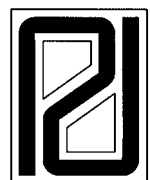


**KWU TUNG NORTH
OUTLINE DEVELOPMENT PLAN No. D/KTN/1
EXPLANATORY STATEMENT**

**Approved by CPLD
on 17.10.2013**

**Studies & Research Section
Planning Department**



Kwu Tung North Outline Development Plan
No. D/KTN/1

Explanatory Statement

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Explanatory Statement

1. Background

- 1.1 The **Territorial Development Strategy Review** in 1990s first identified that there was potential for strategic growth in the North East New Territories (NENT). The **Planning and Development Study on NENT** commissioned in 1998 identified Kwu Tung North (KTN), Fanling North (FLN) and Ping Che/Ta Kwu Ling (PC/TKL) as suitable for New Development Areas (NDAs) development.
- 1.2 The **Hong Kong 2030: Planning Vision and Strategy**, promulgated in 2007, recommended to proceed with the KTN, FLN and PC/TKL NDAs as well as the Hung Shui Kiu NDA to address the long-term housing demand and provide employment opportunities. Following the announcement of the development of the NDAs as one of the ten major infrastructure projects for economic growth in the 2007-08 Policy Address, **the NENT NDAs Planning and Engineering Study** (the NENT NDAs Study) was commissioned jointly by the Civil Engineering and Development Department and the Planning Department in June 2008 with a view to formulating a planning and development framework for the implementation of the KTN NDA, with others, in the NENT.
- 1.3 The NENT NDAs Study adopted a three-stage public engagement (PE) programme to facilitate public discussions and foster consensus building. Taking into account the public views and the planning and technical assessments, the Recommended Outline Development Plans (RODPs) for the KTN and FLN NDAs were revised and finalised under the NENT NDAs Study and were promulgated on 4 July 2013.
- 1.4 Under the revised RODPs, the KTN and FLN NDAs would be developed as extensions to the Fanling/Sheung Shui New Town to form the Fanling/Sheung Shui/Kwu Tung (FL/SS/KT) New Town, which will have a total population of about 460,000 upon full development¹. The FL/SS/KT New Town will be an integrated community with wide-ranging commercial, retail, community, recreational and cultural facilities as well as employment opportunities serving the larger population.

¹ These include a total population of about 105,500 from KTN NDA, a total population of about 71,400 from FLN NDA and the rest from Fanling/Sheung Shui New Town.

2. Objectives and Authority of the Plan

- 2.1 The Outline Development Plan (ODP) is a departmental plan which serves to provide a comprehensive planning framework to guide the future development of KTN NDA in an integrated and co-ordinated manner by giving a comprehensive picture of the proposed land use patterns and major infrastructures within the area. It provides the basis for the preparation of an Outline Zoning Plan (OZP) and more detailed layout plans for the area, the planning for Government works, site reservation for open space, Government, institution or community (G/IC) facilities, transport and other infrastructures, public and private housing, commercial and other development proposals, and the detailed design and implementation of the engineering works.
- 2.2 Formulated on the basis of the revised RODP of KTN NDA prepared under the NENT NDAs Study which was endorsed by the Committee on Planning and Land Development (CPLD) on 21 March 2013, the proposed land use patterns and development parameters of the ODP generally follow those of the revised RODP, except for the amendments mainly made in response to the Advisory Council on the Environment (ACE)'s recommendation on 9 September 2013² in considering the EIA report on NENT NDAs, which was approved by Director of Environmental Protection on 18 October 2013. The domestic and non-domestic gross floor areas (GFAs) and plot ratios (PRs) of individual sites and the housing provision of the NDA provided under the ODP are generally the same as those provided under the revised RODP.
- 2.3 In formulating the ODP, refinements have been made to the layouts to provide spaces for supporting transport and utility facilities, slopes and amenity, and to enhance the greening and open space network. Opportunities have also been taken to designate more land for government reserve and incorporate minor refinements.
- 2.4 The ODP shows greater details of layout of roads, ingress/egress points, footpath and cycle track network, development sites, utility reserves, G/IC facilities/reserves, and the urban design and landscape framework (such as non-building areas (NBA), pedestrian shopping streets, town plaza, visual corridors and breezeways) when compared with the revised RODP.
- 2.5 All development and redevelopment in the KTN NDA should conform with the statutory requirements of the relevant statutory plan. Given that the OZP shows only the broad principles of development, broad

² The road to Ma Tso Lung and the sports ground/sports complex were shifted westwards to take on board ACE's recommendation to avoid diverting the lower section of Ma Tso Lung Stream which is considered to be an important stream corridor for a variety of fauna of conservation significance including Three-banded Box Terrapin. This part of the stream and its surrounding riparian vegetation would be protected by the "Green Belt" zoning under the ODP.

land use zonings and major transport network within the planning scheme area, although the ODP has no statutory effect, the proposed land use zonings, planning intentions and planning requirements stipulated under the ODP should generally be followed in land transactions and allocations where Government is in a position to determine the user of the land by means of sale of Government land or lease modification. The ODP together with the OZP would serve as the basis for the forthcoming lease modification applications (including in-situ land exchange) subject to specified criteria under the enhanced Conventional New Town Approach for the KTN NDA. These criteria will ensure that such applications can allow early delivery of housing land without compromising comprehensive planning and balanced development, as well as safeguarding fair treatment to tenants/occupants. These applications should be confined to sites planned for private development on the ODP.

- 2.6 The ODP No. D/KTN/A was first circulated for comments by relevant bureaux/departments on 11 September 2013. On 17 October 2013, the ODP No. D/KTN/B, incorporated comments from relevant bureaux/departments, was approved by the CPLD with minor refinements. The approved ODP re-numbered as D/KTN/1 was adopted by the Secretary for Development on 20 December 2013.

3. The Planning Scheme Area

Location and Coverage

- 3.1 The Planning Scheme Area (the Area) of the Plan covers about 447 ha. It is located to the northwest of the existing Fanling/Sheung Shui New Town and to the west of the proposed FLN NDA (***Plan I***). As extensions of the new town, the KTN NDA and FLN NDA would be integrated with the existing new town area in Fanling/Sheung Shui to form the FL/SS/KT New Town.
- 3.2 The Area is generally bounded by Shek Sheung River in the east, Castle Peak Road and Fanling Highway in the south, Tit Hang in the west and Tai Shek Mo (Crest Hill) in the north. The boundary of the Area is shown by a heavy broken line on the Plan. For planning and reference purpose, the Area is sub-divided into a number of smaller planning areas as shown on the Plan.

Existing Land Uses

- 3.3 The central and southern parts of the Area comprise an extensive lowland with the recognized villages of Ho Sheung Heung and Yin Kong and the rural settlements scattered in Tung Fong, Fung Kong, Tong Kok, Shek Tsai Leng, Luen Wo, Yin Liu and Pak Shek Au. A number of rural industries, warehouses and open storage sites are

scattered along Ho Sheung Heung Road and Ma Tso Lung Road in the central part of the Area. The grassy knoll at Fung Kong Shan and the Fung Shui woodland to the west of Ho Sheung Heung form important green features of the Area.

- 3.4 Long Valley, situated at the eastern portion of the Area, comprises large stretches of agricultural land with a complex mosaic of active and inactive wet and dry agricultural fields. Active agricultural land is mainly concentrated in the central portion of Long Valley with patches near Tsung Yuen to the north of Sheung Yue River. Village areas, dry agriculture and plantation can be found in the southern part of Long Valley.
- 3.5 The eastern part of the Area is traversed by Sheung Yue River (River Beas), which flows from the upland in the south and meanders through the lowland area, joins Ng Tung River (River Indus) and then runs downstream to Shenzhen River.
- 3.6 A number of G/IC uses are located in the western and northern parts of the Area, including the Community Sports in the west and Lo Wu Firing Range, Ma Tso Lung Firing Range, Lo Wu Correctional Institution and Lo Wu Saddle Club in the north. Further to the west and north, a succession of grassy and hilly terrain extending from Chau Tau and Ma Tso Lung eastwards to Tai Shek Mo provides a natural backdrop to the Area. Ho Sheung Heung Egrettry located at the eastern base of Tai Shek Mo near Ngam Pin immediately outside the boundary of the Area is an important breeding site for egrets (*Plan 2*).

Development Opportunities (Plan2)

Highly Accessible

- 3.7 The proposed Kwu Tung Railway Station on the Sheung Shui to Lok Ma Chau Spur Line provides a key opportunity to connect the KTN NDA with the Fanling/Sheung Shui New Town and the urban area, and to integrate the railway transport system in the overall land use framework. Such integration would help maximize the use of public transport especially rail transport, thus minimizing road traffic and reducing carbon emission.
- 3.8 Fanling Highway to the south of the Area connects the KTN NDA to other areas in the North District and the New Territories, and to the urban area through the strategic road network. Possible new rail infrastructure is being examined in the study of “Review and Update of the Railway Development Strategy 2000” (RDS-2 Review).

Locational Advantage

- 3.9 Strategically located near the Lo Wu, Lok Ma Chau and Lok Ma Chau Spur Line Boundary Control Points (BCPs), the KTN NDA could capitalise on the economic interactions between Hong Kong and the Mainland. There is also potential for integrated planning of the KTN NDA with the Lok Ma Chau Loop (the LMC Loop) in close proximity which is planned for higher education as the leading land use, complemented by high-tech research and development (R&D) and cultural and creative industries.

Natural and Landscape Setting

- 3.10 There are a number of natural and landscape features within and in the surroundings of the Area that could be utilised to create a quality living environment. Long Valley in the eastern portion is recognised by its high ecological value. Proper planning and land use zoning designation could help enhance its ecological and conservation value and establish an integrated green network for the Area. Sheung Yue River and Shek Sheung River provide good opportunities for passive recreation along the riverside promenades. The mountains to the north, including Fung Kong Shan and Tai Shek Mo, serve as a green visual backdrop and a focus for major view corridors across the Area.

Rich Cultural Heritage

- 3.11 KTN is rich in cultural and historical resources. These resources include the fung shui woodland adjacent to Ho Sheung Heung, a declared monument and a number of graded historic buildings within the Area. Appropriate planning and proper land use zoning designation could help incorporate these valuable resources into the NDA development for the benefits of existing and future residents.

Development Constraints (Plan 2)

Environmental Constraints

- 3.12 Sheung Shui Water Treatment Works (SS WTW), which is a potentially hazardous installation (PHI), is located to the northeast just outside the Area, but its 1km Consultation Zone covers the north-eastern portion of the KTN NDA. Sheung Shui Slaughter House and Shek Wu Hui Sewage Treatment Works (SWH STW) located to the northeast of the Area also impose environmental constraints to the NDA development.
- 3.13 Fanling Highway to the south is the major air polluting and noise source to the Area. In the northern part of the Area, Lo Wu Firing Range and Ma Tso Lung Firing Range impose shooting noise and the former also imposes helicopter noise on the nearby developments. Developments adjacent to the helicopter pad of Lo Wu Firing Range are subject to the building height restrictions as stipulated in the Helicopter Landing Site Specification Guidelines of Government Flying Service (GFS).

Infrastructural Constraints

- 3.14 The northern part of the Area is traversed by the 400kV overhead power lines. The existing Dongjiang water mains in the western part of the Area also pose a constraint to building development.
- 3.15 The Area falls within the Deep Bay catchment and is subject to the requirement that no additional pollution load should be discharged into the Deep Bay as a result of any new proposed development. For new developments in the Area, apart from provision of proper sewage treatment facilities, measures to improve the quality of existing sewage discharge is required to ensure no net increase of pollution load to the sensitive Deep Bay Area.
- 3.16 Design flexibility should be allowed for the possible new rail infrastructure which is being examined under the RDS-2 Review and may affect the NDA.

Ecologically Sensitive Area

- 3.17 Due consideration should be paid to ecological resources within and in the vicinity of the Area, including Long Valley and Ho Sheung Heung, Ng Tung River, Sheung Yue River, Shek Sheung River, Ma Tso Lung Stream, Ma Tso Lung San Tsuen Stream, Ho Sheung Heung Egrettry together with its associated flight paths, fung shui woods and secondary woodlands, to avoid/minimise adverse effects on their ecological value and natural habitats.

Recognised Villages and Permitted Burial Grounds

- 3.18 There are two recognised villages, namely Ho Sheung Heung and Yin Kong within the Area. Permitted burial grounds are located at the hillslopes lying immediately north-western of Ho Sheung Heung, near Tit Hang at the north-western fringes and near Tsung Pak Long in the south-eastern part of the Area and they would generally be retained.

4. Population

- 4.1 According to the 2011 Census, the population of the Area was about 5,400 persons. Upon full development, it is estimated that the total planned population to be accommodated in the Area will be about 105,500. First intake of population for the KTN NDA is expected to commence in 2023/24.

- 4.2 The distribution of new housing units in the KTN NDA is around 58:42 in public and private housing developments³. **Appendix 1** shows the requirement and provision of major G/IC facilities and open space within the KTN NDA for a population capacity of about 105,500.

5. Planning Themes and Urban Design and Landscape Framework

Planning Themes

- 5.1 Capitalizing on its strategic location in proximity to the railway link, highways and the existing BCPs, and respecting the rich natural and ecological resources within the Area, the KTN NDA would be developed as a 'Mixed Development Node' with a mix of residential, commercial, R&D and agricultural uses as well as retail and services, community and government facilities and land for natural and ecological conservation. Adjoining the north-western part of the Fanling/Sheung Shui New Town, the KTN NDA, together with the FLN NDA, would become extensions of the existing new town to form the FL/SS/KT New Town, in which the existing and new facilities and open spaces could be shared by the residents as a whole. The major planning themes adopted in planning and designing the KTN NDA are as follows:

Respecting Nature, Integrating Urban and Rural Uses and Promoting Agriculture

- 5.1.1 The existing natural and landscape resources such as Long Valley, Sheung Yue River, Shek Sheung River, the hillslopes of Fung Kong Shan, the fung shui woodland to the west of Ho Sheung Heung and the natural ridgelines to the west and north have been respected and retained in the urban design of the KTN NDA. As part and parcel of the NDA project, some 37 ha of land in the core area of Long Valley generally of high ecological value is designated as a nature park and would be enhanced to become a major green space contributing to a quality living environment for the NDAs. An extensive area of about 83 ha (including 37 ha of land in Long Valley Nature Park (LVNP) and 46 ha in the "Agriculture" ("AGR") zone to the north and south of the LVNP) have been retained for agricultural use in the midst of the future NDA. These would preserve the existing rural character, contribute to a diversified townscape and quality living environment, and enhance integration of urban and rural uses.
- 5.1.2 The Government has identified 160 ha of land with good potential for agricultural rehabilitation in the vicinity of the KTN and FLN NDAs, including a major cluster of about 34 ha of

³ With the FLN NDA, the overall public to private housing ratio of the two NDAs is around 60:40.

fallow agricultural land at Kwu Tung South. The Government would introduce a special agricultural rehabilitation scheme to further assist and facilitate relocation of affected farmers.

Integration of New and Old Communities

- 5.1.3 A comprehensive pedestrian walkway system and cycle track network is planned to ensure good connectivity between major activity nodes, residential sites and existing recognized villages of Ho Sheung Heung and Yin Kong, and to connect KTN NDA with the FLN NDA, Kwu Tung South and Fanling/Sheung Shui New Town. This would promote the shared use of community, recreational and commercial facilities, and enhance employment opportunities within the district.

Transit Oriented Development

- 5.1.4 The proposed railway station on the Sheung Shui to Lok Ma Chau Spur Line at the centre of KTN NDA provides a significant opportunity to promote rail-based transit oriented development. Major developments and population would be planned within walkable distance from the proposed railway station to maximise the use of rail transport, thus promoting energy efficiency and minimising carbon emissions.

Robust Economic and Employment Clusters

- 5.1.5 To take advantage of its strategic location near the Lo Wu BCP, LMC BCP, LMC Loop, proposed railway station and Fanling Highway, the KTN NDA would serve to meet different strategic land use requirements and capitalise on the increasing economic interaction with the Mainland to enhance Hong Kong's competitiveness. Apart from reserving land to provide floorspaces for various types of office and R&D uses as well as to support the development of industries where Hong Kong enjoys clear advantage, commercial uses are allowed in some of the residential sites to enhance vibrancy of the locality and to generate different employment opportunities.

Balanced and Socially Integrated Communities

- 5.1.6 Drawing from the past experience of new town developments, socio-economic considerations have been carefully taken into account in planning for the NDA. To achieve a balanced population profile, a mix of housing land has been allocated for subsidised housing and various types of private housing to provide a wide range of housing choices for different social sectors. Sufficient land is designated for commercial, shopping and various G/IC uses, which in turn create new jobs for the

communities. The various G/IC facilities, such as the new hospital, polyclinic, swimming pool complex, and open spaces provided within the KTN NDA could also serve the wider communities. To encourage social interaction, core activity areas integrated with the open space network are proposed in the NDA.

Sustainable and Quality Living Environment

5.1.7 The planning and design for the KTN NDA adopts a sustainable development approach, balancing housing, employment, community and conservation needs, and encompassing economic, social and environmental considerations. Various urban design and greening features have been incorporated in the layout to achieve a quality living environment. High priorities have been accorded to “sustainable design” and “social consideration”.

Environmental-friendly Design

5.1.8 To pursue a green living environment, a compact city form is adopted in the KTN NDA with a majority of the new population concentrated near the proposed Kwu Tung Station and public transport interchange (PTI). Comprehensive pedestrian and cycle track networks are provided to promote walking and cycling so as to minimise road traffic and hence emission of carbon and other pollutants within the NDA. The primary distributors and main district distributors are planned at the periphery of the NDA to minimise noise and air pollution to the future residents. Green building design should be adopted in the future development of sites.

Urban Design Framework

5.2 A comprehensive planning and urban design framework optimizing opportunities afforded by the NDA, the adjoining Fanling/Sheung Shui New Town and the surrounding natural and landscape features has been formulated to create a quality and green living environment and socially integrated communities. Nine character areas connected by a comprehensive open space network are planned within the KTN NDA, including the Town Centre, North Residential Area, Residential Area by the River, Business and Technology Park, Long Valley Nature Park, Community Facilities Area, Recreational Area, Research & Development Area and Government Facility Area. Key features of the framework are discussed below and illustrated at ***Plan 3***:

Creating Nodes

- 5.2.1 In order to create a legible urban structure and enliven the Area, it is important to create strong district nodes within the KTN NDA. A Town Centre accommodating a mix of residential use, retail, leisure and social and community facilities is planned around the proposed railway station and PTI in the central part of the Area to serve as a major activity node of the KTN NDA. The importance of the Town Centre is emphasized by the development of a pedestrianised Town Plaza and there should be good design integration of the proposed railway station, the shopping street on both sides of the Town Plaza and the residential/commercial developments around the proposed station with the Town Plaza. This integrated core area will form a regional landmark and major focal point, activity node, and pedestrian streets of the Area. To create a legible southern gateway to the Area, the north-south green spine connecting Kwu Tung South and the Town Centre will be marked by landmark buildings in the development sites adjacent to the southern entrance.
- 5.2.2 The Business and Technology Park at the south-eastern part of the Area constitutes an important economic and employment node for the KTN NDA. Adjoining the south-eastern entrance of the Area, the Business and Technology Park provides an opportunity for creating a gateway to the NDA with the inclusion of a landmark building at the entrance.
- 5.2.3 The Recreational Area comprising Fung Kong Shan Park, a swimming pool, a sports centre and a sports ground/sports complex in the north-eastern portion of the Area is another focal point of the NDA to create a recreational hub for the future residents.

Forming a Compact City

- 5.2.4 To minimise the need for road transport and thereby reducing carbon emission, high density residential developments, workplace, leisure/entertainment and public service facilities are concentrated within the 500m catchments of the proposed railway station and PTI in the Town Centre to offer the majority of future residents convenient and comfortable access to public transport and supporting retail and recreational facilities. A comprehensive pedestrian, cycle track and open space network linking the residential areas and major activity nodes with the public transport hub would be provided.

Connecting the Neighbourhoods

- 5.2.5 It is important to connect KTN NDA to the existing and surrounding neighbourhoods to integrate the old and new

communities. The north-south and east-west running open space across the Town Centre serves as major connecting spines to the existing communities in Kwu Tung South to the south and Ho Sheung Heung and Yin Kong in the east. Pedestrian linkages in the form of footbridges and subway to Kwu Tung South across the Fanling Highway, and subways and footbridges to Ho Sheung Heung and Yin Kong are proposed to provide easy access for pedestrians between these areas and the Town Centre. A comprehensive cycle track network is also planned with linkages to the existing cycle track network in the Fanling/Sheung Shui area and the proposed cycle track network in the FLN NDA to provide convenient connections for the local communities.

Creating a Pedestrian Friendly Environment

- 5.2.6 Footpaths within the Area will be pedestrian friendly, continuous and landscaped in order to provide a pleasant walking environment. Pedestrian movement linking the Town Centre and the proposed railway station/PTI to the outer fringe areas would be provided via the east-west and north-south open space corridors. The Town Centre would be pedestrianised to provide a pleasant motor vehicle-free walking environment by placing the vehicular roads away from the town centre. A cruciform pedestrian shopping street supplemented with ‘green fingers’ is planned. There would be terraces on both sides of the pedestrian street lined with retail shops, cafés and restaurants in the Town Centre to liven up the pedestrian environment. The major north-south running open space spine across the Town Plaza is designed as a major boulevard with tree-lined pedestrian path through the NDA and sufficient space is also reserved for amenity strips along the streets to provide a leisure walking environment.

Creating a Comprehensive Cycle Track Network

- 5.2.7 A strong emphasis is on providing a comprehensive and pleasant cycling environment. Cycle tracks are planned along the open space spines and riverside promenades along Sheung Yu River and Shek Sheung River to provide a more comfortable cycling environment. Cycle parking areas are proposed close to the proposed railway station/PTI and major activity centres to facilitate the use of public transport.

Providing Leisure Spaces

- 5.2.8 High quality riverside promenade would be provided along Sheung Yue River and Shek Sheung River for the enjoyment of the residents and visitors. A comprehensive network of recreation and green spaces comprises regional, district and local

open spaces. The Town Plaza and Fung Kong Shan Park would be conveniently located for the enjoyment of residents. Some heritage features within the open spaces would also be incorporated in the layout and design of open spaces to enhance local identity and character.

Creating an Interesting Townscape

5.2.9 The overall development intensity and building height profile steps down towards the periphery and riverside to enhance variety in height and massing of new developments and to ensure a better integration with the adjacent rural setting. Exemplifying the concept of rail-based planning, a gradation approach is adopted with developments of higher intensity and building height planned around the proposed railway station to minimise the need for road transport. The intensity and building height descend toward the southern periphery by designating some low to medium rise G/IC facilities and business developments along Fanling Highway to allow visual relief between the Area and the existing low-rise developments in Kwu Tung South, except for a landmark development at the southern entrance of the Area. Lower intensity and building height is also proposed in the Residential Area by the River near the Long Valley and the existing recognized villages for better integration with the ecologically/visually important areas. Stepped building height control zones are introduced within the development sites along Sheung Yue River to further enhance the stepped building height concept towards the riverside.

Enhancing Air Ventilation, Building Permeability and Celebrating Views

5.2.10 A comprehensive breezeway system is introduced in the Area to promote better air ventilation and urban climate. In general, the major prevailing annual wind comes from the east direction, and the prevailing summer wind mainly comes from southwest direction. A number of major air paths have been incorporated in the layout for wind penetration which are aligned approximately in either east-west or northeast-southwest directions. They include the east-west running Town Plaza, the northeast/southwest running and east/west running district/local roads across the Area and the northeast/southwest running district and local open spaces. These unobstructed air paths allow the prevailing winds to penetrate into the built environment of the Area.

5.2.11 To reinforce the air paths formed by the open spaces and roads, NBAs of different widths are designated in various development sites to enhance penetration of the prevailing wind:

- (a) NBAs running in northeast to southwest direction of about 11m and 6m along the south-eastern edge of the middle development site and north-western edge of the southern development site in Area 23 are imposed. Together with the local open space between these two sites, this 50m-wide air path could facilitate the penetration of wind from the east to the inland;
- (b) 30m wide NBAs running in northeast to southwest direction are designated respectively in the middle of Area 23 and the two development sites to the southeast of Road L6 in Area 22 to divert wind to penetrate through the Town Plaza to the inner parts of the Area;
- (c) NBAs running in northeast to southwest direction are designated at the south-eastern corner of Area 15 and at the north-western corner of Area 23 to facilitate the penetration of wind from the east to the Area; and
- (d) a 20m wide NBA running in northeast to southwest direction is designated along the northern edge of the southern development site in Area 15 to facilitate better penetration of wind from the east to the NDA.

5.2.12 To improve wind penetration at pedestrian street level, large and bulky podium development is discouraged in the NDA. In general, permeable podium design up to 2 storeys is to be adopted in the core of the Town Centre. For development sites along the pedestrian shopping street in the core of the Town Centre, a 2-storey podium with terrace is to be provided in these sites to enhance vibrancy in the street level and direct downward airflow to the pedestrian level. To further enhance prevailing wind penetration through the Area, future developments at sites on both sides of the Town Plaza are encouraged to adopt suitable design measures to allow wind entries through the development sites. Podium-free design is adopted in sites for pure residential development to improve wind penetration at pedestrian street level. The urban design guidelines for improving air ventilation stipulated in the Hong Kong Planning Standards and Guidelines (HKPSG) and the Technical Circular and Technical Guide on Air Ventilation Assessment should be referred to in the detailed design for the developments.

5.2.13 Four 10m wide NBAs are also designated along the northern boundary of the “OU(Mixed Use)” site in Area 30 and the “OU(Business and Technology Park)” sites in Areas 31 and 32 in order to maintain a spacious corridor along the northern boundary of the business and technology park cluster. This

would facilitate wind penetration and greening at pedestrian street level and enhance the pedestrian environment.

- 5.2.14 The major view corridors are created by the east-west running and north-south running open space spines across the Town Centre which provide long-range views toward Long Valley Nature Park in the east and Fung Kong Shan in the north respectively. Another view corridor is also provided in a northwest-southeast direction in the form of the eastern periphery road (Road P2), providing a distant view to Fung Kong Shan when arriving at the NDA from the south-east.

Landscape Design Framework

- 5.3 The landscape design framework for the KTN NDA gives emphasis to creating of an integrated landscape system which links the future developments with the existing landscape resources and the riverside promenades along the western side of Sheung Yue River and Shek Sheung River.

Landscape and Open Space Design

- 5.4 A coherent green framework would link the proposed open spaces including the Town Plaza, Fung Kong Shan Park and riverside promenades with the existing landscape features such as the hillslopes of Fung Kong Shan and Long Valley.
- 5.5 The major elements of the landscape framework are the Town Plaza, Fung Kong Shan Park and the riverside promenades. They serve as major green recreation cores in the framework linking the open spaces with green corridors. These landscape areas will definitely contribute to the improvement of quality of life for the high density developments of the Town Centre and North Residential Area.
- 5.6 Major and secondary green corridors are designed in the form of tree avenues, boulevards, pedestrian streets and green walkways which make the KTN NDA visually cohesive in terms of the continuity of tree and shrub planting and allow where possible continuous and safe pedestrian access throughout the NDA.
- 5.7 The landscape framework also aims to maximise the integration of natural elements in the future urban fabric such as tree and shrub planting, lawn areas in addition to high quality hard landscape elements such as feature paving, lighting and street furniture, and sculptural elements such as landmark, sculptures and water features.
- 5.8 The streetscape is an important part of the landscape framework of the NDA. A high quality streetscape is essential for the quality living and business environment of the KTN NDA. The roadside landscape should

therefore incorporate a tree lined avenue on both sides of the primary, district and local distributor roads including Road P1 (part), Road P2 (part), Road D1, Road D2, Road D3, Road D4, Road D5, Road L1, Road L2, Road L3, Road L4, Road L5, Road L6, Road L7 and Road L8 wherever possible with modern and contemporary hard landscape treatments.

Open Space Provision

- 5.9 Under the ODP, 35.2 ha of open space would be provided in the KTN NDA, of which 6.4 ha are regional open space (i.e. the riverside promenades at the western banks of Sheung Yue River and Shek Sheung River serving the wider recreational needs of the territorial population), 23.8 ha are district open space and 5 ha are local open space. With the estimated total residential population of about 105,500 and worker population of about 31,200, pursuant to the HKPSG for the level of provision of open spaces⁴, 12.1 ha (10.6 ha and 1.5 ha) and 10.6 ha of DO and LO respectively are required for the estimated residential and worker population in the Area. In overall terms, the open space provision can meet the HKPSG requirements. However, when considered separately, there is some shortfall in LO provision. Nevertheless, this can be made up by the LO provided within individual public and private residential developments in the NDA.
- 5.10 The open space provided in the Area would serve both the new and existing residents in the NDA and Fanling/Sheung Shui New Town and visitors. It also provides a good chance for the development of community farms, subject to further examination, in the KTN NDA in view of rising interest of Hong Kong people in hobby farming and gardening activities.

Sustainable Building Design and Greening Coverage

- 5.11 Developments in the NDA are required to comply with the Sustainable Building Design Guidelines promulgated by the Buildings Department. The guidelines on building separation, building setback and site coverage of greenery aim to achieve better air ventilation, enhance the environmental quality of our living and working space, provide more greenery and mitigate the heat island effect.
- 5.12 Concerted efforts should be made to incorporate as many greening opportunities as possible within the NDA. Making reference to the principles and guidelines on greening as provided in the HKPSG, and other government studies on green roof application and sustainable living space, greening ratios of 30% to 60%, 30% to 45% and 30% to 85% are recommended for regional open space, district open space and local open space respectively. For amenity area, a minimum greening

⁴ According to the HKPSG, 1m² DO and 1m² LO should be provided per resident. 0.5 m² DO should also be provided per worker in industrial, industrial-office, business and commercial areas.

ratio of 85% is recommended. For public road works, which include distributor roads, local roads and footbridges, minimum 10% to 15% greening ratio are recommended. For other development sites, a minimum greening ratio of 20% to 30% (depending on the site size) should be provided. Development proponents are encouraged to provide more greenery, especially at-grade tree planting, in the development sites.

6. Land Use Proposals

6.1 Special Residential/ Home Ownership Scheme (“RS/HOS”): Total Area 17.9 ha

6.1.1 Seven development sites are zoned “RS/HOS”. Four sites in Areas 19, 21 and 24 are in the Town Centre while the other three sites in Areas 11, 12 and 13 are in the North Residential Area. All of them are located within the 500m walking distance of the proposed railway station. These sites are reserved for public rental housing (PRH)/HOS use or a mix of them to cater for the future demand for subsidised housing. The zoning aims to allow flexibility for provision of PRH and HOS housing within individual sites. The mix of PRH and HOS units within individual sites could be further considered in consultation with Housing Department (HD) upon implementation of the developments, subject to further technical assessment if necessary. However, the PRH and HOS units provided should generally maintain the public to private housing ratio for the KTN and FLN NDAs at about 60:40 to ensure a balanced and socially integrated community.

6.1.2 The planning intention of “RS/HOS” zone is primarily for high density subsidised housing development. Compatible non-residential uses including a number of commercial, social and community uses on the lowest two floors of the buildings above ground or in the purpose-designed non-residential buildings up to 5 storeys with proper design to minimize any possible adverse air ventilation impacts would be provided within some of these sites.

Area 19 (western site and eastern site)

6.1.3 To enliven the western part of the Town Centre, developments in these two “RS/HOS” sites located to the northwest of the proposed railway station in Area 19 are subject to a maximum domestic plot ratio of 4.5 and a maximum non-domestic plot ratio of 0.5 to allow commercial and retail uses in these sites. Due to the difference in site formation levels, the development site in the west is subject to a maximum building height of 135mPD while the site in the east is subject to a maximum

building height of 130mPD, except that a maximum building height of 5m is applicable on the edges (10m in width) abutting the Town Plaza in the south to provide for terraces and setting back of the first floor of podium. Located along the pedestrian shopping street, areas specifically for “Shop and Services” and “Eating Place” uses are designated along the site boundary of the eastern site abutting the Town Plaza to ensure continuous shop frontages and the provision of commercial and leisure facilities such as café, restaurants and retail shops on the side lining the pedestrian shopping street, thus contributing to its vibrancy, character and enriched pedestrian walking experience. To extend the street vibrancy of the Town Plaza from the shopping street, commercial and retail facilities are encouraged to be placed near the open space spines for the western site. Social and community facilities (a nursery and kindergarten in the western site, and a nursery and kindergarten and a district elderly community centre in the eastern site) are proposed within these two sites to support the community.

Area 21

- 6.1.4 Located immediately to the northeast of the proposed railway station, development in the “RS/HOS” site in Area 21 is subject to a maximum domestic plot ratio of 4.0, a maximum non-domestic plot ratio of 1.0 and a maximum building height of 125mPD, except that a maximum building height of 5m is applicable on the edge (10m in width) abutting the Town Plaza in the south to provide for terraces and setting back of the first floor of podium. The non-domestic floorspaces could allow provision of retail, social and community services to other neighbourhoods for pure residential development. To enrich the pedestrian walking experience, commercial and retail facilities are proposed to be placed near the Town Plaza. Pedestrian shopping street lined with retail frontage along site boundary abutting the Town Plaza is to be provided. Area specifically for “Shop and Services” and “Eating Place” uses is designated along the site boundary abutting the Town Plaza to ensure continuous shop frontages and the provision of commercial and leisure facilities such as café, restaurants and retail shops on the side lining the pedestrian shopping street, thus contributing to its vibrancy and character. Social and community facilities, including a nursery and kindergarten and social welfare facilities (a district support centre for persons with disabilities and a sub-base of integrated home care services) are proposed within this site to support the community.

Area 24

- 6.1.5 To enliven the western part of the Town Centre, development in the “RS/HOS” site located to the southwest of the proposed railway station in Area 24 is subject to a maximum domestic plot

ratio of 4.5, a maximum non-domestic plot ratio of 0.5 and a maximum building height of 135mPD to allow commercial and retail uses in this site, except that a maximum building height of 5m is applicable on the edge (10m in width) abutting the Town Plaza in the north to provide for terraces and setting back of the first floor of podium. This site has been reserved for local rehousing for eligible clearerees affected by the NDA development, while the remaining units after rehousing clearerees will be used for general public housing purpose. To extend the street vibrancy of the Town Plaza from the shopping street to the east, commercial and retail facilities are encouraged to be placed near the open space spines. Social and community facilities, including a nursery and kindergarten and social welfare facilities (a residential care home for the elderly (RCHE) and a long stay care home) are proposed. Separate entrances/exits for the RCHE and rehabilitation facilities should be designed if they are to be provided in the same building.

Areas 11, 12 and 13

- 6.1.6 For the three other “RS/HOS” sites in the North Residential Area, in order to provide retail, social and community services to the nearby new neighbourhood, developments in these sites are subject to a maximum domestic plot ratio of 4.5, a maximum non-domestic plot ratio of 0.5 and a maximum building height of 135mPD. A nursery and kindergarten is planned in Area 11. Social welfare facilities (a day care centre for the elderly, an integrated community centre for mental wellness, a supported hostel for ex-mentally ill persons and a half-way house) are proposed in Area 12. Separate entrances/exits for the day care centre for the elderly and rehabilitation facilities should be designed if they are to be provided in the same building. For the site in Area 13, two nurseries and kindergartens and a RCHE are proposed to support the local community.
- 6.1.7 Details of the social and community facilities proposed within these “RS/HOS” sites, including type, location, GFA, and design should be subject to further review in detailed design stage taking account of the latest circumstances.
- 6.1.8 Planning briefs setting out the planning parameters and the special design requirements of individual sites will be prepared to guide the future development in the “RS/HOS” sites. In drawing up the planning briefs, due consideration should be given to the planning circumstances in assessing whether additional social and community facilities, such as elderly facilities pertaining to the aging population in the territory, would be required.

6.2 Residential Zone 1 (Home Ownership Scheme) (“R1(HOS)”): Total Area 3.3 ha

- 6.2.1 Land has been earmarked specifically for HOS to cater for the demand. Two sites in Areas 20 and 26, which are respectively located to the immediate north and southeast of the proposed railway station, are planned primarily for high density HOS development with compatible non-residential uses.
- 6.2.2 In respect of the core location in the Town Centre, pedestrian shopping streets with terraces lined with retail frontage along site boundaries abutting the Town Plaza are to be provided. This terraces design could promote pedestrians’ walking experiences by reinforcing human scale and enhancing air ventilation at street level.
- 6.2.3 Development in the site in Area 20 which is in a more central location is subject to a maximum domestic plot ratio of 5.0, a maximum non-domestic plot ratio of 1.0 and a maximum building height of 115mPD in general, except that a maximum building height of 5m is applicable on the edges (10m in width) abutting the Town Plaza in the south and the major north-south running open space spine in the east to provide for terraces and setting back of the first floor of podium. Area specifically for “Shop and Services” and “Eating Place” uses is designated along the site boundaries abutting the Town Plaza and the major north-south running open space spine to ensure continuous shop frontages and the provision of commercial and leisure facilities such as café, restaurants and retail shops on the side lining the pedestrian shopping street, thus contributing to its vibrancy and character.
- 6.2.4 Development in the site in Area 26 is subject to a maximum domestic plot ratio of 4.0, a maximum non-domestic plot ratio of 1.0 and a maximum building height of 110mPD in general, except that a maximum building height of 5m is applicable on the edge (10m in width) abutting the Town Plaza in the north to provide for terraces and setting back of the first floor of podium. Area specifically for “Shop and Services” and “Eating Place” uses is designated along the site boundary abutting the Town Plaza to ensure continuous shop frontages and the provision of commercial and leisure facilities such as café, restaurants and retail shops on the side lining the pedestrian shopping street, thus contributing to its vibrancy and character.
- 6.2.5 The site in Area 20 is also subject to the maximum 2-storey non-domestic floors above ground in order to create a coherent and attractive character for the Town Centre.

- 6.2.6 A nursery and kindergarten is planned in Area 20 to support the local community. Social welfare facilities (a day activity centre, a hostel for severely mentally handicapped persons and a care and attention home for severely disable persons) are also proposed within the site in Area 26.
- 6.2.7 Details of the social and community facilities proposed within these “R1(HOS)” sites, including type, location, GFA, and design should be subject to further review in detailed design stage taking account of the latest circumstances.
- 6.2.8 Planning briefs setting out the planning parameters and the special design requirements of individual sites will be prepared to guide the future development in the “R1(HOS)” sites.

6.3 **Residential Zone 1 (“R1”): Total Area 4.5 ha**

- 6.3.1 Concentrated around the proposed railway station and at the core of the Town Centre, three sites in Area 20, Area 24 and Area 25 are reserved for “R1” use, which is primarily intended for high-density private residential developments with compatible non-residential uses. The high-rise developments aim to maximise the utilisation of the high capacity public transport system and to create a vibrant activity node around the station. Commercial uses in close proximity to the proposed railway station will capitalise on the convenience offered by mass transit as well as the concentration of population.
- 6.3.2 In order to enhance vibrancy and vitality of the core area, pedestrian shopping streets with two-storey podium with terraces lined with retail frontage along site boundaries abutting the Town Plaza/the major north-south running open space spine are to be provided. This terraces design could promote pedestrian walking experiences by reinforcing human scale and enhancing air ventilation at street level. Area specifically for “Shop and Services” and “Eating Place” uses is designated along the site boundaries abutting the Town Plaza and the major north-south running open space spine to ensure continuous shop frontages and the provision of commercial and leisure facilities such as café, restaurants and retail shops on the side lining the pedestrian shopping street. Developments in the sites in Areas 20 and 25 are subject to a maximum domestic plot ratio of 5.0, a maximum non-domestic plot ratio of 1.0 and a maximum building height of 115mPD in general, except that a maximum building height of 5m is applicable on the edges (10m in width) abutting the Town Plaza and the major north-south running open space spine in the south and west respectively in Area 20 and in the north and west respectively in Area 25 to provide for terraces and setting back of the first floor of podium. Development in the site in Area 24 is

subject to a maximum domestic plot ratio of 5.0, a maximum non-domestic plot ratio of 1.0 and a maximum building height of 120mPD in general, except that a maximum building height of 5m is applicable on the edge (10m in width) abutting the Town Plaza in the north to provide for terraces and setting back of the first floor of podium.

6.3.3 These sites are also subject to the maximum 2-storey non-domestic floors above ground in order to create a coherent and attractive character for the Town Centre. A range of commercial uses can be accommodated on the lowest two floors of a building. Social and community facilities, including a nursery and kindergarten and social welfare facilities (a special child care centre and an early education and training centre) are proposed within the site in Area 20. For the sites in Areas 24 and 25, one nursery and kindergarten is planned in each site.

6.3.4 Details of the social and community facilities proposed within these “R1” sites, including location, GFA, and design should be subject to further review in detailed design stage taking account of the latest circumstances.

6.4 **Residential Zone 2 (“R2”): Total Area 19.9 ha**

6.4.1 Eleven sites to the east of the high-density “RS/HOS”, “R1(HOS)” and “R1” cluster are designated “R2” which are intended for medium-density private residential developments without non-domestic element. They include the two sites in Area 22 and the other two sites in Area 26 to the west of Road P2, the three sites in Area 15 to the east of Fung Kong Shan and the four sites in Area 23 to the southwest of the fung shui woodland of Ho Sheung Heung. Developments within these sites are subject to a maximum plot ratio of 3.5 and a maximum building height ranging from 75mPD to 95mPD due to locations away from the Town Centre and respecting the topography and site constraints in individual sites such as locating in the major breezeway and railway protection area. To improve wind penetration at pedestrian street level, podium free design is adopted in these pure residential developments.

6.4.2 To further enhance penetration of the prevailing wind to the inner parts of the Area, a number of NBAs are designated in some of the “R2” sites. A 20m wide NBA running in northeast to southwest direction along the northern edge of the southern development site in Area 15 and NBAs running in northeast to southwest direction at the south-eastern corner of Area 15 and at the north-western corner of Area 23 are designated to facilitate better penetration of wind from the east to the NDA. Three 30m wide NBAs running in northeast to southwest direction in the

middle of Area 23 and the two development sites to the southeast of Road L6 in Area 22 are also designated to divert wind to penetrate through the Town Plaza to the inner parts of the Area. NBAs running in northeast to southwest direction of about 11m and 6m along the south-eastern edge of the middle development site and north-western edge of the southern development site in Area 23 are imposed. Together with the local open space between these two sites, this 50m-wide air path could facilitate the penetration of wind from the east to the inland.

6.5 Residential Zone 4 (“R4”): Total Area 1.5 ha

6.5.1 Two sites are designated as “R4” which are intended for low-rise, low-density residential developments with a village character. A site in Area 36 located in close proximity to Ho Sheung Heung is reserved for low-rise, low-density village type development, which may be used for re-provisioning the affected village houses/building lots under the Village Removal Terms and/or low-density village type residential development. In order to ensure that any future development or redevelopment within this site will retain a village character, a maximum building height of 3 storeys (8.23m) is imposed.

6.5.2 The existing Phoenix Garden in the southern hillslope of Fung Kong Shan in Area 14 will be retained. This site has also been designated as “R4” to reflect its existing low-density housing development. Development in this site is subject to a maximum plot ratio of 0.4 and a maximum building height of 2 storeys or the height of the existing building, whichever is the greater.

6.6 Village Type Development (“V”): Total Area 16.6 ha

6.6.1 The existing recognised villages, i.e., Ho Sheung Heung in Area 17 and Yin Kong in Area 37 will be retained and zoned as “V” for Small House developments by indigenous villagers. The existing Hau Ku Shek Ancestral Hall (Declared Monument) is protected under the Antiquities & Monuments Ordinance, Hung Shing Temple and Pai Fung Temple (Grade 3 historic building) and Sin Wai Nunnery (Grade 3 historic building) in the “V” zone of Ho Sheung Heung will remain unaffected by the NDA project. In order to ensure that any future development or redevelopment within the “V” zone will retain a village character, a maximum building height of 3 storeys (8.23m) or the height of the existing building, whichever is the greater, is imposed.

6.7 Comprehensive Development Area (“CDA”): Total Area 1.6 ha

6.7.1 The existing “CDA” site in Area 38 to the south of Yin Kong Village will be retained and zoned as “CDA” under this Plan.

Development within this site is subject to a maximum plot ratio of 0.4, a maximum site coverage of 20% and a maximum building height of 3 storeys (9m) including 1 storey carport. The Enchi Lodge located in the southern portion of the zone is a Grade 2 historic building, which should be incorporated in the design of the development on this site which is subject to a Master Layout Plan submission to the Town Planning Board.

6.8 Government (“G”): Total Area 36.5 ha

- 6.8.1 Some “G” sites are proposed to reflect the existing government uses. These include Lo Wu Correctional Institution in Area 6 and Lo Wu Saddle Club in Area 17.
- 6.8.2 The disused Lung Kai Public School in Area 2 has potential for converting into an eco-tourism education centre, holiday camp or other recreational uses. Development within this site is subject to a maximum building height of 3 storeys.
- 6.8.3 Two sites to the north of Fung Kong Shan in Area 4 are reserved for Potential Activity Centres to accommodate youth camp, adventure training facilities and other related facilities. Located to the southeast and east respectively of the Lo Wu Firing Range and Ma Tso Lung Firing Range, these sites are subject to helicopter and shooting noise arising from these firing ranges. Developments within these sites are subject to a maximum building height of 5 storeys. Proper mitigation measures such as central air-conditioning with fixed window glazing may be required to address the noise impact. The land to its west is designated as “G” for government reserve purpose and development within this site is subject to a maximum building height of 8 storeys. In addition, a government refuse collection point is planned in this “G” site to serve the needs of the KTN NDA population. Proper landscaping buffers should be provided to screen off the RCP. The location, design and layout of the RCP should be subject to further review in detailed design stage. The western site of Area 4 is reserved for a fire station cum ambulance depot. Development within this site is subject to a maximum building height of 9 storeys.
- 6.8.4 In the hilly terrain at the northern part of KTN NDA, two service reservoirs, one for fresh water and the other for flushing water are proposed in Area 5 to provide adequate water supply for the NDA. Developments within these sites are subject to a maximum building height of 1 storey.
- 6.8.5 The Former Ma Tso Lung Landfill (MTLL) in Area 8 is designated as “G” for government reserve purpose. The MTLL has been closed since 1979 and landfill restoration works was

completed in 2000. EPD is currently undertaking aftercare of MTLL and it is anticipated that the site will only be available in the long-term. Development at this site is subject to a maximum building height restriction of 5 storeys.

- 6.8.6 In the western part of the KTN NDA, land is reserved for a district police headquarters with associated married staff quarters and a divisional police station in Area 9. This site is also used for the reprovisioning of junior police officers' police married quarters. Developments at this site are subject to a maximum building height restriction of 20 storeys.
- 6.8.7 A cluster of recreational and sports/leisure related facilities, including a standard swimming pool and a sports centre is proposed near Fung Kong Shan Park in Area 10. Development within this site is subject to a maximum building height of 5 storeys. A sports ground/sports complex accommodating up to 10,000 persons is proposed in Area 1 in the north-western part of the KTN NDA. Development within this site is subject to a maximum building height of 3 storeys.
- 6.8.8 A site in Area 22 in the northeast of the Town Centre is designated as "G" for government reserve purpose and development within this site is subject to a maximum building height of 8 storeys. This site can be reserved for a community hall subject to further review in detailed design stage to serve the population to the north of the Town Centre. This site can also be reserved for a delivery office, which is subject to further review in detailed design stage taking account of the more latest circumstances, to support the provision of postal delivery service to the local community.
- 6.8.9 A site in Area 24 is designated "G" and reserved for government facilities near the Town Centre. Development within this site is subject to a maximum building height of 8 storeys.
- 6.8.10 The land to the west of the Pak Shek Au Interchange in Area 27 is designated as "G" for government reserve purpose and development within this site is subject to a maximum building height of 8 storeys. In the preparation of layouts for future government facilities, consideration shall be given to the alignment and railway protection area of the Sheung Shui to Lok Ma Chau Spur Line and the possible new rail infrastructure.
- 6.8.11 In the south-western part of the NDA, a site is reserved for the proposed hospital, polyclinic and general clinic/ health centre in Area 28 to provide medical services for the KTN and FLN NDAs and wider population as well as nearby residents. Development

at this site is subject to a maximum building height restriction of 10 storeys.

- 6.8.12 Two sites in Area 29 is designated “G” in the southern part of the NDA. For the “G” site abutting the major north-south running open space spine, it is reserved for a district library, a sports centre, a community hall and some social welfare facilities (an integrated children and youth services centre, an integrated family service centre, a child care centre and a social security field unit). Having good access to the proposed railway station, the public transport interchange and connections to Kwu Tung South, the site will serve as a hub of civic activities and social services. Developments at this site are subject to a maximum building height restriction of 10 storeys. Adoption of innovative building design and special landscape treatment will help develop the site as a gateway of the NDA. The land to its west abutting the Castle Peak Road is designated as “G” for government reserve purpose and development within this site is also subject to a maximum building height of 10 storeys.
- 6.8.13 The site in Area 34 to the east of the “OU (Business and Technology Park)” site reserved for hotel and conference uses and next to a footbridge across Sheung Yue River is also designated as “G” zone to provide a low-density low-rise visitor centre cum education centre on wetland conservation and agricultural development for the Long Valley Nature Park. Development in this site is subject to a maximum building height of 18mPD.
- 6.8.14 A site in Area 35 near Sheung Yue River is designated “G” and reserved for government facilities. Development within this site is subject to a maximum building height of 3 storeys.
- 6.8.15 In view of the aging population in the territory, the above “G” sites could be considered for elderly facilities such as RCHE subject to further review in detailed design stage.

6.9 Institution and Community (“IC”): Total Area 1.4 ha

- 6.9.1 Three sites are designated “IC” in the KTN NDA to reflect the existing or proposed institution and community facilities. The site currently occupied by a disused village school lies immediately to the east of Ho Sheung Heung is designated as “IC”. Development at this site is subject to a maximum building height of 3 storeys.
- 6.9.2 A site in the south-western corner of Area 29 is reserved for an electricity substation to support the KTN NDA development.

Development at this site is subject to a maximum building height of 30mPD.

- 6.9.3 A site to the southwest of Yin Kong abutting Castle Peak Road is proposed for relocation of Kwu Tung Vegetable Market and Credit Co-operative Society. The Society serves the farmers in the vicinity of the NDA. Development at this site is subject to a maximum building height of 2 storeys.

6.10 Education (“E”): Total Area 8.5 ha

- 6.10.1 Seven primary and four secondary schools are provided with the KTN NDA to meet the needs of the new population. Sites in close proximity to residential developments are reserved for school development for students’ convenience and in accordance with the requirements of HKPSG. These locations are also strategically proposed close to sports facilities, library and open space.
- 6.10.2 Two primary schools and one secondary school are proposed in sites next to the proposed district library in Area 29 in the southern part of the KTN NDA. The same combination of two primary schools and one secondary school is also planned at sites in Area 22 in the northeast of the Town Centre. Two primary and two secondary schools are proposed in sites adjacent to the swimming pool and sports centre in Areas 8, 9 and 11 in the North Residential Area. A primary school is proposed in the site near the Fung Kong Shan Park in Area 13. Developments at these sites are subject to a maximum building height of 8 storeys.

6.11 Regional Open Space (“RO”): Total Area 6.4 ha

- 6.11.1 Areas along the western banks of Sheung Yue River and Shek Sheung River is zoned “RO” and will be developed into a continuous riverside promenade for the enjoyment of the territorial population including residents and visitors. It is mainly intended for passive recreational uses and maximising view and access to and enjoyment of the riverside. The design of this regional open space should integrate with the proposed footpath and cycle track network of the Area. The riverside promenades should incorporate continuous tree lines along the river banks with modern and contemporary hard landscape treatments to create an attractive and favourable riverside environment.
- 6.11.2 At the southern end of the riverside promenade in Area 31, a Grade 3 historic building, i.e. Yeung Yuen shall be incorporated in the design of this “RO” site.

6.12 District Open Space (“DO”): Total Area 23.8 ha

- 6.12.1 A total of 23.8 ha of “DO” is provided for both new and existing residents in the FL/SS/KT New Town. In addition to provide active and passive recreational pursuits, the “DO” in the KTN NDA also serves as major pedestrian passageway and breezeway corridors.
- 6.12.2 A number of sites are zoned “DO” in KTN NDA to provide recreational and leisure spaces in the form of green corridors and parks. Land designated as “DO” is intended primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of residents as well as the general public in the district.
- 6.12.3 The Town Plaza stretching from west to east across the Town Centre is designated as “DO(1)” to provide not just a town park but also include leisure and food and beverage uses subject to detailed design and the approval of the Town Planning Board by way of a planning application under section 16 of the Town Planning Ordinance. There should be good design integration with the Town Plaza and the shopping terraces on the two sides. Attractive recreational and leisure uses and landscape features are to be provided. A detailed urban design study is to be conducted to achieve a holistic design for the plaza and the Town Centre as a whole, in order to create a distinct sense of place. The major north-south running green corridor linking Kwu Tung South to Fung Kong Shan Park is designated as “DO” and planned as a major tree-lined boulevard in order to enhance walking experience through the NDA. The Town Plaza and the major north-south running green corridor will serve as the primary green corridors of the KTN NDA. As they will serve as the major pedestrian connector for residential sites within the Town Centre and linking up the major activity nodes in the KTN NDA to the proposed railway station and PTI, the Town Plaza and the major north-south running green corridor shall be pedestrianised and opened to the public 24 hours a day and shall be lit sufficiently to create a safe environment at night.
- 6.12.4 To allow greater flexibility for site layout and design for development sites along the pedestrian shopping street, EVA cum pedestrian path should be provided along the two sides of the shopping streets abutting these development sites in the DO(1) area. At grade greening to provide comfort to the pedestrians should also be provided at the shopping streets. Detailed arrangement and implementation mechanism would be subject to study in the detailed design stage.

6.12.5 The Fung Kong Shan Park in Area 7 is another major district open space with various active and passive recreational facilities and a feature lake in the northern part of the NDA.

6.12.6 Another “DO” is located within the Business and Technology Park in Area 31. A Grade 3 historic building, i.e, Yan Wah Lo shall be incorporated in the design of this “DO” site.

6.12.7 In the south-eastern part of the Area, a tract of land in Area 37 has been designated as “DO” to serve as a gateway to the KTN NDA. This open space also serves as a green buffer for providing a subtle transition from the busy Fanling Highway to the tranquil Long Valley Nature Park. A 15m setback and mounding along northern and north-eastern boundaries shall be provided.

6.13 Local Open Space (“LO”): Total Area 5 ha

6.13.1 “LO” is provided in close proximity to residential areas to serve local residents. Some open space corridors linking up the residential areas with the Town Plaza and the riverside promenade along Sheung Yue River are also zoned “LO”.

6.13.2 “LO” will also be provided to the residents within individual public and private residential developments in the KTN NDA to meet the requirements in the HKPSG.

6.14 Green Belt (“GB”): Total Area 122.9 ha

6.14.1 Areas with mature vegetation and/or hilly terrain have been designated as “GB” to protect existing green areas and preserve the hilly terrain as a green backdrop to the NDA. The primary intention of this zone is to preserve the natural and green setting of the NDA. Areas of permitted burial grounds are also incorporated into this land use zone. The fung shui woodland in Area 16 and the ecological buffer of Ma Tso Lung Stream and Ma Tso Lung San Tsuen Stream in Areas 2 and 8 are also designated as “GB” which are of landscape and ecological value. Compensatory planting areas are proposed in the “GB” zone in Area 5 and Area 7.

6.15 Amenity (“A”): Total Area 11.3 ha

6.15.1 Amenity strips will be provided alongside roads as far as possible to enhance the amenity and to serve as visual buffers. They offer good opportunities for landscaping and tree planting. Amenity strips are also designated along some development sites to reflect the formed slopes after the construction of proposed road works.

6.15.2 Amenity strip is also designated along the western side of a “RS/HOS” site in Area 24 to serve as a noise and air buffer between the Pak Shek Au Interchange and the residential site. To enhance the distant view to Fung Kong Shan, amenity strips with continuous tree lines will also be provided along the two sides of the eastern periphery road (Road P2).

6.15.3 The Earth God Shrine of Kam Tsin (Grade 2 historic building) will be integrated into the amenity area in Area 38.

6.16 Agriculture (“AGR”): Total Area 45.9 ha

6.16.1 The northern and southern portions of the Long Valley in Area 18 and Area 40 are currently intermixed with some fish ponds, dry and wet agriculture, abandoned farmland/grassland and squatter huts. These areas will be continued to designate as “AGR” to allow the continuation of the existing farming practices.

6.16.2 The “AGR” zone to the north of Long Valley Nature Park in Area 18 is situated under the flight path of birds from Ho Sheung Heung egretty to Long Valley and with strong ecological links with the habitats in Long Valley. In order to minimise adverse impacts on fauna in Long Valley and fragmentation impacts on the flight-lines between Ho Sheung Heung Egretty and Long Valley, more stringent planning control should be imposed such that any development with adverse drainage, environmental and ecological impacts to the area should not be permitted. Similar planning control should be included in the Explanatory Statement of the OZP.

6.17 Other Specified Uses (“OU”): Total Area 68.4 ha

6.17.1 This zone covers land allocated for the following specific uses.

Area 25 – Commercial and Residential Development Incorporating Public Transport Terminus (2.0 ha)

6.17.2 A site in Area 25 in the Town Centre is designated as “OU” zone annotated “Commercial and Residential Development Incorporating Public Transport Terminus” with the planning intention primarily for high-density residential and commercial developments incorporating a public transport interchange serving the community. To add vibrancy and vitality, a pedestrian shopping street with two-storey podium with terraces lined with retail frontage along site boundaries abutting the Town Plaza in the north and the major north-south running open space spine in the east are to be provided. This terraces design

could enhance pedestrian walking experiences by reinforcing human scale and enhancing air ventilation at street level.

6.17.3 Development within this zone is subject to a maximum domestic plot ratio of 5.0, a maximum non-domestic plot ratio of 1.0 and a maximum building height of 120mPD in general, except that a maximum building height of 5m is applicable on the edges (10m in width) abutting the Town Plaza and major north-south running open space spine in the north and east respectively to provide for terraces and setting back of the first floor of podium. Area specifically for “Shop and Services” and “Eating Place” uses is designated along the site boundaries abutting the Town Plaza and the major north-south open space spine to ensure continuous shop frontages and the provision of commercial and leisure facilities such as café, restaurants and retail shops on the side lining the pedestrian shopping street, thus contributing to its vibrancy and character. This site is also subject to the maximum 2-storey non-domestic floors above ground in order to create a coherent and attractive character for the Town Centre. A post office and a nursery and kindergarten are planned in this development to support the local community. Due consideration shall be given to better integrate the design of future railway station and the design of the proposed PTI. In view of the strategic location in the Town Centre and close to the proposed Kwu Tung Station, it is desirable to develop this site in a comprehensive manner. A master layout plan shall be submitted to the satisfaction of the Director of Lands to ensure proper design of the development before development proceeds.

6.17.4 Details of the community facilities proposed within this site, including location, GFA, and design should be subject to further review in detailed design stage taking account of the updated circumstances.

Area 30 – Mixed Use (2.1 ha)

6.17.5 A site in Area 30 at the southern entrance of the KTN NDA abutting the Fanling Highway is designated as “OU” zone annotated “Mixed Use”. The planning intention of this zone is to provide a mix of commercial/office, R&D, residential uses and social welfare facilities, either within a building vertically or within a spatial area horizontally. Located near the proposed railway station and PTI, the site enjoys high accessibility. To add vibrancy and vitality to this entrance location, a pedestrian shopping street with terraces lined with retail frontage along site boundary abutting the major north-south running open space spine in the west is to be provided. This terraces design could enhance pedestrian walking experiences by reinforcing human scale and enhancing air ventilation at street level.

- 6.17.6 Development in this zone is subject to a maximum non-domestic plot ratio of 2.0, a maximum domestic plot ratio of 1.0 and a maximum building height of 110mPD, except that a maximum building height of 5m is applicable on the edge (10m in width) abutting the major north-south running open space spine in the west to provide for terraces and setting back of the first floor of podium. Area specifically for “Shop and Services” and “Eating Place” uses is designated along the site boundary abutting the major north-south open space spine to ensure continuous shop frontage and the provision of commercial and leisure facilities such as café, restaurants and retail shops on the side lining the open space spine, thus contributing to its vibrancy and character. Social welfare facilities (an integrated vocational and rehabilitation service centre, a hostel for moderately mentally handicapped persons and a hostel for severely physically handicapped persons) are proposed within the site. A 10m wide NBA is designed along the northern boundary of this site in order to maintain a spacious corridor along the northern boundary. This would facilitate wind penetration and greening at pedestrian street level and enhance the pedestrian environment.
- 6.17.7 Considering that the site is adjacent to Fanling Highway, the layout of the development will require special consideration of the traffic noise impact. In this regard, the mix of commercial/office, R&D and residential uses provides the site with high flexibility to mitigate the potential noise from the adjacent road by adopting suitable layout of the non noise-sensitive uses. Future development proponent of the site shall submit a traffic noise impact assessment report to the satisfaction of relevant authority prior to the development.
- 6.17.8 According to the final Environmental Impact Assessment (EIA) report, the ‘White House’ currently used by the Home of Loving Faithfulness is of cultural and historical research value and is proposed to be retained within the site. The future development layout should take this building into account and suitably integrate the building with the proposed development on-site. This site should provide a footbridge across Fanling Highway to enhance pedestrian connectivity between KTN and Kwu Tung South and be linked with the nearby “G” site in Area 29. A cycle track linking the cycle track network to the east and west along Castle Peak Road should be provided within the site by the development proponent taking into account the retention of the ‘White House’. In view of its strategic location as the southern entrance of the KTN NDA and the various planned uses, it is desirable to develop this site in a comprehensive manner. A master layout plan shall be submitted to the satisfaction of

Director of Lands to ensure an integrated layout before development proceeds.

- 6.17.9 Details of the social and community facilities proposed within this site, including location, GFA, and design should be subject to further review in detailed design stage taking account of the updated circumstances.

Areas 31, 32, 33 and 34 – Business and Technology Park (11.7 ha)

- 6.17.10 Five sites located along/near Fanling Highway are designated as “OU” zone annotated “Business and Technology Park”. The planning intention of this zone is to provide a mix of commercial, offices and R&D uses. They will provide development spaces for the industries where Hong Kong enjoys clear advantage, such as innovative and high-technology industries and cultural/creative industries. To achieve a comprehensive urban design and landscape treatment, individual development should submit a master layout plan, following the urban design and landscape framework formulated under the detailed design stage aiming to create a high quality park-like environment for this business and technology cluster, to the satisfaction of Director of Lands to ensure an integrated and compatible layout before development proceeds. Implementation of these sites is subject to further study, taking the advice of relevant bureaux and departments.
- 6.17.11 Development in this zone is subject to a maximum plot ratio of 3.0 and maximum building heights ranges from 40 to 60mPD. Different height bands are designated within sites along Sheung Yue River to establish a stepped building height profile increasing from the riverside towards Fanling Highway and the Town Centre. For sites in Areas 31, 32, 33 and 34, developments fronting the riverside are subject to a maximum building height of 40mPD while those at the rear are subject to a maximum building height of 55mPD. For sites in Areas 31 and 32, three 10m wide NBAs are designed along the northern boundary of these sites in order to maintain a spacious corridor along the northern boundary of the business and technology park cluster to provide a coherent high quality environment. This would facilitate wind penetration and greening at pedestrian street level and enhance the pedestrian environment. A government refuse collection point is planned in the western site of Area 31 to serve the NDA population. Proper landscaping buffers should be provided to screen off the RCP. The location, design and layout of the RCP should be subject to further review in detailed design stage.

6.17.12 Adoption of innovative building design and special landscape treatment will help define the site in Area 33 as a gateway of the NDA. However, being located near the proposed Long Valley Nature Park, careful consideration should be given to the building disposition and façade treatment of the development to minimize disturbance and impacts of light and glare to fauna, especially ensure that there will not be any possible adverse impact to the nearby nature park. An urban design plan shall be submitted to the satisfaction of Director of Planning before development proceeds. In this connection, a 30m green buffer is to be provided along the eastern side of the site in order to further set back the building from the nature park. Measures to ensure no hydrological disruption to Long Valley Watercourse and water supply to Long Valley shall be designed at the detailed design stage for the re-channelisation of the Long Valley Watercourse and the development of areas through which it passes.

6.17.13 The site in Area 34 to the west of Sheung Yue River is proposed to accommodate hotel, exhibition and conference facilities. It will offer accommodation/hospitality for business visitors and tourists of the Business and Technology Park and the nearby Long Valley Nature Park.

Area 2 – Research & Development (5.7 ha)

6.17.14 The site in the north-western tip of the KTN NDA is designated as “OU” zone annotated “Research & Development”. The planning intention of this zone is for R & D uses which could create synergy with the development of LMC Loop in close proximity to the site. They will provide development spaces for the industries where Hong Kong enjoys clear advantage, such as innovative and high-technology industries and cultural/creative industries.

6.17.15 Taking into account GFS’s building height requirement for helicopter flight safety and safety to third parties under the flight path stipulated by the Helicopter Landing Site Specification Guidelines, development at this site is subject to a maximum gross floor area of 101,617m² and maximum building heights range from 30mPD to 65mPD.

Area 39 – Nature Park (37.4 ha)

6.17.16 Some 37 ha of land in the Long Valley area generally of high ecological value is designated as “OU” zone annotated “Nature Park” for its long-term conservation as part and parcel of the KTN and FLN NDAs development and as on-site ecological mitigation to compensate for the wetland loss due to the KTN

and FLN NDAs development. As the ecological value of this area is closely related to the existing wet farming practice, the Nature Park may allow such use based on guidelines and requirements to be prescribed by the Government. CEDD with consultation of AFCD will formulate a management plan for this area, in consultation with different stakeholders, to holistically protect and enhance the habitats in the Nature Park with a view to mitigating wetland loss due to development of the KTN and FLN NDAs.

Area 27 – District Cooling System (2.3 ha)

6.17.17 A site in the south-western end of the NDA in Area 27 is designated as “OU” zone annotated “District Cooling System” for a plant for District Cooling System (DCS) to provide chilled water to buildings planned for non-residential purpose within the NDAs for air-conditioning purpose. A separate study on the adoption of DCS will be included in the detailed design and site investigation for the NDAs Advance Works. Development in this zone is subject to a maximum building height of 35mPD.

Area 33 – Petrol Filling Station (0.1 ha)

6.17.18 A site next to the Kwu Tung Interchange in the south-eastern part of the NDA is designated as “OU” zone annotated “Petrol Filling Station” for a petrol filling station with liquefied petroleum gas filling facilities serving the needs of the local residents as well as the general public. Development in this zone is subject to a maximum building height of 20mPD.

Areas 25, 27, 35 – Railway Associated Facilities (1.4 ha)

6.17.19 A few sites near the proposed railway station and along the existing Lok Ma Chau Spur Line in Areas 25, 27 and 35 are designated as “OU” zone annotated “Railway Associated Facilities” for the existing and planned railway associated facilities. Two sites in Area 25 are for the planned ventilation and plant room for the proposed Kwu Tung Railway Station. The external façade treatment of these railway associated facilities should be compatible with the design of the Town Plaza. The other two sites in Areas 27 and 35 accommodate the existing emergency access point of the Lok Ma Chau Spur Line.

Areas 1 and 35 – Sewage Pumping Station (0.3 ha)

6.17.20 Two sites, one on the western bank of the Sheung Yue River in Area 35 and the other at the northern end of the NDA near Ma Tso Lung in Area 1, are designated as “OU” zone annotated

“Sewage Pumping Station” for two proposed sewage pumping stations for collecting sewage flows from the NDA and pumping the sewage to the SWH STW. Developments in the sites in Areas 1 and 35 are subject to a maximum building height of 20mPD and 15mPD respectively.

Area 3 – Firing Range (5.2 ha)

- 6.17.21 Two sites currently occupied by the Lo Wu Firing Range and Ma Tso Lung Firing Range in Area 3 are designated as “OU” zone annotated “Firing Range”. Development in this zone is subject to a maximum building height of 2 storeys.

7. Transport

- 7.1 To support the development of the KTN NDA, a number of improvements to the existing road network are necessary. The traffic impacts of the proposed developments have been adequately assessed and addressed by these improvement works and with implementation of the improvement works, the traffic impacts would be acceptable. The improvement works are subject to detailed design.

Road

- 7.2 The KTN NDA will be connected with different parts of Hong Kong and surrounding areas by a comprehensive existing and planned road network. The major road networks within the Area including trunk roads, district distributors and local distributors as indicated on ***Plan 4***.
- 7.3 Regarding the trunk road, Fanling Highway serves to provide a convenient route linking the KTN NDA to other parts of the New Territories. It is also the major trunk route for the cross-boundary traffic through Lok Ma Chau, Man Kam To and Sha Tau Kok. In an attempt to relieve weaving movements emerging from the new road scheme for KTN NDA and to accommodate the merging/ diverging ramps from the new Kwu Tung Interchange and improved Pak Shek Au Interchange, Fanling Highway will be widened between San Tin Interchange and Po Shek Wu Interchange from dual 3-lane to dual 4-lane. The existing Castle Peak Road (CPR) – Kwu Tung Section will be shifted northwards to make way for the road widening. Five Old Valuable Trees would be retained under the improvement works.
- 7.4 Regarding the primary distributor, there are two primary distributors, namely P1 and P2. Both primary distributors are of dual 2-lane configuration. The eastern primary distributor road P2 is connected to Fanling Highway via a grade-separated interchange near Yin Kong

while the western primary distributor road P1 will be connected to the Fanling Highway via a pair of slip roads near Pak Shek Au.

- 7.5 Regarding the district distributor, there are five district distributors, namely Road D1, Road D2, Road D3, Road D4 and Road D5. Road D1 and D2 will provide direct connectivity between the diverted CPR and the KTN NDA. Road D3 will provide the east-west connectivity between the two primary distributor roads (P1 and P2). The junction of Road D3 to the major north-south running open space spine is subject to detailed design for continuous pedestrian linkage. Road D4 and D5 will connect the KTN town centre to the northwestern part of KTN NDA via proposed Road R1.
- 7.6 Local distributor roads are designed for single 2-lane configuration, and will branch off from the distributor roads for access to the proposed new developments and existing indigenous villages. Cul-de-sacs will be introduced in the local distributor roads south of the proposed railway station to divert east-west through traffic effectively away from the town centre.
- 7.7 With regard to the road connections with the adjoining districts, people travelling from the North District can gain access to the KTN NDA via the following access points:
- (i) Fanling Highway via the improved Pak Shek Au Interchange
 - (ii) Castle Peak Road – Kwu Tung Section
 - (iii) Kwu Tung Road via the improved Pak Shek Au Interchange; and
 - (iv) Proposed Eastern Connection Road (to be considered under the Study on the LMC Loop)

Railway

- 7.8 The proposed Kwu Tung Station on the Sheung Shui to Lok Ma Chau Spur Line, extending from Sheung Shui Station westwards to the Lok Ma Chau Terminal, provides convenient mass transit link between the KTN NDA and other parts of the territory. The Northern Link (NOL) connecting West Rail Kam Sheung Road Station to Kwu Tung Station is under study in the context of the RDS-2 Review.
- 7.9 The proposed Kwu Tung Station, which will be a new station on the Sheung Shui to Lok Ma Chau Spur Line, will be located at the Town Centre of the KTN NDA. About 80% of the population in the KTN NDA will reside within 500 metres of the proposed railway station. This will encourage residents to use mass transit and reduce the demand for road traffic.

Public Transport

- 7.10 A PTI of not less than 6,000m² will be provided to the immediate south of the proposed railway station in Area 25 to provide bus/GMB services. Taxi pick-up and drop-off bays would also be provided in the PTI. A terminus would be provided according to the requirement of the HKPSG.
- 7.11 In the planning of the KTN NDA, flexibility has been provided for road-based environmentally friendly transport modes (EFTM) such as electric bus (subject to the outcome of the trial to test the use of electric buses under Hong Kong's operating condition) providing feeder services to the proposed railway station. The provision of such transport modes should be considered in detail.

Pedestrian and Cycle Track Connections (Plans 5 and 6)

- 7.12 The proposed footpaths and cycle tracks will link up major activity nodes in the Area, including the proposed railway station, PTI, residential and commercial areas, open spaces and recreational facilities. To the east and west, it will link with the cycle track networks proposed under the *Cycle Track Networks in the Northwest and Northeast New Territories* and the network in the FLN NDA.
- 7.13 Convenient cycle parking facilities will be provided near major destinations including proposed railway station, PTI, major residential areas and open spaces.
- 7.14 The north-south and east-west open space corridors across the KTN NDA will provide a comfortable walking environment for the pedestrians and connect to the Kwu Tung railway station. At the south, five footbridges and a subway are provided to enhance the connectivity between the KTN NDA with the Kwu Tung South area. At the east, pedestrian connections to villages like Yin Kong and Ho Sheung Hueung will also be provided/ maintained. Footbridges are also proposed across Sheung Yue River linking Long Valley and the eastern part of the KTN NDA, and Shek Sheung River linking FLN NDA.
- 7.15 Details of the new and enhanced pedestrian connection points between surrounding areas and the KTN NDA are shown below:
- A. Kwu Tung South
- A1. Extension/modification of existing footbridges across Fanling Highway from KTN NDA to Kwu Tung South is proposed.
- A2. A new footbridge over Fanling Highway is proposed at the proposed elevated Kwu Tung Interchange.
- A3. A new subway underneath Fanling Highway is proposed to the west of Kwu Tung Interchange.

- B. Lok Ma Chau Loop
- B1. At grade walkway from LMC Loop to Ma Tso Lung (to be considered under the Study on the LMC Loop).

- C. Existing Communities near Ma Tso Lung
- C1. At grade walkway from Ma Tso Lung San Tsuen to the KTN NDA.

- D. Tsung Park Long and Tai Tau Leng
- D1. At grade walkway along CPR from Tsung Park Long and Tai Tau Leng to the KTN NDA.

- E. Existing Communities near Chau Tau
- E1. At grade walkway along CPR from Chau Tau to the KTN NDA.

- F. FLN NDA
- F1. New and existing footbridges over Sheung Yue River linking up FLN and KTN NDAs.

8. **Environmental Considerations**

- 8.1 Detailed environmental mitigation measures should be referred to the Environmental Impact Assessment (EIA) report of this project.

- 8.2 Mitigation measures are recommended in the EIA report to mitigate the noise and air impacts.
 - 8.2.1 Noise sensitive uses will be sited in such a way to avoid excessive exposure to traffic noise through the use of non-sensitive non-domestic structures, noise barriers and provision of sufficient setback distance. Residential uses are proposed to be further setback from Fanling Highway, while G/IC facilities planned along Fanling Highway are protected by noise barriers.

 - 8.2.2 5m high vertical noise barriers or 5m vertical barrier with 3m cantilever arm at 45° with full enclosures in some sections are proposed along the Fanling Highway to mitigate the noise of the moving traffic.

 - 8.2.3 To avoid the potential helicopter noise and shooting noise impacts from Lo Wu Firing Range and Ma Tso Lung Firing Range on the nearby research and development use in Area 2 and potential activity centres in Area 4, acoustic insulation with air conditioning is recommended.

 - 8.2.4 Adequate setback for mitigating possible air and noise impacts on residential developments and other air/noise sensitive

receivers should be incorporated in order to satisfy the air and noise standards.

- 8.2.5 Adequate amenity strips are introduced along major roads to serve as a buffer area to reduce traffic noise and airborne pollutants.
 - 8.2.6 Noise mitigation measures, such as self-protecting building layout design and adequate separation, should be devised as part of the building design of new developments/redevelopment to be controlled under lease conditions.
- 8.3 Long Valley and Ho Sheung Heung has been identified as a Priority Site for Enhanced Conservation under the 'New Nature Conservation Policy'. Conservation and mitigation measures are proposed to mitigate the ecological impact of the NDA development:
- 8.3.1 To provide a significant green space contributing to a quality living environment for the new town, it is proposed to resume about 37 ha of Long Valley area, generally of high ecological value, for the development of a Nature Park. It will conserve and enhance the ecologically important environment and compensate for the wetland loss due to the NDAs development. A management plan will be prepared for the LVNP to protect and enhance the ecological value of Long Valley.
 - 8.3.2 It is proposed to retain the "Agriculture" ("AGR") zonings of the area west of Ng Tung River, north of Sheung Yue River and east of Ho Sheung Heung, i.e. Area 18, and the area south of LVNP and east of Yin Kong, i.e. Area 40 as a buffer zone for the LVNP. More stringent planning control over the "AGR" zone in Area 18 should be imposed to reflect the importance of the area being on the flight path of the birds.
 - 8.3.3 Potential indirect impacts to Ho Sheung Heung Egrettry will be minimised by protecting and enhancing wetland habitats in LVNP as a foraging site and by avoiding developments along the flight line between the egrettry and Long Valley by retention of the existing agricultural zoning on land to the north of Sheung Yue River with enhanced planning control.
- 8.4 The stream course of Ma Tso Lung Stream and the surrounding riparian vegetation, which provide habitat for the critically endangered Three-banded Box Terrapin, is protected by "GB" zoning in Area 8 where the upper stream section flows and the 45-60 m buffer of the stream section to the east of Rural Road R1 in Area 2 is also zoned as "GB". The stream course of Ma Tso Lung San Tsuen Stream and the surrounding riparian vegetation within KTN NDA, which provide habitat for the critically endangered Three-banded Box Terrapin and the aquatic fauna

species Small Snakehead and *Somanniathelphusa zanklon*, within Area 2 will also be protected by an ecological buffer which is zoned as “GB”.

- 8.5 According to the EIA report on NENT NDA study, high level arsenic (As) which is considered to be naturally occurring, is detected covering most of the area in KTN NDA. Mitigation measures are proposed as follows:

8.5.1 A detailed site investigation (SI) for all sites to locate all the hotspots and to identify the concentration level and extent of As is therefore required to be carried out after land resumption. A Contamination Assessment Plan for arsenic (CAP-As) proposing the borehole pattern, sampling location and depth, etc. and a Contamination Assessment Report for arsenic (CAR-As) assessing the results of the SI and recommendations, etc. for all the sites in the area should be submitted to EPD for agreement. Construction works at these hotspots with soils containing high levels of arsenic shall first be avoided as far as practicable. Should avoidance is not feasible, a detailed arsenic management plan(s) (AMP) should be submitted to EPD for agreement for such sites which require soil treatment to (i) double-check and confirm validity of the bioavailability predictions given in the EIA report of NENT NDA project; (ii) identify and adopt appropriate treatment methods/processes to reduce the potential risk of arsenic exposure to human health to an acceptable level; and (iii) advise on the proper handling and disposal of the treated materials, prior to commencement of construction works.

8.5.2 Based on the currently available information, the areas (hotspots) with soil containing high level As are shown on Figure 7.5 in Appendix 8.4 in the EIA report. If the concentration of As in the excavated soil exceeds 571mg/kg which is the limit identified in the EIA report, soil treatment should be carried out. This threshold for soil treatment, the method of treatment and measures for handling of the soil As containing soil proposed in Sections 8.4 to 8.6 in Appendix 8.4 of the EIA Report and EM&A Manual would need to be followed subject to the findings in the further investigation for formulation of the detailed AMP(s). In general, it is proposed that 0 to 8m below site formation level is treated for the residential and commercial zones, and 0 to 4m below site formation level for most government facilities, schools and roads. The treatment proposal could then be refined based on the latest findings and design of the sub-structure.

8.5.3 Regarding sites involving land exchange and to be implemented by developers, the developer is required to carry out at his own cost the submissions to EPD, the detailed SI, the treatment of

arsenic containing soil (if required) as detailed in 8.5.1 and 8.5.2 above.

- 8.5.4 Regarding the sites that are formed by government and sell to developers, the developer is required to carry out at its own cost the submissions to EPD, the detailed SI, the treatment of arsenic containing soil (if required) as detailed in 8.5.1 and 8.5.2 above if the developer decides to excavate the soil below the treated soil level by government.
- 8.6 The north-eastern portion of the KTN NDA falls with the 1km Consultation Zone of the SS WTW. No new development is proposed inside the consultation zone to minimize the number of population.
- 8.7 Safety and environmental measures for the Areas 8, 9, 10, 11 and 19 within the 250m consultation zone of former Ma Tso Lung Landfill should be referred to the EIA report and EM&A manual.
- 8.8 A number of archaeological potential areas have been recommended in the EIA report. The following should be conducted for these areas:
 - 8.8.1 Based on the recommendations of the EIA report, further archaeological surveys should be conducted in areas with unknown archaeological potential after land resumption and before construction works to assess their archaeological potential and potential impacts caused by development with recommendations of appropriate mitigation measures if necessary. The scope and methodology of the survey should be agreed with Antiquities and Monuments Office (AMO) prior to commencement. Archaeological impact assessment will then be conducted for detailed assessment. Appropriate mitigation measures will be recommended, if necessary, based on the outcome of the assessment results.
 - 8.8.2 Appropriate mitigation measures, including survey-cum-excavations, should be implemented in those sites which are identified of archaeological potential and will be affected by development. The scope and methodology of the mitigation measures should be agreed with AMO prior to commencement.
- 8.9 The graded historic buildings within the Area have been considered and incorporated in the overall planning of the NDA. The existing Hau Ku Shek Ancestral Hall (Declared Monument) is protected under the Antiquities & Monuments Ordinance. Hung Shing Temple and Pai Fung Temple (Grade 3 historic building) and Sin Wai Nunnery (Grade 3 historic building) in the existing “V” zone of Ho Sheung Heung will remain unaffected by this project. Two Grade 3 historic buildings (Yan Wah Lo and Yeung Yuen) shall be incorporated in the design of the “DO” and “RO” respectively in Area 31. The Earth God Shrine of Kam

Tsin (Grade 2 historic building) will be integrated into the amenity area in Area 38. The existing Enchi Lodge, which is a Grade 2 historic building, will remain in the “CDA” zone in Area 38 according to the approved Master Layout Plan.

- 8.10 A compensatory tree planting plan, includes details of implementing and managing the proposed compensatory planting areas, would be submitted by the project proponent in consultation with the relevant authorities prior to commencement of construction works. Measures for protecting trees potentially to be affected by the project as well as for those to be transplanted should be adopted. Topping of trees should be avoided. As far as practicable, native species and a good mix of different tree species that have been proven to be beneficial to wildlife as well as to the local community and ecological system as a whole would be used.
- 8.11 At grade planting, vertical greening, green roof and screen planting in future development sites should be considered where appropriate.

9. Cultural Heritage

- 9.1 A declared monument and a number of graded historic buildings are identified in the Area, including the Hau Ku Shek Ancestral Hall (Declared Monument), Enchi Lodge (Grade 2), The Earth God Shrine of Kam Tsin (Grade 2), Hung Shing Temple and Pai Fung Temple (Grade 3), Sin Wai Nunnery (Grade 3), Yan Wah Lo (Grade 3) and Yeung Yuen (Grade 3). All the above declared monument and graded historic buildings/structures are worthy of preservation.
- 9.2 The Antiquities Advisory Board (AAB) also released a list of new items in addition to the list of 1,444 historic buildings. These items are subject to grading assessment by the AAB. Details of the list of 1,444 historic buildings and the new items have been uploaded onto the official website of the AAB at <http://www.aab.gov.hk>.
- 9.3 Prior consultation with the AMO of the Leisure and Cultural Services Department should be made if any development, redevelopment or rezoning proposals might affect the above graded historic building/structure, new items pending grading assessment or site of archaeological interest and their/its immediate environs.

10. Utility Services

Drainage

- 10.1 The NDA is mainly located within the catchment area of Sheung Yue River except a small area in the west which falls within the San Tin Basin. The majority of the catchment area drains to Sheung Yue River and Shek Sheung River, with a small area to the Chau Tau Channel. The existing drainage pattern will generally be retained under the NDA development.
- 10.2 New storm water drainage system in the form of a gravity piped drainage system will be provided within the development sites to convey storm water runoff to the downstream watercourses following the existing catchment delineation. The drainage system will be laid along the main roads within the NDA. The new drainage system is subject to detailed design.

Sewerage and Sewage Treatment

- 10.3 Sewage flows from the NDA will be collected through gravity sewer at the proposed SPS in Area 35 on the west of Sheung Yue River, from where it will be pumped to the extension/upgrade of SWH STW through a rising main. The rising main will be routed along the cycle track parallel to the western bank of Sheung Yue River before crossing underneath the Shek Sheung River and the MTR east rail track and connected to the SWH STW. The existing SWH STW is proposed to be expanded and upgraded. In addition, a SPS in Area 1 at the north-western end of the NDA is proposed for the collection and pumping of sewage.

Water Supply

- 10.4 The existing SS WTW is unable to cope with the demand from KTN and FLN NDAs after the completion of all planned developments in the Fanling/Sheung Shui area. In the long term, the shortfall will be met by either Au Tau WTW or Ngau Tam Mei WTW by integrating the supply networks. The waterworks involve laying a trunk main from Ngau Tam Mei Fresh Water Service Reservoir (FWSR) to the existing Kwu Tung FWSR and the proposed KTN FWSR in Area 5 and the construction of a pumping station near Ngau Tam Mei WTW.
- 10.5 A new flushing water service reservoir in Area 5 will be provided. Either treated sewage effluent or fresh water is proposed to be used for flushing. It is recommended to re-use treated sewage effluent from SWH STW for non-potable purposes subject to further study.
- 10.6 A water mains runs transversely through the NDA in a north-eastern direction to feed water from SS WTW to KTS FWSR will be diverted along the proposed roads. Apart from this, a number of water mains

within the NDA will be diverted. The diversion works will be incorporated into the roadworks.

Electricity

- 10.7 A new 132kV bulk infeed substation (BIS) is proposed in the KTN NDA. For power infeed of this station, 132kV power lines from the existing Fanling BIS are proposed. Existing 132kV underground cables from Fanling BIS, running along the CPR, shall be diverted upon road reconstruction. New 132kV underground cables are proposed to be connected from the diverted 132kV underground cables in CPR to the new KTN BIS.
- 10.8 In addition, 132kV power lines are proposed between the proposed KTN 132kV BIS and FLN 132kV primary substation as the backup supply to each other. However, technical coordination and maintenance responsibilities at the key crossings across the East Rail and Sheung Yue River have to be further arranged in the design of the bridge structure during the detailed design stage.

Gas

- 10.9 The existing gas supply for Kwu Tung, Fanling and Sheung Shui is provided by HKCG from the two existing offtake stations, namely Fanling West Offtake Station and Fanling East Offtake Station. Gas is supplied from the Tai Po Gas Production Plant to the two offtake stations through high pressure (HP) gas pipes and then medium pressure (MP) gas pipes outfeed from the offtake stations.
- 10.10 No additional offtake stations are required for the new development and supply will be provided by connecting new MP pipes from the existing MP pipes network or offtake station.

Telecommunication

- 10.11 Telecommunication cables will be laid along the proposed roads and distributed to the development sites. Optic fibres cables can be branched off from the existing network along CPR and Ho Sheung Heung Road.

11. Implementation

- 11.1 Land formation and the provision of infrastructure will be implemented in accordance with the development programme prepared by the CEDD. Open space, schools, social welfare and other community facilities will

be constructed by the appropriate Government departments on the basis of the Capital Works Programme, School Building Programme and other Public Works Programme. Public rental and HOS housing together with the supporting facilities will be built by the HD in accordance with the Public Housing Development Programme and other relevant agents.

- 11.2 The development of the KTN NDA will be implemented in phases, under which the development of the NDA and associated engineering infrastructure are divided into 4 packages. The tentative phasing and packaging of works are shown on **Plan 7**. The phasing and packaging of works is subject to review.
- 11.3 Tentatively, housing developments in the KTN NDA under Advance Works Package will be completed in 2023 to 2025, the earliest whereas the other developments and infrastructural facilities will be completed from 2018 to 2024. Other sites in the KTN NDA are included in different packages (Packages 1, 2 and 3) and will be completed in phases from 2020 to 2024 under Package 1 and 2029 to 2031 for housing developments and 2023 to 2029 for engineering infrastructure and other site developments under Package 2 and Package 3.

Appendix 1

Schedule of Requirement and Provision of G/IC Facilities and Open Space in Kwu Tung North New Development Area (Based on 105,546 persons upon full development)

Facilities	HK Planning Standards & Guidelines	Ultimate Requirement	Planned Provision	Surplus/ Deficit (-)	Remarks
<u>Education</u>					
Nursery Class and Kindergarten (no. of classroom)	730 half-day and 250 full-day places for every 1,000 children aged 3-5	63	63	0	Assuming 2.29% of population at 3-5 years
Primary School (no. of school)	1 whole-day classroom per 25.5 persons aged 6-11	7	7	0	Assuming 5.43% of population aged 6-11
Secondary School (no. of school)	1 whole-day classroom per 40 persons aged 12-17	4	4	0	Assuming 5.05% of population aged 12-17
<u>Medical and Health</u>					
Hospital (no. of beds)	5.5 beds per 1,000 persons with a distribution of beds between various types of hospitals determined on a regional basis	580	1 Hospital with 1 Polyclinic and 1 General Clinic/Health Centre	-	a) Hospital Authority advises to reserve a site of 2-3 ha for a hospital to support medical needs of NDAs population. b) A site of 4 ha is reserved in KTN NDA for the provision of a hospital with polyclinic/general clinic/health centre to meet demands in KTN and FLN NDAs.
Polyclinic/Specialist Clinic	One specialist clinic/polyclinic whenever a regional or district hospital is built	1	-	0	
Clinic/Health Centre	1 clinic/health centre per 100,000 persons	1	-	0	
<u>Law and Order</u>					
District Police Station	1 per 200,000 - 500,000 persons	-	1	1	Surplus provision to meet FLN NDA's demand
Divisional Police Station	1 per 100,000 - 200,000 persons	1	1	0	Surplus provision to meet FLN NDA's demand
Magistracy (8-courtroom)	1 per 660,000 persons	-	-	-	Shortfall would be met by existing Fanling Magistracy Courts
Fire Station	Provision depends on graded response time determined by fire risk category system.	-	1	-	Fire Station cum Ambulance Depot

Ambulance Depot/ Station	Provision depends on the requirement of accommodation for ambulances to give an emergency coverage of 10 minutes and 20 minutes in urban/new towns and rural area respectively.	-	1	-	Fire Station cum Ambulance Depot
<u>Community</u>					
Post Office	Within 0.8km from large concentrations of residents or workers. These should be applied with a degree of flexibility, having regard to local conditions, development constraints and resource availability.	Subject to further assessment after population intake as per Hongkong Post's advice	At least 1	-	The posting behaviour of the general public and the business sector, and hence their demand for postal service, has been undergoing significant changes in recent years and is expected to continue to evolve. Hongkong Post will keep under review the postal needs in KTN NDA and will decide, closer to the time of population intake for the NDA, the appropriate mode and scale of postal service provision having regard to various relevant factors, including the planning guidelines for post offices, the projected and evolving demand for postal service, the diversified provision modes of postal service and the resource implications.
Library	One district library should be provided for each district. There should also be a district library for every 200,000 persons.	1	1	0	Surplus provision to meet FLN NDA's demand
<u>Social Welfare</u>					
Integrated Children and Youth Centre (ICYSC)	1 per 12,000 persons in the 6-24 age group	2	1	1	As per SWD's advice, only one ICYSC is required.
Integrated Family Service Centre (IFSC)	1 per 100,000 - 150,000 persons	1	1	0	
District Elderly Community Centre (DECC)	To be determined taking into account the elderly population, demographic characteristics, geographical factor, existing service provision and service demand	-	1	-	As advised by SWD

Day Care Centre for the Elderly (DE)	To be determined taking into account the elderly population, demographic characteristics, geographical factor, existing service provision and service demand	-	1	-	Advised by SWD that the DE should be placed on ground floor and should each be provided with three parking spaces for 16-seater van.
Neighbourhood Elderly Community Centre (NEC)	To be determined taking into account the elderly population, demographic characteristics, geographical factor, existing service provision and service demand	-	0	-	As per SWD's advice, no NEC is required in KTN NDA.
Residential Care Home for the Elderly (RCHE)	To be determined taking into account the service demand and the availability of suitable premises	-	2	-	Advised by SWD that each RCHE should be provided with a parking space for a 16-seater van with tail-lift.
Early Education and Training Centre (EETC)	To be determined taking into account the population, geographical factor, existing service provision and service demand	-	1	-	As advised by SWD
Special Child Care Centre (SCCC)	To be determined taking into account the population, geographical factor, existing service provision and service demand	-	1	-	Advised by SWD that the SCCC should be provided with a parking space for a 24-seater van with tail-lift.
Day Activity Centre	To be determined taking into account the population, geographical factor, existing service provision and service demand	-	1	-	As advised by SWD, DAC, HSMH, IVRSC, HMMH, HSPH and C&A/SD is preferable to be co-located.
Hostel for Severely Mentally Handicapped Persons (HSMH)	To be determined taking into account the service demand and the availability of suitable premises	-	1	-	As advised by SWD, DAC, HSMH, IVRSC, HMMH, HSPH and C&A/SD is preferable to be co-located.
Integrated Vocational Rehabilitation Services Centre (IVRSC)		-	1	-	As advised by SWD, DAC, HSMH, IVRSC, HMMH, HSPH and C&A/SD is preferable to be co-located. The IVRSC should be located on G/F, otherwise goods lift is needed. Each IVRSC should be provided with a parking space for 5.5-ton goods vehicle with loading/unloading area for goods.

Hostel for Moderately Mentally Handicapped Persons (HMMH)	To be determined taking into account the service demand and the availability of suitable premises	-	1	-	As advised by SWD, DAC, HSMH, IVRSC, HMMH, HSPH and C&A/SD is preferable to be co-located.
Hostel for Severely Physically Handicapped Persons (HSPH)	To be determined taking into account the service demand and the availability of suitable premises	-	1	-	As advised by SWD, DAC, HSMH, IVRSC, HMMH, HSPH and C&A/SD is preferable to be co-located.
Care and Attention Home for Severely Disabled Persons (C&A/SD)	To be determined taking into account the service demand and the availability of suitable premises	-	1	-	As advised by SWD, DAC, HSMH, IVRSC, HMMH, HSPH and C&A/SD is preferable to be co-located. The C&A/SD should be provided with a parking space for 24-seater van with tail-lift.
Supported Hostel for Ex-Mentally Ill Persons (SHOS(ex-MI))	To be determined taking into account the service demand and the availability of suitable premises	-	1	-	As advised by SWD
Halfway House (HWH)	To be determined taking into account the service demand and the availability of suitable premises	-	1	-	As advised by SWD
Long Stay Care Home (LSCH)	To be determined taking into account the service demand and the availability of suitable premises	-	1	-	As advised by SWD
Integrated Community Centre for Mental Wellness (ICCMW)	To be determined taking into account the population, geographical factor, existing service provision and service demand	-	1	-	As advised by SWD
Child Care Centres (CCC)	To be based on the estimated demand, socio-economic factors, district characteristics and the provision of other child care support services for the area	-	1	-	As advised by SWD
Social Security Field Unit (SSFU)		-	1	-	SWD advised that the SSFU should be paired with IFSC at KTN NDA
District Support Centre for Persons with Disabilities (DSC)	To be determined taking into account the population, geographical factor, existing service provision and service demand	-	1	-	Advised by SWD that the DSC should be provided with a parking space for 14-seater van with tail-lift.

Sub-base of Integrated Home Care Services (IHCS)		-	1	-	As advised by SWD
Recreation					
Sports Centre	1 per 50,000 - 65,000 persons	2	2	0	
Sports Ground/ Sports Complex	1 per 200,000 - 250,000 persons	-	1	1	Surplus provision to meet FLN NDA's and Sheung Shui/Fanling's demand
Swimming Pool Complex - Standard	1 per 287,000 persons or 1 m ² water per 85 persons	-	1	1	Surplus provision to meet FLN NDA's and Fanling/Sheung Shui's demand
Open Space					
Regional Open Space (RO)	no set standard	-	63499	-	Riverside Promenade along Sheung Yue River and Shek Sheung River
District Open Space (DO)	1m ² per resident 0.5m ² per worker	121146	238202	117056	
Local Open Space (LO)	1m ² per resident	105546	49761	-55785	Shortfall would be met by the LO to be provided within individual public and private residential development

**Development Parameters of Major Development Sites
in Kwu Tung North New Development Area**

1. **“OU(R&D)” Site in Area 2**

Site Area	: About 5.75 ha
Maximum Non-domestic GFA	: About 101,617 m ²
Maximum Building Height	: About 30mPD to 65mPD

2. **“RS/HOS” Site in Area 11**

Site Area	: About 1.46 ha
Maximum Domestic GFA (Plot Ratio)	: About 65,685 m ² (4.5)
Maximum Non-domestic GFA (Plot Ratio)	: About 7,298 m ² (0.5)
Maximum Building Height	: 135mPD
Estimated No. of Flats	: About 1,460 units ^{#1}
Estimated Population	: About 4,335 persons ^{#2}

3. **“RS/HOS” Site in Area 12**

Site Area	: About 3.51 ha
Maximum Domestic GFA (Plot Ratio)	: About 157,990 m ² (4.5)
Maximum Non-domestic GFA (Plot Ratio)	: About 17,554 m ² (0.5)
Maximum Building Height	: 135mPD
Estimated No. of Flats	: About 3,511 units ^{#1}
Estimated Population	: About 10,427 persons ^{#2}

4. **“RS/HOS” Site in Area 13**

Site Area	: About 2.29 ha
Maximum Domestic GFA (Plot Ratio)	: 103,190 m ² (4.5)
Maximum Non-domestic GFA (Plot Ratio)	: 11,466 m ² (0.5)
Maximum Building Height	: 135mPD
Estimated No. of Flats	: About 2,293 units ^{#1}
Estimated Population	: About 6,811 persons ^{#2}

5. **“R2” Site in Area 14**

Site Area	: About 2.90 ha
Maximum Domestic GFA (Plot Ratio)	: About 101,536 m ² (3.5)
Maximum Building Height	: 80mPD
Estimated No. of Flats	: About 1,451 units ^{#3}

	Estimated Population	: About 3,916 persons ^{#4}
6.	<u>"R2" Site in North of Area 15</u>	
	Site Area	: About 1.24 ha (about)
	Maximum Domestic GFA (Plot Ratio)	: About 43,261 m ² (3.5)
	Maximum Building Height	: 95mPD and 85mPD
	Estimated No. of Flats	: About 618 units ^{#3}
	Estimated Population	: About 1,669 persons ^{#4}
7.	<u>"R2" Site in Central of Area 15</u>	
	Site Area	: About 1.24 ha
	Maximum Domestic GFA (Plot Ratio)	: About 43,253 m ² (3.5)
	Maximum Building Height	: 85mPD
	Estimated No. of Flats	: About 618 units ^{#3}
	Estimated Population	: About 1,668 persons ^{#4}
8.	<u>"R2" Site in South of Area 15</u>	
	Site Area	: About 1.24 ha
	Maximum Domestic GFA (Plot Ratio)	: About 43,259 m ² (3.5)
	Maximum Building Height	: 80mPD
	Estimated No. of Flats	: About 618 units ^{#3}
	Estimated Population	: About 1,669 persons ^{#4}
9.	<u>"RS/HOS" Site in West of Area 19</u>	
	Site Area	: About 3.10 ha
	Maximum Domestic GFA Plot Ratio	: About 139,702 m ² (4.5)
	Maximum Non-domestic GFA Plot Ratio	: About 15,522 m ² (0.5)
	Maximum Building Height	: 135mPD
	Estimated No. of Flats	: About 3,104 units ^{#1}
	Estimated Population	: About 9,220 persons ^{#2}
10.	<u>"RS/HOS" Site in East of Area 19</u>	
	Site Area	: About 2.59 ha
	Maximum Domestic GFA (Plot Ratio)	: About 116,405 m ² (4.5)
	Maximum Non-domestic GFA (Plot Ratio)	: About 12,934 m ² (0.5)
	Maximum Building Height	: 130mPD
	Estimated No. of Flats	: About 2,587 units ^{#1}
	Estimated Population	: About 7,683 persons ^{#2}

11. “R1(HOS)” Site in Area 20

Site Area	: About 1.50 ha
Maximum Domestic GFA (Plot Ratio)	: About 74,834 m ² (5)
Maximum Non-domestic GFA (Plot Ratio)	: About 14,967 m ² (1)
Maximum Building Height	: 115mPD
Estimated No. of Flats	: About 1,386 units ^{#5}
Estimated Population	: About 4,435 persons ^{#6}

12. “R1” Site in Area 20

Site Area	: 1.14 ha (about)
Maximum Domestic GFA Plot Ratio	: About 57,116 m ² (5)
Maximum Non-domestic GFA Plot Ratio	: About 11,423 m ² (1)
Maximum Building Height	: 115mPD
Estimated No. of Flats	: About 816 units ^{#3}
Estimated Population	: About 2,203 persons ^{#4}

13. “RS/HOS” Site in Area 21

Site Area	: About 2.28 ha
Maximum Domestic GFA (Plot Ratio)	: About 91,217 m ² (4)
Maximum Non-domestic GFA (Plot Ratio)	: About 22,804 m ² (1)
Maximum Building Height	: 125mPD
Estimated No. of Flats	: About 2,027 units ^{#1}
Estimated Population	: About 6,020 persons ^{#2}

14. “R2” Site in West of Area 22

Site Area	: About 1.27 ha
Maximum Domestic GFA (Plot Ratio)	: About 44,508 m ² (3.5)
Maximum Building Height	: 75mPD
Estimated No. of Flats	: About 636 units ^{#3}
Estimated Population	: About 1,717 persons ^{#4}

15. “R2” Site in East of Area 22

Site Area	: About 2.54 ha
Maximum Domestic GFA (Plot Ratio)	: About 89,018 m ² (3.5)
Maximum Building Height	: 75mPD
Estimated No. of Flats	: About 1,272 units ^{#3}
Estimated Population	: About 3,434 persons ^{#4}

16. "R2" Site in Furth North of Area 23

Site Area	: About 1.21 ha
Maximum Domestic GFA (Plot Ratio)	: About 42,469 m ² (3.5)
Maximum Building Height	: 95mPD
Estimated No. of Flats	: About 607 units ^{#3}
Estimated Population	: About 1,638 persons ^{#4}

17. "R2" Site in North of Area 23

Site Area	: About 1.62 ha
Maximum Domestic GFA (Plot Ratio)	: About 56,622 m ² (3.5)
Maximum Building Height	: 95mPD
Estimated No. of Flats	: About 809 units ^{#3}
Estimated Population	: About 2,184 persons ^{#4}

18. "R2" Site in Central of Area 23

Site Area	: About 1.62 ha
Maximum Domestic GFA (Plot Ratio)	: About 56,631 m ² (3.5)
Maximum Building Height	: 90mPD
Estimated No. of Flats	: About 809 units ^{#3}
Estimated Population	: About 2,184 persons ^{#4}

19. "R2" Site in South of Area 23

Site Area	: About 0.81 ha
Maximum Domestic GFA (Plot Ratio)	: About 28,309 m ² (3.5)
Maximum Building Height	: 90mPD
Estimated No. of Flats	: About 404 units ^{#3}
Estimated Population	: About 1,092 persons ^{#4}

20. "RS/HOS" Site in Area 24

Site Area	: About 2.67 ha
Maximum Domestic GFA (Plot Ratio)	: About 120,370 m ² (4.5)
Maximum Non-domestic GFA (Plot Ratio)	: About 13,374 m ² (0.5)
Maximum Building Height	: 135mPD
Estimated No. of Flats	: About 2,675 units ^{#1}
Estimated Population	: About 7,944 persons ^{#2}

21. "R1" Site in Area 24

Site Area	: About 1.03 ha
Maximum Domestic GFA (Plot Ratio)	: About 51,495 m ² (5)
Maximum Non-domestic GFA (Plot Ratio)	: About 10,299 m ² (1)
Maximum Building Height	: 120mPD
Estimated No. of Flats	: About 736 units ^{#3}
Estimated Population	: About 1,986 persons ^{#4}

22. “OU(Commercial and Residential Development Incorporating Public Transport Terminus) ” Site in Area 25

Site Area	: About 2.05 ha
Maximum Domestic GFA (Plot Ratio)	: About 102,354 m ² (5)
Maximum Non-domestic GFA (Plot Ratio)	: About 20,471 m ² (1) (6,000m ² for PTI)
Maximum Building Height	: 120mPD
Estimated No. of Flats	: About 1,462 units ^{#3}
Estimated Population	: About 3,948 persons ^{#4}

23. “R1” Site in Area 25

Site Area	: About 2.35 ha
Maximum Domestic GFA (Plot Ratio)	: About 117,281 m ² (5)
Maximum Non-domestic GFA (Plot Ratio)	: About 23,456 m ² (1)
Maximum Building Height	: 115mPD
Estimated No. of Flats	: About 1,675 units ^{#3}
Estimated Population	: About 4,524 persons ^{#4}

24. “R1(HOS)” Site in Area 26

Site Area	: About 1.78 ha
Maximum Domestic GFA (Plot Ratio)	: About 71,294 m ² (4)
Maximum Non-domestic GFA (Plot Ratio)	: About 17,823 m ² (1)
Maximum Building Height	: 110mPD
Estimated No. of Flats	: About 1,320 units ^{#5}
Estimated Population	: About 4,225 persons ^{#6}

25. “R2” Site in West of Area 26

Site Area	: About 1.81 ha
Maximum Domestic GFA (Plot Ratio)	: About 63,476 m ² (3.5)
Maximum Building Height	: 75mPD
Estimated No. of Flats	: About 907 units ^{#3}

- | | |
|----------------------|-------------------------------------|
| Estimated Population | : About 2,448 persons ^{#4} |
|----------------------|-------------------------------------|
26. “R2” Site in East of Area 26
- | | |
|-----------------------------------|-------------------------------------|
| Site Area | : About 2.42 ha |
| Maximum Domestic GFA (Plot Ratio) | : About 84,673 m ² (3.5) |
| Maximum Building Height | : 75mPD |
| Estimated No. of Flats | : About 1,210 units ^{#3} |
| Estimated Population | : About 3,266 persons ^{#4} |
27. “OU(Mixed Use)” Site in Area 30
- | | |
|-------------------------------------|-----------------------------------|
| Site Area | : About 2.14 ha |
| Maximum Domestic GFA Plot Ratio | : About 21,434 m ² (1) |
| Maximum Non-domestic GFA Plot Ratio | : About 42,868 m ² (2) |
| Maximum Building Height | : 110mPD |
| Estimated No. of Flats | : About 306 units ^{#3} |
| Estimated Population | : About 827 persons ^{#4} |
28. “OU(Business and Technology Park)” Site in West of Area 31
- | | |
|---------------------------------------|-----------------------------------|
| Site Area | : About 2.02 ha |
| Maximum Non-domestic GFA (Plot Ratio) | : About 60,490 m ² (3) |
| Maximum Building Height | : 60mPD |
29. “OU(Business and Technology Park)” Site in East of Area 31
- | | |
|---------------------------------------|-----------------------------------|
| Site Area | : About 3.18 ha |
| Maximum Non-domestic GFA (Plot Ratio) | : About 95,313 m ² (3) |
| Maximum Building Height | : 40mPD and 55mPD |
30. “OU(Business and Technology Park)” Site in Area 32
- | | |
|---------------------------------------|-----------------------------------|
| Site Area | : About 2.11 ha |
| Maximum Non-domestic GFA (Plot Ratio) | : About 63,358 m ² (3) |
| Maximum Building Height | : 40mPD and 55mPD |
31. “OU(Business and Technology Park)” Site in Area 33
- | | |
|-----------|-----------------|
| Site Area | : About 3.48 ha |
|-----------|-----------------|

Maximum Non-domestic GFA (Plot Ratio) : About 104,425 m² (3)
Maximum Building Height : 40mPD and 55mPD

32. “OU(Business and Technology Park)” Site
in Area 34

Site Area : About 0.94 ha
Maximum Non-domestic GFA (Plot Ratio) : About 28,186 m² (3)
Maximum Building Height : 40mPD and 55mPD

(Note: Site area and the resultant GFA shall be subject to detailed site survey.)

#1 Assuming average flat size of 45m²

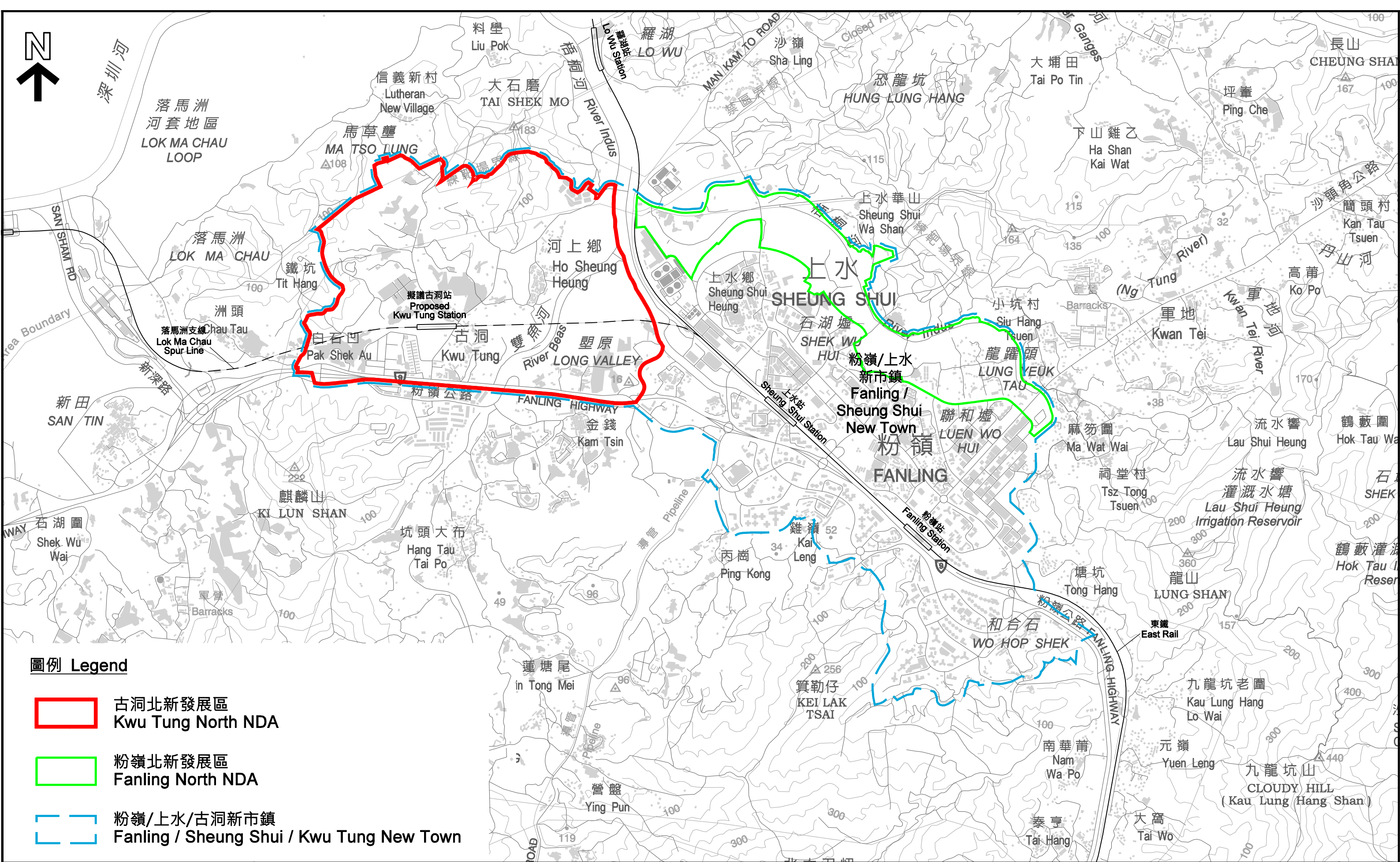
#2 Assuming PPF of 2.97

#3 Assuming average flat size of 70m²

#4 Assuming PPF of 2.7

#5 Assuming average flat size of 54m²

#6 Assuming PPF of 3.2



圖例 Legend

 古洞北新發展區
Kwu Tung North NDA

 粉嶺北新發展區
Fanling North NDA

 粉嶺/上水/古洞新市鎮
Fanling / Sheung Shui / Kwu Tung New Town

只作顯示用途
For Indicative Purpose Only

日期
Date 17/10/2013

古洞北新發展區位置圖
Kwu Tung North New Development Area Location Plan

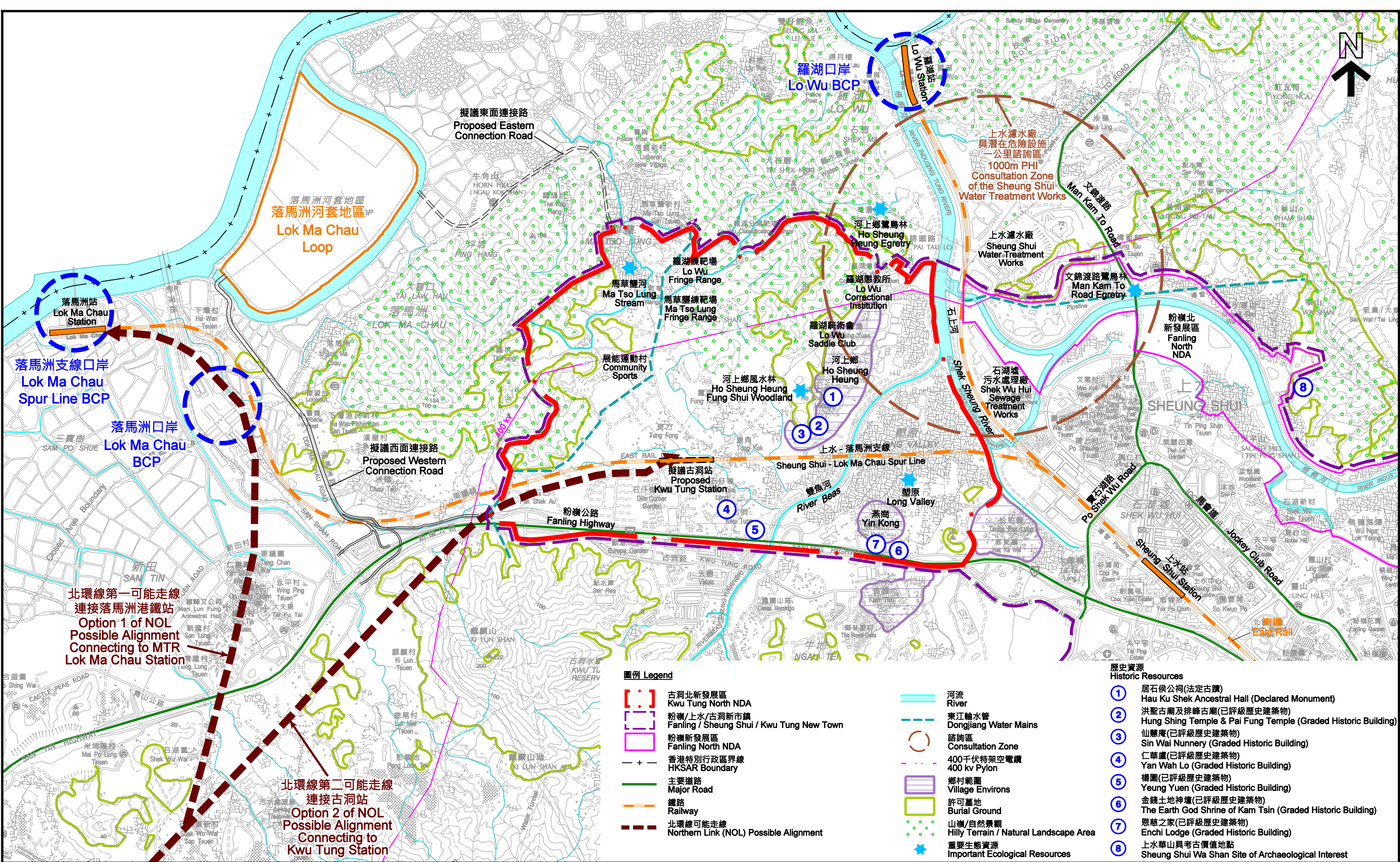
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規劃署
PLANNING DEPARTMENT



參考編號
Reference No.
M/SR/NDA/13/057_1c

圖 Plan
1



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日期
Date 17/10/2013

發展限制與機會(古洞北) Development Constraints and Opportunities (KTN)

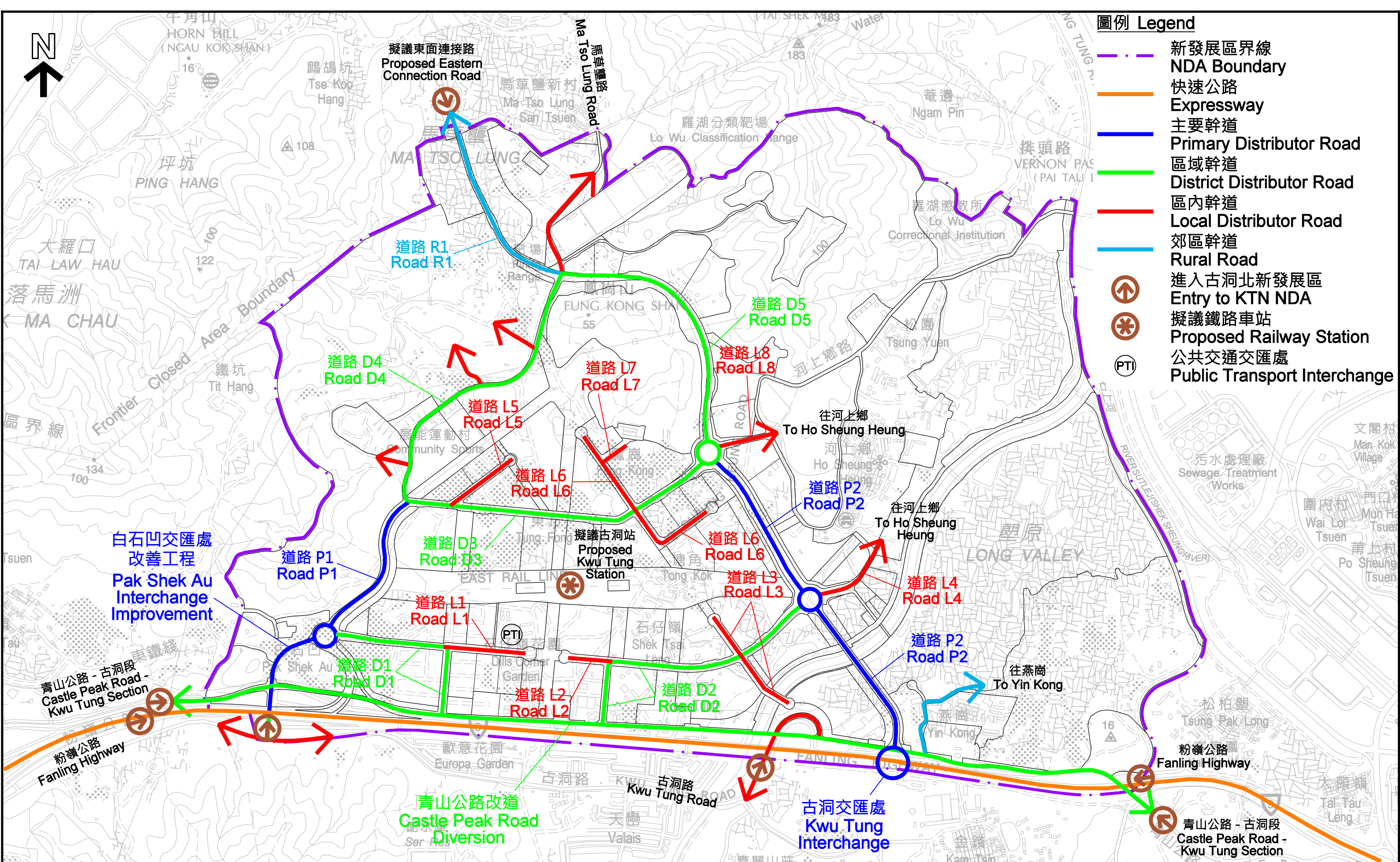
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規劃署
PLANNING DEPARTMENT

參考編號
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M/SR/NDA/13/057_2e



圖 Plan
2



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日期
Date 17/10/2013

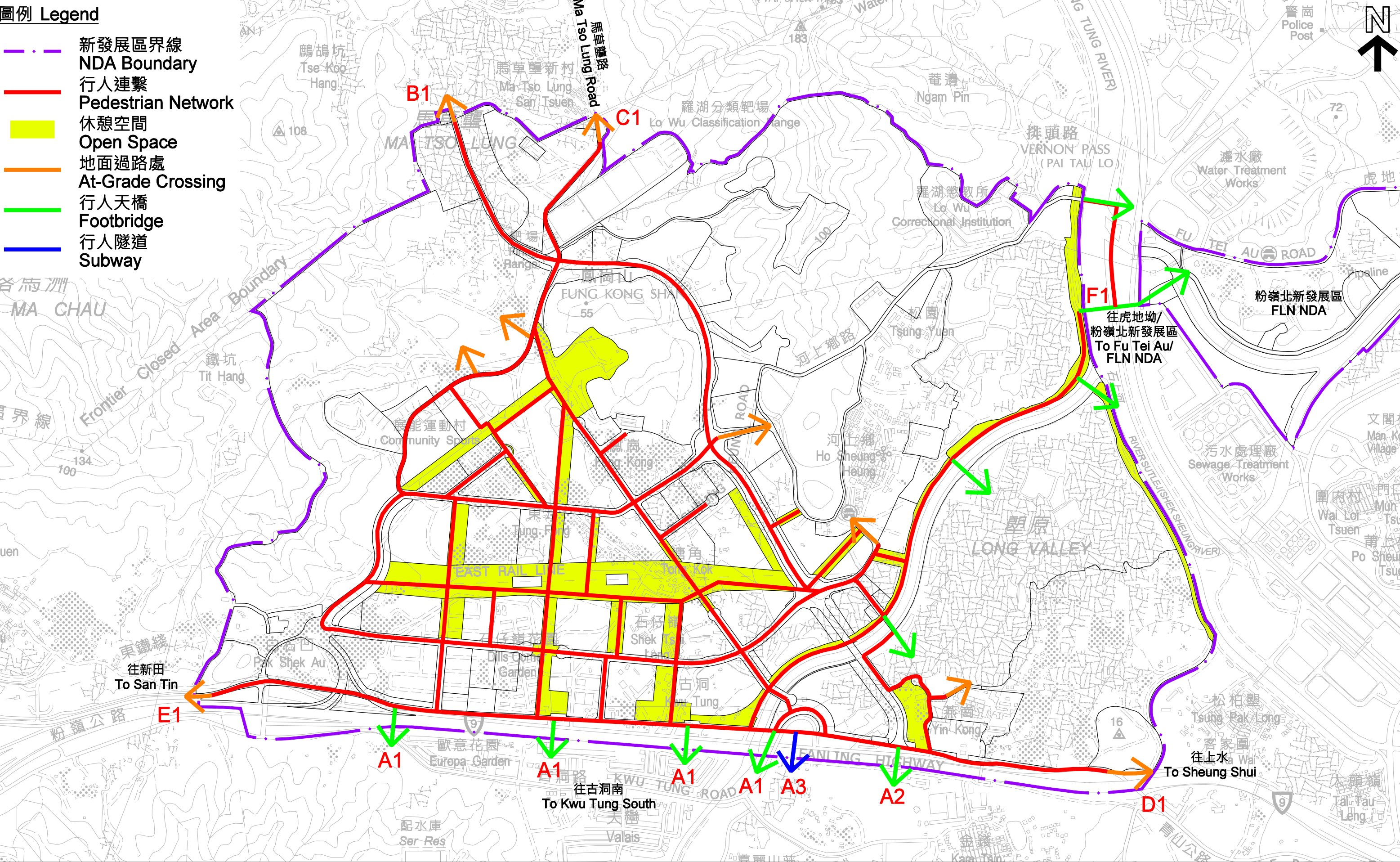
交通網絡圖
Transport Network Plan

規劃署
PLANNING DEPARTMENT

參考編號
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M/SR/NDA/13/057_4f

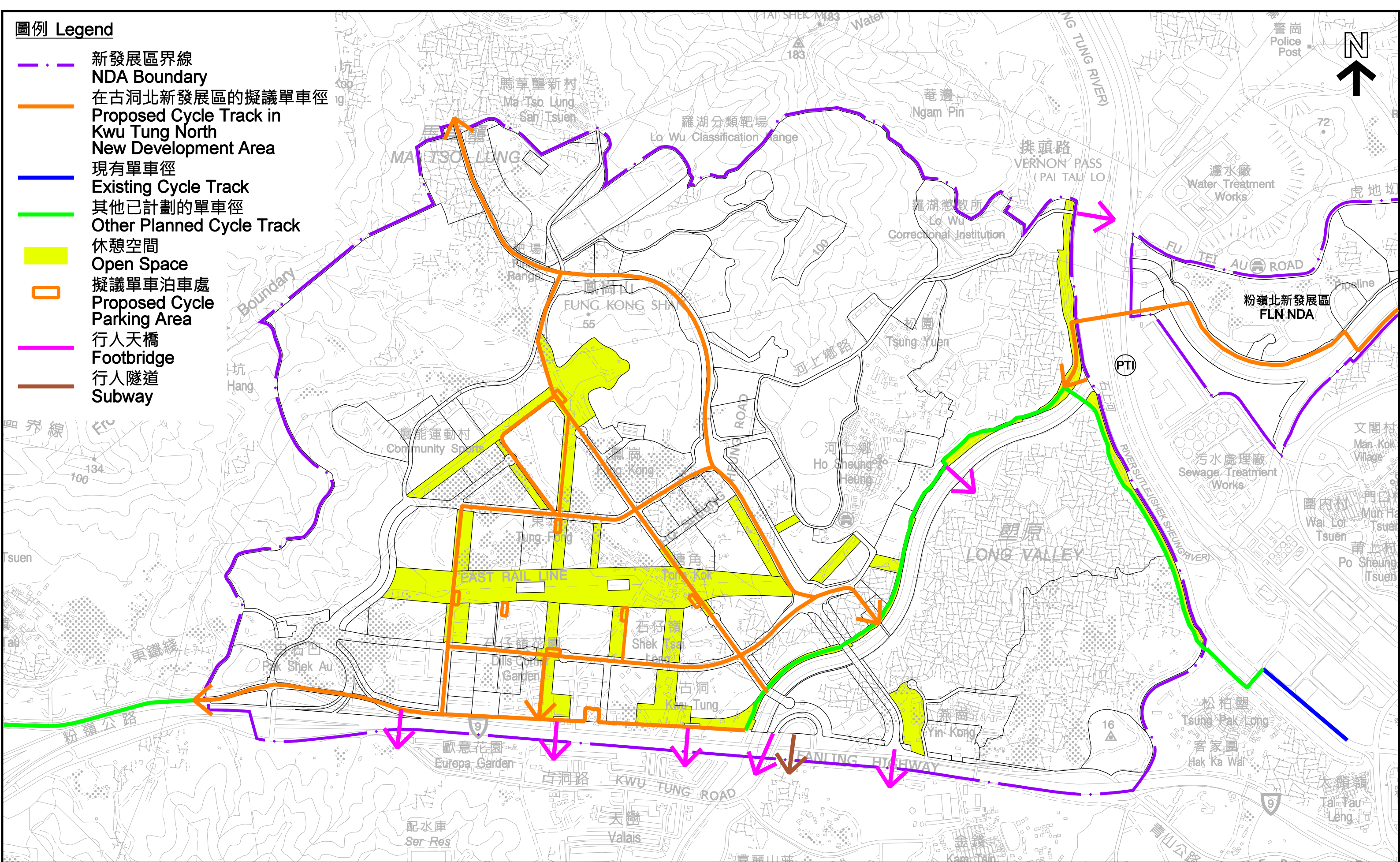


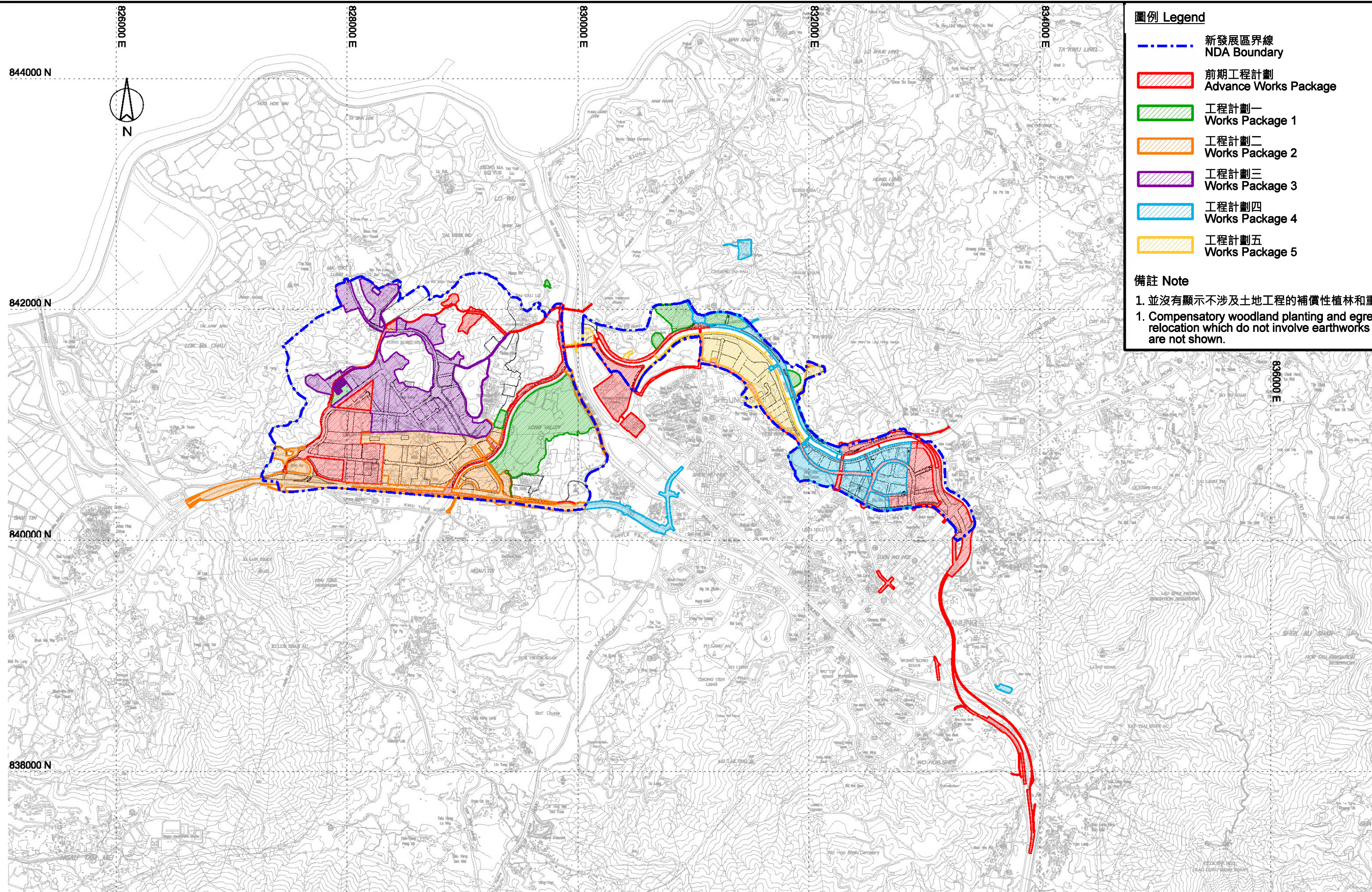
圖 Plan
4



圖例 Legend

- 新發展區界線
NDA Boundary
- 在古洞北新發展區的擬議單車徑
Proposed Cycle Track in
Kwu Tung North
New Development Area
- 現有單車徑
Existing Cycle Track
- 其他已計劃的單車徑
Other Planned Cycle Track
- 休憩空間
Open Space
- 擬議單車泊車處
Proposed Cycle
Parking Area
- 行人天橋
Footbridge
- 行人隧道
Subway





圖例 Legend

- 新發展區界線
NDA Boundary
- 前期工程計劃
Advance Works Package
- 工程計劃一
Works Package 1
- 工程計劃二
Works Package 2
- 工程計劃三
Works Package 3
- 工程計劃四
Works Package 4
- 工程計劃五
Works Package 5

備註 Note

- 並沒有顯示不涉及土地工程的補償性植林和重置鷺鳥林
1. Compensatory woodland planting and egretty relocation which do not involve earthworks are not shown.

只作顯示用途
For Indicative Purpose Only

日期
Date 27/12/2013

新發展區分期發展圖
Phasing Plan for New Development Areas Development

規劃署
PLANNING DEPARTMENT

參考編號
Reference No.
M/SR/NDA/13/057_3f



圖 Plan
7