

AGREEMENT NO. CE 58/2014(TP)

PLANNING AND DESIGN STUDY
ON THE REDEVELOPMENT OF GOVERNMENT SITES AT
SAI YEE STREET AND MONG KOK EAST STATION
FEASIBILITY STUDY

**Executive Summary
(ES)**

June 2018



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Planning Department

ARUP



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Planning Department

**Planning and Design Study on the
Redevelopment of Government
Sites at Sai Yee Street and Mong
Kok East Station – Feasibility
Study**

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Date | 6 June 2018

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 242541

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Abbreviations

"Arup"	Ove Arup & Partners Hong Kong Limited.
"B(P)R"	Building (Planning) Regulation
"CDG"	Completely Decomposed Granite
"DBS"	Diocesan Boys' School
"EE"	Expert Evaluation
"ELS"	Excavation and lateral support
"ENE"	East-northeast
"EVA"	Emergency Vehicular Access
"FEHD"	Food and Environmental Hygiene Department
"GFA"	Gross Floor Area
"GIC"	Government, Institution or Community
"GMB"	Green mini buses
"HDG"	Highly Decomposed Granite
"HKPSG"	Hong Kong Planning Standards and Guidelines
"HyD"	Highways Department
"KCRC"	Kowloon Canton Railway Corporation
"KCRCO Cap 372"	Kowloon Canton Railway Corporation Ordinance Chapter 372
"MK"	Mong Kok
"MKEP"	Mong Kok East Park
"MKES"	Mong Kok East Station
"MKFT"	Mong Kok Freight Terminal
"MKGO"	Mong Kok Government Offices
"MTRCL"	Mass Transit Railway Corporation Limited
"mPD"	Meters above Principal Datum
"N"	North
"NSR"	Noise Sensitive Receiver
"NNE"	North-northeast
"OVT"	Old and Valuable Tree
"OZP"	Outline Zoning Plan
"PNAP"	Practice Notes for Authorized Persons
"PLB"	Public light buses
"PlanD"	Planning Department
"POS"	Public Open Space
"PR"	Plot ratio
"PTI"	Public Transport Interchange
"RDS"	Recommended Development Scheme
"RMB"	Red mini buses
"RVD"	Rating and Valuation Department

“SW”	South-west
“STT”	Short Term Tenancy
“SBDG”	Sustainable Building Design Guidelines
“SVP”	Strategic View Points
“TPZ”	Tree Protection Zone
“WSD”	Water Supplies Department
“X-B”	Cross-boundary
“YTMDC”	Yau Tsim Mong District Council

1. Introduction

1.1 Study Background

- 1.1.1 Planning Department (PlanD) commissioned Ove Arup and Partners Hong Kong Limited (Arup) on 24 March 2015 to undertake the Planning and Design Study on the Redevelopment of Government Sites at Sai Yee Street and Mong Kok East Station – Feasibility Study (the Study). The Study investigated the planning, architectural and engineering feasibility for the optimal comprehensive development potential of the government sites (Study Site).
- 1.1.2 Key to the Study is to explore ways to maximise the Study Site's redevelopment potential with various land uses which may include residential, commercial/office/hotel, open space and/or Government, Institution or Community (GIC) facilities. The Study also made recommendations to enhance the public realm and public transport facilities in the area.
- 1.1.3 The findings and recommendations of the Study will serve as a reference for amendments to the Outline Zoning Plan (OZP) and guide the future land disposal and development of the Study Site.

1.2 The Study Site and Study Area

- 1.2.1 The Study Site (**Figure 1**) covers an area of about 3.9 ha which is bounded by Argyle Street to the south, Sai Yee Street to the west, the Grand Century Place and Hong Kong and Kowloon Chiu Chow Public Association Secondary School (HK&KLN Chiu Chow Public Assn Sec School) to the north and the Diocesan Boys' School to the east. The Study Site comprises the Water Supplies Department (WSD) compound, the Food and Environmental Hygiene Department (FEHD) depot, Luen Wan Street Sitting-out Area, the temporary open-air public car park at Luen Wan Street, Mong Kok East Station (MKES) platform atop the East Rail Line with Mong Kok Government Offices (MKGO), MKES concourse and a public transport interchange (PTI). The eastern side of the Study Site is delineated by the rail track running beneath the MKES and MKGO.

1.2.2 The Study Area (**Figure 2**), in which the main feasibility assessments are based, is bounded by Waterloo Road to the east, Dundas Street to the south, Shanghai Street to the west and Prince Edward Road West to the north.

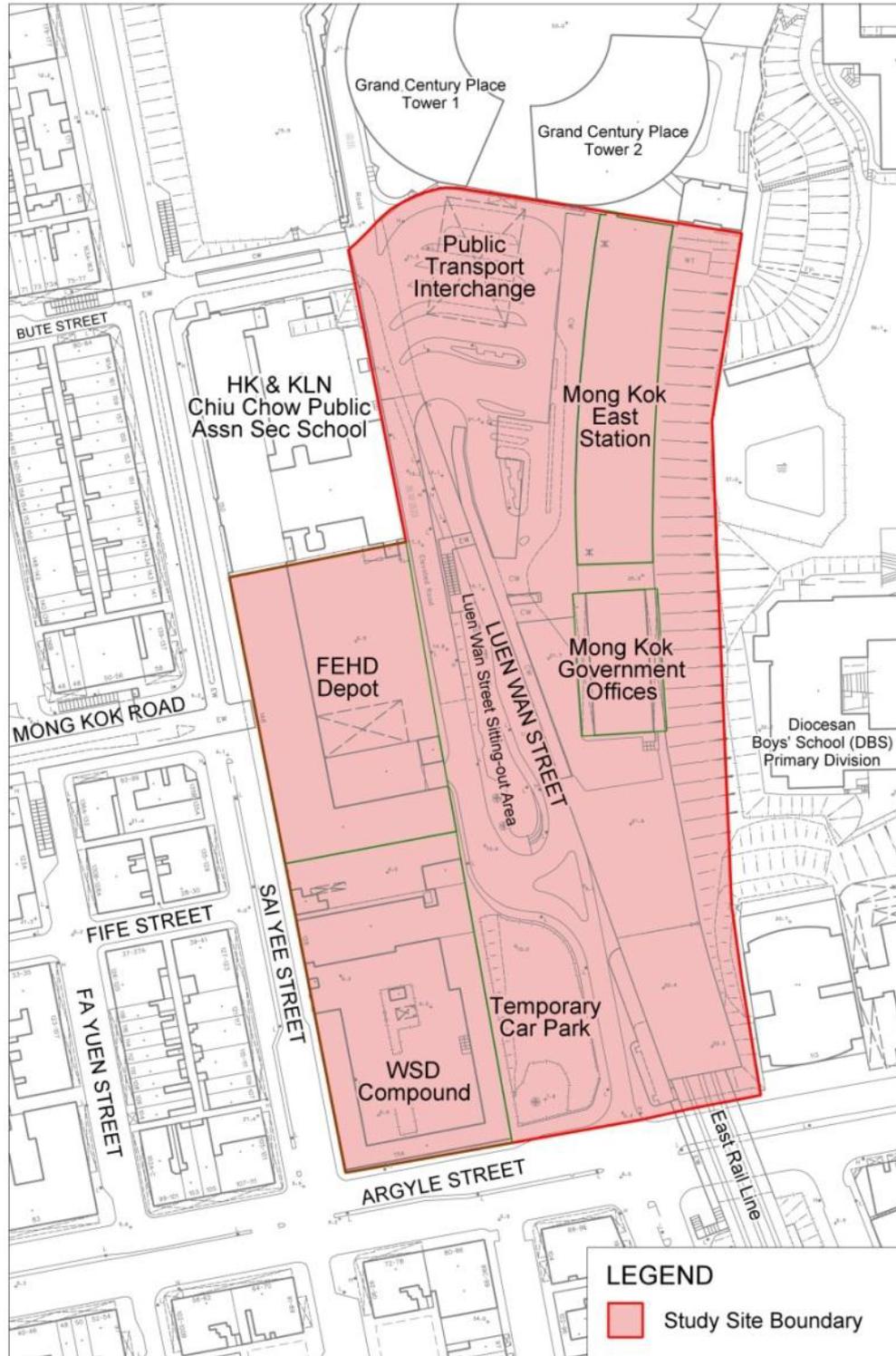


Figure 1: Study Site

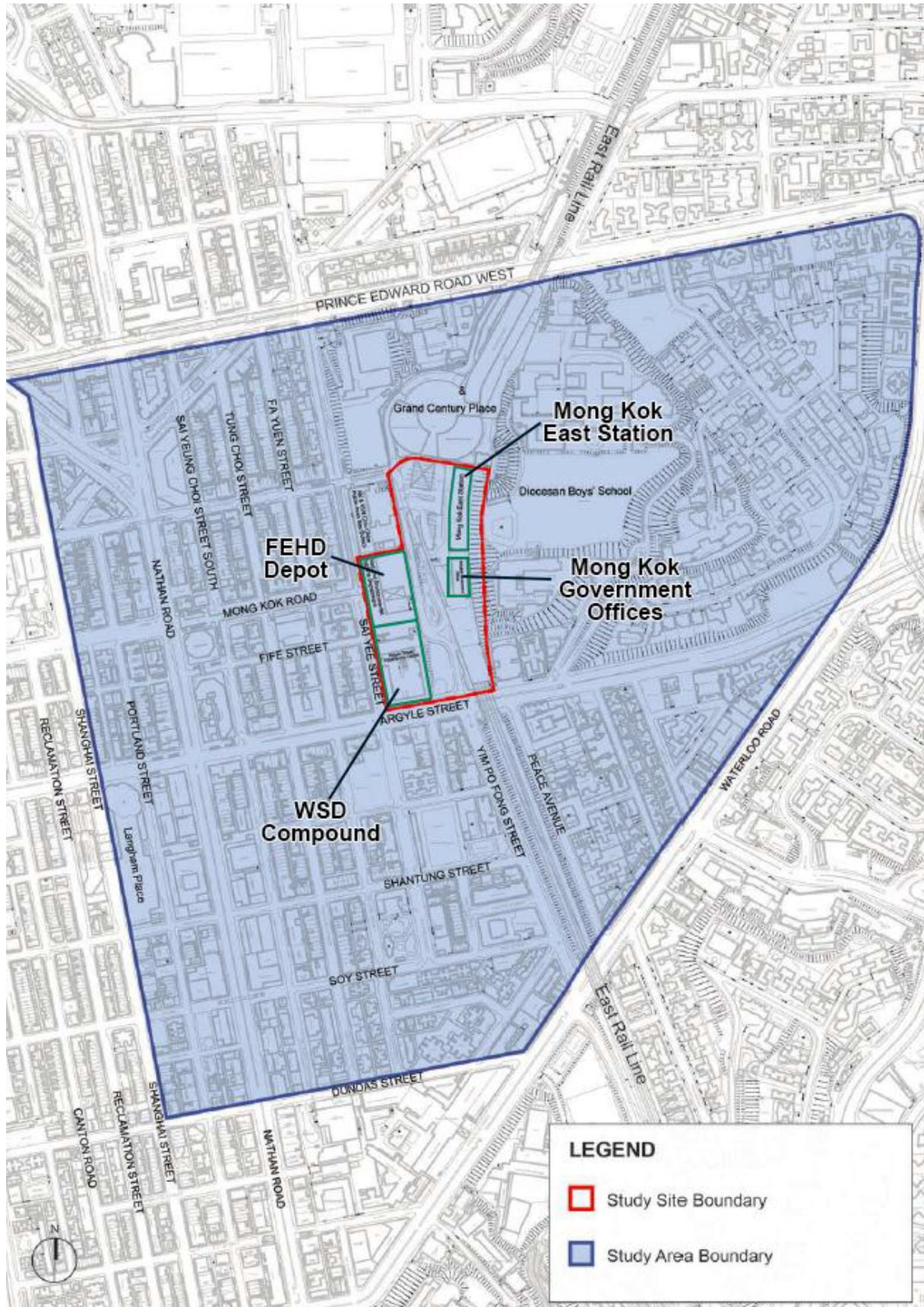


Figure 2: Study Area

Study Framework

1.2.3 The Study comprised three phases, including inception phase, option formulation phase and recommended development scheme finalization phase.

- **Inception Phase** – An inception report was prepared with the study objectives, approaches, methodology and programme for the assignment and followed by baseline review to examine and analyse the baseline conditions and the development constraints and opportunities.
- **Option Formulation Phase** – Based on the baseline review, the guiding planning and design principles were formulated and the planning and design concept was established. Three initial development options were proposed based on the established planning and urban design principles and development concept. The options were evaluated with respect to land use planning, urban design, pedestrian connectivity, visual and landscape, traffic and transport, air ventilation, and programming etc. for the formulation of a recommended development scheme (RDS). Technical assessments were then conducted to ascertain the feasibility of the RDS.
- **Recommended Development Scheme Finalisation Phase** – Taking into account the findings and recommendations of the technical assessments as well as the public comments received during public consultation, the RDS was refined and the development parameters for the revised RDS were finalized. A planning and design brief was prepared setting out the major development parameters, planning and design requirements including the provision of various public facilities such as social welfare and community uses, public transport facilities and public open spaces (POS) to guide the future development of the Site.

2. Key Opportunities and Constraints and Guiding Design Principles

2.1 Key Opportunities and Constraints

- 2.1.1 A Baseline Review was undertaken at the Inception Phase of the Study to establish the baseline profile and to analyse and consolidate the opportunities, constraints and issues of the Study Site which are summarized below.

Key Opportunities

Mong Kok Identity

- 2.1.2 Mong Kok is one of the major shopping areas and entertainment destinations for locals and tourists. There is a traditional characteristic of vibrancy including array of markets, small shops and food stalls along street-fronts. The area is also a popular entertainment and social networking place for the youngsters, with cinemas, karaokes, billiard parlours and restaurants, etc. Redevelopment of the Study Site would provide opportunity to enhance the identity of Mong Kok as a tourist, shopping and entertainment destination.

Prime Location for Commercial Development

- 2.1.3 Currently in shortfall, grade A office requires not only prime location well served by public transport but also relatively large site area. The Study Site, which is located in the urban core, has an area of about 3.9ha. With Grand Century Place (office and shopping mall) and Royal Plaza Hotel nearby, the development of grade A office, hotel, shop and services and place of entertainment at the Study Site could enhance the identity of Mong Kok as a commercial node, as well as a shopping centre for locals and tourists, creating synergy to form an icon at this prime location.

Improvement to Public Realm

- 2.1.4 Mong Kok is a transport hub well served by a wide variety of public transport including Mass Transit Railway (MTR) Tsuen Wan Line and Kwun Tong Line, East Rail, buses, public light buses (PLB) and cross-boundary (X-B) coach services. It is patronized by a large number of visitors and daily commuters. Roads are approaching their maximum carrying capacities and there is limited opportunity in this old urban area for road widening/improvement. Traffic congestion is usual and the situation is complicated by the on-street PLB stands and

X-B coach termini cum stopping points. On the pedestrian linkage aspect, the existing Mong Kok Road Footbridge provides connection between the MKES and the MTR Mong Kok Station. At present, no direct access from the MKES to Mong Kok Road through the Study Site is available as the direct access is physically blocked by the FEHD depot and WSD compound. Pedestrian can only route through the footbridge at Bute Street to join the Mong Kok Road Footbridge which leads to MTR Mong Kok Station. Apart from longer walking distance, it makes the footbridge at Bute Street which provides connection to the MTR Prince Edward Station very busy.

- 2.1.5 According to the population profile, there are more elderly people in the old urbanized Mong Kok area as compared with the territorial average, which gives rise to a need for more GIC facilities. In accordance with the Hong Kong Planning Standards and Guidelines (HKPSG), there is a deficit in the provision of local and district open space in the Mong Kok area. The improvement to the public realm in terms of traffic condition, living environment, greening and landscape as well as provision of GIC facilities in this well-developed urban area requires new land. Redevelopment of the Study Site provides such an opportunity.

Landscaping Enhancement on MKES Platform Area

- 2.1.6 The area bounded by Luen Wan Street to its east is land vested in Kowloon-Canton Railway Corporation (KCRC) (**Figure 3**). While pursuing development involving the KCRC vested land would require the resolution of legal issues, it is stated in the KCRC Ordinance (Cap. 372) that the Government reserves the right to use exclusively and to permit other persons to use the platform area above the rail. The MKES platform area can be explored for landscaping enhancement, provision of POS and pedestrian connection to link up the MKES with the surrounding areas in Mong Kok.

Key Issues and Constraints

Adverse Traffic Noise and Air Quality Impacts

- 2.1.7 Being bounded by the heavily trafficked Sai Yee Street and Argyle Street and with the existing PTI on the platform area and the uncovered part of the East Rail in the vicinity, the Study Site is subject to adverse noise impact generating from road traffic, rail and the PTI, as well as adverse air quality impact due to traffic emission. If the Study Site is proposed for air-/noise-sensitive uses, in particular residential use or GIC facilities with open-window requirement,

careful planning and design with adequate mitigation measures are required.

Limitation Imposed by the Existing Railway Development

- 2.1.8 Under the KCRC Ordinance (Cap. 372), KCRC as the holder of the vested land is required to protect the railway operation and reserve land for future railway expansion. In this context, development within the Study Site shall not interrupt the operation of the East Rail Line which is under the management of the MTR Corporation Limited (MTRCL). MTRCL shall be consulted for any works falling within the railway protection boundary of the East Rail Line.

Limited Structural Capacity of MKES Platform

- 2.1.9 The existing MKES platform has limited structural capacity. A preliminary assessment under the Study on the theoretical capacity of the existing column stubs for topside development shows that only limited areas on top of the MKES platform have potential to support further low-rise development above it.

Existing Air Path

- 2.1.10 According to the draft Mong Kok Outline Zoning Plan (OZP) No. S/K3/30, a 30m-wide building gap above 23mPD aligned with Mong Kok Road at the FEHD Depot shall be provided to enhance the air ventilation performance of the area.

Existing Emergency Vehicular Access (EVA) and Vehicular Connection to the Grand Century Place and Facilities on top of the MKES Platform

- 2.1.11 The existing elevated road and Luen Wan Street serve as the EVA of the Grand Century Place, MKGO and the MKES. They are also the vehicular access to the existing PTI and the MKGO car park at the respective northern and southern parts of the platform deck. Luen Wan Street is the vehicular access and the EVA of the Mong Kok Freight Terminal at ground level below the MKES platform deck.

Protection of Landscape Resources

- 2.1.12 There are four registered Old and Valuable Trees (OVTs) and two trees bearing the character of OVT falling within the Study Area. Preservation of these trees is necessary.

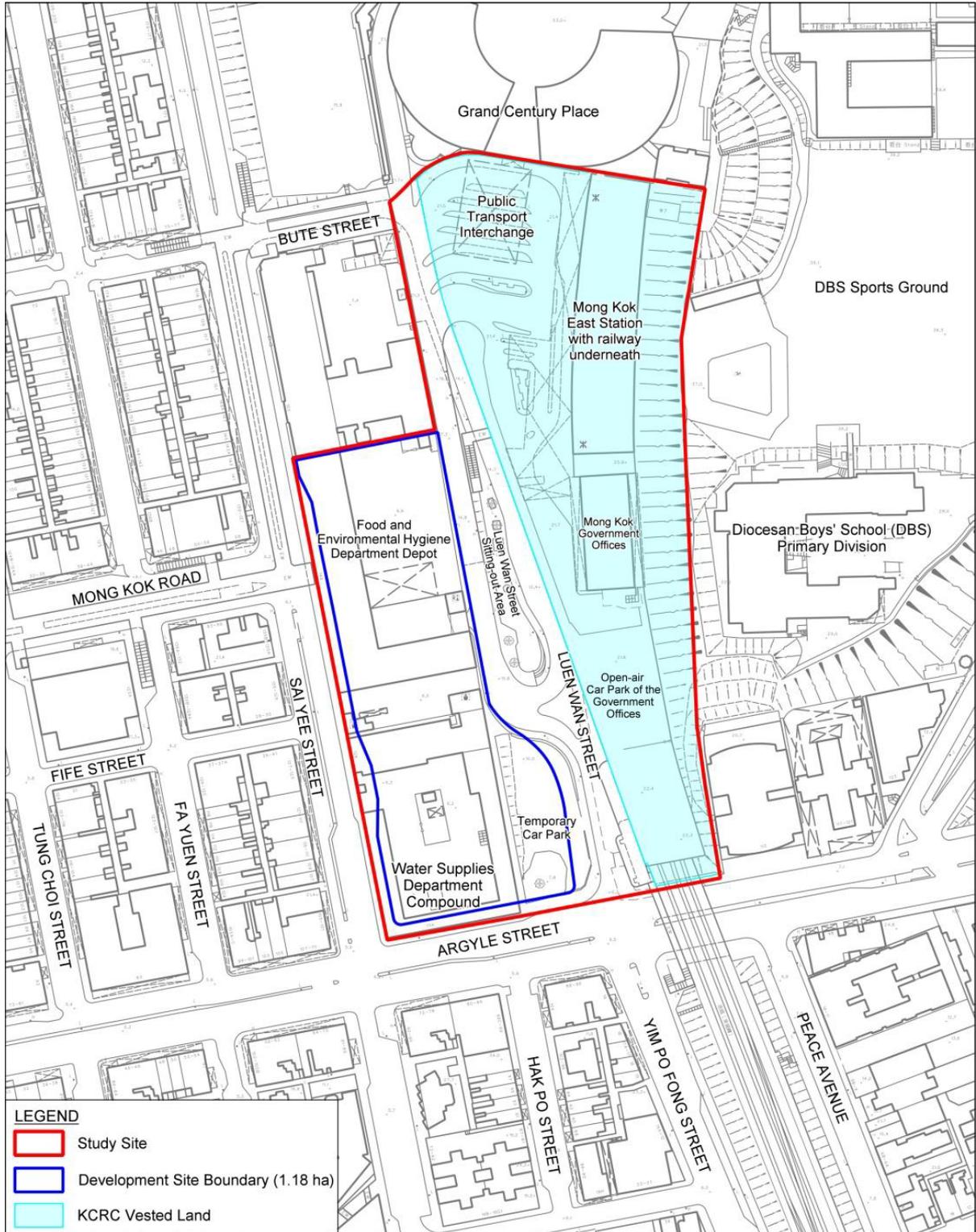


Figure 3: KCRC Vested Land in Study Site

2.2 Guiding Planning and Design Principles

2.2.1 In response to the problems and needs of the Study Area and taking into account the identified opportunities and constraints, guiding planning and design principles have been formulated for the proposed redevelopment of the Study Area and are summarized as follows:

Development Needs

- Optimize development potential according to site context and constraints.
- Re-provisioning of the existing public facilities affected by the redevelopment.

Connectivity

- Create a multi-level pedestrian network connecting the MKES, MTR Mong Kok Station and the nearby local/tourist attractions.
- Enhance the walkability and connectivity of pedestrians.
- Improve the congested Mong Kok traffic condition.

Meeting Community Needs

- Provide the needed GIC and social welfare facilities to serve the local community.
- Provide public transport facilities to improve traffic condition in the surrounding area.

Good Urban Design

- Promote visual and air permeability through provision of visual and air ventilation corridors at strategic locations.
- Reduce overshadowing the adjacent development around the Study Site especially the school to its immediate north.
- Stepped building height profile with the highest building height at the central part of the development and stepping down to the north and south.
- Foster a strong sense of place through building design and streetscape improvement.
- Respect the Sustainable Building Design Guidelines.
- Respect the “20% building free zone” and views to the ridgelines of Beacon Hill and Lion Rock unless for special landmark buildings to give punctuation effects at suitable locations.

Provision of Public Open Space

- Provide quality open space at convenient location with easy access for public enjoyment.

Greening and Landscaping

- Provide quality public realm and landscaped linkages with the surrounding open space and greenery.
- Preserve the OVTs and mature trees bearing the character of OVTs for integration with the POS.
- Observe the requirement on site coverage and greenery.

Mong Kok Identity

- Formulate development concept to reinforce Mong Kok's character and identity.
- Promote liveliness in terms of activities at street level.
- Create a landmark and focal point to foster Mong Kok's identity as the shopping and entertainment destination for locals and tourists.

3. Revised Recommended Development Scheme

3.1 Formulation of Development Options

Development Site

- 3.1.1 The western portion of the Study Site is occupied by the existing FEHD depot, WSD compound and the Luen Wan Street temporary open-air public car park. These existing facilities will be demolished to facilitate the proposed redevelopment. The eastern portion of the Study Site are Luen Wan Street, Luen Wan Street Sitting-out Area and the land vested in the KCRC under the KCRC Ordinance (Cap. 372) for operational purposes of railways. On the KCRC vested land, the at-grade level is occupied by the KCRC freight yard and decked over by a platform which is currently occupied by a PTI, MKES concourse, MKGO, MKGO's open-air car park and a vacant area. Luen Wan Street is the only vehicular access to the platform area. Taking into account these circumstances and major constraints on limitations bounded by the KCRC Ordinance on KCRC vested land and limited structural capacity of the platform deck, the Study recommended that the redevelopment should be confined to the Government land currently occupied by the FEHD depot, the WSD compound and the Luen Wan Street temporary open-air public car park (the Development Site) with an area of about 1.18ha (**Figure 3**).

Proposed Land Uses

- 3.1.2 The Study has examined the feasibility for mixed residential and commercial uses in the Development Site. Residential development is compatible with the existing mixed commercial/residential uses of Mong Kok and can provide a choice for people who enjoy city life. However, the Study Site is surrounded by roads and railway and subject to noise impact arising from road traffic, rail and PTI, as well as air quality impact due to traffic emission. Mitigation measures would be required to mitigate the possible adverse environmental impacts if residential use is to be proposed at the Study Site.

- 3.1.3 Taking advantage of the location of the Study Site which is within a transport hub and the vibrant character of Mong Kok, commercial development including grade A office, hotel, retail and services and place of entertainment at the Study Site could enhance the identity of Mong Kok as a commercial and entertainment node, as well as a tourist attraction and shopping centre creating synergy to form an icon at this prime location. As such, the Development Site is considered more suitable for commercial use than residential use.
- 3.1.4 In addition, from the development intensity point of view, development potential of the Site is maximized with a maximum plot ratio (PR) of 12 for commercial use than for residential use with a maximum PR of 9, as permitted under the OZP for the two zonings. Therefore, the Development Site is recommended for commercial use with no mix of residential use.

Development Options

- 3.1.5 With reference to the opportunities and constraints and on the basis of the derived guiding planning and design principles, three initial development options had been formulated for the Development Site, all with a PR 12 for commercial development with provision of various public facilities. The proposed GIC and transport facilities were similar under all development options, which included one level of PTI for PLB and one level of loading/unloading facilities for X-B coaches, social welfare and community facilities, public car parking spaces, POS and pedestrian footbridges/linkages connecting the Development Site with the surrounding pedestrian network and developments. The main differences among the development options were mainly in block layout, building height, visual permeability, air ventilation performance and provision of POS.

3.2 Public Consultation

3.2.1 Local public consultation on the three initial development options was conducted during the period from March to June 2016 including questionnaire surveys via Yau Tsim Mong (YTM) District Office. The parties consulted included the YTM District Council (DC), Kowloon City DC, Town Planning Board, local community, the trade of PLB and X-B coaches, and the major stakeholders¹. Based on the public comments received, the majority supported the proposed commercial use at the Development Site and the development option of a tallest single high-rise tower block in the middle of the Site with largest provision of POS, i.e. the landmark development. Other major public comments/views collected can be summarized as follows:

- reduction in development intensity to avoid further aggravation of existing traffic condition;
- provision of more POS to address the shortage in the Mong Kok area;
- provision of facilities for public activities to help enhance the vibrancy, identity and local characters of the Mong Kok area. A public viewing deck should be provided on the rooftop of the development for public enjoyment;
- support the provision of PTI and loading/unloading facilities to relocate some of the existing on-street PLB stands and X-B coach stopping points in the nearby streets to alleviate/improve the congested traffic conditions in the Mong Kok area;
- to enhance the pedestrian connectivity in the area in particular for the elderly and disabled; and
- provision of more social welfare and community facilities including a community hall.

¹ Major stakeholders include Hong Kong and Kowloon Chiu Chow Public Association Secondary School, Queen Elizabeth School, Fa Yuen Street Hawker Association, Tung Choi Street (Ladies Market) Merchants & Hawkers Association, Mong Kok Kai-Fong Association Limited, MTR Corporation Limited and KCRC.

3.2.2 Taking into consideration of the local comments/views collected from the local public consultation as appropriate, the RDS has been refined with the incorporation of a standard community hall, sky gardens and a public viewing deck. Further consultations with respect to the revised RDS were undertaken with a view to gaining local support. Comments and requests collected include further reduction of the proposed building height, provision of more X-B coach loading/unloading facilities and more public car parking spaces. To meet the needs and expectation of the local people, after detailed consideration and assessments, the RDS has been further refined with the following changes which obtained support from YTMDC on 30 November 2017:

- maximum building height reduced from 350mPD to 320mPD;
- provision of 5 more X-B coach loading/unloading bays; and
- provision of some 50 more public car parking spaces.

3.2.3 Technical assessments had been carried out in the Study to ascertain the feasibility of the revised RDS.

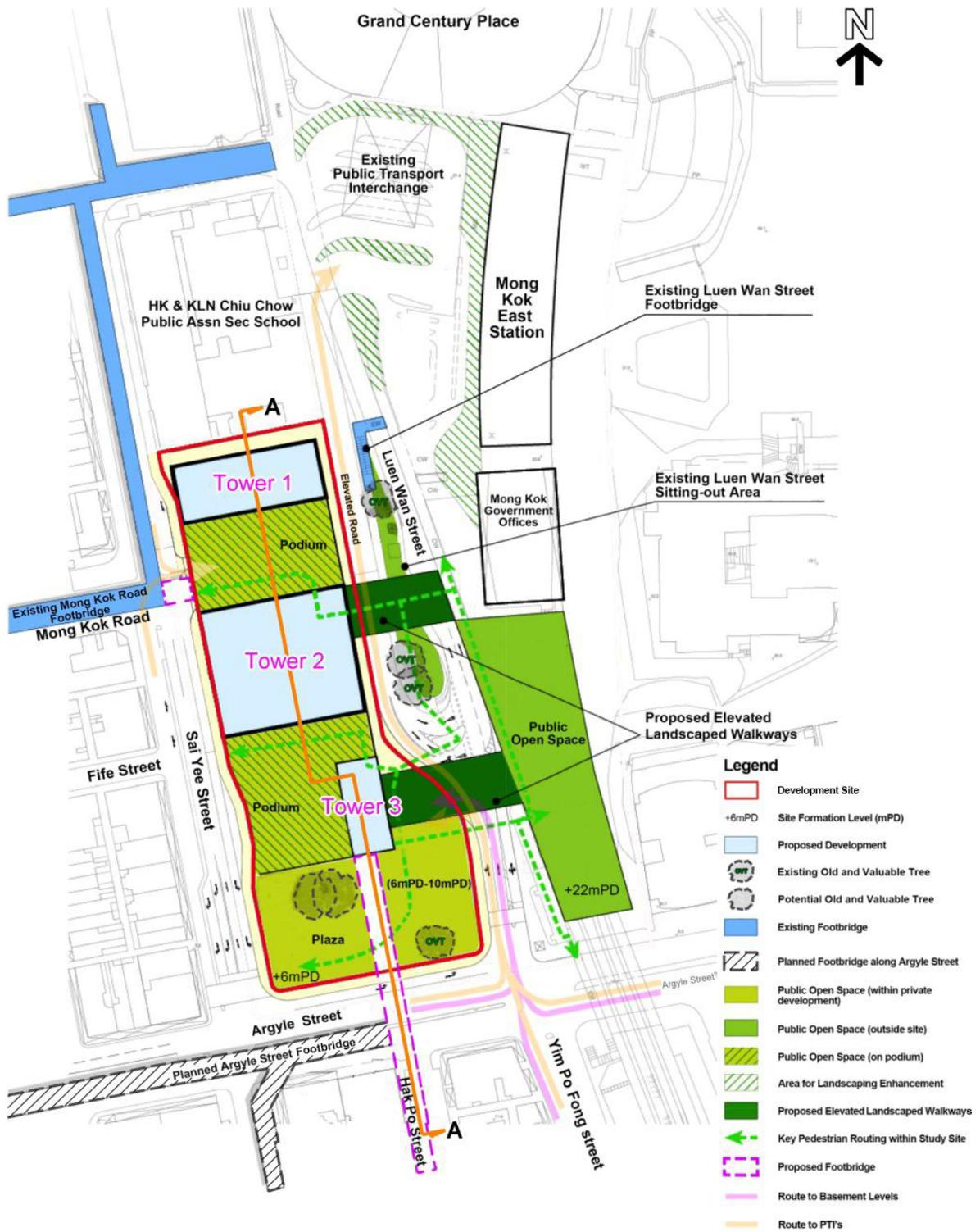
3.3 Revised Recommended Development Scheme

Urban Design and Architectural Considerations

3.3.1 The notional revised RDS uphold the key planning and design principles to maximize opportunities for enhancing visual permeability and air ventilation, and providing ample amount of POS. **Figure 4** shows the urban design layout plan of the revised RDS. It is intended to be the landmark of Mong Kok East area which features a high-rise main block with a building height of 320mPD located in the middle of the Development Site, with a GIC block of 40mPD at the north near the Hong Kong and Kowloon Chiu Chow Public Association Secondary School to provide gradual increase in building height profile and avoid overshadowing the school. A building block of 33mPD is situated to the south of the main block functioning as pedestrian circulation spot connecting the Mong Kok south area across Argyle Street to the platform area of the KCRC deck. Sky gardens at refugee floors are provided for enjoyment of the sky view of the city. Besides greening at the POS, landscaped areas and vertical greening are provided at some of the lower levels of the main block to maximize greening. Major development parameters of the revised RDS are summarized in **Table 1** below:

Table 1 – Major Development Parameters of the Revised RDS

Site Area (ha) (about)	1.18
Plot Ratio	12
GFA (m²) (about)	141,600
Commercial (office/retail/hotel)	121,210
Public Facilities	
GIC facilities (a standard community hall, a day care centre for the elderly, a neighbourhood elderly centre, an integrated children and youth services centre and an integrated community centre for the mental wellness)	4,940
Public Light Buses Public Transport Interchange (PLB PTI)	60 bays
Loading/unloading facilities for Cross-boundary (X-B) coaches	20 bays
Public car parking spaces	130 (120 private cars and 10 coaches/medium & heavy goods vehicles)
Maximum Building Height (including rooftop structures) (mPD) (number of storeys excluding basement)	
Main block	320 (65)
GIC block at the north	40 (6)
Small block at the south	33 (4)
Site Coverage (%)	
Ground level	65
Above 15m	47.6
Public Open Space (POS) (m²) (about)	
Within Development Site	6,550
Adjacent to Development Site on MKES platform	3,200



(Notional Scheme - Indicative Only)

Figure 4: Urban Design Layout Plan

Building Layout and Disposition

- 3.3.2 With the building frontage of approximately 150m in length along Sai Yee Street, the higher floors of the podium are arranged in a staggered configuration to minimize the continuous single façade surfaces that would otherwise appear bulky and monotonous while providing opportunities for additional greenery to be incorporated into the building's frontage (**Figure 5**). The stepped building profile with a high-rise main building block at the central part of the development and two low-rise building blocks at the north and south ends provides a highly permeable view enhancing the visual relief of the development and facilitates the air ventilation of the surrounding area. A retail frontage facing Sai Yee Street and Argyle Street is provided at ground level to enhance street vibrancy.
- 3.3.3 The built form of the tall block is designed to maximize the efficiency of the floor plate for grade A office but also allows preservation of the visual and air ventilation corridor which complies with the OZP requirement for a 30m-wide building gap above 23mPD along Mong Kok Road and view from Fife Street to the green backdrop of Kadoorie Hill. The grid-pattern of Mong Kok district's characteristic narrow streets is conceptually extended into the proposed development.

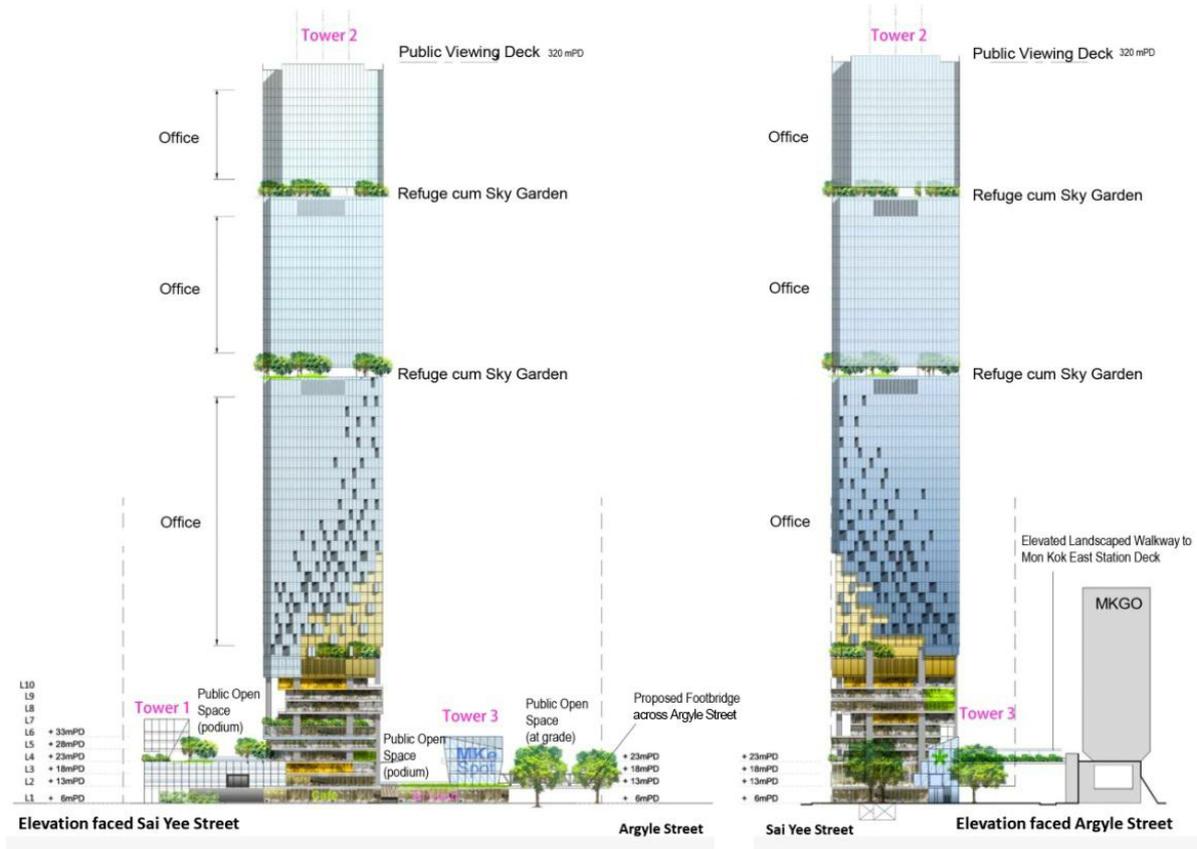
Building Height and Architectural Design

- 3.3.4 The proposed development is to give a new identity to the district and at the same time in harmony with the surrounding. According to the notional revised RDS, the building height of the proposed development is at a level of 320mPD, i.e. the height of the office main block, which breaches the "20% building free zone". **Figure 6** shows the programmatic section of the proposed development. In accordance with the HKPSG Chapter 11 - Urban Design Guidelines, flexibility should be considered on individual merits for special landmark buildings at suitable location, well applicable to the development which is located next to the MKES with PTI and in close proximity to MTR Mong Kok and Prince Edward Stations, i.e. at a transport hub well served by various types of public transport facilities, and features a special landmark design to the surrounding developments in Mong Kok East area. The proposed building height would also generate more opportunities for the provision of more POS on the lower, more accessible levels of the development, limit overshadowing on the streetscape, enhance air ventilation and visual

permeability as well as maintain existing east-west view corridor to the green backdrop of Kadoorie Hill along Fife Street.

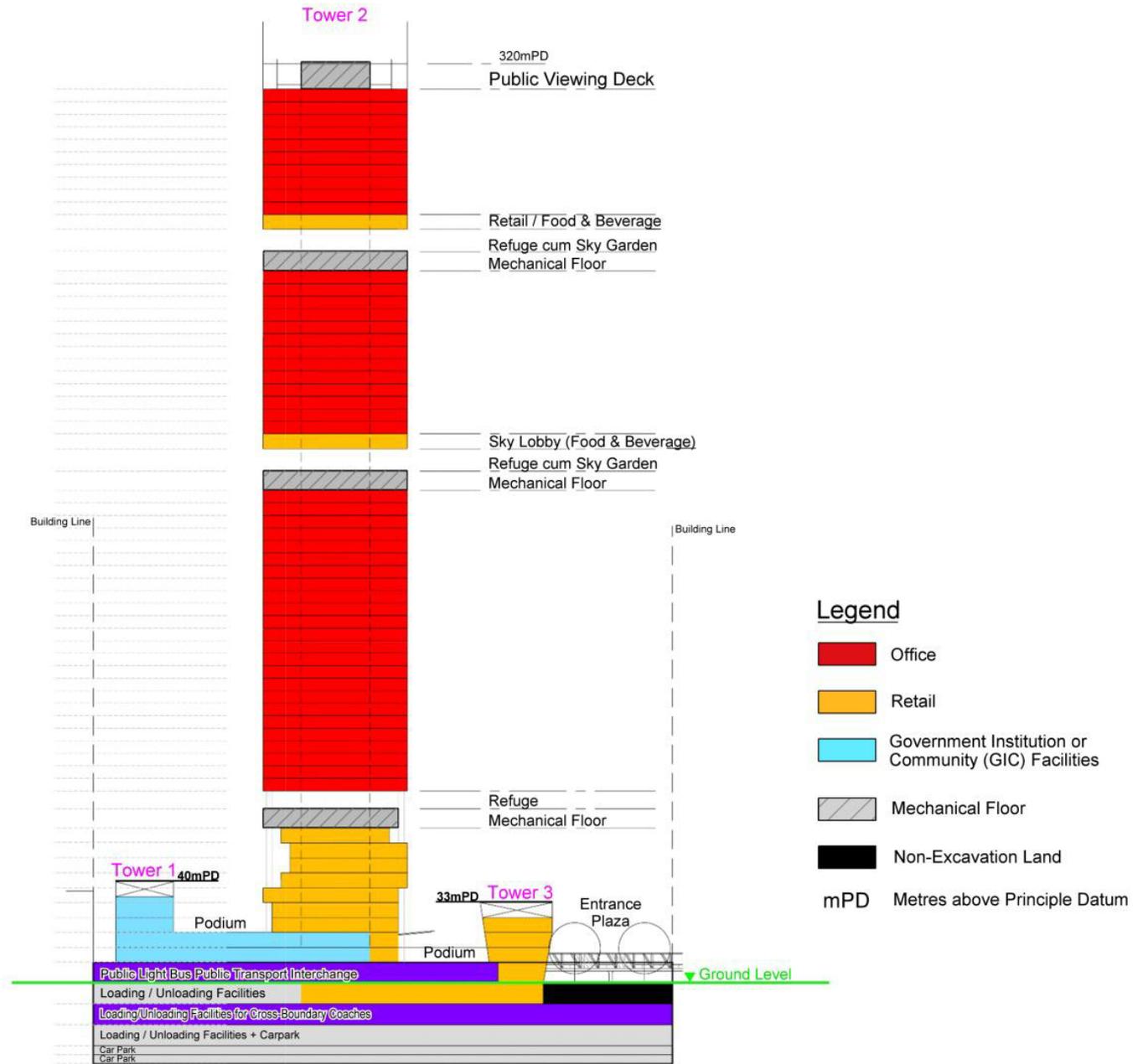
3.3.5 The architectural design of the proposed development responds to the identity and quality of urban fabric of Mong Kok district. The retail podium and façade of the proposed development are designed in a pixelated effect to echo with the fragmented urban fabric of Mong Kok with vibrancy and activities at pedestrian level. The sliding in and out retail edge creates space for open/semi-open greeneries, alfresco dining and commercial activities. The climbing up retail pixels gradually merge with the office tower, reflecting the incorporation of the Mong Kok district identity into the proposed development. Reflective material is used for the proposed building tower façade to make it blend in with the sky (**Figures 5 and 7**).

3.3.6 A double-storey sky garden/lobby is introduced to act as an interchange of vertical circulation from low-zone to high-zone. It provides a commercial opportunity at the middle of the office tower and a platform for viewing the scenery of the Mong Kok district.



(Notional Scheme - Indicative Only)

Figure 5: Elevations facing Sai Yee Street and Argyle Street



(Notional Scheme - Indicative Only)

Figure 6: Programmatic Section A-A

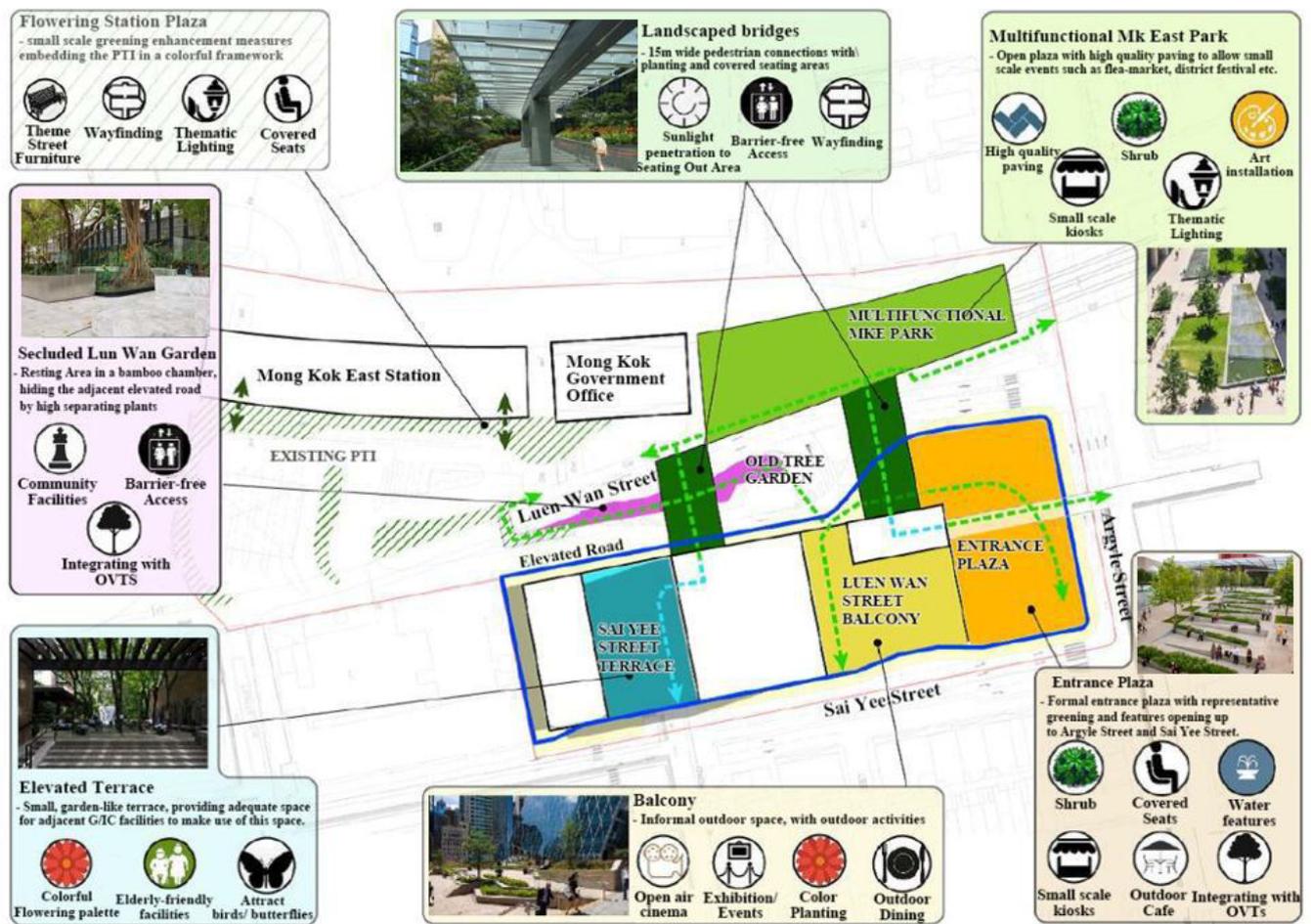


(Notional Scheme - Indicative Only)

**Figure 7: Photomontages of the Proposed Development
(Top: View from MKES PTI,
Bottom: View from Yim Po Fong Street Footbridge)**

Landscape Framework

3.3.7 The landscape framework is formed by a number of key components and provides an interconnected network of amenity areas and a landscape structure composed of tree and shrub planting, which is intended to respond to the needs of future users and to maximize greenery provision. The framework creates a pedestrian friendly walking environment and has a sustainable design approach (Figure 8). Four OVTs and two potential OVTs within the Study Site are to be preserved.



(Notional Scheme - Indicative Only)

Figure 8: Thematic Landscape Concept

3.3.8 A number of green outdoor spaces situated at different levels are to be provided throughout the development. The spaces are inter-connected by direct indoor or outdoor routes to enable convenient way-finding and to allow barrier free and age friendly access. These landscaped spaces can be used to host various activities and design features that expected to enhance and extend Mong Kok’s identity. Optimal visual and physical connection will be provided as far as possible between the POS and the surrounding areas including the proposed POS on the KCRC deck and the Luen Wan Street Sitting-out Area to enable higher levels of visual permeability (**Figure 9**). Desirable planting themes and species that help to conserve biodiversity and enhance sustainable development are to be provided.

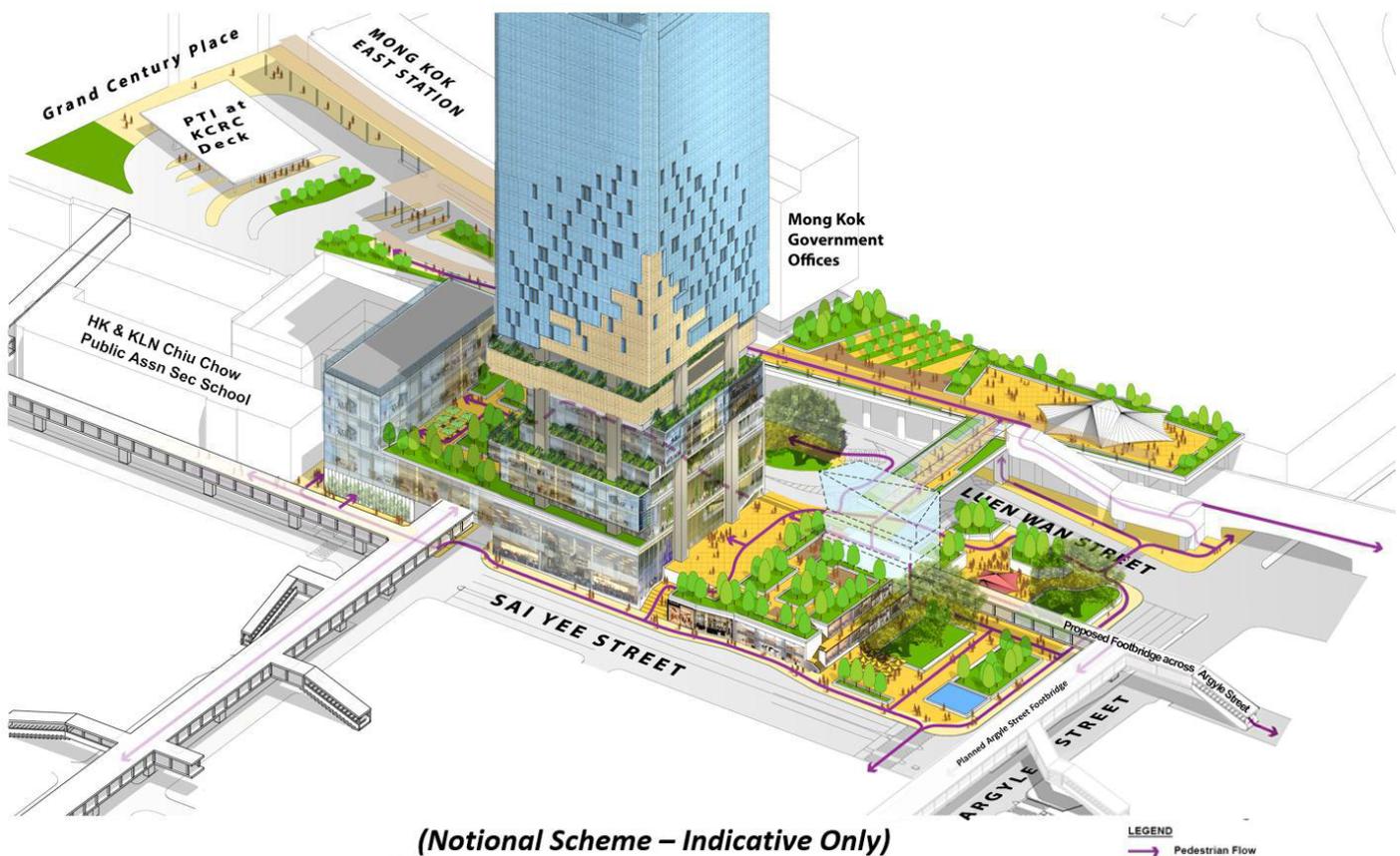


Figure 9: Physical Connections between Public Open Spaces

Development Components

PLB PTI

- 3.3.9 A PLB PTI will be provided at the proposed development to improve the public realm and overall experience for users of public transport. It is planned to be located on ground floor providing sufficient spaces for about 60 PLB bays for relocation of some of the existing on-street PLB termini stands in the nearby area. A waiting area and a public toilet will be provided therein. The ingress/egress point will be located at Sai Yee Street.

Loading/Unloading Facilities for X-B Coaches

- 3.3.10 The loading/unloading facilities for X-B coaches with about 20 bays will be provided at basement floor for relocation of some of the existing X-B coach termini cum stopping points in the nearby area. A public toilet and air-conditioned waiting areas will be provided therein. The ingress/egress point will be located at Luen Wan Street.

Public Car Parking Spaces

- 3.3.11 A total of about 130 public car parking spaces including 120 for private cars and 10 for coaches/medium and heavy good vehicles will be provided in the proposed development. Based on the notional revised RDS of commercial development with a mix of grade A office, retail uses and various public and GIC facilities, sufficient ancillary parking spaces and traffic facilities including parking spaces for private cars, commercial vehicles and those to serve the GIC facilities, loading/unloading bays for goods vehicles, coaches as well as laybys for taxis, private cars, tour buses, vans and vehicles of the GIC facilities will be provided in accordance with the HKPSG with the agreement of the Transport Department. In addition, a total of 41 car parking spaces will be provided within the development for exclusive use of the MKGO for reprovision of the open air car park displaced for the POS at the KCRC deck.

POS and Public Viewing Deck

- 3.3.12 A total area of 6,550m² POS is planned to be provided within the Development Site, of which 3,200m² will be provided at-grade near the junction of Sai Yee Street and Argyle Street to be integrated with the existing OVT and potential OVTs. The at-grade POS will serve as an entrance plaza to create a focal point and activity space for the enjoyment of the locals and tourists. To address the shortfall of open space provision in the Mong Kok area, the southern part of the platform area on the KCRC deck, currently partly vacant and partly used as an open-air car park serving the MKGO outside the Development Site, is proposed to be converted into a POS of about 3,200m², which will be linked up with the POS within the Development Site by two elevated landscaped walkways across Luen Wan Street to form an integral part of the future development. **Figure 8** shows the thematic landscape concept and **Figure 9** shows the pedestrian connections within and outside the proposed development. A public viewing deck is planned to be provided on the rooftop of the tallest tower which will be open for public enjoyment.

GIC Facilities

- 3.3.13 The following GIC facilities (including social welfare and community facilities) will be provided in the future development to meet the needs of the local community:
- a day care centre for the elderly;
 - a neighbourhood elderly centre;
 - an integrated children and youth services centre;
 - an integrated community centre for the mental wellness; and
 - a standard community hall.

Pedestrian Connectivity and Footbridge Linkages

Connectivity within and outside the future development

- 3.3.14 Pedestrian connectivity should be of seamless connection providing a simple, direct, easy-to-orient and interesting way that can enhance walkability and circulation to foster a pedestrian-friendly environment and promote “Walk in Hong Kong”. The pedestrian connectivity within the future development is indicated in **Figure 10** which shows the pedestrian connectivity between different floors and blocks, as well as the key external linkages to the surrounding developments and public walkways. Pedestrian connections with the surrounding areas are indicated in **Figure 11** with elevated linkages to the existing and planned footbridge systems and nearby developments.

Elevated Landscaped Walkways

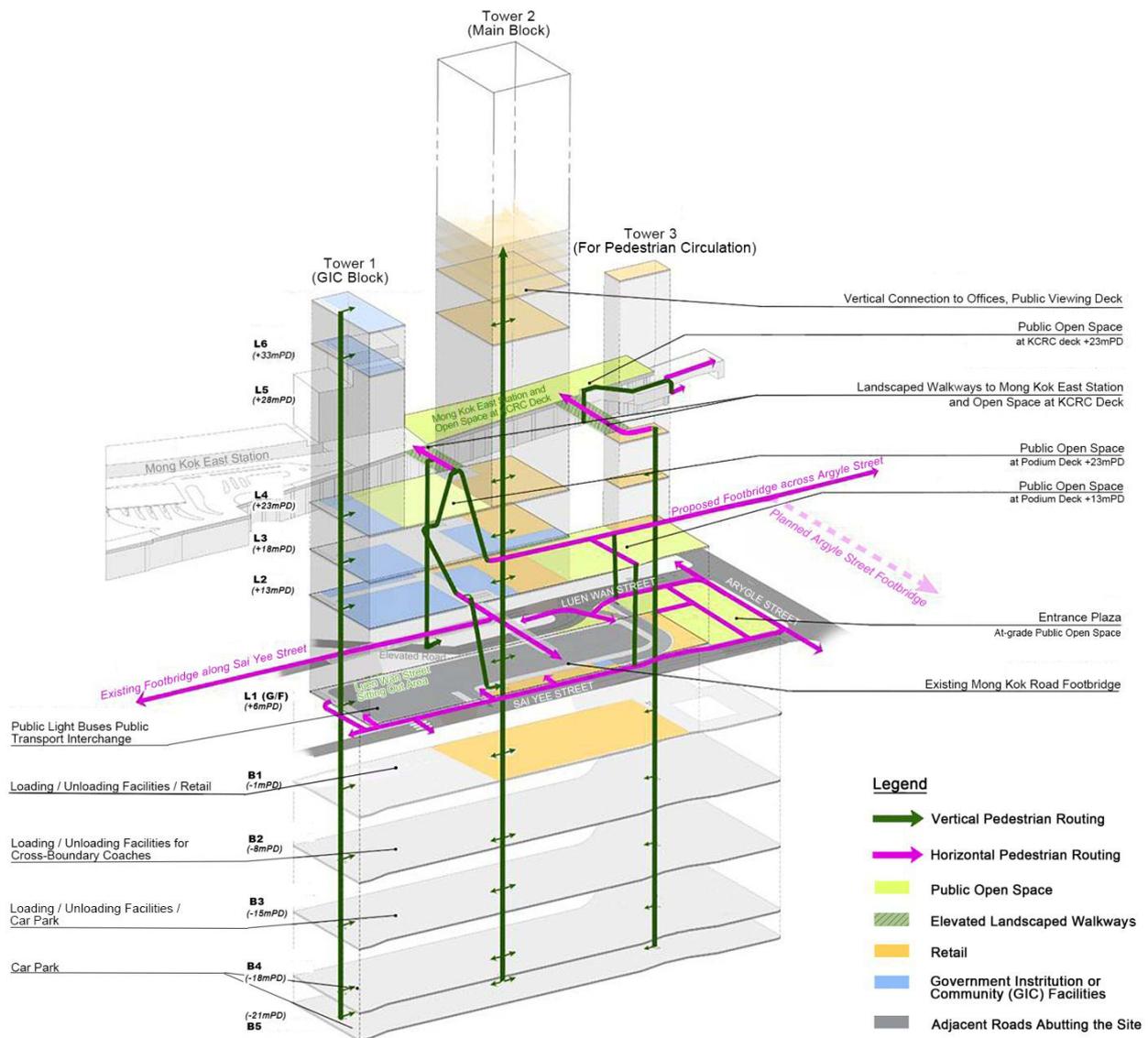
- 3.3.15 Two elevated landscaped walkways are proposed to be provided to connect the MKES platform at about 22mPD and the future development. The design is to maximize the width of the landscaped space to improve the walking environment and to take due consideration of the existing constraints including the extents of the tree protection zone (TPZ) of the OVTs at the Luen Wan Street Sitting-out Area and the existing structures at Luen Wan Street.
- 3.3.16 Each elevated landscape walkway is 15m in width which provides alternative choices for pedestrians commuting between MKES and other areas of Mong Kok. They serve different pedestrian groups with one directing pedestrians towards Bute Street to Mong Kok north via existing Mong Kok Road Footbridge and the other towards Argyle Street to Mong Kok south via the proposed footbridge across Argyle Street.

Footbridge connecting to the Existing Mong Kok Road Footbridge

- 3.3.17 A proposed footbridge will connect the future development to the existing Mong Kok Road Footbridge at about 13mPD, allowing pedestrians commuting between the MKES and Mong Kok north area.

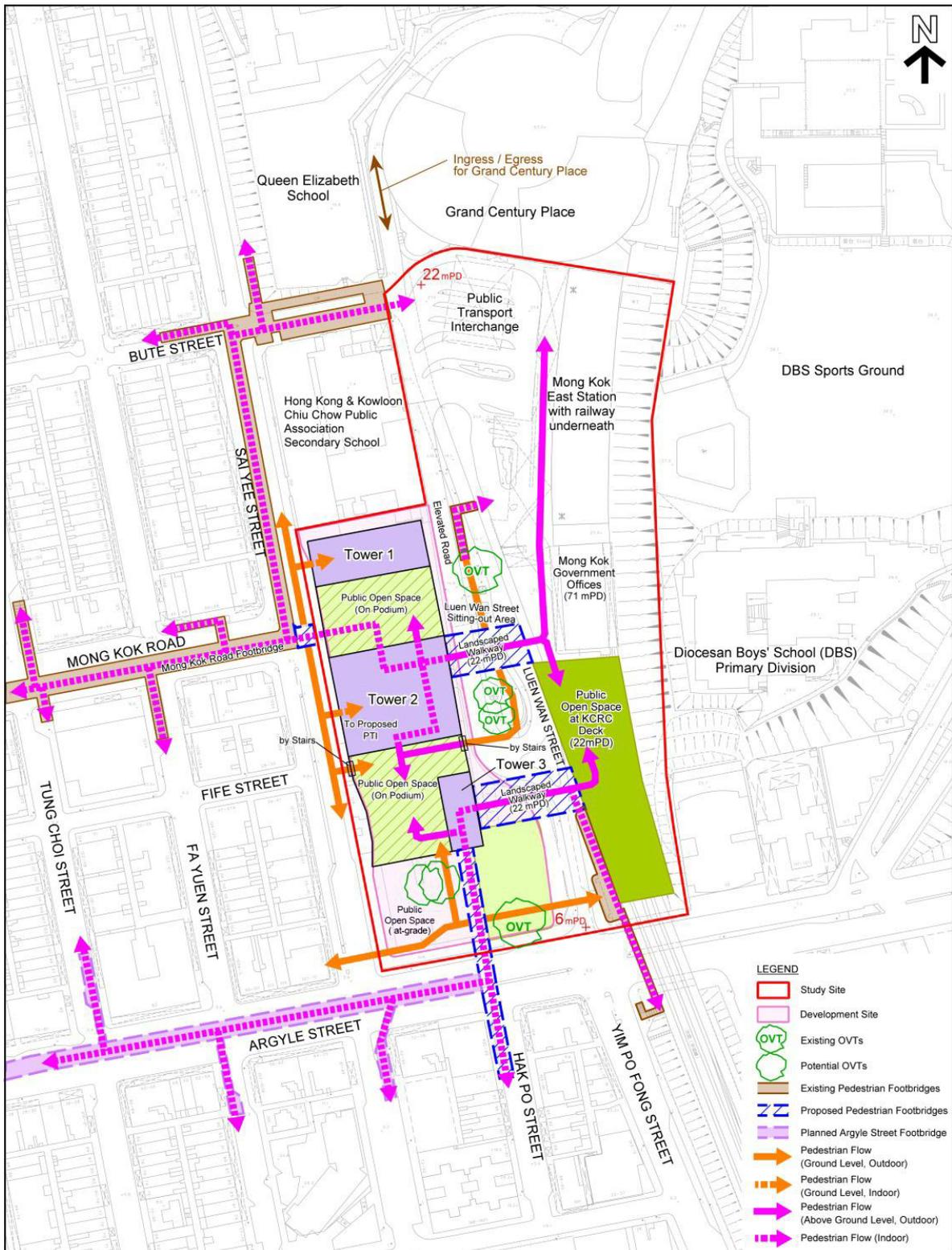
Footbridge Across Argyle Street

3.3.18 A footbridge is proposed to connect the podium of the future development across Argyle Street to Mong Kok area south. A connection point will be reserved at the concerned footbridge for future connection with the planned Argyle Street Footbridge by the Highways Department to lead public to the wider area of Mong Kok south. According to the notional revised RDS, the proposed footbridge will connect the southern low-rise block on top of the podium within the future development (**Figures 10 and 11**).



(Notional Scheme - Indicative Only)

Figure 10: Pedestrian Connectivity within and from the Development



(Notional Scheme - Indicative Only)

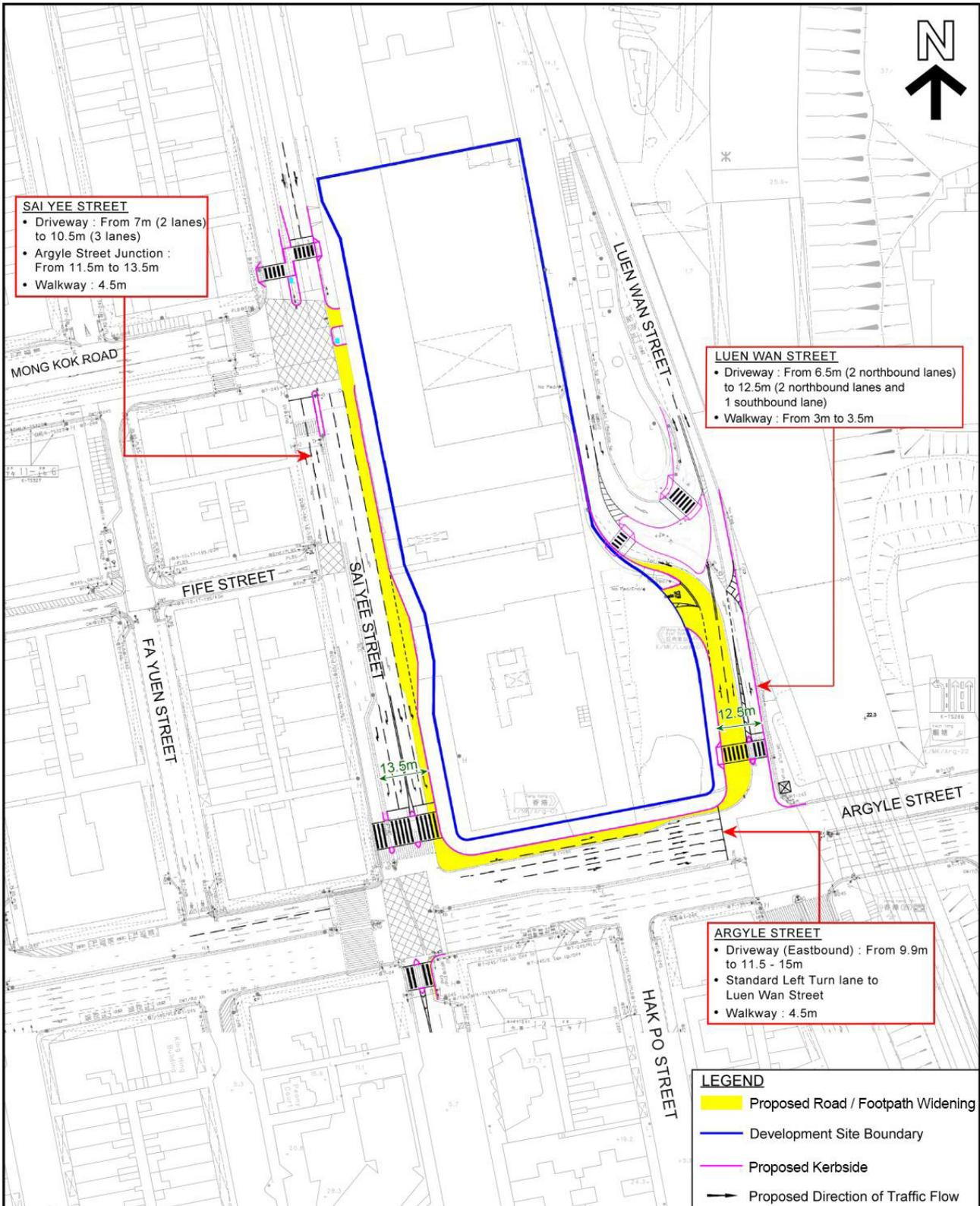
Figure 11: Pedestrian Connectivity between the Proposed Development and Surroundings

Barrier-Free Accesses

- 3.3.19 Barrier-free vertical accesses with aged friendly design will be provided in the future development, which include the lift cores of the office block providing access to all levels of the development, the lift and escalator systems in the GIC block for commuting within the GIC block, the podium and the basement floors, the lift and escalator systems in the southern low-rise block which serves as a hub for pedestrians with connections to the proposed footbridge across Argyle Street, the elevated landscape walkways, the podium, the at-grade POS as well as the basement floors of the future development.
- 3.3.20 All the pedestrian routes within the future development are designed to be barrier-free and all major internal and external pedestrian routes of the future development will be open 24-hour to the public free of charge.

Road/Footpath Widening Works

- 3.3.21 Redevelopment of the Development Site provides an opportunity for road/footpath widening and junction improvement to address the traffic problems in the area. The sections of Sai Yee Street, Argyle Street and Luen Wan Street abutting the Site are planned to be widened, for both the carriageway and footpath portions. For Sai Yee Street, the southbound carriageway is planned to be widened from about 7m for 2 lanes to 10.5m for 3 lanes. The current 4 approaching lanes at the junction of Argyle Street is planned to be widened from about 11.5m to 13.5m with no change in the number of lanes. For Argyle Street, the width of eastbound (currently about 9.9m) after widening will range from 11.5m to 15m. The existing left-turn flare lane to Luen Wan Street will be extended to a standard lane for left-turn movement. The section of footpath along these two streets abutting the future development will be widened to 4.5m. For Luen Wan Street, between the ingress/egress of the development and Argyle Street is currently a section of 6.5m one-way dual lanes which is planned to be widened to incorporate one more lane with a width ranging from 12m to 12.5m for a total of 3 lanes (2 northbound and 1 southbound). The width of the footpath for this section is planned to be widened from about 3m to 3.5m (**Figure 12**).



(Subject to Engineering Feasibility Study)

Figure 12: Proposed Road/Footpath Widening Works

4. Technical Assessments

- 4.1.1 Broad technical assessments, including structural engineering assessment, traffic and transport impact assessments, landscape and visual impact assessments, air ventilation assessment, initial drainage and sewage impact assessments, initial water supply and utilities impact assessments and sustainability assessment were conducted to ascertain the feasibility of the revised RDS. The observations and conclusions of the key assessments are briefly summarized below.

Traffic and Transport Impact Assessments

- 4.1.2 The proposed development is served by a good mix of public transport services including the railway lines of the MTR Tsuen Wan Line and East Line, buses, PLB and X-B coaches. Traffic improvement measures are proposed to improve the existing traffic conditions in the area including road/footpath widening works at Sai Yee Street/Argyle Street/Luen Wan Street and relocation of some of the existing on-street termini and stopping points of the PLB and X-B coaches in the nearby area to the proposed development.
- 4.1.3 With respect to the road traffic, a total of 12 critical road junctions were identified for Traffic Impact Assessment (TIA) in relation to the proposed development. The TIA concludes that all these road junctions will be operated within capacity in the design year of 2027 with the implementation of the traffic improvement/mitigation measures. The performance of some of these road junctions, especially those covered by the proposed road/footpath widening works, is generally improved in the design case when compared with the reference case.
- 4.1.4 Regarding pedestrian traffic, it is also found that the pedestrian footpaths/walkways in the vicinity will likely be affected by the proposed development. The proposed development will provide connections to the surrounding elevated pedestrian network to divert pedestrian flows through the development to various directions. The pedestrian network will be operated in adequate level in the design year 2027.

4.1.5 To conclude, considering the insignificant increase in employment places arising from the proposed development and its location in a transport hub well served by a wide variety of public transport including MTR Tsuen Wan Line and Kwun Tong Line, East Rail, buses, PLB and X-B coach services, the impact of the development on the patronage of the railway lines is to be minimal. With the implementation of the proposed traffic improvement measures, the proposed development will not induce adverse vehicular and pedestrian traffic impacts to the road network in the vicinity. The proposed development is acceptable from traffic point of view.

Environmental Assessment

4.1.6 Environmental Assessment (EA) was carried out on the aspects of air quality, noise, water quality, waste management and land contamination. While the EA has concluded that with the implementation of appropriate environmental mitigation measures, the revised RDS is environmentally acceptable without any insurmountable problems. Some particular issues have been identified which require specific attention including:

- air quality requirements for the proposed loading/unloading facilities for X-B coaches at basement level of the proposed development;
- the GIC facilities to be provided in the proposed development should be central air-conditioned which do not rely on open windows for ventilation. If open windows for ventilation are proposed, further assessments to study the impacts will be required; and
- potential land contamination activities were found within the FEHD depot and the WSD compound and a detailed land contamination assessment is required.

Landscape Impact Assessment

4.1.7 There are a total of 205 trees identified within the Study Site in the tree survey under the Study, among them, 2 have already been felled due to disease, 162 are to be retained which include 4 OVTs and 2 potential OVTs, 10 are to be transplanted which will be affected by the development and the proposed road works. A total of 31 trees are to be felled, including one potential OVT, which are considered to have low survival rate after transplanting taking account of their health condition and site constraints for transplanting. A total of 121 new heavy standard trees will be planted on street level and podium levels to compensate for the felled trees.

- 4.1.8 Overall, the adverse impacts of the proposed development on landscape resources within the Development Site are limited to tree felling as well as the potential impacts of shading arising from the new buildings of the development and the possible damage to the preserved trees by the exhaust fans of the development. These potential impacts and damages could however be mitigated/addressed with sensitive design of the proposed development.

Visual Impact Assessment

- 4.1.9 The Study Site is situated in a built-up urbanized area, surrounded by buildings of multiple uses in various heights. The high-rise landmark development at the Development Site may be visible from Hong Kong Island through the Victoria Harbour with the backdrop of the Lion Rock and Beacon Hill Ridgelines.
- 4.1.10 From the short-range local viewing points, the proximity of the proposed development and its bulk are likely to have adverse visual impacts on people using the Luen Wan Street Sitting-out Area and the MKES PTI. However, the pedestrian experience is likely to benefit from exposing the OVTs to the streetscape, the coordinated and extended ground level surface of the entrance plaza, open/ semi-open views/ greeneries created at podium/low levels for better visual permeability, as well as the more active street level facades that replace the FEHD depot and WSD compound.
- 4.1.11 From medium and long-range local viewing points, the proposed development is likely to impact views of the sky. Nevertheless, the proposed development will be mostly hidden by existing visual obstructions including buildings and peripheral vegetation. The building height of the proposed development is anticipated to function more prominently as a marker delineating the development as a landmark in the overall skyline of Kowloon.
- 4.1.12 From both regional and strategic viewpoints, the main office tower of the proposed development will be clearly perceivable in the Kowloon skyline and will visibly intrude into the ridgelines. However, the proposed tower's slim morphology is expected to have only limited impact on viewers' perception of the ridgelines horizontal continuity, which is expected to heighten the sense of centrality and significance of the Mong Kok district as a major shopping and entertainment destination for the local residents and visitors.

Air Ventilation Assessment

- 4.1.13 The Air Ventilation Assessment (AVA) indicates that the proposed development can generally achieve a slightly better wind environment on the surrounding areas of the Development Site under both annual and summer conditions due to the downwash effect induced by the high-rise office tower. With the tall office tower being located in the central part of the Development Site and much lower building on its sides, downwash effect is prominent in drawing winds to ventilate the pedestrian level. In addition, with the building separations adjacent to the office tower along Mong Kok Road and Fife Street, wind could travel through the proposed development to penetrate into the densely built-up areas of Mong Kok.

Other Technical Assessments

- 4.1.14 Other technical assessments conducted including structural engineering assessment, initial drainage and sewage assessments, initial water supply and utilities impact assessments and sustainability assessment all conclude that generally, with the incorporation of appropriate mitigation measures, the notional revised RDS is technically feasible without any insurmountable problems.

5. Implementation Programme

- 5.1.1 There are public works and public facilities proposed within or near the Development Site. Gazettal is required for works including road/footpath widening and footbridges construction. Amendments to the Mong Kok OZP to facilitate the proposed development are also necessary. Main development parameters, requirements for the provision of various public facilities, as well as key planning and design principles and considerations will be incorporated into the OZP and lease conditions as appropriate to ensure the proposed development would conform with the requirements.
- 5.1.2 An Engineering Feasibility Study (EFS) for the proposed road/footpath widening works (at the sections of Sai Yee Street, Argyle Street and Luen Wan Street abutting the Development Site) and footbridges (the two elevated landscaped walkways to MKES deck and the two footbridges connecting the future development to Mong Kok Road Footbridge and to Mong Kok area south across Argyle Street) would be conducted to facilitate gazettal under the Road (Works, Use and Compensation) Ordinance (Cap. 370) before redevelopment of the Site.
- 5.1.3 The existing WSD compound and FEHD depot will be relocated to Tin Shui Wai and West Kowloon Reclamation Area respectively to release the Site for redevelopment. The demolition works for the existing structures on the Site are scheduled for completion by the third quarter of 2020.