TOWN PLANNING BOARD

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LAND USE PROPOSAL OF SAN TIN TECHNOPOLE

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PURPOSE

1. This paper briefs Members on the land use proposal of San Tin Technopole and certain key features in taking forward the development.

PLANNING VISION AND POSITIONING

2. With the National 14th Five-Year Plan supporting Hong Kong to develop into an international innovation and technology (I&T) centre, we aspire to develop the Northern Metropolis (NM) into a "new international I&T city". The NM Development Strategy released in 2021 put forward the proposal for San Tin Technopole. Located at the heart of NM and in close proximity to Shenzhen's I&T zone in Huangang and Futian, San Tin Technopole is strategically positioned to be a hub for clustered I&T development that creates synergy with Shenzhen's I&T zone. It will contribute to the development of the South-North dual engine (finance - I&T), and become a new community for quality, healthy and green living.

RECOMMENDED OUTLINE DEVELOPMENT PLAN

3. San Tin Technopole covers the Hong Kong-Shenzhen Innovation and Technology Park (HSITP) under construction at the Loop and the San Tin / Lok Ma Chau area. The Civil Engineering and Development Department (CEDD) and the Planning Department (PlanD) jointly commissioned an Investigation Study in October 2021 to formulate a Recommended Outline Development Plan (RODP) for the area outside the Loop. The RODP is at **Plan 1**. San Tin Technopole covers a development area of 627 hectares (ha). Apart from the 87 ha of the Loop, the development area comprises mainly (1) an I&T Park and (2) San Tin Town Centre.

I&T Park

4. The majority of the I&T Park is located to the north of San Tin Highway/Fanling Highway, with a portion at the southeastern part of the new development area (land parcels coloured yellowish brown at **Plan 1**). Underlining Government's strong commitment to I&T development, the I&T Park

and HSITP at the Loop will **collectively provide 300 ha I&T land**, **comparable to the I&T zone in Shenzhen** with a size of 300 ha on the other side of Shenzhen River. Accounting for about **half of the total development area** of San Tin Technopole, the 300 ha I&T land are capable of accommodating **7 million sqm** of gross floor area, equivalent to 17 Science Parks.

- 5. Within the I&T Park, connected land parcels of different sizes (including a piece of 20-ha government land to be released from Lok Ma Chau (LMC) Control Point when the co-located new Huanggang Control Point commences operation) are designed to meet the needs of I&T facilities and uses of varying scales and purposes. The I&T Park will be served by two cross-boundary rail links, namely the proposed Northern Link (NOL) Spur Line connecting to the future co-located new Huanggang Control Point, with new stations near Chau Tau and HSITP, and the existing LMC Spur Line with LMC Station. The proposed Sam Po Shue Wetland Conservation Park (WCP) adjoining San Tin Technopole provides a unique wetland backdrop for the I&T Park while creating environmental capacity for its development.
- 6. In close proximity to the I&T Park, three sites near Fanling Highway and the proposed Shek Wu Wai Interchange, and at the southeastern part of the development area are proposed for logistics, storage and workshop uses. The sites may be developed into multi-storey buildings for modern industries (MSBs) or used for open air operation.

San Tin Town Centre

- 7. San Tin Town Centre, which is mainly located to the south of San Tin Highway/Fanling Highway, will supply about 50 000 public and private housing units, mostly within 500m walking distance from the railway stations. It is planned as an integrated neighbourhood with comprehensive public and community facilities. Two "mixed use" zones at the railway stations, and the cultural and recreational complex in the central part of San Tin Town Centre will be the landmarks of the area.
 - (a) Encompassing the proposed San Tin Station with a transport interchange hub, San Tin Town Centre West is characterised by a mixed use development (comprising residential developments, offices, hotels, retail, dining and entertainment facilities) which is surrounded by public/private housing, and government, institution and community (GIC) facilities. The proposed developments near the future railway station are mostly high-density development, which are knitted together with low to medium-rise GIC facilities by a network of open space.
 - (b) **San Tin Town Centre East** is located along the San Tin Eastern Main Drainage Channel. It is mainly composed of residential developments and GIC facilities. The drainage channel will be revitalised and

integrated with the Riverside Park to enhance robustness of flood retention capability. The Riverside Park and the shopfronts on the lower floors of the residential blocks will create a leisure ambience. Pedestrians and cyclists could make use of the iconic landscape deck across San Tin Highway to reach the proposed railway station near Chau Tau with transport interchange hub. A mixed use development comprising residential developments, offices, hotels, retail, dining and entertainment facilities is planned in the area.

(c) Key community and living support to the residential and working population will be provided in the **central portion of San Tin Town**Centre. The San Tin Western Main Drainage Channel will be revitalised as a landscaped river course. On its two sides there is a landmark Cultural and Recreational Complex with major performance venues, museum, library, swimming pool complex, and flexible public and event spaces. Sites are also reserved for educational facilities, healthcare facilities, youth facilities, a GIC complex (including market, indoor sports centre, ecohub, etc.), clinics, Government joint-user office building, police station, fire station cum ambulance depot and other essential infrastructures.

Land Use Budget and Major Development Parameters

- 8. To put the land resources into optimal use, higher development parameters have been adopted for San Tin Technopole, including maximum domestic plot ratio (PR) 6.5 for housing sites and a maximum PR 6 for I&T land. San Tin Technopole will provide about 50 000 housing units and 6 400 talent accommodation units. In addition to the 50 000 jobs in HSITP, the I&T Park and San Tin Town Centre will together create 165 000 jobs or above (including 120 000 or more on I&T sites), improving home-job balance in the New Territories and alleviating the traffic pressure to and from the urban areas.
- 9. The proposed land use budget for San Tin Technopole (including the Loop) is summarised as follows –

Land Uses	Area (ha)
I&T Park	300
Residential and Mixed Uses [®]	60
Logistics, Storage and Workshop	16
Public Facilities	91
Open Space	55
Amenity and New Roads	105
Total Development Area	627

- @ Two sites at the proposed San Tin Station and the proposed station near Chau Tau are considered for mixed use developments composed of residential developments, offices, hotels, retail, dining, entertainment facilities and transport interchange hub
- 10. The major development parameters of the development area covered by the RODP are tabulated below –

Total Population	about 147 000 – 159 000
No. of New Flats	about 50 000 – 54 000 (public/private housing split is about 70:30 [#])
Talent Accommodation within I&T Park	about 6 400 units##
Employment	165 000 or more (including 120 000 or more within I&T sites)

[#] The 70:30 split has been adopted for planning purpose. It will become 62:38 if counting the assumed 6 400 talent accommodation units as well. Actual public/private housing ratio will be decided upon implementation

KEY PLANNING FEATURES

I&T sites

- 11. We are mindful of the prospect of I&T land in San Tin Technopole being allocated to enterprises which may carry out cutting-edge research and development (R&D) and production activities. Their operation may also call for co-location of research, production, staff accommodation and other facilities on the same site. **Connected land parcels of different sizes**, including some sizable ones, have been designed within the I&T Park to provide flexibility in allocation of land for I&T facilities of different scales (start-ups, leading tech firms), different I&T fields (life and health technology, artificial intelligence and data science, advanced manufacturing and new energy technology, etc.), and different stages of the I&T value chain (R&D, prototype, test production, mass production etc.).
- 12. In order to nurture a more complete I&T ecosystem, San Tin Technopole will have to cater for the land uses of different I&T fields and different stages of I&T value chain, as well as the needs for talent accommodation and other supporting facilities. Hence, we suggest formulating a wider range of permitted uses which are compatible with each other for I&T land under the zoning. Necessary restrictions if any (such as how much talent accommodation may be allowed, or whether they may be situated alongside I&T use with manufacturing elements) may be imposed through administrative means (e.g. land grant conditions) in order to forestall abuse.

^{##} As a planning assumption, it is expected that about 10% of the employees in the I&T sites will be residing in Talent Accommodation. They have been counted in the Total Population

13. The Innovation, Technology and Industry Bureau (ITIB) will soon commence shortly a consultancy study on the development plan for San Tin Technopole with a view to recommending specific I&T uses in the I&T value chain (i.e. upstream (R&D), midstream (prototype or application development) or downstream (manufacturing) processes) for development on different land parcels in San Tin Technopole.

Blue-Green Network

- 14. Within San Tin Technopole, the river/drainage channels, retention ponds, wetland, open space and knolls are knitted closely together to create a blue-green network (Plan 2). Major landscaped corridors are proposed along Sam Po Shue WCP and the two revitalised drainage channels in the east and west. Open spaces of varying sizes are proposed as activity nodes. The blue-green network also creates ecological linkages to enhance biodiversity. Within the sizable I&T land, a public space network conducive to walking, cycling and promoting talents' interaction and exchange of ideas can be created, so as to make it a livable environment while promoting I&T development.
- 15. Adjoining the San Tin Technopole, a Sam Po Shue Wetland Conservation Park is being studied¹, under the Government's New Proactive Conservation Policy where private wetlands and fishponds with ecological value will gradually be resumed and developed into a park system. While some 90 ha of fishponds will be filled for the development of San Tin Technopole, through wetland and fishpond restoration and conservation, the Sam Po Shue WCP will create environmental capacity and make up for the loss in ecological functions due to the development, and provide a uniquely green and blue setting for the I&T Park. Design harmony between the I&T Park and Sam Po Shue WCP will also be achieved through sensible built form, reduced density and ecologically-sensitive landscape treatment along the edge of the wetland, and preservation of birds' flight corridors.

Smart, Green and Resilient (SGR) Initiatives

To align with Hong Kong's Climate Action Plan 2050's call for green 16. planning and developing carbon neutral community and to address climate change, San Tin Technopole would adopt SGR initiatives proposed under the following three aspects –

¹ The Agriculture, Fisheries and Conservation Department (AFCD) is conducting a strategic feasibility study to determine the exact locations, areas and management model etc. of the various parks proposed to be established under the Wetland Conservation Park (WCP) System, including the proposed Sam Po Shue WCP. EEB/AFCD will consult the public in due course on the Sam Po Shue WCP project.

- (a) **Planning and urban design** (include 15-minute neighbourhood, blue-green network, breezeways aligning with prevailing wind directions, maximising greenery, etc.) (**Plans 2 and 3**);
- (b) **SGR infrastructure system** (include floodable landscape with flood attenuation facilities, district cooling system, effluent polishing plant and food waste pre-treatment facilities, common utility enclosure, water reclamation facilities, etc.) (**Plan 4**); and
- (c) Smart and sustainable mobility with green transport modes (include railway as backbone of sustainable transport, comprehensive pedestrian and cycling network, provision of transport interchange hub/public transport interchange, charging facilities for electric vehicles and green fuel stations, etc.).

Transport Connection

- 17. **External Connection** (**Plan 5**) The proposed transport infrastructure will enhance the connection of San Tin Technopole with other parts of Hong Kong and foster cross-boundary travel with Shenzhen
 - (a) there are three mass transit rail links to San Tin Technopole, including the existing LMC Spur Line with LMC Station, the planned NOL Main Line with San Tin Station, and the proposed NOL Spur Line to Huanggang with stations near Chau Tau and at HSITP; and
 - (b) there are four major road connections linking San Tin Technopole with the surrounding areas. San Tin Technopole will be served by San Tin Highway (with proposed widening between San Tin Interchange and the proposed Shek Wu Wai Interchange) and Fanling Highway in the east-west direction, connected to the Huanggang Port to the north via the re-aligned San Sham Road, and linked to a future Northern Metropolis Highway connection in the southeast.
- 18. **Pedestrian and Cycling Network** (**Plan 6**) There will be a comprehensive network of cycle track and pedestrian walkway system connecting various development sites, public spaces and activity nodes of San Tin Technopole, with a view to realising the 15-minute neighbourhood concept and promoting a healthy and active lifestyle. To facilitate movements across San Tin Highway/Fanling Highway, 3 new crossings for pedestrians and cyclists will be constructed in addition to 4 existing underpasses/footbridges.

Integration of New Developments with Rural Neighourhoods

19. The concept of embracing urban-rural integration has been adopted in the planning of San Tin Technopole. The surrounding village zones in San Tin

will be retained and benefit from the comprehensively planned GIC facilities and improved infrastructure services including transport connectivity brought about by the project, while the cultural heritage resources of the villages will add cultural diversity to San Tin Technopole. To achieve harmony in design between the villages and neighbouring developments, suitable open space or amenities will be provided in the bordering area. I&T development adjoining the villages will be of a lower density, and breezeways have been taken into account in preparing the land use plan.

TECHNICAL ASSESSMENTS

20. In parallel with the formulation of the RODP for San Tin Technopole, technical impact assessments covering aspects on transport and traffic, environment, sewerage, drainage, water supply, utilities, geotechnical, socio-economic, air ventilation, sustainability, etc. have been conducted. Overall, the project is considered technically feasible without insurmountable engineering and environmental problems.²

COMPENSATION AND REHOUSING

- 21. The planning for San Tin Technopole has minimised impacts on the existing developments as far as possible. However, it is unavoidable that some existing structures, brownfield operations, farming activities, fishpond culture, graves and burial grounds will be affected. The Government has recently enhanced the ex-gratia allowances and rehousing arrangements which will be offered to eligible squatter occupants and business operators affected.³ The Government will also provide proactive assistance to the affectees during the land clearance process.
- 22. We have planned a Dedicated Rehousing Estate near San Tin Station to accommodate domestic occupants in squatters affected by government developments who are eligible for rehousing, with first population intake expected in 2031. Three pieces of logistics land (around 16 ha, see also paragraph 6 above) on which MSBs may be developed have been proposed at the fringe of the I&T Park to promote development of industries and accommodate brownfield operations displaced by government developments. This will supplement the 72 ha of land reserved in Hung Shui Kiu/Ha Tsuen (HSK/HT) and Yuen Long South New Development Areas (NDA) for industrial and logistics uses, as well as the MSB developments being planned near Yuen Long InnoPark.

The statutory environmental impact assessment for the San Tin Technopole project is on-going and expected to be completed by Q3 2023.

DIVERSIFIED MEANS OF LAND DISPOSAL AND TAPPING MARKET FORCES

- 23. Various forms of public-private partnership will be considered. When granting land for I&T uses in the area, **land disposal methods other than open tendering** may be considered taking into account the industry-specific policy of ITIB. On current planning, the first batch of unformed I&T land is expected to be available in Q4 2024 for works to start and will become formed sites in 2026. The Government may also consider allowing the prospective enterprises to carry out site formation works.
- 24. Besides, consideration may be given to applying the Enhanced Conventional New Town Approach (ECNTA) adopted in Kwu Tung North/Fanling North and HSK/HT NDA under which the Government may allow **in-situ land exchange applications** from lot owner-developers to carry out developments in NDAs (which may include the relevant site formation works) which accord with Government's planning intention. This would not only leverage market forces to enhance quantity and speed of the developments, but may also allow better management of the cash flow of development projects.

NEXT STEP AND IMPLEMENTATION PROGRAMME

- 25. We have commenced a 2-month public engagement exercise starting from 6 June 2023. A series of publicity events and activities including roving exhibitions and briefing sessions with relevant stakeholders, etc. are being conducted.
- 26. The RODP may be refined taking into account the public comments collected during the public engagement. PlanD will then prepare the statutory plan of San Tin Technopole for Members' consideration. The associated statutory procedures will commence in Q1 2024. We aim to start site formation works in Q4 2024, subject to funding approval from the Finance Committee of Legislative Council.
- Works for the development area covered by the RODP are planned to be implemented in two phases. Phase 1 mainly covers the I&T land parcels to the north of San Tin Highway/Fanling Highway, some residential land to the south and the key infrastructure areas with road connections. Phase 2 covers the remaining area. On present showing, site formation for I&T land will commence in Q4 2024 with formed sites coming on stream in 2026 the earliest. The timing for business intake will depend on the progress of disposal or allocation of I&T land parcels and subsequent developments. The first population intake will start from 2031, while bulk population intake will start

from 2034, around the time when the NOL Main Line commences operation. A tentative development phasing plan of San Tin Technopole is at **Plan 7**.

ADVICE SOUGHT

28. Members are invited to offer views on the land use proposal of San Tin Technopole.

ATTACHMENTS

Plan 1	Recommended Outline Development Plan
Plan 2	Blue-Green Network
Plan 3	Urban Design Features
Plan 4	SGR Infrastructure System
Plan 5	Transport Network
Plan 6	Pedestrian and Cycling Network
Plan 7	Development Phasing

DEVELOPMENT BUREAU CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT PLANNING DEPARTMENT JUNE 2023