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**Lantau Development Advisory Committee
Seventeenth Meeting**

Date: 9 February 2023 (Thursday)
Time: 3 p.m. to 5 p.m.
Venue: Conference Room 6, G/F, West Wing, Central Government Offices
Tamar, Hong Kong

Minutes of Meeting

Members Present

Ms LINN Hon-ho, Bernadette Secretary for Development Chairman

Mr CHAN Ho-ting, Mac

Mr Marvin CHEN

Mr Dane CHENG

Hon CHOW Ho-ding, Holden

Ms CHOY Siu-min, Linda

Hon KWOK Wai-keung

Prof LAM Kwan-sing, Paul

Mr LAU Chun-kong

Ms LAU Suk-han, Rita

Mr LI Yun-tai

Ms LIAO Shu-hang

Ir Dr Hon LO Wai-kwok

Dr MAK Hoi-cheung, Eunice

Prof TAM Fung-yee, Nora

Dr TANG Shuk-ming, Winnie

Hon YUNG Hoi-yan

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Mr LAU Chun-kit, Ricky	Permanent Secretary for Development (Works)	
Ms HO Pui-ling, Doris	Permanent Secretary for Development (Planning & Lands)	
Miss LAW Shuk-pui, Rosanna	Commissioner for Transport	
Ms SUM Fong-kwang, Vivian	Commissioner for Tourism Culture, Sports and Tourism Bureau	
Mr FONG Hok-shing, Michael	Director of Civil Engineering and Development	
Mr CHUNG Man-kit, Ivan	Director of Planning	
Mr TSANG Sai-wing, Terrence	Assistant Director (Environmental Assessment), Environmental Protection Department (EPD)	
Ms YIU Kuk-hung, Portia	Assistant Director of Housing (Project) 1	
Mr LI Ho, Thomas	Assistant District Officer (Islands)1, Home Affairs Department	
Mr LAM Tat-ming, Terence	Principal Assistant Secretary (Works) 5, Development Bureau (DEVB)	Secretary

Members Absent (absent with apologies)

Mr LAM Tin-fuk, Frederick
Prof LO Hong-kam
Prof LEUNG Mei-yee, Kenneth
Prof LOO Pui-ying, Becky
Mr WONG Fuk-kan
Mr WONG Man-hon

In Attendance

Mr LAM Chi-man, David	Under Secretary for Development
Mr WONG Yan-lok, Roger	Deputy Secretary for Development (Works) 2
Ms KONG Wai-yin, Jessey	Acting Press Secretary to Secretary for Development
Mr WONG Chung-wa, Alan	Chief Assistant Secretary (Works) 5, DEVB
Mr LEE Ming-keung, Marco	Assistant Secretary (Works Policies 5) 1, DEVB
Mr SUM Tze-choi, Don	Assistant Secretary (Works Policies 5) 2, DEVB
Mr LAI Tsan-kei, William	Assistant Secretary (Works Policies 5) 3, DEVB
Ms KAN Yuet-man, Carol	Assistant Secretary (Works Policies 5) 6, DEVB
Ms LI Mei-yee, Florence	Senior Executive Officer (Works Policies 5), DEVB
Mr WU Kwok-yuen, Jacky	Head of the Sustainable Lantau Office (SLO), Civil Engineering and Development Department (CEDD)
Mr IP Wai-man, Raymond	Deputy Head of SLO (Works), CEDD
Ms CHENG Nga-see, Ellen	Chief Engineer/Lantau 4, SLO, CEDD
Ms KIANG Kam-yin, Ginger	Deputy Director of Planning/Territorial
Ms KUN Ka-yin, April	Assistant Director of Planning/Territorial
Mr NG Kim-wai	Chief Town Planner/Studies and Research 2, Planning Department (PlanD)
Mr Wilfred LAU	Project Director, Ove Arup & Partners

(Translated Version)

Mr James SZE	Project Manager (P&E Study), Ove Arup & Partners
Ms Carmen CHU	Project Manager (Transport Infrastructure), Ove Arup & Partners
Dr LEUNG Kam-shing	Team Leader (Town Planning), Ove Arup & Partners

The Chairman welcomed Members for participating in the seventeenth meeting of the Lantau Development Advisory Committee (LanDAC). She also welcomed the representatives of ex-officio Members who attended the meeting for the first time, including Ms HO Pui-ling, Doris, Permanent Secretary for Development (Planning & Lands); and Ms YIU Kuk-hung, Portia, Assistant Director of Housing (Project) 1. The Chairman said that she, together with Mr LAM Chi-man, David, Under Secretary for Development and Ms Doris HO, Permanent Secretary for Development (Planning & Lands), had to leave at 4 p.m. to join an urgent meeting, so Mr LAU Chun-kit, Ricky, Permanent Secretary for Development (Works) would continue to chair the meeting after 4 p.m.

Agenda Item 1: Confirmation of the Minutes of the Last Meeting

2. The minutes of the last meeting had been distributed to Members for their perusal prior to the meeting. There being no further comments from Members before and at the meeting, the Chairman announced the confirmation of the minutes of the last meeting.

Agenda Item 2: Matters Arising

3. There were no matters arising from the last meeting.

Agenda Item 3: Kau Yi Chau Artificial Islands (KYCAI)
(LanDAC Paper No. 01/2023)

4. The Chairman invited Mr WU Kwok-yuen, Jacky, Head of SLO, CEDD, to brief Members an overview on agenda item 3; and Ms CHENG Nga-see, Ellen, Chief Engineer/Lantau 4 of SLO, CEDD, and Mr NG Kim-wai, Chief Town Planner/Studies and Research 2 of PlanD to give a detailed presentation on agenda item 3.

5. Ms Ellen CHENG and Mr NG Kim-wai gave Members a PowerPoint presentation on agenda item 3.

6. A Member supported the “three-island” design which was considered to be able to retain natural islands to reduce the impact on the natural environment, including the organisms on the natural islands and the nearby water bodies. He also considered that artificial islands and natural islands were complementary to each other. Regarding the respective roles of the three islands, he opined that the central business district (CBD) should have more direct transport linkage with Lantau Island and Hong Kong Island, so Island C was more suitable to be designated as the CBD. In addition, he hoped that the consultant could submit a study report with detailed recommendations on reclamation, including the reclamation extent, in future to explain to environmentalists the ability of the artificial islands to cope with climate change, including rising sea levels.

7. A Member supported the proposal for the KYCAI. She hoped that the Government would expound on the respective roles of Northern Metropolis (NM) and KYCAI to the public and professional bodies, indicating clearly that the former was mainly for promoting technology innovation ecosystem while the latter served as the third CBD. Furthermore, she hoped that the DEVB would utilise the data of the Common Spatial Data Infrastructure in the website of Lantau Tomorrow. She also hoped that the DEVB would adopt the existing data of the platform when developing the NM and artificial islands. Finally, she pointed out that the Government had planted 400 cherry blossom trees at Ngong Ping, and suggested that the Government should consider planting cherry blossom trees on the artificial islands and in other places in Hong Kong so that cherry blossom trees would become

the icon of Lantau Island or Hong Kong, with a view to boosting tourism development.

8. A Member opined that the “three-island” design was better than the “one-island” option put forward earlier. In the light of the declining local birth rate, she suggested that when planning the seven proposed liveable living communities, the Government should designate two of them for young families to live in and also provide affordable residential units for young people as well as sufficient ancillary facilities such as kindergartens, schools and children’s playgrounds to attract them to form a family. In addition, that Member hoped that the Government would provide diverse public housing flats such as Home Ownership Scheme flats on the islands to enable young people to purchase their own flats.

9. Mr Jacky WU responded that as Island A had the advantage of geographical proximity to Hong Kong Island, the third CBD would therefore be located on Island A. To avoid occupying the land of the third CBD on Island A, the landing point of the road link between Hong Kong Island and the artificial islands would be located on Island C. This approach was consistent with the practice of overseas big cities of locating landing points of highways outside the CBDs. To ensure the accessibility of the CBD, we suggested providing a slip road from Island C to the CBD on Island A. The study team also suggested linking the artificial islands and Hong Kong Island West with railway and locating a station in the third CBD on Island A. There would also be piers in the vicinity to facilitate connection with different districts.

10. Mr Jacky WU continued to point out that during the formulation of the preliminary design, the study team made reference to relevant design standards as well as the Intergovernmental Panel on Climate Change’s Sixth Assessment Report, and took into account the projection of sea level rise under different likely GHG emissions scenarios, to test the performance of the preliminary design. In the process of designing the artificial islands, the study team fully considered the risks of flooding and overtopping waves under extreme weather conditions and climate change, so as to set an appropriate site formation level for the artificial islands and design adaptive and resilient coastal protection facilities. The study team proposed that the average site formation level of the KYCAI was 7.5 metres (m) above the

Principal Datum. In some of the locations exposed to the wind (including the east and southeast of KYCAI), the level was as high as 9 m above the Principal Datum. The team also took a progressive adaptive approach to design coastal infrastructure facilities by providing sufficient flexibility and adaptability. Design allowance was reserved in the seawall design so that the resilience of the artificial islands against climate change could be enhanced according to the actual situation in the future, such as raising the height of seawalls or wave walls. The above design strategy was endorsed by the Expert Panel on Reclamation and Coastal Resilience comprised of independent experts (including overseas and Mainland experts as well as famous local hydraulics expert, Professor LEE Hun-wei, Joseph) formed for the artificial islands project. In addition, arrangements were made on the planning and design fronts. Along the shoreline, there was a promenade of 20 to 30 m wide, which not only provided recreational facilities for public enjoyment, but also served as a buffer zone in extreme weather conditions to reduce the possible impact brought by severe weather.

11. Mr IP Wai-man, Raymond, Deputy Head of SLO (Works), pointed out that the study team had set up an Urban Forestry and Biodiversity Focus Group comprising three experts, namely Professor CHEN Hung-chi, Leslie, Professor LEUNG Mei-yee, Kenneth, and Dr HAU Chi-hang, Billy, to propose extensive planting of native and other trees on the KYCAI based on the principle of “Right Plant Right Place”, in the hope of having flowers blooming alternately in all seasons of the year. The study team also hoped to advance the implementation of the greening works during construction to expedite the planting of trees and increase biodiversity. Furthermore, the study team was exploring the construction of floating structures between the artificial islands and other islands, with trees planted on top, hoping that the above arrangements could attract insects and birds to inhabit and forage in the vicinity.

12. Ms KIANG Kam-yin, Ginger, Deputy Director of Planning/Territorial, responded that in planning the KYCAI, the study team aimed at building an “inter-generational harmony community” to create a suitable place for people of different age groups to live together. Therefore, the preliminary proposal was to enhance the planning standards regarding land for open space and community facilities to each not less than 3.5 square metres per person in the project. In addition, the entire

development was expected to last for 20 years, during which reviews and adjustments would be made from time to time to suit the actual situation.

13. The Chairman added that the Government was conducting planning and engineering studies at this stage and had not yet reached the stage of policy formulation and implementation. In the 20-year development process, the proposed public-to-private housing ratio of 7:3 or flat number might need to be adjusted over time and according to actual situation. At the present stage, the Government would focus on land formation work and reserve sufficient space to allow adjustments in the future according to the actual situation.

14. A Member enquired whether the feasibility of a “one-island” design had been explored and whether there had been an analysis on whether the “one-island” option would be better than the “three-island” option in terms of transport, environment and cost effectiveness. She also enquired whether a zero-emission incinerator would be built on the artificial islands to treat food waste and refuse, and whether new modes of transport, including electric vehicles, would be used on the islands. That Member also asked whether the Hong Kong Planning Standards and Guidelines would be updated and whether there would be separate criteria to regulate the development of newly reclaimed land. Lastly, that Member expressed the hope that the Government would follow the example of Singapore and develop mixed housing, so that people from all walks of life could enjoy the new land.

15. A Member commended the “three-island” option and considered it a better option than the “one-island” option proposed earlier. She suggested that the Government should make good use of the KYCAI’s water channels to create a water-friendly culture, and consider the views of Members on the positioning of the KYCAI. She also expressed appreciation for the Government’s invitation to professional institutes to discuss the detailed design of the artificial islands. However, she hoped that the Government would also invite professional institutes, green groups and other non-governmental organisations to participate in the design of the shoreline, and include features such as an inner bay and an open rocky beach at the waterfront during reclamation to create the impression of a natural shoreline, so as to encourage a water-friendly culture and make it an eco-tourism destination.

16. That Member went on to say that to cope with climate change, she hoped that apart from implementing the above physical protective measures, consideration would also be given to plant mangroves on the artificial islands. She pointed out that mangroves could act as a buffer zone to cushion waves during tsunamis, increase biodiversity, serve as a carbon sink and achieve carbon neutrality, as well as beautify the environment. Therefore, they were good natural green breakwaters.

17. Noting that the preliminary findings on ecological and fisheries surveys had revealed the presence of White-bellied Sea Eagles on Sunshine Island, that Member suggested that the Government should assess the impact of the population intake of Island B on the White-bellied Sea Eagles and the marine habitats nearby in the study. Moreover, she hoped that the study team would develop a clear methodology for marine ecological studies and sampling, and communicate further with environmentalists before completing the ecological surveys, in order to avoid the discovery of a large number of unrecorded species only after the completion of the surveys. In addition, that Member enquired whether the target of using 25% of the KYCAI's land for residential use was in line with the previously promised quantity of public housing to be provided on the islands. She said that if the current numbers of housing units to be provided and population to be accommodated were less than the promised quantities, the Government would need to explain the reasons to the public.

18. A Member said that the “one-island” option that the Government had been pursuing would incorporate the nearby islands such as Kau Yi Chau, Siu Kau Yi Chau and Sunshine Island, while under the current “three-island” option, the smaller islands in the vicinity would not be incorporated into the artificial islands. For this reason, she hoped that the Government would inform her of the positioning of these small islands in the future planning. In addition, that Member considered that with transport facilities slightly inferior to Islands A and C, Island B seemed to be designated as a purely residential area. She wished to enquire whether, under the current planning, residents of Island B could only choose to work on Island A, Hong Kong Island or Kowloon Peninsula. Moreover, as that Member anticipated that the third CBD on Island A would be occupied by large multinational companies; she hoped that the Government would consider reserving space on Islands A, B or C for smaller start-up companies and providing land for the families of the young

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operators concerned to settle there. That Member also noted the Government's intention to develop tourism and entertainment facilities at the water channels of artificial islands, organising activities such as dragon boat races and windsurfing; she enquired how the above recreation facilities would differ from those in South Lantau.

19. The Chairman advised the Government's representatives to take note of Members' views and respond to their enquiries.

[The Chairman, Mr David LAM, Under Secretary for Development, and Ms Doris HO, Permanent Secretary for Development (Planning & Lands) left the meeting at this juncture to attend another important meeting. Mr Ricky LAU, Permanent Secretary for Development (Works) continued to chair the meeting.]

20. Ms KIANG Kam-yin, Ginger responded that the study team had been in contact with the Environment and Ecology Bureau (EEB) and understood that the EEB had a comprehensive plan for the construction of Integrated Waste Management Facilities (IWMF). Works of Phase I at Shek Kwu Chau had already commenced. Tsang Tsui had been selected as the site for Phase 2 and the NM would be studied for Phase 3. As the sea distance between the KYCAI and Shek Kwu Chau was only about 15 kilometres, there were no plans to build a separate waste management facility on the artificial islands for the time being. Ms KIANG also said that, when planning for the artificial islands, the study team would refer to new planning concepts and adopt new planning standards as mentioned in paragraph 13. As for the shoreline design, Ms KIANG said that it would be discussed via a platform established with professional bodies, taking into account various factors such as ecology, biodiversity, water-friendly culture, and how to cope with climate change in the process. The study team was also exploring the feasibility of planting mangroves at the intersection of fresh water and salty sea water near the central park on Island B. As for residential land use aspect, Ms KIANG responded that the Government had estimated some time ago that the artificial islands could accommodate 400 000 to 700 000 people. After taking into account factors such as livability and the capacity of transport infrastructure in the current study, the estimated capacity was 500 000 to 550 000 people. In response to Members' questions on the islands in the vicinity of the artificial islands, Ms KIANG said that

as there were species with higher ecological value on Sunshine Island and Siu Kau Yi Chau, the Government would like to keep these islands and set buffer zones to minimise the impacts on the living things on the islands. Besides, at this stage, the Government was open to the possibility of connecting transport infrastructure to Peng Chau and would gladly listen to the views of residents and other stakeholders. Ms KIANG also said that the land outside the CBD was also set aside for commercial and other economic uses, aiming at providing various job opportunities and giving young people more opportunities to start their own business.

21. Mr Jacky WU said that the artificial islands were to be located in the Central Waters because the area was less ecologically sensitive. He said that the Government initially proposed the “one-island” option, but it was discovered in subsequent hydraulics analysis that constructing one or two islands would both slow down the water flow velocity in the vicinity of Kau Yi Chau and Siu Kau Yi Chau, affecting the ecologically valuable hard coral community. Therefore, it would be necessary to construct three islands, so that the water channel between Island A and Island B could align with the direction of the natural tidal flow, driving the water flow and bringing fewer changes to the water flow in the surrounding environment. The proposed Y-shape water channel would be at least 200 m wide, which was about the same width of Shing Mun River. Apart from considering how to cope with climate change, the Government also aimed at promoting a water-friendly culture when carrying out the design. For example, a waterfront promenade would be built with a stepped design as a protective seawall so that the public could engage in water-friendly activities at a lower level. Besides, the Government would build eco-shorelines in the inter-tidal zone and consider deploying artificial reefs at seabed to enhance biodiversity. The Y-shape water channel between the three islands would align with the prevailing wind direction to mitigate the urban heat island effect.

22. For the provision of electric vehicles on the artificial islands, Mr Jacky WU expressed that the Government would reserve land to allow flexibility in developing new transport modes, including electric vehicles and other new energy vehicles, in the planning for the artificial islands. In addition, Mr Jacky WU said that the impact of human activities on White-bellied Sea Eagles would be assessed when conducting the environmental impact assessment (EIA). The Government would carry out the relevant EIA study for the reclamation works of the artificial

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islands in accordance with the requirements of the EIA Ordinance and the EIA study brief. Appropriate mitigation measures would also be recommended as needed to minimise the possible impact on the environment arising from the reclamation works. During the process, expert advisors such as Mr SO Ngai Hung, Samson of the Hong Kong Bird Watching Society's White-bellied Sea Eagle Research Group, would be consulted. A close communication with the Agriculture, Fisheries and Conservation Department and the EPD would also be maintained.

23. A Member was concerned about the cost implication of the construction of “three islands”.

24. In terms of cost, Mr Jacky WU anticipated that the reclamation cost of the “three-islands” option would be about 3% higher than the “one-island” option, while the overall project cost would only increase by less than 1%. He also said that the design would be refined in the future and expected to provide more concrete information on the cost in 2024.

25. A Member enquired whether the Government had any study reports from experts recording the impact of the “one-island” option on water flow. She also asked whether the artificial islands would be at risk of drifting.

26. Mr Jacky WU responded that the “one-island” option would result in slower water flow, which would increase sedimentation, posing impacts on the water quality and ecology. He further said the design of the reclamation would be carried out in the detailed design stage according to the condition of the marine mud layer thereat to ensure the structural safety of the seawall on the artificial islands and the reclaimed land would meet the relevant settlement standards.

[Mr CHOW Ho-ding, Holden left the meeting at this juncture.]

27. A Member responded that she strongly supported the Government's plan to plant mangroves in the central park on Island B. However, she indicated that mangroves should be planted at the exterior, for example, the southeast of Island A, so that they could serve the function of coping with the extreme weather. She reiterated that, on top of building a concrete breakwater on the shore, the

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Government could also plant mangroves on the shore during reclamation. The mangroves in the concerned location should be designed to withstand extreme weather, the design of which should be different from the mangroves in the central park on Island B. She opined that using mangroves as natural barriers would enable Hong Kong to be a step ahead of other places, thus enhancing Hong Kong's international image and influence.

28. Mr Jacky WU thanked Members for their views and indicated that he would take into consideration.

29. A Member hoped that the Government could provide more information about the transport of the CBD with external areas. In addition, she supported the Government's approach of minimising the impact on the three natural islands, i.e., Sunshine Island, Siu Kau Yi Chau and Kau Yi Chau. However, she hoped that the Government would also take into account the traffic of the three natural islands when designing the transport facilities for the artificial islands. That Member also pointed out that the artificial islands would be the first place that could be seen by tourists when they came to Hong Kong in future, so she, therefore, hoped that the Government could beautify the relevant environment when designing both sides of the highways. Also, she pointed out that the artificial islands were newly planned development and opined that the Government could take this opportunity to consider building obnoxious facilities there to make the islands self-contained. Besides, she noted that the existing artist's impressions of the artificial islands mainly involved skyscrapers, and suggested that the Government could develop the artificial islands into a more attractive liveable city when promoting them in future.

[Hon YUNG Hoi-yan and Ir Dr Hon LO Wai-kwok left the meeting at this juncture.]

30. A Member expressed concern about the respective roles of the three islands, in particular how residential sites would be distributed on them and whether some of the sites would be designated to Hong Kong residents, especially young people for developing creative industries. In addition, he noted that the "three-island" option could create more shorelines than the "one-island" option. He hoped that the Government would, from the planning perspective, consider linking the promenades together, building cycle tracks and providing the public with venues,

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open space and leisure facilities for conducting cultural and arts activities, exhibitions and games. He hoped that the Government would take into account the above suggestions at the present stage to allow flexibility for future development.

31. A Member was pleased to see the proposal put forward by the Government and commented that it was well-planned, forward-looking and could build Hong Kong into a 21st century city. He noted that according to paragraph 22 of the meeting paper, the railway would be connected to Tuen Mun East. However, the alignment was not shown in Annex 11. He therefore hoped that the Government would clarify the future alignment of the railway. In addition, that Member noted that the Government intended to develop the artificial islands into a unique tourist attraction and would reserve land for economic uses. He was of the view that tourism development required comprehensive planning and should not be regarded as an additional or ancillary project. Hence, he considered that in order to develop the tourism industry, there should be landmarks, hotels, speciality food and beverage, entertainment and retail facilities, etc. on the islands. He also suggested that the Government should expand Hong Kong's capacity in receiving tourists through the development of KYCAI and invite professional academics to plan the district tourism facilities together.

32. As regards the respective roles of the three islands, Ms Ginger KIANG responded that though the artificial islands were designed as three individual islands, in fact, they were regarded as a whole, with the western end connected to the airport and the Hong Kong-Zhuhai-Macau Bridge (HZMB) on Lantau Island and the northern end connected to Qianhai in Shenzhen via the Hong Kong-Shenzhen Western Rail Link. Overall speaking, the artificial islands could reinforce the advantage of Lantau Island as a "Double Gateway" connecting the world and other cities of the Greater Bay Area. Furthermore, since the artificial islands were close to Central, they would become an extended part of the Harbour Metropolis, enhancing Hong Kong's economic competitiveness. Ms KIANG continued to point out that seven liveable living communities were preliminarily planned on the islands. Though three communities would be built on Island B and there would be tourism, recreational and other ancillary facilities such as a central park on it, Island B would not be a pure residential area. Besides, she said that the study team had reserved land for developing the cultural and creative industries, and the

implementation arrangement would be further explored by the Government in future. Ms Kiang also pointed out that when planning the three islands, no less than 20-metre-wide land had been reserved along the coast as promenades with a total length of more than 20 kilometres. It was hoped that more water-friendly opportunities could, therefore, be provided.

33. Dr LEUNG Kam-shing, Team Leader (Town Planning), Ove Arup & Partners responded that the location of a CBD should meet three requirements, including accessibility, prominent image and functional suitability. He said that the highly accessible Island A would be the first stop of the proposed railway from Hong Kong Island to the artificial islands. It would also be a transport hub which allowed interchange for Green Mass Transit System connecting the three artificial islands. As for roads, taking into account the actual situation to avoid occupation of much land by trunk roads as in the business districts of Central and Tsim Sha Tsui, the study team proposed designating Island C as the landing point of Hong Kong Island West – Northeast Lantau Link with a slip road connecting the CBD on Island A. The travel time under such arrangement would only be about one more minute as compared with that under the arrangement of landing the link directly on Island A. He pointed out that reference had been made to Canary Wharf in the United Kingdom and Marina Bay in Singapore when planning the CBD on the artificial islands. Also, value management seminars had been organised and it was agreed that such arrangement was desirable. As to image, Dr LEUNG pointed out that Island A is relatively close to Hong Kong Island, and with extraordinary shape and prominent image, it could better echo the international financial centre on Hong Kong Island. As regards functional suitability, Dr LEUNG agreed that the Government should expand Hong Kong's capacity in receiving tourists through the construction of by developing the artificial islands. He pointed out that the artificial islands with high connectivity would allow access to the airport and the HZMB in the west and Shenzhen via Hung Shui Kiu in the north. It was hoped that the planning of the islands could be tailored to suit their individual situation. For example, the tourism facilities close to Hong Kong Island could focus more on cultural elements and target business clients, while more leisure activity facilities could be provided on Island B and Island C to achieve synergy effect with the Disneyland and Discovery Bay.

34. Mr Jacky WU added that the rail alignment mentioned by Dr LEUNG would pass through Tuen Mun East, where a station was preliminarily proposed. Mr WU went on to explain the differences between the current alignment and the earlier one via Tuen Mun West. Mr WU pointed out that the original design under the Lantau Tomorrow Vision was to build a rail alignment from Tuen Mun East to Tuen Mun West, arriving a location near the River Trade Terminal and Lung Kwu Tan. As the development of the Hong Kong-Shenzhen Western Rail Link was subsequently announced in the Policy Address, the rail alignment would therefore be extended from Tuen Mun East to Hung Shui Kiu to facilitate connection to the planned Hong Kong-Shenzhen Western Rail Link, strengthening the connection between the artificial islands and the NM, and thus enhancing the KYCAI's strategic position and the connectivity of Hong Kong's rail network more effectively. The Government would continue to study the rail link between Tuen Mun East and Tuen Mun West in the context of the planning and engineering study for Lung Kwu Tan reclamation and the re-planning of Tuen Mun West area.

35. Ms Ginger KIANG responded to the selection of sites for obnoxious facilities. She said that with improved environmental awareness and technological advancement, most obnoxious facilities nowadays had a relatively low impact on the surrounding environment, but the study team would still concentrate as far as possible such facilities, including waste management facilities and sewage treatment works in the east of Island C to minimise the impact extent. In addition, the Government would work with relevant departments, through detailed design, to provide greening in these facilities and incorporate compatible facilities and/or leisure and recreational uses, to make more effective use of land resources.

36. A Member said she was pleased with the Government's proposal, believing that it would create a beautiful island. However, she commented that residents of the Islands District would inevitably be disappointed to see that the Government had developed the KYCAI into a liveable place, but the ancillary facilities had not benefited the existing residents of the nearby islands. She hoped that in its planning, the Government would take into account the needs (such as transport) of residents in the neighbouring areas, such as Peng Chau and Mui Wo, and pay attention to the development of tourism in those places. Moreover, noting that a rail link would pass through Penny's Bay in future, that Member enquired

whether the Government would develop the area around Penny's Bay.

37. Mr Jacky WU responded that residents of the outlying islands would also benefit from the KYCAI's development. He added that the public could reach the KYCAI smoothly within 15 minutes from either Tung Chung by land transport or Mui Wo by sea transport. The enhanced accessibility as well as jobs created on KYCAI would also benefit the residents of the outlying islands. Furthermore, he said the Government was aware that with only one road connecting North and South Lantau currently, any accident could severely impact the travel of South Lantau residents. Therefore, CEDD was underway to engage consultants to conduct another feasibility study, which was planned to begin next month, to review options for a new road connecting North and South Lantau, such as a road connecting Mui Wo via the Discovery Bay Tunnel, or a road directly connecting Mui Wo and the road at Siu Ho Wan, and the feasibility of improving Old Tung Chung Road would also be explored at the same time.

38. Regarding the development of the area around Penny's Bay, Ms Ginger KIANG pointed out that the Government would now prioritise the development targets set out in the Hong Kong 2030+ and possible solution spaces in the medium to long term, including the KYCAI and the NM.

39. A Member said that he and the professional sectors of the construction industry were pleased that the Government had considered the environmental and harbour concerns raised by professional institutes, including the Hong Kong Institute of Architects, the Hong Kong Institute of Surveyors, the Hong Kong Institute of Planners and the Hong Kong Institute of Landscape Architects, in the consultation exercise in 2018, and had therefore put forward the "clover" option in the new proposal. He commented that while the "clover" option was more expensive, considering its lower environmental impact, it was still worthwhile for the Government to invest in the new proposal. That Member also said that he hoped the Government would advise on the carbon neutrality target for the development of KYCAI. He opined that in order to achieve the carbon neutrality target, the Government would have to carry out proper planning in early stage and complement with infrastructure during construction.

40. That Member added that a successfully planned city often had its own unique landmarks. He remarked that on a two-dimensional plan, the KYCAI was unique as it looked like a “clover”. However, it still lacked character on a three-dimensional one. He hoped that in planning the KYCAI, the Government would consider the skyline, highlight the core area, and arrange the height of buildings in an orderly manner so that people would feel the area a liveable community. Moreover, he hoped that in addition to functional planning, the Government would also carry out the planning and design in a humanistic approach, such as giving thorough consideration to the identify suitable area to accommodate people from all walks of life on the KYCAI. He also hoped that the Government would consider the development (such as transport) of the islands around the KYCAI.

[Mr Dane CHENG and Ms LAU Suk-han, Rita left the meeting at this juncture.]

41. A Member expressed concern about the real estate on the artificial islands, particularly the development for commercial sites. He was concerned that it would be difficult for people living in the west of Island B to travel to the east of Island A for work. It would also be difficult for people living in the north of Island C to get to work in the east of Island A. He hoped that the Government would be able to create a design that could facilitate the commute of 500 000 residents to and from work. Also, he said that if the artificial islands were to be developed into a high technology area to attract senior executives, more high-end residential units instead of subsidised housing would have to be built in the surrounding area, so as to avoid a mismatch between the manpower demand and the skills of the residents on the artificial islands.

42. Ms Ginger KIANG thanked members for their views on land use planning. She said that the study team would plan the land use in detail, in the hope of making optimal use of the land resources while creating a better environment by providing large blue-green resources. As for transportation, she said that although the study team encouraged residents to travel on foot or by bicycle, there would be a green mass transit system on the artificial islands, which would provide public transport to facilitate travelling. Also, she said that public and private housing ratio for the artificial islands was tentatively set at 7:3, which might need to be adjusted according to the actual situation in the future. Moreover, the study team had set

aside land in the CBD for residential development. In terms of local employment, she said that there would be a total of 270 000 jobs to be provided on the artificial islands, which is desirable compared to the overall population of 500 000 to 550 000. In addition, the study team would plan a comprehensive transport network to facilitate residents of the islands to travel to and from their workplaces and engage in other activities.

43. In term of the uniqueness of the artificial islands, Dr LEUNG Kam-shing added that a certain number of flats would have to be built on the artificial islands while having to ensure a liveable environment. Therefore, in future, suitable locations such as the CBD would be planned for taller developments to reinforce the image of the district. Meanwhile, certain locations would be planned for lower developments (such as the major community facilities), or reserved for the blue-green corridor and shoreline. Through the above arrangements, it was hoped that the artificial islands would have a more prominent profile. He remarked that the reclaimed land, which was relatively flat, together with natural islands (such as hill-shaped terrain), would give a richer overall visual effect.

44. In terms of carbon neutrality, Mr IP Wai-man, Raymond said that, when formulating the carbon neutrality plan for the artificial islands in the future, the four major decarbonisation strategies outlined in Hong Kong's Climate Action Plan 2050, namely "net-zero electricity generation", "energy saving and green buildings", "green transport" and "waste reduction", would be proactively implemented. For example, renewable energy would be used as far as possible; the orientation of buildings would be considered to increase the natural lighting and ventilation; district cooling systems would be used to reduce energy consumption; and urban forestry would also be promoted. As regards to green transport, the Government would implement a comprehensive pedestrian and cycle track network as well as provide supporting facilities for electric vehicles and other new energy vehicles (e.g. hydrogen fuel vehicles). Flexibility would be allowed to cater for the promotion of autonomous vehicles in the future. For waste reduction, food waste and sewage sludge anaerobic co-digestion facilities would be provided, while supporting facilities for recycling would be enhanced on the artificial islands. At the construction stage, building information modelling technology and the modular integrated construction method would be adopted to reduce carbon emissions.

(Translated Version)

Through the above decarbonisation measures, the artificial islands were aiming to achieve the carbon neutrality target by 2050.

45. A Member said that she understood that the current proposal was a preliminary idea. She hoped that the Government would refine the design and place much emphasis on the characteristics of each district and the inter-district relationships. In addition, she hoped that the Government could conduct further planning from the humanistic perspective and consider the actual situation of people living, working and spending leisure time on the islands. By doing so, the public could have a better idea of how it would be like living on the artificial islands.

46. Mr Ricky LAU concluded that the proposal for the KYCAI was at the preliminary study stage and thanked Members for their valuable views, which would be of great help to the future planning of the KYCAI. After listening to the valuable views expressed by Members, the Government would refine the design and planning, amongst which professional bodies would also be invited to provide further comments. Upon refining the details of the Study, the Government would report and consult Members again.

Agenda Item 4: Any Other Business

47. There being no other business, the meeting was adjourned at 5:10 pm.