For discussion
on 26 May 2026

Legislative Council Panel on Development

PWP Item No. 5115AP – Expansion of Aberdeen Typhoon Shelter

PURPOSE

This paper briefs Members on the proposal to upgrade item **5115AP** to Category A for carrying out the works for expansion of Aberdeen Typhoon Shelter, while simultaneously achieving multiple policy objectives.

PROJECT SCOPE AND NATURE

2. The proposed scope of works under **5115AP** comprises –

(a) Construction of two breakwaters of approximately 340 metres (eastern) and 300 metres (western) in length to the south of the existing Aberdeen Typhoon Shelter, with public landing facilities and open space at the proposed eastern breakwater, and associated sea-bed stabilization works for the new breakwaters;

(b) Construction of a wave wall in the form of floating breakwater of approximately 80 metres in length at Aberdeen Channel to the east of the tombolo between Ap Lei Chau near Yuk Kwai Shan and Ap Lei Pai;

(c) Construction of a pedestrian walkway of approximately 240 metres in length connecting the proposed eastern breakwater to Ocean Drive in Tai Shue Wan, and provision of an associated vessel impact protection system;

(d) Shortening of the existing western breakwater at the eastern side of Ap Lei Chau by approximately 70 metres in length to optimise the navigation channel, and modification of the existing eastern

breakwater near Shum Wan Road to provide open space on the crest;

(e) associated works including drainage, water supply, utilities, lighting facilities, mechanical and electrical systems, and landscaping works; and

(f) implementation of environmental mitigation measures and environmental monitoring and audit (EM&A) programme for the above works.

The layout plan, cross sections and photomontages of the proposed works are at **Enclosure 1, Enclosure 2 and Enclosure 3** respectively.

3. Subject to the support from this Panel and Public Works Subcommittee, we plan to commence the proposed works upon obtaining the approval from the Finance Committee (FC) of the Legislative Council for target completion in around four and a half years (i.e. by end-2030). In order to meet the tight construction programme, we have invited tenders in parallel to enable early commencement of the proposed works. The returned tender prices have been reflected in the estimated cost of the project. We will award the works contract only after obtaining the funding approval from the FC.

JUSTIFICATION

4. There are four policy objectives under the project –

(a) addressing the demand for sheltered spaces;

(b) scaling up capability in coping with extreme weather;

(c) developing yacht economy; and

(d) synergies with Ocean Park.

5. Since 2021, the Development Bureau has been taking forward the Invigorating Island South initiative to develop the Southern District into a place full of vibrancy, vigour and velocity for people to work, live, explore new ideas and have fun.

Expansion of Aberdeen Typhoon Shelter is one of the key projects under the Invigorating Island South initiative, which aims at addressing the strong demand for sheltered space in Hong Kong, particularly from pleasure vessels, while supporting tourism, leisure and recreational development in the Southern District. The 2024 Policy Address and 2025 Policy Address announced the initiative of promoting prime yacht tourism. Early last year, the Development Bureau invited expressions of interest (EOIs) from the market for the construction and operation of a marina at the Aberdeen Typhoon Shelter. The project intends to utilise part of the expanded waterbody for the market to develop a marina, thereby leveraging market forces to promote yacht tourism. The urgency of and the benefits to be brought by implementing the proposed works are detailed as follow—

Addressing the Demand for Sheltered Spaces

6. The results of the Assessment of Typhoon Shelter Space Requirements 2022-2035, which was completed by the Marine Department in end-2022, revealed that owing to the increase in demand for berthing of pleasure vessels, there exists a need to expand the Aberdeen Typhoon Shelter to meet the overall territory-wide demand of sheltered space area, as well as the berthing needs of local working and pleasure vessels throughout the period up to 2035. The total area of the existing Aberdeen West and Aberdeen South Typhoon Shelters is approximately 60 hectares, primarily accommodating fishing and associated working vessels, as well as pleasure vessels. The typhoon shelter will be expanded southward under the proposed works by approximately 24 hectares (including navigation channels), of which approximately 11 hectares are preliminarily proposed as a public mooring area to be managed by the Marine Department to alleviate the pressure on the limited mooring area in the Southern District; approximately 10 hectares are designated for the future private-operated marina (see paragraphs 10 and 11 below), while the remaining approximately 3 hectares will serve as navigation channels.

Scaling up Capability in Coping with Extreme Weather

7. Hong Kong is frequently affected by tropical cyclones, and coastal windy locations are often vulnerable to storm surge[1] impacts, posing potential threats to coastal facilities. Part of the wave wall structure on the crest of the existing western breakwater in the east

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[1] Storm surge is a rise of sea level due to the combined effects of low pressure and winds associated with a tropical cyclone.

of Ap Lei Chau, as well as some facilities of a hotel located along the promenade beyond Aberdeen Typhoon Shelter were damaged during Super Typhoon Ragasa in September 2025. The breakwaters' resilience to extreme weather will be enhanced while expanding the typhoon shelter. The two proposed breakwaters are designed in accordance with the requirements in the latest Port Works Design Manual (PWDM) issued by the Civil Engineering and Development Department (CEDD). Adopted the latest design parameters considering extreme weather conditions, including historical storm surge water levels and wind speeds, and verified through large-scale three-dimensional physical wave model tests, it is ensured that the wave height within the expanded portion of Aberdeen Typhoon Shelter will meet the design wave height requirements for mooring and navigation inside the typhoon shelter, safeguarding vessels therein. The proposed breakwaters will also reduce potential threats to the coastal facilities from storms.

8. Aberdeen Channel faces the South China Sea and is primarily affected by waves from the south and southeast. The two proposed breakwaters will adopt vertical face design, with suitable overlap to enhance the overall structural stability and resilience against wave actions[2]. To address the impacts of storm surges, wind waves and sea level rise under climate change, we have raised the crest level of the new breakwaters and applied a progressive adaptive approach, reserving space on the crest for increasing the height of wave wall atop later according to actual conditions.

9. Considering the weakened waves[3] from the west passing through the tombolo between Yuk Kwai Shan and Ap Lei Pai, and taking the experience of the installation of floating breakwaters in Hei Ling Chau Typhoon Shelter, we propose installing a wave wall in the form of floating breakwater to the east of the tombolo, which not only minimises the construction cost, but also avoids adverse impact to the sea-bed and

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[2] The innovative breakwater design enhances the overall structural stability and resilience to wave actions through four aspects: (i) adopted deep cement mixing method to stabilise the sea-bed underneath the proposed breakwaters, in order to minimise the risks of settlement; (ii) adopted large-size precast reinforced concrete caisson as the trunk of the breakwaters, and infill with construction materials to enhance the structural resilience; (iii) addition of wave absorption chambers at the overlapping sections of the two proposed breakwaters to minimise effectively the risk of waves reflecting off the vertical faces and entering into the typhoon shelter; and (iv) laying of large-size tetrapods on the sloping surfaces at the landfalls to reduce the risk of overtopping waves crossing the terrain and entering into the typhoon shelter.

[3] The tombolo serves as a natural barrier that weakens incoming waves. Waves from the west are already attenuated when passing through the tombolo, and further reduced by the wave-dampening effect of the floating breakwater before entering the expanded portion of Aberdeen Typhoon Shelter.

tombolo during construction. The tombolo is a rare coastal landform near urban areas that attracts visitors and merits conservation.

Developing Yacht Economy

10. As mentioned above, the Policy Addresses over the past two years have recommended promoting the yacht economy. Among the three proposed locations[4] referenced in the Policy Addresses, the development conditions for the expansion area of Aberdeen Typhoon Shelter are comparatively more mature with respect to geographical location, surrounding infrastructure, and development timeline, etc. Eight submissions[5] were received from the market early last year during the market gauging EOI exercise, all of which expressed support for the proposed marina development to drive high-end tourism and consumption spending. Subsequent technical studies confirmed the feasibility of developing a marina with about 200 yacht berths, along with supporting landside facilities and private residential development at the site near Po Chong Wan under the "large-scale land" approach.

11. We briefed the Southern District Council in March and May this year about the details of the development project, as well as the upcoming relevant statutory procedures. The development project received support from the District Council and other local stakeholders, who concurred with taking the opportunity by the expansion of the typhoon shelter to enrich tourism resources of the Southern District, invigorate the local economy, improve the local environment and generate substantial land sale revenue for the Government. If all statutory and land clearance[6] procedures are completed smoothly, the tender exercise for the development project is targeted for the first half of 2027, with the aim of completing the marina by the first half of 2031 at the earliest. In support of this goal, the expansion of Aberdeen Typhoon Shelter must commence as soon as practicable to ensure timely provision of the designated water area for future developers

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4 The other two locations are the ex-Lamma Quarry site and the Hung Hom Station waterfront site.

5 The enterprises/organisations submitted EOIs include local and overseas developers, hotel/entertainment groups and marina developers/operators.

6 The site in Po Chong Wan for the proposed development of supporting landside facilities and private residential development is a government land, currently let to around 90 tenants by way of short-term tenancies. We will disburse ex-gratia allowances to eligible operators, and let a portion of vacant government land on Tin Wan Praya Road to operators who wish to continue operating marine engine workshops or marine associated trade workshops through restricted tender. We are discussing with relevant operators on the arrangement.

to construct the marina. We will also implement a phased handover of the site to the developer to ensure the continued navigation and normal operations within the existing typhoon shelter throughout the construction period. The proposed location plan and artistic impression for the marina development are at **Enclosure 4**.

Synergies with Ocean Park

12. Considering that the expanded Aberdeen Typhoon Shelter is in proximity to the Ocean Park and the nearby hotel, while benefiting from the astonishing view of Aberdeen Channel, we recommend modifying the existing eastern breakwater adjacent to Shum Wan Road, with its crest converted into a public open space.

13. The proposed works also include the provision of a public open space and public landing facilities at the proposed eastern breakwater, together with a pedestrian walkway connecting the public open space and landing facilities to the promenade adjoining the Water World Ocean Park. The pedestrian walkway will be constructed offshore, ensuring no adverse impact on the Coastal Protection Area, while enabling locals and visitors to enjoy the beautiful scenery and natural geological features (such as sea caves) along the way. In designing the public open space on the proposed eastern breakwater crest, after careful consideration of the geographical location as well as future operational and maintenance requirements, we recommend providing coastal harbour steps, railings, shelters, observation deck, photogenic installations, and distinctive lighting features. These elements will transform the public open space into a new landmark in the Southern District. This development will seamlessly connect Ocean Park with the district's abundant blue and green resources, further enhancing its appeal to both local and overseas visitors. The proposed public landing facilities address the needs of vessel berthing and passenger embarkation and disembarkation, while serving as a key transportation hub for island tourism in the Southern District, further enhancing connectivity between the Southern District and other island and coastal attractions, thereby generating synergistic benefits. We are currently discussing a proposal with the Ocean Park Corporation (OPC) to entrust them with management of the pedestrian walkway, public landing facilities and public open space on the new eastern breakwater. This approach aims to provide more efficient, integrated management for the Tai Shue Wan waterfront. We will also introduce eco-shoreline elements such as eco-tiles and tidal pools, into the new breakwaters, pedestrian walkway, and its associated vessel impact protection system, with the aim of enhancing biodiversity and improving ecological functionality.

FINANCIAL IMPLICATIONS

14. We estimate the capital cost of the project to be $2,030.30 million in money-of-the-day (MOD) prices. The estimated approximate cost breakdown in percentage are set out below—

		Cost breakdown in percentage
(a)	Construction of new breakwaters	
	(i) Sea-bed stabilisation	About 20%
	(ii) Vertical breakwaters, wave wall in the form of floating breakwater and associated works[7]	About 55%
(b)	Construction of pedestrian walkway and vessel impact protection system	About 5%
(c)	Modification of two existing breakwaters[8], landscaping and other associated works[9]	About 5%
(d)	Other expenses (including contingencies)[10]	About 15%

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7 Associated works of new breakwaters comprises: (i) laying of large-size tetrapods on the landfall of the proposed eastern breakwater; (ii) constructing sloping rock-mound breakwater to connect the proposed western breakwater with Ap Lei Pai; (iii) providing public landing facilities at the proposed eastern breakwater; (iv) providing the associated drainage, water supply, utilities, lighting facilities and mechanical and electrical systems for the open space at the crest of breakwater; and (v) providing eco-shoreline facilities.

8 The works for modification of two existing breakwaters comprises: (i) widening and enhancing the existing eastern breakwater to provide public open space atop; and (ii) demolishing part of the existing western breakwater to at least 5 metres below the Hong Kong Principal Datum to fulfil the water depth requirements of the navigation channel in the existing Aberdeen Typhoon Shelter, and shortening the existing western breakwater by approximately 70 metres to optimise the navigation channel.

9 Landscaping and other associated works comprises: (i) beautification works for open space; (ii) tree survey, maintenance, removal and planting works; and (iii) environmental impact mitigation measures.

10 Other expenses comprise: (i) consultants' fees, (ii) remuneration of resident site staff; (iii) fees for environmental monitoring and audit programme; and (iv) contingencies.

15. During the investigation and design phases of the project, we have considered and optimised various design alternatives to enhance cost-effectiveness and reduce the project cost. Given the proximity of the proposed expansion of typhoon shelter to the proposed Tai Shue Wan Pier, the two projects were integrated to provide public landing facilities on the proposed eastern breakwater, thereby eliminating the navigation channel originally required for the Tai Shue Wan Pier, thus increasing the usable area of the expanded typhoon shelter, on the other hand reducing the overall project costs, while minimising the cumulative environmental impact associated with multiple construction works. High-strength steel has been adopted in the proposed breakwaters in place of some conventional steel members, thus lowering the weight of some precast components and further improving the project's cost efficiency. Furthermore, drawing on the experience from the installation of floating breakwaters at Hei Ling Chau Typhoon Shelter, the floating breakwater instead of conventional wave wall has been proposed to the east of the tombolo, where wave conditions are relatively mild, which not only minimises the project cost, but also avoids adverse impact to the tombolo.

PUBLIC CONSULTATION

16. We consulted the Development Planning Committee of the Southern District Council for the project on 23 May 2024, and reported the project progress to the Southern District Council on 18 September 2025. Members of the said district council and committee agreed that the expansion of Aberdeen Typhoon Shelter would help promote the development of Hong Kong yacht economy and expressed support for the project.

17. We gazetted the proposed works for the project under the Foreshore and Sea-bed (Reclamations) Ordinance (Cap. 127) and Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 13 and 20 June 2025 respectively, and received no objection during the statutory objection period. The notices of authorization were subsequently gazetted on 3 and 10 October 2025 respectively.

ENVIRONMENTAL IMPLICATIONS

18. The project is a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499) and Environmental Permit (EP) for its construction and operation is required. The environmental impact assessment (EIA) report was approved in July 2025 under the EIAO and EP for the proposed works was

issued. The EIA report concluded that the environmental impacts of the proposed works can be controlled to within the criteria under the EIAO and the Technical Memorandum on EIA Process with the implementation of the recommended mitigation measures. Furthermore, we propose introducing eco-shoreline elements, such as eco-tiles and tidal pools, into the proposed breakwaters, pedestrian walkway, and its associated vessel impact protection system, with the aim of enhancing biodiversity and improving ecological functionality, enabling environmental sustainability and promoting the concept of environmental education.

19. We have included relevant provisions in the works contract requiring the contractor to implement the measures recommended in the EIA report and the environmental monitoring and audit programme to minimise the environmental impacts of the proposed works during construction. These include installing silt curtains to mitigate water quality impact, conducting water quality monitoring within and adjacent to the construction site and implementing standard noise and dust control measures. We have allowed sufficient funds in the project estimates to implement the environmental mitigation measures recommended in the EIA report.

20. During the planning and design phases, we have considered measures to minimise construction waste generation (for example prefabricating the large-size precast reinforced concrete caissons for the breakwater trunk off-site and transporting them to the site for installation). In addition, we will request the contractor to reuse the inert construction waste (such as the dolosse and rockfill materials generated from the modification of the two existing breakwaters) on-site or at other suitable construction sites as far as practicable to minimise the generation of inert construction waste requiring disposal at public fill reception facilities (PFRF)[11]. To further reduce construction waste generation, we will encourage the contractor to utilise recycled or recyclable inert construction waste as much as possible, and to use materials other than timber for formwork construction.

21. During the construction phase, the contractor will be required to submit waste management plan for approval. The plan must outline appropriate mitigation measures to avoid and reduce the generation of inert construction waste and to reuse and recycle

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[11] PFRF are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at PFRF requires a license issued by the Director of Civil Engineering and Development.

this waste. We will ensure that the daily operations of the construction site comply with the approved plan and that the contractor will separate inert from non-inert construction waste on-site before transporting them to appropriate facilities for disposal. We will adopt the trip ticket system to monitor the transport of inert and non-inert construction waste to PFRF and landfills for disposal.

22. We estimated that approximately 61,000 tonnes of construction waste will be generated under the proposed works, of which approximately 56,000 tonnes (92%) of inert construction waste will be reused on-site, and approximately 4,000 tonnes (6%) of inert construction waste will be transported to PFRF for future reuse. The remaining approximately 1,000 tonnes (2%) of non-inert construction waste will be disposed of at landfills. The estimated total cost for transporting the construction waste to the PFRF and landfill for disposal under the project is approximately $480,000 (calculated based on a unit charge rate of $71 per tonne for disposal at PFRF and $200 per tonne for disposal at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Chapter 354N)).

HERITAGE IMPLICATIONS

23. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings or structures, sites of archaeological interest, all sites or buildings or structures in the list of new items with proposed grading and Government historic sites identified by the Antiquities and Monuments Office.

TRAFFIC IMPLICATIONS

24. We have conducted a land traffic impact assessment for the proposed works. According to the findings of the assessment, the proposed works will not cause any adverse impact on local traffic during construction or upon completion.

25. We have also conducted a marine traffic impact assessment for the proposed works which concluded that, with the implementation of risk mitigation measures (including appropriate marine traffic controls and contingency arrangements under adverse weather), the proposed works will not cause any significant local marine traffic impact during construction or upon completion. Given that the large-scale marine engineering works such as sea-bed stabilisation works and breakwater construction will be involved,

to ensure that normal operation at the entrance and navigation channel of the existing Aberdeen Typhoon Shelter is maintained during construction, the proposed works will be carried out in phases with corresponding temporary marine traffic arrangements. We will closely liaise and arrange coordination meetings with stakeholders during construction.

LAND ACQUISITION

26. The project does not require any land resumption. The landfall portion of the proposed eastern breakwater and the pedestrian walkway will connect to the lot boundary of Ocean Park. Discussion will be held with OPC to resolve the relevant land matters of the proposed works through a lease modification.

BACKGROUND

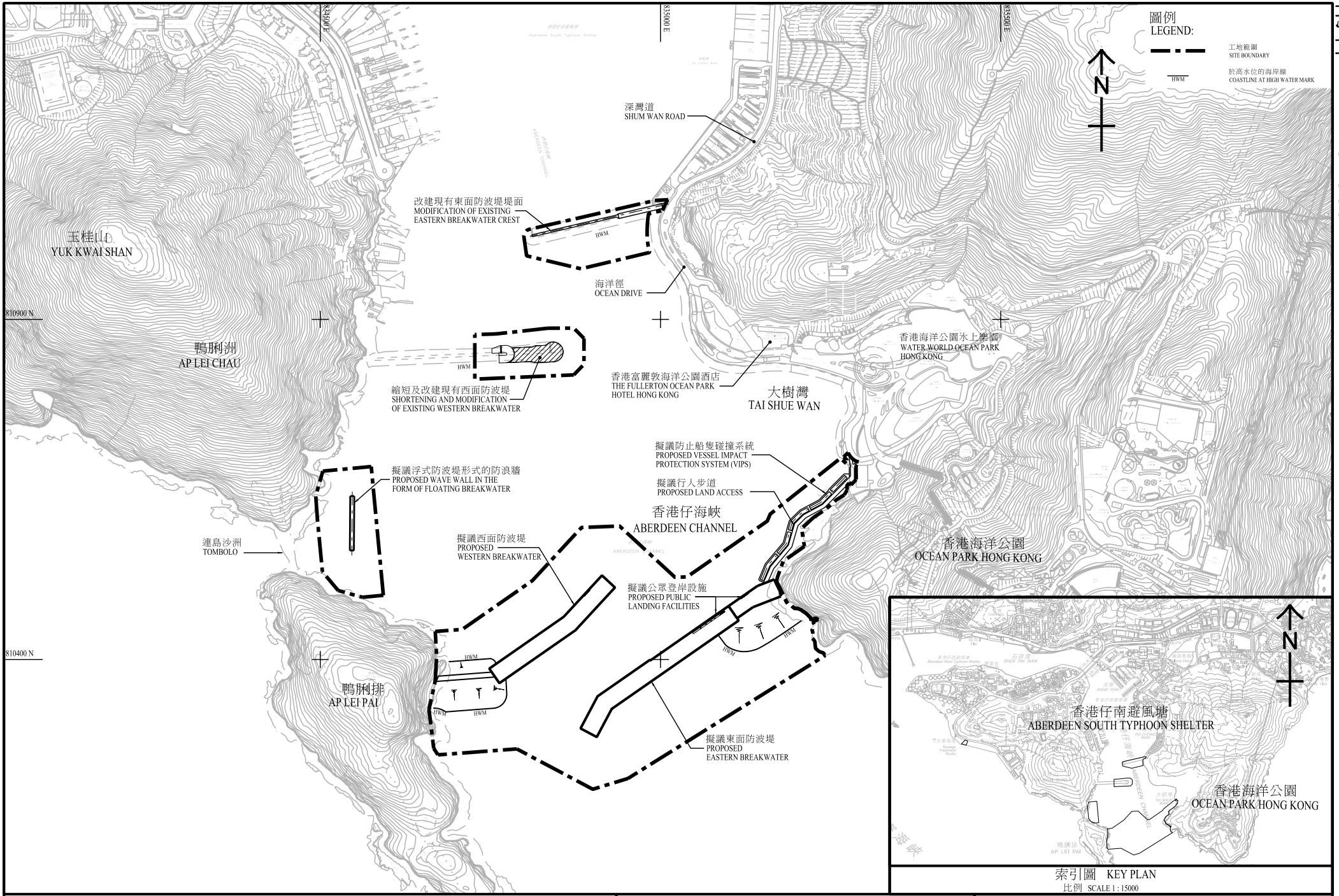
27. We engaged consultants in June 2022 to carry out the detailed design and ground investigations for **PWP Item No. 5115AP.** The approved cost estimate is approximately $40.18 millions in MOD prices which was charged to block allocation **Subhead 5101CX** "Civil engineering works, studies and investigations for items in Category D of the Public Works Programme". Detailed design and ground investigations are required to define the project scope and estimate costs for the Legislative Council funding application.

WAY FORWARD

28. Subject to the support from the Panel on Development, we plan to submit the proposal to the Public Works Subcommittee for consideration and seek funding approval from the FC.

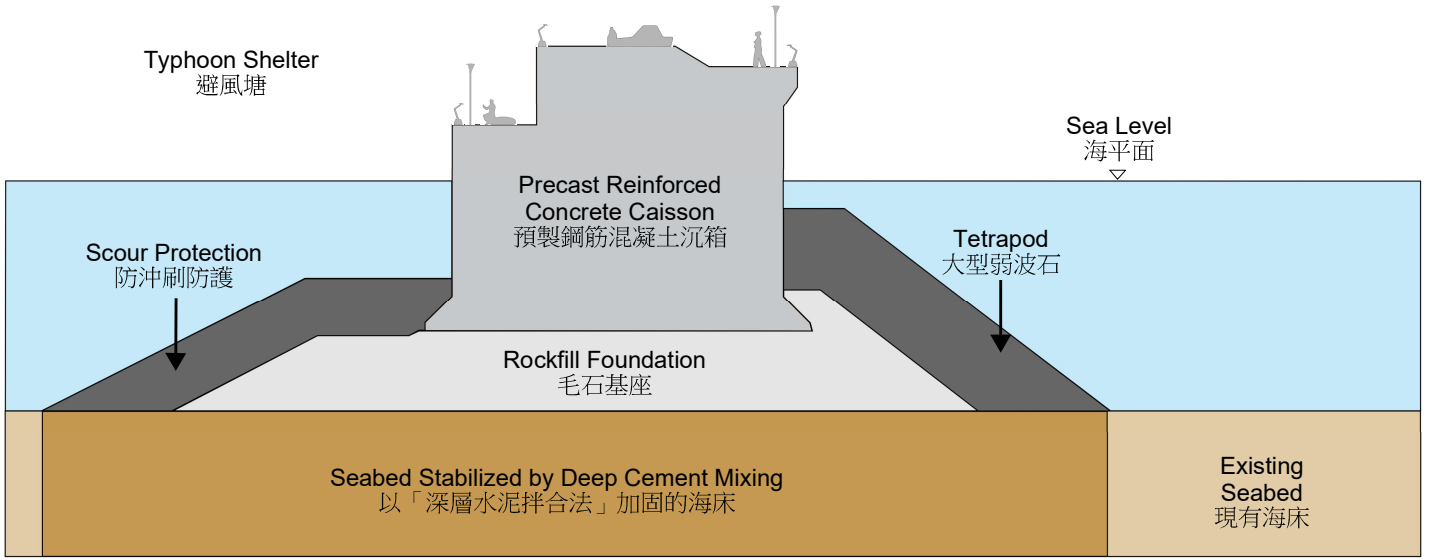
Development Bureau
Civil Engineering and Development Department
May 2026

附件 1 ENCLOSURE 1

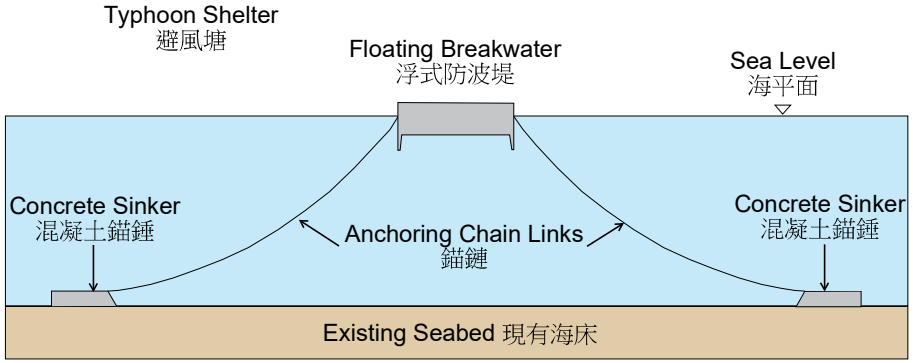


索引圖 KEY PLAN
比例 SCALE 1 : 15000

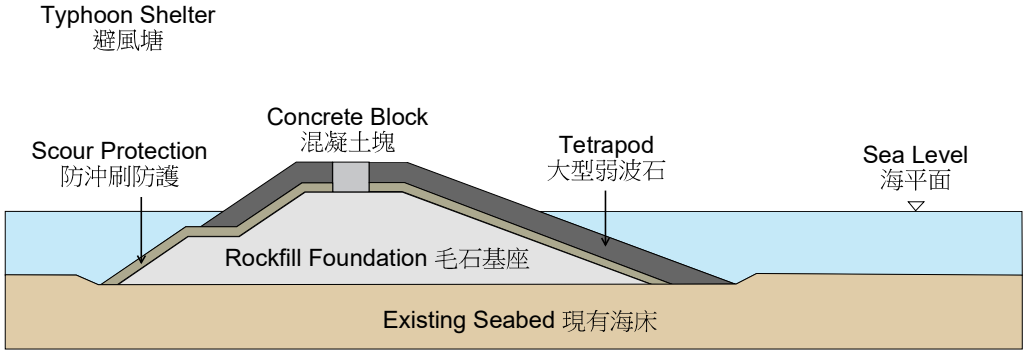
工程名稱 PROJECT TITLE 工務計劃項目編號 5115AP - 擴建香港仔避風塘 PWP ITEM NO. 5115AP - EXPANSION OF ABERDEEN TYPHOON SHELTER	圖則名稱 DRAWING TITLE 平面圖 LAYOUT PLAN	比例 SCALE 0 25 50 75 100 125 METRES 1 : 2500



Eastern Vertical Breakwater
東面直立式防波堤



Wave Wall in the form of Floating Breakwater
浮式防波堤形式的防浪牆

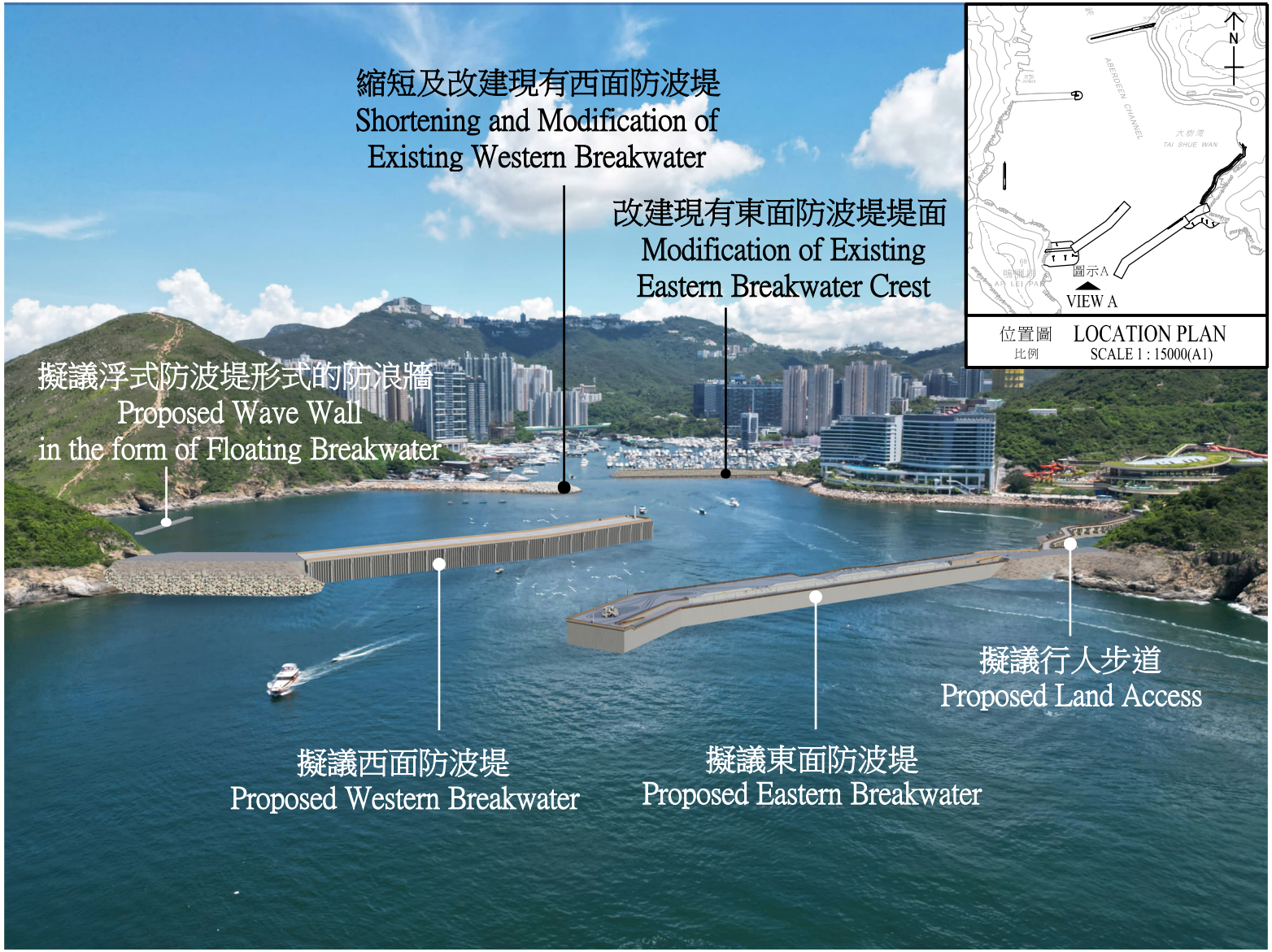


Landfall
防波堤接岸部份

REMARKS: DRAWINGS ON THIS PAGE ARE NOT TO SCALE AND ARE FOR ILLUSTRATIVE PURPOSES ONLY
備註：本頁圖案不按比例繪製，僅供示意用途

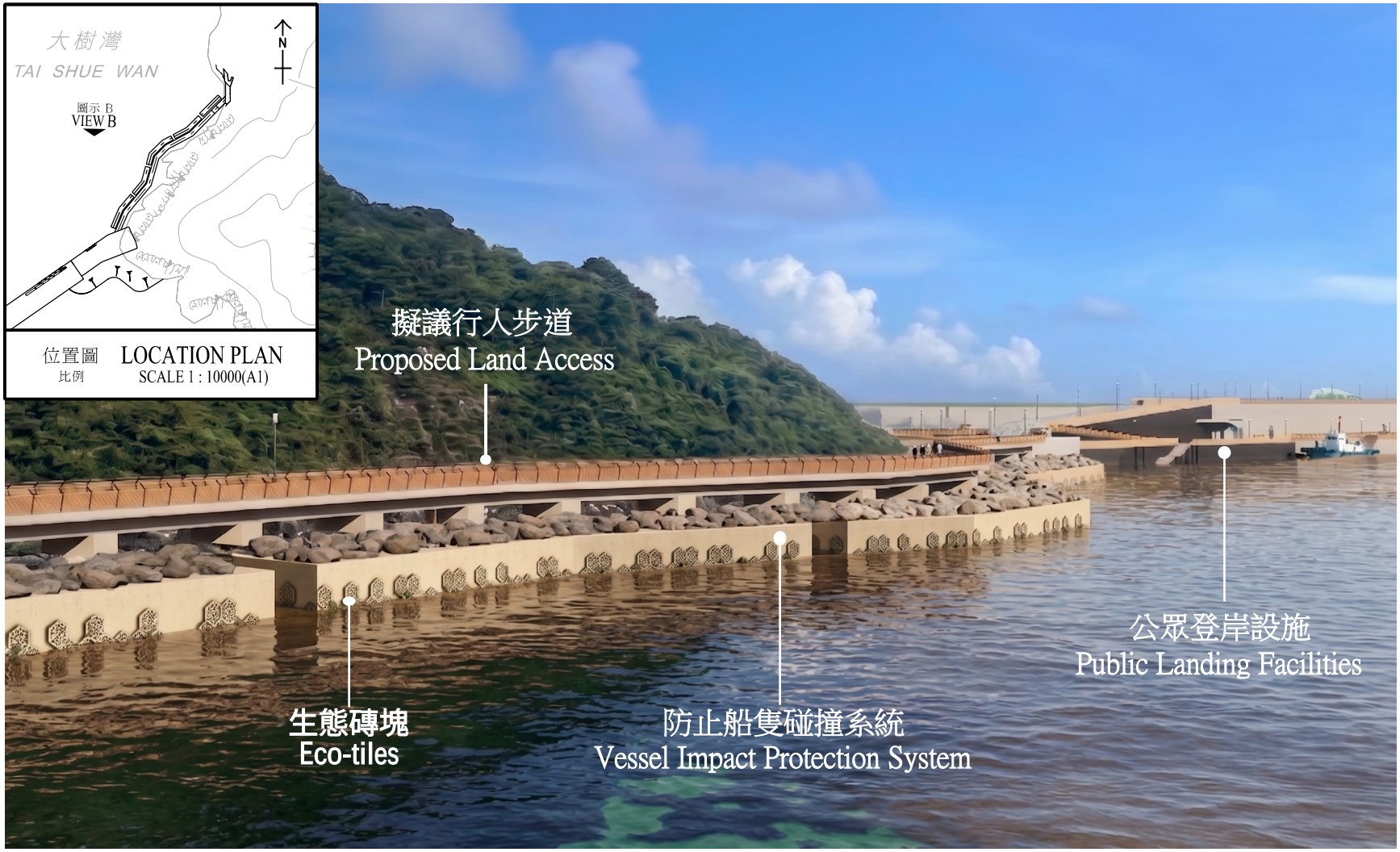
工程名稱
PROJECT TITLE 工務計劃項目編號 5115AP - 擴建香港仔避風塘
PWP ITEM NO. 5115AP - EXPANSION OF ABERDEEN TYPHOON SHELTER

圖則名稱
DRAWING TITLE 工程主要構件橫切面
TYPICAL SECTION OF KEY ELEMENT



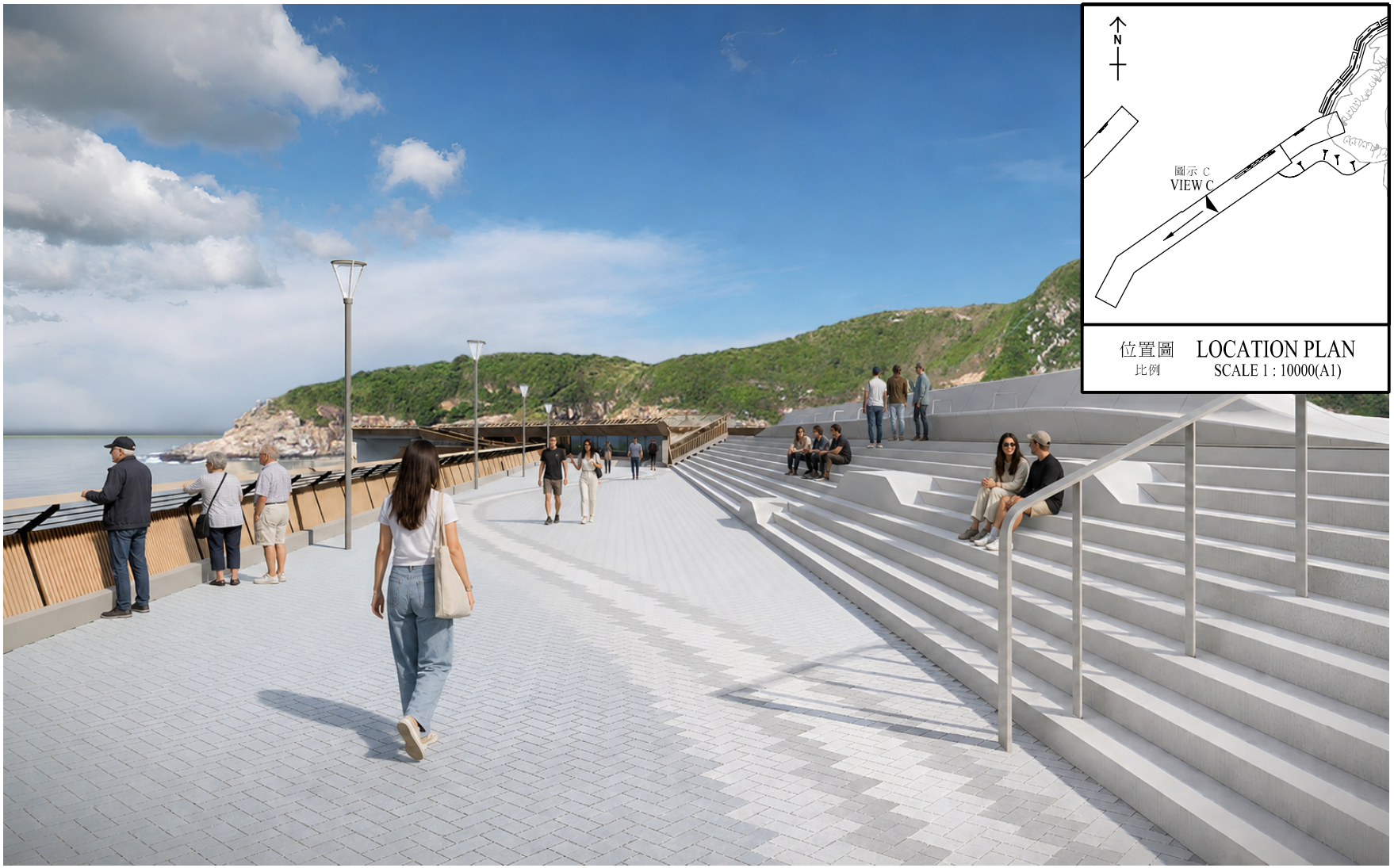
圖示A VIEW A

工程名稱 PROJECT TITLE 工務計劃項目編號 5115AP - 擴建香港仔避風塘 PWP ITEM NO. 5115AP - EXPANSION OF ABERDEEN TYPHOON SHELTER	圖則名稱 DRAWING TITLE 擬議防波堤 佈局模擬圖 PHOTOMONTAGE OF PROPOSED BREAKWATER LAYOUT



圖示B VIEW B

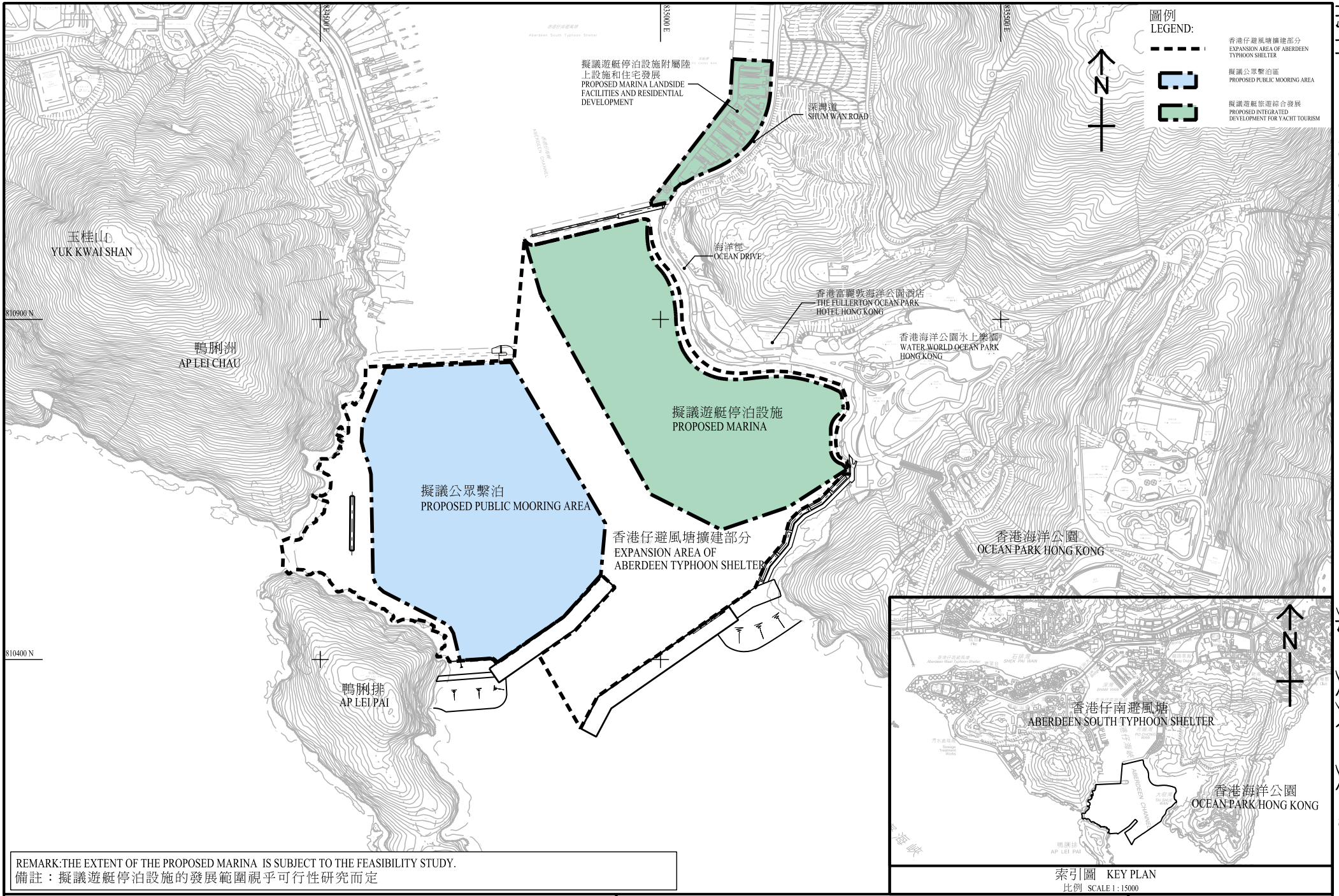
工程名稱 PROJECT TITLE 工務計劃項目編號 5115AP - 擴建香港仔避風塘 PWP ITEM NO. 5115AP - EXPANSION OF ABERDEEN TYPHOON SHELTER	圖則名稱 DRAWING TITLE 擬議行人步道佈局模擬圖 PHOTOMONTAGE OF PROPOSED LAND ACCESS



圖示C VIEW C

工程名稱
PROJECT TITLE
工務計劃項目編號 5115AP - 擴建香港仔避風塘
PWP ITEM NO. 5115AP - EXPANSION OF ABERDEEN TYPHOON SHELTER

圖則名稱
DRAWING TITLE
擬議新的東面防波堤 佈局模擬圖
PHOTOMONTAGE OF PROPOSED NEW EASTERN BREAKWATER



REMARK:THE EXTENT OF THE PROPOSED MARINA IS SUBJECT TO THE FEASIBILITY STUDY.
備註：擬議遊艇停泊設施的發展範圍視乎可行性研究而定

索引圖 KEY PLAN
比例 SCALE 1 : 15000

工程名稱
PROJECT TITLE 工務計劃項目編號 5115AP - 擴建香港仔避風塘
PWP ITEM NO. 5115AP - EXPANSION OF ABERDEEN TYPHOON SHELTER

圖則名稱
DRAWING TITLE 在香港仔避風塘擴建部分發展遊艇停泊設施
MARINA DEVELOPMENT AT THE EXPANSION AREA OF ABERDEEN TYPHOON SHELTER

比例
SCALE
0 25 50 75 100 125
METRES
1 : 2500

工程名稱
PROJECT TITLE

工務計劃項目編號 5115AP - 擴建香港仔避風塘
PWP ITEM NO. 5115AP - EXPANSION OF ABERDEEN TYPHOON SHELTER

圖則名稱
DRAWING TITLE

遊艇停泊設施構想圖
ARTIST'S IMPRESSION OF MARINA DEVELOPMENT