TASK FORCE ON LAND SUPPLY

Alternative Use of the River Trade Terminal Site

PURPOSE

This paper provides Members with background information on the site currently used by the River Trade Terminal ("RTT") in Tuen Mun West to facilitate discussion on any possible alternative use(s) of the site. It also touches on an idea regarding reclamation in the Castle Peak Bay to the east of the RTT along the same coastline.

BACKGROUND

- 2. To meet the rising need of river trade to and from the Pearl River Delta ("PRD") region in the late 1980s and improve the overall efficiency of the Hong Kong Port ("HKP"), the RTT, a privately-run terminal on reclaimed land dedicated for river cargo, came into operation in 1998. Granted to the current land owner by way of public tender, the RTT site occupies an area of 65 hectares (ha), providing 49 berths along 3,000 metres of quay front. The facility primarily handles and consolidates container and break-bulk cargo from the PRD region prior to despatch to the Kwai Tsing Container Terminals ("KTCTs") and other port facilities in Hong Kong for onward shipment and *vice versa*. Under the lease, only vessels regularly travelled within the PRD region are allowed to berth at the RTT. **Annex 1** shows the location of the RTT site.
- 3. In recent years, the rapid development of port facilities and significant increase in port capacity within the PRD region has led to keen competition of port services. Cargo from PRD is increasingly consolidated at inland water ports in PRD and transported to KTCTs direct with a view to driving down the operation cost for shippers and carriers ¹. The cargo

Consolidation of cargo at the RTT before feeding to KTCTs entails extra handling cost and lead time

handling volume of RTT has been dwindling. The Study on the Strategic Development Plan for Hong Kong Port 2030, commissioned by the Transport and Housing Bureau and completed in 2014, recommended, amongst other things, to allow the RTT to handle both ocean and river vessels so as to improve the utilisation of the RTT and to provide additional ocean berth capacity for HKP, thereby enhancing HKP's role as a transhipment hub and its competitiveness. We understand that the utilisation rate of the 49 berths of the RTT was only 24% of its capacity in 2017.

DEVELOPMENT CONSIDERATIONS

4. The RTT is another example showing that as our city develops, the original use of some sites may not be as much needed by society as before as compared with other competing uses. This opens up the opportunity to consider alternative use(s) for these sites that can better meet the prevailing needs of the community. Key issues for consideration of this idea are set out below.

Throughput of the RTT

5. According to the RTT operator, the container throughput of the RTT in 2017 is about 969,000 twenty-foot equivalent units, which is equivalent to 4.7% of HKP's total container throughput. At present, some of the RTT's laden container cargo will be shipped to the KTCTs for onward shipment. In other words, such laden containers are handled twice (i.e. double handling) at HKP. Discounting the throughput from double handling, the share of throughput handled solely by the RTT in 2017 is roughly 3% of HKP's total container throughput. If the RTT site is to make way for other purposes, and with completion of all necessary procedures for the relevant sites and subject to upgrading of other HKP facilities, if required, there is a possibility that the throughput of the RTT can be absorbed into the capacity of other HKP facilities such as KTCTs, Public Cargo Working Areas ("PCWA") and midstream sites without giving rise to new land requirements.

Land Ownership

6. The RTT site was granted in 1996 at full market value premium to the current land owner, and the existing lease term is up to 30 June 2047. If it is considered that the function of the RTT is to be transferred to other terminals

or port facilities, we need to explore ways to secure a suitable arrangement to enable the RTT site to be used alternatively.

Planning Context

- 7. Tuen Mun West where the RTT site is located is predominantly industrial in character with focus on modern logistics, special industries and The RTT site is zoned "Other Specified Uses" annotated industrial uses. "River Trade Terminal" ("OU(RTT)"). To its immediate north is the Pillar Point Sewage Treatment Works and across Lung Mun Road is Tuen Mun Area 46 with temporary government uses. To the east are the northern landfall and toll plaza of the Tuen Mun-Chek Lap Kok Link ("TM-CLKL"), which is to be completed by 2020 the earliest, as well as Tuen Mun Area 40 being mainly occupied by industrial uses under short-term tenancies or private lots. on-going Planning and Engineering Study for Tuen Mun Areas 40 and 46 and the Adjoining Areas ("TM Areas 40 and 46 Study") has initially identified modern logistics and green industries as the preferred long-term land use for the potential development areas under the study.
- 8. To the west also on reclaimed land is the Special Industries Area in Tuen Mun Area 38. Adjoining the RTT site on its west is a 32-ha site currently used as a temporary public fill bank. Pending the decommissioning of the public fill bank, part of the site (about 6.5 ha) will be used for logistics development in the long term². To the further west are EcoPark, Airport Authority Hong Kong's Permanent Aviation Fuel Facility, a steel mill, a cement plant and Castle Peak Power Station ("CPPS").
- 9. **Annex 2** shows the developments surrounding the RTT site.

Possible Alternative Use(s)

Industrial and Brownfield-related Operations

10. In view of the existing and planned industrial uses in Tuen Mun West, a logical option is to continue to use the RTT site for industrial purpose. Not only is this compatible with surrounding land uses, there is also the practical consideration that industrial uses generate less vehicular traffic than

There is another logistics site of 3.2 ha in Tuen Mun Area 49 right across Lung Mun Road. Tender invitation will be issued for this site tentatively in March 2018.

non-industrial uses at peak hours and create less extra loading on the existing congested road network in Tuen Mun. One idea that has been mooted is to convert about 4 ha of the RTT site into off-airport air cargo screening and consolidation facilities³ to partly meet the demand for air cargo security screening arising from a new requirement of the International Civil Aviation Organisation ("ICAO")⁴. Such a proposed use may be warranted to help enhance the utilisation of the RTT site in the short to medium term.

- 11. Other industrial and brownfield-related operations that may be considered for the RTT site include modern logistics development, warehouse, vehicle body building, vehicle repair workshop, container storage and environmental industry to create synergy with the neighbouring uses. The RTT site with the improved connectivity in the long run may be used to construct multi-storey buildings for the aforementioned industrial functions to cater for the demand for operating space generated by, among others, brownfield operators in the New Territories that would be affected by the New Development Area (NDA) projects in the pipeline. While land use at the RTT site will remain as industrial under this suggestion, necessary statutory and administrative procedures including rezoning may still be required to take forward these alternative uses.
- 12. There are on-going proposals to increase the industrial and economic land supply in Tuen Mun West. Besides the TM Areas 40 and 46 Study stated above, the Civil Engineering and Development Department has recently completed a Technical Study on Reclamation at Lung Kwu Tan. The proposed Lung Kwu Tan reclamation at the coastal area to the north of CPPS (see **Annex 2**) is expected to deliver 220 to 250 ha of land in phases between 2026 and 2030 for industrial and other uses subject to a detailed Planning and Engineering Study to be conducted. With abundant supply of industrial land in Tuen Mun West in near future, the possibility to use part or whole RTT site for non-industrial purposes may also be considered.

This idea is being explored by relevant parties, and the feasibility of the proposed screening facilities and the screening capacity that may be provided at the RTT site are being examined.

⁴ The ICAO's new requirement, to be in force internationally from 1 July 2021, mandates that all outbound cargo must be screened, or originate from an approved shipper. The proposed screening and consolidation facility can be considered a "Cargo Handling and Forwarding Facility" always permitted under the current "OU(RTT)" zoning, although the planning intention of the zoning is to provide facilities mainly for river trade vessels from the PRD region.

Residential

- 13. The proposed Lung Kwu Tan reclamation provides a unique opportunity to comprehensively rationalise the existing land uses, involving about 240 ha of land, along the entire western coastal area of Tuen Mun. possibilities to use the RTT site for housing development to meet the acute territorial housing demand could be explored as part of this comprehensive land use rationalisation/review process. Purely drawing reference to the Tung Chung New Town Extension (TCNTE)⁵ and without the support of technical studies, arithmetically speaking the 65-ha RTT site may produce about 22 000 housing units (as compared to the existing housing stock of about 170 000 units in Tuen Mun). Located 1.5 km away from the well-developed residential neighbourhood in the Tuen Mun Ferry Pier area, the RTT site is a piece of flat and formed reclaimed land of considerable size with existing road, infrastructures, and public utilities connections. If the adjacent industrial and other incompatible uses could be relocated to the Lung Kwu Tan reclamation, the RTT site could be comprehensively re-planned together with the adjacent land. However, if developed on its own, land use compatibility would be a major challenge. In particular, air quality and noise impacts arising from the nearby industrial developments and road infrastructures including the future TM-CLKL would need to be addressed. Besides, the RTT site is subject to the airport height restriction under the Three-Runway System of the Hong Kong International Airport. The technical feasibility of residential development on the RTT site and its interface with the implementation programme of the immediately adjacent incompatible land uses are yet to be ascertained by comprehensive studies.
- While the external connectivity of Tuen Mun will be improved upon completion of TM-CLKL and Tuen Mun Western Bypass (TMWB), one of the major challenges to change the RTT site to residential use, other than land use compatibility, is the capacity constraint of existing road network in Tuen Mun. Currently a dual 2-lane carriageway, Lung Mun Road is one of the major roads serving Tuen Mun West, which connects to Lung Fu Road and Wong Chu Road within the town centre area and then Tuen Mun Road in the east to other parts of the urban area. **Annex 3** shows the existing road network in Tuen Mun. Both Wong Chu Road and Tuen Mun Road are reaching their design capacities. A detailed traffic and transport impact assessment is required to

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⁵ Under the TCNTE, about 121 ha of land will be reclaimed in Tung Chung East for development of about 40 800 housing units.

assess the additional traffic demand and the cumulative traffic impact on the adjacent road network to identify enhancements to disperse the potentially high traffic flows arising from the proposed residential development. While the completion of the TM-CLKL may ease congestion at Tuen Mun Road⁶, more major improvements are only expected after the commissioning of Route 11 and TMWB, both of which are under planning⁷. Subject to further studies, there may be a case to time the population intake of the proposed development at the RTT site, if taken forward, to be after the completion of Route 11 and/or TMWB in order not to aggravate traffic congestion at Tuen Mun Road.

- 15. As for rail-based transport, the RTT site is about 4.5 km from the existing Tuen Mun Station of the MTR West Rail Line ("WRL") and about 2.5 km from the proposed station of Tuen Mun South ("TMS") Extension recommended under the Railway Development Strategy 2014 ("RDS-2014"). Subject to the development scale, road-based feeders may be provided to carry residents to and from the WRL. However, the WRL is approaching its capacity and the traffic loading of WRL will further increase following the implementation of other major developments in the NWNT such as the Hung Shui Kiu NDA. The WRL will have little spare capacity to accommodate new traffic demand from the proposed development at the RTT site.
- 16. If a new transport link is considered necessary to support the proposed development, the proposed strategic NWNT-Lantau-Metro Transport Corridor identified as the long-term transport network for the East Lantau Metropolis (ELM), a Strategic Growth Area with comprehensive housing development and a core business district proposed under the Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030, may serve the purpose. **Annex 4** shows the conceptual NWNT-Lantau-Metro Transport Corridor. As part of this strategic transport corridor, a railway is proposed to link up ELM with the existing urban districts and North Lantau, and further to

⁶ TM-CLKL will provide the most direct route for vehicles commuting between North Lantau and Northwest New Territories (NWNT). It will also provide an alternative route from NWNT to urban areas via the Lantau Link.

Both Route 11 and TMWB form part of the strategic road network in the NWNT. Route 11 connects Yuen Long with North Lantau and relieves traffic bottlenecks along Tuen Mun Road and Tai Lam Tunnel. Funding is being sought from the Legislative Council to conduct a feasibility study on Route 11. TMWB links up Hung Shui Kiu NDA via Kong Sham Western Highway in the north, and TM-CLKL in the south, with an intermediate connections to Tsing Tin Road in Tuen Mun North. Upon agreeing with stakeholders on the latest proposed alignment, the Government commissioned the investigation study and preliminary design last October for completion in about two years' time.

NWNT via the Hong Kong-Zhuhai-Macao Bridge Boundary Crossing Point. This proposed railway extension to NWNT may serve the new development at the RTT site. This rail loop is also strategically important by providing an alternative railway route from NWNT to the Metro Area and can alleviate the congestion along WRL, subject to more detailed technical assessments.

- In gist, the suitability of the site for residential development has to 17. be established by further studies to address the land use interface and the traffic/transport and infrastructure constraints as explained above. such studies, and depending on the scale of the proposed residential development, large-scale site formation works may not be required. the lead time required for resolving land use compatibility and transport issues, and other technical issues (e.g. provision of new infrastructure or upgrading of existing utilities, and site decontamination) as well as the associated statutory and administrative procedures required for residential development such as rezoning, it appears that the RTT site may only become a source of land supply in the medium to long term. If reclamation at the existing basin and near-shore is proposed so as to provide more developable land for integrated planning and better economy of scale in development, more time is required to resolve additional issues.
- 18. Whether the alternative land uses along the Tuen Mun western coastal area, including the RTT site, suggested above would deliver community benefit is subject to a lot of factors, including negotiation with existing land owners and operators, as well as the assessment of overall social cost, economic and financial viability of the proposed options. In particular, it would not be appropriate to come to a conclusion before detailed assessments are conducted by relevant parties.

OTHER LAND SUPPLY PROPOSAL IN THE AREA MOOTED

- 19. In December 2017, Professor Jimmy Leung submitted to the Task Force a preliminary proposal on Castle Peak Bay Reclamation ("CPBR"). A copy of the proposal was tabled at the Public Engagement Editorial Advisory Board for reference on 8 December 2017. Key features of the proposal include -
 - (a) reclaiming about 68 ha of land at the Castle Peak Bay for mixed residential and commercial development (please see

Annex 5 for the proposed reclaimed area);

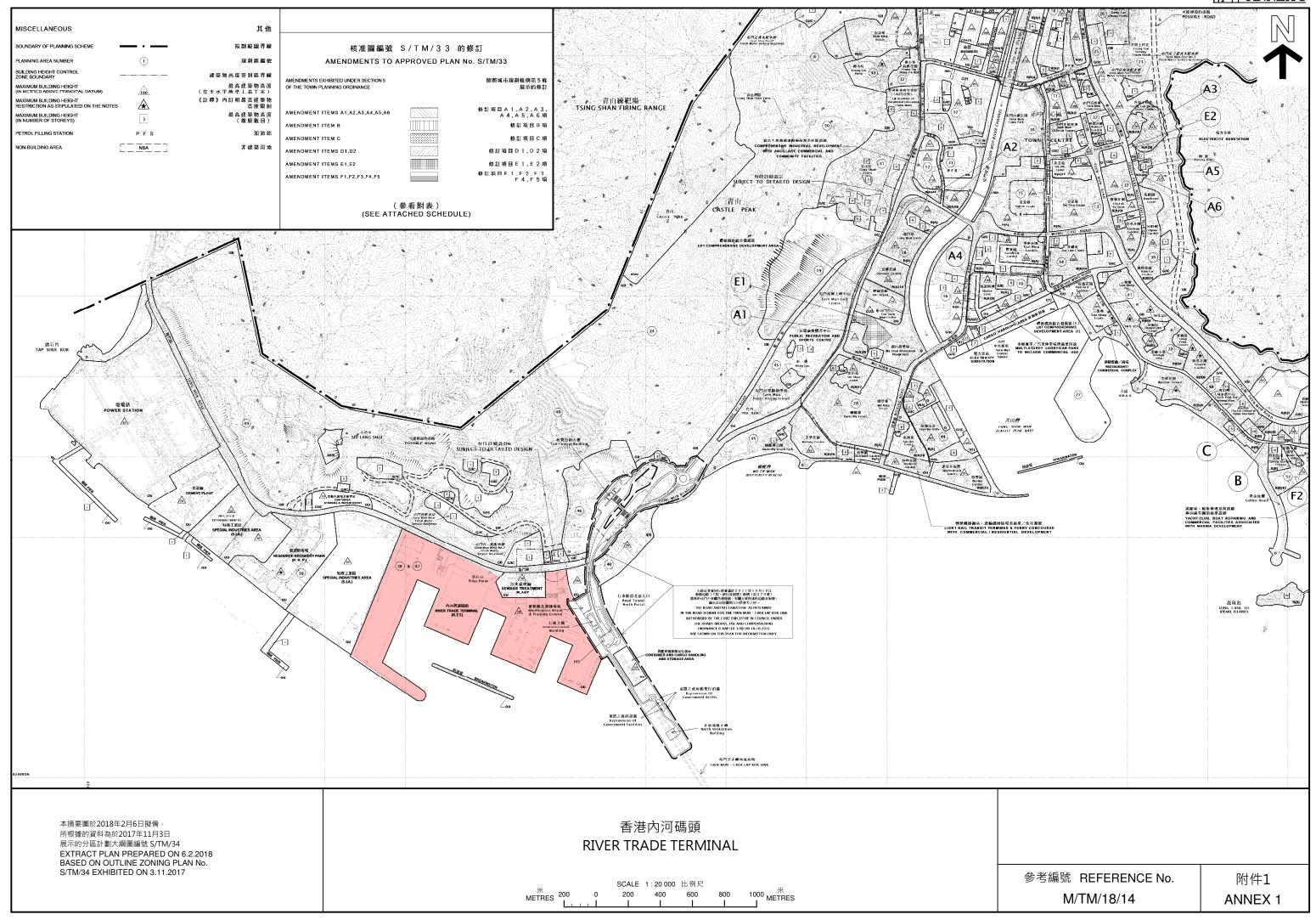
- (b) the transport need of the additional population to be met by road-based connection to nearby WRL stations, as well as proposed implementation of the TMS Extension and Tuen Mun to Tsuen Wan Link ("TM-TWL"); and
- (c) the Tuen Mun Typhoon Shelter ("TMTS") and Tuen Mun PCWA ("TMPCWA") be reprovisioned to the east of the landfall of TM-CLKL in Tuen Mun Area 40.
- 20. In the context of the Enhancing Land Supply Strategy – Reclamation outside Victoria Harbour and Rock Cavern Development commissioned in 2011, a reclamation site in proximity to the site currently proposed by Professor Leung was put forth for public consultation in the Stage 1 Public Engagement ("PE"). It was not shortlisted for Stage 2 PE owing to local objection and potential adverse impacts to surrounding beaches and waters. While Tuen Mun Area 40 may be a possible reprovisioning site for TMTS and TMPCWA subject to further study, the proposed CPBR with reclamation area about five times that of the 2011 proposal will unlikely be less controversial, particularly given the close proximity of the CPBR to the existing residential areas, the public aspirations for turning the area where the traditional fishing village, Sam Shing Hui used to be into tourism and leisure facilities, as well as potential fisheries impact to fishermen as the Castle Peak Bay is a major homeport in Hong Kong. The adjacent waters of the CPBR are a commercial fishing ground. The potential ecological, fisheries and other environmental impacts will also have to be carefully assessed.
- As in the case of alternative uses of the RTT site, transport and traffic remains the primary concern for the CPBR. The analysis for the RTT case is applicable to the CPBR proposal as both have a similar development scale. On the proposed TM-TWL, a preliminary conceptual scheme comprising a railway station in Tuen Mun West and five intermediate stations along the 20 km coastal corridor between Tuen Mun and Tsuen Wan was examined when formulating the RDS-2014. It was noted that the catchment population of the proposed link was mainly concentrated at the eastern and western ends of the corridor, while the remaining population was scattered and dispersed along the coast. The cost of the scheme was also expected to be very high (in the region of \$65 billion (in 2013 prices)) due to the technical difficulties involved. The cost effectiveness of the proposed railway line

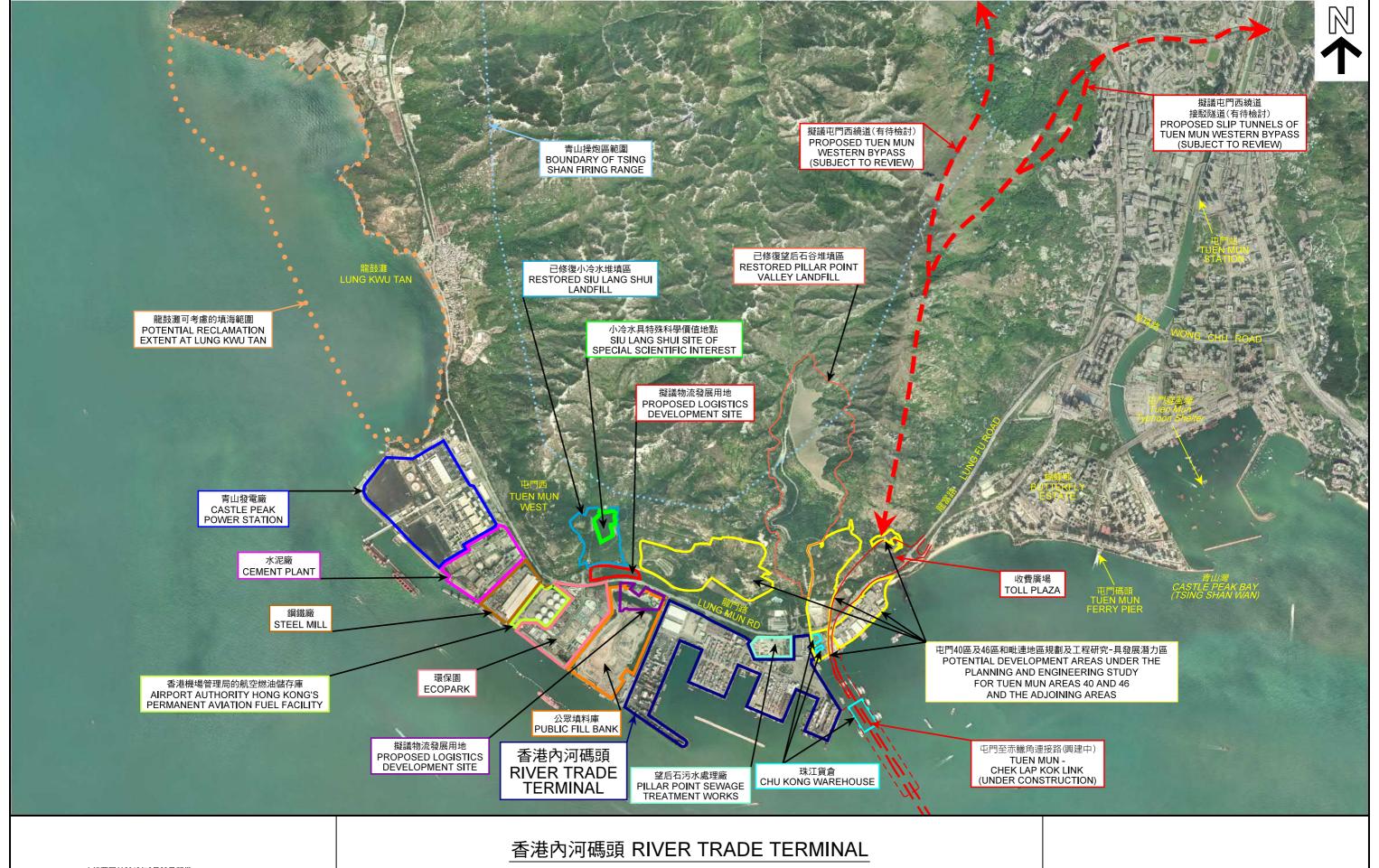
could hardly be established at the time of formulating the strategy. Moreover, the implementation of the scheme would also create negative visual and landscape impacts along the scenic coastal areas. The TM-TWL was therefore not included in the RDS-2014.

ADVICE SOUGHT

22. Whether the RTT and/or CPBR proposals should be taken forward are subject to further studies. The two proposals share some similarity as the scale is broadly the same involving land of 65 ha or more. They are in the same locality, hence subject to similar transport infrastructure constraint. We welcome Members' initial views on the proposals.

Development Bureau Transport and Housing Bureau 2 March 2018



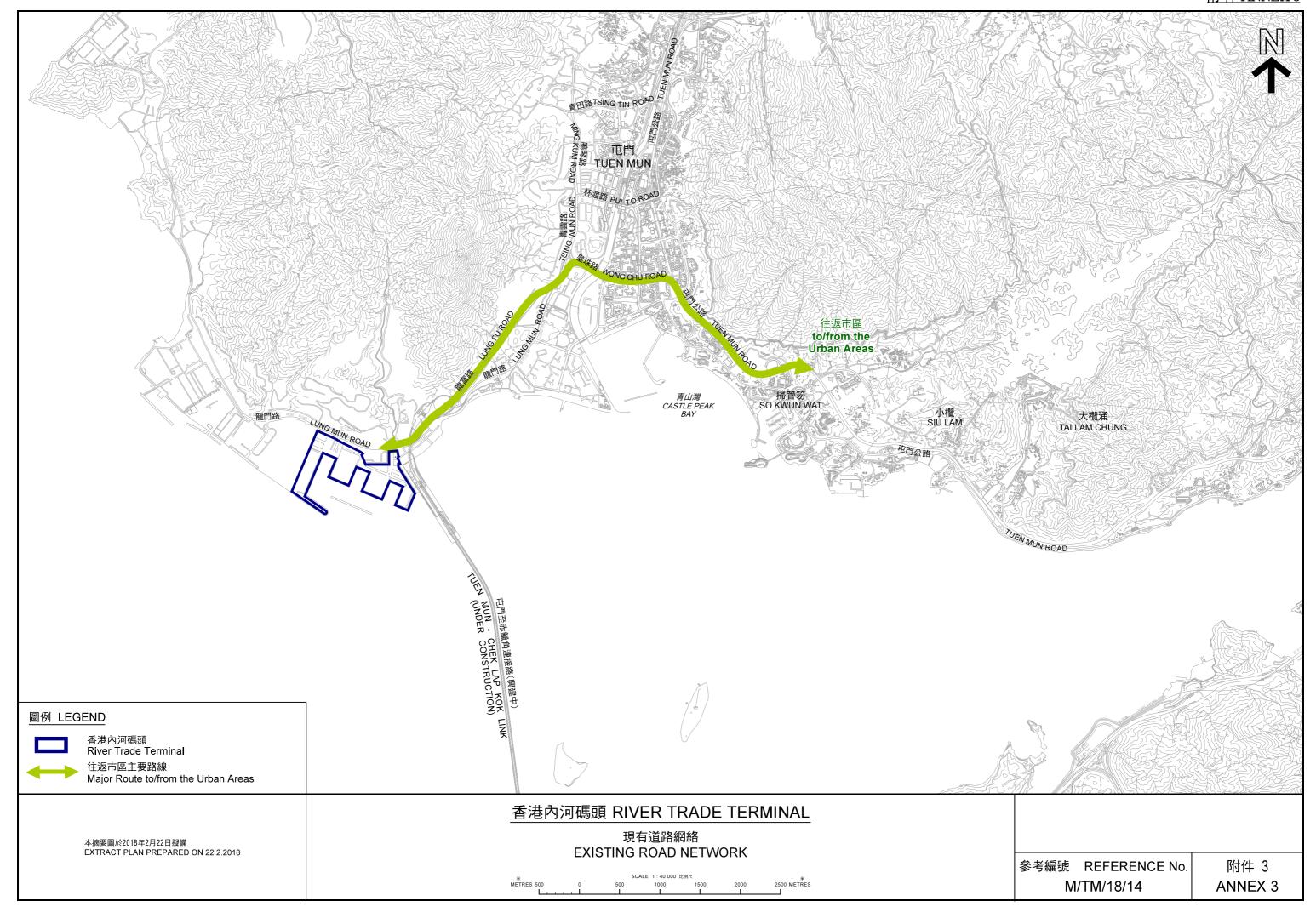


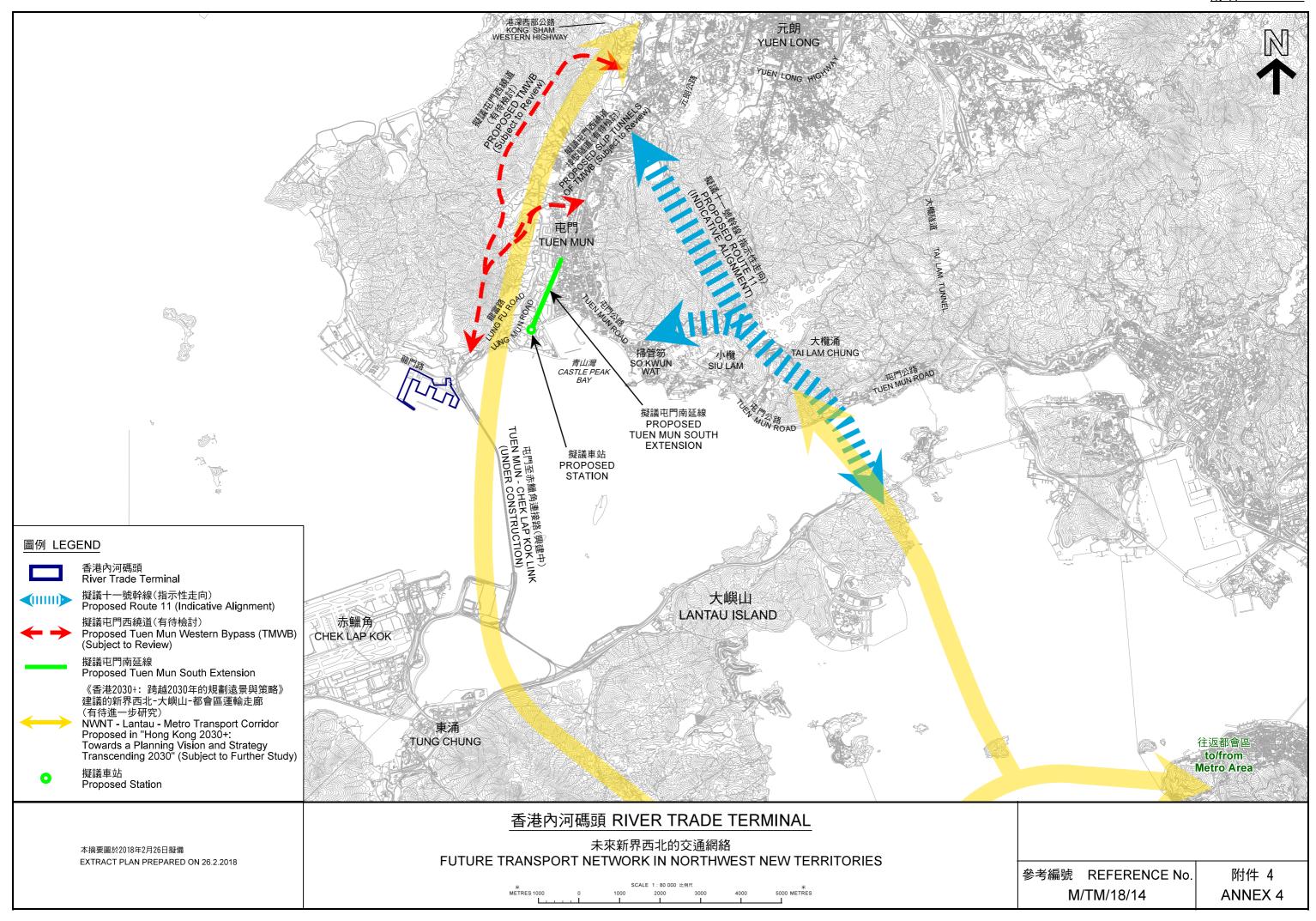
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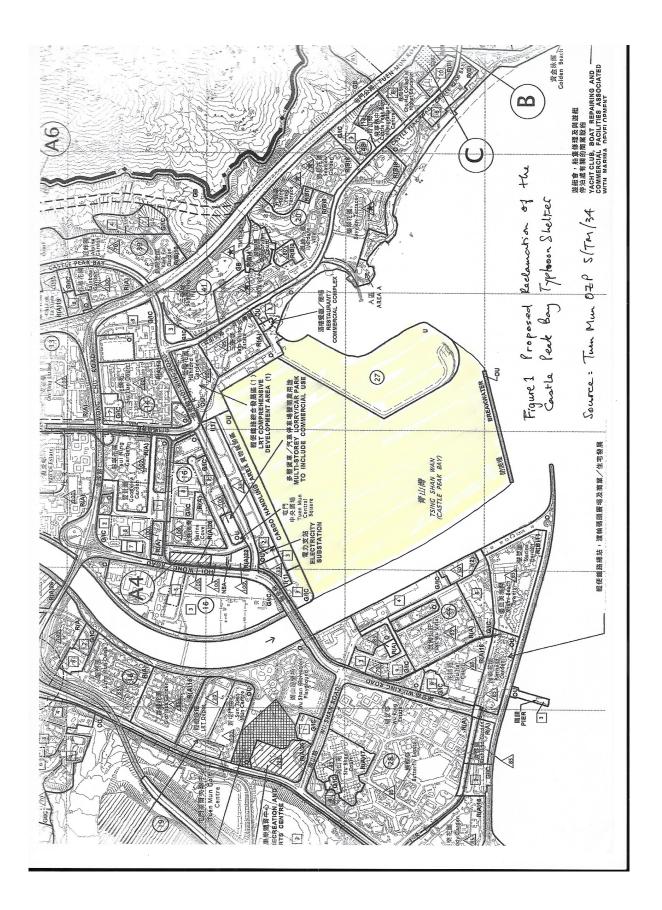
附近發展 Surrounding Developments

參考編號 REFERENCE No. M/TM/18/14

附件 2 ANNEX 2







來源:梁焯輝教授的建議書 Source: Professor Jimmy Leung's Proposal