approved, can progress without the necessary resource entitlement. This means a development application can be accepted by the assessment manager and progressed without waiting for the evidence of an allocation or entitlement to the state resource.

Owner's consent is not required at the time of lodgement for all relevant applications (including those involving state owned land) in order for the application to be properly made.

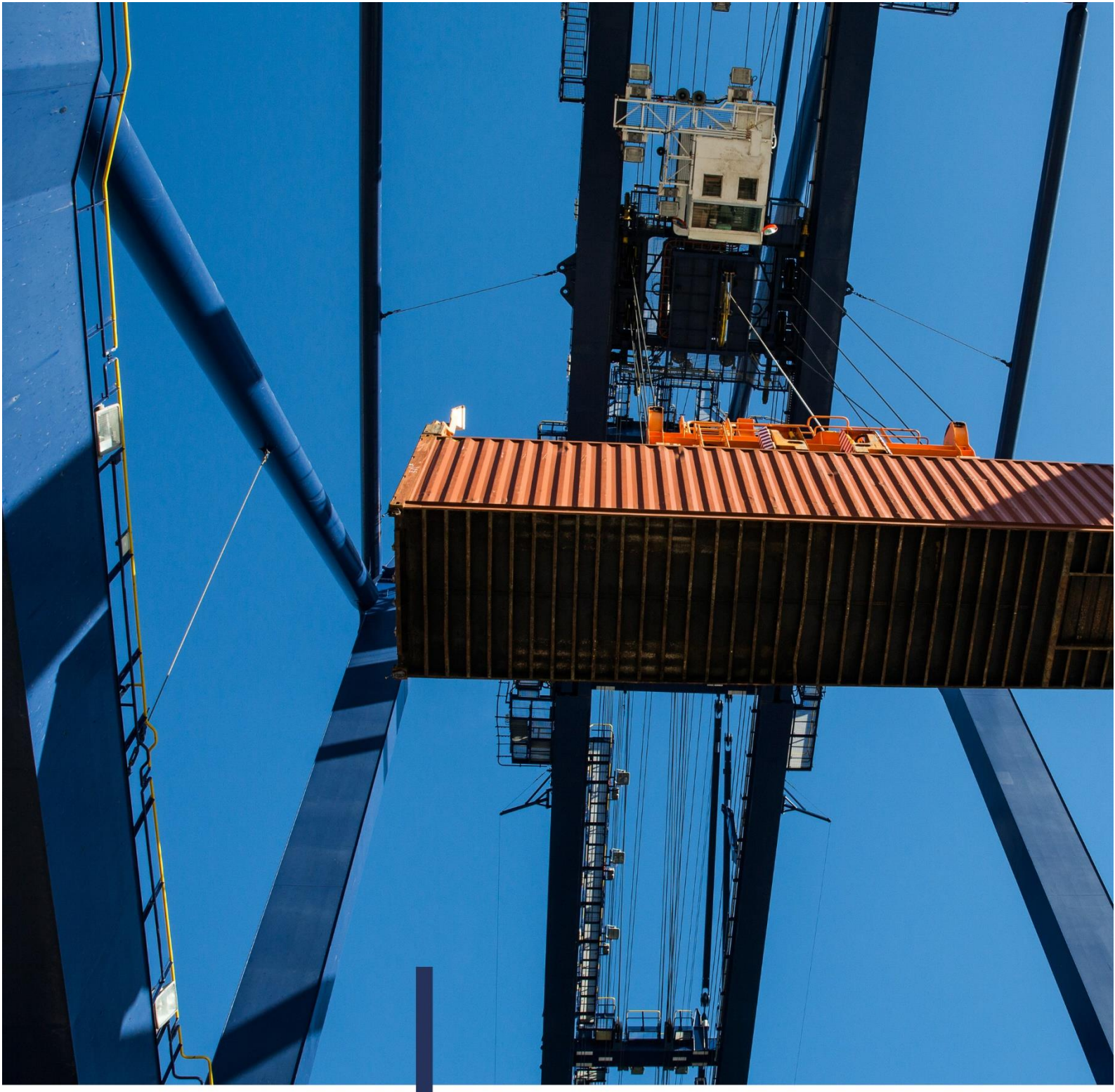
3.4.3 Port Lease requirements

In addition to the *Planning Act* requirements, there is normally a requirement under subleases for sub-tenants to obtain the port manager's written consent (as sub-lessor) prior to carrying out works. Sub-tenants should be aware that neither this LUP nor the statutory planning framework for BCPL overcomes this contractual requirement.

Sub-tenants should also be aware that normally consents for works are subject to a range of conditions, considering the requirements of this LUP, particularly code requirements.

3.4.4 Development affecting petroleum pipeline land

A petroleum pipeline owned by Caltex Refineries (Qld) Ltd (PPL106) is located within the Brisbane Port LUP area and shown in Map 2A(iv) of Appendix 4. The pipeline is licensed under the *Petroleum and Gas (Production and Safety) Act 2004* and Sections 807 and 808 of the Act require that, in addition to the *Planning Act* requirements for owners' consent, any construction or placement of a structure or development that changes the surface level on 'Pipeline Land' must have the pipeline licence holders' consent.



PORT of BRISBANE
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Part 4
Codes

Brisbane Port Land Use Plan 2020

4.1 Description of codes

This LUP includes several codes, either classified as development codes or standards codes.

Performance outcomes and acceptable outcomes in the codes are expressed in the present tense as statements of outcome to describe the development / environmental outcome to be achieved.

Unless otherwise stated, all acceptable outcomes for a performance outcome are cumulative.

Consideration may however be given by the port operator to alternative or relaxed 'Acceptable Solutions' where a development proponent can clearly demonstrate that the 'Performance Outcomes' of the Codes can be achieved without compromising the efficiency, safety, environmental integrity or aesthetic impact of their development proposal. Where any future change in the development or associated land use is proposed, such relaxations and/or alternative Acceptable Solutions would need to be reconsidered and may or may not be deemed acceptable.

For the rules on determining compliance with codes, see Section 3.2.

Development codes apply to particular precincts and/or particular types of development.

Port Development Code – applies to development which is:

1) Accepted – subject to requirements or Assessable Development for material change of use and/or operational / building works in any of the following precincts:
   - Wharves/Loading/Unloading Facilities;
   - Terminals (Containers, Motor Vehicles, General Cargo);
   - Terminals (Bulk, General Purpose);
   - Port Industry;
   - Motor Vehicle Storage, Processing and Distribution;
   - Special Industry;
   - Port Operational and Support Services – Area 2; and
   - Transport Infrastructure;
2) Accepted – subject to requirements or Assessable Development for material change of use and/or operational / building works for core port infrastructure in any precinct.

Commercial Code – applies to development which is:

1) Accepted – subject to requirements or Assessable Development for material change of use and/or operational / building works in the Port Central Precinct or the Commercial Uses and Ancillary Services precinct
2) Accepted – subject to requirements or Assessable Development for material change of use for any of the following uses in any precinct on BCPL:
   a. ancillary offices for core port infrastructure;
   b. food and drink outlet;
   c. medical centre;
   d. office;
   e. seafarer's centre;
   f. service station;
   g. shop (minor);
   h. visitor centre;
   i. educational establishment (port related);
   j. temporary use for any of the aforementioned purposes and any other commercial use.

Sustainable Design Code – applies to development which is Accepted – Subject to Requirements or Assessable Development for material change of use and/or operational/building works which may include new buildings, structures or use areas.

Land Preparation Code – applies to Accepted – subject to requirements or Assessable Development for material change of use or operational work for land preparation activities which may include facilities for handling dredged material, bulk earthworks, pre-loading, surcharging, transitional movements of sand, mud and other quarry material, and any supporting infrastructure (e.g. pipelines, gantries, booster units, conduits, etc).

Roadworks, Utilities and Other Infrastructure Code – applies to Accepted – subject to requirements or Assessable Development for material change of use or operational work for roads, utilities, services and other infrastructure on BCPL.

Reconfiguration Code – applies to (and is the only code which applies to) Assessable reconfiguring a lot on BCPL.

Standards codes

Standards codes deal with the more technical aspects of development. They apply to Accepted – subject to requirements or assessable material change of use or operational work on BCPL:

- Environmental Management Code
- Car Parking and Vehicle Movement Design Code
- Landscaping, Stormwater and Water Sensitive Urban Design Code.

Technical Standards

To assist with the interpretation and application of the Development Codes, the port operator has also developed a set of non-statutory Technical Standards aimed at improving development outcomes and assisting development proponents with the submission and assessment of their projects.

These Standards are attached as an addendum to the LUP and address a range of matters including:

1) Standards associated with:
    - Environmental Management (during both the construction and operational phases of a development)
    - Car Parking and Vehicle Movement Design
    - Landscaping, Stormwater and Water Sensitive Urban Design.
2) Port Engineering requirements for development over land and water.

It is envisaged that within the life of this plan, that these Standards may be augmented in areas deemed appropriate (e.g. the inclusion of additional policies for port signage, sustainable development, application preparation).

These Standards should be addressed / read in accordance with the LUP.

4.2 Development Codes

4.2.1 Port Development Code

Purpose

The purpose of this code is to:

- facilitate the establishment and operation of relevant development on port lands recognising the specific operational nature of port development;
- ensure a satisfactory standard of environmental performance;
- ensure that sustainable development principles are integrated in the design, construction and operation of development;
- ensure buildings and structures display a variety of building forms, materials and facade treatments;
- ensure port operations are safe and secure; and
- ensure development achieves a high level of visual amenity (whilst it is recognised that port land has an inherent industrial character).

Applicability

The Port Development Code applies in either of the following instances:

1) Accepted – subject to requirements or Assessable Development for material change of use and/or operational / building works in any of the following precincts:
   - Wharves/Loading/Unloading Facilities;
   - Terminals (Containers, Motor Vehicles, General Cargo);
   - Terminals (Bulk, General Purpose);
   - Port Industry;
   - Motor Vehicle Storage, Processing and Distribution;
   - Special Industry;
   - Port Operational and Support Services – Area 2; and
   - Transport Infrastructure.
2) Accepted – subject to requirements or Assessable Development for material change of use and/or operational / building works for core port infrastructure in any precinct.

Performance Outcomes	Acceptable Outcomes
Site coverage, layout and function	
P1 Sites are not overdeveloped, and buildings and structures are located to allow sufficient: • space between buildings; • setbacks from site boundaries; • car parking/queuing; • truck parking/manoeuvring/queuing; • outdoor storage areas; • segregated pedestrian movement paths; • access for service and emergency vehicles; • loading and unloading areas; and • appropriately sized water tanks.	**A1.1** The building footprint* does not exceed 70% of the site area; and ** The building footprint must be shown as a percentage of site area on proposal plans.* **A1.2** No part of any building or structure is within 6m of any road-frontage lease boundary, unless: • the subject site has an irregular frontage alignment and the average setback is a minimum of 6m; or • a reduced setback is compatible with and does not prejudice surrounding development; or

	• there is a significant operational benefit to having a setback less than six metres (e.g. gatehouse, security control building, AQIS/Customs control building, etc); or • it is for service/utility infrastructure and the relevant service authority has provided written confirmation demonstrating that no alternative location is possible.
P2 Buildings and structures do not adversely impact on underground services.	**A2** No part of any building or structure is constructed over trunk infrastructure without appropriate protection and/or approval from the relevant authority (where relevant).
P3 The frontage to the site is developed to an appropriate standard of amenity recognising the industrial character of the area.	**A3** The development incorporates: • quality paved roadway; • kerb and channel; • provision for the alteration or upgrading of public infrastructure, utilities and services; • effective drainage including litter / gross pollutant traps; landscaping and/or street trees (other than in either of the Terminals precincts); • appropriate conduits for street lighting and traffic signals (where applicable).
P4 The development provides appropriate storage, reception and collection areas/service points for: • rubbish services; • postal and delivery services; • emergency services; and • trade waste services.	**A4** The development provides appropriately located: • screened waste-storage areas; and • reception/collection areas/service points that meet the needs and regularity of services' visits to the site; and • pedestrian movement paths and entries to buildings that are easily identifiable and accessible
P5 Building design and layout minimises conflict between noise sources and noise sensitive uses on-site and off-site.	**A5.1** Building design and layout locates noise sources away from noise sensitive uses; or **A5.2** Building design and layout adequately treats noise sources to minimise impacts on noise sensitive uses to within acceptable limits.
P6 The development creates a socially interactive and acceptable work environment.	**A6** At least one staff recreation area is provided close to the kitchen facilities or amenities. The recreation area: • is adequately protected from the weather (incorporating a mix of shade and solar access); • is located away from noisy or odorous activities; • features differentiated pavement treatments; and • includes seating, tables and a rubbish bin.
P7 The development provides for non-discriminatory access as specified in the relevant Australian Standards.	**A7** Non-discriminatory access is provided as specified in the relevant Australian Standards.
Architectural style and form	
P8 All buildings and structures incorporate a variety of building forms, materials and treatments to create a strong sense of place and complement the surrounding character.	**A8.1** No facade contains more than 75% of a single colour, texture or material; and **A8.2** The primary street façade provides visual interest and the reduction of building bulk through the varying the horizontal plan every 10m, building elements that

	incorporate recesses and projections, a variety of building colours, or the use of canopies, window hoods / blades or awnings over windows and building openings; and **A8.3** The principal pedestrian entry of all buildings provides a canopy, recess or awning; and **A8.4** Windows and entries of offices, and staff recreation areas should be oriented to the street; and **A8.5** Gutters and downpipes are painted to complement the building or structure.
P9 Demountable buildings complement the visual amenity of the area and provide an appropriate standard of amenity for its occupants.	**A9.1** Demountable buildings are not used on site; or **A9.2** Demountable buildings are used only during construction activities; or **A9.3** Demountable buildings are used for ancillary office, amenities buildings gatehouses or security huts and satisfy the following criteria: • include a mixture of construction materials such as Colourbond, painted timber surfaces, timber skirting of all foundations; • do not have galvanised surfaces or untreated surfaces; • have matching gutters and downpipes to the building; • provide appropriate shading and solar protection (e.g. awnings, verandas, etc); and • provide appropriate indoor comfort for workers, including passive ventilation or air conditioning and acoustic protection; and • mechanical plant, air-conditioning units, water tanks and/or telecommunications equipment associated with any demountable buildings will be concealed, screened in enclosures or positioned beneath buildings and/or behind building rood lines, to reduce visibility from any street frontage.
Infrastructure/utilities/services	
P10 The development is adequately serviced by reticulated infrastructure.	**A10** The development is serviced with infrastructure in accordance with relevant standards including (where available and relevant): • reticulated/recycled water; • sewerage; • drainage; • electricity; • telecommunications; and • gas services. *Note: Where reticulated supply is not available, e.g. sewerage, adequate on-site treatment is provided that is designed and engineered to treat anticipated volumes.*

	Note: Where the development is a temporary use, infrastructure is still required having regard to the nature of the use. *Note: Any development over or immediately adjacent to SEQ Water's bulk water supply infrastructure should be assessed in accordance with the relevant sections of the SPP (Energy and Water Supply) and accord with the SEQ Water Network Consent Guidelines (November 2019) – see Appendix 4, Map 13.*
P11 For assessable material change of use, applicable infrastructure contributions in accordance with the Contributions Schedule is paid to the relevant authority.	**A11** For assessable material change of use, applicable infrastructure contributions in accordance with the *Contributions Schedule* is paid to the relevant authority.
P12 Infrastructure is appropriately installed and maintained.	**A12.1** The installation/construction of infrastructure accords with relevant legislation; and **A12.2** Where the development needs to connect to infrastructure that is outside the property/leased area: • RPEQ certified plans identify all existing services and illustrate the proposed connections are prepared; and • written confirmation has been provided by the relevant service provider that states their non-objection to the proposed connection to their infrastructure. • Connections are designed and installed in accordance with PBPL's Technical Standards (including, in some instances PBPL and BCC Standard Drawings) and/or relevant Australian Standards.
P13 Development protects or alternatively accommodates existing and future planned infrastructure, utilities and services.	**A13.1** Development: • is not located within the alignment of existing or proposed infrastructure; and/or • is sensitive to the operational impacts on existing or proposed infrastructure; and • does not compromise the operational efficiency / capacity of existing or proposed infrastructure; and • is designed and constructed to co-exist with, or otherwise accommodate, existing or proposed infrastructure. **A13.2** All infrastructure, utilities and services do not compromise existing or planned infrastructure, utilities and services by including: • appropriate alignments on and off site; • appropriate locations on and off site; • appropriate discharge and/or connection points; and • sufficient additional design capacity **Note:** RPEQ Certification is required to demonstrate compliance with A13.1 and A13.2.

P14 For development other than a Temporary Use, building design and layout includes provision for additional infrastructure to facilitate future telecommunications services.	**A14** For development other than a Temporary Use, conduits are provided to enable the future provision of fibre-optic cabling and other smart-wiring.
P15 Any mechanical plant, air-conditioning units, water tanks and/or telecommunications equipment are not visually dominant from the street.	**A15** Mechanical plant, air-conditioning units, water tanks and/ or telecommunications equipment are concealed in screened enclosures or positioned beneath buildings and/or behind building rooflines, to prevent dominant visibility from any street frontage.
Transport, traffic and access/egress	
P16 All on site traffic, manoeuvring and parking associated with the development contributes to safe and efficient operations and does not prejudice established or future traffic networks.	**A16** On-site traffic, manoeuvring and car parking achieves compliance with the provisions in the Car Parking and Vehicle Movement Design Code.
P17 Development does not jeopardise the safe, efficient and effective use of existing transport infrastructure or planned transport infrastructure.	**A17** Transport infrastructure in the Transport Infrastructure Precinct is of a mode contemplated for that part of the Transport Infrastructure Precinct having regard to Map 4 (Surface Transport Linkages).
P18 Development does not jeopardise the current or future efficient and effective use of the Transport Infrastructure Precinct through construction of buildings or other infrastructure that quarantines the land for its intended purpose	**A18** No new buildings are constructed in the Transport Infrastructure Precinct other than: • temporary buildings used in the construction phase; • buildings/structures related to the operational phase of transport corridor operations; or • buildings related to port security.
Landscaping, stormwater management and water sensitive urban design	
P19 Landscaping and stormwater management design are integrated with the site's layout in a manner that optimises the adoption of water sensitive urban design principles and protects the environmental values of receiving waters.	**A19** Landscaping and stormwater management systems are integrated and incorporate the principles of water sensitive urban design to satisfy the requirements of the Landscaping, Stormwater and Water Sensitive Urban Design Code including achievement of stormwater design objectives. Alternatively, an offsite stormwater treatment investment payment *may* occur in lieu of use onsite stormwater treatment as per the requirements outlines in PBPL's Technical Standards.
Environmental management	
P20 The development does not have adverse environmental impacts upon surrounding areas.	**A20** Separate site- and issue-specific Construction and Operational Environmental Management Plans that accord with the Environmental Management Code are prepared and complied with. Note: This information must be submitted for review by PBPL for Landowner's Consent to be granted for the commencement of site constructions and/or operations.
Flood immunity / climate change	
P21 Development avoids or mitigates the risks of natural hazards including expected sea level rise of 0.8m	**A21.1** Buildings and structures have a constructed floor level that provides expected flood immunity for health and safety, including a sea level rise factor of 0.8m to 2100.

projected to 2100, to an acceptable level to maintain the health and safety of people and the environment.	OR **A21.2** A risk assessment prepared by an appropriately qualified person in accordance with AS//NZS ISO 31000:2009 Risk Management, demonstrates to the satisfaction of the port manager's Chief Engineer, how the development avoids or mitigates the risks of natural hazards including sea level rise of 0.8m projected to 2100, to an acceptable or tolerable level for health and safety of people and the environment. OR **A21.3** The design and layout of development avoids or mitigates the risks of natural hazards by: a) locating development outside of a natural hazard area wherever possible; b) maintaining or enhancing natural processes and the protective function of landforms and vegetation that can mitigate risks of the natural hazards; c) incorporating other measures to avoid or mitigate natural hazard risk consistent with the recommendations in a risk assessment report referred to in **A21.2.**
Container stacking, storage and handling	
P22 Container storage areas are aligned and managed to optimise operational safety.	**A22.1** Where containers are stacked parallel to a road, pedestrian movement path / footpath and/or the fence line along a lease boundary, the first container stack adjacent to the abovementioned elements is: • no more than two containers-high where the stack is ≤5m from any road, pedestrian movement path / footpath and/or the fence line along a lease boundary; • no more than three containers-high where the stack is ≤7m from a road, pedestrian movement path / footpath and/or the fence line along a lease boundary; or • otherwise no more than four containers-high*; and **A22.2** Subsequent stacks are tiered no more than one container higher than the previous line of containers. **A22.3** Where containers are stacked perpendicular to a road, pedestrian movement path / footpath and/or the fence line along a lease boundary the managers of any facility where containers are stored may stack one additional container in height from the limits noted above i.e.: • no more than three containers-high where the stack is ≤5m from any road, pedestrian movement path / footpath and/or the fence line along a lease boundary;

	• no more than four containers-high where the stack is ≤7m from a road, pedestrian movement path / footpath and/or the fence line along a lease boundary; or • otherwise no more than five containers-high*. **A22.4** Subsequent stacks are tiered no more than one container higher than the previous line of containers. The managers of facilities where containers are stacked will assume all responsibility for safely and efficiently managing container storage and stacking on their sites *Any variation on the stacking arrangements noted above will only be considered where a Proponent undertakes a detailed Risk Assessment and provides PBPL with a written indemnity for alternative container stacking arrangements.
Fire safety and mitigation	
P23 Firefighting infrastructure (i.e. fire hydrants, boosters, etc) are located appropriately to fulfil its intended purpose	**A23** Where the development does not require a building approval from the local government or a private certifier, written confirmation may need to be provided by the Queensland Fire and Rescue Service and/or an appropriately qualified/experiences RPEQ or Risk Assessor that all firefighting infrastructure and emergency response procedures are acceptable.
Safety / risk management – construction and operation	
P24 During construction, the site is managed and operated to ensure a safe workplace for onsite employees, members of the general public and the port community who may have cause to enter or pass by the site.	**A24.1** A Work Health and Safety Management Plan that addresses the construction requirements of the *Workplace Health and Safety Act 2011*, the TIA and other relevant legislation is prepared and complied with; and **A24.2** If the proposed works will impact on the safe and efficient functioning of the existing traffic network, a Traffic Management Plan demonstrating that adverse traffic impacts during construction will be avoided / ameliorated is prepared to the satisfaction of the port manager and complied with.
P25 Development does not adversely impact on the safe and efficient operation of significant aviation or maritime transport infrastructure either within or proximate to BCPL.	**Part A: Brisbane Airport** **A25.1** Buildings, structures (including cranes, towers, stacks and temporary structures) and landscaping do not penetrate relevant limits on current OLS and PANS-OPS surface mapping for the Brisbane Airport; and *Note: The OLS and PAN-OPS surfaces as at the commencement of this LUP is shown on Maps 8 and 9. Proponents are responsible for checking current surface levels for the Brisbane airport.*

A25.2 Development does not emit excessive electromagnetic or signal transmissions that would interfere with aviation navigation devices; and

A25.3 Development does not emit dust, liquid or gas vapour that may adversely affect the Brisbane Airport's operational airspace. This includes gas/discharge plumes from industry with a velocity exceeding 4.3m/sec, with depleted oxygen content, of high temperature, of high particulate content, or likely to cause visibility problems; and

A25.4 Development emitting smoke, dust, ash, steam or a gaseous plume exceeding 4.3m/sec is designed and constructed to mitigate adverse impacts of emissions upon operational airspace.

A25.5 Development does not include any of the following types of outdoor lighting:

- straight parallel lines of lighting 500m to 1000m long
- flare plumes
- upward shining lights
- flashing lights
- laser lights
- sodium lights
- reflective surfaces.

A25.6 Any emissions of light do not exceed the maximum intensity of illumination for the applicable lighting zone; and

Note: The lighting zones as at the commencement of this LUP are shown on Map 10. Proponents are responsible for checking current lighting zones for the Brisbane airport.

A25.7 Development that has the potential to increase wildlife strikes and hazards and within 3km of the Brisbane Airport runway, provides measures to reduce the potential to attract birds and bats; and

Note: The operator of the Brisbane Airport maintains a preferred list of plant species to minimise bird strike risk. Additionally, the wildlife hazard buffer zone as at the commencement of this LUP is shown on Map 11. Proponents are responsible for checking current wildlife hazard buffer zones for the Brisbane airport on the State Planning Policy Interactive Mapping System.

A25.8 Development is consistent with the requirements of the *Airport (Protection of Airspace) Regulations, the Civil Aviation Safety Regulations 1996* and the *Civil Aviation Regulations 1988.*

	A25.9 Development located within the building restricted area for an aviation facility: • does not create permanent or temporary physical obstructions in the line of sight between antennas; and • does not create an electrical or electromagnetic field that will interfere with signals transmitted by the facility; and • does not create reflective surfaces that could deflect or interfere with signals transmitted by the facility, or • is designed and constructed to mitigate adverse impacts on the function of the facility. *Note: Aviation facilities subject to State interest as at the commencement of this LUP are shown on Map 12. Proponents are responsible for checking current State interest aviation facilities for the Brisbane airport on the State Planning Policy Interactive Mapping System.*
	Part B: Maritime Safety **A25.10** Development on BCPL: • does not remove, interfere with, alter or damage any maritime aids or infrastructure during the construction or operational phases of any development activity or land use; and • does not create permanent or temporary physical obstructions to the lines of sight between vessels and maritime navigational aids; and • does not create an electrical or electromagnetic field that will interfere with signals transmitted between vessels and associated maritime navigational service/ safety providers (e.g. Maritime Safety Queensland, tug service operators, marine pilots, the Queensland Police Service, PBPL Security etc); and • meets all relevant legislative requirements pertaining to marine transport. Where any development or land use requires the modification, relocation, repair or replacement of any maritime navigational aids, such action will only be permitted with the prior, written consent of the Department of Transport and Main Roads (Maritime Safety Queensland), PBPL and any other relevant agency as required.
P26 Risks and hazards associated with the storage or transport of hazardous or flammable materials satisfies all Local, State and Commonwealth requirements and does not endanger any person or the natural or built environment.	**A26** The development: • complies with relevant legislation for the storage and transport of hazardous and flammable materials; and • ensures that hazardous chemicals are not stored in any areas that are subject to flood hazard.

P27 Development must not compromise existing and future industrial land, including industrial land in a state development area	**A27** No acceptable outcome is prescribed as each situation requires an individual approach.
P28 Development must not result in sensitive land use being exposed to industrial air, noise and odour emissions that impact on human health, amenity and wellbeing.	**A28.1** Development is designed to meet the following: • Indoor noise objectives set out in the Environmental Protection (Noise) Policy 2019; and • Air quality objectives in the Environmental Protection (Air) Policy 2019, and any relevant national or international standard (for example, the World Health Organisation Guidelines for Air Quality 2000). **A28.2** Noxious and offensive odours are avoided, minimised and/or mitigated at the location of sensitive uses.
P29 Operations that are undertaken at night are adequately lit to ensure safety.	**A29.1** Outdoor work areas, car parking, pedestrian paths and site access and egress points which are used at night incorporate security and temporary lighting for night works; and **A29.2** All facility lighting is designed and focused to minimise light spillage and light pollution on areas outside the site, avoid adverse impacts on marine and aeronautical navigation and ensure compliance with *National Light Pollution Guidelines for Wildlife 2019*.
P30 Fencing is provided to optimise safety and security, without detracting from the amenity of the surrounding area.	**A30.1** Perimeter fencing is provided to all sites to a minimum height of 1.8m; and **A30.2** Fencing is black PVC, chain wire mesh fence with black posts (with an additional three-strand barbed wire atop the fence line at the proponent's discretion); and **A30.3** Where electrified fencing is required (and where there are no applicable standards prescribed by legislation, code, or policy), signs warning of electrical hazards are attached to fencing in accordance with the following standard: • a minimum height of 1.2m from ground level to the bottom of the sign; • a maximum height of 1.6m from ground level to the bottom of the sign; • a minimum size of 0.2m by 0.3m; • spaced every 100m or less as the situation and hazard demand; • brightly coloured to attract attention; and • simply worded to reinforce the potential hazards of accessing the area. *Note: for temporary site fencing, standard styles (i.e.: uncoated chain mesh) may be used.*

P31 Development incorporates features and equipment that minimise the risk associated with maintenance and cleaning of the development.	**A31** The proponent has prepared and complies with a report which: • identifies all operational site maintenance and cleaning functions associated with the development; • stipulates all risks associated with these functions; and • nominates design and procedural strategies for alleviating such risks.
Quarantine and AQIS development and operational aspects	
P32 Development complies with the Australian Quarantine Inspection Services and the Australian Customs Service legislative requirements.	**A32** The development complies with relevant legislation relating to the Australian Quarantine Inspection Services and the Australian Customs Service.
Signage	
P33 All signage is of a design, content and scale that: • complements building form; • does not adversely impact on the streetscape; • uses complementary colours and designs, in keeping with the port environment; • is of high-quality materials; • is structurally sound; • will not deteriorate in weather and environmental • conditions; is appropriately lit, with no light spillage off the sign; • does not involve any on-roof signage; and • complies with the signage provisions detailed in in PBPL's Technical Standards.	**A33** The design, content and scale of all signage: • complements building form; • does not adversely impact on the streetscape; • uses complementary colours and designs, in keeping with the port environment; • is of high-quality materials; • is structurally sound; • will not deteriorate in weather and environmental conditions; • accords with standards deemed consistent with BCC's local laws regarding signage; is appropriately lit, with no light spillage off the sign; and • does not involve any on-roof signage.
Temporary use	
P34 A temporary use does not jeopardise the future efficient use of BCPL or quarantine it from future use for core port infrastructure or port related development.	**A34.1** A temporary use does not continue beyond 5 years; and **A34.2** A restoration and rehabilitation plan is prepared to the satisfaction of the port manager and complied with to ensure future development is not compromised.
Shift worker amenities	
P35 On-site amenities are provided in response to the individual needs to development involving shift work.	**A35.1** The development is encouraged to provide amenities that address the needs of shift workers. Where relevant the following may be provided for workers and contractors only: • bunks; • lockers; • shower and toilet facilities; and • kitchen facilities.
Surface coating and fumigation activities	
P36 Surface coating (abrasive blasting; spray painting; powder coating; and anodising, electroplating and galvanising) and/or fumigation facilities are designed to prevent or minimise environmental harm and nuisance	**A36.1** Surface coating / fumigation activities must occur ancillary to other activities.

	A36.2 Surface coating / fumigation booths and chambers are: • enclosed; • provided with appropriate air filters; • bunded; • regularly maintained and cleaned; • appropriately store and dispose of waste; and • designed and managed to store and use chemicals in accordance with the National Code of Practice for the Storage and Handling of Workplace Dangerous Goods.
Fuel Storage	
P37 Fuel storage is designed to prevent ground contamination.	**A37.1** Fuel storage activities must occur ancillary to other activities. **A37.2** Fuel storage: • above ground tanks are appropriately bunded, sited and designed to comply with AS1940-2004 The storage of flammable and combustible liquids, AS1692-2006 Tanks for flammable and combustible liquids, or equivalent standard. • all underground tanks are to meet the requirements of AS1692-2006 Steel tanks for flammable and combustible liquids, UL 1316 Glass fibre reinforced underground storage tanks for petroleum products, alcohols and alcohol gasoline mixtures or the equivalent standard. • all fuel storage and dispensing facilities must be designed and constructed in accordance with the relevant Australian Standards and relevant Brisbane City Council policies, including *SC2.28 Storage and dispensing of petroleum products Planning Scheme Policy.*
Temporary storage facilities	
P38 Development for temporary storage facilities (including storage of break-bulk, project cargo and/or bulk products) are supported where they do not conflict with the long-term intent and use of the land or adjoining areas.	**A38.1** Development for temporary storage facilities ensures that the lifetime of the use does not exceed 5 year. **A38.2** Development does not involve any permanent buildings or structures. **A38.5** A restoration and rehabilitation plan is prepared to the satisfaction of the port manager and complied with to ensure future development is not compromised.

4.2.2 Commercial Code

Purpose

The purpose of this code is to:

- facilitate the establishment and operation of appropriately scaled, commercial development which provides convenience to primarily the port community including its workers and visitors;
- ensure commercial developments include relevant supporting infrastructure and on-site facilities;
- ensure a satisfactory standard of environmental performance;
- ensure that sustainable development principles are integrated in the design, construction and operation of commercial developments within the commercial precincts;
- ensure buildings and structures display a variety of building forms, materials and facade treatments expected of commercial development types; and
- ensure commercial developments do not prejudice safe and secure port operations.

Applicability

The Commercial Code applies in either of the following instances:

- Accepted – subject to requirements or Assessable Development for material change of use in the Port Central Precinct or the Commercial Uses and Ancillary Services Precinct; or
- Accepted – subject to requirements or Assessable Development for material change of use for any of the following uses in any precinct on BCPL:
    - ancillary offices for core port infrastructure; food and drink outlet; medical centre; office; seafarer's centre; service station; shop (minor); visitor centre; educational establishment (port related); temporary use for any of the aforementioned purposes and any other commercial use.

Performance Outcomes	Acceptable Outcome
Site coverage, layout and function	
P1 Sites are not overdeveloped, and buildings and structures are located so as to allow sufficient: • space between buildings; • setbacks from site boundaries; • landscaping; • car parking/queuing; • truck parking/queuing (where relevant); • segregated pedestrian movement paths; • loading and unloading areas; and • vehicle manoeuvring and access.	**A1.1** The building footprint* does not exceed 70% of the site area. ** The building footprint must be shown as a percentage of site area on proposal plans.* **A1.2** No part of any building or structure is within 3m of any road-frontage lease boundary, unless: • the subject site has an irregular frontage alignment and the average setback is a minimum of 6m; or • a reduced setback is compatible with and does not prejudice surrounding development; or • there is a significant operational benefit to having a setback less than six metres (e.g. gatehouse, security control building, AQIS/Customs control building, etc); or • it is for service/utility infrastructure and the relevant service authority has provided written confirmation demonstrating that no alternative location is possible.

P2 Buildings and structures do not adversely impact on underground services.	**A2** No part of any building or structure is constructed over trunk infrastructure without appropriate protection and/or approval from the relevant authority (where relevant).
Architectural style and form	
P3 All buildings and structures incorporate a variety of building forms, materials and treatments to create a strong sense of visual interest expected for high quality commercial developments, whilst complementing existing development in the precinct.	**A3.1** Buildings within the Port Central precinct have a building height not exceeding four (4) storeys (counting ground level as one (1) storey); and **A3.2** The architectural style of developments within the Port Central precinct meets or exceeds established building design standards and urban landscape quality. **A3.3** The primary street façade provides visual interest and the reduction of building bulk through the varying the horizontal plan every 5m, building elements that incorporate recesses and projections, a variety of building colours, or the use of canopies, window hoods / blades or awnings over windows and building openings. **A3.4** The principal pedestrian entry of all buildings provides a canopy, recess or awning. **A3.5** Windows and entries of offices, and staff recreation areas should be oriented to the street. **A3.6** Gutters and downpipes are painted to complement the building or structure.
P4 Unless specifically altered as an architectural design element, shipping containers and demountable buildings are not located within the Port Central or Commercial Uses and Ancillary Services Precincts apart from their use during the construction phase of a project.	**A4** No unaugmented shipping containers or demountable buildings are located within the Port Central or Commercial Uses and Ancillary Services Precincts apart from their use during the construction phase of a project.
Infrastructure/utilities/services	
P5 The development is adequately serviced by reticulated infrastructure.	**A5** The development is serviced with infrastructure in accordance with relevant standards, including (where available and relevant): • reticulated/recycled water; • sewerage; • drainage; • electricity; • telecommunications; and • gas services. *Note: Where reticulated supply is not available, e.g. sewerage, adequate on-site treatment is provided that is designed and engineered to treat anticipated volumes.*

	Note: Where the development is a temporary use, infrastructure is still required having regard to the nature of the use.
P6 For assessable material change of use, applicable infrastructure contributions in accordance with the Contributions Schedule are paid to the relevant authority.	**A6** For assessable material change of use, applicable infrastructure contributions in accordance with the Contributions Schedule is paid to the relevant authority.
P7 Infrastructure is appropriately installed and maintained.	**A7.1** The installation/construction of infrastructure accords with relevant legislation; and **A7.2** Where the development needs to connect to infrastructure that is outside the property/leased area: • RPEQ certified plans identify all existing services and illustrate the proposed connections; and • written confirmation has been provided by the relevant service provider that states their non-objection to the proposed connection to their infrastructure. • connections will accord with PBPL's Technical Standards (including, in some instances, PBPL / BCC standard drawings).
P8 Development protects or alternatively accommodates existing and future planned infrastructure, utilities and services.	**A8.1** Development: • is not located within the alignment of existing or proposed infrastructure; and/or • is sensitive to the operational impacts on existing or proposed infrastructure; and • is designed and constructed to co-exist with, or otherwise accommodate, existing or proposed infrastructure; and • does not compromise the operational efficiency / capacity of existing or proposed infrastructure. **A8.2** All infrastructure, utilities and services do not compromise existing or planned infrastructure, utilities and services by including: • appropriate alignments on and off site; • appropriate locations on and off site; • appropriate discharge and/or connection points; and • sufficient additional design capacity **NB**: RPEQ certification is required to demonstrate compliance with A8.1 and A8.2.

P9 For development other than a Temporary Use, building design and layout includes provision for additional infrastructure to facilitate future telecommunications services.	**A9** For development other than a Temporary Use, conduits are provided to enable the future provision of fibre-optic cabling and other smart-wiring.
P10 Any mechanical plant, air-conditioning units, water tanks, and/or telecommunications equipment are not visually dominant from the street.	**A10** Mechanical plant, air-conditioning units, water tanks, and/or telecommunications equipment are concealed in screened enclosures or positioned beneath buildings and/or behind building rooflines, to prevent dominant visibility from any street frontage.
Transport, traffic and access/egress	
P11 All on site traffic, manoeuvring and parking associated with the development contributes to safe and efficient operations and does not prejudice established or future traffic networks.	**A11** Development ensures that all on-site traffic, manoeuvring and parking complies with the provisions in the *Car Parking and Vehicle Movement Design Code.*
Landscaping, stormwater management and water sensitive urban design	
P12 Landscaping and stormwater management design are integrated with the site's layout in a manner that optimises the adoption of water sensitive urban design principles and protects the environmental values of receiving waters.	**A12** Landscaping and stormwater management systems are integrated into the development and incorporate the principles of water sensitive urban design to satisfy the requirements of the Landscaping, Stormwater and Water Sensitive Urban Design Code including achievement of stormwater design objectives.
Environmental management	
P13 The development does not adversely impact upon surrounding areas and is designed in a way which minimizes conflicts with sensitive receiving environments.	**A13** Separate Construction and Operational Environmental Management Plans in accordance with the Environmental Management Code are prepared and complied with. Note: copies of these documents are required to be lodged to PBPL as part of any application for Landowner's Consent.
Flood immunity / climate change	
P14 Development avoids or mitigates the risks of natural hazards including expected sea level rise of 0.8m projected to 2100, to an acceptable level to maintain the health and safety of people and the environment.	**A14.1** Buildings and structures have a constructed floor level that provides expected flood immunity for health and safety, including a sea level rise factor of 0.8m to 2100. OR **A14.2** A risk assessment prepared by an appropriately qualified person in accordance with AS//NZS ISO 31000:2009 Risk Management, demonstrates to the satisfaction of the port manager's Chief Engineer, how the development avoids or mitigates the risks of natural hazards including sea level rise of 0.8m projected to 2100, to an acceptable or tolerable level for health and safety of people and the environment. OR **A14.3** The design and layout of development avoids or mitigates the risks of natural hazards by: a) locating development outside of a natural hazard area wherever possible;

	b) maintaining or enhancing natural processes and the protective function of landforms and vegetation that can mitigate risks of the natural hazards c) incorporating other measures to avoid or mitigate natural hazard risk consistent with the recommendations in a risk assessment report referred to in **A14.2.**
Fire safety and mitigation	
P15 Firefighting infrastructure (i.e. fire hydrants, boosters, etc) are located appropriately to fulfil its intended purpose.	**A15** Where the development does not require a building approval from the local government or a private certifier, written confirmation may need to be provided by the Queensland Fire and Rescue Service and/or an appropriately qualified/experienced RPEQ or Risk Assessor that all firefighting infrastructure and emergency response procedures are acceptable.
Safety / risk management – construction and operation	
P16 During construction, the site is managed and operated to ensure a safe workplace for onsite employees, members of the general public and the port community who may have cause to enter or pass by the site.	**A16.1** A Construction Safety Plan that addresses the requirements of the *Queensland Work Health and Safety Act 2011*, the TIA and other relevant legislation is prepared and complied with; and **A16.2** If the proposed works will impact on the safe and efficient functioning of the existing traffic network, a Traffic Management Plan demonstrating that adverse traffic impacts will be ameliorated is prepared to the satisfaction of the port manager and complied with.
P17 Development does not adversely impact on the safe and efficient operation of significant aviation or maritime transport infrastructure either within or proximate to BCPL.	Please refer and respond to P26 and the other associated Acceptable Outcomes of the Port Development Code
P18 Risks and hazards associated with the storage or transport of hazardous or flammable materials satisfies all Local, State and Commonwealth legislation and/or requirements and does not endanger any person or the natural or built environment.	**A18** The development: • complies with relevant legislation for the storage and transport of hazardous and flammable materials; and • ensures that hazardous chemicals are not stored in any flood prone areas.
P19 Operations that are undertaken at night are adequately lit to ensure safety.	**A19.1** Outdoor work areas, car parking, pedestrian paths and site access and egress points which are used at night incorporate security lighting; and **A19.2** All facility lighting is designed and focused to minimise light spillage and light pollution on areas outside the site, avoid adverse impacts on marine and aeronautical navigation and ensure compliance with *National Light Pollution Guidelines for Wildlife 2019*.
P20 Development incorporates features and equipment that minimise the risk associated with maintenance and cleaning of the development.	**A20**The proponent has prepared and complies with a report which: • identifies all operational site maintenance and cleaning functions associated with the development;

	• stipulates all risks associated with these functions; and nominates design and procedural strategies for alleviating such risks.
Quarantine and AQIS development and operational aspects	
P21 Development complies with the Australian Quarantine Inspection Services and the Australian Customs Service legislative requirements.	**A21** The development complies with relevant legislation relating to the Australian Quarantine Inspection Services and the Australian Customs Service.
Signage	
P22 All signage is of a design, content and scale that: • complements building form; • does not adversely impact on the streetscape; • uses complementary colours and designs, in keeping with the port environment; • is of high-quality materials; • is structurally sound; • will not deteriorate in weather and environmental conditions; and • is appropriately lit, with no light spillage off the sign. • complies with the signage provisions detailed in in PBPL's Technical Standards.	**A22** The design, content and scale of all signage: • complements building form; • does not adversely impact on the streetscape; • uses complementary colours and designs, in keeping with the port environment; • is of high-quality materials; • is structurally sound; • will not deteriorate in weather and environmental conditions; • accords with standards deemed consistent with BCC's local laws regarding signage; and • is appropriately lit, with no light spillage off the sign.
Temporary use	
P23 A temporary use does not jeopardise the future efficient use of BCPL or quarantine it from future use for core port infrastructure or port related development.	**A23.1** A temporary use does not continue beyond 5 years; and **A23.2** A restoration and rehabilitation plan is prepared to the satisfaction of the port manager and complied with to ensure future development is not compromised.
Retail use	
P24 Development for retail uses are small scale and limited to serving the day to day convenience needs of people working in and visiting the Port of Brisbane and their trading catchments primarily service the port community (workers and visitors) rather than beyond the Port boundary.	**P24.1**. Development for a retail use (other than cruise related development) does not exceed 2,500m^2 gross floor area. **P24.1**. Development for a retail use (cruise related development) does not exceed 500m^2 gross floor area.
Amenity	
P25 Development must not compromise existing and future industrial land, including industrial land in a state development area	No acceptable outcome is prescribed as each situation requires an individual approach.
P26 Development must not result in sensitive land use being unreasonably exposed to industrial air, noise and odour emissions that impact on human health, amenity and wellbeing.	**A26.1** Development is designed to meet the following: • indoor noise objectives set out in the Environmental Protection (Noise) Policy 2019; and • air quality objectives in the Environmental Protection (Air) Policy 2019, and any relevant national or international standard (for example, the World Health Organisation Guidelines for Air Quality 2000) are met.

	A26.2 Noxious and offensive odours are avoided, minimised and/or mitigated at the location of sensitive uses.

4.2.3 Sustainable Design Code

Purpose

The purpose of this code is to facilitate development which achieves the equivalent of a minimum Green Star 4-Star rating as per the criteria of the Green Building Council of Australia (see: https://new.gbca.org.au/green-star/rating-system/).

The code requires proponents to document sustainable design, construction and operational aspects of development proposals and/or provide a written undertaking as to the provision of information / certification associated with sustainable design initiatives.

Note:

1. While Proponents are not necessarily required to apply for / obtain certification from the Green Building Council of Australia[7], evidence / written assurances are required by PBPL to ensure that the stated Performance Outcomes (or an Accepted / Alternative Outcome) is achieved to meet an equivalent, minimum Green Star 4-star level of performance; and

2. Where a suggested Acceptable outcome cannot be achieved or is viewed as irrelevant to the development in question, the Proponent should document, state and describe; via independent certification where deemed necessary; how alternative initiatives / actions will be adopted to deliver the equivalent of a minimum Green Star 4-Star rating as per the criteria of the Green Building Council of Australia or why the specific Performance Outcome is not relevant to the development.

Applicability

The Sustainable Design Code applies to development which is Accepted – subject to requirements or Assessable Development for material change of use in any precinct;

Performance Outcomes	Acceptable Outcome
Building Design	
P1 The Proponent must demonstrate that a comprehensive services and maintainability review has been conducted for the proposed development.	**A1** During the design phase of the project (i.e. prior to the commencement of constructions) the Proponent must undertake a review that must address the following: • Commissionability • Controllability • Maintainability • Operability and • Safety The review must be documented in a 'Service and Maintainability Report'.
P2 The Proponent must demonstrate that pre-commissioning and commissioning activities have been conducted by an Independent Commissioning Agent.	**A2** To demonstrate compliance, the following should be documented: • Commissioning Specification • Design parameters for each identified system; • Required commissioning activities; • Define how each system is intended to operate; • List acceptable tolerances during commissioning; • Commissioning Plan;

NB: In some instances PBPL may, at its discretion and where acting reasonably, require that certain projects are required to seek formal certification from Green Building Council of Australia.

	• Objectives; • Scope; • Commissioning team; • General sequence of commissioning; • Commissioning procedures; • Witnessing requirements; • Commissioning program; and • Requirements for subcontractor commissioning manuals
P3 The Proponent should demonstrate that the air permeability of the relevant aspects of the development meet the equivalent of the Green Star Design and As Built Guidelines.	**A3** Air permeability testing must be carried out on the Proponent's behalf by a member of the Air Tightness Testing and Measurement Association (ATTMA) or Air Infiltration and Ventilation Association of Australia (AIVAA) in accordance with AS/NZA ISO 9972:2015 for the office structure. The test results must not exceed the 'maximum' air permeability rates outlined in Table 2.2.1 in the *Green Star Design and as Built Guidelines*.
P4 Prior to the commencement of any new development operations, the Proponent must test, (where required) adjust and document the functionality of all relevant building systems.	**A4** Following practical completion, and prior to occupation, the Proponent must undertake a tuning process for all identified building systems. The building tuning process will require the analysis of data from the monitoring systems and assessment of feedback from occupants on building conditions. This process should include the following: • Operating and Maintenance Manuals have been developed in accordance with approved standards and guidelines (refer to green star guidance); • A building tuning manual, or a building tuning plan, has been developed in accordance with the approved standards and guidelines; • A building tuning team has been created including the facilities manager, the owner's representative and the ICA (if applicable). The head contractor and the services design professionals are available to address specific tuning issues where required; and • The owner has engaged parties to tune the nominated systems. This engagement includes requirements for: • Verification that nominated systems are performing to their design potential at full and part load conditions; • Reviews of environmental performance against the environmental targets; • Collection of user feedback to match the system performance with the occupant's needs; • Adjustment of all the systems to account for all deficiencies discovered; and • Management, communication, and assignment of responsibilities for the tuning process within the team. The Proponent must confirm in writing to PBPL that these tuning processes have been completed; and include documented quarterly adjustments and measurement for the first 12 months after occupation and a review of building system manufacturer warranties.

P5 The Proponent is required to augment their site's OEMP with site and issue-specific facility operations and maintenance information (including the keeping of logbooks on building performance).	**A5** The Proponent must ensure that comprehensive operations and maintenance (O&M) information is available to relevant stakeholders. The O&M manuals may be sought by PBPL and should include, but not be limited to: • A summary sheet of relevant building service contacts; • System-level information for building systems • An introduction and scope; • Operating parameters and procedures; • Preventive maintenance requirements, including procedures and schedules; • Corrective maintenance requirements, including repair requirements; • Service contacts information; • Warranties and certificates; and • Up-to-date drawings The Proponent must ensure that: • a building logbook is developed (in accordance with CIBSE TM31: *Building Logbook Toolkit)* before practical completion of the project and confirm that this logbook will be available for PBPL's review at any time. • it captures and tracks updates to building user and systems information to ensure that this data is available to all relevant stakeholders at the time of practical completion.
P6 The Proponent will ensure and document environmental performance targets for the construction and operation of the project**.**	**A6** The Proponent is required to define and describe performance targets for: • Waste minimisation and management; • Water use; • Energy use; and • Optimising indoor air quality These targets must be outlined within the CEMP and OEMP documents submitted as part of any development proposal.
Waste Management	
P7 The Proponent must develop and implement an Operational Waste Management Plan.	**A7** The Proponent is to confirm that it will implement an Operational Waste Management Plan that includes, but is not limited to the following: • Information on the reduction and separation of waste streams (recycling, cardboard, general waste, organic waste, paper etc.) with clearly labelled bins; • Dedicated waste storage area(s) around the building; • Dedicated waste storage area(s) on site with clear access to collection areas; and • Site plan highlighting the relevant areas for waste storage and access. The site and issue-specific details of this plan should be an addendum to the project's OEMP.

P8 The Proponent must define and describe the details of how it intends to: • minimise construction and operational waste associated with their proposed development / use • ensure all waste generated (including regulated waste) must be stored and disposed of correctly. Emphasis should be placed on recycling where practicable**.**	**A8** The Proponent is to demonstrate and document that 90% of waste generated during construction has been diverted from landfill and must not exceed 10kg/m^2 of waste to landfill from the site. All contractors associated with the construction and operation of the project must provide a comprehensive, project-specific waste management plan(s) for the works which addresses the following: • waste minimisation strategies; • waste generation; • waste systems; • performance/reduction targets; • bin quantity and size; • collection frequency; • confirmation of waste contractors' information; • waste management facilities shown on plans; • signage; and • monitoring and reporting of construction waste volumes
Energy	
P9 The Proponent's development seeks to optimise the use of renewable energy sources.	**A9** The development will incorporate solar panels (and/or other renewable energy technologies) into the design, construction and operation of the project.
P10 The Proponent will seek to optimise the energy efficiency of their development beyond the generation and/or use of renewable energy.	**A10** The Proponent is to demonstrate / document that the development encourages energy efficient buildings by reducing greenhouse gas emissions associated with the use of energy in the building's construction materials, operations and transport task. This should be achieved through means including but not limited to: • 5-star energy efficient equipment and appliances; • All lights are LED lights with automated control system(s), such as occupant detection, local zone controls and daylight adjustment; • all air conditioning systems incorporated within the development are run on energy-efficient motors; • roof materials are to be of a light / reflective colour, while accommodating for translucent sheeting and where deemed appropriate, solar panelling.; • all doors / entrances to air-conditioned spaces are appropriately sealed and/or caulked; and • all hot water to the site is provided via solar or heat-pump hot water systems. The Proponent must also demonstrate / document that the development: • will exceed the minimum Deemed to Satisfy performance requirements stipulated within parts J1 and J2 of the NCC by at least 5%; and/or

	• optimise energy efficiency and the reduction of greenhouse gas (GHG) emissions through exceeding the Section J requirements outlined in section 15A of the Green Star Design and as Built Guidelines.
Indoor Environment Quality	
P11 The Proponent is required to demonstrate / document how air quality associated with their development will be optimised.	**A11** The Proponent must: • confirm that building ventilation systems will be designed to comply with ASHRAE Standard 62.1:2013. Any mechanical ventilation system within the building must be designed to provide adequate access for maintenance. All ductwork must have been cleaned in prior to use and occupation; and • demonstrate / document that pollutants from operations will be limited by either removing the source of pollutants in accordance with ECMA-328, RAL-UZ 171 or GGPS.003 (certification must be obtained) or by exhausting the pollutants directly outside in accordance with AS 1668. Compliance with P11 must be outlined within the submitted OEMP.
P12 The Proponent is required to demonstrate / document how the acoustic environment of their development will be optimised.	**A12** The Proponent must confirm that the proposed development provides appropriate and comfortable acoustic conditions for occupants including: • Ensuring the internal ambient noise levels are suitable and relevant to the activity type; • Reducing the persistence of sound to a level suitable to the activity; • Minimising crosstalk between rooms; and • Demonstrating that the internal noise levels are compliant with standard AS/NZS 2107:2016 The Proponent must develop an Acoustic Report by a suitably qualified specialist and provide this information in the project's OEMP.
P13 The Proponent is required to demonstrate / document how the facility lighting of their development will be optimised.	**A13** The Proponent must document how it will achieve / provide an appropriate degree of facility lighting that: • ensures all lights are flicker free and accurately address the perception of colour in the space (minimum CRI of 80); • ensures lighting and glare reduction levels comply with AS/NZS 1680.2.4; • ensure combination of lighting and surfaces improve uniformity of lighting by having a surface reflectance for ceilings (at least 0.75) and a direct/indirect lighting system present to ensure the ceiling area have an average surface illuminance of 30% of the lighting levels on the working plane; and • Provides localised lighting control zones.

	• Demonstrates compliance with the *National Light Pollution Guidelines for Wildlife 2019*.
P14 The Proponent is required to demonstrate / document how levels of visual comfort within their development will be optimised.	**A14** The Proponent must provide high levels of visual comfort to building occupants through: • 60% of the development receiving high levels of light by: - the use of translucent sheeting - atriums - skylights; • glare from direct sunlight being reduced by using blinds, screens, awnings etc. with localised control (manual or automatic); and • 60% of the main areas of the development having a clear line of sight to a high quality internal or external view.
P15 The Proponent is required to demonstrate / document its optimal use of healthy building materials.	**A15** The Proponent is to confirm that: • 95% of all engineered wood products meet stipulated formaldehyde limits as outlined in the *Green Star Design and As Built Guidelines.* • all internally applied paints, adhesives, sealants and carpets meet the stipulated 'Total VOC Limits' outlined in section 13 of the Green Star Design and As Built Guidelines.
P16 The Proponent is required to demonstrate / document how optimal levels of thermal comfort will be achieved.	**A16** The Proponent is to confirm that the development achieves high levels of thermal comfort. The HVAC system and building façade must meet the requirements outlined in the *Green Star as Built and Design Guidelines.*
Water	
P17 The Proponent is required to demonstrate / document how efficient water use associated with the development will be optimised.	**A17** The Proponent is required to: • install appropriate water meters (as per the Technical Standards) to all water connections within the site; • confirm that no potable water is used for irrigation; • confirm that the development minimises potable water consumption in operations by installing / using: - 6-star WELS rating for taps, urinals and dishwashers; - 5-star WELS rating for toilets, showers and washing machines; and - 3-star WELS rating for showers; • confirm that (where applicable) the development site collects and reuses rainwater on site for applications including but not limited to: - amenities e.g. toilet flushing, washing machine use; - landscape irrigation; - air conditioning cooling towers; - machinery cooling; - industrial cleaning of equipment, machinery, vehicles, vessels etc.

	- industrial processing (i.e. re-using water for industrial processes); - carpet cleaning (or similar applications requiring large amounts of water); - restoring and maintaining wetlands etc.; and - (where applicable), the Proponent must also confirm that any developed involving a purpose-built wash bay facility will include a wash-water recycling system and provide design specifications for this system; • rainwater collection tank to be sized to allow 10 days' total potable water usage (calculations to be provided, or based on 200L per person per day); • confirm that a minimum of 80% of Fire Protection System test water (including maintenance drain down) is / will be either reused or stored for other reuse on site; and • confirm that the development does not use water for heat rejection.
Building Materials	
P18 The Proponent is required to optimise its use of responsibly sourced materials within the development where possible.	**A18** The Proponent is to confirm / certify that building materials are responsibly sourced or have a sustainable supply chain. This can be achieved through: • at least 95% of buildings steel (by mass) is sourced from a Responsible Steel Maker; (Steel maker possesses current certified ISO 14001 (EMS) and is a member of the World Steel Association's (WSA) Climate Action Programme (CAP)) and • for steel framed buildings, at least 60% of the fabricated structural steelwork is supply by an accredited Environmental Sustainability Charter of the Australian Steel Institute (ASI); or • for concrete framed buildings, at least 60% (by mass) of all reinforcing bar and mesh is produced using energy-reducing processed in its manufacture (measured by average mass by steel maker annually).
P19 The Proponent should ensure that where timber is used in the development, sustainable timber is used wherever possible. Any timber specified for the development must assist in reducing the destruction of rainforests and old growth forests. Where appropriate, timber specified for structure and finishes must be recycled or sourced from environmentally certified plantations.	**A19** The Proponent is to confirm that 95% of all timber used in the building and construction works is either: • from a reused source; or • certified by a forest certification scheme Such certification should be independently provided in accordance with the Australian Standards (AS) provided by the Australian Forest Certification Scheme and/or the Forest Stewardship Council's (FSC) certification scheme. Rainforest and old growth timbers are not used.
P20 The Proponent is required to minimise the amount of PVC used in the development.	**A20** The Proponent is to confirm:

	• that at least 90% of all permanent formwork, pipes, flooring, blinds and cables do not contain PVC; or • that PVC products being used are certified as compliant with the GBCA's Best Practice Guidelines for PVC.
P21 The Proponent's development is encouraged to incorporate recycled, reused or third-party sustainably certified products into the design.	**A21** Proponents must demonstrate how they will reduce embodied energy as part of their development by utilising systems, products and services that capitalise on reduced embodied energy and recycling. Materials are sourced locally where possible to minimise energy consumption from transport. Where possible materials should feature a low level of embodied energy including but not limited to the use of: • back-fill aggregate with recycled content; • concrete with fly-ash content < 25%, particularly for non-structural components; • carpet finishes and underlay containing recycled content; • recycled materials (e.g. timber, crushed concrete and cleaned bricks); and • recycled asphalt.

4.2.4 Land Preparation Code

Purpose

The purpose of this code is to:

- ensure that the environmental performance of any land preparation works achieves a satisfactory standard;
- ensure that both construction and operational impacts and issues are appropriately addressed by any development proposal;
- ensure developments do not prejudice safe and secure port operations.

Applicability

The Land Preparation Code applies to Accepted – subject to requirements or Assessable Development for material change of use or operational work for land preparation activities which may include facilities for handling dredged material and operational work that is filling or excavation.

Performance Outcomes	Acceptable Outcome
Safety	
P1 The works do not adversely impact the safe and efficient operation of the Port or the surrounding areas.	**A1** The works do not adversely impact the safe and efficient operation of the Port or the surrounding areas.
P2 During construction, the site is managed and operated to ensure a safe workplace for onsite employees, members of the general public and the port community who may have cause to enter or pass by the site.	**A2.1** A Construction Safety Plan that addresses the requirements of the *Work Health and Safety Act 2011,* the TIA and other relevant legislation is prepared and complied with; and **A2.2** If the proposed works will impact on the safe and efficient functioning of the existing traffic network, a Traffic Management Plan demonstrating that adverse traffic impacts will be ameliorated is prepared to the satisfaction of the port manager and complied with.
Environmental management	
P3 The development does not have adverse environmental impacts upon surrounding areas.	**A3** A Construction Environmental Management Plan (including details pertaining to the management of potential acid sulphate soils and the movement of soil material within and/or beyond BCPL) has been developed in accordance with the Environmental Management Code and will be complied with.
Infrastructure/utilities/services	
P4 Development protects or alternatively accommodates existing and future planned infrastructure, utilities and services.	**A4.1** Development: • is not located within the alignment of existing or proposed infrastructure; and • is not sensitive to the operational impacts of existing or proposed infrastructure; and • does not compromise the operational efficiency of existing or proposed infrastructure; and • is designed and constructed to co-exist with existing or proposed infrastructure.

	A4.2 All infrastructure, utilities and services do not compromise existing or planned infrastructure, utilities and services by including: • appropriate alignments on and off site; • appropriate locations on and off site; • appropriate discharge and/or connection points; and • sufficient additional design capacity *Note: Any development over or immediately adjacent to SEQ Water's bulk water supply infrastructure should be assessed in accordance with the relevant sections of the SPP (Energy and Water Supply) and accord with the SEQ Water Network Consent Guidelines (November 2019) – see Appendix 4, Map 13*.
P5 All works have been certified by a Registered Professional Engineer of Queensland.	**A5** All works have been certified by a Registered Professional Engineer of Queensland.
P6 Infrastructure is appropriately installed and maintained.	**A6.1** The installation/construction of infrastructure accords with relevant legislation; and **A6.2** Where the development needs to connect to infrastructure that is outside the property/leased area: • RPEQ certified plans identify all existing services and illustrate the proposed connections; and • Written confirmation has been provided by the relevant service provider that states their non-objection to the proposed connection to their infrastructure.
P7 Land preparation works include provision for additional infrastructure to facilitate future telecommunications services.	**A7** Conduits are provided (where relevant) to enable the future provision of fibre-optic cabling and other smart-wiring.
P8 The site's entrance is accessible and legible.	**A8.1** Site entries are easily identifiable and accessible from the street; and **A8.2** If an office facility is provided, it is easily identifiable and located at the front of the site.
P9 Works that are undertaken at night are adequately lit to ensure safety.	**A9.1** Work areas, car parking, pedestrian paths and site access and egress points which are used at night incorporate security lighting; and **A9.2** All facility lighting is designed and focused to minimise light spillage and light pollution on areas outside the site, avoid adverse impacts on marine and aeronautical navigation and ensure compliance with *National Light Pollution Guidelines for Wildlife 2019*.
P10 Fencing is provided to optimise safety and security without detracting from the amenity of the surrounding area.	**A10.1** Perimeter fencing is provided to all sites that addresses the requirements of the *Customs Act 1901;* and **A10.2** Fencing is black PVC, chain wire mesh fence with black posts (with three-strand barbed wire atop the fence line at the proponent's discretion).

	***Note:** for temporary fencing, standard styles (i.e. un-coated chain mesh) may be used.*
P11 Development does not adversely impact on the safe and efficient operation of significant aviation or maritime transport infrastructure either within or proximate to BCPL.	Please refer and respond to P26 and the associated Acceptable Outcomes of the Port Development Code
Flood immunity / climate change	
P13 Development avoids or mitigates the risks of natural hazards including expected sea level rise of 0.8m projected to 2100, to an acceptable level to maintain the health and safety of people and the environment.	**A13.1** Buildings and structures have a constructed floor level that provides expected flood immunity for health and safety, including a sea level rise factor of 0.8m to 2100. OR **A13.2** A risk assessment prepared by an appropriately qualified person in accordance with AS//NZS ISO 31000:2009 Risk Management, demonstrates to the satisfaction of the port manager's Chief Engineer, how the development avoids or mitigates the risks of natural hazards including sea level rise of 0.8m projected to 2100, to an acceptable or tolerable level for health and safety of people and the environment. OR **A13.3** The design and layout of development avoids or mitigates the risks of natural hazards by: a) locating development outside of a natural hazard area wherever possible; b) maintaining or enhancing natural processes and the protective function of landforms and vegetation that can mitigate risks of the natural hazards c) incorporating other measures to avoid or mitigate natural hazard risk consistent with the recommendations in a risk assessment report referred to in **A13.2.**

4.2.5 Roadworks, Utilities and Other Infrastructure Code

Purpose

The purpose of this code is to:

- ensure development is provided with the quality of services expected by the port community;
- ensure roads, utilities and other infrastructure contributes to the safe and efficient operation of the Port; and
- ensure the establishment of roads, utilities and other infrastructure does not detract from the visual amenity of an area.

Applicability

The Roadworks, Utilities and Other Infrastructure Code applies to Accepted – subject to requirements or Assessable Development for material change of use or operational work for roads, utilities, services and other infrastructure on BCPL.

Performance Outcomes	Acceptable Outcome
Visual amenity	
P1 The development does not unnecessarily detract from visual amenity of the area.	**A1** The development does not unnecessarily detract from visual amenity of the area.
Engineering	
P2 All works are certified by a Registered Professional Engineer of Queensland or equivalent and the certification provided to the port manager.	**A2** All works comply with relevant Australian Standards and PBPL's Technical Standards and are certified by a Registered Professional Engineer of Queensland or equivalent.
Environmental management	
P3 Stormwater is managed to: • protect the environmental values of the receiving environment; • provide an acceptable level of flood immunity; and • not adversely impact any person, property or operation.	**A3** Stormwater is managed to: • protect the environmental values of the receiving environment and achieves stormwater design objectives; • provide an acceptable level of flood immunity; and • not adversely impact any person, property or operation.
P4 The development does not have adverse environmental impacts upon surrounding areas.	**A4** A Construction Environmental Management Plan in accordance with the Environmental Management Code is prepared and complied with.
Safety	
P5 The works do not adversely impact the safe and efficient operation of the Port or the surrounding areas.	**A5** The works do not adversely impact the safe and efficient operation of the Port or the surrounding areas.
P6 The site is managed and operated to ensure a safe workplace for onsite employees, members of the general public and the port community who may have cause to enter or pass by the site.	**A6.1** A Work Health and Safety Management Plan that addresses the requirements of the *Work Health and Safety Act 2011*, the TIA and other relevant legislation is prepared and complied with; and **A6.2** If the proposed works will impact on the safe and efficient functioning of the existing traffic network, a Traffic Management Plan demonstrating that adverse traffic

	impacts will be ameliorated is prepared to the satisfaction of the port manager and complied with.
P7 Works that are undertaken at night are adequately lit to ensure safety.	**A7.1** Work areas, car parking, pedestrian paths and site access and egress points which are used at night incorporate security / safety lighting; and **A7.2** All facility lighting is designed and focused to minimise light spillage and light pollution on areas outside the site, avoid adverse impacts on marine and aeronautical navigation and ensure compliance with *National Light Pollution Guidelines for Wildlife 2019*.
P8 Utilities and other infrastructure are secure and not pose a risk to public safety. If fencing is required, it does not detract from the amenity of the surrounding area.	**A8.1** Utilities and other infrastructure are secure and do not pose a risk to public safety; and **A8.2** Where utilities or other infrastructure require fencing to be secure or alleviate the risk to public safety, the fencing is black PVC, chain wire mesh fence with black posts ***Note:*** *for temporary fencing, standard styles (i.e.: uncoated chain mesh) may be used.*
P9 Works do not adversely impact on the safe and efficient operation of significant aviation or maritime transport infrastructure either within or proximate to BCPL.	
Infrastructure	
P10 Infrastructure is appropriately installed and maintained.	**A10.1** The installation/construction of infrastructure accords with relevant legislation; and **A10.2** Where the development needs to connect to infrastructure that is outside the property/leased area: • RPEQ certified plans identify all existing services and illustrate the proposed connections; and • Written confirmation has been provided by the relevant service provider that states their non-objection to the proposed connection to their infrastructure. • connections are designed and installed in accordance with PBPL's Technical Standards (including, in some instances, PBPL / BCC standard drawings).
P11 Access to utilities and other infrastructure is safe and efficient.	**A11** Maintenance and servicing of infrastructure can be undertaken in a safe and efficient manner.
Provisioning for future development	
P12 New roads include provision for additional infrastructure to facilitate future services.	**A12.1** Driveways off the new roads must not compromise proposed or future infrastructure work; and **A12.2** Conduits are provided (where relevant) to enable the future provision of fibre-optic cabling and other smart-wiring.

P13 Development protects or alternatively accommodates existing and future planned infrastructure, utilities and services.	**A13.1** Development: • is not located within the alignment of existing or proposed infrastructure; and/or • is sensitive to the operational impacts on existing or proposed infrastructure; and • does not compromise the operational efficiency of existing or proposed infrastructure; and • is designed and constructed to co-exist with, or otherwise accommodate, existing or proposed infrastructure. **A13.2** All infrastructure, utilities and services do not compromise existing or planned infrastructure, utilities and services by including: • appropriate alignments on and off site; • appropriate locations on and off site; • appropriate discharge and/or connection points; and • sufficient additional design capacity *Note: Any development over or immediately adjacent to SEQ Water's bulk water supply infrastructure should be assessed in accordance with the relevant sections of the SPP (Energy and Water Supply) and accord with the SEQ Water Network Consent Guidelines (November 2019) – see Appendix 4, Map 13.*

4.2.6 Reconfiguration Code

Purpose

The purposes of this code are:

- to protect the accessibility of each parcel of land resulting from the reconfiguration
- to ensure adequate access to vehicle parking, drainage, sewerage, water and other utility connections for each parcel of land.

Applicability

The Reconfiguration Code applies to (and is the only code which applies to) assessable reconfiguring a lot on BCPL.

Performance Outcomes	Acceptable Outcome
General	
P1 Each parcel of land created by the proposed reconfiguration has adequate access to the transport network within the BCPL in a manner that does not adversely affect the safe and efficient operation of the transport network.	**A1.1** Each parcel of land created by the proposed reconfiguration has direct access to inter-modal transport (such as to rail or the internal road network) within the BCPL in a manner that does not adversely affect the safe and efficient operation of the transport network; or **A1.2** The instrument creating each parcel of land provides for an access or shared access to the parcel connecting to the road network (and consequently to inter-modal transport), for example, as part of the leased area or a licensed area, in a manner that does not adversely affect the safe and efficient operation of the transport network; or **A1.3** The applicant has demonstrated security of accessibility, for example, through a separate agreement providing for access or shared access in a manner that does not adversely affect the safe and efficient operation of the transport network.
P2 If relevant to the use of the premises there is adequate provision for all reasonably required utilities and services (such as sewerage and drainage connections, water and power) to be provided to each parcel of land created by the proposed reconfiguration safely, efficiently and lawfully.	**A2.1** Each parcel of land created by the proposed reconfiguration has direct separate connections to all reasonably required utilities for the proposed use of the parcel/s (such as sewerage, drainage, water, telecommunications and power); or **A2.2** The applicant has demonstrated an entitlement to access to services and utilities reasonably required for the proposed use of the parcel/s, for example, through an agreement providing for shared access, confirmed in writing to be to the satisfaction of the port operator.
P3 To the extent relevant to the nature of the use of each parcel created by the proposed reconfiguration (considering the requirements of the car parking and vehicle movement design code, applicable to the use), each parcel of land has access to adequate vehicle parking for the premises.	**A3.1** Each parcel of land proposed to be created by the reconfiguration includes an area of land which provides an adequate area for vehicle parking for the type of use of that land; or **A3.2** The applicant has demonstrated an entitlement to access to adequate vehicle parking, for example, through an agreement providing for shared vehicle parking rights, confirmed in writing to be to the satisfaction of the port operator.

4.3 Standards codes

4.3.1 Environmental Management Code

Purpose

The purpose of this code is to:

- maintain, protect and/or enhance the environmental values of the sensitive environments that surround BCPL including matters of local, state and national environmental significance;
- ensure that all development and operations on BCPL are undertaken in an environmentally responsible manner;
- ensure development and new uses are designed, located and operate in a manner which avoids impacts on areas of environmental significance, including maters of national, state and local environmental significance. Where adverse impacts cannot be reasonably avoided they are minimised.

Applicability

The Environmental Management Code applies to Accepted – subject to requirements or Assessable Development for material change of use or operational work on BCPL.

Performance Outcomes	Acceptable Outcome
Construction Environmental Management Plan	
P1 All construction work is undertaken in an environmentally responsible manner and not adversely impact the environment or any person, property or operation.	**A1.1** A site and issue specific Construction Environmental Management Plan (CEMP) containing the following information has been developed and is to the port manager's satisfaction. The CEMP shall adopt a risk-based approach to environmental management with key risks and appropriate management measures adequately identified: Overview • the address and real property description of the construction site; • a description of the nature and duration of the construction works; • the details of the individuals or groups that are responsible for managing the work; • the contact details of the key personnel associated with the project (i.e. Project Manager, Site Superintendent, Project Engineer, Site Foreman, Key Contractors etc.); • the contact details of the key personnel within the port manager (i.e. Environmental Manager, Security Manager); Key environmental issues • commentary about the environmental areas or values that may be impacted by the construction work. • commentary about how different aspects of the work will be managed. These may include: erosion and sediment control; stormwater quality management; groundwater quality management; air quality

	management; noise management, contamination[8]; acid sulfate soils management; waste management; flora and fauna management; invasive species management; water conservation; and cultural heritage (European and/or Indigenous); Key management plans • for each issue that was identified to be of a high risk, a management plan must be prepared. The management plan must outline the potential environmental issue, objectives to achieve, management actions and controls to achieve objectives, timing of actions and controls, responsible persons, performance indicators, monitoring requirements, reporting and recording methods and corrective actions; and Site plan • a site plan for each significant stage of the project. The site plan must include: site boundaries; site entrance and egress locations; vehicle and equipment movement areas; site offices and amenities buildings; construction staff car parking; stormwater flow paths and discharge points; existing stormwater inlets and outlets; areas requiring dewatering and details of treatment and discharge points; location of sediment and erosion control devices; stockpile areas; material storage areas (including hazardous materials e.g. fuels), designated refuelling area; designated concrete washout area; waste receptacles (general, skip and recycling); location of spill kits, other environmental management features and other items of importance associated with the works; and **A1.2** All persons undertaking work on the site are given an induction and necessary training on the Construction Environmental Management Plan; and **A1.3** The development complies with the Construction Environmental Management Plan.
Operational Environmental Management Plan	
P2 All operations are undertaken in an environmentally responsible manner. All operations are managed to ensure they do not adversely impact the environment or any person, property or operation.	**A2.1** A site and issue specific Operational Environmental Management Plan (OEMP) containing the following information has been developed and is to the port manager's satisfaction. The CEMP shall adopt a risk-based approach to environmental management with key risks and appropriate management measures adequately identified: Overview • the address and real property description of the site;

[8] Development Proponents should consult the State's Contaminated Land Register and PFAS webpage when undertaking these investigations.

- the details of the individuals or groups that are responsible for managing the site;
- the contact details of the key personnel who manage the site;
- a description of the operations within and associated with the site. This discussion must be accompanied by a plan that illustrates: the site layout (i.e. infrastructure, vehicle movement areas, sizable equipment, buildings etc.); location and nature of any sensitive environments that could be impacted by the operation; locations of significant activity; any nearby and/or associated activities that are relevant to this operation.

Identification and assessment of emissions, contaminants and wastes

- the details of the actual and potential emissions, contaminants and wastes that area generated by the operation of the site. These details will include: description, quantity, regularity and concentration of the actual and potential emissions, contaminants and wastes; description and location of equipment and sources generating discharges (where equipment and sources are mobile, movement areas are to be identified); treatment, recycling and/or reprocessing of discharges either on or off site; and storage and/or disposal of such discharges on or off site.

Key management plans of emissions, contaminants and wastes

- for each emission, contaminant and waste that was identified as a high risk, a management plan must be prepared. The management plan must outline: the emission, contaminant or waste; the potential environmental issue; objectives to achieve; management actions and controls to achieve objectives; timing of actions and controls, responsible persons; performance indicators, monitoring requirements; reporting and recording methods; and corrective actions;

Site plan

- a site plan for each significant stage of the project. The site plan must include: site boundaries; site entrance and egress locations; environmentally sensitive areas within and around the site; vehicle and equipment movement areas; car parking; operational buildings, plant and equipment; other buildings within the site; stormwater infrastructure; stockpile areas; maintenance and servicing areas; material storage areas (including hazardous materials e.g. fuels); waste receptacles (general, skip and recycling), location of spill kits; other control devices and response equipment; and other items of importance associated with the operation; and

	A2.2 All persons working on the site are given an induction on the Operational Environmental Management Plan; and **A2.3** The Operational Environmental Management Plan is reviewed and updated when an operation within the site is changed; and **A2.4** The development complies with the Operational Environmental Management Plan.
Biodiversity	
P3 Development; • identifies potential adverse environmental impacts on matters of local, state or national environmental significance; • provides for the protection or enhancement of matters of local, state or national environmental significance; • locates in areas that avoid significant impacts on matters of local, state or national environmental significance. Where it is not possible to avoid impacts, development minimises impacts to the greatest extent possible; and • maintains or enhances ecological connectivity.	**A3.1** Development avoids adverse impact on areas of local, state or national environmental significance. OR **AO3.2** A report certified by an appropriately qualified person demonstrating to the satisfaction of the assessment manager, that the development site does not contain any matters of local, state or national environmental significance. OR **AO3.3** Development is located, designed and operated to mitigate significant impacts on the relevant environmental values. For example, a report certified by an appropriately qualified person demonstrating to the satisfaction of the assessment manager, how the proposed development mitigates impacts, including on water quality, hydrology and biological processes. **AO3.4** The design and layout of development minimises adverse impacts on areas of local, state or national environmental significance by: (a) focussing development in cleared areas or areas of least environmental value; (b) aligning new property boundaries to maintain areas of local, state or national environmental significance; (c) ensuring that alterations to natural landforms, hydrology and drainage patterns do not negatively impact on areas of local, state or national environmental significance; (d) ensuring that significant fauna habitat is protected in its environmental context; (e) incorporating measures that allow for the safe movement of fauna through the site. **AO3.4** Development retains and rehabilitates native vegetation in areas large enough to maintain ecological values, functions and processes.

4.3.2 Landscaping, Stormwater and Water Sensitive Urban Design Code

Purpose

The purpose of this code is to:

- ensure development complements the sensitive environments that surround BCPL;
- ensure that landscaping is functional and reflects the scale and intensity of the built environment on BCPL;
- ensure that landscaping is responsive to a subtropical environment, provides visual interest and enhances the amenity of development.
- ensure that the stormwater runoff originating from a development on BCPL protects the environmental values of the receiving environments and contributes to the achievement of water quality objectives for the Brisbane River Estuary (Enclosed Coastal / Lower Estuary Waters); and
- ensure stormwater is managed to ensure it does not adversely impact any person, property or operation.

Applicability

The Landscaping, Stormwater and Water Sensitive Urban Design Code applies to accepted – subject to requirements or Assessable Development for material change of use and operational work on BCPL.

Performance Outcomes	Acceptable Outcome
Landscaping	
P1 Landscaping comprises native plant species that are well suited to a subtropical environment, include drought tolerant species and enhance the visual amenity of the site and demonstrate compliance with the requirements of PBPL's Technical Standards. .	**A1.1** Selected plants provide visual interest through form, texture and colour; and **A1.2** Landscaping comprises only native plant species and incorporates a variety of trees, shrubs and appropriate ground covers; and **A1.3** The amenity of a development is enhanced through landscaping; and **A1.4** Where a street or a precinct has a specific character derived from existing vegetation, similar species are planted on site. If a street or a precinct does not have a specific character from the existing vegetation, drought tolerant, native species are planted; and **A1.5** Low water demand species are chosen as a priority to reduce the need for watering and ensure landscaping resilience during dry periods.
P2 Landscaping is provided on road-frontage boundaries and within car parking and staff breakout areas that is functional and enhances the streetscape and the built environment.	**A2.1** A variety of trees, shrubs and ground covers are provided on road-frontage boundaries and within car parking and staff break-out areas; and **A2.2** Where practical, within the car parking area, a minimum of one shade tree is provided for every six car parking spaces; and **A2.3** In areas where there is vehicular traffic, raised kerbs, wheel stops or bollards protect landscaped areas.

P3 Landscaped areas are capable of being maintained efficiently and effectively.	**A3.1** All landscaping receives adequate sunlight and is easily and safely accessible; and **A3.2** Where reasonable and cost effective a reticulated irrigation system is provided to landscaped areas (Reticulation systems should utilise recycled water only and not potable water); and **A3,3** Where practicable, stormwater runoff should be directed through landscaping to provide both an additional source of watering and to allow the landscaping to act as a means of stormwater management; and **A3.4** A site and issue specific Maintenance Schedule addressing the following has been prepared and is complied with: • watering of landscaped areas is undertaken/programmed for early morning or late afternoon; • if the base of the landscaped area is not dominated by shrubs or ground covers, garden beds are regularly re-mulched; • maintenance tasks such as mowing, weeding and pruning are undertaken regularly.
P4 The location and type of planting and species selection does not compromise the function and accessibility of services and facilities, including overhead and underground services.	**A4** The location type of planting and species selection does not compromise the function and accessibility of services and facilities, including overhead and underground services.
P5 Landscaping does not compromise the safe and efficient movement of vehicles or people.	**A5.1** Tree location and species selection accommodates vehicle and pedestrian sight lines; and **A5.2** Landscaping does not compromise the safe and efficient movement of vehicles or people.
Stormwater management	
P6 Stormwater is managed to: • protect the environmental values of the receiving environment and contribute to the achievement of water quality objectives for the Brisbane River estuary; • provide an acceptable level of flood immunity; and • not adversely impact any person, property or operation.	**A6** Stormwater is managed to: • protect the environmental values of the receiving environment by achieving the stormwater management design objectives in Table A (construction phase) and Table B (post construction phase); • provide an acceptable level of flood immunity; and • not adversely impact any person, property or operation.
P7 The development implements the principles of water sensitive urban design.	**A7** The development implements the principles of water sensitive urban design, including where practicable: • the infrastructure within the site treats stormwater to reduce the target pollutants (i.e. suspended solids, phosphorus, nitrogen, gross pollutants); • landscaping and the stormwater management infrastructure are integrated to reduce reliance on traditional stormwater management tools (i.e. pipes, open concrete drains). Such technologies may include

	but are not limited to bio-retention basins, swales and filter strips; • opportunities for water infiltration are maximised through the drainage of hardstand towards permeable surfaces including landscaping; • rainwater tanks are installed; and • the irrigation system uses recycled water or water that has been harvested on site.
P8 Stormwater should be managed to minimise the discharge of contaminants to receiving waters.	**A8.1** Demonstrate through modelling (MUSIC or otherwise) that proposed stormwater treatment methodologies reduce pollutant loads from the site in accordance with Table B. OR **A8.2** As an alternative (or as a negotiated combination of approaches), in accordance with the State Government Implementation Guidance for Off-site Urban Stormwater Management applicants can make a payment for offsite stormwater treatment. Note: Where this option is selected, the targets for gross pollutants onsite must still meet the requirements specified in part 4.0 of the Port of Brisbane Technical Standards.

Table A: Construction phase—stormwater management design objectives

Issue		Design objectives
Drainage control	Temporary drainage works	1. Design life and design storm for temporary drainage works: • Disturbed area open for <12 months—1 in 2-year ARI event • Disturbed area open for 12–24 months—1 in 5-year ARI event • Disturbed area open for > 24 months—1 in 10-year ARI event 2. Design capacity excludes minimum 150 mm freeboard 3. Temporary culvert crossing—minimum 1 in 1-year ARI hydraulic capacity
Erosion control	Erosion control measures	1. Minimise exposure of disturbed soils at any time 2. Divert water run-off from undisturbed areas around disturbed areas 3. Determine the erosion risk rating using local rainfall erosivity, rainfall depth, soil-loss rate or other acceptable methods 4. Implement erosion control methods corresponding to identified erosion risk rating
Sediment control	Sediment control measures Design storm for sediment control basins Sediment basin dewatering	1. Determine appropriate sediment control measures using: • potential soil loss rate, or • monthly erosivity, or • average monthly rainfall 2. Collect and drain stormwater from disturbed soils to sediment basin for design storm event: • design storm for sediment basin sizing is 80th% five-day event or similar 3. Site discharge during sediment basin dewatering: • TSS < 50 mg/L TSS, and • Turbidity not >10% receiving waters turbidity, and • • pH 6.5–8.5

Water quality	Litter and other waste, hydrocarbons and other contaminants	1. Avoid wind-blown litter; remove gross pollutants 2. Ensure there is no visible oil or grease sheen on released waters 3. Dispose of waste containing contaminants at authorised facilities
Waterway stability and flood flow management	Changes to the natural waterway hydraulics and hydrology	1. For peak flow for the 1-year and 100-year ARI event, use constructed sediment basins to attenuate the discharge rate of stormwater from the site

Table B: Post construction phase—stormwater management design objectives

Climatic region (Refer SPP Interactive Mapping System)	**Design objectives** Minimum reductions in mean annual load from unmitigated development (%)				**Application**
	Total suspended solids (TSS)	Total phosphorus (TP)	Total nitrogen (TN)	Gross pollutants >5 mm	Gross pollutants >5 mm
South East Queensland	80	60	45	90	Development for urban purposes within population centres greater than 3000 persons.
All	N/A	N/A	N/A	N/A	Excludes development that is less than 25% impervious. In lieu of modelling, the default bio-retention treatment area to comply with load reduction targets for all Queensland regions is 1.5% of the contributing catchment area.
	Waterway stability management • Limit the peak 1-year ARI event discharge within the receiving waterway to the pre-development peak 1-year ARI event discharge.				Catchments contributing to un-lined receiving waterway. For peak flow for the 1-year ARI event, use co-located storages to attenuate site discharge rate of stormwater.

* Note: Treatment levels for sediment, phosphorus and nitrogen do not apply if the offsite stormwater option is utilised.

4.3.3 Car Parking and Vehicle Movement Design Code

Purpose

The purpose of this code is to:

- ensure that the infrastructure to support vehicles is designed to be safe and efficient;
- ensure that development makes adequate provision for vehicular traffic;
- ensure that development does not adversely impacting the safe and efficient operation of the surrounding transport corridors.

Applicability

The Car Parking and Vehicle Movement Design Code applies to all accepted – subject to requirements or Assessable Development for material change of use or operational work on BCPL.

Performance Outcomes	Acceptable Outcome
Transport, traffic and access/egress	
P1 The site's entrance is accessible and legible.	**A1.1** Formal, constructed entries (including sealed crossovers and driveways) for vehicles are provided to the site; and **A1.2** All site entrances address and are visible and accessible from, the site's principal road alignment. Easily identifiable office facilities (where proposed), or clear directions thereto, are evident from the front of the site.
P2 The location of driveways does not prejudice the use of adjoining land.	**A2.1** Driveways are located within the property/lease boundary and the area between the street and the property/ lease boundary; or **A2.2** Driveways located in the area between the street and the adjacent property/lease boundary do not prejudice the use of adjoining land and agreement has been reached with the adjoining development proponent for the sharing of driveway / access arrangements.
P3 Site access meets operational, employee and customer needs.	**A3.1** Driveways and crossovers are provided according to the type and number of vehicles expected to access the site: • Vehicles larger than a van: - For crossovers to a minor road, entry and exit may be shared or divided; - For crossovers to a major road, entry and exit is divided; • 19m long semi-trailers or larger: in accordance with the relevant Standard Drawings contained in the Port of Brisbane Technical Standards; • Super B-Double and B-Double: in accordance with the relevant Standard Drawings contained in the Port of Brisbane Technical Standards; and **A3.2** For driveways used by 25m long semi-trailers or larger, a minimum separation distance from corner site

	boundaries is provided in accordance with Drawing No. 123431 (refer to Port of Brisbane Technical Standards); and **A3.3** For driveways used by Super B-Doubles, a minimum separation distance from corner site boundaries is provided in accordance with Drawing No. 123432 (refer to Port of Brisbane Technical Standards). The aforementioned drawings will be provided by PBPL as required.
P4 A driveway does not access Port Drive south of the Captain Bishop Bridge or Lucinda Drive south of Bishop Drive.	**A4** A driveway does not access Port Drive south of the Captain Bishop Bridge or Lucinda Drive south of Bishop Drive.
P5 The development does not adversely impact on the safe and efficient functioning of the existing traffic network.	**A5** If the development may adversely impact on the safe and efficient functioning of the existing traffic network, a Traffic management Plan demonstrating that adverse traffic impacts will be ameliorated is prepared to the satisfaction of the port manager and complied with.
P6 The design of vehicle access, circulation, manoeuvring and parking areas complies with relevant Australian Standards and is safe and efficient.	**A6.1** The design of vehicle access, circulation, manoeuvrings and parking areas complies with relevant Australian Standards and is depicted on an RPEQ certified access, circulation, manoeuvrings and parking plan illustrating the following details: • dimensions and loadings of all pavements and hardstand areas; • turning templates for largest turning circle of vehicles • accessing the site; • directional information showing vehicle movements/flows; • the dimensions and capacity of all car parking and heavy vehicle queuing areas; • access for service vehicles; • depths of, and materials used to construct, pavements; • all gradients of parking, access and circulation areas; • sight lines; and • height clearances; and **A6.2** Provision is made to ensure all vehicles: • entering a site do not queue across footpaths or onto • external roads; • are exclusively accommodated within the property and/or lease boundary; and **A6.3** On-site vehicle queuing capacity is designed to accommodate the busiest period in vehicle visitation (as opposed to an average daily, weekly or annual level of vehicle visitation); and (If required by the port manager, a traffic assessment report may need to be prepared by a suitably qualified consultant).

	A6.4 No off-site queuing/parking occurs at any time; and **A6.5** Access to a toilet is provided and accessible from on-site vehicle queuing areas (where relevant); and **A6.6** The design of the site ensures the refuse collection vehicle has a minimum vertical clearance of 4.5m to lift the rubbish bin(s).
Car parking	
P7 A front entry to a building is not obscured by access driveways and vehicle parking.	**A7** Access driveways and car parking do not exceed 90% of the visible frontage of the development as measured from the side lease/property boundaries of the site.
P8 Parking is provided on site to meet all operational, employee and customer needs.	**A8** Car parking complies with Table 4.3.3.1: Minimum number of on-site parking spaces required for development.

Table 4.3.3.1: Minimum number of on-site parking spaces required for development

Development	Minimum number of on-site car parking spaces
Freight Warehouse or Storage Facilities (including Container Parks)	5 car spaces per tenancy or lot + 1 car space per 200m^2 of GFA or 1 car space per 2000m^2 of site area (whichever is the highest)
Service Station/Truck Stop/Workshop/Repair Facilities	10 car spaces + 1 car space per 60m^2 of GFA
Industrial uses not listed above (not including within the terminal precincts)	2 car spaces per tenancy or lot + 1 car space per 200m^2 of GFA
Office	1 car space per 30m^2 of GFA
Retail uses	1 car space per 25m^2 of GFA
Other development (or where a specific and justifiable relaxation is sought by a development proponent in relation to the above).	As nominated by the port manager. The port manager may require a traffic assessment report to demonstrate the development's ability to accommodate vehicle visitation during the busiest period.

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Part 5
Contributions Schedule

Brisbane Port Land Use Plan 2020

Purpose

This part of the LUP sets out a schedule of charges under which a contribution may be required by a condition imposed under section 283ZZ TIA on a development approval for the following infrastructure provided by the BCC or a service provider:

(a) drainage

(b) public transport

(c) roads

(d) sewerage and water supply headworks.

Applicability

The Contributions Schedule applies to assessable material change of use on BCPL under this LUP.

Infrastructure contributions are to be determined in accordance with this schedule on the basis of the relevance of the infrastructure to the actual proposed development to which the approval relates.

This schedule does not affect the conditions that may be imposed by a concurrence / referral agency under the TIA or the entry into of an infrastructure agreement.

Infrastructure network	
Drainage	Contributions for drainage infrastructure are not required for development on BCPL.
Public transport	Contributions for public transport infrastructure are not required for development on BCPL.
Roads	Bulwer Island Roads contributions for assessable material change of use on Bulwer Island are to be calculated in accordance with the relevant BCC planning scheme policy applying at the date the development application is made and/or in accordance with specific provisions negotiated between PBPL and BCC. In the event the relevant planning scheme policy ceases to have effect under the *Planning Act*, roads contributions are to be calculated in accordance with the version of the planning scheme policy applying immediately before it ceased to have effect, but as varied by the above specific port development unit of demand rates / provisions negotiated between BCC and PBPL.
	All other BCPL Contributions for roads infrastructure are not required.
Sewerage headworks	Fisherman Islands and Port Gate Sewerage headworks contributions for development on Fisherman Islands and Port Gate, including any land to be reclaimed, are governed by the terms of the agreement with BCC dated 31 August 2007. *Note: The unit of demand rates for existing or future reclaimed land on Fisherman Islands is intended to apply only in relation to water supply headworks (and not to sewerage headworks which are governed solely by the 31 August 2007 agreement).* Sewerage headworks contributions for assessable material change of use on BCPL are limited to and are to be calculated in accordance with the following clauses: For development on BCPL, sewerage headworks contributions may be required only in respect of assessable material change of use developments. Sewerage headworks contributions are to be calculated in accordance with the *Brisbane Infrastructure Charges Resolution (No.8) 2019* that commenced from the 1 July 2019. The

	sewerage headworks contributions will apply at the date the development application is made and will vary dependant on which BCPL precinct the development falls within. In the event the *Brisbane Infrastructure Charges Resolution (No.8) 2019* ceases to have effect under the *Planning Act* or the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*, sewerage headworks contributions are to be calculated in accordance with the version of the *Brisbane Infrastructure Charges Resolution (No.8) 2019* applying immediately before it ceased to have effect, and the demand rates of the BCPL the development falls within.
Water supply headworks	Water supply headworks contributions for assessable material change of use on BCPL are limited to and are to be calculated in accordance with the following clauses: • For development on BCPL, water supply headworks contributions may be required only in respect of assessable material change of use developments as defined under the LUP. • Water supply headworks contributions are to be calculated in accordance with the BCC Water Supply Infrastructure Contributions Planning Scheme Policy applying at the date the development application is made, but subject to/as varied by the demand rates of the BCPL the development falls within. In the event the Water Supply Infrastructure Contributions Planning Scheme Policy ceases to have effect under the *Planning Act* or the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*, water supply headworks contributions are to be calculated in accordance with the version of the Water Supply Infrastructure Contributions Planning Scheme Policy applying immediately before it ceased to have effect, but as varied by the demand rates that are determined by UU.

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Part 6
Priority Infrastructure Interface Plan

Brisbane Port Land Use Plan 2020

6.1 Background

Under the *Transport Infrastructure Act 1994* (TIA), PBPL has obligations related to land use planning on port land and interaction with Brisbane City Council (BCC) and Urban Utilities (UU) to achieve consistency in the planning of various infrastructure serving the port.

TIA requires the preparation of a Priority Infrastructure Interface Plan (PIIP) to consider the specific interactions between the LUP and BCC's Local Government Infrastructure Plan (LGIP) that embody the requirements of BCC and UU. Specific utility services that require consideration in the PIIP as per the TIA include, water, sewerage, stormwater and roads.

Although not part of BCC's LGIP, the PIIP also considers public transport, community infrastructure, electricity and telecommunications services to the port. Rail infrastructure interface, while integral to the port's future development and efficiency, is already addressed in the 'Strategic Plan' elements of the LUP and will continue to be discussed with relevant government and industry stakeholders.

Having previously acknowledged these requirements, PBPL has engaged with BCC, UU, the Department of Transport and Main Roads (DTMR), Energex and the Regional Harbour Master (Maritime Safety Queensland), to develop a PIIP, that considers the specific interactions between the LUP, and the Priority Infrastructure Plans (PIP) which are key mechanisms for delivering the capital investment plans of BCC and various utility providers serving (directly or indirectly) the developments within the designated core port lands.

6.2 Scope and Objectives

The PIIP describes how planned developments under the LUP correspond with the LGIP established by BCC and other utility providers to service Brisbane's core port lands. The PIIP is supported by a technical document which incorporates:

a. A summary of initiatives and contributions made by PBPL towards the improvement of service infrastructures in around the core port lands since the previous PIIP was completed in 2015/16, including but not limited to:

- Construction of the final stage of the Port of Brisbane Motorway, linking Fisherman Islands to the Port of Brisbane Motorway (including the upgrading of Port Drive and the connection of Tanker Street to Osprey Drive as part of Port Gate) in accordance with the PBPL's Road Franchise Agreement with DTMR. These works were completed in December 2018;
- Upgrades to PBPL's private road network (e.g. the duplication of the Lucinda Drive overpass off Port Drive, the upgrading of the Bulk Terminals Drive round-about, the further development of Curlew Street, Peregrine and Lucinda Drives (Fisherman Islands), the extension of Radar Street (Port West) and the upgrading of Farrer Street (Port North). These projects were all carried out between 2015-2019;
- Ongoing provisions, operations and maintenance of Port Drive and internal road networks within port precincts;
- Activation of additional electrical services capacity at Fisherman Islands;
- Ongoing provision, operations and maintenance of Port Drive and internal road networks within port precincts;
- Ongoing provision, operation and maintenance of internal water supply and sewerage reticulation systems within the Fisherman Islands, Port Gate and Port West precincts;
- Ongoing provision, operations and maintenance of communications network, including the broadband internet connection service PortNET; and

- A Joint Funding Agreement with BCC for an agreed $10 million ($5 million from PBPL) to upgrade essential sections of road networks (i.e. Brownlee Street, Main Beach Road and Marine Road to support the Brisbane International Cruise Terminal (BICT). These works are underway and will be completed in 2020, in conjunction with the BICT's completion).

b. A review of BCC's LGIP and its priorities for infrastructure provision in port areas and their immediate surrounds, particularly those relating to the following utility services:
   - Water supply
   - Sewerage
   - Roads
   - Stormwater drainage
   - Land for community purposes

c. PBPL's strategic infrastructure development and funding priorities and sequencing to effectively interface with BCC and other stakeholders' infrastructure delivery programs.

d. Compare BCC's PIP and utility providers' future infrastructure planning with the PBPL priorities for development so as to establish where respective infrastructure priorities are matched/ mismatched, and where gaps exist for future negotiation.

e. Document consultation/negotiations between BCC, UU and the relevant agencies to satisfy the requirements of TIA Section 283X.

6.3 PIIP

In accordance with the *Transport Infrastructure Act 1994* (TIA), Port of Brisbane Pty Ltd (PBPL) has compiled a Priority Infrastructure Interface Plan (PIIP) to consider the specific interactions between the Brisbane Port Land Use Plan (LUP) 2020 and the Brisbane City Council Local Government Infrastructure Plan (LGIP) that represents projects for stormwater, transport, parks and land for community from 2016-2026 and various utility providers serving (directly or indirectly) the developments within the designated core port lands.

Services reviewed in the PIIP study include:

- Water supply
- Sewerage
- Roads
- Rail
- Maritime services
- Stormwater drainage
- Power supply

While the TIA requirements for the PIIP do not specifically include a requirement to address rail interface, the port's LUP addresses this dimension of PBPL's future freight task in detail. PBPL has identified an increased modal share for rail transport, and the role of its 'Brisbane Multimodal Terminal' (BMT), as integral elements a logistics/supply chain strategy aimed at optimising port efficiency and liveability within South East Queensland. In this regard, ongoing discussions about the planning and development of freight rail infrastructure and services benefiting the port and its hinterland are ongoing between PBPL, various local government authorities, Queensland Rail Ltd, Aurizon, the Australian Rail Track Corporation, the State and Federal Government and related stakeholders.

PBPL has made significant capital investments towards the development and maintenance of port facilities and infrastructure intended to support port operations. PBPL's contributions include funding, provision and/or direct development of various infrastructure services.

The below shows the coordination of infrastructure works between PBPL, BCC and other relevant infrastructure stakeholders to ensure that planning for port services progresses smoothly.

Table 6.1 – PIIP

Infrastructure Element	External Stakeholder	PIIP Integration
Land Use Planning	Brisbane City Council	BCC's *City Plan 2014* is generally consistent with PBPL's planning initiatives (both land use and development timing) as summarised in its government approved LUP. Port West is a designated zone for industrial development. While PBPL's current development plans do not identify the provision of park land, Port West will continue to develop with the incorporation of adequate amenities for local workers (including a riparian corridor setback of a minimum 20 metres off the river (HAT) as per BCC's requirements under their Waterway Corridor Overlays in the *City Plan 2014*) that will not compromise the industrial primacy of the site. This approach is consistent with PBPL's general development strategy that has led to approximately 35% of core port lands being designated for as Open Space, Conservation/Buffer or Buffer/Investigation uses. This is an internationally unique 'green space' provision for a port. PBPL's proposed inclusion of additional areas that may become BCPL ((BCPL) - e.g. wet and dry areas at Luggage point identified for additional "Wharves" and "Terminals (Bulk, General Purpose and additional areas at the approach to Fisherman Islands)" will also be the subject of specific, future discussions with BCC, DTMR, UU and others regarding the provision of appropriate road, water, sewer, stormwater and electrical services connectivity and capacity. Where necessary, the future inclusion of additional BCPL in the LUP and/or changes in transport / supply-chain infrastructure servicing the port may also prompt a review and updating of this PIIP.
Water Supply	Urban Utilities	PBPL functions as the Water Service Provider for its developments. PBPL is responsible for provision, operation and maintenance of water supply reticulation networks within Fisherman Islands, Port Gate and Port West. Water is supplied to port lands from UU's broader water supply networks, particularly the Wellers Hill and Bartleys Hill water supply areas. A review of the UU's current infrastructure planning indicates that the planning criteria adopted by UU are generally higher than the historical water demands of existing port customers. It is expected that future developments within the port will be of similar nature to existing developments and consequently its water demands will be similar. Based on the PIIP review, existing and future infrastructure proposed by UU are consistent with the provisions of the PBPL Land Use Plan. With the planned 30% increase in port footprint by 2048, UU's infrastructure strategy is considered adequate to service the future water demands on port lands. None of the planned works identified in UU's current capital investment programme is directly attributed to demand growth within port lands. Notwithstanding this, the possible implications of higher than expected future peak instantaneous flow requirements on network planning needs to be continually monitored and confirmed. PBPL is also exploring potential pressure reduction initiatives in line with its system leakage management approach. The implication of this proposed

		change to supply pressures on fire flow availability needs to be confirmed and coordinated in due course. UU and PBPL are yet to establish formal interface points between their water supply networks. Whilst these points are generally recognisable based on the current water supply arrangements, UU and PBPL are currently in negotiations to formalise these terms and implications for the sharing of asset ownership and maintenance requirements.
Sewerage	Urban Utilities	Similar to water supply, PBPL is responsible for the provision of sewerage services to its developments except in the Port North precinct. PBPL is responsible for the provision, operation and maintenance of the internal reticulation networks within Fisherman Islands, Port Gate and, once fully developed, Port West. Sewage flows from port lands are discharged to UU's broader sewerage network for treatment at Luggage Point STP. UU has not updated the sewerage infrastructure planning for the Australia Trade Coast (ATC) area since 2005. The ATC includes the areas of BCPL. In lieu of reviewing an infrastructure plan, a comparison of UU's current planning and design criteria was instead conducted as part of the PIIP study. The review indicates that actual sewage generation in existing port developments is lower than the criteria used by UU to plan its capital works. Based on the PIIP review, existing and future infrastructure developments proposed by UU are consistent with the provisions of the PBPL Land Use Plan. UU and PBPL are yet to establish formal ownership interface points between their sewerage networks. Whilst these points are generally recognisable based on the current sewerage arrangements, UU and PBPL are currently in negotiations to formalise these terms and implications for the sharing of asset ownership and maintenance requirements. Of particular interest to these negotiations is the determination of SP206 ownership.
Roads	Department of Transport and Main Roads Brisbane City Council	With 97.5% of its cargo trade being handled by trucking, PBPL recognises the significance of adequate and well-maintained road networks to its operations. PBPL has historically initiated and/or contributed to the planning, funding, construction and maintenance of key road infrastructures that connect and service the port precincts and its surrounding neighbourhoods. Some of PBPL's notable previous initiatives involving roads that immediately service port lands include: • Construction of the final stage of the Port of Brisbane Motorway, linking Fisherman Islands to the Port of Brisbane Motorway (includes the connection of Tanker Street to Osprey Drive as part of Port Gate) in accordance with the PBPL's Road Franchise Agreement with DTMR; • Upgrades to PBPL's private road network (e.g. the duplication of the Lucinda Drive Overpass off Port Drive, the further development of Peregrine and Lucinda Drives (Fisherman Islands), the extension of Radar Street (Port West) and the upgrading of Farrer Street (Port North);

		• Upgrading and duplication of Captain Bishop Bridge; and • The augmentation of the cycle path network near Port Gate The recent completion of the PoBM upgrade ensures that the existing road network directly servicing the Fisherman Islands and Port Gate precincts are adequate to service PBPL's targeted container trade growth to 2048. This is particularly critical since 66% of the port's cargo trade (containers) is moved within Brisbane and its adjacent regions. Given its regional importance as a freight route, the PoBM's efficiency and safety will continue to be monitored in partnership with DTMR (noting that recent incidents of traffic congestion exiting the PoBM (south onto the Gateway Motorway) have been raised with DTMR for review and the consideration of remedial options as necessity dictates. The development of Port North and other areas nominated for future inclusion as BCPL will be the subject of site and issue-specific infrastructure provision discussions as needs, design detail and development priorities warrant. It is expected that the significant cargo trade growth targeted by PBPL will continue to put pressure on South-East Queensland's broader road network used for freight transport. Notwithstanding, the completed and planned road infrastructure works, holistic planning on freight movement encompassing roads, rails and logistic chain needs (to, from and beyond the port) should be coordinated with relevant state and local government stakeholders to determine more concrete infrastructure plans to support the growing port trade. The port's interface with rail infrastructure, while not an element referenced in TIA's requirements for the PIIP, is addressed in Section 1.4.5.1 of the LUP.
Rail	Australian Rail and Track Corporation Queensland Rail	PBPL is of the view that in keeping with global transport trends, SEQ must plan for a changed modal split for its long-term, landside logistics function. Currently, around 2.5% of container trade through the port is handled on rail; the projected increase in population and therefore growth in container trade will lead to a sixfold increase in the number of trucks on the road by 2050. In 2019, Deloitte Access Economics completed a report on the potential for a freight rail link from Acacia Ridge to the Port of Brisbane. The report identified significant economic, social and environmental benefits of having a freight rail link to the port. Also, in 2019 the SEQ City Deal Proposition was published. One of two "transformational opportunities" for infrastructure was to "Supercharge an SEQ Trade and Enterprise Spine between the Toowoomba Trade Gateway and the Australia TradeCoast by connecting Inland Rail to the Port of Brisbane and unlocking new jobs in the south-west and western growth areas." Queensland Rail is currently undertaking lowering works to tunnel floors at 11 tunnels on the Toowoomba Range and the Little Liverpool Range to allow 9'6" (2.9 m) high cube containers to pass. The project will ensure rail is a more viable and attractive option for industries to deliver goods to the Port of Brisbane for export.

Maritime Services	Maritime Safety Queensland	PBPL has obligations under its 99-year head lease to maintain the channel and berth depths at the port. PBPL is also obliged to provide certain information, in particular in relation to channel depths, to enable depths to be declared to MSQ – the Regional Harbour Master. The channels, reaches and berths are developed, monitored and maintained by PBPL's fleet of dredgers and hydrographic surveyors. Maritime Safety Queensland (MSQ) is a branch of the Department of Transport and Main Roads and is the safety regulator for Queensland waterways. Brisbane is Queensland's largest general cargo port and one of the fastest growing multi-cargo ports in Australia. There are over 2500 vessel visits annually. Presently, the following assets are owned and maintained by PBPL: • 9 dedicated container berths and 4 berths for general cargo and motor vehicles at Fisherman Islands; • Port North Common User Berth, Pinkenba; • Caltex Crude Oil Wharf, Fisherman Islands; • Caltex Products Wharf, Port Gate; • Coal Wharf, Fisherman Islands; • General Purpose Wharf, Fisherman Islands; • 90 kms of shipping channels; • 2 Dredgers; • 1 Bed Leveller Unit; • Swing basin at Fisherman Islands (not owned by PBPL); and • Swing basin adjacent to Berths 10 and 11 (not owned by PBPL) From October 2020 there will be a large shift in the movement of cruise ship arrivals and departures to Brisbane with the completion of the Brisbane International Cruise Terminal (BICT) at Pinkenba. There will be a reduced need for larger cruise ships to travel downstream upstream to the Portside Wharf at Hamilton. A significant portion of this growing tourist market will berth at the new BICT (noting there will be 190 cruise calls to BICT in its first 12 months of operation. PBPL has been working alongside MSQ, landowners, the State Government and the cruise operators to ensure a smooth transition to this new facility operating from October 2020.
Stormwater	Brisbane City Council	Provisions made by PBPL in its developments for stormwater infrastructure are consistent with BCC's general approach to stormwater management planning and design, specifically: • Underground drainage system designed for a minimum capacity of 10-year ARI rainfall event; • All major roads are designed to remain trafficable during a 30-year ARI rainfall event; and • Overland flow paths are provided for the conveyance of flows in excess of the capacity of the underground drainage system. These flow paths are typically designed for a 100-year ARI rainfall event. As port lands are downstream of, or isolated from, BCC land, development of port lands does not rely on the provision of trunk stormwater drainage infrastructure by BCC. Port West and Port Gate precincts contain significant drainage channels that drain upstream land. These channels, while not mapped as trunk

		infrastructure on BCC's current LGIP, perform drainage and flood management functions that must be maintained. Future development of port lands (including any potential modification or realignment of drainage channels) must comply with applicable design guidelines relating to flood immunity and drainage design. Development of port lands should avoid or mitigate any potential adverse impacts of flooding and drainage of surrounding land. Potential adverse impacts include, but are not limited to, increases to flood levels, depths or velocities across a range of flood magnitudes. Outside of BCC's approach to stormwater, PBPL provides an alternative stormwater treatment solution for its tenants and as part of its own projects.
Power Supply	Energex	The electricity infrastructure supplying the Port of Brisbane has been designed with future expansion in mind, including: • Sufficient capacity in the transmission network; • An established and operationally designed 110kV voltage with the 'downstream' connection to the Port Drive Zone substation remaining at 33kV. The site is not presently energised to 110kV. The ultimate expansion of this system to 110kV will be managed by Energex as demand requires; • The establishment of a second Zone Substation (33-11kV) at the northern end of Fisherman Islands. This substation will be supplied from the future 110-33kV Bulk Supply Substation on Lucinda Drive via an underground 33kV feeder along Lucinda and Peregrine Drives; and • An expanded network of 11kV underground lines will radiate from this substation with appropriate connectivity into the existing 11kV network supplied from the Port Drive Zone Substation. This improvement is expected to be developed in line with demand for power and likely to be within the next 30 years. It is therefore concluded that adequate electricity network planning is in place to cater for a range of customer load developments for the Port of Brisbane. PBPL will also continue to explore opportunities to generate and use renewable energy at the port (in accordance with its lease, Energex and State requirements).

6.4 Conclusions

The PIIP discusses the infrastructure interface and interactions between the LUP and BCC's LGIP that embody the requirements of BCC and UU. Supporting information for the PIIP is provided in a technical document available on the Port of Brisbane Limited website that provides:

- a detailed account of the present infrastructure provisions to and within the port and the interface between PBPL and infrastructure agencies in the linkage of such services;
- a robust assessment of the port's growth projections and how same will be accommodated in terms of infrastructure provision by PBPL and 'external' infrastructure providers;
- an analysis of the port's future infrastructure demands against the forward supply planning of external' infrastructure providers; including the identification of any notable 'gaps' in future infrastructure provision; and

- a platform for future discussions/interface between PBPL, BCC, UU, DTMR, Energex and MSQ with regard to the continuation of sustainable infrastructure provisions to the port.

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Part 7
Appendices

Brisbane Port Land Use Plan 2020

Appendix 1 — Brisbane Core Port Land

Appendix 2 — Use Definitions

Appendix 3 — Administrative Definition

Appendix 4 — Maps

Appendix 1 – Brisbane Core Port Land

RPD	Area (ha)	Present precinct / Use	Future Use
Precinct: Fisherman Islands			
86/SP108337	7.969	Terminals (Bulk, General Purpose), Wharves / Loading / Unloading Facilities, Transport Infrastructure, Port Infrastructure including Bund Wall	Refer to LUP 2020
87/SP108337	0.2746	Terminals (Bulk, General Purpose), Wharves / Loading / Unloading Facilities, Transport Infrastructure, Port Infrastructure including Bund Wall	Refer to LUP 2020
92/SP108337	0.4488	Wharves / Loading / Unloading Facilities, Transport Infrastructure, Port Infrastructure including Bund Wall	Refer to LUP 2020
99/SP238079	555	Port Operations (Various)*, Transport Infrastructure, Port Central, Open Space, Port Infrastructure including Bund Wall	Refer to LUP 2020
84/SP108337	68.15	Conservation/Buffer, Open Space	Refer to LUP 2020
85/SP108337	83.65	Conservation / Buffer, Port Infrastructure, Pipeline	Refer to LUP 2020
88/SP108337	37.6	Wharves / Loading / Unloading Facilities, Port Infrastructure including Bund Wall	Refer to LUP 2020
91/SP108337	1.543	Port Infrastructure including Bund Wall, Service Road	Refer to LUP 2020
95/SP205694	0.0959	Port Infrastructure including Bund Wall, Service Road	Refer to LUP 2020
98/SP236540	269.5	Port Operations (Various)*, Dredge Rehandling including Reclamation Area	Refer to LUP 2020
Precinct: Port Gate			
3/RP158603	0.577	Transport Infrastructure	Refer to LUP 2020
390/SL8909	2.438	Conservation/Buffer#	Reserve
5/RP166975	2.7257	Conservation/Buffer	Refer to LUP 2020
546/SL8909	0.7576	Conservation/Buffer#	Reserve
7/RP836135	5.404	Conservation/Buffer	Refer to LUP 2020
701/SP118642	2.619	Transport Infrastructure (including Boat Ramp, Car Park Infrastructure), Open Space	Refer to LUP 2020

732/SP142208	82.66	Port Operations (Various)*, Commercial Uses and Ancillary Services, Transport Infrastructure	Refer to LUP 2020
733/SP142208	3.66	Transport Infrastructure, Open Space	Refer to LUP 2020
734/SP142208	0.2217	Transport Infrastructure, Open Space	Refer to LUP 2020
737/SP185434	1.644	Transport Infrastructure, Open Space	Refer to LUP 2020
739/SP185434	0.1734	Infrastructure including Utilities, Drainage, Wastewater Outfall Pipe#	Reserve
751/SP239472	0.5925	Open Space, Transport Infrastructure, Buffer/Investigation	Reserve
753/SP282377	1.042	Transport Infrastructure, Open Space	Refer to LUP 2020
690/CP867995	1.89	Wharves / Loading / Unloading Facilities	Refer to LUP 2020
699/SP118642	2.127	Conservation/Buffer	Refer to LUP 2020
730/SP142207	39.95	Port Operations and Support Services - Area 2, Buffer / Investigation	Refer to LUP 2020
736/SP185434	324.5	Conservation/Buffer	Refer to LUP 2020
750/SP239472	125.1	Buffer/Investigation, Open Space, Transport Infrastructure	Refer to LUP 2020
Precinct: Port West			
486/SL5990	28.202	Port Industry, Transport Infrastructure, Port Infrastructure including Drainage, Pipeline	Refer to LUP 2020
518/SL6387	0.9333	Port Industry, Port Infrastructure including Drainage	Refer to LUP 2020
720/SP110610	1.361	Conservation / Buffer, Infrastructure including Drainage, Utilities and Pipeline	Refer to LUP 2020
759/SP301776	58.7396	Port Industry, Transport Infrastructure, Port Infrastructure including Drainage	Refer to LUP 2020
713/SP110608	2.037	Conservation / Buffer, Port Infrastructure including Drainage	Refer to LUP 2020
714/SP110608	11.81	Conservation / Buffer, Port Infrastructure including Drainage	Refer to LUP 2020
716/SP110610	2.211	Conservation / Buffer, Port Infrastructure including Drainage	Refer to LUP 2020
718/SP110610	3.325	Port Industry, Port Infrastructure including Drainage	Refer to LUP 2020
743/SP236496	6.635	Port Industry, Wharves / Loading / Unloading Facilities	Refer to LUP 2020

750/SP257084	0.3829	Port Industry, Port Infrastructure including Drainage	Refer to LUP 2020
752/SP275610	2.86	Port Infrastructure, Pipeline	Refer to LUP 2020
Precinct: Port North			
1102/SL10945	5.894	Special Industry	Refer to LUP 2020
1128/SL9395	7.789	Special Industry	Refer to LUP 2020
1160/SL10945	4.97	Special Industry	Refer to LUP 2020
1216/SP172749	2.104	Special Industry	Refer to LUP 2020
1229/SP186548	6.118	Special Industry	Refer to LUP 2020
1171/SP172732	4.7156	Terminals (Bulk, General Purpose)	Refer to LUP 2020
1172/SP172732	0.0857	Terminals (Bulk, General Purpose), Infrastructure including Drain	Refer to LUP 2020
1173/SP172732	0.0713	Terminals (Bulk, General Purpose), Infrastructure including Drain	Refer to LUP 2020
1164/SL6544	0.0855	Terminals (Bulk, General Purpose), Infrastructure including Access Road	Refer to LUP 2020
1258/SP235548	23.19	Special Industry	Refer to LUP 2020
1259/SP235549	0.4553	Special Industry	Refer to LUP 2020
1260/SP235549	3.823	Special Industry	Refer to LUP 2020
1261/SP235549	2.614	Special Industry	Refer to LUP 2020
1/SP299911	14.22	Terminals (Bulk, General Purpose) - Cruise	Refer to LUP 2020
3/SP299911	2.114	Terminals (Bulk, General Purpose), Open Space / Buffer[#]	Reserve
1169/SP119924	0.1959	Balance Port Land - Wharves / Loading / Unloading Facilities	Refer to LUP 2020
1192/SP153114	0.1334	Balance Port Land - Wharves / Loading / Unloading Facilities	Refer to LUP 2020
1220/CP903460	2.728	Wharves / Loading / Unloading Facilities	Refer to LUP 2020
1225/SP110604	3.299	Wharves / Loading / Unloading Facilities	Refer to LUP 2020
1226/SP120289	4.46	Wharves / Loading / Unloading Facilities	Refer to LUP 2020
1174/SP172732	3.524	Wharves / Loading / Unloading Facilities	Refer to LUP 2020
1219/SP172732	0.2852	Port Infrastructure including Pipeline	Refer to LUP 2020
1248/SP210101	0.7432	Wharves / Loading / Unloading Facilities	Refer to LUP 2020

1262/SP235549	0.9362	Wharves / Loading / Unloading Facilities	Refer to LUP 2020
1264/SP235550	3.168	Wharves / Loading / Unloading Facilities	Refer to LUP 2020
999/SP234003	0.3784	Port Infrastructure including Pipeline	Refer to LUP 2020
1270/SP256895	1.024	Wharves / Loading / Unloading Facilities	Refer to LUP 2020
1271/SP256895	0.0411	Wharves / Loading / Unloading Facilities[1]	Will become 1275/SP312617
1272/SP256895	1.605	Port Infrastructure, Pipeline	Refer to LUP 2020
1273/SP278679	19.74	Conservation / Buffer	Refer to LUP 2020
2/SP299911	6.434	Wharves / Loading / Unloading Facilities - Cruise	Refer to LUP 2020
1275/SP312617		Wharves / Loading / Unloading Facilities[1]	Will replace 1271/SP256895
Precinct: Colmslie			
4/RP863808	0.0238	Balance Port Land / Transport Infrastructure, Infrastructure.	Refer to LUP 2020
991/SP188998	0.3242	Balance Port Land / Transport Infrastructure, Infrastructure.	Refer to LUP 2020
206/SP234085	0.4356	Balance Port Land / Transport Infrastructure, Infrastructure.	Refer to LUP 2020
207/SP234085	1.521	Balance Port Land / Transport Infrastructure, Infrastructure.	Refer to LUP 2020
208/SP234085	0.5586	Balance Port Land / Transport Infrastructure, Infrastructure.	Refer to LUP 2020
209/SP234085	0.8105	Balance Port Land / Transport Infrastructure, Infrastructure.	Refer to LUP 2020
995/SP184575	1.9	Balance Port Land / Transport Infrastructure, Infrastructure.	Refer to LUP 2020
Total land 1873.3285 (1867.7548 Excluding Colmslie)		* denotes a variety of the Port Industry Precincts defined in the LUP # denotes a Reserve [1] note well: Lot 1275 will replace Lot 1271	

Appendix 2 – Use Definitions

User note: Use definitions are categorised under parts headed 'core port infrastructure', 'port-related development', 'port-prohibited development' and 'other development'. Users should check all parts when searching for a definition.

Part 1: Core port infrastructure

- **Ancillary offices for core port infrastructure** means premises used for an administrative, secretarial or management service that is directly associated with the operation of the core port infrastructure.
- **Berths** means an area or structure used to accommodate or moor vessels.
- **Bulk loading, unloading and storage facilities** means any premises or infrastructure used for the loading and unloading, stockpiling, storage, packaging, containerisation and/or distribution of goods in bulk.
- **Communications or telecommunications facilities** means any premises or infrastructure (either above or below ground) used for the purpose of facilitating communications.
- **Conveyors and pipelines** means conveyors, pipelines and associated infrastructure used to transfer material or goods via a pipeline or conveyor.
- **Customs, immigration and quarantine facilities**, including facilities for under bond storage and housing of animals, means premises or infrastructure used as part of monitoring or inspecting work of commonwealth agencies to ensure safe and lawful port operations.
- **Defence facilities** means premises or infrastructure used to provide protection or surveillance by the Australian Defence Force, its sanctioned partners and/or its appointed contractors (excluding 'stand-alone' offices used by such agencies).
- **Emergency response systems / equipment** means facilities and infrastructure required to safely and efficiently enable emergency incident responses (e.g. firefighting systems, sprinkler systems, emergency vehicle access / parking, emergency lighting etc.)
- **Emergency service facilities** including, for example, a base for water police, means premises or infrastructure used by emergency services agencies.
- **Facilities for handling dredged material** means premises or infrastructure used to handle, manage or treat dredged material (or material which has not been dredged but is part of land preparation activities). The handling, management or treatment of material includes pre-loading, surcharging, storage, sale, transportation, transitional movements of sand, mud and other quarry material and any supporting infrastructure (e.g. pipelines, gantries, booster units, conduits, worker amenities etc).
- **Freight warehouse or depot** means premises used to receive, store, or distribute goods, if at least 75% of the goods are, in each year, transported by ship through the Port of Brisbane.
- **Manufacturing facility** relates to any industrial or commercial premises involved in the manufacturing, assembly, engineering and/or production of goods imported or for export through the port. Such uses are distinct from Processing Activities which involve more intense physical / chemical processes and generally have a higher potential for environmental and/or safety impacts.
- **Maritime infrastructure** includes any infrastructure required for marine-based activities accommodated by the port (e.g. boat ramps, gantries, bollards, railings etc.).
- **Monitoring facilities** including, for example, a facility to monitor air quality, weather or tides, means premises or infrastructure that is used to investigate or monitor activities that influence the current or future operations of the port.
- **Port terminal facilities** means:
  - premises used for handling shipping freight or dealing with a ship's passengers
  - port terminal facility includes facilities within a building that are used to provide goods and services, including, for example, services / retail functions to a ship's passengers. Examples include:

    - arts and craft stores, bookstores, gift or souvenir stores, news agencies, pharmacies and toy stores
    - tourism or accommodation booking offices.

- **Roads, driveways, flyovers and other accesses** mean premises or infrastructure that facilitates the safe and efficient movement of vehicles to, from and around the port.
- **Security facilities** mean premises or infrastructure that is used to provide protection to the port and its operations.
- **Ship building facilities and dry docks** means premises or infrastructure that is used to build, repair, maintain or upgrade any maritime structure or vessel.
- **Signage (other than advertising billboards)** refers to directional, interpretative and site (PBPL) branding signage that is intended to direct, inform and improve the legibility of the Brisbane port area. For example, for identification or directional purposes.
- **Storage yards** means an open area that is used to store materials or goods that have been imported or will be exported.
- **Transport and equipment depot** means premises used to garage, store or maintain vehicles and equipment, including, for example, trucks and earthmoving equipment.
- **Transport infrastructure** includes:
    - air, busway, light rail, miscellaneous, public marine, rail or road transport infrastructure
    - transport infrastructure relating to ports (including maritime infrastructure, rail infrastructure, road infrastructure and vehicle parking / marshalling areas).
- **Utilities for water supply, sewerage, drainage, waste storage and collection, electricity supply and transmission** means utilities that facilitate the needs of the port and its tenants.
- **Vehicle parking facilities** means premises or infrastructure for the parking of vehicles where the activity is not ancillary to another use.
- **Weighbridges** means premises or infrastructure used to weigh vehicles and their contents.
- **Wharves and associated structures** include hydraulic structures, structures used for shipping purposes, cranes, lighting and un/loading equipment and wharf protection devices used for the docking, servicing and un/loading of vessels.

Part 2: Port-related development

- **Food and drink outlet** means premises used for preparing and selling food or drink to the public, on a regular basis, for consumption on or off the premises.
- **Fuel storage facility** means any facility used for the storage and dispensing of fuel for vehicles, vessels and/or lifting equipment used for approved port purposes. Such facilities are distinct from a service station and do not involve the sale of fuel, or the provision of broader service station offerings (e.g. retail / mechanical services etc.) to third parties.
- **Fumigation facility** means any facility used to fumigate / treat goods, vehicles, equipment, containers etc at the port.
- **Medical centre** means premises:
    - used for medical or surgical care or treatment of patients; and
    - at which accommodation is not provided for patients to stay overnight.
- **Nature-based recreation facility** means premises used for minor recreational facilities that cause minimal impact on the environment. Examples include boardwalks, picnic facilities and premises used to educate visitors about an area's ecology.

- **Office** means premises used for an administrative, professional or management service, other than the manufacture or sale of goods. Examples include a financial institution's office**.** However, office does not include ancillary offices for core port infrastructure.
- **Park** means open space that is primarily designed for recreational use. The use includes facilities for the enjoyment and convenience of users of the park, such as car parking areas, public toilets and recreational facilities / equipment / amenities for use by workers at the port.
- **Seafarers' centre** means premises where chaplaincy services and rest and recreational facilities are provided primarily for seafarers.
- **Service station** means premises used primarily for the sale of fuel for vehicles. Service station also includes part of any premises also used to maintain, service, repair, clean or hire vehicles, or as a shop (minor) or food and drink outlet.
- **Shift workers amenities** means facilities required to safely accommodate shift works on BCPL including small-scale, non-commercial, over-night bedding where workers can rest as a means of better responding to chain of responsibility practices. Where approved, such facilities are to be made available to port workers and contractors only.
- **Shop (minor)** means premises that:
  - are used for the display or retail of goods or personal services; and
  - have a gross floor area of not more than 2,500m^2.

  Examples: Beauty salon, dry cleaning shop, laundromat, a pharmacy, bait and tackle outlet and/or supermarket.
- **Tourism facility / retail** means small-scale development / uses including infrastructure, facilities and retail outlets associated with marine related tourism uses including cruise activities, ferries and boat ramps. Such development may include the shops (minor) listed above), tour booking facilities, cafes / food outlets, small-restaurants, small-craft tour operations, vehicle hire operations and ancillary development associated with improved passenger / staff amenity (e.g. landscaping, urban design elements, interpretive signage, open space).
- **Visitors' Centre** means premises used primarily to provide information to visitors about the Port of Brisbane or training relating to the port, including premises containing an office, cafe or meeting rooms.
- **Warehouse (general)** means a building used for the storage or distribution of goods, other than a freight warehouse or depot or transport and equipment depot.
- **Wash bay** means a facility used for the washing / cleaning of vehicles, vessels, plant / equipment, containers etc. involving the use of water and/or detergents.

Part 3: Port-prohibited development

- **Hospital** means premises:
  - used for medical or surgical care or treatment of patients; and
  - at which accommodation is provided for inpatients to stay overnight.
- **Residential development** means premises in which people reside or stay, whether permanently or temporarily. Examples include dwelling house, hostel, hotel, motel, multiple dwelling, relocatable home, caravan park, residential care facility, retirement facility and caretaker's accommodation.
- **Shopping facility (major)** means a building or group of buildings that:
  - are used primarily as shops or retail showrooms; and
  - are an integrated development; and
  - have a gross floor area of more than 2,500m^2.

  Examples: Department store, discount department store, discount factory outlet, retail warehouse, shopping centre and a showroom or wholesale facility.

- **Sport and recreation (major)** means premises that:
  - are used for sporting or recreational activities; and
  - have an area of more than 2,500m^2.

  Examples: Racetrack, sporting field and motor sport track.
- **Tourist attraction (major)** means premises that:
  - are used primarily for public entertainment or recreation; and
  - have an area of more than 2,500m^2.

  Examples: Theme park and zoo.
- **Wind farm** means premises that:
  - are used for generating electricity by wind force; and
  - have an area of more than 2,500m^2.

Part 4: Other development

- **Advertising Billboard** is any signage (of a non-directional or specific site / facility branding nature) designed and erected to specifically market or sell a product or commodity. Such signage will be assessed by PBPL in a manner consistent with the standards and definitions otherwise specified by BCC's Local Laws.
  - Signage (other than advertising billboards) refers to directional, interpretative and site (PBPL) branding signage that is intended to direct, inform and improve the legibility of the Brisbane port area. For example, for identification or directional purposes.
- **Boat Ramps and associated infrastructure** means facilities, infrastructure and services that are used for launching and retrieval of primarily recreational vessels. The use may include ancillary facilities and amenity provisions such as toilets, lighting, signage and queuing infrastructure.
- **Cemetery** means any premises used for the burial of the dead. The term includes any chapel or columbarium on the premises.
- **Child Care Facilities** means any premises used for the minding and care of children under school age. The term includes a kindergarten or crèche or home day care.
- **Crematorium** means any premises used for the reduction of the human body to ashes after death. The term includes any chapel or columbarium on the premises.
- **Educational Establishment** means any premises used for a pre-school, primary or secondary school, college, university, technical and further education institution, sheltered workshop, art gallery, cultural centre, museum, library, lecture hall, or for any similar premises, whether or not residential accommodation and ancillary uses are provided for the occupants of such premises.
- **Educational Establishment (port-related)** means any training facility integral to a core port infrastructure or port-related development, or which provides a training element to a use intended or approved for BCPL. There must be a direct link or nexus between the training program provided and the skills and needs of activities at the port (for example, maritime safety, stevedoring, etc).
- **Emergency Works** means any activity undertaken necessary for the safe and integral operations of the port and protection of the environment and in response to an emergency caused by (but not limited to) fire, flood, storms, toxic fumes, spillage or similar events.
- **Gatehouses** means facilities primarily located at site entrances and/or exits to assist in the control and movement of vehicles and persons on sites
- **Indoor Entertainment** means any premises used for a sports centre, art gallery, amusement and leisure centre or unlicensed club, where the activities are conducted entirely within a building and where not defined elsewhere.

- **Junk Yard** means any premises used for the collection, storage, or sale of scrap materials or scrap goods or used for collecting, dismantling, storing or salvaging vehicles or machinery and may include the sale of parts
- **Kennels** means any premises used for the breeding or boarding of dogs or cats or both for commercial gain.
- **Maintenance Workshops/Repair Facilities** means use of premises for the servicing, repair, modifying and fitting of accessories to motor vehicles and other equipment/vessels including temporary storage when awaiting servicing, repairing, modifying or fitting of accessories.
- **Major Hazard Facility/Possible Major Hazard Facility** means any premises used for the handling, processing, treatment or storage of any materials whether or not such materials are considered hazardous, where such activity typically gives rise to noxious, hazardous or offensive effects including excessive fumes, odours, large quantities of liquid or solid wastes, or storage of large quantities of highly flammable materials (usually liquids), all of which require special management. Regulation occurs primarily through the *Dangerous Goods and Safety Management Act 2001* and associated legislation.

  Such uses by their nature are offensive to the general public and may involve an element of public risk in their conduct, or if not properly managed detrimental effects on land beyond the premises.

  Examples include bulk fuel storage in tank farms, cement and lime works, chemical works, food processing, oil refineries, rendering works etc. The definition would exclude those activities otherwise defined as core port infrastructure, port-related development and port-prohibited development in this LUP and the Transport Infrastructure Act.
- **Port Road Infrastructure** under the Port Drive Road Franchise Agreement means Port Road Infrastructure as defined under the Port Drive Road Franchise Agreement.
- **Processing activities** means the use of a premises or land for the purpose of carrying out any processing industrial activity that may have the potential to cause significant on-site (or external) effects. Such activities relate to a more specific stream of manufacturing that involve mechanical and/or chemical processes to create a product potentially including chemical, mineral or food processing activities. To be deemed appropriate on port land they must involve the export of a final product and/or the import of raw materials.
- **Putrescible Waste Disposal Facility** means a facility for the disposal of putrescibles waste.
- **Sports and Fitness Centre** means any premises used for the commercial conduct of sport and fitness undertaken primarily indoors in the form of a gymnasium or as part of supervised classes.
- **Temporary Construction Site Office** means facilities, infrastructure and services used for a short period of time to primarily accommodate project construction personnel and their project management activities.
- **Temporary Use** means use of any premises for a period up to five years. The use must not quarantine the site for any future core port infrastructure or port-related development consistent with the precinct's intent.

  Examples include short-term storage areas

Appendix 3 – Administrative Definitions

Where any term used in this LUP is not defined in this Appendix or is not defined or explained elsewhere in the text of this LUP, but is defined in the *Transport Infrastructure Act 1994*, the *Planning Act 2016* or the *Acts Interpretation Act 1954*, the term has, for the purpose of this LUP and unless the context otherwise indicates or requires, the meaning assigned to it by the Act in which it is defined. If a term not defined in this LUP is defined in the *Transport Infrastructure Act 1994* and the *Planning Act 2009*, the *Transport Infrastructure Act 1994* prevails, to the extent of any inconsistency.

This section provides the meaning of terms used in the LUP and their application to development and operations on BCPL. These definitions assist with the interpretation of the LUP but do not have a specific land use meaning.

- **2007 / 2010 / 2013 / 2015 / 2020 LUP** means the Brisbane Port Land Use Plans 2007, 2010, 2013, 2015 or 2020.
- **ANEF** means Australian Noise Exposure Forecast.
- **BMT** means the Brisbane Multi-modal Terminal at the Port of Brisbane.
- **Building footprint** means the total roof area coverage on the development site.
- **Building height** means the vertical distance between the ground level and the roof or parapet at any point but not including an antenna, aerial, chimney, flagpole or the like.
- **Building work** means building work as defined in the *Planning Act 2016*.
- **Core port infrastructure** means any of the uses listed in Appendix 2 Part 1.
- **Crossover** means the area where a site connects to the public roadway.
- **Environmental value** means the sum of the desirable elements and factors that comprise the surroundings.
- **Filling or excavation** means removal or importation of material to or from a lot that will change the ground level of the land.
- **FPE** means the future port expansion area at Fisherman Islands shown as 'FPE' on Map 4 (Appendix 4).
- **Gross floor area** means the total floor area of all storeys of a building (measured from the outside of the external walls or the centre of a common wall), other than areas used for the following:
  - building services, plant and equipment
  - access between levels
  - ground floor public lobby
  - the parking, loading and manoeuvring of motor vehicles
  - unenclosed private balconies whether roofed or not.
- **Ground level** means:
  - the existing level of the site providing it has not been unlawfully altered; or
  - where the land has been unlawfully altered, the level of land prior to the alteration; or
  - the 'as-constructed' level of the land in accordance with an approval for filling and excavation.
- **LUP** means this Brisbane Port LUP.
- **Minor building work** means an alteration, addition or extension to an existing building where the floor area including balconies is less than:
  - the lesser of 5% of the building or 100m^2 for core port infrastructure;
  - the lesser of 5% or 50m^2 for port related development; and

  - the lesser of 5% or 25m^2 for all other development.

- **Natural hazard** means a naturally occurring situation or condition, such as a flood, bushfire, landslide or coastal hazard, including erosion-prone areas and storm-tide inundation areas, with the potential for loss or harm to the community, property or environment.
- **Operational Work** means operational work as defined in the *Planning Act 2016*.
- **Planning Act** means the *Planning Act 2016*.
- **PSA** means public safety areas under the State Planning Policy
- **Port Lease** means a lease or sublease of BCPL or other land between the port lessor and port manager.
- **Port Drive Road Franchise Agreement** means the road franchise agreement made under the TIA between The State of Queensland and Port of Brisbane Pty Ltd ACN 143 384 749 or any entity declared to be a port manager.
- **Port of Brisbane Motorway** means the motorway which connects the Port of Brisbane to the Gateway Motorway
- **Port manager** means an entity declared to be the port manager under section 289Y of the TIA.
- **Port Lessor** means an entity declared to be the port lessor under section 289Y of the TIA.
- **Port manager** means a port manager appointed in accordance with the TIA.
- **Port operator** means a port manager or port manager as the context requires.
- **Port-prohibited development** means any of the uses listed in Appendix 2 Part 3.
- **Port-related development** means any of the uses listed in Appendix 2 Part 2.
- **UU** means Queensland Urban Utilities.
- **Receiving environment** means the environment immediately, or in close proximity to the development and/or its operations. Recreation area means a recreation area for the exclusive use of occupants of a building.
- **Setback** means the shortest distance measured horizontally from the building or structure to the vertical projection of the boundary of the lot.
- **Site** means a lot or lots or part thereof, which is the subject of a development application.
- **Storey** means the space within a building which is situated between one floor level (including the ground level) and the floor level next above (or ceiling of the topmost storey). For the purpose of this definition a basement (where the floor level of the level above projects no more than one metre above ground level) is not a storey. For the purpose of calculating the number storeys, the number of storeys is the greater of:
  - the actual number of spaces between levels;
  - the number of storeys calculated by dividing the distance in meters or part thereof between the top of the floor of the first storey and the top of the ceiling of the topmost storey by 4.5 meters. Any fraction which results from this calculation constitutes a storey.
- **Structure** means structure as defined in the Building Code of Australia.
- **Use** means use as defined in the *Planning Act 2016*.
- **Water Sensitive Urban Design** means the effective and responsible management of water. Water sensitive urban design promotes the following:
  - the protection of natural systems
  - the protection of water quality
  - the integration of stormwater treatment into the landscape

- the storage and reuse of stormwater.

Abbreviations

AAT – Australian Amalgamated Terminals
AIO – Asciano (the parent company of Patrick Stevedores)
AQIS – Australian Quarantine and Inspection Service
ACS – Australian Customs Service
BCC – Brisbane City Council
BCPL – Brisbane Core Port Land
BCT / HPH – Brisbane Container Terminals / Hutchison Port Holdings
BICT – Brisbane International Cruise Terminal
BMT – Brisbane Multimodal Terminal
CBD – Central Business District
CEMP – Construction Environmental Management Plan
City Plan 2014 – refers to BCC's town planning scheme.
Cmwth – Commonwealth Government of Australia
DAF – Department of Agriculture and Fisheries
DES – Department of Environment and Science
DSDILGP– Department of State Development, Infrastructure, Local Government and Planning (Qld)
DTMR – Department of Transport and Main Roads (Qld)
DPW – Dubai Ports World (DP World)
EMS – Environmental Management System
FPE – Future Port Expansion
HAT – Highest Astronomical Tide
HTC – Heavy Transit Corridor
HPV – Higher Productivity Vehicles
LAT – Lowest Astronomical Tide
LGIP – Local Government Infrastructure Plan
LUP – Brisbane Port LUP 2020
MHF – Major Hazardous Facility
MHWS – Mean High Water Springs
NPS – National Ports Strategy
OEMP – Operational Environmental Management Plan
OLS – Obstacle Limitations Surface
PAN-OPS - Procedures for Air Navigation Services – Aircraft Operations
PoBM – Port of Brisbane Motorway
PA – *Planning Act* 2016
PBPL – Port of Brisbane Pty Ltd
PDI – Pre-delivery Inspection
PIIP – Priority Infrastructure Interface Plan

SEQ – South East Queensland

SEQRP – South East Queensland Regional Plan

SPP – State Planning Policy

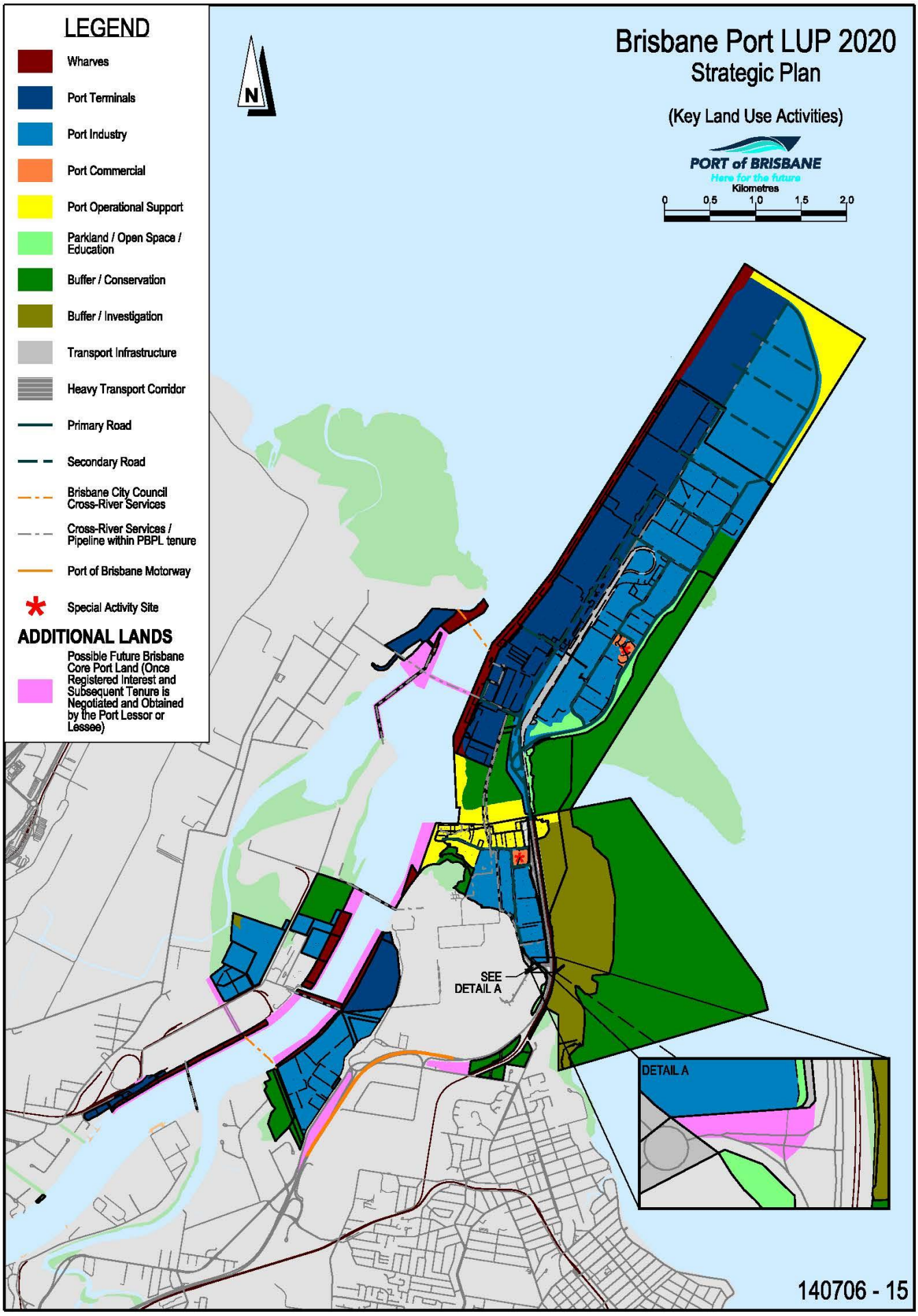
TEU – Twenty-foot Equivalent Units

TIA – the Transport Infrastructure Act 1994

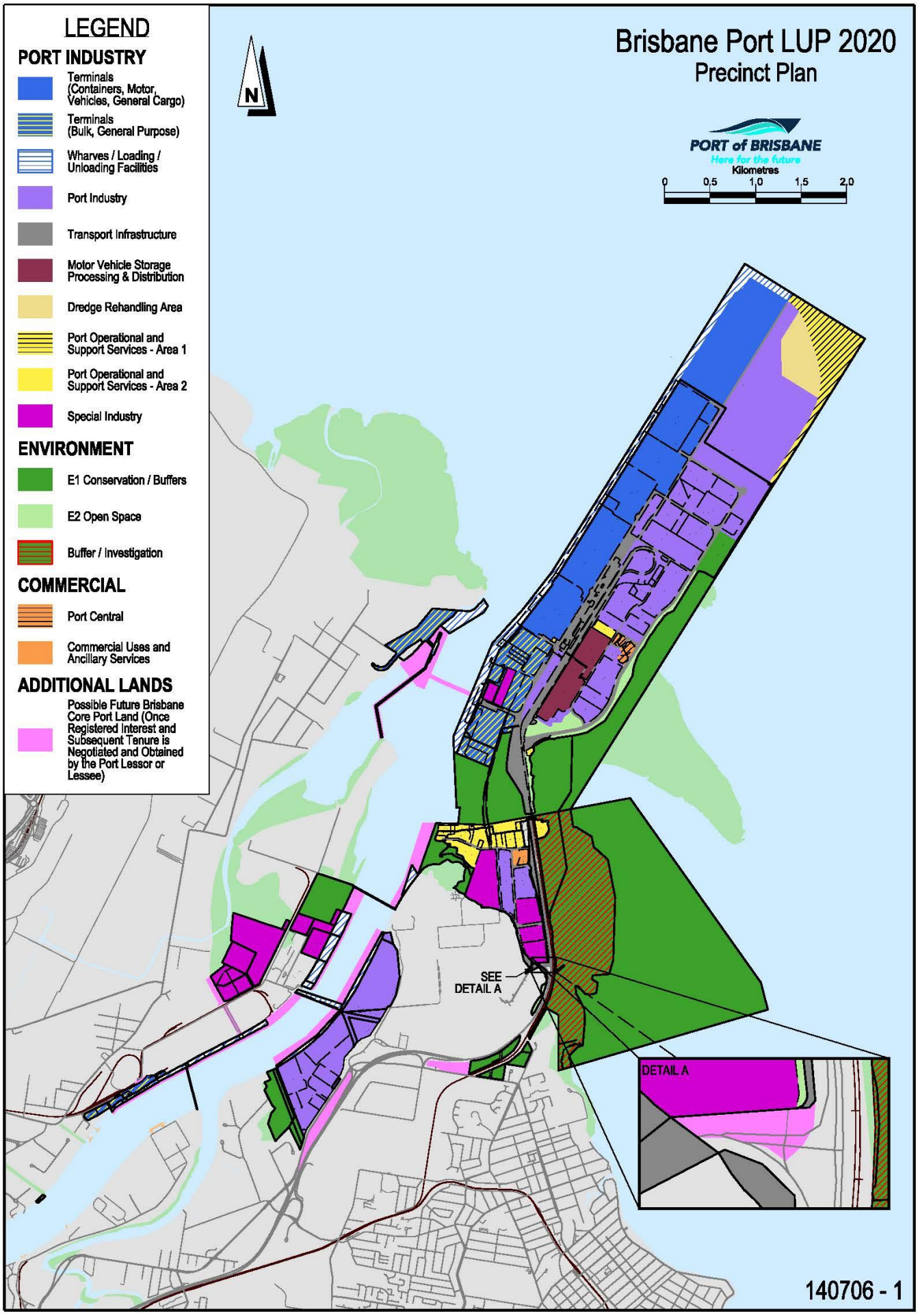
Appendix 4 – Maps

- **Map 1 – Strategic Plan (Key Land Use Activities)**
- **Map 2 – Precinct Plan**
- **Map 2A(i) – Possible additional Port areas**
- **Map 2A(ii) – Detail Sheet 1 – Possible additional Port areas**
- **Map 2A(iii) – Detail Sheet 2 – Possible additional Port areas**
- **Map 2A(iv) – Proposed Precinct Plan highlighting intended uses for Possible Future BCPL**
- **Map 3 – Relationship with adjoining Brisbane City Council City Plan 2014 classification**
- **Map 4 – Surface Transport Linkages**
- **Map 5 – Port Areas Development Staging (Major areas subject to land preparation)**
- **Map 6 – Strategic Investigation Areas (Local)**
- **Map 7 – Vegetation Plan**
- **Map 8 – Obstacle Limitation Surface (OLS)**
- **Map 9 – Procedures for Air Navigational Services Aircraft Operations (PANS-OPS)**
- **Map 10 – Airport Restricted Lighting**
- **Map 11 – Wildlife Hazard Buffer Zone (Key land use activities)**
- **Map 12 – Aviation facilities (Aviation facilities: Primary and Secondary Surveillance Radars**

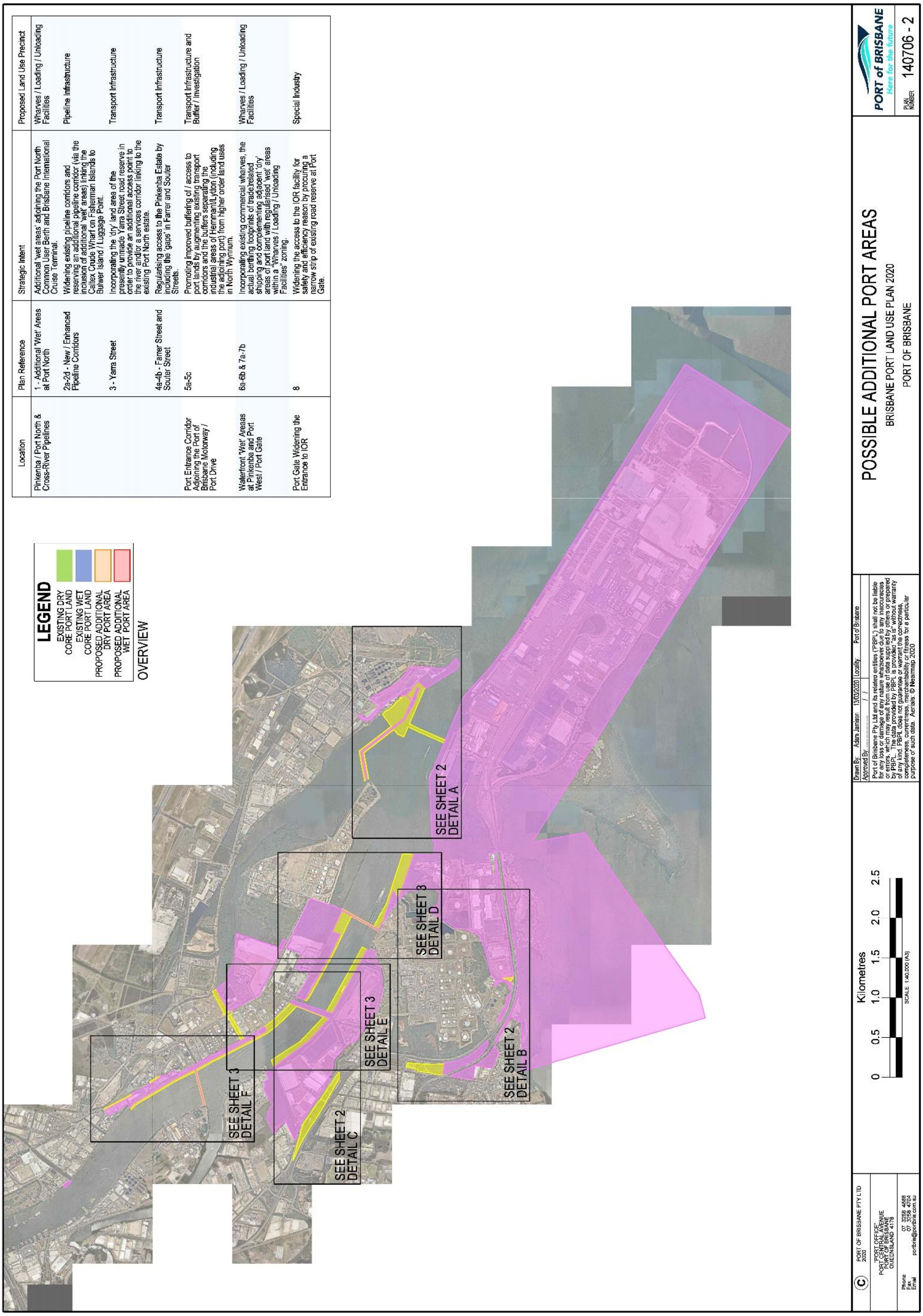
Map 1


LEGEND
Wharves
Port Terminals
Port Industry
Port Commercial
Port Operational Support
Parkland / Open Space / Education
Buffer / Conservation
Buffer / Investigation
Transport Infrastructure
Heavy Transport Corridor
Primary Road
Secondary Road
Brisbane City Council Cross-River Services
Cross-River Services / Pipeline within PBPL tenure
Port of Brisbane Motorway
Special Activity Site
ADDITIONAL LANDS
Possible Future Brisbane Core Port Land (Once Registered Interest and Subsequent Tenure is Negotiated and Obtained by the Port Lessor or Lessee)
N
Brisbane Port LUP 2020
Strategic Plan
(Key Land Use Activities)
PORT of BRISBANE
Here for the future
Kilometres
0 0.5 1.0 1.5 2.0
SEE DETAIL A
DETAIL A
140706 - 15

Map 2

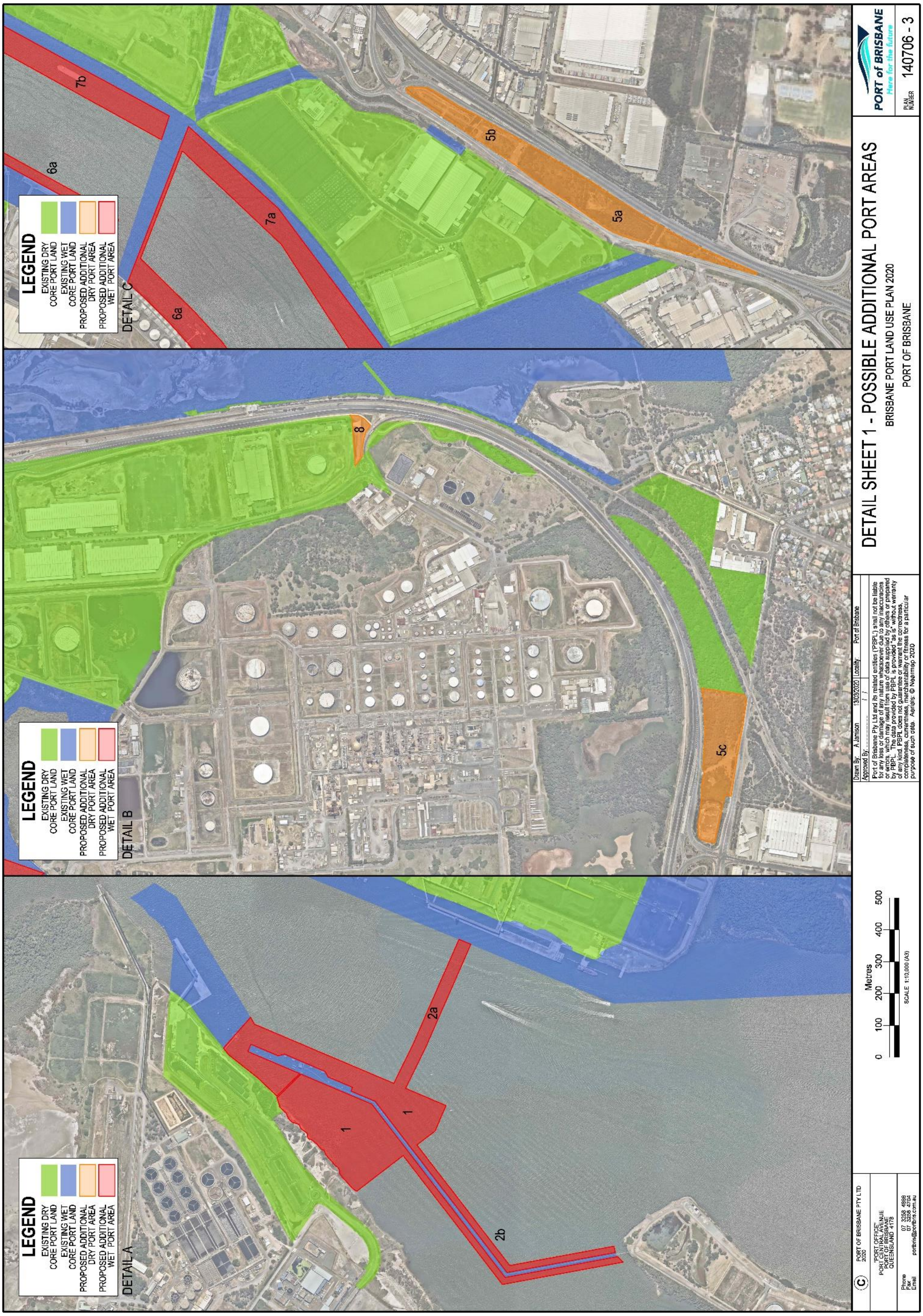

LEGEND
PORT INDUSTRY
Terminals (Containers, Motor Vehicles, General Cargo)
Terminals (Bulk, General Purpose)
Wharves / Loading / Unloading Facilities
Port Industry
Transport Infrastructure
Motor Vehicle Storage Processing & Distribution
Dredge Rehandling Area
Port Operational and Support Services - Area 1
Port Operational and Support Services - Area 2
Special Industry
ENVIRONMENT
E1 Conservation / Buffers
E2 Open Space
Buffer / Investigation
COMMERCIAL
Port Central
Commercial Uses and Ancillary Services
ADDITIONAL LANDS
Possible Future Brisbane Core Port Land (Once Registered Interest and Subsequent Tenure is Negotiated and Obtained by the Port Lessor or Lessee)
N
Brisbane Port LUP 2020
Precinct Plan
PORT of BRISBANE
Here for the future
Kilometres
0 0,5 1,0 1,5 2,0
SEE DETAIL A
DETAIL A
140706 - 1

Map 2A (i)

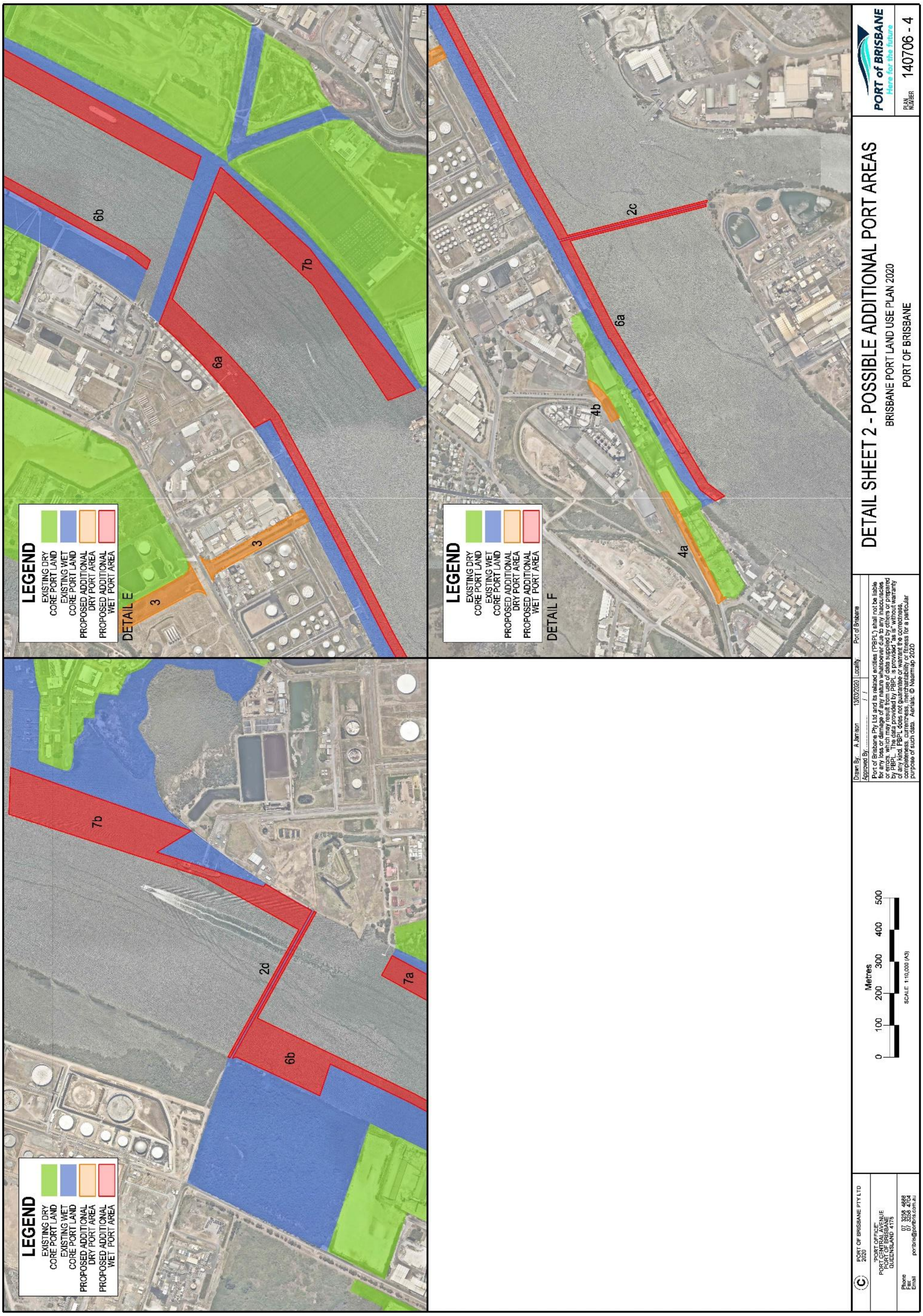


Location	Plan Reference	Strategic Intent	Proposed Land Use Precinct
Pinkenba / Port North & Cross-River Pipelines	1 - Additional 'Wet' Areas at Port North	Additional 'wet areas' adjoining the Port North Common User Berth and Brisbane International Cruise Terminal.	Wharves / Loading / Unloading Facilities
	2a-2d - New / Enhanced Pipeline Corridors	Widening existing pipeline corridors and reserving an additional pipeline corridor (via the inclusion of additional 'wet' areas) linking the Caltex Crude Wharf on Fisherman Islands to Bulwer Island / Luggage Point.	Pipeline Infrastructure
	3 - Yarra Street	Incorporating the 'dry' land area of the presently unmade Yarra Street road reserve in order to provide an additional access point to the river and/or a services corridor linking to the existing Port North estate.	Transport Infrastructure
	4a-4b - Farrer Street and Souter Street	Regularising access to the Pinkenba Estate by including the 'gaps' in Farrer and Souter Streets.	Transport Infrastructure
Port Entrance Corridor Adjoining the Port of Brisbane Motorway / Port Drive	5a-5c	Promoting improved buffering of / access to port lands by augmenting existing transport corridors and the buffers separating the industrial areas of Hemmant/Lytton (including the adjoining port) from higher order land uses in North Wynnum.	Transport Infrastructure and Buffer / Investigation
Waterfront 'Wet' Areas at Pinkenba and Port West / Port Gate	6a-6b & 7a-7b	Incorporating existing commercial wharves, the actual berthing footprints of trade related shipping and complementing adjacent 'dry' areas of port land with regularised 'wet' areas within a "Wharves / Loading / Unloading Facilities" zoning.	Wharves / Loading / Unloading Facilities
Port Gate Widening the Entrance to IOR	8	Widening the access to the IOR facility for safety and efficiency reason by procuring a narrow strip of existing road reserve at Port Gate.	Special Industry

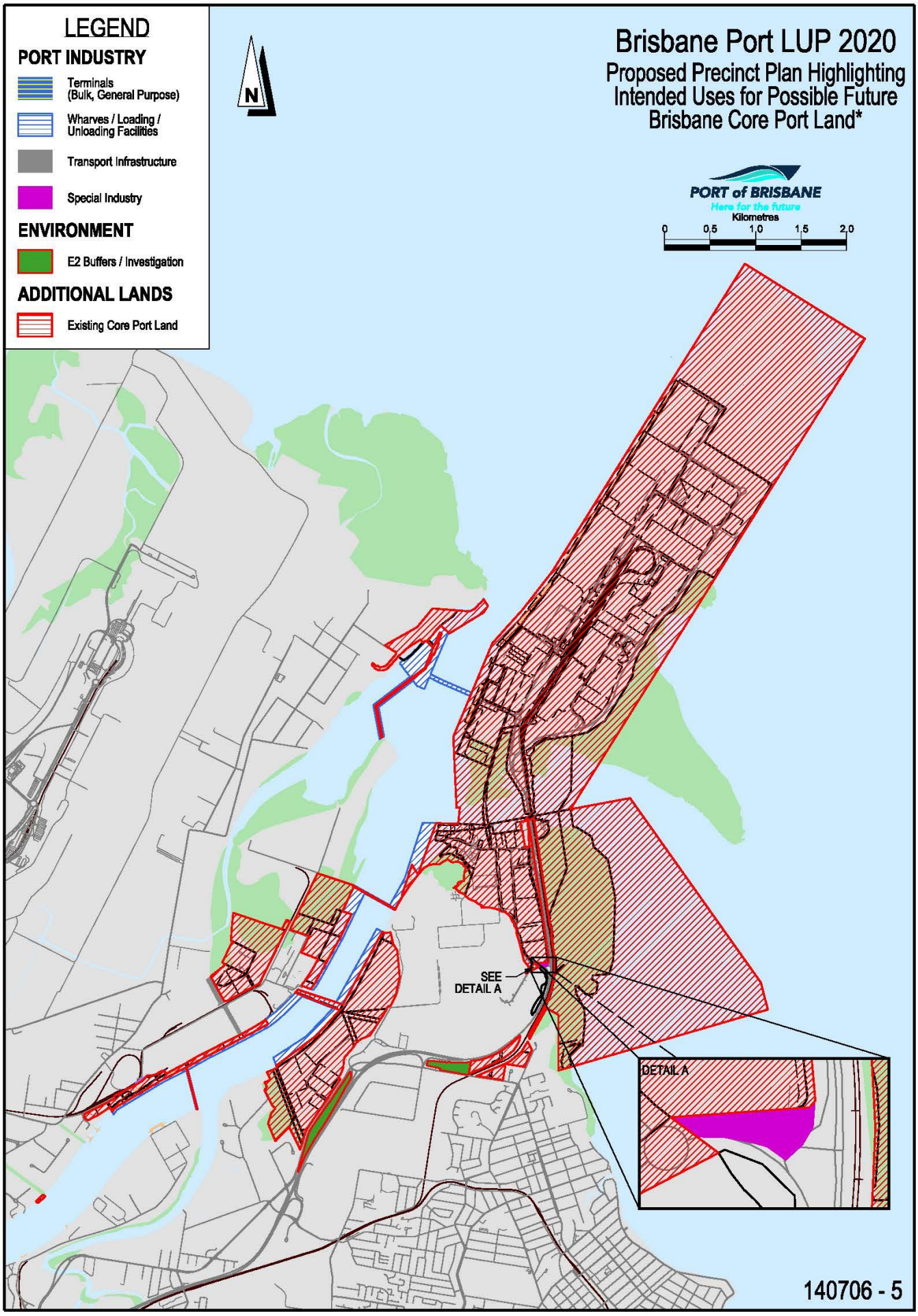
Map 2A (ii)


LEGEND
EXISTING DRY CORE PORT LAND
EXISTING WET CORE PORT LAND
PROPOSED ADDITIONAL DRY PORT AREA
PROPOSED ADDITIONAL WET PORT AREA
DETAIL A
DETAIL B
DETAIL C
1
2a
2b
5a
5b
5c
6a
7a
7b
8
Metres
0 100 200 300 400 500
SCALE 1:10,000 (A3)
DETAIL SHEET 1 - POSSIBLE ADDITIONAL PORT AREAS
BRISBANE PORT LAND USE PLAN 2020
PORT OF BRISBANE
PORT of BRISBANE
140706 - 3

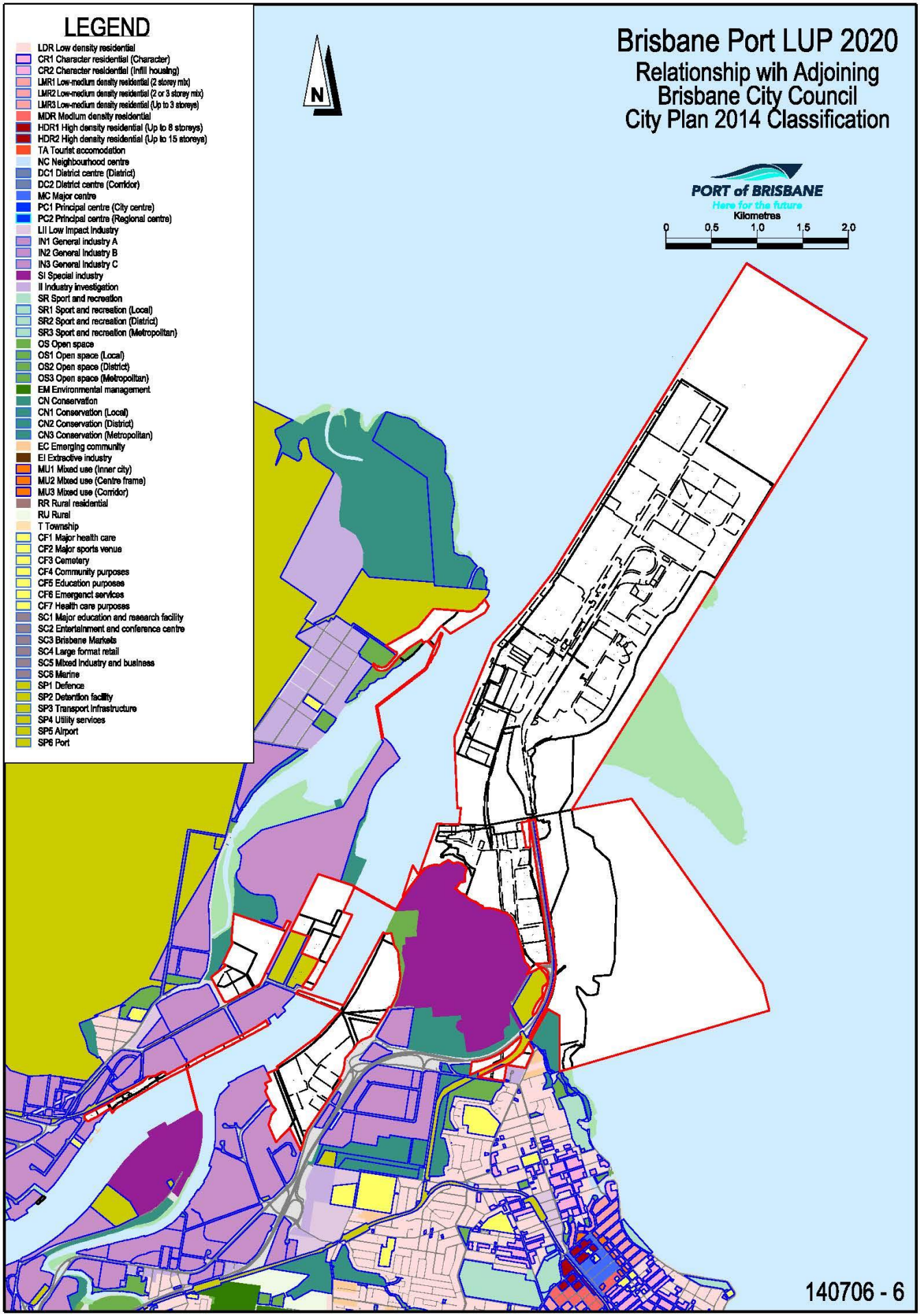
Map 2A (iii)


DETAIL SHEET 2 - POSSIBLE ADDITIONAL PORT AREAS
BRISBANE PORT LAND USE PLAN 2020
PORT OF BRISBANE
PORT of BRISBANE
Here for the future
PLAN NUMBER
140706 - 4
LEGEND
EXISTING DRY CORE PORT LAND
EXISTING WET CORE PORT LAND
PROPOSED ADDITIONAL DRY PORT AREA
PROPOSED ADDITIONAL WET PORT AREA
DETAIL E
DETAIL F
Metres
0 100 200 300 400 500
6a
6b
7a
7b
2c
2d
3
4a
4b

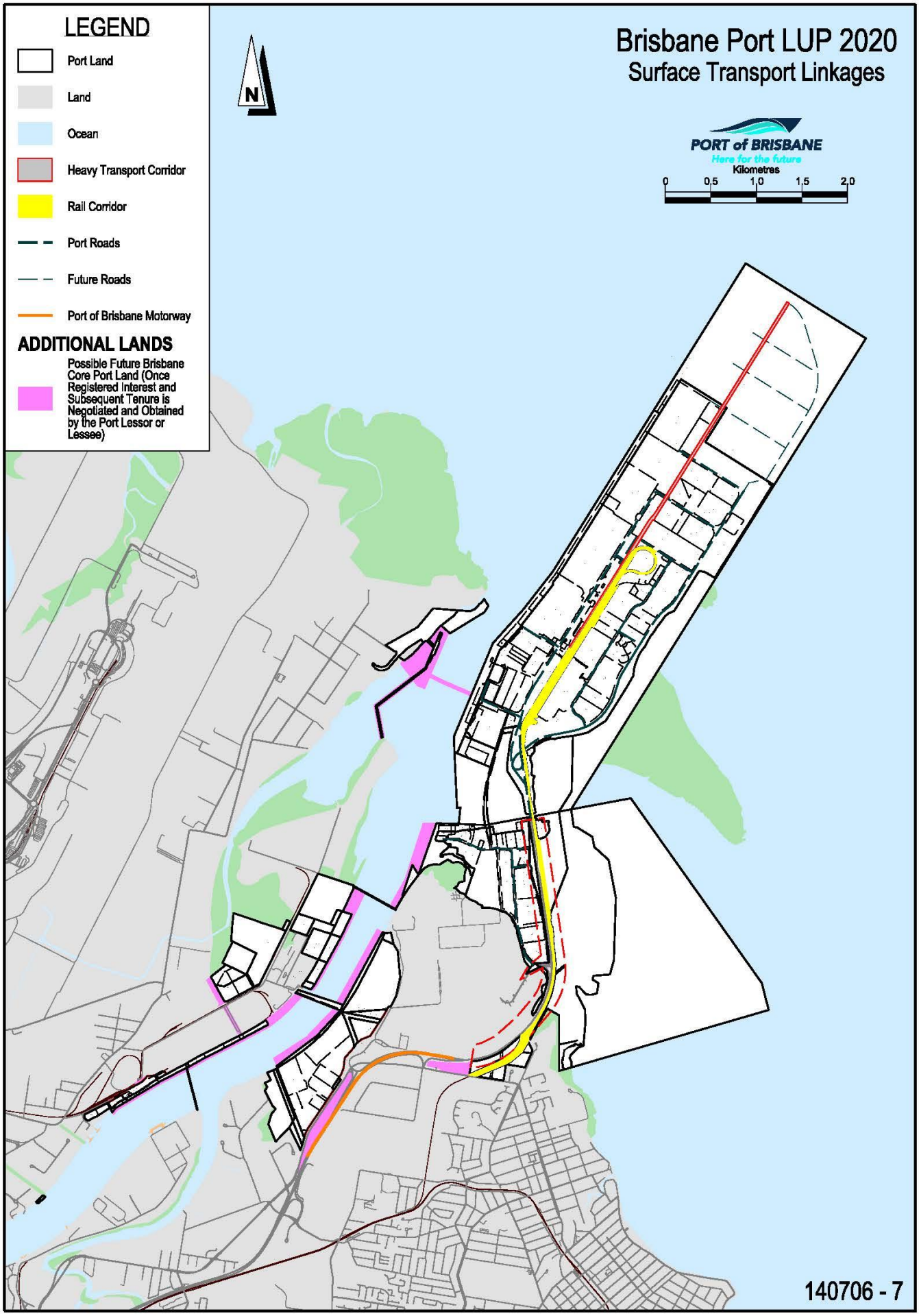
Map 2A (iv)


LEGEND
PORT INDUSTRY
Terminals (Bulk, General Purpose)
Wharves / Loading / Unloading Facilities
Transport Infrastructure
Special Industry
ENVIRONMENT
E2 Buffers / Investigation
ADDITIONAL LANDS
Existing Core Port Land
N
Brisbane Port LUP 2020
Proposed Precinct Plan Highlighting Intended Uses for Possible Future Brisbane Core Port Land*
PORT of BRISBANE
Here for the future
Kilometres
0 0.5 1.0 1.5 2.0
SEE DETAIL A
DETAIL A
140706 - 5

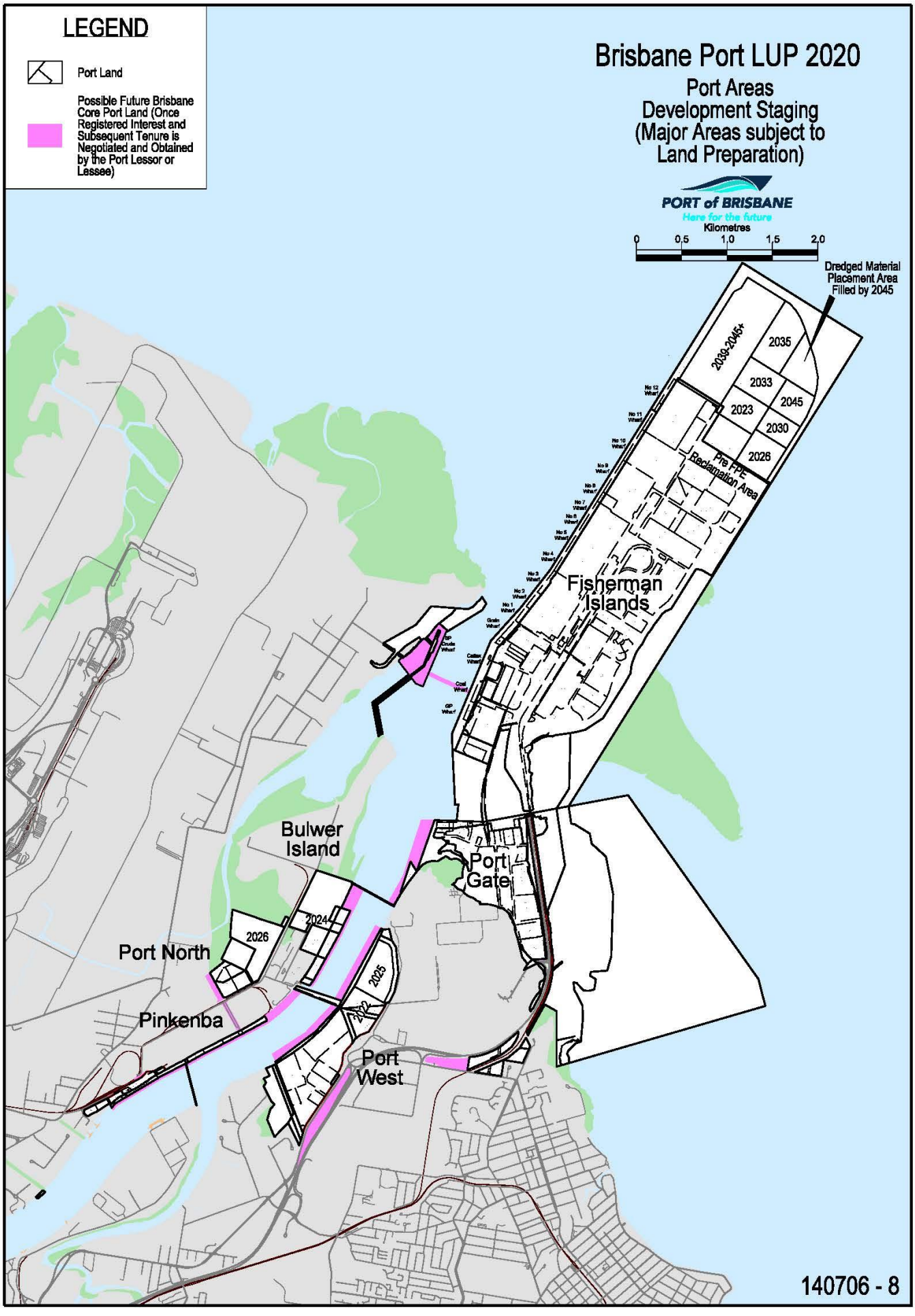
Map 3


LEGEND
LDR Low density residential
CR1 Character residential (Character)
CR2 Character residential (Infill housing)
LMR1 Low-medium density residential (2 storey mix)
LMR2 Low-medium density residential (2 or 3 storey mix)
LMR3 Low-medium density residential (Up to 3 storeys)
MDR Medium density residential
HDR1 High density residential (Up to 8 storeys)
HDR2 High density residential (Up to 15 storeys)
TA Tourist accomodation
NC Neighbourhood centre
DC1 District centre (District)
DC2 District centre (Corridor)
MC Major centre
PC1 Principal centre (City centre)
PC2 Principal centre (Regional centre)
LII Low impact industry
IN1 General industry A
IN2 General industry B
IN3 General industry C
SI Special industry
II Industry investigation
SR Sport and recreation
SR1 Sport and recreation (Local)
SR2 Sport and recreation (District)
SR3 Sport and recreation (Metropolitan)
OS Open space
OS1 Open space (Local)
OS2 Open space (District)
OS3 Open space (Metropolitan)
EM Environmental management
CN Conservation
CN1 Conservation (Local)
CN2 Conservation (District)
CN3 Conservation (Metropolitan)
EC Emerging community
EI Extractive industry
MU1 Mixed use (Inner city)
MU2 Mixed use (Centre frame)
MU3 Mixed use (Corridor)
RR Rural residential
RU Rural
T Township
CF1 Major health care
CF2 Major sports venue
CF3 Cemetery
CF4 Community purposes
CF5 Education purposes
CF6 Emergenct services
CF7 Health care purposes
SC1 Major education and research facility
SC2 Entertainment and conference centre
SC3 Brisbane Markets
SC4 Large format retail
SC5 Mixed industry and business
SC6 Marine
SP1 Defence
SP2 Detention facility
SP3 Transport infrastructure
SP4 Utility services
SP5 Airport
SP6 Port
N
Brisbane Port LUP 2020
Relationship wih Adjoining
Brisbane City Council
City Plan 2014 Classification
PORT of BRISBANE
Here for the future
Kilometres
0
0.5
1.0
1.5
2.0
140706 - 6

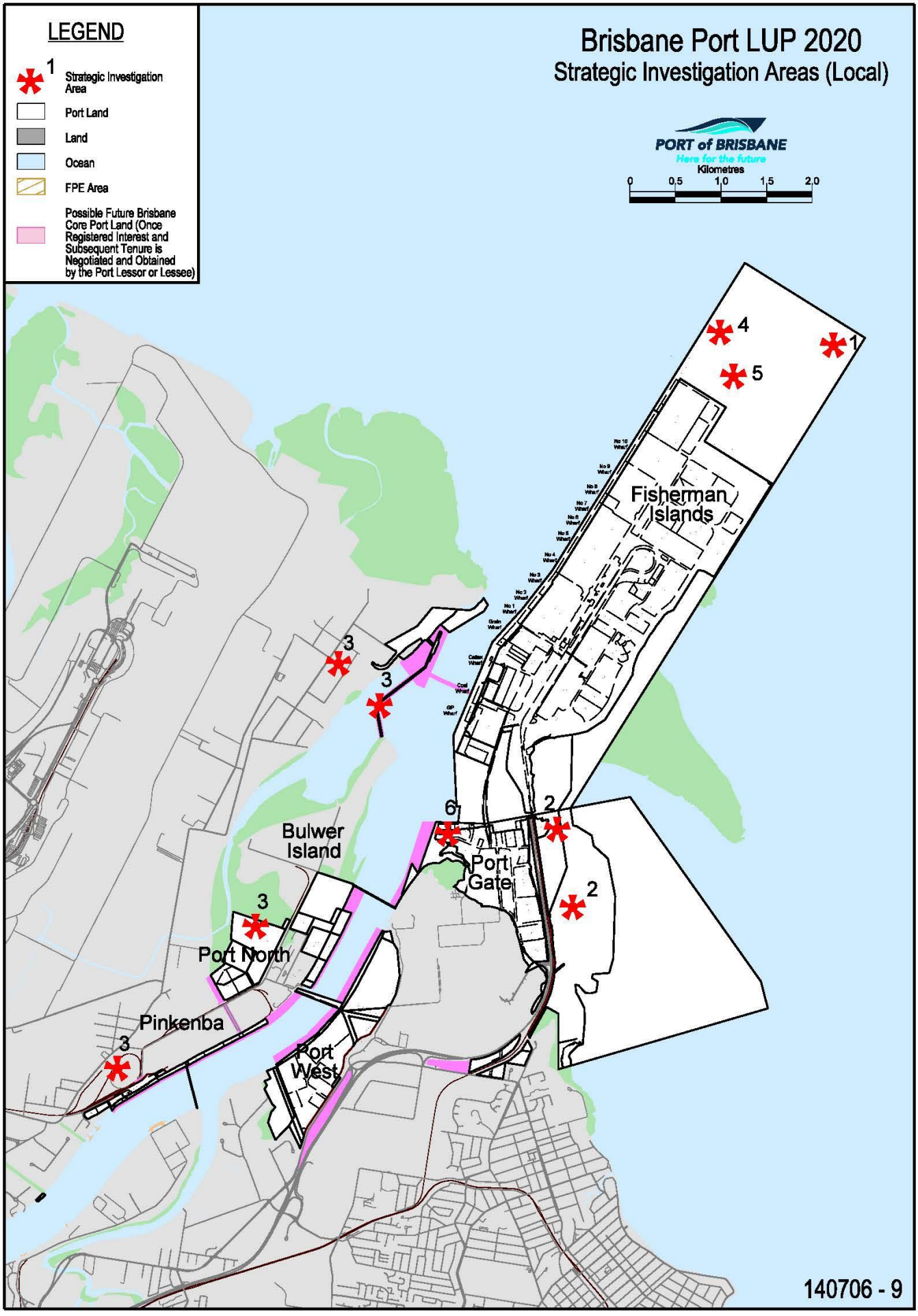
Map 4


LEGEND
Port Land
Land
Ocean
Heavy Transport Corridor
Rail Corridor
Port Roads
Future Roads
Port of Brisbane Motorway
ADDITIONAL LANDS
Possible Future Brisbane Core Port Land (Once Registered Interest and Subsequent Tenure is Negotiated and Obtained by the Port Lessor or Lessee)
N
Brisbane Port LUP 2020
Surface Transport Linkages
PORT of BRISBANE
Here for the future
Kilometres
0 0.5 1.0 1.5 2.0
140706 - 7

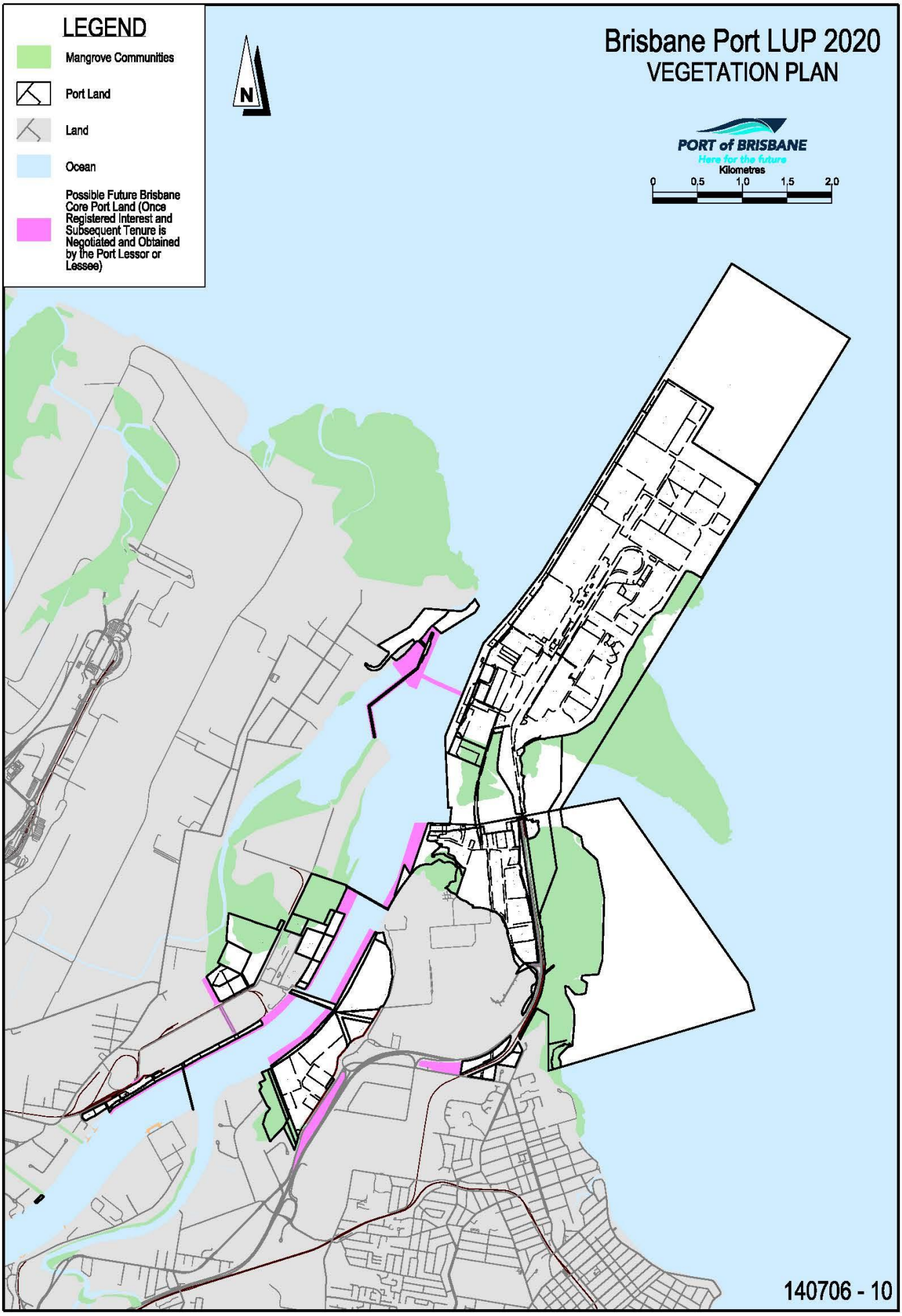
Map 5


LEGEND
Port Land
Possible Future Brisbane Core Port Land (Once Registered Interest and Subsequent Tenure is Negotiated and Obtained by the Port Lessor or Lessee)
Brisbane Port LUP 2020
Port Areas
Development Staging
(Major Areas subject to
Land Preparation)
PORT of BRISBANE
Here for the future
Kilometres
0 0.5 1.0 1.5 2.0
Dredged Material
Placement Area
Filled by 2045
2030-2045+
2035
2033
2045
2023
2030
2026
Pre PPE
Reclamation Area
Fisherman
Islands
Bulwer
Island
Port
Gate
2024
2026
Port North
2025
2022
Pinkenba
Port
West
140706 - 8

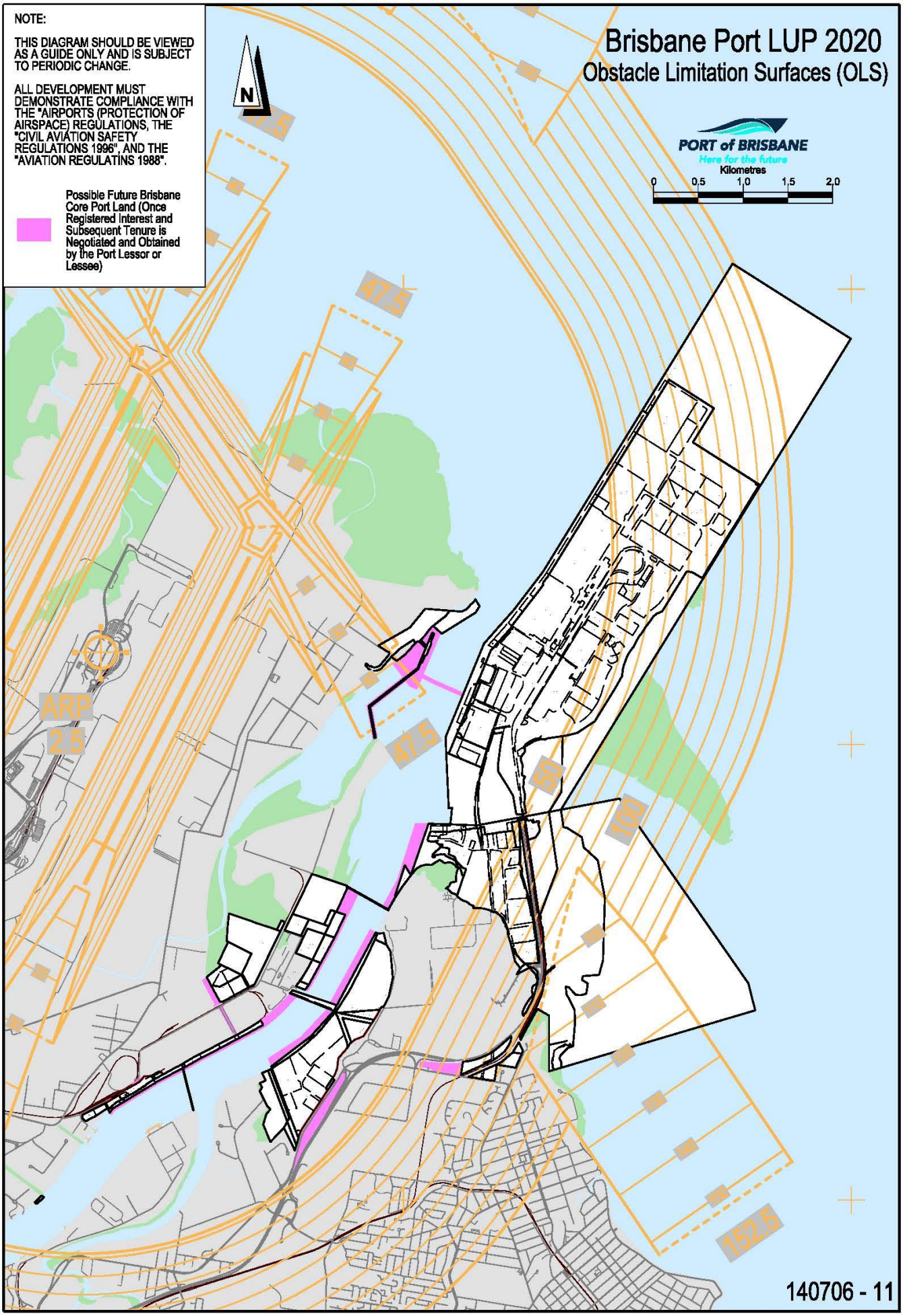
Map 6


LEGEND
1 Strategic Investigation Area
Port Land
Land
Ocean
FPE Area
Possible Future Brisbane Core Port Land (Once Registered Interest and Subsequent Tenure is Negotiated and Obtained by the Port Lessor or Lessee)
Brisbane Port LUP 2020
Strategic Investigation Areas (Local)
PORT of BRISBANE
Here for the future
Kilometres
0 0,5 1,0 1,5 2,0
Fisherman Islands
Bulwer Island
Port Gate
Port North
Pinkenba
Port West
140706 - 9

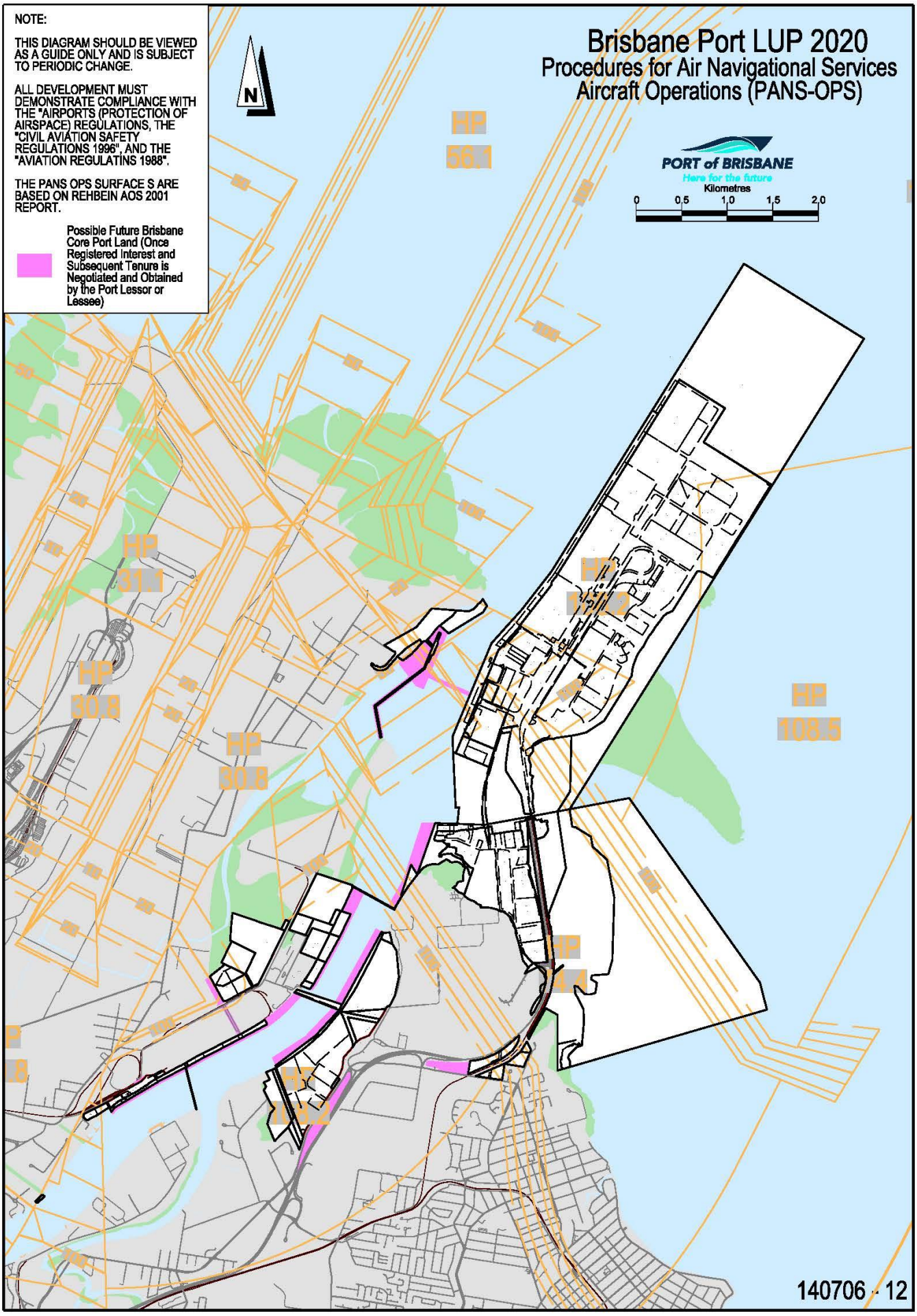
Map 7


LEGEND
Mangrove Communities
Port Land
Land
Ocean
Possible Future Brisbane Core Port Land (Once Registered Interest and Subsequent Tenure is Negotiated and Obtained by the Port Lessor or Lessee)
N
Brisbane Port LUP 2020
VEGETATION PLAN
PORT of BRISBANE
Here for the future
Kilometres
0 0.5 1.0 1.5 2.0
140706 - 10

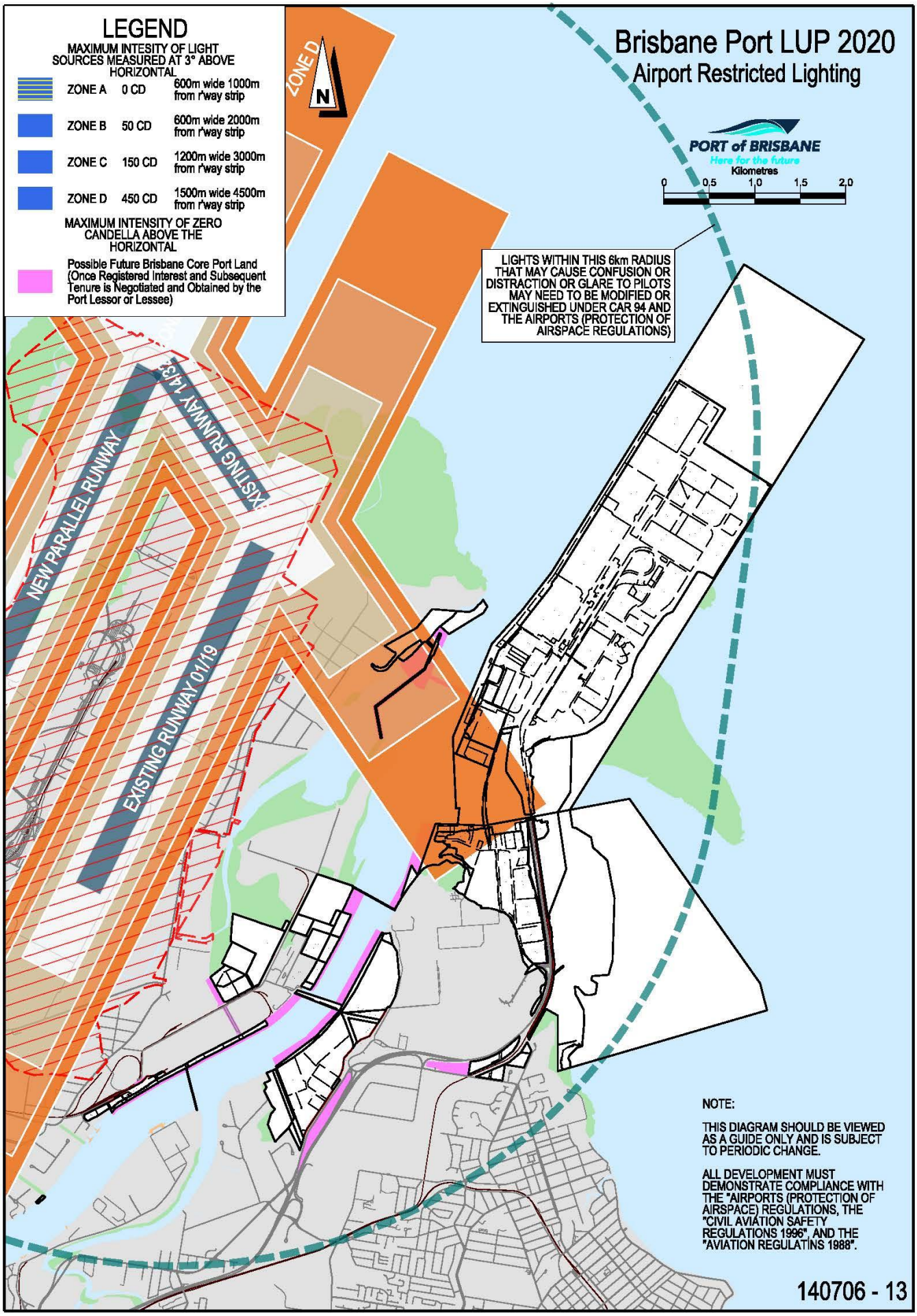
Map 8


NOTE:
THIS DIAGRAM SHOULD BE VIEWED AS A GUIDE ONLY AND IS SUBJECT TO PERIODIC CHANGE.
ALL DEVELOPMENT MUST DEMONSTRATE COMPLIANCE WITH THE "AIRPORTS (PROTECTION OF AIRSPACE) REGULATIONS, THE "CIVIL AVIATION SAFETY REGULATIONS 1996", AND THE "AVIATION REGULATINS 1988".
Possible Future Brisbane Core Port Land (Once Registered Interest and Subsequent Tenure is Negotiated and Obtained by the Port Lessor or Lessee)
N
Brisbane Port LUP 2020
Obstacle Limitation Surfaces (OLS)
PORT of BRISBANE
Here for the future
Kilometres
0 0.5 1.0 1.5 2.0
ARP
47.5
152.5
140706 - 11

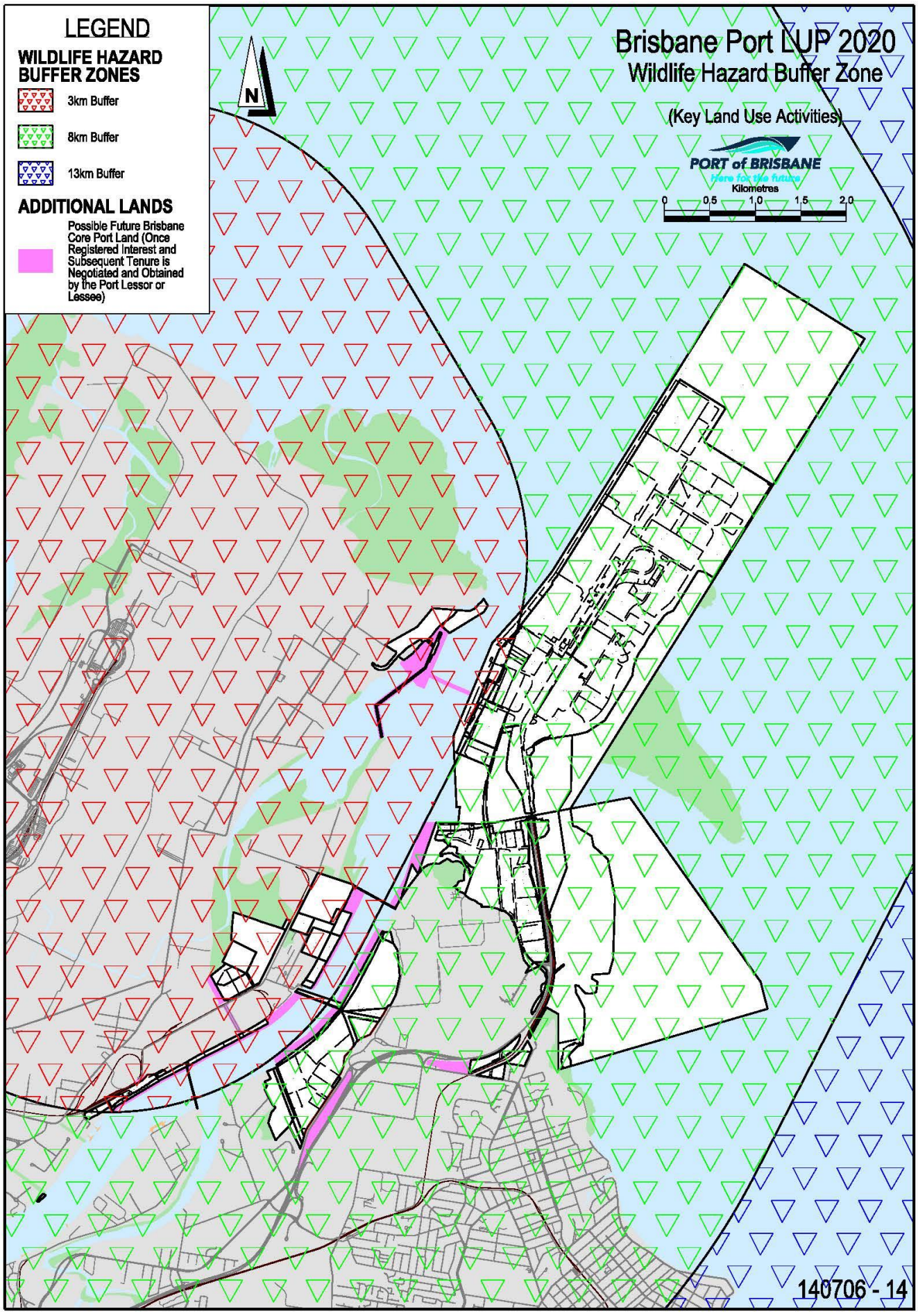
Map 9



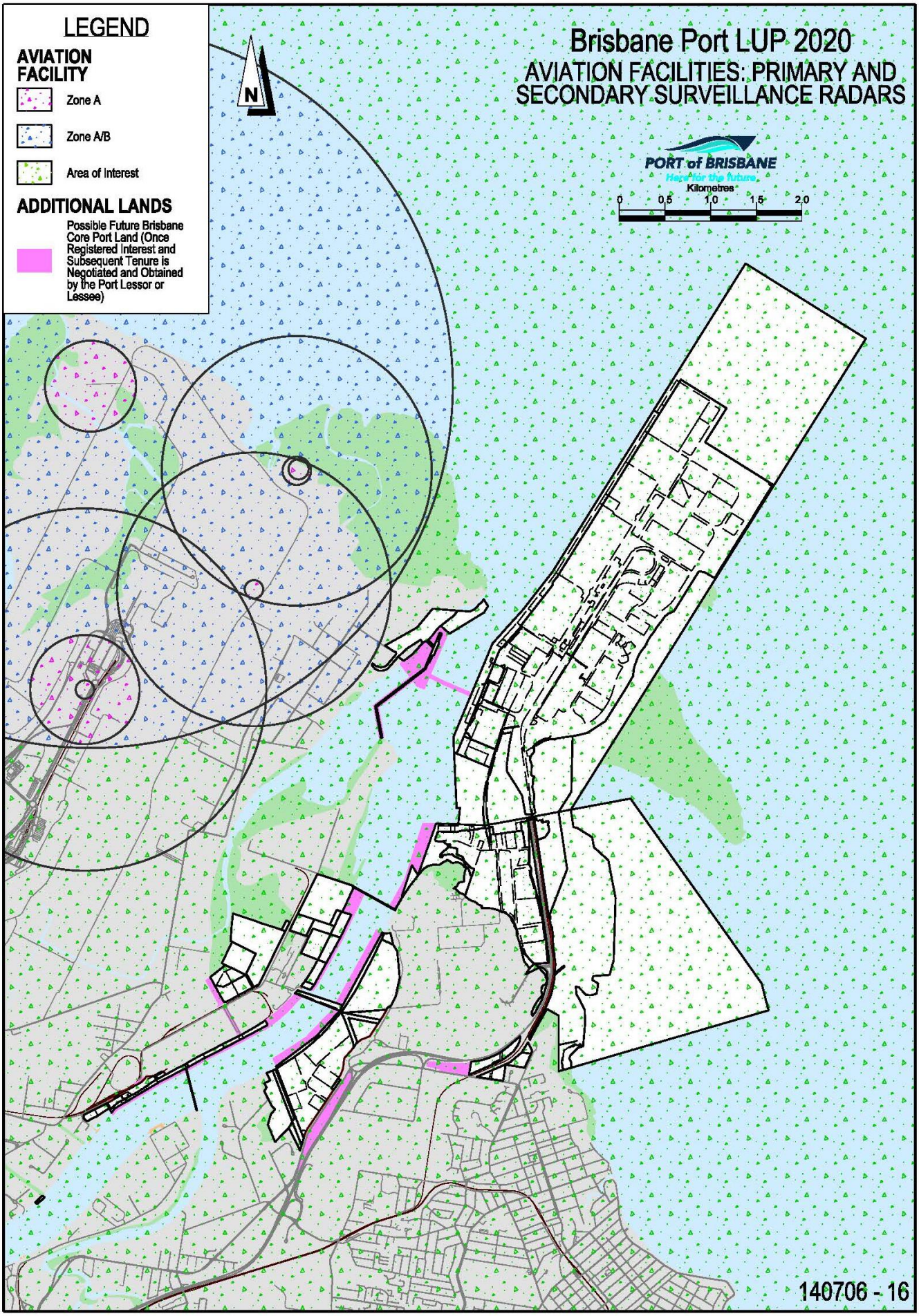
Map 10


LEGEND
MAXIMUM INTESITY OF LIGHT SOURCES MEASURED AT 3° ABOVE HORIZONTAL
ZONE A 0 CD 600m wide 1000m from r'way strip
ZONE B 50 CD 600m wide 2000m from r'way strip
ZONE C 150 CD 1200m wide 3000m from r'way strip
ZONE D 450 CD 1500m wide 4500m from r'way strip
MAXIMUM INTENSITY OF ZERO CANDELLA ABOVE THE HORIZONTAL
Possible Future Brisbane Core Port Land (Once Registered Interest and Subsequent Tenure is Negotiated and Obtained by the Port Lessor or Lessee)
ZONE D
N
Brisbane Port LUP 2020
Airport Restricted Lighting
PORT of BRISBANE
Here for the future
Kilometres
0 0.5 1.0 1.5 2.0
LIGHTS WITHIN THIS 6km RADIUS THAT MAY CAUSE CONFUSION OR DISTRACTION OR GLARE TO PILOTS MAY NEED TO BE MODIFIED OR EXTINGUISHED UNDER CAR 94 AND THE AIRPORTS (PROTECTION OF AIRSPACE REGULATIONS)
NEW PARALLEL RUNWAY
EXISTING RUNWAY 14/32
EXISTING RUNWAY 01/19
NOTE:
THIS DIAGRAM SHOULD BE VIEWED AS A GUIDE ONLY AND IS SUBJECT TO PERIODIC CHANGE.
ALL DEVELOPMENT MUST DEMONSTRATE COMPLIANCE WITH THE "AIRPORTS (PROTECTION OF AIRSPACE) REGULATIONS, THE "CIVIL AVIATION SAFETY REGULATIONS 1996", AND THE "AVIATION REGULATINS 1988".
140706 - 13

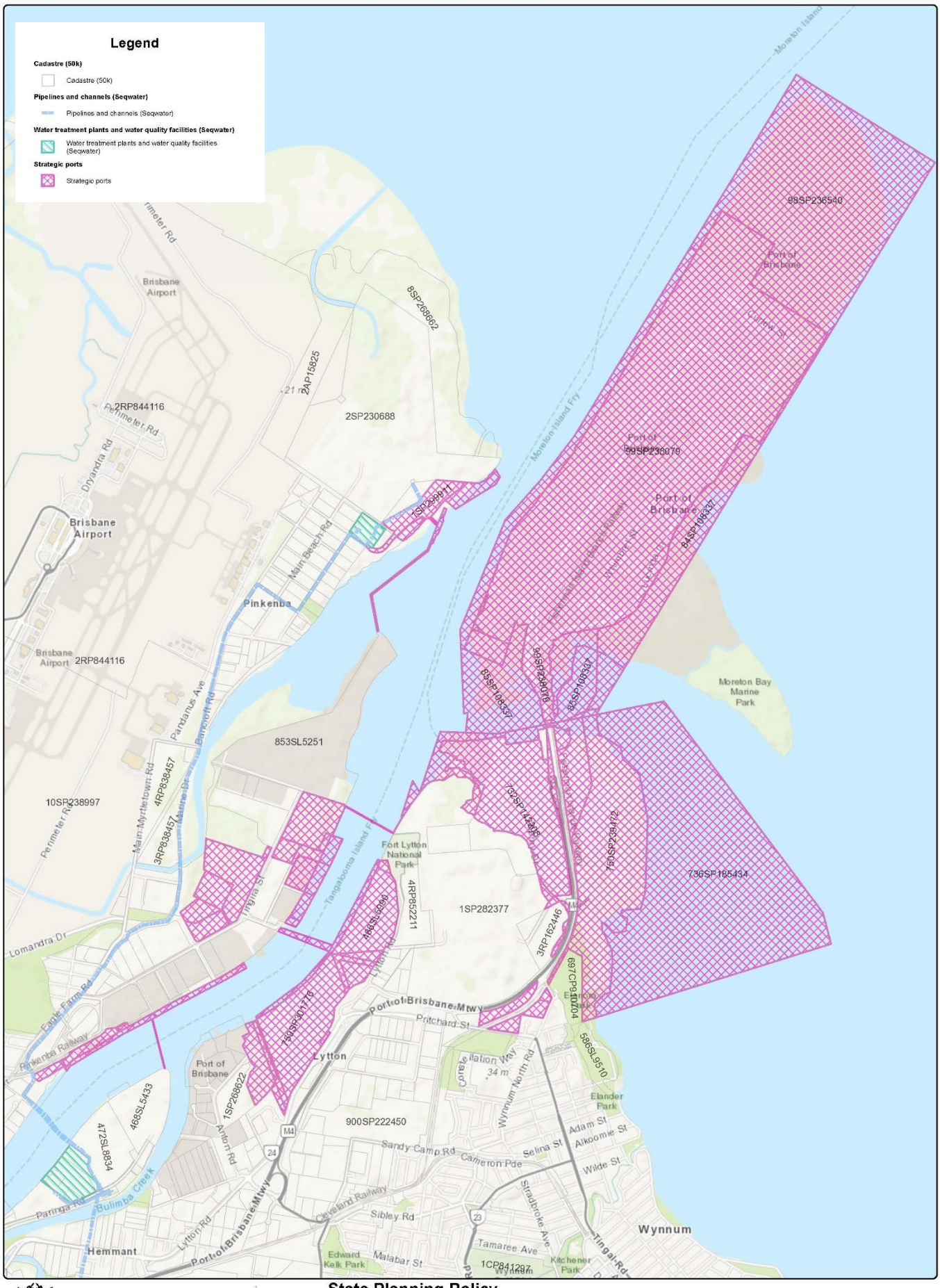
Map 11


LEGEND
WILDLIFE HAZARD BUFFER ZONES
3km Buffer
8km Buffer
13km Buffer
ADDITIONAL LANDS
Possible Future Brisbane Core Port Land (Once Registered Interest and Subsequent Tenure is Negotiated and Obtained by the Port Lessor or Lessee)
N
Brisbane Port LUP 2020
Wildlife Hazard Buffer Zone
(Key Land Use Activities)
PORT of BRISBANE
Here for the future
Kilometres
0 0.5 1.0 1.5 2.0
140706 - 14

Map 12


LEGEND
AVIATION FACILITY
Zone A
Zone A/B
Area of Interest
ADDITIONAL LANDS
Possible Future Brisbane Core Port Land (Once Registered Interest and Subsequent Tenure is Negotiated and Obtained by the Port Lessor or Lessee)
N
Brisbane Port LUP 2020
AVIATION FACILITIES: PRIMARY AND SECONDARY SURVEILLANCE RADARS
PORT of BRISBANE
Here for the future.
Kilometres
0
0.5
1.0
1.5
2.0
140706 - 16

Map 13



Department of State Development, Manufacturing, Infrastructure and Planning

State Planning Policy

Making or amending a local planning instrument and designating land for community infrastructure

0 580 1,160 1,740 2,320

Metres

Date: 04/03/2021

PORT of BRISBANE
Here for the future