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North East New Territories New Development Areas Planning and Engineering Study Stage Three Public Engagement

PURPOSE

This paper seeks the Council's views on the Recommended Outline Development Plans (RODPs) formulated for the Kwu Tung North (KTN), Fanling North (FLN) and Ping Che/Ta Kwu Ling (PC/TKL) New Development Areas (NDAs) under the North East New Territories New Development Areas Planning and Engineering Study (the Study).

BACKGROUND

2. The Study adopts a three-stage Public Engagement (PE) Programme to foster consensus building. The Stage One Public Engagement (PE1) to solicit public views on the visions and aspirations for the NDAs and the Stage Two Public Engagement (PE2) to consult the public on the Preliminary Outline Development Plans (PODPs) of the NDAs were completed in early 2009 and early 2010 respectively. We consulted the Council on 9 January 2009 and 14 December 2009 (ACE Paper 2/2009 and ACE Paper 24/2009) in PE1 and PE2 respectively. At the meeting on 14 December 2009, the Council supported the principles of sustainable development and conservation in the PODPs and considered that it was of paramount importance that the ecological function and integrity of the affected areas should be maintained and enhanced. The Council also urged the Administration to design and build a sustainable community for the NDAs. However, the Council was disappointed that the concept of preserving the Long

Valley as a Nature Park was dropped and did not support the proposed zoning of the Long Valley as “Other Specified Uses (Comprehensive Development and Nature Conservation Enhancement Area)” (“CDNCEA”).

MAJOR PUBLIC VIEWS

3. A series of briefings and presentations were given to different stakeholders during the PE2. The major public views collected are summarized below:

- (a) There were both supportive and opposing views on the NDAs project. Objections were mostly from the existing residents in the areas who demanded “no removal and no demolition” while some residents in FLN also objected to any further urban development in Fanling and Sheung Shui. On the other hand, there were views suggesting that the development intensity should be increased to make more efficient use of land resources. There were comments that the NDAs should not be overwhelmingly used for development of public housing.
- (b) Some respondents considered that the proposed “CDNCEA” zone for Long Valley would open the floodgate for development and fail to safeguard conservation of the ecological value of the Long Valley area. On the other hand, there were criticisms, mainly from landowners, that the proposed zoning would freeze their development right without compensation.
- (c) Most of the comments received were related to implementation, particularly on land resumption, compensation and re-housing/re-provisioning arrangements. Generally speaking, the affected locals objected to the proposed NDAs project in the absence of an improved package for land resumption, compensation and re-housing/re-provisioning.
- (d) Several written submissions advocated private sector participation. However, there were also criticisms that the discussion of private sector participation had prompted private landowners to evict their tenants making them homeless even before confirmation of the development plans.

4. Taking account of the Council's comments and the public views and aspirations expressed, we have looked into the feasibility of increasing development intensity while ensuring a quality living environment in the NDAs. We have also examined the appropriate mechanism for conservation of Long Valley as well as the possibility of incorporating new green initiatives into the NDAs to promote sustainable development. Various technical assessments have been undertaken after PE2 in formulating the RODPs for the NDAs having regard to these aspects.

RECOMMENDED OUTLINE DEVELOPMENT PLANS

5. The development themes of the NDAs as incorporated into the PODPs, i.e. 'Mixed Development Node' for KTN, 'Riverside Township' for FLN and 'Quality Business/Residential Area' for PC/TKL, were generally supported by the respondents in PE2. They have thus formed the basis for the formulation of the RODPs.

6. The development theme, major land uses and key development parameters of each of the NDAs are summarised as follows –

	KTN NDA	FLN NDA	PC/TKL NDA	Total
Development Theme	Mixed Development Node	Riverside Township	Quality Business/ Residential Area	-
Major Land Uses	Residential; Commercial, Research & Development; Long Valley Nature Park	Residential; Government Facilities	Residential; Special Industry; Government Facilities	-
Total Area (ha)	450	166	171	787
Developable Area^(a) (ha) (% Total)	251 (56%)	129 (78%)	153 (90%)	533 (68%)
New Population^(b)	81,900	52,100	17,600	151,600
New Residential Units	28,700	18,600	6,500	53,800
Housing Mix (Public:Private)	55:45	39:61	0:100	43:57
Plot Ratio	2 – 5	2 – 5	0.75 – 2.5	-
Maximum Height	35 storeys	35 storeys	10 storeys Special Industry: 35m	-
New Employment	35,400	6,000	10,700	52,100

(a) Referring to areas with new developments on the RODPs, excluding areas zoned "Village Type Development", "Conservation Area", "Green Belt", "Agriculture" and "River Channel", as well as those already occupied by existing/committed developments which have to be retained in future.

(b) Excluding those in indigenous villages and existing/committed developments.

7. The RODPs have responded to the public comments by making the following changes:

Designating Long Valley as Nature Park

- (a) Some 37 hectares of land in the core area of Long Valley generally of high ecological value are designated as a Nature Park to be implemented by the Government as part and parcel of the NDAs project. It will become a “green lung” contributing to a quality living environment for the KTN and FLN NDAs. It will conserve and enhance the ecologically important environment which supports a diverse bird community, and compensate for the wetland loss due to the NDAs development. A visitor centre will be provided in the southern end of the park to demonstrate the ecological importance of Long Valley. As the ecological value of this area is closely related to the existing wet farming practice, part of the Nature Park may allow such use based on guidelines and requirements to be prescribed by the Government. The Nature Park will showcase the harmonious blending of farming activities with nature conservation. The “Agriculture” zoning of the land in the north and south of the Nature Park will be retained to allow continuation of the current use.

Pursuing Greener Living Environment

Rail/Public Transport Based Development

- (b) Under the rail-based development approach, more than 80% of the population in the KTN NDA will reside within 500 m of the proposed railway station. Similarly, for the FLN NDA, population will concentrate mainly around the public transport nodes to reduce road traffic. This concept will be supplemented by a comprehensive pedestrian and cycling network with supporting facilities, such as cycle parking areas, to promote walking and cycling.

District Cooling System (DCS) for Non-domestic Developments

- (c) DCS using cooling tower as heat rejection mode is about 20% more energy efficient than conventional air-cooled system. Land in the vicinity of the government and commercial facilities in the KTN and PC/TKL NDAs has been reserved for the purpose. A further study will be carried out to provide a detailed analysis on the financial viability, sustainability and implementation of DCS in the NDAs.

Reuse of Treated Sewage Effluent (TSE) for Non-potable Purposes

- (d) Reuse of TSE will have positive contributions to conserving water and reducing water pollution. Preliminary assessment has demonstrated the cost-effectiveness of using TSE for non-potable purposes such as toilet flushing, landscape irrigation and make-up water for DCS.

Better Urban Design and More Greenery

- (e) Breezeways along major prevailing wind directions are provided to allow effective air movements into the NDAs. View corridors are also planned to protect the long-range views towards the green backdrop and other natural scenery. A comprehensive open space system is planned to provide greenery and reduce heat island effect.

Improving Transport Network to Minimize Noise and Air Pollution

- (f) The planned Kwu Tung Station on the Lok Ma Chau Spur Line will enhance the accessibility of the Kwu Tung area, serving the new residents in the NDA and also the existing residents in nearby areas.
- (g) In the KTN NDA, an outer ring road is proposed to connect Fanling Highway at the east and west ends to create a car-free environment in the town centre. Land is also reserved for a proposed road connecting to the Lok Ma Chau Loop development.
- (h) In the FLN NDA, the proposed Fanling Bypass running along the northern bank of Ng Tung River at some distance from the residential clusters of the NDA (between Fanling Highway near Wo Hop Shek Interchange and Man Kam To Road) can help improve the traffic condition in the Fanling and Sheung Shui area.
- (i) In the PC/TKL NDA, a new road will be constructed to link to the future Liantang/Heung Yuen Wai BCP connecting road to provide convenient and direct connection to Shenzhen and other parts of Hong Kong.

Increase in Development Intensity to Better Meet Long-term Housing Needs

- (j) In response to some respondents' suggestion in PE2 to increase flat supply to satisfy housing needs, the plot ratios of the "Residential Zone 2" ("R2") and "Residential Zone 3" ("R3") sites in the KTN and FLN

NDAAs have been increased from 3 to 3.5 and from 1 to 2 respectively in the RODPs after balancing different factors such as efficient use of infrastructure and scarce land resources, as well as the growing public aspirations for a quality living environment. This will give rise to an estimated increase of about 8,000 flats, thus bringing the total flat supply from 45,800 to 53,800 as per the RODPs.

More Robust Zonings to Promote Economic Development

- (k) Taking advantage of their proximity to a number of existing and new boundary control points (BCPs) and Shenzhen, the NDAAs will serve to meet different strategic land use requirements. A cluster of “Commercial, Research and Development” sites (about 14 hectares) along Fanling Highway in the KTN NDA has potential to be developed into various types of office and research uses as well as to provide development spaces to support the Six Industries¹ which Hong Kong enjoys clear advantages. In the northwestern part of the KTN NDA, about 10 hectares of land for research and development uses are also reserved to support the development of Lok Ma Chau Loop. The Special Industries Area in the PC/TKL NDA (about 36 hectares) will provide development space for high value-added non-polluting special industries, logistic uses, as well as the Six Industries.

Mixture of Different Housing Types

- (l) A balanced housing mix will help create a socially integrated community. With this in mind, some 43% of the new residential units are planned for public rental housing and the remaining 57% for various types of private housing in overall terms. Higher density public and private housing developments will be concentrated near the railway station in the KTN NDA and the public transport interchanges in the two centres of FLN NDA, which can easily be connected to the existing Fanling and Sheung Shui railway stations. Medium to low density private housing will be developed in the fringe of the KTN NDA, along Ng Tung River in FLN and in the southern part of the PC/TKL NDA. Land has also been reserved on the RODPs for a comprehensive range of commercial, retail, open space and government, institution and community (G/IC) uses.

¹ The ‘Six Industries’ are testing and certification services, medical services, innovation and technology, cultural and creative industries, environmental industries and education services.

OTHER ENVIRONMENTAL ASPECTS

8. In parallel with the formulation of the RODPs, detailed technical assessments, including environmental, engineering, sustainability and air ventilation assessments have been carried out to examine the feasibility of the various proposals. The findings and recommendations of technical assessments have been incorporated into the RODPs. Overall, the NDAs project is technically feasible and will comply with the statutory requirements under the Environmental Impact Assessment Ordinance (EIAO). The major issues of assessment on environmental aspects are summarized in the following –

Ecological Impacts

- (a) An ecological impact assessment has been conducted to address the potential ecological impacts arising from the development of the NDAs. Ecological impacts have been identified, including loss of wetland habitats, woodlands and the Man Kam To Road Egrettry. Through avoidance of habitats of significant ecological value, long-term preservation and enhancement of the Long Valley Nature Park (some areas of which are currently not wetland and have high potential for enhancements), compensatory planting and implementation of other mitigation measures, it is anticipated that the potential impacts could be sufficiently mitigated. Design and implementation of the mitigation measures will be formulated under the EIAO process.

Landscape Impact

- (b) As part of the landscape impact assessment under the Study, a tree survey to identify the species and numbers of trees affected by the proposed developments has been carried out. The assessment shows that there are no rare or endangered species within the NDAs. To meet the EIAO requirement, compensatory planting will be provided to address the loss of woodland/plantation. Preservation of the 6 Old and Valuable Trees (OVTs) at the northern side of Fanling Highway is the key consideration in widening the Fanling Highway. The OVTs will be retained at their current locations by shifting the Tai Po bound carriageway further north so that the OVTs will be protected by the future median barrier. With the implementation of the recommended mitigation measures, the residual landscape impact will be reduced to acceptable level.

Cultural Heritage

- (c) The PC/TKL and FLN/NDAs are located near three sites of archaeological interest - the Ping Che Site of Archaeological Interest, Hung Leng Site of Archaeological Interest and Sheung Shui Wa Shan Site of Archaeological Interest respectively. An archaeological survey has been conducted within the NDAs on accessible land. Four archaeological potential areas have been identified. Porcelain shards of Qing to Song Dynasties were found in some test pits; while porcelain and pottery shards of Yuen Dynasties and Late Neolithic Period were found in during field scanning. However, further investigation to confirm the distribution and condition of the archaeological remains in these archaeological potential areas is required. Meanwhile, further archaeological surveys after land resumption but before construction are recommended to comprehensively assess the archaeological potential of some spots and to provide appropriate mitigation measures if required.

Noise Mitigation Measures

- (d) Operational noise impacts associated with helicopter noise, industrial noise, fixed noise sources and road traffic noise have been investigated. Sound Power Level (SWL) limits for fixed noise source such as DCS, sewage treatment works and sewage pumping station with necessary noise control measures to comply with statutory criteria are specified. Air-conditioning with ventilation system is also recommended for certain sites affected by helicopter noise and shooting noise near Lo Wu Classification Range. Operational road traffic noise impact on the sensitive uses outside and within the NDAs would be mitigated by provision of vertical noise barriers, vertical noise barriers with cantilevered arm, low noise surfacing, and semi-enclosures/full enclosures.

Air Quality

- (e) The key pollutants of concern are Nitrogen Dioxide (NO₂) and Respirable Suspended Particulates (RSP) from vehicular emissions during the operational phase. It is predicted that the cumulative hourly, daily and annual NO₂ and RSP levels would be in compliance with the prevailing Air Quality Objectives and hence no adverse operational phase air quality impacts from road traffic is anticipated.

CARBON APPRAISAL

9. A carbon appraisal for the proposed NDA developments has been carried out, aiming to assess the reduction of carbon emission under the proposed planning framework and adoption of resource-saving and energy-efficient measures of the proposed developments. To minimize adverse impacts on the environment, optimize the use of natural resources, and achieve the target of low carbon emission, different green initiatives are recommended, including a DCS providing cooling for non-residential buildings, public transport in the form of road-based Environmental Friendly Transport Mode (EFTM) such as electric bus, various green building features e.g. green roof, vertical greening and passive building design, etc. Moreover, energy efficient systems/equipment, renewable energy, water saving fixtures and green construction materials are also proposed to further enhance the overall sustainability. Furthermore, treated sewage effluent (TSE) will be utilized for irrigation, flushing and as make-up water for the DCS system to save fresh water consumption. With the incorporation of these green initiatives, it is anticipated that 140,000 to 180,000 tonnes (20-25%) of carbon emission would be reduced.

NEXT STAGE

10. We are now finalizing the EIA report for submission under the EIA Ordinance for approval in September/October 2012.

IMPLEMENTATION PROGRAMME

11. The NDAs will be developed in phases. Upon completion of the required statutory and funding approval procedures, construction works are anticipated to commence in 2017, with the first population intake in 2022. The entire NDAs project is expected to be completed by 2031.

PUBLIC ENGAGEMENT PROGRAMME

12. PE3 commenced on 19 June 2012, for completion on 31 August 2012. We consulted the Panel on Development of the Legislative Council on 28 June 2012 and the Town Planning Board on 13 July 2012. We will consult relevant Boards/Committees, including the North District Council and related Rural

Committees. Briefings will be provided to other stakeholders, including professional institutes, green groups and local concern groups.

13. The public views received from PE3 will be taken into account in refining the recommended development proposals before finalising the Study.

ADVICE SOUGHT

14. Members are invited to give views on the RODPs as detailed in the Stage Three Public Engagement Digest.

ATTACHMENT

Stage Three Public Engagement Digest

Planning Department

Civil Engineering and Development Department

July 2012