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Hung Shui Kiu New Development Area Planning and Engineering Study Preliminary Outline Development Plan and Stage Two Community Engagement

PURPOSE

As part of the Stage Two Community Engagement (CE2) of the Hung Shui Kiu New Development Area Planning and Engineering Study (the Study), this paper seeks Members' views on the Preliminary Outline Development Plan (PODP) formulated for the Hung Shui Kiu (HSK) New Development Area (NDA).

BACKGROUND

2. The Study commenced in August 2011. The HSK NDA is one of the ten mega infrastructure projects announced in the 2007-08 Policy Address. It aims to meet the long-term development needs of Hong Kong, including provision of housing land and employment opportunities.

3. The community engagement of the Study is divided into three stages, with Stage One CE (CE1) carried out in two rounds. The first round was held in November 2010, prior to the commencement of the Study, to initiate early public discussion on the key issues. The second round took place between 9 December 2011 and 9 February 2012 to facilitate further discussion on the major topics relating to the strategic roles of the HSK NDA, building people-oriented communities and promoting a green living and working environment.

MAJOR PUBLIC VIEWS

4. The major public comments received during CE1 are summarized below:

(a) Strategic Roles of the HSK NDA

Some considered that the NDA should play a strategic role by capitalising on the transport connections with the Hong Kong International Airport, the North West New Territories (NWNT) and Shenzhen, including Qianhai and the wider Pearl River Delta Region. The NDA should tie in with the developments in Tuen Mun, Yuen Long and Tin Shui Wai (TSW) New Towns. Other than housing developments to meet the long-term housing demand, employment opportunities for different skill levels to match with the population profile of residents should be provided in the NDA.

(b) People-oriented Communities

It was generally considered that adequate Government, Institution and Community (GIC) facilities, shopping streets and employment opportunities should be provided to create a self-sufficient community with a more balanced public and private housing mix. The Government should avoid creating a homogenous residential area with a high proportion of public housing. The social problems experienced in TSW should not be repeated in the NDA. The existing villages and the surrounding natural environment should integrate well with the new developments. The historic buildings and sites of archaeological interest should be preserved and tourist routes should be established.

(c) Sustainable Development

Some remarked that plot ratios for public and private housing should not be too high and should be compatible with the environment. The NDA should have railway services to enhance connection of HSK with the urban areas by a West Rail (WR) HSK Station. Sewerage to villages in HSK and drainage systems to alleviate flooding should be provided. The existing rural environment and sites with significant ecological values should be preserved, and buffer zones should be provided to minimize disturbance to ecological sensitive habitats. The heritage features within the NDA should be protected. The port back-up/open storage (PBU/OS) uses within the NDA should be carefully considered and a flexible approach should be adopted to sustain the livelihood of PBU/OS operators/workers.

(d) Implementation Mechanism, Compensation and Rehousing

In view of the scale of development, there were comments indicating that the NDA development should be implemented in phases and the supporting infrastructure should be provided in a timely manner. Some suggested that the prevailing compensation rates under land resumption by the Government should be reviewed. On the mode of implementation, while some considered that land resumption should only be carried out for public housing and infrastructure, others objected to private sector participation in the development of the NDA.

5. We have taken into account the public views in formulating the PODP for the NDA. The PODP proposals are described in the ensuing paragraphs. As regards the public comments on the implementation mechanism, compensation and rehousing, as well as arrangements for PBU/OS uses, we have noted the concerns expressed. While the current stage of the Study focuses on the PODP, we will continue to examine how those concerns could be addressed and listen to the views of the community before finalising the implementation approaches at a later stage.

VISION AND ROLE OF THE HSK NDA

6. In response to the public views collected, the suggestions to strengthen the strategic roles of the HSK NDA, the need to address the different housing needs of the community and to achieve a better quality living environment as well as a balanced and well-integrated community, the PODP for the NDA has accorded high priorities to:

(i) capitalising on nearby infrastructure and natural features to provide for green design, social integration, and sustainable development including land uses for economic development; and

(ii) maximizing the development potential while taking due account of urban design and infrastructure capacity considerations.

7. The HSK NDA commands a strategic location in the NWNT, with existing and planned railways and highways linking it to the Hong Kong International Airport, different districts of Hong Kong and Shenzhen. This geographically favourable location will help promote economic activities which build upon interaction with the Mainland. These include support to port services and, in turn, the logistics industry of Hong Kong which accounts for a significant share of Hong Kong's economy.

8. As a major source of land supply to meet the housing needs of Hong Kong in the medium- to long- term, the NDA should integrate well with the existing neighbouring urban clusters including TSW, Yuen Long and Tuen Mun to enable

effective sharing of infrastructure, GIC facilities and job opportunities, and to improve the existing housing mix.

9. In line with sustainable development principles, the development potential of the NDA should be maximized within the infrastructure capacity limits without compromising urban design principles, while minimizing impacts on existing communities, cultural heritage resources as well as the natural environment.

10. The overall vision of the NDA is to build a sustainable, people-oriented and balanced living and working community for Hong Kong. The NDA will not be just a localised residential and employment hub, but a regional centre that will serve to foster future economic development and growth of Hong Kong.

Economic Uses and Employment Generation

11. With good connections to the existing and planned railways and strategic highways to the airport, other districts and Shenzhen, an area located in the north-western part of the NDA is reserved for a Logistics and Technology Quarter designated for "Special Industry" to accommodate logistics facilities (62 ha) as well as providing flexible space for Information Technology and Telecommunications industries including data centre uses, testing and certification facilities and ancillary business uses (10 ha). These uses will be major sources of employment generation within the NDA.

12. Two urban nodes are proposed at the existing WR TSW Station and around the proposed WR HSK Station. It is envisaged that the major town centre with a regional shopping centre cum hotels and offices will take shape in the vicinity of the proposed WR HSK Station serving not just the NDA but the wider NWNT region. To create a secondary focal point, a wide range of retail and commercial uses will be clustered around the existing WR TSW Station to also serve the needs of the TSW residents for additional commercial facilities. These two urban nodes will provide significant employment opportunities for a wide range of skill sets.

PRELIMINARY OUTLINE DEVELOPMENT PLAN

13. The NDA has an area of approximately 826 ha. It will be developed into a multi-functioned development node with a variety of housing types, business and employment opportunities.

14. The proposals under the PODP will accommodate a new town of a population of about 218 000 (including a new population of about 175 000), about 60 000 additional flats and 100 000 employment opportunities. We aim to expedite the

implementation of the NDA with the target of first population intake by 2024 and full development of the NDA by 2034. The planning and design proposals contained in the PODP are summarized in the CE2 Digest at **Appendix 1**. The key development parameters and development timeline of the PODP are as follows:

Total Area (ha)	826
Developable Area[(1)](ha) **(% Total)**	446 (54%)
Total Population	218 000 (including existing population and base growth of 43 000)
No. of Flats	60 000
Housing Mix	Public[(2)]51% : Private 49%[(3)]
Employment	100 000
Plot Ratio	3.5 - 8
Maximum Building Height (Storeys)	40
Commencement of Site Formation and Infrastructure Works	2019
First Population Intake	2024
Project Completion	2034

Notes:

(1) Developable Area refers to the area with planned new developments on the PODP. This excludes areas zoned "Village Type Development", "Green Belt", "Agriculture" and areas occupied by existing developments which will be retained.

(2) This includes Public Rental Housing (PRH) and Home Ownership Scheme (HOS).

(3) Taking TSW New Town together, the overall housing mix is about 69% (public) : 31% (private)

Overall Planning and Design Framework

15. The main features of the overall planning and design framework are set out below:

(a) Development Intensity

For most of the development sites, the NDA will adopt maximum plot ratios of between 3.5 to 6.5, which will be similar to those of the nearby TSW and Tuen Mun New Towns, and also the proposed Kwu Tung North and Fanling North NDAs. The mixed developments at the proposed town centres near

the existing and planned WR stations in the NDA will have a higher plot ratio of 8 to capitalise on the accessibility of the WR stations.

(b) Urban Design

(i) The major town centre with a mega shopping facility and other shops and services, office and hotel uses as well as high density residential developments is planned around the proposed WR HSK Station. This area is intended to be a regional commercial and business hub in the NWNT.

(ii) A secondary hub will be located near the existing WR TSW Station which will also serve the TSW residents.

(iii) The Logistics and Technology Quarter is proposed to be located in the north-western part of the NDA with direct access onto Kong Sham Western Highway (KSWH) to avoid intrusion of heavy vehicles into the residential areas.

(iv) Visual corridors, appropriate building setbacks and varied building heights will allow for visual relationships between existing and future developments, visual linkage with surrounding natural features and ensure air ventilation.

(v) Regeneration of the areas alongside the TSW Channel and enhancement of the integration with TSW will be achieved by upgrading the environment of the river channels and provision of low-rise retail to create a distinct character and to enhance vibrancy, facilitated by the removal of Tin Ying Road abutting the channel. The removal of Tin Ying Road will also improve the air quality of the surrounding areas and reduce traffic noise nuisance to the residents, in particular the TSW residents living on the eastern side of the channel.

(vi) A well integrated open space network including a wide variety of passive and active recreational facilities will be planned, with the existing river channels as the main vertebrae. A Town Park is proposed at a central location in the NDA, which will be well connected with the other smaller open spaces and the riverside promenades.

(vii) A comprehensive cycle track and pedestrian network to connect all residential developments with employment/commercial nodes, community facilities, open spaces, transport nodes as well as TSW New Town will be provided.

(c) Planning for a Balanced and Socially Integrated Community

Learning from the past experiences of new town developments and public comments received, the socio-economic factor has been carefully taken into account in planning for the NDA. The relevant attributes are:

(i) To achieve a balanced community and to avoid creating a homogenous residential area with a high proportion of public housing, about 51% of the residential flats will be allocated for public housing (including PRH and HOS) and the remaining 49% for various types of private housing to provide a wide choice of housing types. Taking TSW New Town together, about 69% of the overall number of residential flats will be for public housing and the remaining 31% for private housing.

(ii) Existing villages and other local settlements within the NDA will be retained whenever possible, and sites of historic and cultural significance will be preserved. A network of heritage trails has been proposed to link up the historic and cultural sites including the Ping Shan Heritage Trail to the immediate east of the NDA.

(iii) The southern part of the NDA is characterised by existing clustered villages and private developments. A number of education and Government facilities are also present. Given the well established communities and limited available land for further major developments, substantial intensification of development in this area is not proposed. Appropriate local environmental and infrastructural improvements will be examined in the next stage of the Study. Further development of the area will follow the land use and development intensity provisions under the current outline zoning plans.

(iv) Currently there are over 190 ha of land within the HSK NDA used as PBU/OS activities. Many of these activities abut existing residential areas creating industrial/residential interface problems. On the other hand, these uses are vital in supporting port services and in turn the logistics industry which accounts for a significant share in Hong Kong's economy. The PBU/OS uses within the NDA should be carefully considered, and an appropriate approach should be adopted in implementing the NDA.

(v) Sufficient land has been designated on the PODP for public open spaces and various GIC uses. The NDA would be self-sufficient in terms of local community and recreational facilities.

(d) Transport Facilities

(i) The HSK NDA will make use of the existing WR as backbone of public transport with the existing WR TSW Station in the east and the proposed WR HSK Station in the future town centre in the west. About 45% of the population in the NDA will reside within 500m of the WR TSW Station and proposed WR HSK Station. Apart from the existing WR, the Light Rail Transit also operates at the south of the NDA along Castle Peak Road. Feeder services in the form of rail-based transport will be considered to serve the population and workers of the NDA to and from the WR stations. Environmental- friendly transport system for feeder services such as buses using cleaner Euro models, electric and hybrid buses will be considered in the next stage of the Study.

(ii) As for road-based transport, the HSK NDA is already well served by existing strategic highways including Yuen Long Highway, Castle Peak Road and KSWH. It will be further provided with a comprehensive district and local road network to cater for the traffic growth within the NDA. A primary distributor is proposed underneath KSWH connecting the traffic from the Logistics and Technology Quarter to KSWH avoiding heavy vehicles to use the roads within the residential neighbourhood. Another main district distributor is proposed in the northern part of the NDA to facilitate east-west traffic movements. Other district distributors will also be provided serving the Special Industry uses, the proposed WR HSK Station and the commercial/residential hubs.

(iii) Even with the removal of Tin Ying Road at the north-eastern edge of the NDA and some traffic redistributed, the accessibility within the NDA and surrounding areas will not be compromised.

(e) Energy Efficient Design

(i) With a view to creating a sustainable living environment, various energy efficient designs and technologies for building development, such as the use of energy efficient building materials, installation of building energy management system, energy saving devices by means of sun sensor, motion sensing, green roof/vertical wall planter, etc. are encouraged. Opportunities of using renewable energy, e.g. solar and wind energy, reuse of sewage effluent and use of green and water retention materials

for paving in the NDA are being explored. In the next stage, we will further examine the feasibility of these proposals.

(ii) A detailed carbon appraisal will be conducted in the next stage to assess the reduction of carbon emission under the proposed planning framework and resource-saving and energy efficient measures of the proposed developments under the RODP.

OTHER ENVIRONMENTAL ISSUES

Stage 1 – Environmental Impact Assessment

16. The Study includes two stages of technical assessments, including environmental impact assessment (EIA). The Stage 1 technical assessments on traffic and transport, infrastructure, environmental and socio-economic aspects for the PODP have concluded that the proposals are technically feasible. Recommenced mitigation measures will be implemented in order to comply with the statutory requirements under the Environmental Impact Assessment Ordinance (EIAO). The major issues of the Stage 1 preliminary EIA study are summarized in the following: -

(a) Historical Landscape/Heritage Preservation

There are eleven built heritage resources including two declared monuments and nine graded historic buildings (two Grade 2 and seven Grade 3 historic buildings) within the HSK NDA. These built heritage resources are proposed to be retained and preserved in-situ. A heritage trail is also proposed within the NDA to interlink these heritage features as well as heritage trails outside the NDA, e.g. Ping Shan Heritage Trail.

There are six sites of archaeological interest, of which three sites are located within the NDA and three others are fringing the northern boundary of the NDA. These sites are proposed to be preserved as far as practicable. An archaeological field survey will be conducted to ascertain the extent of the archaeological deposits. Where archaeological deposits are identified, appropriate mitigation would be implemented.

As regards landscape resources, there are no old and valuable trees (OVTs), designated important trees or Wall Trees identified within the NDA.

(b) Air Quality

During the construction phase, the major air pollutant is likely to be dust generated from various construction activities. Detailed dust modelling would be conducted at the later EIA stage to assess and mitigate any

potential adverse dust impacts at nearby air sensitive uses. At this preliminary EIA stage, dust suppression measures and monitoring practices have been recommended to alleviate the dust nuisance.

During the operational phase, four major types of air pollution sources have been identified which include vehicular exhaust from road traffic, emissions from logistics activities, emissions from industrial chimneys and odour from the sewage treatment works and pump stations. In order to improve the air quality adjacent to the TSW public housing along TSW Channel and to minimize pollutants generated from the increase of road traffic in the area, Tin Ying Road is proposed to be removed. Existing traffic using Tin Ying Road to TSW and Lau Fau Shan area will be diverted to the new road networks within and around the NDA such as along Long Tin Road, Tin Tsz Road, new primary distributor underneath KSWH and Ping Ha Road. The PODP layout also removes existing interfacing issues between logistics/PBU/OS activities and the adjoining residential/commercial development and will avoid the penetration of heavy vehicles into the proposed residential areas within the HSK NDA. The removal of local and low-level chimneys has been recommended, and standard mitigation measures are available to minimize odour impacts during the operation of sewage treatment works (STW) and sewage pumping stations (SPSs).

(c) *Noise*

Potential construction noise impacts associated with construction activities have been identified and assessed. Mitigation measures are available to reduce the construction noise impacts to meet EPD's recommended day-time noise levels.

During the operational phase, a number of sites have been identified as having the potential to be affected by existing and proposed roads. In order to avoid excessive noise barriers or sterilizing too much land, a combination of broad mitigation measures (e.g. providing depressed road and decking over road, and providing setback distance) have been considered within the NDA area. Moreover, the use of public transport and environmental-friendly transport system (EFTS) to reduce the need of excessive provision of road infrastructure are also proposed. Full scale road traffic noise impact assessment would be required to establish the detailed mitigation measures in the later EIA stage. Based on the preliminary review of expected railway noise levels that may be generated by the West Rail Line (WRL), it is expected that potential impacts could occur to the noise sensitive receivers close to the alignment and railway stations. Options for mitigation measures including plain barrier/cantilever/enclosure have been recommended.

Where available, railway noise impact assessment would be based on the latest information from MTR, and would be undertaken in the Stage Two EIA based on the Recommended Outline Development Plan (RODP). Noise impacts from the PBU and OS activities, including truck movements, hauling, stacking, etc. can be effectively mitigated by implementing noise control treatments at source (e.g. using quiet plant and equipment).

(d) *Ecology*

Habitat with moderate ecological value are identified within the HSK NDA which include the San Sang San Tsuen egretry, woodland, and shrubland, and mitigation ponds created to compensate for habitat loss associated with the Deep Bay Link. It is proposed that under the PODP that the majority of woodland and shrubland, San Sang San Tsuen egretry and the mitigation ponds would be retained. It is anticipated that greater urbanization within the NDA would likely result in habitat fragmentation as the retained habitats would be surrounded by development. It is proposed that buffer planting comprising native plant species would be employed to minimize such impact.

To reduce the impact on the San Sang San Tsuen egretry, set back of developments close to the egretry would be considered in formulating the RODP at the next stage. It is also proposed that construction works would be undertaken outside the ardeids' breeding season.

(e) *Sewerage Treatment and Re-use of Treated Effluent*

In order to meet the effluent discharge requirements, all sewage generated within the HSK NDA will be collected and conveyed by sewers via sewage pumping stations to San Wai Sewage Treatment Works (SWSTW) for treatment before disposal. The sewerage infrastructure for the HSK NDA will be implemented in phases to be in line with the implementation of the NDA. The re-use of treated effluent from the SWSTW will be explored in the next stage of the Study.

(f) *Water Quality*

The major water resources identified close to the NDA area include TSW Channel, HSK Channel and Tin Sam Channel, which flow through the NDA area to Deep Bay Water Control Zone (WCZ) to the north. In addition, a minor stream at the southern part of the assessment area is a tributary of the Tuen Mun River, which runs south into the North Western WCZ. Potential water quality impacts from the proposed construction of the NDA would mainly be associated with the release of sediment-laden water generated from surface construction works areas and wastewater generated from various construction activities. Impacts can be controlled to comply with

the Water Pollution Control Ordinance (WPCO) standards by implementing the recommended mitigation measures. No unacceptable residual impacts on water quality are anticipated. During the operational phase, sewage generated from the NDA would be collected by the public sewerage system and subsequently conveyed to the SWSTW for treatment. There would be no direct discharge of sewage or treated sewage into Deep Bay and hence no adverse water quality impact due to sewage generation from the development would be expected.

17. After CE2, we will take on board amendments to the PODP and conduct the Stage 2 EIA with detailed impact assessments to prepare an EIA Report under EIAO for approval.

STAGE TWO COMMUNITY ENGAGEMENT PROGRAMME

18. CE2 started on 15 July 2013 and ended on 22 October 2013. The aim was to seek comments from the public on the proposed PODP. We consulted relevant Boards/Committees, such as the Town Planning Board, Legislative Council Panel on Development, Planning Sub-Committee of the Land Development Advisory Committee, Tuen Mun and Yuen Long District Councils and the relevant Rural Committees, Heung Yee Kuk, and major local concern groups during the engagement period. Briefing sessions were also arranged for interested professional bodies and other organisations. A Public Forum on the PODP was also held on 7 September 2013 and about 470 participants attended. Over 1 300 public written comments were received together with a public hearing at the LegCo Panel on Development on 16 November 2013.

19. We widely publicised the CE2 through various channels including the Study website, a roving exhibition, erection of posters and banners at roadsides, village entrances. In addition, a copy of the CE2 Digest was mailed to all addressees within the HSK NDA through the Hongkong Post Circular Service.

NEXT STAGE

20. The public views received during the CE2 will be taken into account in refining the planning proposals at the next stage of the Study. Further engineering and technical assessments including the Environmental Impact Assessment will be conducted and the RODP will be formulated for the final stage of community engagement.

ADVICE SOUGHT

21. Members are invited to give views on the PODP as detailed in the CE2 Digest at **Appendix 1**.

ATTACHMENT

Appendix 1 Stage 2 Community Engagement Digest

Civil Engineering and Development Department
Planning Department
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