

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 705 – CIVIL ENGINEERING

Civil Engineering – Land development

767CL – Planning and Engineering Study for Lung Kwu Tan Reclamation and the Re-planning of Tuen Mun West Area

Members are invited to recommend to the Finance Committee the upgrading of **767CL** to Category A at an estimated cost of \$179.0 million in money-of-the-day prices.

PROBLEM

We need to carry out a planning and engineering study (P&E Study) for the proposed reclamation at Lung Kwu Tan and its adjoining areas (LKT area) and the re-planning of Tuen Mun West including the River Trade Terminal and its adjacent areas (TMW area) to increase the supply of land for housing and industries in the medium to long term.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Development, proposes to upgrade **767CL** to Category A at an estimated cost of \$179.0 million in money-of-the-day (MOD) prices, for engaging consultants to carry out a P&E Study for LKT reclamation and the re-planning of TMW area (the Study) and the associated site investigation works.

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of 767CL comprises—
- (a) a P&E Study for LKT area and TMW area to formulate proposals in relation to the reclamation extent, land uses and development recommendations for developable land of the two areas, with due regard to stakeholders' opinions to be collected in the process, and to conduct detailed technical assessments for the development proposals;
 - (b) preliminary design of the associated engineering works and proposed transport and infrastructure; and
 - (c) associated site investigation works including supervision.

———— The location plan of LKT area and TMW area and existing major operation facilities are at Enclosure 1.

4. The tender exercise of the Study has been completed, and the returned tender price have been reflected in the estimated cost. We plan to award the contract upon funding approval from the Finance Committee and commence the Study thereafter for completion by phases in about 30 months.

JUSTIFICATIONS

5. LKT reclamation and the re-planning of TMW area is one of the medium-to-long term land supply recommendations. It is expected that the works could commence by 2027 the earliest with a view to providing “developable land” to meet development needs starting from 2030-31. Part of the supply from LKT/TMW have contributed to the “10-year Supply Forecast of Developable Land” announced by the Government in October this year.

6. The land and transport developments in the northwest New Territories in recent years have placed LKT and TMW areas in strategic positions. LKT leads north to Pak Nai, Lau Fau Shan, Tsim Bei Tsui and Hung Shui Kiu/ Ha Tsuen New Development Area, which is the “high-end professional services and logistics hub” of the Northern Metropolis connecting with Qianhai. TMW area is located near multiple existing and planned transport infrastructure facilities, given the utilisation rate of the berths in the River Trade Terminal having only one-fifth

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of their overall capacity, we should seize the opportunity to review and make the best use of the land at TMW area. With Tuen Mun – Chek Lap Kok Link, it takes only around 10 to 20 minutes to travel from LKT and TMW to Tung Chung and the Hong Kong International Airport. Moreover, Route 11 and Tuen Mun Bypass etc. under planning will improve the external connectivity of LKT and TMW. Upon completion of the construction/upgrading of Nim Wan Road and associated road section of Deep Bay Road in the north, LKT can be connected northward along the coast to Pak Nai, Lau Fau Shan, Tsim Bei Tsui and the Northern Metropolis. The Study will explore how to fully leverage the unique geographical advantages of LKT and TMW, and make use of its connectivity with the Northern Metropolis, the Hong Kong International Airport and other areas to bring development opportunities for the area.

7. Having reviewed views of LegCo Members in early 2020¹ and the latest circumstances in recent years, we had made refinements on aspects including the reclamation extent, major land uses, transport infrastructure, etc. and briefed the Legislative Council Panel on Development on the revised proposal in February this year. Members were generally supportive and the recommendations are recapitulated and summarised as follows:

(a) Reducing the extent of LKT reclamation, land uses mainly for modern and advanced industries

In order to preserve the existing natural beaches and shorelines at LKT and minimise the impacts of the development on LKT Village, the reclamation extent would be reduced from 220 hectares (ha) as proposed in 2020 to 145 ha. Apart from the 145 ha reclaimed land, the Study will cover the 65 ha of land which are mainly used as brownfields currently to increase the developable land in the area to about 210 ha. Only if the Study reveals that additional reclamation is required to accommodate the required infrastructure would we then consider increasing the reclamation extent as appropriate.

Future land uses of the reclaimed land and its adjacent areas will be led by modern industries, incorporating residential development and the needed community facilities as appropriate. Initially, the reclaimed land is considered suitable for supporting modern, advanced and high value-added economic industries,

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¹ Funding application for the Study had been submitted to the Public Works Subcommittee (PWSC) in February 2020, the scrutiny of which however could not be completed within that LegCo term.

especially those requiring marine access and a large extent of operational space such as modern logistics park, advanced construction industry park, high-end green technology industry park, and multi-storey buildings for modern industries to accommodate brownfield operations. The Study will consider the geographical advantage of LKT's proximity to the Northern Metropolis and the Hong Kong International Airport to enhance its positioning in terms of industry development.

(b) Directly using the newly-created land to support industries as soon as possible

For the existing EcoPark, aviation fuel facility, steel mill, cement plant and Castle Peak Power Station at TMW, considering that relocating these industrial facilities would have time implication on the implementation programme, our current intention is to retain these facilities at their existing locations, and to adopt this assumption in the Study, so that the newly-created land mentioned in (a) above can be used to support the modern advanced industries at the soonest possible juncture.

(c) Residential-oriented development for re-planning of TMW area

The River Trade Terminal located at TMW has an area of 65 ha. We will consider the potential reclamation of 40 ha at the River Trade Terminal Basin, together with the various sites in the adjacent Areas 40, 46 and 47 (about 38 ha in total), forming a total of 143 ha of land² to be included in the Study for development of a residential-oriented community.

Area 38 (32 ha) is at the west of the River Trade Terminal. Currently there are a temporary public fill bank and temporary construction waste sorting facilities. After cessation of the public fill bank and relocation of part of the facilities to LKT reclaimed area, the site can serve as a buffer zone between the future residential development at TMW and other existing facilities for industries at westward coast.

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² There are operational facilities (including warehouses, factories, sawmills and cement plants etc.) and government facilities (including fire station and laundries etc.) at Area 40; Area 46 is a former borrow area; and Area 47 is the River Trade Terminal and the Pillar Point Sewage Treatment Works.

(d) Improvement of local and external transport connectivity

We will assess the traffic demand at LKT area and TMW area and formulate improvement measures based on the proposed land uses. In addition to the widening of Lung Mun Road, which connects LKT and TMW areas to Tuen Mun Town Centre, the Study will explore the feasibility of constructing a new road within the LKT reclamation area to provide an alternative route connecting other areas, so as to save the need of having all vehicles passing through Lung Kwu Tan Road, and to meet the demand for existing and planned local developments.

Besides, the Study will consider the connectivity of LKT and TMW with the existing and planned road and railway networks, including the proposed Route 11 and Tuen Mun Bypass, and the feasibility of extending the Hong Kong Island West – Hung Shui Kiu Rail Link as proposed under Kau Yi Chau Artificial Islands to TMW from Tuen Mun East (see Enclosure 2).

FINANCIAL IMPLICATIONS

8. We estimate the cost of the Study and the associated site investigation works to be \$179.0 million in MOD prices, broken down as follows –

| | \$ million (in MOD prices) |
|---|---------------------------------------|
| (a) Consultants' fees for | 117.4 |
| (i) planning and engineering study | 94.9 |
| (ii) environmental impact assessment | 20.8 |
| (iii) supervision of site investigation works | 1.7 |
| (b) Community engagement exercise and consultation exercise | 13.2 |
| (c) Site investigation works | 32.1 |
| (d) Contingencies | 16.3 |
| Total | <u>179.0</u> |

9. We propose to engage consultants to undertake the Study and supervise the associated site investigation works. A detailed breakdown of the estimates for the consultants' fees by man-months is at Enclosure 3.

10. Subject to funding approval, we plan to phase the expenditure as follows –

| Year | \$ million (in MOD prices) |
|-------------|---------------------------------------|
| 2023 - 2024 | 11.1 |
| 2024 - 2025 | 20.0 |
| 2025 - 2026 | 57.3 |
| 2026 - 2027 | 58.4 |
| 2027 - 2028 | 32.2 |
| | <hr/> |
| | 179.0 |
| | <hr/> |

11. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2023 to 2028. We will deliver the Study under New Engineering Contract³ form. The contract will provide for price adjustments. We will tender the proposed site investigation works under a standard re-measurement contract.

12. The Study and the associated site investigation works will not give rise to any recurrent consequences.

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³ New Engineering Contract is a suite of contracts developed by the Institution of Civil Engineers, United Kingdom. It is a contract form that emphasises cooperation, mutual trust and collaborative risk management between contracting parties.

PUBLIC CONSULTATION

13. We consulted the Legislative Council Panel on Development on the Study on 28 February 2023. Members generally supported submitting the funding proposal to Public Works Subcommittee for consideration.

14. We also consulted members of the Tuen Mun Rural Committee (including village representatives of LKT Village) and Tuen Mun District Council on 8 June 2023 and 3 July 2023 respectively. The aforesaid stakeholders generally supported the commencement of the Study and the propose direction under paragraph [7] above, with several expressing concerns about the potential impacts of the proposed development on the local traffic, infrastructure and environmental conditions. We will conduct assessments under the Study and formulate practical proposals. In the course of the Study, we will conduct community engagement activities to consult and gather views and suggestions from stakeholders.

ENVIRONMENTAL IMPLICATIONS

15. The Study is a designated project under Schedule 3 of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499). We will prepare EIA report(s) according to the requirements under the EIAO for submission to the Director of Environmental Protection for approval. The final recommended development scheme under the Study may fall into designated projects under Schedule 2 of the EIAO and require application of Environmental Permit for construction and operation. Impacts of the designated projects on air quality, water quality, ecology, fisheries, cultural heritage, noise, landscape and visual etc. will be assessed in the EIA report(s).

16. We anticipate the Study and the associated site investigation works will only generate very little construction waste. Nevertheless, we will require the consultants to fully consider and formulate measures as appropriate to minimise the generation of construction waste and to reuse/recycle construction waste as much as possible in the future implementation of the construction projects. Moreover, the Study will align with the decarbonisation strategies, targets and actions for achieving carbon neutrality as set out under the “Hong Kong’s Climate Action Plan 2050”, and the specific actions highlighted under the “Hong Kong’s Biodiversity Strategy and Action Plan 2016 - 2021”.

17. We will carry out EIAs on aspects including ecology and water quality as required under the EIAO, and propose corresponding mitigation measures, to ensure the works are in compliance with relevant regulations. We will also preserve the natural shorelines at LKT as far as possible, and explore the feasibility of adopting eco-shoreline at the reclamation area to enhance biodiversity. In order to effectively reduce the potential pollution caused by the removal of seabed sediments, suitable environment-friendly reclamation method will be proposed. To further protect the environment, more advanced and environmentally friendly reclamation technologies and designs will also be explored as appropriate in the Study.

HERITAGE IMPLICATIONS

18. The Study and the associated site investigation works will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites and buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

19. The Study and the associated site investigation works will not require any land acquisition. The Study will examine the need and extent of land acquisition and/or clearance required for implementation of the proposed development scheme.

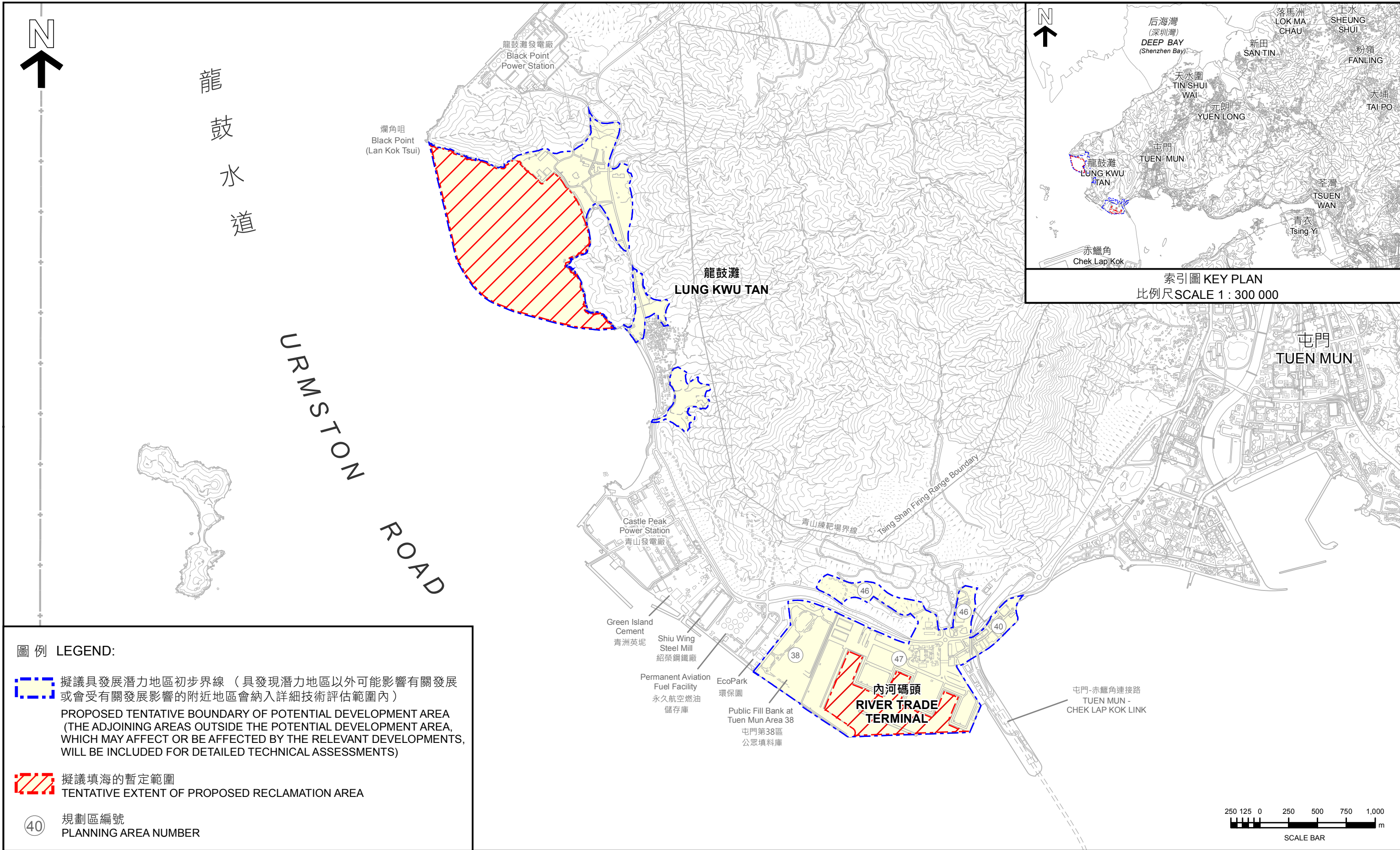
BACKGROUND INFORMATION

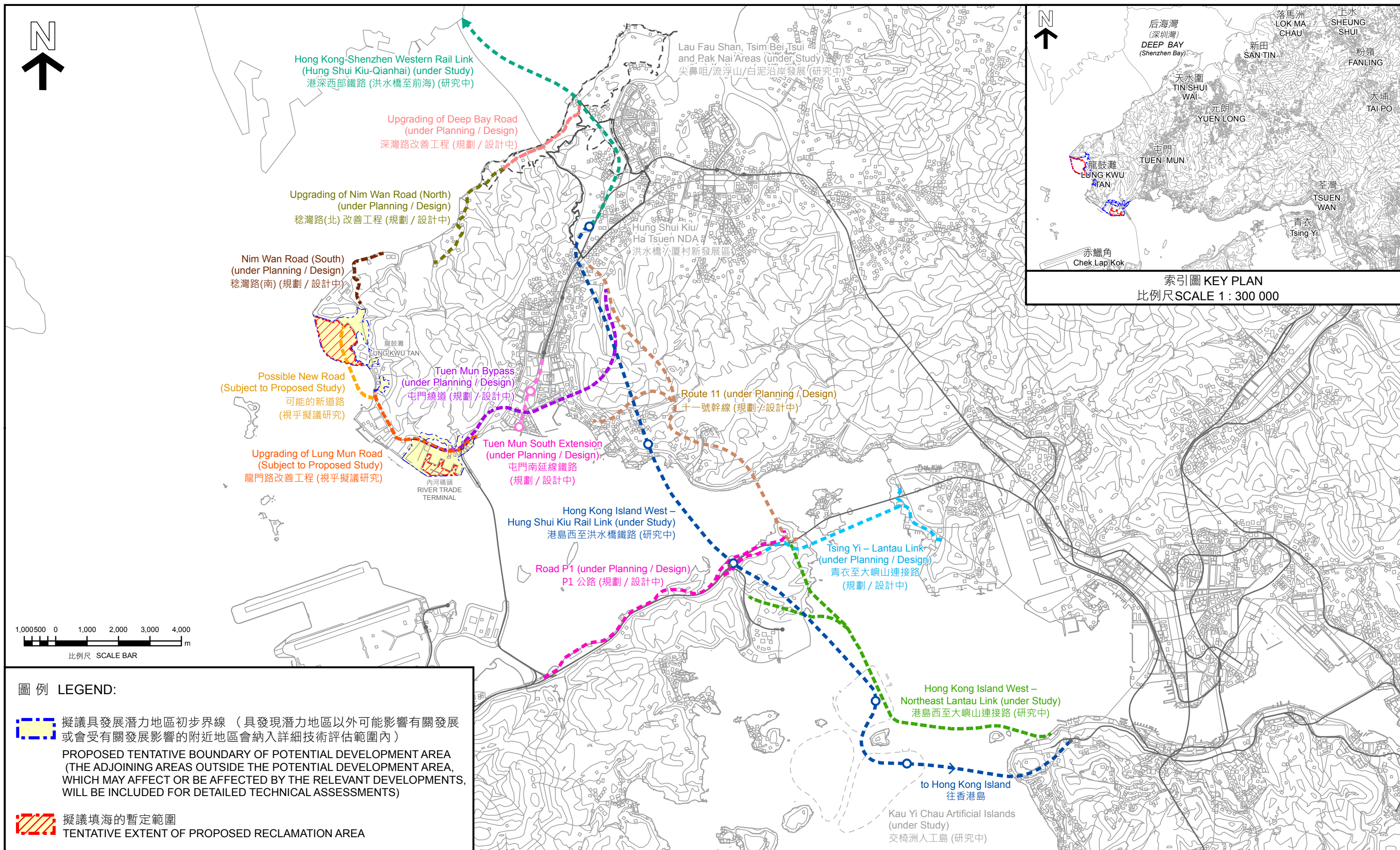
20. The Civil Engineering and Development Department (CEDD) completed the study “Enhancing Land Supply Strategy - Reclamation outside Victoria Harbour and Rock Cavern Development” in 2014 to identify suitable sites for reclamation outside Victoria Harbour. LKT was identified as one of the potential near-shore reclamation sites. The executive summary of the study has been uploaded onto CEDD’s website for public information.

21. The Study and the associated site investigation works will not directly involve any tree removal or planting proposals. We will require the consultants to take into consideration the need for tree preservation during the Study, and include tree planting as far as possible in the future project implementation stage.

22. We estimate that the Study and the associated site investigation works will create about 30 jobs (5 for labourers and 25 for professional or technical staff), providing a total employment of 800 man-months.

Development Bureau
November 2023





龍鼓灘填海和重新規劃屯門西地區的規劃及工程研究 — 現有和規劃中的策略交通基建設施

PLANNING AND ENGINEERING STUDY FOR LUNG KWU TAN RECLAMATION AND
THE RE-PLANNING OF TUEN MUN WEST AREA – EXISTING AND PLANNED STRATEGIC TRANSPORTATION INFRASTRUCTURE

**767CL – Planning and Engineering Study for Lung Kwa Tan Reclamation
and the Re-planning of Tuen Mun West Area**

Breakdown of the estimates for consultant's fees (in September 2023 prices)

| | | | Estimated man- months | Average MPS* salary point | Multiplier (Note 2) | Estimated fees (\$ million) |
|-----|---|--------------|-----------------------------|------------------------------------|------------------------|-----------------------------------|
| (a) | Consultants' fees | | | | | |
| | (i) Planning and Engineering Study ^(Note 1) | Professional | 308 | 38 | 2.0 | 55.7 |
| | | Technical | 463 | 14 | 2.0 | 30.0 |
| | | | | | Sub-total | 85.7# |
| | (ii) Environmental Impact Assessment ^(Note 1) | Professional | 68 | 38 | 2.0 | 12.3 |
| | | Technical | 102 | 14 | 2.0 | 6.7 |
| | | | | | Sub-total | 19.0# |
| (b) | Supervision of site investigation works ^(Note 3) | Professional | 6 | 38 | 2.0 | 1.0 |
| | | Technical | 9 | 14 | 2.0 | 0.6 |
| | | | | | Sub-total | 1.6# |
| | | | | | Total | 106.3# |

* MPS = Master Pay Scale

Notes

1. The actual man-months and fees will only be known after the consultants have been selected.
2. A multiplier of 2.0 is applied to the average MPS point to estimate the cost of staff supplied by the consultants (including the consultants' overheads and profit as the staff will be employed in the consultant's offices) (as at now, MPS salary point 38 = \$90,540 per month and MPS salary point 14 = \$32,430 per month).
3. The actual man-months and actual costs will only be known after the completion of the site investigation works.

Remarks

The figures in this Enclosure are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 8 of the main text.