For discussion on 23 February 2019

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LANTAU DEVELOPMENT ADVISORY COMMITTEE

Studies related to Artificial Islands in the Central Waters

PURPOSE

This paper aims to brief the Lantau Development Advisory Committee on the proposed Studies related to Artificial Islands in the Central Waters (the Study).

PROJECT SCOPE

- 2. The proposed scope of the Study comprises:
 - (a) a detailed planning and engineering (P&E) study for the artificial islands around Kau Yi Chau (KYC Artificial Islands) to establish the reclamation extent, land uses and technical feasibility, including the formulation of detailed land use proposals, preparation of preliminary design of the associated engineering works, and conducting statutory environmental impact assessment (EIA) as well as public engagement exercise in relation to the formulation of development proposals;
 - (b) a transport infrastructure study which covers:
 - (i) an area-wide transport study covering the priority road and rail links as well as the possible road and rail links for longer term, between the Hong Kong Island, the artificial islands in the Central Waters, Lantau and Northwest New Territories;
 - (ii) an engineering study to ascertain the feasibility of the priority road and rail links;
 - (iii) an investigation study for the priority road link between Hong Kong Island and Northeast Lantau, via KYC Artificial Islands, including preliminary design, statutory EIA and other detailed impact assessments;

- (iv) collection of information¹ on waters within and in the vicinity of the possible artificial islands near Hei Ling Chau (HLC) and Cheung Chau South for future reference in long-term planning; and
- (v) associated site investigation including supervision.
- 3. A location plan is at **Figure 1**.

PROGRAMME OF STUDY

4. We plan to consult the Legislative Council (LegCo) Panel on Development in the first quarter of 2019. Subject to the funding approval of the Finance Committee of the LegCo, we plan to commence the Study in the latter half of 2019 for completion in 42 months. We propose to commence the first phase of reclamation works for KYC Artificial Islands in 2025 with a view to making available the first population intake in 2032.

SUPPLEMENTARY INFORMATION

Lantau Tomorrow Vision

5. Hong Kong is facing an acute shortage of land supply. The "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030" (Hong Kong 2030+) has broadly estimated that the housing demand between 2016 and 2046 is about one million units. The Government has been adopting multi-pronged approach to increase land supply. In short-to-medium term, through rezoning sites, appropriately increasing the development density, Kai Tak development, railway property development projects, urban redevelopment projects and so on, a total of about 380 000 housing units can be provided. In medium-to-long term, the various new development areas (NDAs) and new town extension projects (including the Kwu Tung North and Fanling North NDAs, Tung Chung New Town Extension project, Hung Shui Kiu NDA and Yuen Long South Development), together with the potential railway property development projects can provide some 230 000 housing units. However, there is still a shortage of about 390 000 housing units to meet the anticipated housing demand. Apart from housing, we are also facing shortage of land to sustain our economic growth as well as land for meeting the ever increasing social needs in the

¹ The information to be collected will mainly include the preliminary ecological, environmental and geological conditions.

community for the government, institution and community facilities arising from the ageing of our population.

6. The Hong Kong 2030+ Study has broadly estimated that the land shortage is no The Report of the Task Force on Land Supply (TFLS)² less than 1 200 hectares (ha). published on 31 December 2018 points out that the estimate of land shortage of about 1 200 ha is grossly conservative and it has underestimated the actual needs of Hong Kong. from assuming that all the existing land supply projects, including rezoning and NDAs, could all be implemented in full smoothly as scheduled accordingly to the Government's proposed scale, the Hong Kong 2030+ Study is yet to fully take into account the additional demand for land such as the society's aspiration for a more spacious living environment; the demand for more elderly and healthcare facilities in light of the ageing population; or the need of decanting space to speed up urban renewal against the backdrop of our ageing The TFLS thus is of the view that the actual land shortage will be far more building stock. than 1 200 ha, bearing in mind that we would also need a land reserve in the future to enable Hong Kong to overcome bottlenecks constraining our development that are caused by land shortage.

From East Lantau Metropolis to Lantau Tomorrow Vision

- 7. In October 2016, the Government conducted a public engagement exercise on the Hong Kong 2030+ Study, in which the proposed East Lantau Metropolis (ELM) was one of the strategic growth areas. The ELM is located in the Central Waters between Hong Kong Island and Lantau. Its preliminary concept is to create artificial islands by mainly reclamation to provide about 1 000 ha of potential developable area to support housing and economic development.
- 8. The Lantau Tomorrow Vision (the Vision) promulgated in the 2018 Policy Address has strengthened the ELM proposal with various proposed land supply initiatives to alleviate the acute shortage of land in Hong Kong in medium-to-long-term. With the new strategic transport network, we can capitalise on the Lantau's advantage of connection to the world so as to promote economic development as well as enabling the public to live and work in

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² The TFLS appointed by the Chief Executive comprising 22 non-official members and 8 official members, was established in September 2017 to serve a term of 1.5 years until February 2019. The major duties of the TFLS are to review and evaluate land supply options; conduct an extensive public engagement (PE) exercise to raise public awareness of the shortage of land supply and promote public discussions on these issues, with a view to reaching a mainstream consensus on increasing land supply and narrowing the differences among stakeholders; and to submit report to the Government on the overall land supply strategy and the land supply options worthy of priority studies and implementation by the Government, based on the views collected in the PE.

contentment.

- 9. One of the key initiatives put forward under the Vision is to commence as soon as possible the studies on developing artificial islands in phases in the Central Waters that are ecologically less sensitivity. The first phase will focus on developing the KYC Artificial Islands with a total area of about 1 000 ha that is in line with the proposal of ELM in terms of location, scale, broad development mode and potential development benefits. It is broadly estimated that the KYC Artificial Islands will provide about 150 000 to 260 000 housing units, 70% of these units (viz. 105 000 to 182 000 units) are for public housing. We have set the first population intake in 2032 as our working target. In comparison with the 130 000 public housing units to be provided by the four NDAs / new town extension projects³ that are ongoing or under planning, the enormous potential for the KYC Artificial Islands to meet the long-term housing needs can be seen.
- 10. There are multiple strategic location advantages which make the KYC Artificial Islands distinctively important and not easily replaced by other land supply options. The KYC Artificial Islands can generate large areas of land at waters that are ecologically less sensitive for housing and economic development without affecting the existing land uses. Given their large scale, the KYC Artificial Islands will enable comprehensive planning with a higher level of flexibility for liveable and sustainable communities with a range of compatible uses and community facilities, ample open spaces and greening, state-of-the-art infrastructure and smart designs, to increase the living standard of the public. We also plan to develop near carbon-neutral pilot zones on the KYC Artificial Islands.
- 11. The strategic location of the KYC Artificial Islands will also support the development of road and rail links. The proposed strategic road and railway network will help relieve the traffic congestion in the North West New Territories. Besides, the KYC Artificial Islands will become the third Core Business District (CBD3), promoting economic development and providing numerous diversified, high-end and high value-added job opportunities beyond those traditional Core Business Districts.
- 12. The KYC Artificial Islands can provide decanting space relatively close to the urban areas for households affected by urban renewal as well, which will enable larger-scale urban redevelopment projects. It also helps adjust the current distribution of homes and job opportunities so as to make the territorial spatial planning pattern more balanced and the

³ The ongoing or under planning projects include Kwu Tung North/Fanling North NDA, Hung Shui Kiu NDA, Yuen Long South Development and Tung Chung New Town Extension.

population distribution more reasonable.

13. The Study will also cover the collection of information in the vicinity of the artificial islands near HLC and Cheung Chau South. This is in line with the TFLS's recommendations regarding establishing a land reserve for the long-term development needs of Hong Kong. The information collected can be reference for the long-term planning to be conducted and the Study can provide objective data for the community to discuss the relevant land supply options.

CONCLUSION

14. Members are invited to offer views on the Study.

Civil Engineering and Development Department February 2019

圖例: 概念性位置 LEGEND: CONCEPTUAL LOCATION 擬議交椅洲人工島 PROPOSED KAU YI CHAU ARTIFICIAL ISLANDS 可能的喜靈洲人工島 POSSIBLE HEI LING CHAU ARTIFICIAL ISLANDS ين 可能的長洲南人工島 दोSING Y POSSIBLE CHEUNG CHAU SOUTH ARTIFICIAL ISLAND 九龍 KOWLOON 優先鐵路連接 PRIORITY RAIL LINK 交 榜 洲 KAD YI CHAD 優先道路連接 PRIORITY ROAD LINK 大嶼山 可能的較遠期鐵路連接 香港島 LANTAU ISLAND POSSIBLE RAIL 喜靈洲 HELLING CHAU HONG KONG ISLAND LINK IN LONGER TERM 可能的較遠期道路連接 POSSIBLE ROAD LINK IN LONGER TERM 研究中的十一號幹線 [870TH - 十一號幹線(北大 CHEUNG CHAU 嶼山至元朗)的可行性研究] ROUTE 11 BEING STUDIED UNDER 870TH "FEASIBILITY STUDY ON ROUTE 11 (BETWEEN NORTH LANTAU AND YUEN LONG)" LAMMA ISLAND 圖則名稱 drawing title 項目編號 item no. 辦事處 office 768CL 可持續大嶼辦事處 SUSTAINABLE LANTAU OFFICE 比例 scale 中部水域人工島相關研究 1:200 000 STUDIES RELATED TO ARTIFICIAL ISLANDS IN THE CENTRAL WATERS 圖則編號 drawing no. 土木工程拓展署 CEDD CIVIL ENGINEERING AND SL0-Z0221 DEVELOPMENT DEPARTMENT