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### 2 PROJECT DESCRIPTION

# 2.1 Project Site Location and Site History

- 2.1.1.1 The Project is located to the south of San Tin Technopole (STT) and to the northeast of Yuen Long New Town. The Project Site is bounded by La Maison Vineyard, Green Crest, Wai Tsai Tsuen, the Vineyard and Tam Mei Barracks (TMB) to the north, Mai Po area to the west, Sheung Chuk Yuen and Kai Kung Leng to the south and Ngau Tam Mei Water Treatment Works (NTMWTW) to the east. Existing and planned strategic highway infrastructures, such as San Tin Highway, Ngau Tam Mei Road, and the planned Northern Metropolis (NM) Highway San Tin Section, will be connected to the Project. The planned Ngau Tam Mei (NTM) Station and NTM Depot under the future Northern Link (NOL) Main Line will also be located within the Project Site.
- 2.1.1.2 Historically, the Project Site was predominantly rural, occupied by agricultural activities and village settlements. Currently, some recognised villages (Sheung Chuk Yuen, Wai Tsai Tsuen and San Wai Tsuen) and a non-indigenous village (Yau Tam Mei Tsuen) remain inhabited today. Besides, low-density residential developments, military facilities, scattered brownfield operations, drainage channel, farmland/fishponds and agricultural activities, etc., are found within or in the vicinity of the Project Site.

## 2.2 Need for the Project

- 2.2.1.1 As discussed in **Section 1.1.1** to **Section 1.1.3**, the Project aims to make use of the existing brownfield clusters and the "Green Belt" in NTM for comprehensive development, leveraging the development opportunities brought by the NOL Main Line, with the support of new and upgraded infrastructures proposed at the NTM.
- 2.2.1.2 To take forward the initiatives in NMAA and the 2024 Policy Address, land will be reserved in the eastern part of the Project Site for development of a university town (hereinafter referred to as "UniTown"). Local post-secondary institutions will be encouraged to introduce more innovative, cutting-edge and high-level branded programmes at undergraduate, postgraduate and professional levels, research collaboration and exchange projects with renowned Mainland and overseas institutions in a flexible and innovative manner, including cross-institution, interdisciplinary, cross-sector, and cross-boundary collaboration. These will enable Hong Kong's academics and research to scale new height in international development, and facilitate the innovation & technology (I&T) development of surrounding areas such as STT by providing talent support at "research, academic and industry" front, promoting the integrated development of education, technology and talents, and promoting Hong Kong as an international hub for high-calibre talents.
- 2.2.1.3 As announced in the 2024 Policy Address, in addition to increasing training places of the existing two medical schools, the Government supports the plan to establish a third medical school by local university, so as to increase the number of doctors to support the local healthcare system in providing quality medical services and supporting the city's development as an international health and medical innovation hub. Land is therefore reserved in NTM for the third medical school.
- 2.2.1.4 Furthermore, with the gradual development of the NM, demand for healthcare services in the Yuen Long and North Districts will increase in future. There is a need to provide an Integrated Hospital in NTM. The Integrated Hospital will provide comprehensive healthcare services for the existing and planned population in the NM. It will be equipped with specialist manpower and related technology and apparatus



to serve patients with individual highly complex diseases in the territory. The Integrated Hospital will also accommodate teaching, training and research facilities to complement the development of the life and health technology industry in STT and Hong Kong at large, promoting "research, academic and industry" collaboration. In particular, advanced life and health technology establishments (such as pre-clinical laboratories, animal laboratories, biological laboratories and cell culture R&D, etc.) will be attracted to the I&T Zone, helping the NM to become a "new international I&T city". Considering the proposed establishment of the third medical school at NTM, the Integrated Hospital can also serve as a teaching hospital.

2.2.1.5 To make the best use of the enhanced accessibility brought about by the proposed NOL Main Line, a residential community is planned around the NTM Station, with comprehensive amenities and supporting facilities to attract and retain top-notch academics and researchers.

## 2.3 Appreciation of Existing Environment

- 2.3.1.1 The Project Site is mainly covered by the approved Ngau Tam Mei OZP (No. S/YL-NTM/14). Area to the west of the Project Site is covered by the approved Mai Po and Fairview Park OZP (No. S/YL-MP/8). Area to the south of the Project Site is covered by the approved Ngau Tam Mei OZP (No. S/YL-NTM/14), including an "Industrial (Group D)" zone. Area to its further north is area covered by the approved San Tin Technopole OZP (No. S/STT/2). San Tin Highway borders the Project Site to the west. To the east is the NTMWTW, while hilly and mountainous ridges formed by Kai Kung Leng (part of Lam Tsuen Country Park (LTCP)) and Ngau Tam Shan surround the Project Site to the further south and north respectively.
- 2.3.1.2 Land at the immediately north of the Project Site is predominantly rural in character with low-rise building / structures embedded in a natural setting, which include TMB of the Hong Kong Garrison. There are also low-rise residential developments (e.g. the Vineyard and Green Crest) and a recognised village (i.e. Wai Tsai Tsuen) to the northwest. Recognised villages (e.g. Chuk Yuen Tsuen, San Wai Tsuen and Sheung Chuk Yuen) are situated to the west and southwest of the Project Site, on either side of San Tin Highway. Some domestic structures, agricultural uses (e.g. chicken farms), NTM Animal Waste Composting Plant (AWCP) and a lard boiling factory (LBF) are located to the south and southwest.
- 2.3.1.3 The Project Site has a rural character, comprising:
  - (a) rural settlements (e.g. Yau Tam Mei Tsuen) with mostly temporary domestic structures;
  - (b) Ngau Tam Mei Drainage Channel (NTMDC) which dissects the Project Site, flowing east to west towards Deep Bay via Kam Tin River;
  - (c) scattered brownfield operations, such as logistics and freight operation, open storage, vehicle-related operation and warehouse / workshop;
  - (d) farmland and fishponds scattered along the existing NTMDC and a chicken farm in the southeastern part of the Project Site; and
  - (e) two permitted burial grounds (PBGs) (i.e. PBG Nos. YL/16 and 17) on the green knolls in the western part of the Project Site, as well as some scattered graves located outside PBGs but within the Project Site, including a grave of a prominent local figure at the area off Chuk Yau Road. Though none of the graves are declared monuments and graded historical buildings (Section 12 refers).



### 2.3.2 Development Opportunities and Constraints

### **Development Opportunities**

High Accessibility

2.3.2.1 San Tin Highway to the west of the Project Site is the main carriageway linking other areas in Yuen Long District and the New Territories. The Project Site will also connect with the planned NM Highway – San Tin Section via a district distributor (DD) road (namely Road D1) for direct and convenient access to other parts of the territory. The Project will connect to STT by a new local distributor (LD) road to the north of the Project Site.

Enhanced Railway Network

2.3.2.2 The future NOL Main Line includes an intermediate station at NTM and would serve as the backbone of the public transport network to cater for external and internal public transport demands.

Favourable Geographical Location

2.3.2.3 Located at the heart of the NM, neighbouring STT and connected by a number of existing and planned strategic transport links to other parts of the territory, there are opportunities for NTM New Development Area (NDA) to provide additional land to capture the synergistic and interactive relationship with STT by fostering "research, academic and industry" collaboration and the NM through physical and functional connections.

Plentiful Natural and Landscape Features

2.3.2.4 A number of natural and landscape features within and surrounding the Project Site could be utilised to create and foster a quality living environment, such as uplands and lowlands, green knolls, ridgeline/mountainous backdrops of Ngau Tam Shan and Kai Kung Leng, etc. There are opportunities to revitalise the existing NTMDC by adopting nature-based solution with blue-green infrastructures to enhance the ecology and biodiversity, and foster urban-rural integration.

Resolving Land Use Interface

2.3.2.5 At present, the brownfield operations in the NTM have created environmental nuisances such as odour and fixed noise and interface problems. Through comprehensive development with more optimal uses, the Project provides opportunities to resolve land use interface problems and improve the local environment within the NDA.

#### **Development Constraints**

**Environmental Constraints** 

- 2.3.2.6 The environmental constraints posed by the existing and planned infrastructures and uses require considerations in the planning of the Project include:
  - (a) Two existing chicken farms, a LBF and NTM AWCP are located to the southeast and southwest of the Project Site. Besides, a sewage treatment plant within TMB directly borders the northern boundary of the NTM NDA. The proposed



- developments under the Project need to comply with the relevant requirements to minimise potential odour impacts from these facilities/uses.
- (b) The firing range of TMB is considered as a potential fixed noise source to the proposed noise sensitive uses in the northern part of the Project.
- (c) The NTMDC connects the pond habitat upstream, with the Deep Bay wetland habitats to the west of the assessment area of the Project. It serves as a bird flight path for various waterbird species. This channel also plays a role in flood management for the surrounding low-lying area. For minimising the environmental impacts, the Project should manage run-off and water quality, maintain habitat connectivity, and minimise potential disturbances to bird flight paths. Currently, the operation of NTMDC is governed by Environmental Permit No. FEP-01/003/1998/A held by Drainage Services Department (DSD) covering drainage channel from Ngau Tam Mei to Kam Tin River near Tai San Wai.
- 2.3.2.7 Two Green Belts with PBGs and vegetation cover the western part of the Project Site should be retained as far as possible.

Infrastructure Constraints

- 2.3.2.8 The constraints posed by the existing and planned infrastructures and land uses require considerations in the planning of the Project include:
  - (a) The existing major distributor roads including San Tin Highway, Ngau Tam Mei Road, Chuk Yau Road, San Tam Road, Castle Peak Road Tam Mi will likely pose air quality and road traffic noise impacts to the proposed developments in the western part of the Project Site.
  - (b) The existing High Speed Rail (formerly known as Express Rail Link) runs underneath and through the Project Site in southeast-northwest orientation. The future NOL Main Line also traverses the Project Site, and the associated NTM Depot (NTD) is anticipated to pose development constraints and potential noise impacts to the developments of the Project.
  - (c) The existing overhead electricity transmission lines with pylons are located to the south and east of the Project which require sufficient vertical and horizontal separation distances from adjacent proposed land uses in accordance with the requirements stated in Hong Kong Planning Standards and Guidelines (HKPSG).
  - (d) The development of the NOL Main Line, including the planned NTM Station and associated railway depot within the Project Site, is being undertaken by the MTRCL separately. The railway scheme, including land area, and layout of the NTM Station, railway depot, and ancillary facilities was gazetted on 6 October 2023 and authorised on 8 April 2025. The potential interfacing challenges may arise concerning land use integration, infrastructure alignment, and construction sequencing between the railway facilities and the NTM NDA, and thus there should be close coordination to minimise the interface issues.

### 2.4 Description of the Project

### 2.4.1 Positioning and Planning Framework

2.4.1.1 Situated within the I&T Zone of NM, NTM NDA lies to the northeast of Yuen Long New Town and south of STT. Upon completion of the planned NOL Main Line, NTM will only be one station away from STT and well connected with the rest of NM and



the urban areas. Through the proposed cross-boundary NOL Spur Line and new Huanggang Port (under construction), NTM NDA will also enjoy easy access to Hong Kong-Shenzhen Innovation and Technology Park (HSITP), which is the Hong Kong Park of the Hetao Shenzhen-Hong Kong Science and Technology Innovation Cooperation Zone and Shenzhen.

- 2.4.1.2 NTM NDA is positioned as an Academic and Research District. More than one third of the land is proposed for developing the UniTown, forming part of the NMUT. An Integrated Hospital is also planned to provide comprehensive healthcare services for the existing and new population in the NM. In the western part of the Project Site, residential neighbourhood is planned to capitalise on the planned railway station (i.e. the NTM Station) of the NOL Main Line.
- 2.4.1.3 Under the Recommended Outline Development Plan (RODP), the residential neighbourhood is proposed around the future NTM Station. Adopting a "15-minute neighbourhood" concept, comprehensive amenities and supporting facilities have been planned to maximise the convenience of future residents and to attract and retain top-notch academics and researchers. A district shopping centre atop the railway depot is proposed to provide retail, catering and entertainment facilities to meet the needs of local residents as well as those working or studying in NTM NDA.
- 2.4.1.4 The UniTown is proposed at the eastern part of the NDA with proposed road connection to/from STT and the planned NM Highway San Tin Section. With ease of access to STT and HSITP, the UniTown could foster "research, academic and industry" collaboration for completing the I&T industry ecosystem in NM. Through provision of ample student hostel places, sports and outdoor leisure spaces, the UniTown will become a self-sustained university neighbourhood.
- 2.4.1.5 The Integrated Hospital (with about 3,000 beds) is proposed at the central part of the NDA. It will be served by Road D1 which connects to major roads like San Tin Highway and NM Highway San Tin Section. The hospital is within walkable distance to NTM Station and other public transport through the planned pedestrian network. As the Integrated Hospital can also serve as a teaching hospital, the central location could strengthen its functional integration with the third medical school, which will be accommodated in the UniTown in the eastern part of the NDA.
- 2.4.1.6 The UniTown, Integrated Hospital and residential neighbourhood will be linked up by a multi-functional blue-green spine along the revitalised NTMDC across NTM NDA. Apart from forming part of the integrated blue-green infrastructure to reduce flood risks and enhance environmental sustainability, the blue-green spine will be integrated with surrounding public open space and incorporated with pedestrian and cycle tracks connecting the key developments in NTM NDA.
- 2.4.1.7 To improve the external transport connectivity, a new interchange connecting directly to San Tin Highway and two junction improvement schemes at San Tam Road in the west and road connection to the planned NM Highway San Tin Section in the east are proposed to direct traffic flow to/from NTM NDA. A new connection road to STT to the north is also planned, with a view to further integrating the two NDAs within the I&T zone. Regarding the internal road network, the existing Ngau Tam Mei Road will be widened. A DD road (i.e. Road D1) and three LD roads (i.e. Roads L1, L2 and L3) are proposed to connect various development sites. The proposed road network would also connect the surrounding villages to the wider road system, with vehicular access to existing communities maintained or reprovisioned.



## 2.4.2 Size, Scale, Shape and Design of the Project

- 2.4.2.1 Covering an area of about 130 ha, NTM NDA can accommodate a population of about 35,400 38,500 with provision of about 26,000 jobs (see **Figure 2.1**).
- 2.4.2.2 An overview of the key planning elements and land uses of the RODP is provided in **Table 2.1** and shown in **Figure 2.1**.

Table 2.1 Land Use Budget of the RODP

Land Use	Approximate Area (ha)
Government, Institution and Community (GIC) Facilities (including the UniTown, Integrated Hospital, other GIC Facilities and Reserve)	66
Residential (including railway topside commercial / residential development)	19
Open Space	13
Roads and Other Uses (including Railway and Amenity)	29
Green Belt (including permitted burial grounds)	3
Total:	130

### <u>UniTown</u>

2.4.2.3 Four sites (G.6, G.10, G.11 and G.12) are zoned "Government (UniTown)" with planning intention primarily for establishment of a UniTown with post-secondary education use, primarily with a focus on scientific research, and other complementary and supporting uses which could facilitate 'research, academic and industry' collaboration. The university town will offer space for activities related to research and development (R&D) and groom high-calibre talents to support the I&T development in STT. The third medical school will also be accommodated in the UniTown. Subject to the update of UniTown land by the future project proponent(s), flexibility is allowed to accommodate a regional police headquarters and a public sports ground at sites G.6 and G.11 respectively.

### **Integrated Hospital**

2.4.2.4 Development of the Integrated Hospital will provide a comprehensive range of healthcare services for the existing and new population in NM. It will also accommodate teaching, training and research facilities, and can serve as a teaching hospital. Besides, a Chinese Medicine Clinic cum Training Research Centre will be provided at the site.

#### Other GIC Sites

- 2.4.2.5 Besides reserving land for the UniTown and Integrated Hospital, GIC facilities have been planned in accordance with the HKPSG and the advice / requests of relevant bureaux / departments. Apart from the community facilities incorporated in the residential sites (**Section 2.4.2.6** refers), the following public facilities are proposed to support the development:
  - Fire Station and Ambulance Depot cum Staff Quarters;
  - Community Recycling Centre;



- Primary School and Secondary School;
- Refuse Collection Points (RCPs);
- Electricity Substations (ESSs); and
- Sewage Pumping Station (SPS).

### Residential

2.4.2.6 There are 5 sites (Sites RSc.1, R.1, R.2, R.3 and R.4) on the RODP with planning intention primarily for high-density residential developments and may be with compatible non-domestic uses to provide local needs and services. Site RSc.1 is proposed for the development of a dedicated rehousing estate, whereas some community facilities including indoor sports centre, library, kindergartens and social welfare facilities, will be incorporated in other residential sites.

# Topside Development at Ngau Tam Mei Depot

2.4.2.7 Sites OU(RDCRD).1 and OU(RDPOS).1 are intended primarily for development of Ngau Tam Mei Station and railway depot, with topside development comprising commercial and residential uses and public open spaces.

#### Open Space

- 2.4.2.8 About 13 ha of open space is planned in the RODP. Apart from the public open space atop the railway depot, 6 sites (Sites O.1 to O.6) are zoned "Open Space", 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.
- 2.4.2.9 The open space network will integrate with the NTMDC which will be revitalised to form a coherent 'blue-green spine' network for the Development Area.
- 2.4.2.10 Within Site O.3, Wai Cheung Ancestral Hall (WCAH) is recommended for in-situ preservation for adaptive reuse for public enjoyment.

#### Railway

2.4.2.11 Two sites, zoned "Other Specified Uses (Railway Station)" and "Other Specified Uses (Railway Facility)", are for the development of the planned NTM Station and other railway facilities of the NOL Main Line by the MTRCL.

#### <u>Amenity</u>

2.4.2.12 Several amenity strips are proposed along the widened Ngau Tam Mei Road and the planned Road D1 to enhance the roadside amenity and to cater for the formed slopes.

#### Green Belt

2.4.2.13 Two sites are zoned "Green Belt" zone to reflect the existing use as PBG with vegetation cover.



### 2.4.3 Transport Network

#### Road Transport

- 2.4.3.1 There are two major external road connections of NTM NDA, including the existing San Tin Highway at the west and the planned NM Highway San Tin Section at the east, linking the NDA to the other parts of the territory.
- 2.4.3.2 An interchange has been proposed, in the form of a signalized junction to connect the proposed road network with the existing San Tin Highway. The signalized junction consists of four arms with two arms connecting northbound of San Tin Highway and the other two arms connecting southbound of San Tin Highway. The latter southbound exit arms will allow free-flow traffic to reduce traffic pressure of the elevated junction as well as maximizing the capacity of the proposed interchange.
- 2.4.3.3 The planned NM Highway has been proposed under Agreement No. CE7/2018 (TT) Strategic Study on Major Roads Beyond 2030 Feasibility Study and is currently under further study under CE4/2024 (HY) Northern Metropolis Highway Investigation. Based on on-going liaison with Transport Department and Highways Department, the road network of the Project has reserved a connection with the planned NM Highway San Tin Section at the eastern edge. Relevant at-source mitigation measures induced by the NM Highway San Tin Section should be duly addressed by the NM Highway project.
- 2.4.3.4 In addition to connections of the Project's road network with the strategic highway network, San Tam Road will serve as the major inter-district roadway connecting the existing residential settlements and villages in vicinity of NTM NDA. The existing priority junctions connecting San Tam Road and Ngau Tam Mei Road, and San Tam Road and Chuk Yau Road will be upgraded into signalized junctions, with partial widening of San Tam Road for maximizing junction capacity.
- 2.4.3.5 A new LD road (i.e. the proposed road connection to/from STT) will provide direct connection between NTM NDA and STT. This connection road will serve as an additional local traffic connection between these two NDAs.
- 2.4.3.6 The major components of the proposed road hierarchy for the Project are as follows:

District Distributor

2.4.3.7 A DD road, namely Road D1 and its slip roads connecting to San Tin Highway, as described in **Section 2.4.4.3**, is proposed to serve as the major linkage between the two external connections (i.e. San Tin Highway and the planned NM Highway – San Tin Section) and the Project's local road network, as well as the existing road network.

Local Distributors

2.4.3.8 A total of four LD roads (i.e. Road L1, Road L2, Road L3 and road connection to/from STT) serve to link up the proposed development parcels within the Project Site with the proposed DD as well as STT, are proposed.

Existing Roads - Ngau Tam Mei Road, Chuk Yau Road and San Tam Road

2.4.3.9 Ngau Tam Mei Road, as the main access between NTM NDA and San Tam Road, will be widened to single 4-lane and extended to connect to the new Road L2 and Road L3 to meet the traffic demand generated by the proposed developments within the Project Site.



- 2.4.3.10 Similarly, the section of Chuk Yau Road between San Tam Road and Wang Ping Shan East Road will be upgraded to single 2-lane configuration. Footpath widening is proposed at both sides to enhance the pedestrian connectivity.
- 2.4.3.11 San Tam Road will accommodate the traffic from NTM NDA by linking the upgraded Chuk Yau Road and the upgraded Ngau Tam Mei Road. Both priority junctions where San Tam Road connects with Ngau Tam Mei Road, and where Chuk Yau Road connects with Ngau Tam Mei Road will be upgraded to signalized intersections and widened as necessary to improve traffic flow.

#### Public Transport

## Rail-based Public Transport

- 2.4.3.12 The NOL Main Line is one of the seven railway schemes recommended under the Railway Development Strategy 2014. Connecting East Rail Line and Tuen Ma Line, the NOL Main Line includes the construction of Kwu Tung Station on East Rail Line, as well as the NOL Main Line between Kwu Tung Station and Kam Sheung Road Station, with three intermediate stations at San Tin, NTM and Au Tau. The NOL Main Line will form a railway loop in the northern New Territories to promote land and economic development along the alignment.
- 2.4.3.13 The NTM Station of NOL Main Line will serve as one of the major public transport modes for the population/employments of the NTM NDA.

### Road-based Public Transport

- 2.4.3.14 Apart from railway, road-based public transport services will be provided with public transit infrastructures proposed at strategic locations. Upon full development, NTM NDA will accommodate a population of approximately 35,400 38,500 and create about 26,000 jobs. Additional bus routes will be proposed to meet local demand with current public transit routes serving the NTM area expected to be maintained.
- 2.4.3.15 A Transport Interchange Hub (TIH) and a Public Transport Terminus (PTT) would be provided within the Project Site. With reference to **Figure 2.1**, the TIH will be located adjacent to the future NTM Station, together with park and ride facilities, to provide a convenient and pleasant setting for multi-modal transport interchange activities. The PTT will be located at the eastern part of the NDA within the UniTown.

#### Pedestrian Walkway and Cycle Track Networks

2.4.3.16 There will be a comprehensive network of cycle track and pedestrian walkway system connecting developments, open spaces and activity nodes within the NDA, with a view of realizing the "15-minute neighbourhood" concept, promoting a healthy and active lifestyle.

#### Pedestrian Infrastructure

2.4.3.17 Pedestrian footpaths will be provided along both sides of the roads and within the open space respectively. In order to enhance pedestrian connectivity between NTM NDA and the existing residential areas located along the west side of San Tin Highway, a footbridge cum cycle track across San Tin Highway is proposed. The proposed pedestrian network will be connected to the existing footpath network at the periphery of the Project Site as well as the internal pedestrian network of the UniTown.



### Cycling Provision

2.4.3.18 To encourage the use of non-motorised transport modes, comprehensive cycle tracks will be provided along roadside of all LD roads and the at-grade section of the DD road. The footbridge cum cycle track across San Tin Highway is proposed to link up the existing New Territories Cycle Track Network in Castle Peak Road.

## 2.4.4 Key Infrastructures of the Project

#### Site Formation

- 2.4.4.1 Site formation works would cover majority of the Project Site. The proposed site formation would integrate with the overall topography of the area. The types of site formation works to be adopted at various areas within the Project Site will be determined based on the approach mentioned in **Section 2.7.4**.
- 2.4.4.2 The surplus inert Construction and Demolition (C&D) materials generated from the site clearance and formation works, construction of new buildings and infrastructure works would be reused either within the development for backfilling at later stage or in the concurrent projects where feasible. The quantity of C&D materials is detailed in **Section 7** of this EIA Report.

### Roadworks and Utilities

- 2.4.4.3 The road infrastructures are shown in **Figure 2.2** and listed below:
  - DD roads Road D1 and its slip roads connecting to San Tin Highway;
  - LD roads Road L1, Road L2, Road L3, and the proposed road connection to/from STT: and
  - Upgrade of existing roads to LD roads Chuk Yau Road, Ngau Tam Mei Road and San Tam Road.
- 2.4.4.4 The proposed utilities such as drainage systems, sewerage networks, water supply networks and other utility construction to support the developments of the Project are listed below:
  - Sewerage network and the proposed supporting infrastructure (**Section 2.4.4.8** refers):
  - Freshwater system; and
  - Other utilities such as power supply, telecommunication, internet and wireless communication service, street lighting, etc.
- 2.4.4.5 Typical construction methods would be adopted for at-grade road sections, while the construction of the following elevated road sections would involve piling works:
  - Section of Road D1 including its slip roads connecting to San Tin Highway;
  - Section of Road L1, Road L2 and Road L3 which cross NTMDC; and
  - Section of proposed road connection to/from STT.
- 2.4.4.6 The works for roads and utilities construction would involve earthworks, utilities laying, laying of sub-base materials and laying of bituminous or concrete surfacing layers.



#### Revitalisation of NTMDC

2.4.4.7 The existing NTMDC within the Project Site will be widened and revitalised to enhance ecological value, and improve the flood resilience and climate change adaptation in the area, while serving as a blue-green spine across the NDA. The blue-green spine is a key soft-landmark that project a metropolitan, vibrant and innovative image for the UniTown. Framed by iconic buildings on both sides, the blue-green spine itself would form a scenic east-west corridor that creates a distinct and impressive character for NTM NDA.

### Sewage Pumping Station

2.4.4.8 The sewage generated from the Project and the nearby existing villages will be collected and diverted to the proposed SPS, and then pumped to the planned STT Effluent Polishing Plant (EPP) and, as potential mitigation measure, Yuen Long EPP via Nam Sang Wai SPS for treatment. Details of the sewage arrangement are provided in **Section 6** of this EIA Report.

### Flood Attenuation Measures

2.4.4.9 Retention tanks acting as flood attenuation measures are proposed to be located underground and beneath Site O.4 and Site G.11 to mitigate the flood risk of downstream due to increase of surface run-off as a result of larger paved area and climate change.

### Landscaping Works at Open Spaces, Amenity Areas and Slopes

2.4.4.10 Landscaping works involving provision of planting and pedestrian facilities at open space, amenity areas and slopes will be conducted after site formation works and slope works.

### **Building Works**

2.4.4.11 Building works of each development site will be carried out by the respective project proponents, Government bureaux / departments or future developers after site formation works and site handover.

### 2.4.5 Designated Projects

- 2.4.5.1 The Development Area, covering an area of about 130 ha, constitutes a Designated Project (DP) by virtue of Item 1 under Schedule 3 of EIA Ordnance (EIAO):
  - Item 1 An urban development or redevelopment project covering an area of more than 50 ha.
- 2.4.5.2 In addition, the Project also constitutes DPs under Part I, Schedule 2 of the EIAO, which are illustrated in **Figure 1.2**.
  - <u>DP1 Construction and Operation of District Distributor Road (Road D1) and</u> associated road works at San Tin Highway
- 2.4.5.3 The Project will be served by a network of DD and LD. Road D1, which is a DD (i.e. Item A.1 of Schedule 2 of the EIAO), is proposed to be a dual two-lane carriageway serving as the main connection road between San Tin Highway and the NTM NDA. Most of the Road D1 will be constructed at-grade, except for an elevated section of approximately 300 m long near Site E.1 and Site R.1, which connects to the proposed



- elevated junction over the existing San Tin Highway. A connection with the planned NM Highway San Tin Section is reserved at the east end of Road D1.
- 2.4.5.4 The general layout of Road D1 and the associated road works at San Tin Highway is presented in **Figure 2.3**.
  - <u>DP2 Part of Revitalisation of Ngau Tam Mei Drainage Channel and river diversion</u> <u>works located less than 300 m from the nearest boundary of an existing conservation</u> area
- 2.4.5.5 The current NTMDC that sits within the Project Site is mainly a concrete channelised waterway. As part of the blue-green spine concept, the existing concrete channel will be revitalised with a green and ecologically friendly approach for integration with the overall land use planning. Provision of natural substrates that could encourage colonisation of flora and freshwater fauna in the bottom and banks of the revitalised watercourses would be considered, subject to detailed design of the proposed revitalisation measures. The drainage channel would also be widened to increase the hydraulic capacity of the river, creating a resilient and dynamic design. These provisions, including planting of suitable trees, would enable connectivity and usage for mammals and avifauna. Also, landscape and recreation provisions as well as pedestrian walkway and cycling track will be provided along the revitalised NTMDC.
- 2.4.5.6 Due to the proposed developments, a few watercourses (except NTMDC) within the Project Site will be permanently diverted or removed. Diversion works at these existing watercourses would involve diversion of water flow from their existing routes to the new routes through the proposed covered drainage system of the new development.
- 2.4.5.7 Part of the NTMDC and a few watercourses in the southeastern part of the NTM NDA are located within 300 m from Conservation Area (CA) (<u>Figure 2.4</u> refers). Revitalisation and river diversion works within 300 m from CA fall into the category of Item I.1(b), Part I, Schedule 2 of the EIAO.

### 2.5 Project Benefits and Environmental Initiatives

- 2.5.1.1 The Project aspires to capitalise the development potential brought about by the NTM Station of NOL Main Line by replanning the brownfields and adjoining area for supporting the future development of Hong Kong. Meanwhile, the proposed UniTown will offer space for activities relating to R&D and groom high-calibre talents to support the I&T development in STT, promoting "research, academic and industry" collaboration, as well as training more doctors to dovetail with Hong Kong's development as an international health and medical innovation hub. Apart from providing comprehensive healthcare services for the existing and new population in the NM, the Integrated Hospital will be developed into a three-in-one teaching, training and research facility, providing training for medical and healthcare professionals, and conducting clinical trials and scientific research to facilitate the advancement of patient care. Through the Project, GIC facilities will be provided to support the existing and future residential population in the NM and along the future NOL Main Line.
- 2.5.1.2 The Project could deliver a range of benefits and bring in environmental initiatives as follows:



## **Direct Benefits**

- Northern Metropolis Synergy With the vision to develop NM into a "New International I&T City", NMAA outlines the strategic positioning and development themes of the four major zones in NM. Amongst them, the I&T Zone covers STT and NTM. STT will be the hub for clustered I&T development and the core of industry development of the entire NM. It is also proposed that land be reserved in NTM for use of post-secondary education institutions, with a focus on scientific research, to complement the I&T development in STT, promoting "research, academic and industry" collaboration. Through leveraging physical and functional connections with STT, the future planning of NTM NDA should aim to capture the synergistic and interactive relationship with STT and the other major development areas in NM, with a view towards fostering integration between the two NDAs within the I&T Zone and NM.
- Nurture and Attract Talent To complement the positioning of NTM NDA as an Academic and Research District, a worker- and student-friendly university town vibe will be developed to groom high-calibre talents to support I&T development in STT, tie in with the Government's objective of building Hong Kong into an international post-secondary education hub. The planning and urban design of the NDA should target to facilitate knowledge exchanges and cultivation of innovative ideas. On the other hand, a comprehensive residential neighbourhood with commercial, leisure and GIC facilities should be planned to foster a quality living environment for residents and talents. This would in turn attract and nurture talent to provide manpower for supporting industrial development. Housing mix of the NDA should complement the positioning of NTM NDA as an Academic and Research District.
- Versatile Community To create a liveable area for the future population for NTM NDA as well as supporting the wider developments in NM, an integrated community with adequate and quality urban services and community facilities would be provided in NTM NDA to support the territorial housing demand with an emphasis on "live, learn, play and work". To optimise the strategic location in NTM NDA, a large portion of land is reserved for the UniTown. Other key district facilities including healthcare and other supporting GIC facilities are also planned to serve NTM NDA and the wider communities. A residential neighbourhood with comprehensive amenities and supporting facilities is planned around the future NTM Station, to enable the residents to reach the GIC facilities for daily necessities, open space and major transport facilities by walking or cycling. A wide range of community facilities are also planned in NTM NDA to develop the area as a vibrant and liveable community to attract and retain global academics and researchers.
- Meet Long-term Housing Needs of Hong Kong The Project will provide about 12,600-13,800 new flats, including private housing and dedicated rehousing estate (DRE) to meet long-term housing needs of Hong Kong. Also, student hostels and staff quarters in the UniTown, and government departmental quarters will be provided.
- Home-job Balance to Reduce Cross-district Commuting Through a mix of educational, healthcare, commercial, community and government land uses, the Project will generate approximately 26,000 new jobs. To complement the positioning of NTM NDA as an Academic and Research District, predominantly private housing will be provided in the area, which can enrich the choices of



- accommodation for teaching / research and hospital staff, reducing the need for cross-district commuting and improving home-job balance.
- Multi-functional Blue-green Spine The current NTMDC will be revitalised, and the riverfront will be integrated with blue-green infrastructure to reduce flood risks and enhance environmental sustainability. Leisure and recreational uses will be integrated to create pleasant and engaging public spaces. The blue-green spine will also form a key east-west transit corridor incorporated with pedestrian walkways and cycling tracks across the entire NDA that enhances connectivity within the urban fabric and facilitates social interactions.
- Provision of GIC Facilities The Project has proposed a wide range of GIC facilities to support both existing and planned local population, as well as regional and territorial demand on specific aspects. The proposed GIC facilities include educational, recreational and healthcare facilities such as the Integrated Hospital.
- Enhance Land Efficiency and Rural Environment At present, there are about 22 ha of brownfields clustered in the Project Site, including logistics and freight operation, open storage, vehicle-related operation and warehouse/ workshop, etc., which produce adverse environmental, traffic and visual impacts to the neighbourhood. With the proposed developments and infrastructures, land use efficiency would be enhanced and the overall environment in the area can be significantly improved.
- Improve Sewerage System Provision The Project will improve the existing sewerage infrastructure with new sewerage networks and a new SPS which would benefit both the population of the nearby existing residential development / villages and the proposed developments under the Project. Water quality would be improved by the introduction of new sewerage networks to the currently unsewered areas.
- Improve Transport Connectivity and Community Services to the Existing Villages and Residential Development in the Vicinity of NTM Existing villages and residential developments can be benefited from the newly planned GIC facilities, open space and improved rail-and-road transport connectivity, and other infrastructure services brought by the Project. These enhancements provide collective benefit and contribute to improve the quality of life of the existing villages and residential developments in the vicinity of the Project.
- Improve Stormwater Management and Climate Resistance The proposed revitalised NTMDC and retention tanks would mitigate potential flooding issue and enhance the overall stormwater management system. By increasing the channel's capacity and naturalizing its flow through ecological design features, the revitalised NTMDC not only enhance its ecological function but also effectively convey stormwater run-off while reducing peak flow rates. The proposed retention tanks serve as critical flood attenuation facilities, temporarily storing excess stormwater during heavy rainfall events to prevent downstream flooding. The improved stormwater management also enhances climate resilience by better handling intense rainfall and extreme weather, reducing flood risks and increasing the area's adaptability to climate change.



#### **Environmental Benefits and Initiatives**

- Revitalisation of the NTMDC By integrating sustainability principles with engineering, Hong Kong's completed river revitalisation projects<sup>1</sup> demonstrate how infrastructure can simultaneously achieve environmental and social objectives - bringing life back to the city's waterways and setting a benchmark for urban ecological design. Upon completion of revitalisation works at previously concrete lined drainage channels, river ecosystems can be restored, and biodiversity will be enhanced through the promotion of wildlife growth. The revitalised rivers serve to reconnect urban communities with nature. Postrevitalisation surveys<sup>1</sup> have recorded a resurgence of native species (including bird, fish and dragonfly species) which indicate the improvement in the ecological health of these waterways. Similar to Hong Kong's earlier successful river revitalisation initiatives, the treatments for the NTMDC including channel widening, flattening of the southern riverbank, as well as incorporating green and eco-conservation elements, such as planting a variety of vegetation and mimicking natural stream environments, are proposed for the revitalisation of NTMDC. The slopes of NTMDC will be transformed into planting areas, and new plantings including riparian species would be introduced to enhance aquatic habitats and support the implementation of blue-green infrastructure. The planting of native vegetation and creation of wildlife environments will also maximise biodiversity and promote environmental sustainability. These treatments would bring positive impacts to the nature, as well as the future population of NTM, whereby the overall ecological value and biodiversity would increase. It is expected that the enhanced habitats could provide more ecological resources for the waterbirds species of conservation importance, such as Citrine Wagtail, Great Egret, Little Egret and White-throated Kingfisher. The details of the revitalisation features and ecological enhancement measures will be further developed following Drainage Services Department Practice Note No. 3/2021 Guidelines on Design for Revitalisation of River Channel, and design elements will be agreed with relevant parties and departments during detailed design stage.
- Integrated Walkability, Cycling, and Open Space Network The Project promotes sustainable, low-carbon mobility and active lifestyles through a comprehensive, people-centered network of pedestrian walkways and cycle tracks. This network connects key destinations including UniTown, Integrated Hospital, public transport hubs, residential neighbourhood, retail outlets and community facilities via elevated, covered, and barrier-free routes. The open space provision meet the enhanced provision of 3.5 m² per person under Hong Kong 2030+. The robust cycling network integrates with existing tracks, including connections to the New Territories Cycle Track Network along Castle Peak Road and an arterial route connecting major activity nodes across the NTM NDA.
- Preservation of Points of Local Historical Interests Preservation of points of local historical interests has been considered in the RODP, taking into account the public comments obtained during the public engagement exercise (PE) (Table 2.2 refers), to promote cultural sustainability. Notably, Wai Cheung Ancestral Hall (WCAH) is proposed to be preserved in situ allowing flexibility for future adaptive use within a planned open space. The open space surrounding WCAH could be utilised for public to interact, relax and hold local community events. Subject to the detailed design in later stage, the former Yau Tam Mei

<sup>1</sup> River Revitalisation for the Good of Water (<a href="https://www.dsd.gov.hk/EN/Publicity">https://www.dsd.gov.hk/EN/Publicity</a> and Publications/Publicity/DSD Sustainability Reports/1/river revitalisation.html)



Primary School, valued for its social significance, as a sole source of education in Yau Tam Mei Tsuen connecting many descendants of the village, and possesses some historical value as an embodiment of various acts of local benevolence recorded throughout its history, is also proposed to be preserved in situ within UniTown for potential adaptive reuse. This could provide the future students/teaching staff with a tangible link to the educational past of NTM. It is worth to note that both buildings are neither declared monument nor graded historic building, and their preservation, conservation and protection is not required under EIAO-TM.

### 2.6 Formulation of the Recommended Outline Development Plan

## 2.6.1 Background

2.6.1.1 The NMAA published in October 2023 designates four key zones in the NM, including the I&T Zone, which covers STT and NTM. Within NTM, land is reserved for post-secondary education emphasizing on scientific research to support I&T development and foster collaboration among research, academia, and industry. The 2024 Policy Address further announced land for the NMUT, a third medical school, and an Integrated Hospital. A two-month PE exercise was carried out to solicit public views on the NTM between November 2024 and January 2025 (see **Section 2.6.5**). Based on the Broad Land Use Concept Plan used during PE, policy directives, and feedback from the PE exercise, the RODP for NTM was formulated.

### 2.6.2 Key Considerations

- 2.6.2.1 The RODP involves three key neighbourhoods, namely the UniTown (including the third medical school) at the eastern part of the Development Area, an Integrated Hospital in the centre part, and NTM residential neighbourhood in the west around the planned NTM Station. The key considerations for these three key neighbourhoods are:
  - The UniTown is planned at the eastern part of the NDA with proposed road connection to/from STT and the planned NM Highway – San Tin Section. With ease of access to STT and HSITP, the UniTown could foster "research, academic and industry" collaboration for completing the I&T industry ecosystem in NM. Through provision of ample student hostel places, sports and outdoor leisure spaces, the UniTown will become a self-sustained university neighbourhood.
  - The Integrated Hospital is planned to provide comprehensive healthcare services for the existing and new population of NM. The Integrated Hospital is strategically located at the central part of the NDA. Directly served by Road D1 which connects to major roads like San Tin Highway and the future NM Highway San Tin Section, the hospital will be highly accessible by public transport and road networks. With its central location, the hospital is within walkable distance to NTM Station and other public transport through the planned pedestrian network. The central location of Integrated Hospital next to the UniTown which covers the third medical school could also strengthen its function as a teaching school.
  - The residential neighbourhood is proposed around the future NTM Station of NOL Main Line. Adopting a "15-minute neighbourhood" concept, comprehensive amenities and supporting facilities have been planned to maximise the convenience of future residents and to attract and retain top-notch academics and researchers. A district shopping centre atop the railway depot is proposed to provide retail, catering and entertainment facilities to meet the needs of local residents as well as those working or studying in NTM NDA.



2.6.2.2 To improve the accessibility to the NTM NDA, a new interchange connecting directly to San Tin Highway and two junction improvement schemes at San Tam Road in the west and road connection to the planned NM Highway – San Tin Section at the district distributor (Road D1) are proposed to direct traffic flow to/from NTM NDA. A new connection road to STT to the north is proposed, with a view to further integrating the two NDAs within the I&T zone. Regarding the internal road network, the existing NTM Road will be widened. A district distributor road (i.e. Road D1) and three local distributor roads (i.e. Roads L1, L2 and L3) are proposed to connect various development sites. The proposed road network would also connect the surrounding villages to the wider road system, with vehicular access to existing communities maintained or reprovisioned.

### 2.6.3 Dedicated Rehousing Estate

2.6.3.1 Acknowledging the strong request from clearees for rehousing arrangements within NTM to minimise disruption to the existing community, a DRE has been planned at the western end of the NTM NDA to cater for the potential rehousing needs, demonstrating the Government's commitment to a people-centric planning approach.

#### 2.6.4 Preservation of Points of Local Historical Interests

2.6.4.1 In response to public views received during public engagement process for conserving points of local historical interests and achieving better urban-rural integration, two structures are proposed to be preserved in the NTM NDA for possible adaptive re-use. These include the WCAH located at Site O.3 and former Yau Tam Mei Primary School located at Site G.11 of the UniTown. While these are neither declared monument nor graded historic buildings, these structures are reminiscent of communities that inhabited NTM. Through appropriate planning and land use zoning designation, retaining these valuable resources could help fostering urban-rural integration and preserving local history. The open space surrounding WCAH could also be utilised for the public to interact, relax and hold local community events. Road L3 has been aligned to enable preservation of the school footprint of the former Yau Tam Mei Primary School, while flexibility for adaptive re-use of the school structures for education / supporting facilities is allowed in the RODP, subject to the design of the future project proponent of the UniTown.

## 2.6.5 Public Engagement

- 2.6.5.1 The RODP has taken into consideration the comments collected during the public inspection process of the Project Profile (PP) (No. PP-659/2023) and in the two-month PE exercise on the broad land use concepts of NTM NDA conducted between 14 November 2024 to 13 January 2025 (the PE period).
- 2.6.5.2 For the PE exercise, 10 roving exhibitions in Hong Kong, Shenzhen and Guangzhou, and mobile exhibitions at 35 locations in Hong Kong were conducted. 12 briefing sessions were conducted for various statutory and advisory bodies (including Subcommittee on Planning, Land and Conservation of Advisory Committee on the Northern Metropolis, Panel on Development of Legislative Council, Town Planning and Development Committee of Yuen Long District Council, Planning Sub-committee of Land and Development Advisory Committee, Town Planning Board and Heung Yee Kuk), post-secondary education sector, San Tin Rural Committee, the villagers of Yau Tam Mei Tsuen, professional institutes, brownfield operators and green groups. A project website was also launched to ensure effective dissemination of information related to the Project. The key environmental related comments received from the public inspection process of the PP and the PE exercise are summarised in Table 2.2.



Table 2.2 Key Comments Related to Environment Received During Statutory Public Inspection Period and PE Period

Key Issue	Public Comments	Responses	
Air Quality	The cumulative air quality impacts should be assessed, and effective mitigation measures should be formulated to control air pollution. Polluting industrial/commercial activities should be forbidden in order not to worsen the air quality.	No polluting industrial/commercial activities are proposed within the Project Site.	
	Odour arising from the LBF and air quality impact arising from other pollution sources should be addressed to protect the interests of the community.	<ul> <li>Odour and air quality impact from pollution sources have been assessed.</li> <li>Details of air quality (including odour) impact assessment are provided in <b>Section 3</b> of this EIA Report.</li> </ul>	
Water Quality	Any untreated surface run-off generated from the Project Site during both construction and operational phases should be prevented from discharging into NTMDC or its tributaries, other natural or man-made channels, stormwater drainage and wetlands directly.	Proper drainage and sewerage systems with due consideration of avoidance and minimization of the potential water quality impacts will be adopted. Details of water quality impact assessment are provided in <b>Section 5</b> of this EIA Report.	
Watercourses with natural substrates and good water quality should not be destroyed and should be well protected.		It is anticipated that removal of a few watercourses is unavoidable for site formation works under the Project. Nevertheless, NTMDC will be revitalised to bring positive impacts to the nature in NDA.	
Waste Management	Storage, transportation and disposal of solid wastes should be under stricter monitoring and control to avoid any fly-tipping of solid wastes generated from the Project.	or equivalent system for tracking and monitoring of all dump trucks will be engaged to record their	
Ecology	Given the high ecological sensitiveness around the Project Site, year-long ecological surveys for diverse taxa groups and habitats should be conducted in the EIA study. Additional bird survey efforts should be invested during the migratory seasons to assess the ecological impacts on migratory birds.	A 12-month baseline ecological survey (including bird survey) was conducted. Details of baseline ecological data and impact assessment are provided in <b>Section 9</b> of this EIA Report.	



Key Issue	Public Comments	Responses
	Eurasian Otter ( <i>Lutra lutra</i> ) could utilise the existing NTMDC and fishponds nearby. Intensive active search for field signs of Otters and the approach of employing Local Ecological Knowledge by conducting questionnaire interviews with local people should be taken.	There are no official published data or records of the Otter in the Project Site, and no Eurasian Otter was recorded during the baseline ecological survey. Further additional interview targeting the sightings of the Otter among the local people in NTM area was conducted upon receipt of the public comment. Based on the interview findings, no sightings of the Otter in NTM area were reported or heard by interviewees.
	Alternative alignment of the proposed road connection to/from STT should be explored to minimise woodland loss.	The alignment of the proposed road connection to/from STT has been reviewed and optimised with respect to engineering feasibility and other considerations to minimise the loss of woodland habitat.
	Removal of trees and vegetation in the Project Site should be avoided as far as possible in order to reduce ecological impact, loss of habitats and urban heat island effect. Any vegetation loss in the Project should be compensated through the cultivation of native plant species.	<ul> <li>It is anticipated that some trees and vegetation removal are unavoidable for site formation works. Nevertheless, the land use formulation has maximised the opportunity for open space with greening in order to reduce ecological impact including the loss of habitats as well as landscape impact.</li> <li>Tree compensation is proposed to be provided at a 1:1 tree compensatory ratio at the roadside amenity areas and open space to compensate for tree loss due to the Project as far as practicable. Areas within the Project Site and off-site areas for compensatory tree planting would be explored and negotiated with relevant project proponent(s) to achieve 1:1</li> </ul>
	Avoidance / minimization of both direct and indirect impacts on wetland within/adjacent to Wetland Buffer Area (WBA) should be explored in both construction and operational phases.	ratio in compensatory tree planting number as far as practicable.  The Project has been carefully planned such that the works would only be situated at the existing developed area / wasteland habitat within WBA to avoid direct impact to wetland within/adjacent to WBA, and the modified watercourse within WBA
	Off-site negative impact, such as construction noise during construction phase and human activities during operational phase, would adversely affect	Construction Noise Management     Plan will be prepared during pretender and pre-construction stages to formulate the requirement of



Key Issue	Public Comments	Responses	
	foraging behavior ardeids at NTMDC.	mitigation measures, monitoring and audit programme.	
		<ul> <li>Mitigation measures, such as provision of non-building area and "Open Space" along both sides of NTMDC and peripheral tree planting as screening, have been adopted to minimise the indirect impacts to ardeids during operational phase.</li> </ul>	
Agricultural Land and Fishponds  Agricultural Land and Fishponds  Agricultural land in NTM is generally in low degree of fragmentation which should be protected. Rural life and associated farmland and fishponds should be preserved in NDA developments under the concept of urban-rural integration to minimise impacts on local fisheries and agricultural industries.		Currently, the agricultural land in NTM is scattered and mostly consists of abandoned farmland, which is assessed to have low to moderate ecological value. To maximise the utilisation of land resources, these scattered plots of agricultural land are consolidated for developing into a functional community providing land for a UniTown, Integrated Hospital and residential neighbourhood to complement with the I&T development in STT. That said, opportunities of introducing urban farming in the planned open space are allowed under the RODP.	
Cultural Heritage  Direct and indirect impacts on cultural heritage items should be identified.		Direct and indirect impacts on the identified cultural heritage items have been assessed in <b>Section 12</b> of this EIA Report.	
	Alternatives should be further explored to avoid/minimise direct loss on the cultural heritage items identified in both construction and operational phases.	Alternatives have been explored to avoid direct loss on WCAH such that it would be preserved in situ.	
	Existing buildings with collective memories and heritage characters should be reserved to enrich the continuity of heritage.	Flexibility for potential adaptive reuse of building structures of the former Yau Tam Mei Primary School by future project proponents of UniTown is allowed in the RODP.	
	Contingency measures should be prepared in case items of historical or archaeological importance can be spotted within the development area during construction phase.	In accordance with the Antiquities and Monuments Ordinance (Cap. 53), Antiquities and Monuments Office (AMO) will be informed immediately in case of discovery of antiquities or supposed antiquities in the course of works.	
Landscape and Visual	Yau Tam Mei Tsuen or nearby parks might contain "trees of particular interest (TPI) " which should be identified and protected in conservation plans.	of and vegetation survey, including all TPI(s) that would be direct impacted by the Project, and the	



Key Issue	Public Comments	Responses		
		Sensitivity analysis would be conducted in the detailed design and construction stages to further review and justify the need for any TPI(s) removal.		
Electric and Magnetic Field	Due consideration should be given when planning developments at areas near the existing 400 kV overhead cables to the south of the Development Area to reduce potential impact of the electromagnetic field.	It is expected that the electric and electromagnetic field generated by the existing 400 kV overhead cables should be well below the relevant exposure standards and limits, and therefore adverse impact on the proposed developments of the Project is not anticipated.		
Concern associated with the Proposed River Revitalisation	A buffer zone should be provided at each side of the revitalised NTMDC to provide sufficient riparian habitats and to accommodate a wide range of water flow.	Open Space and non-building area (a combined width of 80 m) will be provided along the revitalised NTMDC (total length of about 2.2 km), serving as a buffer zone.		
Additional water source might be required for the revitalised NTMDC during dry season.		Provision for additional water source in dry season would be reviewed in detailed design stage.		
Cumulative Environment- al Impact	Given other major developments, such as the STT, NOL Main Line and NM Highway – San Tin Section, interconnected with the Project, all the potential environmental impacts of the adjacent developments should be addressed so that the cumulative environmental impacts will not be underestimated.	the cumulative impacts arising from the construction and operational phases of the identified interfacing projects have been addressed in this EIA Report.		

### 2.7 Consideration of Alternatives and Development of the Preferred Option

### 2.7.1 Consideration of No Development Scenario

- 2.7.1.1 Under the no development scenario for the Project, the Project Site would remain in its present state. No strategic land parcels could be released for the development of UniTown, Integrated Hospital and residential neighbourhood, despite of the development potential offered by the planned NTM Station of NOL Main Line. In addition, the present industrial land uses (i.e. logistic and freight operation, open storage, vehicle-related operation, warehouse/workshop and chicken farm) would remain, such that the odour and noise issues associated with the brownfield operations continue in affecting the nearby local residents.
- 2.7.1.2 Furthermore, to realise the vision for NTM NDA as envisioned in NMAA, alternative sites to accommodate the UniTown would need to be identified and may be farther away from the planned I&T hubs in STT and the Loop. The alternative sites may not offer the same extent of locational advantage offered by the Project for "research, academic and industry" collaboration with STT. Meanwhile, the Project also accommodates a range of GIC facilities, to serve territorial and district needs.



### 2.7.2 Consideration on Major Road Connection

2.7.2.1 Due to the elongated shape of the Project Site, a major road connecting east and west is required. The following options were considered during development of the Broad Land Use Concept Plan.

# Option 1 – South of NTMDC

2.7.2.2 This option would provide a major road connection accessing to all land parcels with the shortest distance as it is located at a central position.

### Option 2 – Outer Loop Road along the Southern Edge of the Project Boundary

2.7.2.3 This option would provide an outer loop road connection that optimises the proposed NTM Station as the focal point of the NTM NDA, allowing developments to cluster unobstructed at the centre of the area.

## Selected Option - Brief Assessment

2.7.2.4 Option 2 was preferred as it enables the creation of an unobstructed blue-green corridor and promoted a pedestrian-friendly environment. In contrast, Option 1 would divide the Project Site into two separate areas, also disrupting the NTMDC and potentially fragmenting the planned open space. The placement of a major road at a central position under Option 1 would also introduce additional traffic-related air emission close to sensitive receivers and open space areas

### 2.7.3 Consideration of Configuration Options for NTMDC

2.7.3.1 In formulating the design for the NTMDC, alternative options have been considered to balance flood control, ecological enhancement, and land use integration. Considerations have also been given to the need of providing opportunities for pedestrian and cycle connectivity, and creating a multifunctional public space that supports both human activities and wildlife movement. Details of options considered are summarised below.

## Option 1 – Maintain Existing Profile

2.7.3.2 Under this option, the NTMDC will remain its existing profile and condition with concrete/grasscrete finishes, helping to preserve the natural flow regimes and minimize disturbance on habitat. However, this will undermine the potential of developing an integrated blue-green infrastructure and connections for people and wildlife, as well as the potential to enhance the ecological value of NTMDC.

#### Option 2 – Widening of River Channel and Flattening of Southern Bank

2.7.3.3 Under this option, the southern bank of NTMDC is proposed to be converted into a natural embankment (targeting a 1:4 slope aspect) to enhance planting opportunities. The widening of the river channel would increase the hydraulic capacity of the river, creating a resilient and dynamic environment. The proposed revitalisation of NTMDC would follow the guidelines in *Drainage Services Department Practice Note No.* 3/2021 – Guidelines on Design for Revitalisation of River Channel as appropriate, and thus could enhance the overall ecological value and support biodiversity. This blue-green spine could also provide opportunities for provision of water-friendly culture space and pedestrian/cycle routes to enhance connectivity across the NDA.



#### Selected Option – Brief Assessment

2.7.3.4 Option 2 is preferred and considered more suitable option to optimise the potential of the channel. In contrast, Option 1 will not provide any additional value to the NTMDC in terms of enhancing planting and habitat creation opportunities, improving hydraulic capacity, enhancing overall ecological value and support biodiversity, as well as providing opportunities for provision of water-friendly culture space and pedestrian/cycle routes to enhance connectivity across the NDA.

Table 2.3 Comparison of Benefits and Dis-benefits for the Configuration Options for NTMDC

Options	Benefits	Dis-benefits
Option 1 – Maintain Existing Profile	Preserve existing ecosystem	Undermine the potential of developing an integrated blue-green infrastructure and connections for people and wildlife
Option 2 – Widening of River Channel and Flattening of Southern Bank	<ul> <li>Enhance planting and habitat creation opportunities</li> <li>Increase the hydraulic capacity of the river</li> <li>Enhance the overall ecological value and support biodiversity</li> <li>Provide opportunities for provision of water-friendly activity space and pedestrian / cycle routes to enhance connectivity across the NDA</li> </ul>	<ul> <li>Temporary environmental impacts (e.g. water quality, noise, ecology) caused by construction activities</li> <li>More maintenance and management issues (e.g. more frequent desilting works, tree management and vegetation overgrowth,. etc)</li> </ul>

#### 2.7.4 Consideration of Design Options / Alternatives for Site Formation Works

2.7.4.1 According to the site formation levels shown in the RODP, there are level differences between the existing roads and the proposed sites and roads. Specific retaining/sloping measures should be provided for the site formation works and to maintain the elevation differences between land parcels, existing and newly proposed roads, and the site boundary.

## Option 1 – Cut Slope (with or without soil nailing)

- 2.7.4.2 A straightforward option is to trim the existing ground profile with designed angle. The excavated soil would be reused for backfilling in other development sites within the Project. Consequently, the generation of excavated materials could be minimised.
- 2.7.4.3 However, the formed slope may occupy a large area of land and restrict the available levelled area for development. Therefore, different formation profiles can be achieved by controlling the cutting angle which are typically ranged between 30° and 45° to allow for planting of grass, trees and shrubs on the slope surface.



#### Option 2 - Fill Slope

- 2.7.4.4 Another option to support elevation difference is to form fill slopes when a raise in platform is required. If found suitable, excavated soils from nearby stockpiling or cutting works can be reused. Consequently, the generation of excavated materials could be minimised.
- 2.7.4.5 Since soil fabrics is not preserved in disturbed soil, fill slopes are usually formed at a gentler gradient when compared to cut slopes. A typical filling angle of 26.5° can generally be stable without the need of reinforcement and allow planting of grass, trees and shrubs on the slope surface. Alternatively, steeper gradient or even subvertical profile can be achieved by adopting the reinforced fill technique associated with suitable wall finishing panels. However, steeper gradient may cause restrictions, to a certain extent, on the vegetation growth on slope face.

### Option 3 – L-shaped Retaining Wall

- 2.7.4.6 One other option to maintain elevation difference vertically is to adopt conventional L-shaped reinforced concrete retaining wall. Soils excavated from temporary cutting can be reused for backfilling behind the wall face, such that the generation of excavated materials could be minimised.
- 2.7.4.7 However, soft landscape on the wall face is difficult and may incur high future maintenance cost. The appearance of the wall may need to be improved by providing features in the finished face or decorative facings.

#### Option 4 – Cantilevered Pile Retaining Wall

- 2.7.4.8 Another option is to install cantilevered pile wall to retain the level difference between the proposed sites and existing roads, to maximise the land use of the development sites. Cantilevered pile wall is best suited when soil nailing is not permitted and if greater retained height is required in areas with limited space allowed for the retaining structures.
- 2.7.4.9 It is however noted that cantilevered pile wall will involve piling works that export of large quantities of excavated material may trigger higher construction traffic volume inducing more air quality and noise impacts to the surrounding residents. Besides, piling works will incur much higher construction cost, in particular when large diameter bored pile is adopted.
- 2.7.4.10 Similar consideration as in L-shaped retaining wall is applicable.

### Option 5 – Tie-back Wall

- 2.7.4.11 Tie-back wall is an effective design approach for retaining wall. By providing intermediate tie-back anchors/soil nails, the retaining height of retaining wall can be enhanced.
- 2.7.4.12 However, similar to soil nailing in slopes, tie-back anchors/soil nails may restrict the development flexibility at the wall top. This is not a major issue if anchors/soil nails are intruded into natural hillside when permitted.
- 2.7.4.13 Similar consideration as in L-shaped retaining wall is applicable.



### Selected Option - Brief Assessment

- 2.7.4.14 Generally, for most of the site development, Option 1 cut slope and Option 2 fill slope with less excavation can minimise the C&D materials generation. However, in some other development sites where the land is limited, the size of the land formed will be smaller than the required footprint for the development when adopting the Options 1 and 2. Option 3 L-shaped retaining wall, Option 4 cantilevered pile retaining wall and Option 5 tie-back wall may be more preferable for providing more land for development subject to various retaining height. The recommendations of site formation works (Options 1-5 or other options) should be taking into consideration of environmental friendliness, practicability of works, cost effectiveness etc. during detailed design of the Project.
- 2.7.4.15 Based on the existing site condition and the proposed site formation levels, site formation works including Option 1 cut slope (with or without soil nail), Option 2 fill slope and Option 3 retaining wall would be preferred, subject to further detailed design.

Table 2.4 Comparison of Benefits and Dis-benefits of Options of Site Formation Works

Options	Benefits	Dis-benefits	
Option 1 – Cut Slope	<ul> <li>Slope can be formed in a relatively short period of time. Surplus of soil/rock resulted from slope trimming can be reused for backfill and other purposes, such that less excavated materials could be generated.</li> <li>Vegetation growth is more possible</li> </ul>	Less spaces available for development for smaller site as the slope would occupy a significant footprint	
Option 2 – Fill Slope	<ul> <li>Slope can be formed in a relatively short period of time</li> <li>Surplus of soil/rock resulted from slope trimming can be reused for backfill and other purposes, such that less excavated materials could be generated.</li> <li>Vegetation growth is more possible due to less compacted soil, resulting in increased pore space that enhances moisture retention and allows for better root penetration.</li> </ul>	Less spaces available for development for smaller site as the slope would occupy a significant footprint	
Option 3 – L-shaped Retaining Wall	<ul> <li>Vertical wall face can be formed to maximise development area</li> <li>Soils excavated from temporary cutting could be reused for backfilling behind</li> </ul>	Vegetation growth is difficult and incurs high maintenance cost	



Options	Benefits	Dis-benefits
Option 4 – Cantilevered Pile Retaining Wall	the wall face, such that the generation of excavated materials could be minimised.  • Economical design can be achieved as the self-weight of backfill is used to stabilise the wall  • Ability to retain greater height  • Maximised development area on both sides of the retaining wall	<ul> <li>Relatively costly for constructing cantilevered pile wall, in particular large diameter bored piles</li> <li>Heavy plants and equipment for construction</li> <li>Vegetation growth is difficult and incurs high maintenance cost</li> </ul>
Option 5 – Tie-back Wall	Ability to retain greater height economically	<ul> <li>Tie-backs may be restricted by the development at wall top</li> <li>Vegetation growth is difficult and incurs high maintenance cost</li> </ul>

## 2.7.5 Consideration of Site Formation Phasing

2.7.5.1 In developing the site formation phasing strategy for the NTM NDA, consideration has been primarily given to development and population intake schedule of each proposed land use. Two options have therefore been identified: (i) undertaking site formation for the whole NDA simultaneously without phasing, and (ii) adopting a phased approach with three phases in facilitating the planned population intake and infrastructure delivery. The environmental benefits and dis-benefits of these two options are discussed below.

#### Option 1 – Only One Phase for Whole NDA

2.7.5.2 Under this option, site formation for the entire NTM NDA would be carried out simultaneously. From an environmental perspective, this option would create substantial construction activities to be conducted within a single timeframe, resulting in a peak in environmental impacts such as construction dust, noise, and waste generation, thereby, increasing potential disturbance to nearby sensitive receivers. On-site temporary stockpiling areas may also not be available for the on-site reuse of surplus C&D materials under the Project. In addition, the simultaneous mobilisation of machinery, workforce, and materials across the whole NDA could increase construction traffic volumes which would create adverse air quality and noise impacts on surrounding communities. Furthermore, for this option to be feasible, site formation would need to be deferred after the decommissioning of the transitional housing project in the western part of the NDA. This dependency would cause significant delay to the overall implementation programme of the NDA.

## Option 2 – Implement Site Formation in Phases

2.7.5.3 Under this option, site formation works would be divided into three phases taking into account of interfacing issues (i.e. transitional housing project in the western part of



the NDA and construction of NOL Main Line), project's needs and population intake schedules. By staging the site formation in phases, construction impacts would be distributed over time, reducing the scale of dust, noise, and waste generation in any given period. This would also facilitate more effective environmental management, as well as reduce the peak construction traffic demand, lessening temporary pressure on the surrounding road network and the associated environmental impacts.

# <u>Selected Option – Brief Assessment</u>

2.7.5.4 The phased approach (i.e. Option 2) is generally more preferred as it restrains the scale of environmental impacts and provides greater flexibility for implementing mitigation measures.

# 2.8 Key Environmental Outcomes

2.8.1.1 **Table 2.5** presents the key environmental issues that have been avoided/minimised and the sensitive areas protected by environmentally friendly options in the development of the RODP.

Table 2.5 Summary of Key Environmental Issues Avoided / Minimised and Sensitive Areas Protected

Design Approaches	Environmental Issues Avoided/Minimised and Sensitive Areas Protected
Avoidance of Impact on Sites of Conservation Importance	Encroachment of LTCP, CA, Wetland     Conservation Area, Priority Site for Enhanced     Conservation and Other Specified Uses     (Wetland Conservation Park) have been     avoided.
Avoidance/Minimisation of Ecological Impact on Pond Habitat	Impact to the ponds which are considered to have moderate ecological value, to the west of San Tin Highway have been avoided.
Incorporation of Wildlife Corridor and Animal Barriers Design	Incorporation of wildlife corridor and animal barriers design will be adopted during the detailed design of the proposed road connection to/from STT to mitigate habitat fragmentation and maintain the movement access for non-flying mammals including species of conservation importance.
Preservation of Natural Habitats	Sites GB.1 and GB.2 have been retained in the RODP such that the loss of natural habitats and the associated flora species of conservation importance could be avoided.
Revitalisation of NTMDC	NTMDC will be revitalised to serve as green buffer, enhancing biodiversity as well as the overall ecological value.
Avoidance of Impact from the Existing Odour Sources (i.e. chicken farms, LBF and TMB sewage treatment plant)	<ul> <li>The planned air sensitive receivers (ASRs) have been proposed to be situated away from existing odour sources.</li> <li>Height restriction of air sensitive uses and fresh air intake at concerned sites that fall within odour exceedance zone of existing odour sources has been proposed.</li> </ul>
Clearing of Existing Odour Sources	A chicken farm within the Project Site will be removed to minimise the odour impact to the planned ASRs under the Project.



Design Approaches	Environmental Issues Avoided/Minimised and Sensitive Areas Protected
Provision of Sustainable Transport Infrastructure to Promote Low-carbon Living	Pedestrian-friendly environment and robust cycling network has been proposed in the RODP to promote walkability and cycling for low-carbon living.
Proper Design of TIH and PTT	Operational fixed noise impacts from the proposed TIH and PTT to noise sensitive receivers (NSRs) are avoided.
Provision of Direct Road Traffic Noise Mitigation Measures	NSRs will be protected to achieve the statutory road traffic noise requirement through adoption of direct noise mitigation measures such as provision of low noise road surfacing, absorptive type noise barriers, and acoustic windows/balconies or acoustic windows/balconies lined with sound absorptive material.
Preservation of Points of Local Historical Interests	<ul> <li>Local resources such as WCAH and the former Yau Tam Mei Primary School will be preserved in situ within the Project Site in the RODP.</li> <li>Flexibility for potential adaptive reuse of building structures by future project proponents of UniTown is also allowed in the RODP for former Yau Tam Mei Primary School.</li> </ul>
Implementation of an Environmental Monitoring and Audit Programme during Construction and Operational Phases	To ensure that all the recommended measures are in place.

# 2.9 Development Programme for Project

# 2.9.1 Development Phasing

2.9.1.1 The Project would be commissioned in phases with the first population intake in Year 2033. Construction of the Project is scheduled to commence in early Year 2027, with completion targeted by 2036 to accommodate the intake of residential population, the UniTown and Integrated Hospital. The preliminary construction schedule under various phases is summarised in **Table 2.6** and indicated in **Appendix 2.1**. The construction programme is presented in **Appendix 2.2**.

Table 2.6 Preliminary Construction and Population Intake Schedule

Develop -ment Stage	Area	Rationale of Phasing	Earliest Date for Commencement of Infrastructure Works	Earliest Date for Availability of Land for Building Works	Anticipated First Occupation / Population Intake Date
Phase 1	<ul> <li>DRE site (RSc.1)</li> <li>Integrated Hospital (G.8) &amp; adjacent ESS site (G.9)</li> <li>Part of UniTown (G.11)</li> <li>Sewage pumping station (G.1)</li> </ul>	Early     handover of     the sites for     building     works (by     others)	Q1 2027	Q4 2028	2033 for DRE site



Develop -ment Stage	Area	Rationale of Phasing	Earliest Date for Commencement of Infrastructure Works	Earliest Date for Availability of Land for Building Works	Anticipated First Occupation / Population Intake Date
	<ul> <li>Road network connecting to the Integrated Hospital</li> </ul>				
Phase 2	<ul> <li>Remaining UniTown (G.6, G.10, G.11, G.12)</li> <li>Residential Site (R.3, R.4)</li> <li>Remaining G/ICs, School (E.1 &amp; E.2), Open Space (O.2, O.5-O.7), Amenity Areas</li> <li>Majority of road network</li> <li>NTMDC</li> </ul>	To commence infrastructur e works for targeted population intake To allow early handover of UniTown	Q3 2028	Q2 2031	Q2 2034
Phase 3	<ul> <li>Residential Site R.1, R.2</li> <li>Remaining open space</li> <li>Remaining roadworks, landscape works, riverside &amp; site formation works</li> </ul>	To suit the programme of interfacing projects	Q3 2030	Q3 2032	Q2 2036

#### 2.9.2 Phase 1

2.9.2.1 Phase 1 comprises of site clearance and site formation of sites that would require early completion for handover, including DRE site "RSc.1", Integrated Hospital "G.8", ESS "G.9", part of UniTown "G.11", sewage pumping station at "G.1" and road network connecting to the Integrated Hospital. The population intake of the DRE site is expected to be in Year 2033.

#### 2.9.3 Phase 2

- 2.9.3.1 This phase of development aims to support the remaining UniTown and population intake projected for the year 2034, along with the essential supporting infrastructures. Majority of these areas consist of main road network and road connection from existing road networks. There will be interface with NOL Main Line in this phase.
- 2.9.3.2 The major site formation and infrastructure works (including site clearance) in this development phase will include:
  - Site formation and development for key infrastructures including retention tank, RCPs and utilities laying, etc.;
  - Site formation and development for remaining areas of UniTown to facilitate completion for handover;
  - Site formation for R.3 and R.4;
  - Site formation and development for "E" and "G" sites such as primary school, etc.;



- Road improvement to Chuk Yau Road, Ngau Tam Mei Road and San Tam Road;
- Construction of District Distributor Road D1, proposed road connection to/from STT, Road L1, Road L2, Road L3, associated junction works and slip roads connecting San Tin Highway and local roads, pedestrian and cycling connectivity including cycle bridge, associated pedestrian walkway and cycle tracks;
- Site clearance and revitalisation of NTMDC; and
- Construction of associated open space and amenity areas.

#### 2.9.4 Phase 3

- 2.9.4.1 The development in this phase is to support the remaining population intake in Year 2036 and to develop the remaining sites that are currently occupied by the transitional housing project in the western part of the NDA and NOL Main Line works area. There will be interface with the transitional housing and NOL Main Line in this phase.
- 2.9.4.2 The major site formation and infrastructure works in this development phase will include:
  - Site formation for R.1 and R.2 after partial demolition of the transitional housing;
  - Development of open space after partial demolition of the transitional housing;
     and
  - Remaining roadworks, landscape works, riverside and site formation works.

# 2.10 Major Concurrent Projects

- 2.10.1.1 The EIA study has assessed the potential cumulative impacts of the Project and associated works that may arise through interaction or in combination with other existing, committed and planned developments in the vicinity of the Project and associated works. In addition, interactions between different impacts (i.e. synergistic impacts) for key sensitive receptors have also been considered.
- 2.10.1.2 Several major projects are identified in the vicinity of the Project as having the potential to run concurrently with the Project and hence have the potential to result in cumulative impacts on the environment. The planned construction period and a brief description of the identified major concurrent projects are summarised in **Table 2.7**. The location of the major concurrent projects for which potential cumulative impact may arise is illustrated in **Figure 2.5**. Cumulative impacts from the major concurrent projects based on the best available information have been assessed in the individual sections of this EIA Report and are summarised in **Table 2.7**.



Table 2.7 Summary of Potential Cumulative Impacts from Major Concurrent Projects

Major Concurrent	rrent Proponent Concurrent Project			•	Potential Cumulative Impact	
Project		Concurrent Project	Construction	Operation		
NOL Main Line	MTRCL	2025	2034	The proposed NOL Main Line includes an underground railway corridor of about 10.7 kilometres between the Kam Sheung Road Station and Kwu Tung Station, with three intermediate stations at San Tin, NTM and Au Tau, NTM Depot and ancillary buildings.	<ul><li>Air Quality</li><li>Noise</li><li>Ecology</li><li>Fisheries</li><li>Landscape</li></ul>	Noise     Landscape     and Visual
Northern Metropolis Highway – San Tin Section	Highways Department	Under Study	• On or Before 2036	The alignment of San Tin Section links the interchange at San Tin Highway and traverses the developed area in Mo Fan Heung, mainly consisting of an approximately 8.5 km long dual three-lane carriageway and five interchanges.	<ul><li>Air Quality</li><li>Noise</li><li>Ecology</li><li>Fisheries</li><li>Landscape</li></ul>	<ul><li>Air Quality</li><li>Noise</li><li>Landscape and Visual</li></ul>

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Major Concurrent	Project	Tentative Construction Programme		Brief Description of the	Potential Cumulative Impact	
Project	Proponent	Start	Complete	Concurrent Project	Construction	Operation
Ngau Tam Mei Water Treatment Works Extension	Water Supplies Department	Q1 2025	Q4 2030	The project will include the extension of NTMWTW within the site compound with the aim of upgrading the water treatment capability and enhancing the treatment efficiency. It also includes the construction of extension of NTM Fresh Water Primary Service Reservoir (FWPSR) adjacent to the existing FWPSR and a tunnel in connection with the NTMWTW, laying of fresh water trunk mains from the extended NTMWTW to near Tan Kwai Tsuen.	<ul><li>Air Quality</li><li>Noise</li><li>Ecology</li><li>Fisheries</li></ul>	• Noise
Retrofitting of Noise Barriers on San Tin Highway	Highways Department	Under Planning	Under Planning	The purpose of the project is to mitigate the traffic noise on Mai Po San Tsuen, Casa Paradizo, Green Crest, Hang Fook Garden, Ha San Wai, Merry Garden, San Wai Tsuen and Pok Wai near San Tin Highway by retrofitting of noise barriers.	As the construction programme is unavailable at the time of preparation of this EIA, the potential cumulative impact is not assessed.	As the construction programme is unavailable at the time of preparation of this EIA, the retrofitted noise barriers on San Tin Highway are not included in the road traffic noise assessment.

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Major Concurrent Project	Project	Tentative Construction Programme		Brief Description of the	Potential Cumulative Impact	
	Proponent	Start	Complete	Concurrent Project	Construction	Operation
Site Formation and Infrastructure Works for Public Housing Development at Sha Po, Yuen Long	CEDD	2025	2031	The project scope comprises site formation works, geotechnical works, roadworks, sewerage and drainage works; associated tree felling, transplanting and preservation works; and ancillary works including waterworks, landscaping works, environmental mitigation measures, etc. for public housing development at Sha Po	<ul><li>Air Quality</li><li>Noise</li></ul>	Landscape and Visual
First Phase Development of the New Territories North – San Tin / Lok Ma Chau Development Node – Investigation	CEDD & PlanD	End 2024	2039	The project covers a development area of 610 ha which is located at the heart of the NM and in proximity to Shenzhen's I&T Zone. San Tin Technopole will bolster I&T, residential spaces, community and commercial facilities, and other vital infrastructures in Hong Kong.	<ul><li>Air Quality</li><li>Noise</li><li>Ecology</li><li>Fisheries</li><li>Landscape</li></ul>	<ul><li>Air Quality</li><li>Noise</li><li>Landscape and Visual</li></ul>
Proposed Residential Development at Various Lots in D.D. 104 and the Adjoining Government Land in Yuen Long, N.T.	Capital Chance Limited	Under Planning	Under Planning	The project is a low- to medium- rise residential development project with local commercial uses, transportation and GIC facilities to serve the future residents and the neighbours, and a landscaped public open space.	<ul><li>Air Quality</li><li>Noise</li><li>Landscape</li></ul>	Landscape and Visual

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I CANCHIFFANT	Project	Tentative Construction Programme		Brief Description of the	Potential Cumulative Impact	
	Proponent	Start	Complete	Concurrent Project	Construction	Operation
(Approved Planning Application No. Y/YL-MP/10)						
Proposed Lowrise and Lowdensity Residential Development at Various Lots and their Adjoining Government Land in D.D. 104, East of Kam Pok Road, Mai Po, Yuen Long, N.T. (Approved Planning Application No. A/YL-MP/287)	Glory Queen Limited	Under Planning	Under Planning	The project is a low-rise and low-density residential development project. Its scope covers the filling of ponds/land and excavation works for the proposed residential development.	<ul><li>Air Quality</li><li>Noise</li><li>Landscape</li></ul>	Landscape and Visual

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