

Proposed Marine Facilities between Airport Island and Hong Kong Port

PURPOSE

This paper serves to brief members on the proposed development of marine facilities, located at the bay area between Airport Island and Hong Kong Port (“HKP”). The proposed arrangements include:

- (a) establishment of new marine facilities at a size of about 8.4 hectares of marine bay area between Airport Island and HKP; and
- (b) proposed marine traffic control measures within the proposed sea area

BACKGROUND

2. Airport Authority Hong Kong (“AAHK”) outlined its vision and strategy to transform Hong Kong International Airport (“HKIA”) into an Airport City in a report titled “From City Airport to Airport City” published in 2019. It describes the need for HKIA to maintain and strengthen its position as an international aviation hub. New tourism, leisure, and recreational facilities are proposed around the bay between the Airport Island and HKP. The development of this bay area can enhance the airport as an international intermodal transport hub by creating synergy between the development and the surrounding land uses, such as the highly acclaimed HKIA with its Three-Runway System (3RS), world-class commercial hub – SKYCITY and the future developments at HKP. Together with the Airport Island and the HKP, the proposed development will ultimately contribute to the building of the premier “Airport City”.

3. AAHK endeavours to extend the passengers catchment of HKIA by the development of the pier facility in the bay area between Airport Island and HKP. The proposed development is envisioned to be a mooring space for berthing of pleasure vessels and to accommodate marine services associated with leisure activities and tourism. It will not only provide great convenience for the passengers travelling to and from nearby tourist destinations, but its tourism elements of the pier will also complement the HKIA and become an attraction benefiting the tourism industry and fostered by the catalytic effect with the SKYCITY development.

THE PROPOSAL

4. The location plan and arrangement of the proposed development is illustrated in **Enclosure 1**. The proposed marine facilities include the following:

- a. 73 nos. of wet berths, mainly catering to medium-sized pleasure vessels (total of 3.4 hectares of sheltered spaces); and

- b. A pier located north of the proposed berths to provide marine services associated with leisure and tourism.

5. To ensure the smooth marine traffic to and from the future pier and the berthing facilities, it is necessary for AAHK to acquire the sea area between Airport Island and Hong Kong Port. In January 2022, AAHK submitted their application to the Lands Department to apply for a land grant for the purpose of construction, operation and maintenance of the facilities, buildings and systems related to AAHK's developments. Details of the land grant conditions are still subject to Government's consideration and approval. The proposed sea area to be included under land grant to AAHK is about 33.7 hectares.

MARINE TRAFFIC IMPACTS

6. A Marine Traffic Impact Assessment ("MTIA") was carried out by the consultant engaged by AAHK to assess the marine traffic impact brought about during the construction and operation of the proposed marine facilities.

7. The marine facilities in the Study Area were systematically identified, and the marine traffic data has been collected through a variety of channels to establish the baseline marine traffic data. These include ferry schedule, automatic identification systems ("AIS") and radar data.

8. The level of traffic was reviewed as part of the MTIA. It is anticipated that no significant increase in marine traffic will occur on both the construction and operation phases of the proposed development in comparison with the present marine traffic.

9. A collision risk assessment was undertaken to assess the risk due to the marine traffic produced by the proposed development, and it is found that the risk level is acceptable.

PROPOSED CONTROL MEASURES

10. To enhance safety of the sea area, such as avoiding simultaneous use of navigation channel and limiting air draft under the SkyPier Terminal Bonded Bridge ("SPTBB") and Airportcity Link ("ACL") located north of the proposed development area, a number of management measures are proposed:

- i. Pre-arrival booking system for the use of the pier and the berthing facilities will be available to inform the potential users regarding the headroom requirement and confirm with the users that the incoming vessel complies with the headroom requirement. This will also aid in managing the traffic flow within the navigation channel.
- ii. Subject to agreement with ferry operators and other stakeholders, a marine traffic control system under AAHK is proposed to be established to control and coordinate the marine traffic using the SkyPier and the future pier and berthing

facilities in the bay area.

- a. A Maritime Surveillance System (MSS) will be deployed for real-time monitoring of all vessels entering, transiting through, and exiting the bay.
 - b. The movements of vessels will be managed and coordinated by means of Very High Frequency radio (“VHF”) communications and the patrol launch at scene. Local crafts and pleasure vessels may be temporarily restricted when SkyPier ferries or FSD fireboats are about to transit through the area. [Please be reminded that the marine traffic control centre shall not use the VHF channels listed in First Schedule of Cap 313A to communicate the vessels navigating in the area.]
 - c. The marine traffic control centre operates on specific VHF Channel. It will give warnings to approaching vessels on this frequency and, if necessary, by other available means including the patrol launch at scene. Vessels equipped with VHF should keep a listening watch on specific VHF Channel when transiting this area. [Please be reminded that the marine traffic control centre shall not use the VHF channels listed in First Schedule of Cap 313A to communicate the vessels navigating in the area.]
- iii. A pre-defined vessel movement route for vessels is located along the eastern side of the bay next to HKP. The route will be connected to a navigation channel under SPTBB and ACL, with appropriate navigation aids and signage provided for mariners. The navigation aids for both the southbound and northbound approach of the navigational channel comprise of:
- a. 2 continuous quick green flashing light (60 flashes/min) on the navigation channel span with nominal range of 5 NM
 - b. 2 continuous quick red flashing light (60 flashes/min) on the navigation channel span with nominal range of 5 NM
 - c. 2 Iso 4s – Isophase at 4s repeat lights on navigation span.
 - d. 2 fixed red lights on the pile caps of bridge piers with nominal range of 1 NM
- iv. For navigation safety in low visibility conditions, red and green lateral buoys with radar reflectors and AIS in accordance with IALA standard will be permanently established at the entrance of the navigation channel. The lateral buoys are proposed to be located on the north side of the SPTBB, at minimum 50m from the bridge piers. Lateral buoys on the south side are not recommended as they may pose an obstruction for vessels navigating in the waters south of ACL due to the limited water space. In addition, it is anticipated that mariners that have passed through the navigation channel into the bay would be aware of the navigation channel upon passing and lateral buoys on the south side would be redundant. The particulars of the proposed buoys are provided in **Enclosure**

3.

- v. Signage which displays the minimum height restriction shall be installed at bridge soffit during construction and operation. Appropriate signage with reference to the Transport Planning and Design Manual and relevant design codes should be designed and agreed with the Highways Department and Marine Department.
- vi. The arrangement of the navigation channel with navigation aids and signage will be implemented under the SPTBB and ACL project. The details are presented in **Enclosure 2**.

WAY FORWARD

11. Subject to relevant statutory procedures and support from stakeholders, construction of the proposed marine facilities is scheduled to commence in 2026 for targeted commissioning in 2028.

ADVICE SOUGHT

12. Members are invited to offer comments on the proposed navigation channel arrangement and marine traffic safety measures of the Proposal.

ENCLOSURES

Enclosure 1 Location Plan and Proposed Arrangement

Enclosure 2 Proposed Navigation Channel under SPTBB and ACL

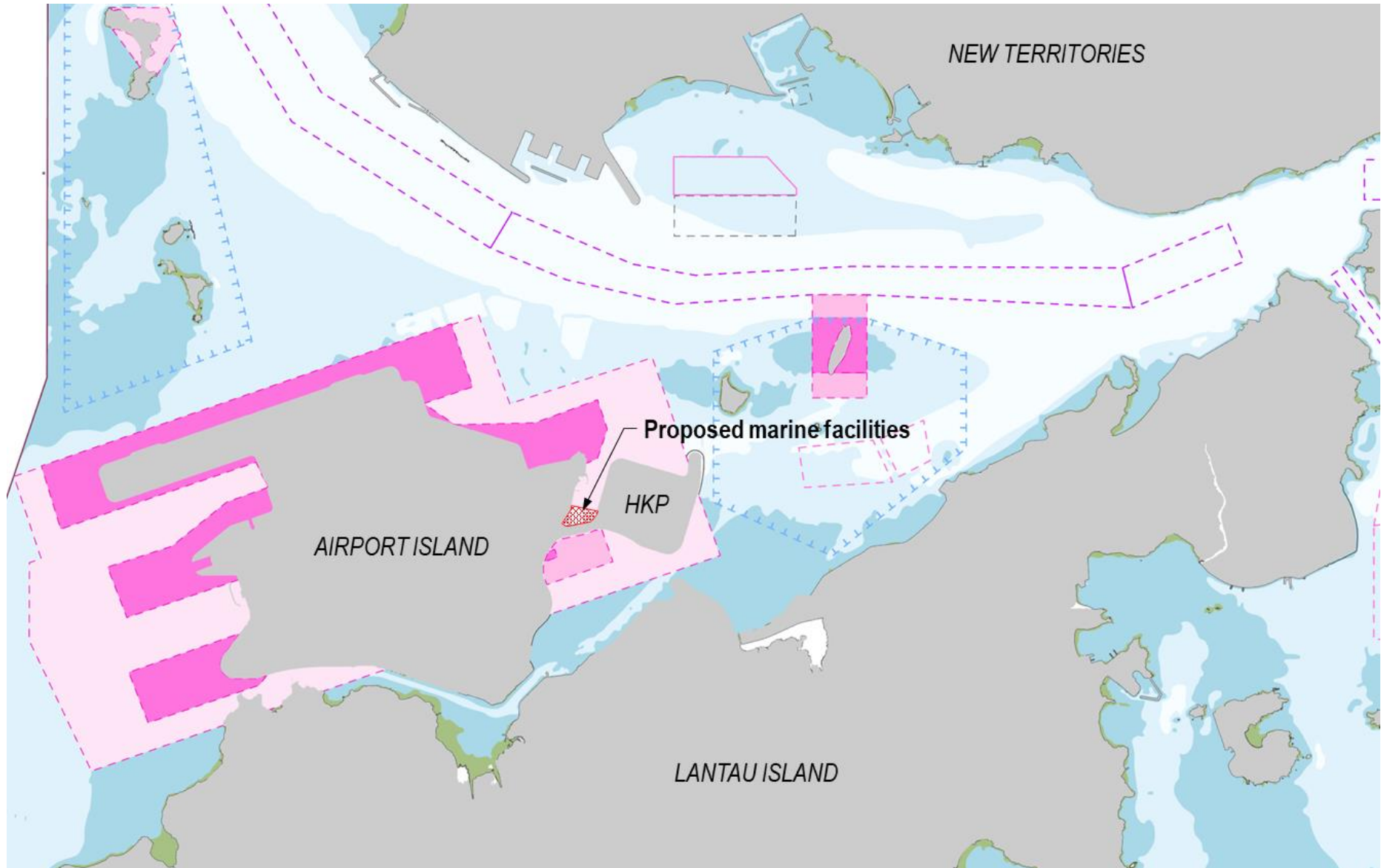
Enclosure 3 Particulars of the Proposed Buoys

Airport Authority Hong Kong

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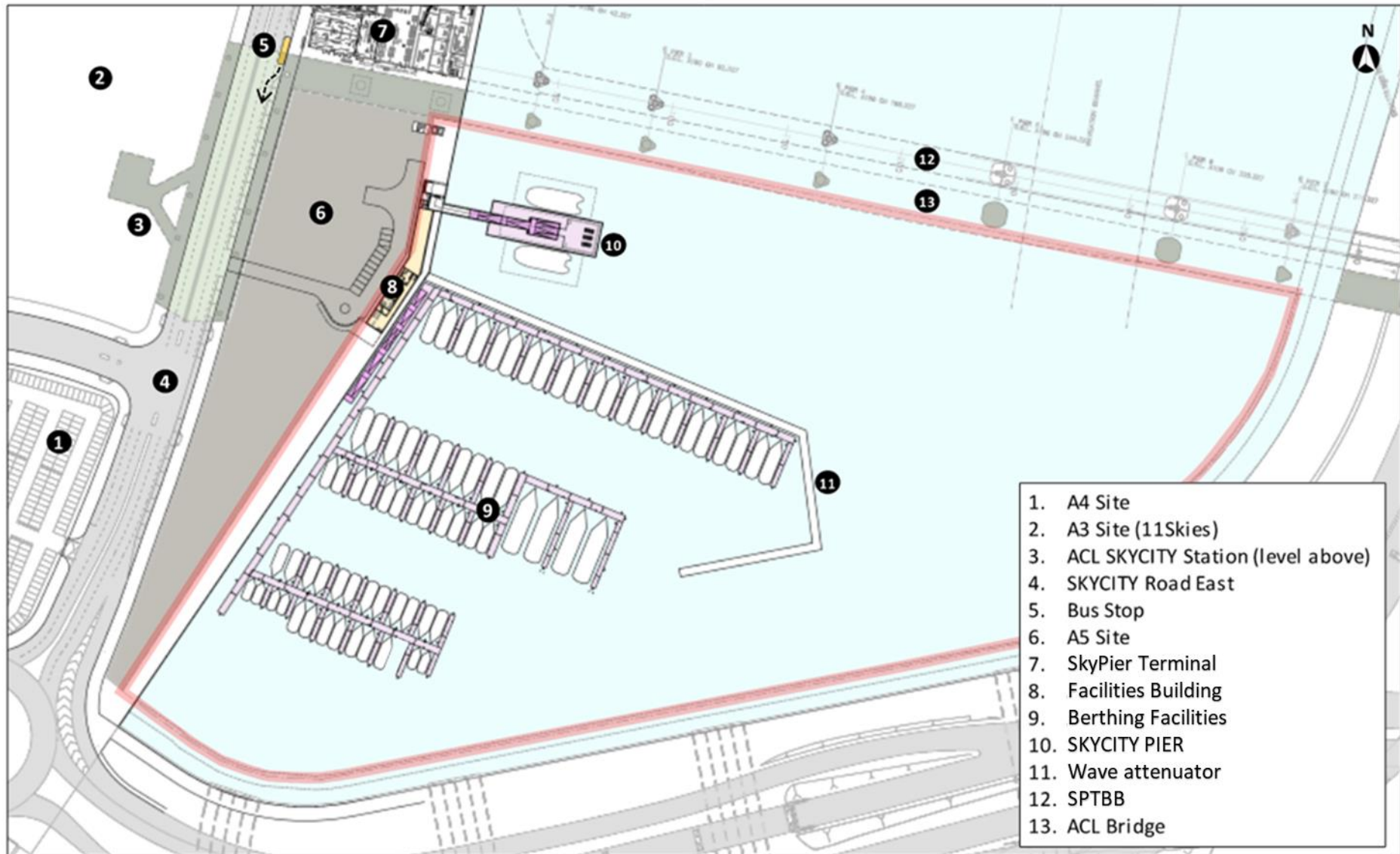
Enclosure 1 - Location Plan and Proposed Arrangement

Location plan of proposed marine facilities



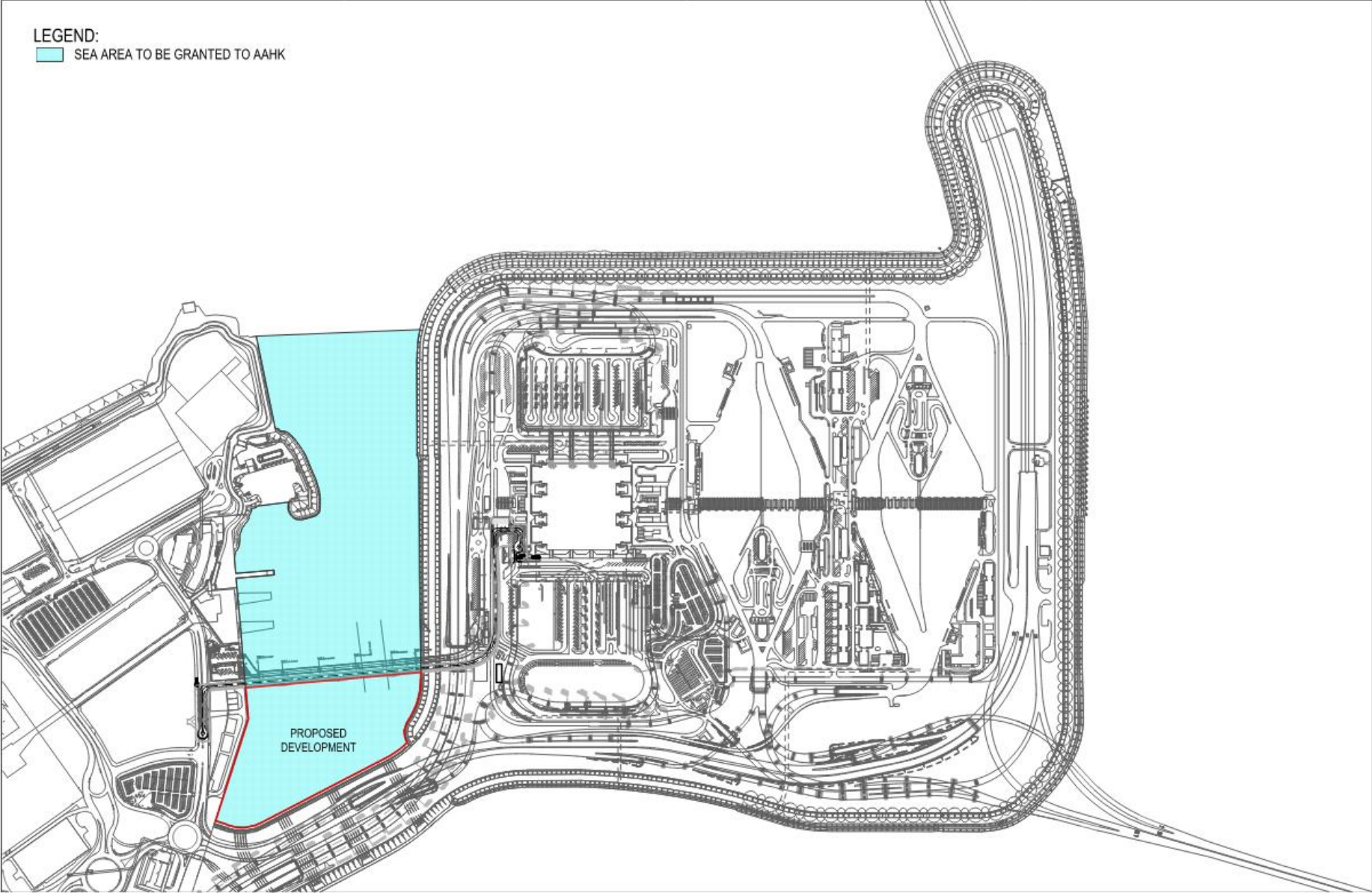
Enclosure 1 - Location Plan and Proposed Arrangement

Proposed arrangement of proposed marine facilities



Enclosure 1 - Location Plan and Proposed Arrangement

Sea area under AAHK's land grant application



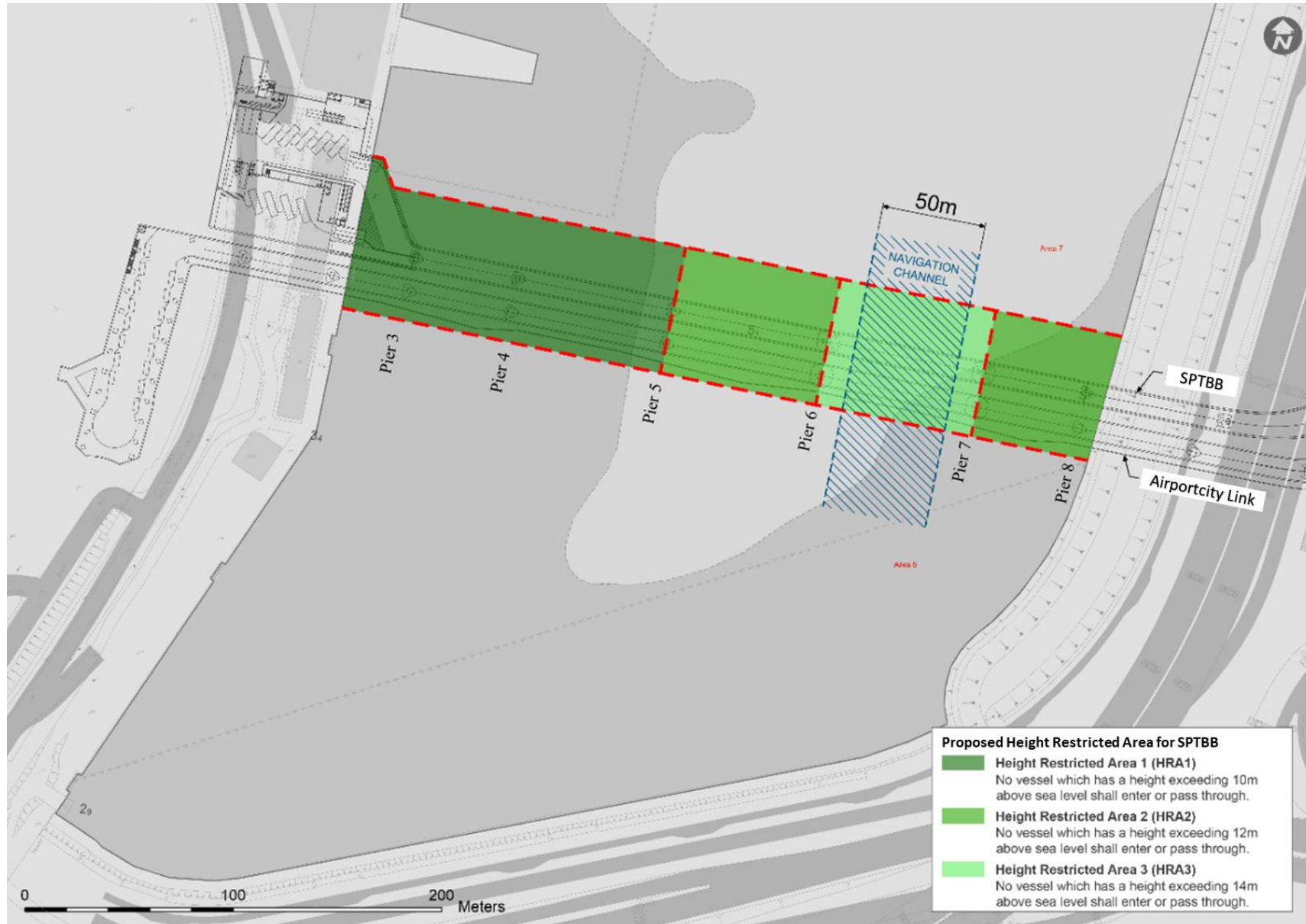
Enclosure 1 - Location Plan and Proposed Arrangement

Pre-defined route for vessels



Enclosure 2 - Proposed Navigation Channel under SPTBB and ACL

Proposed Height Restricted Areas and Navigation Channel



Enclosure 2 - Proposed Navigation Channel under SPTBB and ACL

Proposed Signage for SPTBB and ACL

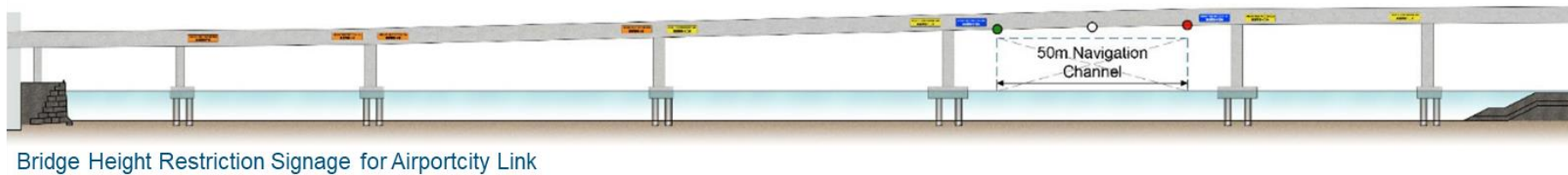
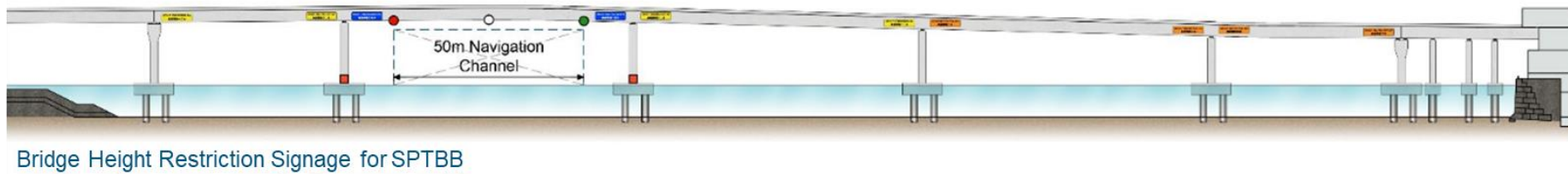
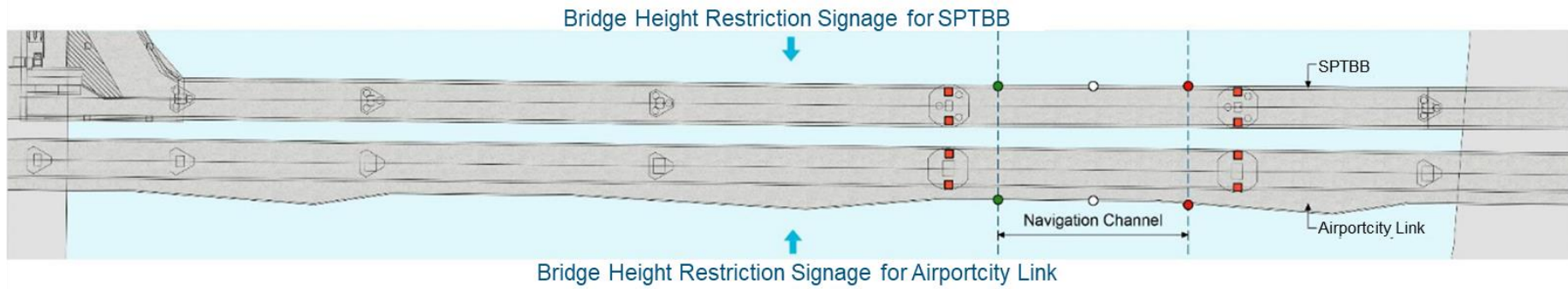
Legend

- Isophase Light 4s
- Continuous Quick Flashing Red Light (QR) and Continuous Quick Flashing Green Light (QG)
- Fixed Red Light

HEIGHT RESTRICTION 10m
高度限制十米
Signs for 10m Height Restriction (indicative only)

HEIGHT RESTRICTION 12m
高度限制十二米
Signs for 12m Height Restriction (indicative only)

HEIGHT RESTRICTION 14m
高度限制十四米
Signs for 14m Height Restriction (indicative only)



Enclosure 2 - Proposed Navigation Channel under SPTBB and ACL

Proposed Navigation Channel Lateral Buoys

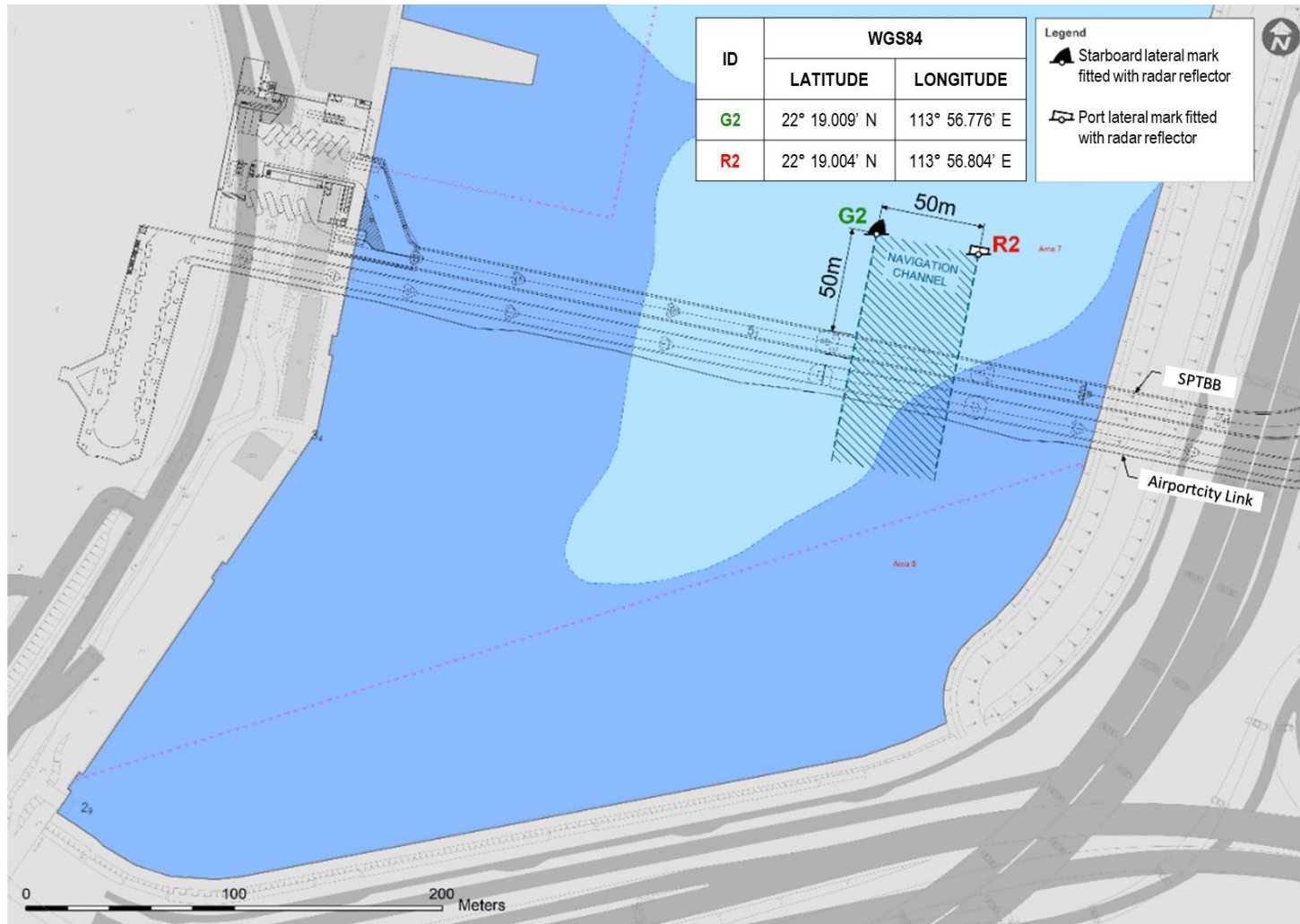


Photo of lateral buoy (for reference only):



Enclosure 3 – Particulars of Proposed Buoys

The particulars of the proposed buoys are as follows:

Name:	G2
Position (WGS 84 Datum):	22° 19.009' N 113° 56.776' E
Shape:	Cone
Colour:	Green
Light Characteristics:	Q. G
Top Mark:	None
Radar Reflector:	Fitted
Automatic Identification System:	Fitted

Name:	R2
Position (WGS 84 Datum):	22° 19.004' N 113° 56.804' E
Shape:	Can
Colour:	Red
Light Characteristics:	Q. R
Top Mark:	None
Radar Reflector:	Fitted
Automatic Identification System:	Fitted