



圖例
NOTATION

ZONES

COMMERCIAL	C	商業
COMPREHENSIVE DEVELOPMENT AREA	CDA	綜合發展區
RESIDENTIAL (GROUP A)	R(A)	住宅 (甲類)
RESIDENTIAL (GROUP B)	R(B)	住宅 (乙類)
GOVERNMENT, INSTITUTION OR COMMUNITY	GIC	政府、機構或社區
OPEN SPACE	O	休憩用地
OTHER SPECIFIED USES	OU	其他指定用途
CONSERVATION AREA	CA	自然保育區
COUNTRY PARK	CP	郊野公園

COMMUNICATIONS

RAILWAY AND STATION (ELEVATED)		鐵路及車站 (高架)
LIGHT RAIL AND STOP		輕鐵及車站
MAJOR ROAD AND JUNCTION		主要道路及路口
ELEVATED ROAD		高架道路
RAILWAY RESERVE		鐵路專用範圍

MISCELLANEOUS

BOUNDARY OF PLANNING SCHEME		規劃範圍界線
PLANNING AREA NUMBER	③	規劃區編號

土地用途及面積一覽表
SCHEDULE OF USES AND AREAS

USES	大約面積及百分比 APPROXIMATE AREA & %		用途
	公頃 HECTARES	% 百分比	
COMMERCIAL	3.44	0.85	商業
COMPREHENSIVE DEVELOPMENT AREA	13.98	3.44	綜合發展區
RESIDENTIAL (GROUP A)	102.73	25.29	住宅 (甲類)
RESIDENTIAL (GROUP B)	39.65	9.76	住宅 (乙類)
GOVERNMENT, INSTITUTION OR COMMUNITY	26.91	6.62	政府、機構或社區
OPEN SPACE	42.69	10.51	休憩用地
OTHER SPECIFIED USES	5.86	1.44	其他指定用途
CONSERVATION AREA	3.75	0.92	自然保育區
COUNTRY PARK	61.52	15.14	郊野公園
DRAINAGE CHANNEL	17.21	4.24	排水道
MAJOR ROAD ETC.	88.49	21.79	主要道路等
TOTAL PLANNING SCHEME AREA	406.23	100.00	規劃範圍總面積

夾附的《註釋》屬這份圖則的一部分
THE ATTACHED NOTES ALSO FORM PART OF THIS PLAN

行政長官會同行政會議於2022年4月12日 根據城市
規劃條例第9(1)(a)條核准的圖則
APPROVED BY THE CHIEF EXECUTIVE IN COUNCIL UNDER
SECTION 9(1)(a) OF THE TOWN PLANNING ORDINANCE ON
12 APRIL 2022

Ms Wendy LEUNG 梁嘉儀女士
CLERK TO THE EXECUTIVE COUNCIL 行政會議秘書

香港城市規劃委員會依據城市規劃條例擬備的天水圍分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
TIN SHUI WAI - OUTLINE ZONING PLAN

SCALE 1:5000 比例尺



規劃署遵照城市規劃委員會指示擬備
PREPARED BY THE PLANNING DEPARTMENT UNDER
THE DIRECTION OF THE TOWN PLANNING BOARD

圖則編號
PLAN No. S/TSW/16

APPROVED-DRAFT TIN SHUI WAI OUTLINE ZONING PLAN NO. S/TSW/16A

(Being ~~an Approved~~ *a Draft* Plan for the Purposes of the Town Planning Ordinance)

NOTES

(N.B. These form part of the Plan)

- (1) These Notes show the uses or developments on land falling within the boundaries of the Plan which are always permitted and which may be permitted by the Town Planning Board, with or without conditions, on application. Where permission from the Town Planning Board for a use or development is required, the application for such permission should be made in a prescribed form. The application shall be addressed to the Secretary of the Town Planning Board, from whom the prescribed application form may be obtained.
- (2) Any use or development which is always permitted or may be permitted in accordance with these Notes must also conform to any other relevant legislation, the conditions of the Government lease concerned, and any other Government requirements, as may be applicable.
- (3)
 - (a) No action is required to make the existing use of any land or building conform to this Plan until there is a material change of use or the building is redeveloped.
 - (b) Any material change of use or any other development (except minor alteration and/or modification to the development of the land or building in respect of the existing use which is always permitted) or redevelopment must be always permitted in terms of the Plan or, if permission is required, in accordance with the permission granted by the Town Planning Board.
 - (c) For the purposes of subparagraph (a) above, “existing use of any land or building” means –
 - (i) before the publication in the Gazette of the notice of the first statutory plan covering the land or building (hereafter referred as ‘the first plan’),
 - a use in existence before the publication of the first plan which has continued since it came into existence; or
 - a use or a change of use approved under the Buildings Ordinance which relates to an existing building; and
 - (ii) after the publication of the first plan,
 - a use permitted under a plan which was effected during the effective period of that plan and has continued since it was effected; or

- a use or a change of use approved under the Buildings Ordinance which relates to an existing building and permitted under a plan prevailing at the time when the use or change of use was approved.
- (4) Except as otherwise specified by the Town Planning Board, when a use or material change of use is effected or a development or redevelopment is undertaken, as always permitted in terms of the Plan or in accordance with a permission granted by the Town Planning Board, all permissions granted by the Town Planning Board in respect of the site of the use or material change of use or development or redevelopment shall lapse.
- (5) Road junctions, alignments of roads and railway tracks, and boundaries between zones may be subject to minor adjustments as detailed planning proceeds.
- (6) Temporary uses (expected to be 5 years or less) of any land or building are always permitted as long as they comply with any other relevant legislation, the conditions of the Government lease concerned, and any other Government requirements, and there is no need for these to conform to the zoned use or these Notes. For temporary uses expected to be over 5 years, the uses must conform to the zoned use or these Notes.
- (7) The following uses or developments are always permitted on land falling within the boundaries of the Plan except (a) where the uses or developments are specified in Column 2 of the Notes of individual zones or (b) as provided in paragraph (8) in relation to areas zoned “Conservation Area”:
- (a) provision, maintenance or repair of plant nursery, amenity planting, open space, rain shelter, refreshment kiosk, road, bus/light rail/public light bus stop or lay-by, cycle track, light rail track, taxi rank, nullah, public utility pipeline, electricity mast, lamp pole, telephone booth, telecommunications radio base station, automatic teller machine and shrine;
 - (b) geotechnical works, local public works, road works, sewerage works, drainage works, environmental improvement works, marine related facilities, waterworks (excluding works on service reservoir) and such other public works co-ordinated or implemented by Government; and
 - (c) maintenance or repair of watercourse and grave.
- (8) In areas zoned “Conservation Area”,
- (a) the following uses or developments are always permitted:
 - (i) maintenance or repair of plant nursery, amenity planting, sitting out area, rain shelter, refreshment kiosk, road, watercourse, nullah, public utility pipeline, electricity mast, lamp pole, telephone booth, shrine and grave; and

- (ii) geotechnical works, local public works, road works, sewerage works, drainage works, environmental improvement works, marine related facilities, waterworks (excluding works on service reservoir) and such other public works co-ordinated or implemented by Government; and

- (b) the following uses or developments require permission from the Town Planning Board:

provision of plant nursery, amenity planting, sitting out area, rain shelter, refreshment kiosk, footpath, public utility pipeline, electricity mast, lamp pole, telephone booth and shrine.

- (9) In any area shown as 'Road', all uses or developments except those specified in paragraph (7) above and those specified below require permission from the Town Planning Board:

toll plaza, on-street vehicle park and railway track.

- (10) Unless otherwise specified, all building, engineering and other operations incidental to and all uses directly related and ancillary to the permitted uses and developments within the same zone are always permitted and no separate permission is required.
- (11) In these Notes, "existing building" means a building, including a structure, which is physically existing and is in compliance with any relevant legislation and the conditions of the Government lease concerned.

Schedule of Uses

	<u>Page</u>
COMMERCIAL	1
COMPREHENSIVE DEVELOPMENT AREA	3
RESIDENTIAL (GROUP A)	6
RESIDENTIAL (GROUP B)	9
GOVERNMENT, INSTITUTION OR COMMUNITY	12
OPEN SPACE	13
OTHER SPECIFIED USES	
LRT Terminus	14
Bus Terminus	15
For All Other Sites (Not Listed Above)	16
CONSERVATION AREA	17
COUNTRY PARK	19

COMMERCIAL

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Ambulance Depot	Broadcasting, Television and/or Film Studio
Commercial Bathhouse/Massage Establishment	Flat
Eating Place	Government Refuse Collection Point
Educational Institution	Hospital
Exhibition or Convention Hall	Petrol Filling Station
Government Use (not elsewhere specified)	Residential Institution
Hotel	
Information Technology and Telecommunications Industries	
Institutional Use (not elsewhere specified)	
Library	
Off-course Betting Centre	
Office	
Place of Entertainment	
Place of Recreation, Sports or Culture	
Private Club	
Public Clinic	
Public Convenience	
Public Transport Terminus or Station	
Public Utility Installation	
Public Vehicle Park (excluding container vehicle)	
Recyclable Collection Centre	
Religious Institution	
Rural Committee/Village Office	
School	
Shop and Services	
Social Welfare Facility	
Training Centre	
Utility Installation for Private Project	
Wholesale Trade	

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COMMERCIAL (Cont'd)

Planning Intention

This zone is intended primarily for commercial developments, which may include shop, services, place of entertainment and eating place, functioning mainly as local shopping centres serving the immediate neighbourhood.

Remarks

- (a) On land designated “Commercial” at Tin Shui Wai Town Lot (TSWTL) No. 4, no new development, or addition, alteration and/or modification to or redevelopment of an existing building:
 - (i) shall result in a total development and/or redevelopment in excess of a maximum gross floor area of 135,000m²; and
 - (ii) the distribution of the non-domestic gross floor area amongst the sites under this zone and the “Residential (Group B)” sites at TSWTLs No. 1, 2, 3, 5, 6 and 7 would be controlled by the submission of Master Layout Plans.
- (b) In determining the maximum gross floor area for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker’s office, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the gross floor area restriction stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

COMPREHENSIVE DEVELOPMENT AREA

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
	<p>Ambulance Depot</p> <p>Commercial Bathhouse/Massage — Establishment</p> <p>Eating Place</p> <p>Educational Institution</p> <p>Exhibition or Convention Hall</p> <p>Flat</p> <p>Government Refuse Collection Point</p> <p>Government Use (not elsewhere specified)</p> <p>Hospital</p> <p>Hotel</p> <p>House</p> <p>Institutional Use (not elsewhere specified)</p> <p>Library</p> <p>Off-course Betting Centre</p> <p>Office</p> <p>Place of Entertainment</p> <p>Place of Recreation, Sports or Culture</p> <p>Private Club</p> <p>Public Clinic</p> <p>Public Convenience</p> <p>Public Transport Terminus or Station</p> <p>Public Utility Installation</p> <p>Public Vehicle Park (excluding container — vehicle)</p> <p>Recyclable Collection Point</p> <p>Religious Institution</p> <p>Residential Institution</p> <p>School</p> <p>Shop and Services</p> <p>Social Welfare Facility</p> <p>Training Centre</p> <p>Utility Installation for Private Project</p>

(Please see next page)

COMPREHENSIVE DEVELOPMENT AREA (Cont'd)

Planning Intention

~~This zone is intended for comprehensive development/redevelopment of the area for residential and/or commercial uses with the provision of open space and other supporting facilities. The zoning is to facilitate appropriate planning control over the development mix, scale, design and layout of development, taking account of various environmental, traffic, infrastructure and other constraints.~~

Remarks

- ~~(a) Pursuant to section 4A(2) of the Town Planning Ordinance, and except as otherwise expressly provided that it is not required by the Town Planning Board, an applicant for permission for development on land designated "Comprehensive Development Area" ("CDA") shall prepare a Master Layout Plan for the approval of the Town Planning Board and include therein the following information:~~
- ~~—— (i) the area of the proposed land uses, the nature, position, dimensions, and heights of all buildings to be erected in the area;~~
 - ~~—— (ii) the proposed total site area and gross floor area for various uses, total number of flats and flat size, where applicable;~~
 - ~~—— (iii) the details and extent of the Government, institution or community (GIC) and recreational facilities, public transport and parking facilities, and open space to be provided within the area;~~
 - ~~—— (iv) the alignment, widths and levels of any roads proposed to be constructed within the area;~~
 - ~~—— (v) the landscape and urban design proposals within the area;~~
 - ~~—— (vi) programmes of development in detail;~~
 - ~~—— (vii) an environmental assessment report to examine any possible environmental problems that may be caused to or by the proposed development during and after construction and the proposed mitigation measures to tackle them;~~
 - ~~—— (viii) a sewerage impact assessment report to examine any possible sewerage problems that may be caused by the proposed development and the proposed mitigation measures to tackle them;~~
 - ~~—— (ix) a traffic impact assessment report to examine any possible traffic problems that may be caused by the proposed development and the proposed mitigation measures to tackle them;~~

(Please see next page)

COMPREHENSIVE DEVELOPMENT AREA (Cont'd)

Remarks (Cont'd)

- ~~———— (x) — an air ventilation assessment report to examine any possible air ventilation problems that may be caused by the proposed development and the proposed mitigation measures to tackle them;~~
- ~~———— (xi) — an ecological impact assessment report to examine any impact on the ecological value of the wetland park and the conservation areas, and the proposed mitigation measures to tackle them; and~~
- ~~———— (xii) — such other information as may be required by the Town Planning Board.~~
- ~~(b) — The Master Layout Plan should be supported by an explanatory statement which contains an adequate explanation of the development proposal, including such information as land tenure, relevant lease conditions, existing conditions of the site, the character of the site in relation to the surrounding areas, principles of layout design, major development parameters, design population, types of GIC facilities, and recreational and open space facilities.~~
- ~~(c) — No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum plot ratio and the maximum building height specified below:~~

<u>Site</u>	<u>Maximum Plot Ratio</u>	<u>Maximum Building Height</u>
“CDA” site in Planning Area 112	1.5	10 storeys over one storey car park
“CDA” site in Planning Area 115		

- ~~(d) — In determining the maximum plot ratio for the purposes of paragraph (c) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker’s office, or caretaker’s quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.~~
- ~~(e) — Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and building height restrictions stated in paragraph (c) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.~~

RESIDENTIAL (GROUP A)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Ambulance Depot	Commercial Bathhouse/Massage Establishment
Flat	Eating Place
Government Use (not elsewhere specified)	Educational Institution
House	Exhibition or Convention Hall
Library	Government Refuse Collection Point
Market	Hospital
Place of Recreation, Sports or Culture	Hotel
Public Clinic	Institutional Use (not elsewhere specified)
Public Transport Terminus or Station (excluding open-air terminus or station)	Office
Public Vehicle Park (excluding container vehicle) (on land designated "R(A)1" only)	Petrol Filling Station
Residential Institution	Place of Entertainment
School (in free-standing purpose-designed building only)	Private Club
Social Welfare Facility	Public Convenience
Utility Installation for Private Project	Public Transport Terminus or Station (not elsewhere specified)
	Public Utility Installation
	Public Vehicle Park (excluding container vehicle) (not elsewhere specified)
	Religious Institution
	School (not elsewhere specified)
	Shop and Services (not elsewhere specified)
	Training Centre

(Please see next page)

RESIDENTIAL (GROUP A) (Cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
<p>In addition, the following uses are always permitted (a) on the lowest three floors of a building, taken to include basements; or (b) in the purpose-designed non-residential portion of an existing building, both excluding floors containing wholly or mainly car parking, loading/unloading bays and/or plant room:</p>	
<p>Eating Place Educational Institution Institutional Use (not elsewhere specified) Off-course Betting Centre Office Place of Entertainment Private Club Public Convenience Recyclable Collection Centre School Shop and Services Training Centre</p>	

Planning Intention

This zone is intended primarily for high-density residential developments. Commercial uses are always permitted on the lowest three floors of a building or in the purpose-designed non-residential portion of an existing building.

Remarks

- (a) On land designated “Residential (Group A) 1”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 6.9 and a maximum building height of 165mPD, or the plot ratio and height of the existing building, whichever is the greater.
- (b) *On land designated “Residential (Group A) 2”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic plot ratio of 6, a maximum non-domestic plot ratio of 0.4 and a maximum building height of 150mPD, or the plot ratio and height of the existing building,*

whichever is the greater.

- (bc) In determining the maximum plot ratio for the purposes of paragraph (a), any floor space that is constructed or intended for use solely as public vehicle parks, public transport facilities and Government, institution or community facilities, as required by the Government, may be disregarded.
- (d) *In determining the maximum plot ratio for the purposes of paragraph (b), any floor space that is constructed or intended for use solely as Government, institution or community facilities, as required by the Government, may be disregarded.*
- (ee) In determining the maximum plot ratio for the purposes of paragraphs (a) **and** (b) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (ef) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio ~~and~~/ building height restrictions stated in paragraphs (a) **and** (b) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RESIDENTIAL (GROUP B)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
<p><i>Eating Place (on land designated “R(B)3” and “R(B)4” only)</i></p> <p>Flat</p> <p>Government Use (Police Reporting Centre, Post Office only)</p> <p>House</p> <p>Library</p> <p><i>Public Vehicle Park (excluding container vehicle) (on land designated “R(B)4” only)</i></p> <p>Residential Institution</p> <p>School (in free-standing purpose-designed building, <i>and kindergarten and nursery on land designated “R(B)4” only</i>)</p> <p><i>Shop and Services (on land designated “R(B)3” and “R(B)4” only)</i></p> <p>Utility Installation for Private Project</p>	<p>Ambulance Depot</p> <p>Eating Place (<i>not elsewhere specified</i>)</p> <p>Educational Institution</p> <p>Government Refuse Collection Point</p> <p>Government Use (not elsewhere specified)</p> <p>Hospital</p> <p>Hotel</p> <p>Institutional Use (not elsewhere specified)</p> <p>Off-course Betting Centre</p> <p>Office</p> <p>Petrol Filling Station</p> <p>Place of Entertainment</p> <p>Place of Recreation, Sports or Culture</p> <p>Private Club</p> <p>Public Clinic</p> <p>Public Convenience</p> <p>Public Transport Terminus or Station</p> <p>Public Utility Installation</p> <p>Public Vehicle Park (excluding container vehicle) (<i>not elsewhere specified</i>)</p> <p>Recyclable Collection Centre</p> <p>Religious Institution</p> <p>School (not elsewhere specified)</p> <p>Shop and Services (<i>not elsewhere specified</i>)</p> <p>Social Welfare Facility</p> <p>Training Centre</p>

(Please see next page)

RESIDENTIAL (GROUP B) (Cont'd)

Planning Intention

This zone is intended primarily for medium-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Town Planning Board.

Remarks

- (a) On land designated “Residential (Group B)”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum gross floor area (GFA) specified below, or the GFA of the existing building, whichever is the greater:

<u>Town Lot No.</u>	<u>Planning Area No.</u>	<u>Maximum Domestic GFA</u>	<u>Maximum Non-domestic GFA</u>
TSWTL 1	8	209,718m ²	The total non-domestic GFA of TSWTLs No. 1, 2, 3, 5, 6 & 7 and the sites zoned “Commercial” at TSWTL No. 4 shall not exceed 135,000m ² . The distribution of non-domestic GFA amongst these sites would be controlled by the submission of Master Layout Plans.
TSWTL 2	11	107,248m ²	
TSWTL 3	19	92,781m ²	
TSWTL 5	27	} The total domestic } GFA of TSWTLs } No. 5, 6 & 7 shall not exceed 562,253m ²	
TSWTL 6	28		
TSWTL 7	24		

- (b) On land designated “Residential (Group B)1”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 5.
- (c) On land designated “Residential (Group B)2”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic gross floor area of 159,206m², a maximum non-domestic gross floor area of 9,051m² and a maximum building height of 159mPD, or the gross floor area and height of the existing building, whichever is the greater.
- (d) ***On land designated “Residential (Group B)3”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum gross floor area of 96,600m² and a maximum building height of 10 storeys over one storey car park, or the gross floor area and height of the existing building, whichever is the greater.***

- (e) ***On land designated “Residential (Group B)4”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum gross floor area of 113,250m² and a maximum building height of 10 storeys over one storey car park, or the gross floor area and height of the existing building, whichever is the greater.***
- (df) In determining the maximum plot ratio/gross floor area for the purposes of paragraphs (a) to (ee) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker’s office, or caretaker’s quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (eg) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/gross floor area/***building height*** restrictions stated in paragraphs (a) to (ee) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- (h) ***Under exceptional circumstances, for a development or redevelopment proposal, minor relaxation of the non-building area restrictions as shown on the Plan may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.***

GOVERNMENT, INSTITUTION OR COMMUNITY

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Ambulance Depot	Animal Boarding Establishment
Animal Quarantine Centre (in Government building only)	Animal Quarantine Centre (not elsewhere specified)
Broadcasting, Television and/or Film Studio	Columbarium
Eating Place (Canteen, Cooked Food Centre only)	Correctional Institution
Educational Institution	Crematorium
Exhibition or Convention Hall	Driving School
Field Study/Education/Visitor Centre	Eating Place (not elsewhere specified)
Government Refuse Collection Point	Flat
Government Use (not elsewhere specified)	Funeral Facility
Hospital	Holiday Camp
Institutional Use (not elsewhere specified)	Hotel
Library	House
Market	Off-course Betting Centre
Place of Recreation, Sports or Culture	Office
Public Clinic	Petrol Filling Station
Public Convenience	Place of Entertainment
Public Transport Terminus or Station	Private Club
Public Utility Installation	Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation
Public Vehicle Park (excluding container vehicle)	Refuse Disposal Installation (Refuse Transfer Station only)
Recyclable Collection Centre	Residential Institution
Religious Institution	Sewage Treatment/Screening Plant
Research, Design and Development Centre	Shop and Services (not elsewhere specified)
School	Utility Installation for Private Project
Service Reservoir	Zoo
Social Welfare Facility	
Training Centre	
Wholesale Trade	

Planning Intention

This zone is intended primarily for the provision of Government, institution or community facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.

OPEN SPACE

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Aviary Barbecue Spot (other than on land designated "Open Space (1)") Field Study/Education/Visitor Centre Park and Garden Pavilion Pedestrian Area Picnic Area Playground/Playing Field (other than on land designated "Open Space (1)") Promenade Public Convenience Sitting Out Area Zoo (other than on land designated "Open Space (1)")	Eating Place Government Refuse Collection Point Government Use (not elsewhere specified) Holiday Camp Place of Entertainment Place of Recreation, Sports or Culture Playground/Playing Field (on land designated "Open Space (1)" only) Private Club Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Religious Institution Service Reservoir Shop and Services Tent Camping Ground Utility Installation for Private Project

Planning Intention

This zone is intended primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of local residents as well as the general public. On land designated "Open Space (1)", the site is intended for passive recreational uses with existing ponds preserved as landscape features.

Remarks

On land designated as "Open Space (1)", no filling of ponds is allowed.

OTHER SPECIFIED USES

Column 1	Column 2
Uses always permitted	Uses that may be permitted with or without conditions on application to the Town Planning Board

For “LRT Terminus” only

Public Transport Terminus or Station
(LRT Terminus only)

Eating Place
Exhibition or Convention Hall
Flat
Government Use (not elsewhere specified)
Hotel
Off-course Betting Centre
Office
Place of Entertainment
Private Club
Public Clinic
Public Utility Installation
Public Vehicle Park
(excluding container vehicle)
Residential Institution
School
Shop and Services
Social Welfare Facility
Utility Installation for Private Project

Planning Intention

This zone is intended primarily for Light Rail Transit (LRT) terminus developments to meet the demand for LRT service in the New Town.

(Please see next page)

OTHER SPECIFIED USES (Cont'd)

Column 1	Column 2
Uses always permitted	Uses that may be permitted with or without conditions on application to the Town Planning Board

For "Bus Terminus" only

Public Transport Terminus or Station
(Bus Terminus only)

Eating Place
Exhibition or Convention Hall
Flat
Government Use (not elsewhere specified)
Hotel
Off-course Betting Centre
Office
Place of Entertainment
Private Club
Public Clinic
Public Utility Installation
Public Vehicle Park
(excluding container vehicle)
Residential Institution
School
Shop and Services
Social Welfare Facility
Utility Installation for Private Project

Planning Intention

This zone is intended primarily for bus terminus development to meet the demand for bus services in the New Town. It will also serve as a transport interchange for buses, the LRT, green mini-buses and public light buses.

(Please see next page)

OTHER SPECIFIED USES (Cont'd)

For All Other Sites (Not Listed Above)

As specified on the Plan

Government Use (not elsewhere specified)
Utility Installation not ancillary to
the Specified Use

Planning Intention

This zone is intended for the provision of ~~a bus depot~~, electric sub-stations, sewage pumping stations, and *a* telephone exchanges.

CONSERVATION AREA

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use (other than Plant Nursery)	Barbecue Spot
Nature Reserve	Field Study/Education/Visitor Centre
Nature Trail	Government Refuse Collection Point
On-Farm Domestic Structure	Government Use (not elsewhere specified)
Picnic Area	Holiday Camp
Wild Animals Protection Area	House (Redevelopment only)
	Public Convenience
	Public Utility Installation
	Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation
	Tent Camping Ground
	Utility Installation for Private Project

Planning Intention

This zoning is intended to protect and retain the existing natural landscape, ecological or topographical features of the area for conservation, educational and research purposes and to separate sensitive natural environment such as Site of Special Scientific Interest or Country Park from the adverse effects of development.

There is a general presumption against development in this zone. In general, only developments that are needed to support the conservation of the existing natural landscape or scenic quality of the area or are essential infrastructure projects with overriding public interest may be permitted.

Remarks

- (a) No redevelopment, including alteration and/or modification, of an existing house shall result in a total redevelopment in excess of the plot ratio, site coverage and height of the existing house.
- (b) Any filling of pond or excavation of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the draft Tin Shui Wai Outline Zoning Plan No. S/TSW/2 without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance.

(Please see next page)

CONSERVATION AREA (Cont'd)

Remarks (Cont'd)

- (c) Any filling of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the draft Tin Shui Wai Outline Zoning Plan No. S/TSW/8 without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance.

COUNTRY PARK

Country Park means a country park or special area as designated under the Country Parks Ordinance (Cap. 208). All uses and developments require consent from the Country and Marine Parks Authority and approval from the Town Planning Board is not required.

~~APPROVED DRAFT~~ TIN SHUI WAI OUTLINE ZONING PLAN NO. S/TSW/16A

EXPLANATORY STATEMENT

EXPLANATORY STATEMENT

<u>CONTENTS</u>	<u>Page</u>
1. INTRODUCTION	1
2. AUTHORITY FOR THE PLAN AND PROCEDURES	1
3. OBJECT OF THE PLAN	3
4. NOTES OF THE PLAN	3
5. BACKGROUND	3
6. THE PLANNING SCHEME AREA	4
7. POPULATION	5
8. OPPORTUNITIES AND CONSTRAINTS	5
9. PLANNING AND DESIGN PRINCIPLE OF THE AREA	5
10. LAND USE ZONINGS	
10.1 Commercial	6
10.2 Comprehensive Development Area	7
10.32 Residential (Group A)	7
10.43 Residential (Group B)	8
10.54 Government, Institution or Community	9
10.65 Open Space	10
10.76 Other Specified Uses	
LRT Terminus	10
Bus Terminus	11
Bus Depot	11
Electric Sub-station	11
Sewage Pumping Station	11
Telephone Exchange	11
10.87 Conservation Area	11
10.98 Country Park	12
11. COMMUNICATIONS	12
12. UTILITY SERVICES	14
13. IMPLEMENTATION	15

APPROVED DRAFT TIN SHUI WAI OUTLINE ZONING PLAN NO. S/TSW/16A

(Being an ~~Approved~~ *a Draft* Plan for the Purposes of the Town Planning Ordinance)

EXPLANATORY STATEMENT

Note : For the purposes of the Town Planning Ordinance, this statement shall not be deemed to constitute a part of the Plan.

1. INTRODUCTION

This Explanatory Statement is intended to assist an understanding of the ~~approved~~ *draft* Tin Shui Wai Outline Zoning Plan (OZP) No. S/TSW/16A. It reflects the planning intention and objectives of the Town Planning Board (the Board) for the various land use zonings of the Plan.

2. AUTHORITY FOR THE PLAN AND PROCEDURES

- 2.1 On 27 May 1993, the Board was directed under section 3(1)(a) of the Town Planning Ordinance (the Ordinance) to prepare a draft statutory plan for Tin Shui Wai.
- 2.2 The draft Tin Shui Wai OZP No. S/TSW/1 was exhibited under section 5 of the Ordinance for public inspection on 21 October 1994. Subsequently, the OZP was amended and the draft Tin Shui Wai OZP No. S/TSW/2 was exhibited for public inspection on 18 July 1997. On 1 December 1998, the Chief Executive in Council (CE in C), under section 9(1)(a) of the Ordinance, approved the draft Tin Shui Wai OZP, which was subsequently renumbered as S/TSW/3.
- 2.3 On 10 October 2000, the CE in C referred the approved Tin Shui Wai OZP No. S/TSW/3 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. Subsequently, the OZP was amended three times and exhibited for public inspection under section 5 or 7 of the Ordinance. On 30 April 2002, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tin Shui Wai OZP, which was subsequently renumbered as S/TSW/7.
- 2.4 On 9 December 2003, the CE in C referred the approved Tin Shui Wai OZP No. S/TSW/7 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. On 28 May 2004, the draft Tin Shui Wai OZP No. S/TSW/8 was exhibited for public inspection under section 5 of the Ordinance. On 15 April 2005, the draft Tin Shui Wai OZP No. S/TSW/9 was exhibited for public inspection under section 7 of the Ordinance.
- 2.5 On 8 November 2005, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tin Shui Wai OZP, which was subsequently renumbered as S/TSW/10. On 26 June 2007, the CE in C referred the approved Tin Shui Wai

OZP No. S/TSW/10 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. Subsequently, the OZP was amended and exhibited for public inspection under section 5 of the Ordinance.

- 2.6 On 15 July 2008, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tin Shui Wai OZP, which was subsequently renumbered as S/TSW/12. On 2 November 2010, the CE in C referred the approved Tin Shui Wai OZP No. S/TSW/12 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended and exhibited for public inspection under section 5 of the Ordinance.
- 2.7 On 16 October 2018, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tin Shui Wai OZP, which was subsequently renumbered as S/TSW/14. On 26 October 2018, the approved Tin Shui Wai OZP No. S/TSW/14 was exhibited under section 9(5) of the Ordinance.
- 2.8 On 25 August 2020, the CE in C referred the approved Tin Shui Wai OZP No. S/TSW/14 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. ~~The reference back of the OZP was notified in the Gazette on 4 September 2020 under section 12(2) of the Ordinance.~~ ***The OZP was then amended and exhibited for public inspection under section 5 of the Ordinance on 7 May 2021.***
- ~~2.9 On 7 May 2021, the draft Tin Shui Wai OZP No. S/TSW/15, mainly incorporating amendments to rezone an area at the junction of Tin Wah Road and Tin Ying Road from “Government, Institution or Community” (“G/IC”) and an area shown as ‘Road’ to “Residential (Group A)1” for public housing development, to rezone a site at the junction of Tin Wing Road and Tin Yan Road from “Undetermined” to “Residential (Group B)2”, and to rezone two strips of land at Tin Yip Road from an area shown as ‘Road’ to “G/IC” as well as from “G/IC” to an area shown as ‘Road’, and corresponding amendments to the Notes, was exhibited for public inspection under section 5 of the Ordinance. During the two-month exhibition period, a total of 3 representations were received. On 16 July 2021, the representations were published for three weeks for public comments and a total of 4 comments on the representations (comments) were received. After giving consideration to the representations and comments on 17 December 2021, the Board decided not to uphold the representations and no amendment should be made to the draft OZP to meet the representations.~~
- 2.10~~9~~ On 12 April 2022, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tin Shui Wai OZP, which was subsequently renumbered as S/TSW/16. On 22 April 2022, the approved Tin Shui Wai OZP No. S/TSW/16 ~~(the Plan)~~ was exhibited for public inspection under section 9(5) of the Ordinance.
- 2.10 ***On 25 January 2024, the Secretary for Development referred the approved Tin Shui Wai OZP No. S/TSW/16 to the Board for amendment under section***

12(1A)(a)(ii) of the Ordinance. The reference back of the OZP was notified in the Gazette on 2 February 2024 under section 12(2) of the Ordinance.

- 2.11** *On XX XXXXX 2024, the draft Tin Shui Wai OZP No. S/TSW/17 (the Plan) was exhibited for public inspection under section 5 of the Ordinance. The amendments on the Plan mainly include (i) the rezoning of a site in Tin Shui Wai Area 14 from “Other Specified Uses” annotated “Bus Depot”, “Government, Institution or Community” (“G/IC”) and an area shown as ‘Road’ to “Residential (Group A)2”; (ii) the rezoning of a site at the junction of Tin Yip Road and Tin Kwai Road from “Other Specified Uses” annotated “Telephone Exchange” to “G/IC”; and other amendments to reflect the current uses and as-built conditions.*

3. OBJECT OF THE PLAN

- 3.1 The object of the Plan is to indicate the broad land-use zonings and the transport networks for the Tin Shui Wai area so that development and redevelopment within the Planning Scheme Area (the Area) can be put under statutory planning control. It also provides the planning framework for preparing more detailed non-statutory plans which form the basis for public works planning and site reservation for various uses.
- 3.2 The Plan is to illustrate the broad principles of development and control. It is a small-scale plan and the transport alignments and boundaries between the land-use zones may be subject to minor adjustments as detailed planning proceeds.
- 3.3 Since the Plan is to show broad land use zonings, there would be situations in which small strips of land not intended for building development purposes and carry no development right under the lease, such as the areas restricted as non-building area or for garden, slope maintenance and access road purposes, are included in the residential zones. The general principle is that such areas should not be taken into account in plot ratio and site coverage calculations. Development within the residential zones should be restricted to building lots carrying development right in order to maintain the character and amenity of Tin Shui Wai area and not to overload the road network in this area.

4. NOTES OF THE PLAN

- 4.1 Attached to the Plan is a set of Notes which shows the types of uses or developments which are always permitted within the Area and in particular zones and which may be permitted by the Board, with or without conditions, on application. The provision for application for planning permission under section 16 of the Ordinance allows greater flexibility in land use planning and control of development to meet changing needs.
- 4.2 For the guidance of the general public, a set of definitions that explains some of the terms used in the Notes may be obtained from the Technical Services

Division of the Planning Department and can be downloaded from the Board's website at <http://www.info.gov.hk/tpb> <http://www.tpb.gov.hk>.

5. **BACKGROUND**

- 5.1 In July 1982, the Government and a private developer - Mightycity Co Ltd. (MCL) reached a joint venture agreement to proceed with an urban development in Tin Shui Wai, Yuen Long. Under the agreement, the Government would acquire the 488 ha Tin Shui Wai landholding (Lot 665 in DD 126) from Tin Shui Wai Development Ltd., a wholly owned subsidiary of MCL, for the development of a new town. This development, however, would initially be concentrated within an area of 169 ha in size, which together with some land bank sites south of Tin Wah Road were known as the Development Zone (DZ).
- 5.2 According to the 1982 Agreement, a Master Development Plan (MDP) was to be prepared for the purposes of delineating the boundaries of the 169 ha of land and to provide a framework for the preparation of detailed layout plans. A planning consultant was commissioned by the Government to prepare the MDP in December 1982. The MDP was endorsed by the then Development Progress Committee (DPC) in June 1984 and adopted by the then Secretary for Lands and Works on 22 June 1984.
- 5.3 The northern part of Tin Shui Wai, known as the Reserve Zone (RZ), has been reserved as land bank to cater for strategic growth. It was subsequently identified by the Government as a solution space to meet the demand for public and private housing in Hong Kong. In September 1994, the Government commissioned a consultancy study to prepare layout plans for the RZ. The study was completed in July 1995 and endorsed by the Committee on Planning and Land Development (CPLD) in August 1995. A ~~Master Development Plan~~ **MDP**, ~~Layout Plans~~ **Layout Plans** and a Preferred Development Concept (PDC) showing how the proposed land uses within the RZ are planned to relate to the existing New Town in the DZ in a coherent manner were prepared under the study.
- 5.4 Following the completion of the preparation of the layout plans, the Study on Engineering Investigations for Development of Areas 3, 30 and 31 of the DZ and the RZ (the Engineering Investigations Study) was commissioned by the Government in November 1995. The objective of the Engineering Investigations Study was to develop in sufficient detail the preliminary design for the provision of a multiplicity of engineering infrastructure, including a feasible implementation programme, to allow further development in Tin Shui Wai to proceed.
- 5.5 The Engineering Investigations Study had concluded that there would be no insurmountable environmental constraints to the further development of Tin Shui Wai, following the implementation of the recommended mitigation measures.

6. THE PLANNING SCHEME AREA

- 6.1 The Area is located in the north-western part of the North West New Territories (NWNT). It is bounded by the Inner Deep Bay Site of Special Scientific Interest (SSSI) and Tin Tsz Road to the north-east and east, Mong Tseng Tsuen and Mong Tseng Wai to the north, Lau Fau Shan to the north-west, the Hung Shui Kiu/Ha Tsuen New Development Area (NDA) to the west and Sheung Cheung Wai to the south. The boundary of the Area is shown in a heavy broken line on the Plan. The Area is about 406.23 ha in size.
- 6.2 The Area consists of flat land which was reclaimed from fish ponds. It is divided into a DZ and a RZ separated by Tin Wah Road. Most of the areas in the DZ have been developed, and population intake in the whole of the DZ has been completed. All the necessary infrastructure, commercial and community facilities in support of the development in the DZ have been in service. The RZ is being developed mainly for residential purposes with the Hong Kong Wetland Park (HKWP) Special Area in the eastern portion serving as a buffer to the environmentally and ecologically sensitive areas of SSSI and fish ponds in the Deep Bay area to its east and north-east, which have been designated for inclusion in the Ramsar List of Wetlands of International Importance (Ramsar Site).

7. POPULATION

Based on the ~~2016~~ **2021** Population by ~~census~~ *Census*, the population of the Area was estimated by Planning Department as about ~~286,150~~ **277,700** persons. It is estimated that the total planned population will be about ~~298,600~~ **299,900** persons.

8. OPPORTUNITIES AND CONSTRAINTS

8.1 Opportunities

Since the Area is reclaimed from fish ponds, opportunities exist for the development of a well-designed new town which is planned comprehensively with little difficulties in meeting the standards stipulated in the Hong Kong Planning Standards and Guidelines (HKPSG).

8.2 Development Constraints

The Area is in close proximity to the environmentally and ecologically sensitive areas of Inner Deep Bay and Mai Po Nature Reserve (MPNR) which have been designated as a Ramsar site for wetland conservation. The northern and eastern portions of the RZ fall within the Wetland Buffer Area, where the proponent for development will have to demonstrate to the Board that ~~it~~ **the proposed development** would have no negative impact on the ecological value of the Deep Bay wetland ecosystem and the MPNR.

9. PLANNING AND DESIGN PRINCIPLE OF THE AREA

- 9.1 In order to achieve an open character of the New Town and to maximize views of the residential units, residential developments in the DZ and RZ are built around the district parks. The district parks provide ample opportunities for both passive and active recreation. Moreover, amenity areas are provided at the sides of the drainage channel to maximize the use of the water features for recreational purposes.
- 9.2 Tin Shui Wai provides a mix of different housing to meet forecast demand. Sufficient open space and community facilities are provided to serve the residents. Higher density development areas are concentrated to the south and west of the RZ and lower density development and conservation areas including the HKWP Special Area are located adjacent to the north and east. The development concept is to provide a buffer to the ecologically sensitive areas of Inner Deep Bay and MPNR. Two distributor roads provide the primary means of vehicular access to the RZ. As a feeder system to the Mass Transit Railway Tuen Ma Line (TML), the Light Rail Transit (LRT) serves both the DZ and the RZ.
- 9.3 Developments in the RZ are fully integrated with the DZ to the south to ensure that development of the New Town proceeds in a coherent and well planned manner.
- 9.4 According to the Environmental Impact Assessment of the Engineering Investigations Study, there is a general presumption against development for petrol filling station and chemical storage facilities in Tin Shui Wai especially in the RZ to avoid petrol and chemicals entering the stormwater system and causing potential contamination to the nearby water bodies, including Inner Deep Bay.

10. LAND USE ZONINGS

10.1 Commercial ("C") : Total Area: 3.44 ha

- 10.1.1 This zone is intended primarily for commercial developments, which may include shop, services, place of entertainment and eating place, functioning mainly as local shopping centres serving the immediate neighbourhood.
- 10.1.2 In the DZ, sites zoned "C" are located in Areas 20 and 23 south of the LRT Terminus. They are known as Tin Shui Wai Town Lot (TSWTL) No. 4. The sites are developed as the town centre providing retail and other commercial facilities to serve Tin Shui Wai New Town. The development and future redevelopment of the zone was governed by the Conditions of Grant and the Master Layout Plan approved under the lease. ~~To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the restrictions~~

~~stated in the Notes may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.~~

- 10.1.3 In the RZ, a site located in Area 108A is zoned “C” and is served by the LRT. Within the zone, retail, office, hotel and other commercial uses are always permitted. This zone has been developed to a hotel with retail facilities.

~~10.2 Comprehensive Development Area (“CDA”) : Total Area: 13.98 ha~~

- ~~10.2.1 This zone is intended for comprehensive development/redevelopment of the area for residential and/or commercial uses with the provision of open space and other supporting facilities. The zoning is to facilitate appropriate planning control over the development mix, scale, design and layout of development, taking account of various environmental, traffic, infrastructure and other constraints. One site in Area 112 and another one in Area 115 in the RZ, which are for comprehensive lower density development, are zoned “CDA” and were sold in 2014. The “CDA” zoning is to ensure proper planning control over the development of the sites, taking into account their proximity to the HKWP Special Area and the conservation areas to the north east, as well as the landscape character and traffic and infrastructural capacities of the surrounding areas.~~

- ~~10.2.2 The development restrictions for the “CDA” sites in terms of maximum plot ratio and maximum building height are stipulated in the Notes for the zone. The “CDA” sites in Areas 112 and 115 are restricted to a maximum plot ratio of 1.5 and a maximum building height of 10 storeys over one storey car park. A stepped height principle should be applied within the “CDA” sites so that building heights should decrease gradually towards the “Country Park” zone to the north east. Government, institution or community (GIC) facilities, open space and other facilities are required to be provided to serve the residents. To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the above plot ratio and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.~~

- ~~10.2.3 Pursuant to section 4A(1) of the Ordinance, any development/redevelopment in this zone would require the approval of the Board. Pursuant to section 4A(2) of the Ordinance, and except as otherwise expressly provided that it is not required by the Board, the applicant should prepare a Master Layout Plan (MLP) together with the information specified in the Notes for consideration of the Board. The approved MLP shall be made available for public inspection in the Land Registry pursuant to section 4A(3) of the Ordinance.~~

10.32 Residential (Group A) (“R(A)”) : Total Area: ~~402.73~~ **104.22** ha

10.2.1 This zone is intended primarily for high-density residential developments. Commercial uses are always permitted on the lowest three floors of a building or in the purpose-designed non-residential portion of an existing building. Most sites zoned “R(A)” in the DZ and RZ have been developed into residential uses. There are 10 existing Public Rental Housing estates, including Tin Heng Estate, Tin Chak Estate, Tin Yat Estate, Tin Yan Estate, Tin Yuet Estate, Tin Ching Estate, Tin Wah Estate, Tin Shui Estate, Tin Yiu Estate and Tin Tsz Estate. There are also 6 Home Ownership Scheme (namely Tin Fu Court, Tin Chung Court, Tin Oi Court, Tin Shing Court, Tin Yau Court and Tin Lai Court) and a Private Sector Participation Scheme (PSPS) development (namely Grandeur Terrace). A wide range of facilities including primary and secondary schools, community centres, children and youth centres, public transport interchanges and local open spaces have been provided within this zone to serve the residents. There ~~is~~ **are** ~~one~~ **two** sub-areas within this zone:

Residential (Group A) 1 (“R(A)1”) : Total Area: 1.13 ha

- (a) The “R(A)1” zone at the junction of Tin Wah Road and Tin Ying Road is intended for public housing development. GIC facilities, including kindergarten(s), local open space as well as retail facility will be provided within the site. The area is subject to a maximum plot ratio of 6.9 and a maximum building height of 165mPD.
- (b) In determining the maximum plot ratio of the development and/or redevelopments, any floor space that is constructed or intended for use solely as public vehicle parks, public transport facilities and GIC facilities, as required by the Government, may be disregarded to facilitate the provision of these facilities.
- (c) An Air Ventilation Assessment – Expert Evaluation (AVA-EE) has been carried out for the site and concluded that design measures, including building separations and setbacks, would alleviate the potential air ventilation impacts on the surrounding wind environment. A quantitative AVA shall be carried out, if required, at the detailed design stage. Requirements of the design measures and quantitative AVA shall be incorporated in the planning brief for implementation as appropriate.
- (d) A planning brief setting out the planning parameters and the design requirements of public housing development at this zone will be provided to guide its future development.

Residential (Group A) 2 (“R(A)2”) : Total Area: 1.48 ha

- (e) *The “R(A)2” zone in Area 14 is intended for private housing development. GIC and retail facilities are also intended to be provided within the site. The area is subject to a maximum domestic plot ratio of 6, a maximum non-domestic plot ratio of 0.4 and a maximum building height of 150mPD.*
- (f) *In determining the maximum plot ratio of the development and/or redevelopments, any floor space that is constructed or intended for use solely as GIC facilities, as required by the Government, may be disregarded to facilitate the provision of these facilities.*
- ~~(e) — To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual merits.~~

10.2.2 *The plot ratio control under “R(A)2” zone is regarded as being stipulated in a “new or amended statutory plan” according to the Joint Practice Note No. 4 “Development Control Parameters Plot Ratio/Gross Floor Area”, and shall be subject to the streamlining arrangements stated therein.*

10.43 Residential (Group B) (“R(B)”) : Total Area: 39.65 53.64 ha

- 10.43.1 This zone is intended primarily for medium-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Board.
- 10.43.2 The private residential development sites zoned “R(B)” within the DZ are divided into 6 lots, namely TSWTLs No. 1, 2, 3, 5, 6 and 7, which are developed into Kingswood Villas. Private residential developments in these 6 lots are restricted to a maximum domestic gross floor area (GFA) of 972,000m². The total non-domestic GFA of these 6 lots and the sites zoned “C” at TSWTL No. 4 shall not exceed 135,000m². The distribution of the permitted GFA is governed by the MLPs under the lease and future redevelopment will also be governed by conditions set out in the Conditions of Grant.
- 10.43.3 Two sites are zoned “R(B)1” in Areas 104 and 108B in the RZ. They are restricted to a maximum plot ratio of 5. Area 108B has been developed into Vianni Cove, a private residential development. Area 104 has been developed into a public rental housing named Tin Ching Estate.

10.43.4A site is zoned “R(B)2” in Area 33 in the DZ. It is restricted to a maximum domestic GFA of 159,206m², a maximum non-domestic GFA of 9,051m² and a maximum building height of 159mPD. The site has been developed into a private residential development named Central Park Towers.

10.3.5 *Two sites are zoned “R(B)3” and “R(B)4” in Areas 115 and 112 respectively in the RZ. The site in Area 115 is restricted to a maximum GFA of 96,600m² and a maximum building height of 10 storeys over one storey car park, whereas the site in Area 112 is restricted to a maximum GFA of 113,250m² and a maximum building height of 10 storeys over one storey car park, in accordance with the leases for both sites. A non-building area (NBA) with a width of 30m, which has also been incorporated in the leases, is designated along the eastern boundary of both sites to provide a buffer from the HKWP. Besides, a 35m-wide breezeway extending from Tin Kwai Road and a 40m-wide breezeway extending from Tin Shui Road should be maintained in Areas 115 and 112 respectively to facilitate wind penetration into the town centre. A stepped-height principle should also be applied within the sites so that building heights would decrease gradually towards the HKWP to the north-east. As both sites are subject to traffic noise impacts caused by surrounding roads and the LRT, adequate noise mitigation measures should be provided. Areas 115 and 112 have been developed into private residential developments named Wetland Seasons Park and Wetland Seasons Bay respectively.*

~~10.4.5 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the above restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.~~

10.54 Government, Institution or Community (“G/IC”) : Total Area: ~~26.94~~ 26.78 ha

10.54.1 The zone is intended primarily for the provision of GIC facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.

10.54.2 Major existing facilities include a sports ground in Area 12, an indoor recreation centre, a swimming pool and a special school in Area 14, an indoor recreation centre in Area 101, a community health centre and a sand court in Area 109, a health centre in Area 26, a divisional police station in Area 4, a Food and Environmental Hygiene Department Vehicle Depot, an electric sub-station, ~~and~~ a hospital *and a special school* in Area 32 and two fire and ambulance stations in Areas 4 and

112 respectively, as well as primary and secondary schools in various Planning Areas.

~~10.54.3~~Major proposed facilities include a divisional police station in Area 101, ~~a special school in Area 32, a swimming pool in Area 107,~~ a planned Heritage Conservation and Resource Centre cum Sports Centre in Area 109, and primary and secondary schools in various Planning Areas.

10.65 Open Space (“O”) : Total Area: 42.69 ha

~~10.65.1~~This zone is intended primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of local residents as well as the general public.

~~10.65.2~~Major visual corridors have also been reserved in the Area to provide a visual linkage between the New Town and the surrounding rural landscape.

~~10.65.3~~Major open space provisions include the existing Tin Shui Wai Park in Area 22, Tin Yip Road Park in Area 117 and Tin Sau Road Park in Area 107 incorporating a visual corridor running in a north-west to south-east direction to provide the visual link with Lau Fau Shan and Wang Chau. Areas 29 and 33A have been developed to a district square and Area 25B has been developed to an open space. Area 108A is developed to a temporary rugby field. A swimming pool has been planned in Area 107.

~~10.65.4~~Local open spaces and amenity areas are provided within developments in the residential or commercial zones to enhance the landscape character of the New Town.

~~10.65.5~~Two sites in Areas 122 and 123 are zoned “O(1)” and reserved for passive recreational uses. There are some existing ponds on site which should be preserved as landscape features and incorporated into the open space design in order to minimize the adverse impact on the wetland habitats of the existing ponds. No filling of ponds shall be undertaken within the “O(1)” zone.

10.76 Other Specified Uses (“OU”) : Total Area: ~~5.86~~ 4.69 ha

As part of the infrastructure of the New Town and to provide public services to the wider region of NWNT, certain sites are reserved for specific uses. The sites zoned “OU” on the Plan include the following as annotated on the Plan:

(a) LRT Terminus

Two LRT termini are located at TSWTL No. 23 (adjacent to Area 33) and in Area 106 respectively. A residential development above the LRT terminus at TSWTL No. 23 has been approved by the Board in

June 2016 and being implemented. The LRT terminus in Area 106 should be covered for noise mitigation purpose. In view of the central location of Area 106 in the RZ, there is potential for retail/office development above the LRT terminus. A low-rise retail/commercial complex above the LRT terminus in Area 106 may be permitted on application to the Board, provided that such development would have insignificant impacts on the environment and traffic and infrastructural capacities of the area.

(b) Bus Terminus

A bus terminus has been constructed in Area 33 to meet the demand for bus services in the New Town. It also serves as a transport interchange for buses, the LRT, green mini-buses and public light buses.

~~(e)~~ Bus Depot

~~A bus depot has been developed in Area 14 at the south-eastern part of the New Town.~~

~~(d)~~(c) Electric Sub-Station

An electric sub-station in Area 3 is already in operation. Another electric sub-station has also been proposed in Area 120 to serve the RZ.

~~(e)~~(d) Sewage Pumping Station

Two sewage pumping stations in Areas 14 and 101 are in operation to handle sewage disposal of the New Town.

~~(f)~~(e) Telephone Exchange

A telephone exchange in Area 14 at the south-eastern part of the New Town to meet the demand for telecommunications services of Tin Shui Wai is already in operation ~~and another one is proposed in Area 109 to serve the RZ.~~

10.87 Conservation Area ("CA") : Total Area: 3.75 ha

10.87.1 The planning intention of this zone is to protect and retain the existing natural landscape, ecological or topographical features of the area for conservation, educational and research purposes and to separate sensitive natural environment from the adverse effects of development. There is a general presumption against development in this zone. In general, only developments that are needed to support the conservation of the existing natural landscape or scenic quality of the area or are essential infrastructure projects with overriding public interest may be permitted.

10.87.2 Uses in support of the conservation purposes such as nature reserve and nature trail are permitted as of right. Only a selective range of uses such as public convenience and tent camping ground which would have insignificant impact on the ecology, environment and infrastructural provision of the area may be permitted with or without conditions on application to the Board.

10.87.3 The areas under the zoning comprise mature trees and topographical features, which are of landscape and ecological value. They also serve to separate environmentally and ecologically sensitive areas of the Inner Deep Bay SSSI and fish ponds in the Deep Bay area, which have been designated as a Ramsar Site, from the impacts of urban developments and human activities.

10.87.4 Filling of land/pond and excavation of land may cause adverse drainage impacts on the adjacent areas and adverse impacts on the natural environment. In view of the conservation value of the area within this zone, permission from the Board is required for such activities.

10.98 Country Park ("CP") : Total Area: ~~61.52~~ **61.44** ha

This area covers the HKWP Special Area in the north-eastern portion of the RZ. The HKWP Special Area is proposed as a replacement habitat for the wetland lost from the engineering works in the RZ and to act as a buffer to minimize human disturbance to the ecologically sensitive areas of the Inner Deep Bay SSSI, the adjoining fish ponds and MPNR to its east and north-east which have been designated as a Ramsar Site. The HKWP Special Area was designated under the Country Parks Ordinance (Cap. 208) and its development is under the monitoring of the Country and Marine Parks Board. All uses and developments require consent from the Country and Marine Parks Authority and approval from the Board is not required. The HKWP was opened to the public in May 2006.

10.9 *For the zone(s) where minor relaxation of relevant restriction(s) is applicable, based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/building height/GFA restrictions as stated in the relevant paragraph(s) above may be considered by the Board on application under section 16 of the Ordinance. Each application will be considered on its own merits.*

10.10 *For the zone(s) where minor relaxation of relevant restriction(s) is applicable, under exceptional circumstances, minor relaxation of NBA restrictions as stated in the relevant paragraph(s) above may be considered by the Board on application under section 16 of the Ordinance. Within the NBAs stipulated on the Plan, landscaping and boundary fence/wall will be permitted.*

11. COMMUNICATIONS

11.1 Roads

11.1.1 Major links to the Area include Long Tin Road which connects the eastern part of Tin Shui Wai New Town to Yuen Long, Hung Tin Road which connects the western part of Tin Shui Wai New Town to Castle Peak Road, and Ping Ha Road which connects Tin Shui Wai New Town to the Ping Shan area and the surrounding areas of Ha Tsuen. Hung Tin Road has been further extended from Castle Peak Road to connect to Yuen Long Highway via a flyover.

11.1.2 The two north-south primary distributors serving the New Town are Tin Ying Road in the west running along the existing drainage channel and Tin Tsz Road in the east. Tin Ying Road and Tin Tsz Road are connected to Yuen Long Highway via Hung Tin Road and Long Tin Road respectively. Tin Tsz Road is also connected to the Route 3 via Castle Peak Road and Wang Tat Road/Ma Wang Road.

11.1.3 The east-west distributors include Ping Ha Road and Tin Fuk Road, which run along the southern boundary of the New Town and link up with Yuen Long and Lau Fau Shan. Tin Wah Road also connects Tin Shui Wai New Town to the nearby villages of Sha Kong Wai and Lo Uk Tsuen in the west and Lau Fau Shan to the north-west.

11.1.4 Within the Hung Shui Kiu/Ha Tsuen NDA which is located to the immediate west of Tin Shui Wai New Town, a hierarchy of primary and district distributors and local roads is planned to provide convenient connection between various developments and surrounding areas. New roads are introduced to connect Tin Shui Wai New Town to Kong Sham Western Highway and Ping Ha Road to Hung Tin Road so as to ease traffic congestion near the Tin Shui Wai Station. Besides, Ping Ha Road will further be widened to improve the traffic conditions of Tin Shui Wai.

11.2 Railways

11.2.1 Tin Shui Wai New Town is served by a LRT system which is in operation and connects to Tuen Mun and Yuen Long New Towns. A LRT terminus is located to the north of the town square in Area 33. It is adjacent to a bus terminus to provide convenient public transport interchange. Another LRT terminus is located in Area 106.

11.2.2 Tin Shui Wai is also served by MTR TML, with a station located just outside the Area to the south of Tin Yiu Estate. A LRT stop is located underneath the station, providing interchanges between MTR TML and the LRT.

11.3 Bus Services

Tin Shui Wai is also served by public bus services. Bus termini are provided in both the private and public residential developments. A bus terminus is located adjacent to the LRT terminus near Area 33 to provide transport interchange.

11.4 Footpaths and Cycleways

11.4.1 A footpath network has been provided to facilitate pedestrian movement around the New Town. Extensive tree planting is provided in major routes to separate pedestrian and vehicular traffic and to provide shade for pedestrian comfort. It also enhances the character of the New Town. Footpaths are also provided along the drainage channel with amenity areas.

11.4.2 Taking advantage of the flat terrain, segregated cycleways are planned in the New Town to provide convenient movement and recreational opportunity along the drainage channel.

11.5 Off-street Parking

Sufficient car-parking spaces have been provided or planned for in major developments to cater for the local demand as well as for visitors to the New Town.

12. UTILITY SERVICES

12.1 Water Supply

Fresh water to the area is via the Wang Chau Service Reservoir and Tan Kwai Tsuen North Service Reservoir. The existing water treatment works capacity available in the NWNT will soon be fully committed. Further treatment works capacity, if required, would be made available from the future extension to Ngau Tam Mei Water Treatment Works. Extension of water supply system will be required if there is a substantial increase in the future water demand arising from development proposals for large residential developments.

12.2 Drainage

The drainage of Tin Shui Wai and the surrounding areas is diverted into the existing drainage channel in the west and the box culverts in the east. Storm water is discharged into the water body of Deep Bay. Intercepting devices have been constructed to ensure that the water in the open channel can be kept relatively clean. Desilting works is also carried out to ensure that the drainage flow will not be affected.

12.3 Waste Water Disposal

Waste water generated from the developments in Tin Shui Wai New Town is collected by sewerage connected to the two pumping stations in Areas 14 and 101 for diversion to the San Wai Sewage Treatment Plant in Hung Shui Kiu/Ha Tsuen NDA. The waste water collected will then be treated and pumped through a trunk main pipeline to a submarine outfall in the Urmston Road for disposal.

12.4 Electricity, Telephone and Gas Supply

12.4.1 The power supply for Tin Shui Wai New Town is served by a 132 kV network connecting the electric sub-stations in Areas 3 and 32 where the supply is then redistributed to serve the developments in the New Town. Another electric sub-station is planned in Area 120.

12.4.2 A ~~main~~ telephone exchange is in operation in Area 14 to provide telecommunications services to the New Town. ~~Another one is proposed in Area 109 to cater for the future demand.~~

12.4.3 The New Town is served by town gas. Gas supply is provided through a pipeline connected to the pigging-station in Au Tau which receives and diverts the gas supply transported from the gas plant in Tai Po Industrial Estate.

13. IMPLEMENTATION

13.1 The Plan has been and will be implemented in stages. The developments in the DZ and RZ have been largely completed.

13.2 Although existing uses non-conforming to the statutory zonings are tolerated, any material change of use and any other development/redevelopment must be always permitted in terms of the Plan or, if permission is required, in accordance with the permission granted by the Board. The Board has published a set of guidelines for the interpretation of existing use in the urban and new town areas. Any person who intends to claim an “existing use right” should refer to the guidelines and will need to provide sufficient evidence to support his claim. The enforcement of the zonings mainly rests with the Buildings Department, the Lands Department and the various licensing authorities.

13.3 The Plan provides a broad land use framework within which more detailed non-statutory plans for the Area are prepared by the Planning Department. These detailed plans are used as the basis for public works planning and site reservation within the Government departments. Disposal of sites is undertaken by the Lands Department. Public works projects are undertaken by the Civil Engineering and Development Department and some are in conjunction mainly with the Architectural Services Department. In the course

of implementing the Plan, the Yuen Long District Council would also be consulted as appropriate.

- 13.4 Planning applications to the Board will be assessed on individual merits. In general, the Board in considering the planning applications will take into account all relevant planning considerations which may include the departmental outline development plans and layout plans, and the guidelines published by the Board. The outline development plans and the layout plans are available for public inspection at the Planning Department. Guidelines published by the Board are available from the Board's website, the Secretariat of the Board and the Technical Services Division of the Planning Department. Application forms and Guidance Notes for planning applications can be downloaded from the Board's website and are available from the Secretariat of the Board and the Technical Services Division and relevant District Planning Office of the Planning Department. Applications should be supported by such materials as the Board thinks appropriate to enable it to consider the applications.

TOWN PLANNING BOARD
~~APRIL 2022~~ XXXXX 2024



土木工程拓展署
Civil Engineering and
Development Department

Agreement No. CE 23/2020 (CE)

Engineering Feasibility Study for Developments in Tin Shui Wai Area 14 - Feasibility Study

Report for Zoning Amendment

(Ref: R7-03)

March 2024

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Engineering Feasibility Study for Developments in Tin Shui Wai Area 14 – Feasibility Study

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March 2024


Reviewed:



Leo Lo

11 March 2024

Approved for Issue:



David Ho

11 March 2024

AECOM ASIA COMPANY LIMITED

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TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Background	1
1.2	Structure of Report	1
2	THE SITE AND ITS SURROUNDING CONTEXT	2
2.1	Study Site and Location	2
2.2	Statutory Planning Context	2
2.3	Background of the Site	2
2.4	The Surrounding Area	3
2.5	Site Accessibility	4
2.6	Land Status	4
2.7	Overview of Key Technical Constraints and Design Considerations	4
3	PROPOSED DEVELOPMENT SCHEME FOR THE DEVELOPMENT	6
3.1	The Conceptual Scheme	6
3.2	Development Components	8
3.3	Planning Justification	9
3.4	Technical Assessment for the Development	10
4	REZONING PROPOSAL	11
4.1	Proposal Amendments to OZP	11
5	TRAFFIC AND TRANSPORTATION ASPECTS	12
5.1	General	12
5.2	Existing Traffic Condition	12
5.3	Traffic Survey	12
5.4	Existing Public Transport Facilities	13
5.5	Existing Pedestrian and Cycling Network	14
5.6	Traffic Impact Assessment for Year 2033 and 2036	14
5.7	Pedestrian Traffic Impact Assessment for Year 2036	17
5.8	Public Transport Demand Assessment for Estimation of Public Transport Facilities	18
5.9	Construction Traffic Impact	22
5.10	Summary	22
6	INFRASTRUCTURE ASPECTS	23
6.1	General	23
6.2	Drainage Aspects	23
6.3	Sewerage Aspects	24
6.4	Waterworks Aspects	25
6.5	Underground Utilities Aspect	26
7	GEOTECHNICAL AND SITE FORMATION ASPECTS	28
7.1	General	28
7.2	Proposed Site Formation Works	28
7.3	Man-made Slopes and Retaining Walls	28
7.4	Scheduled Area No. 2	28
7.5	Natural Terrain	28
8	ENVIRONMENTAL ASECTS	29
8.1	General	29
8.2	Air Quality Impact Assessment	29
8.3	Noise Impact Assessment	30
8.4	Water Quality Assessment	31
8.5	Waste Management Implications	31
8.6	Land Contamination Study	32
8.7	Cultural Heritage Aspects	32
8.8	Ecological Impact Assessment	32

8.9	Summary	33
9	LANDSCAPE ASPECTS	34
9.1	General.....	34
9.2	Findings of Tree and Vegetation Survey.....	34
9.3	Landscape Resources and Landscape Character Areas	34
9.4	Landscape Impact Assessment	35
9.5	Proposed Landscape Mitigation Measures	36
9.6	Preliminary Compensatory Planting Proposal	40
9.7	Preliminary Landscape Design Proposal	40
10	VISUAL ASPECTS	42
10.1	General.....	42
10.2	Visual Envelope	42
10.3	Selection of Viewpoints	42
10.4	Appraisal of Visual Change	42
10.5	Evaluation of Overall Visual Impact	48
10.6	Summary	49
11	AIR VENTILATION ASPECTS.....	50
11.1	General.....	50
11.2	Summary on Wind Availability.....	50
11.3	Merit Design Features in the Proposed Scenario	50
11.4	Ventilation Performance of Proposed Scenario	51
11.5	Further Recommendations on the Proposed Development Layout.....	52
11.6	Summary	52
12	LAND REQUIREMENT ASPECTS	54
12.1	Existing Land Uses	54
12.2	Land Requirement for Proposed Works.....	54
12.3	Affected Government Land	54
12.4	Affected Private Land.....	54
12.5	Affected Buildings / Structures	55
12.6	Other Features	55
12.7	Tentative Programme.....	55
13	CONCLUSION	56

List of Tables

Table 2.1	Building Height Profile of Major Housing Developments in Proximity to the Site
Table 3.1	Development Parameters of the Conceptual Scheme
Table 3.2	Tentative Development Programme
Table 5.1	Existing Key Junctions Performance
Table 5.2	Existing Key Road Links Performance
Table 5.3	Key Junction Assessments for Operational Stage in 2033 and 2036
Table 5.4	Key Road Links Assessments for Operational Stage in 2033 and 2036
Table 5.5	Key Junction Assessments for Operational Stage (with Improvement Schemes)
Table 5.6	Estimation of Pedestrian Flow and LOS on Footpaths in 2036 with Proposed Development
Table 5.7	Redistributed Modal Split Proportion
Table 5.8	Estimated Public Transport Demand of the Site by Mode
Table 5.9	Estimated MTR Demand for Developments at the Site
Table 5.10	Estimated LRT Demand for Developments at the Site
Table 5.11	Demand on Existing Franchised Bus Services to Different Districts
Table 5.12	Change in Occupancy Rates of Existing Bus Services
Table 5.13	Proposed Enhancement of Existing GMB Services
Table 6.1	Change of Catchment Areas before and after Development
Table 6.2	Sewage Treatment Capacity of TSWTCSSPS, HTSPS and SWSTP
Table 6.3	The Capacity and Designed MDDs of TKTNFWSR and TKTSWSR
Table 8.1	Summary of Predicted Road Traffic Noise Level under Base case Scenario
Table 9.1	List of Landscape Resources and their Sensitivity
Table 9.2	List of Landscape Character Area and their Sensitivity
Table 9.3	Landscape Mitigation Measures for Construction and Operation Phases
Table 9.4	Significance of Landscape Impacts during Construction and Operation Phases
Table 9.5	Summary of Compensatory Planting Proposal
Table 10.1	Summary of Visual Impact to Corresponding Viewpoints (VPs)
Table 12.1	Affected Short Term Tenancy

Appendices

Appendix A	Conceptual Scheme of Proposed Housing Development at Tin Shui Wai Area 14 (Scheme for Technical Assessment Only)
Appendix B	Junction Improvement Works Proposed by Other Projects
Appendix C	Tree Assessment Schedule

Figures

FIGURE 1.1	Layout Plan of Development Area
FIGURE 1.2	Land Status Plan
FIGURE 2.1	The Site and Surrounding Area
FIGURE 2.2	Statutory Planning Context

FIGURE 2.3	Surrounding Context
FIGURE 2.4	Existing Public Transport Facilities
FIGURE 3.1	Preliminary Open Space Provision
FIGURE 3.2	Preliminary Greenery Coverage
FIGURE 3.3	Proposed Vehicular and Pedestrian Ingress/Egress
FIGURE 4.1	Proposed Amendment to Matters Shown on the Plan
FIGURE 5.1	Critical Road Links and Junction within the AOI
FIGURE 5.2	Existing Public Transport Facilities
FIGURE 5.3	Existing Key Pedestrian and Cycling Connectivity
FIGURE 6.1	Existing Drainage Layout Plan
FIGURE 6.2	Existing Catchment Plan
FIGURE 6.3	Proposed Catchment Plan
FIGURE 6.4	Proposed Drainage Layout Plan
FIGURE 6.5	Existing Sewerage Layout Plan
FIGURE 6.6	Proposed Sewerage Plan
FIGURE 6.7	Existing Water Supply for Tin Shui Wai Area 14 – Layout Key Plan
FIGURE 6.8	Existing Water Supply Layout Plan
FIGURE 6.9	Proposed Fresh Water Supply Layout Plan
FIGURE 6.10	Proposed Flushing Water Supply Layout Plan
FIGURE 6.11	Existing, Planned and Proposed CLP Cable Layout Plan at Tin Shui Wai Area 14
FIGURE 6.12	Existing, Planned and Proposed Lighting Cable Layout Plan at Tin Shui Wai Area 14
FIGURE 6.13	Existing, Planned and Proposed Towngas Layout Plan at Tin Shui Wai Area 14
FIGURE 6.14	Existing, Planned and Proposed Telecommunication Duct Layout Plan at Tin Shui Wai Area 14
FIGURE 7.1	Site Formation Plan
FIGURE 7.2	Geological Sections
FIGURE 8.1	300m Noise and 500m Air Quality Assessment Areas
FIGURE 8.2	Locations of Potential Sources and Buffer Distance
FIGURE 8.3	Locations of Representative Air Sensitive Receivers and Potential Odour Sources
FIGURE 8.4	Locations of Potential Noise Sensitive receivers within 300m Study Area
FIGURE 8.5	Recommendation of Noise Mitigation Measures for Road Traffic Noise Impact
FIGURE 8.6	Location of Water Sensitive Receivers
FIGURE 8.7	Location Plan of Underground Storage Tank
FIGURE 8.8	Location Plan of Cultural Heritage Resources
FIGURE 8.9	Habitat Map and Location of Species of Conservation Importance
FIGURE 9.1	Tree and Vegetation Survey
FIGURE 9.2	Landscape Resources
FIGURE 9.3	Photos of Landscape Resources (Sheet 1 of 2)
FIGURE 9.4	Photos of Landscape Resources (Sheet 2 of 2)

FIGURE 9.5	Landscape Character Areas
FIGURE 9.6	Photos of Landscape Characters
FIGURE 9.7	Landscape and Visual Mitigation Plan
FIGURE 9.8	Conceptual Landscape Plan
FIGURE 10.1	Location Plan of Visual Envelope, Visually Sensitive Receivers and Key Viewpoints
FIGURE 10.2	Photomontage – VP1 View at Kai Shan Looking South-west
FIGURE 10.3	Photomontage – VP2 View Inside Tin Pak Road Park Looking South
FIGURE 10.4	Photomontage – VP3 Pedestrian Road near Tin Shui Wai Swimming Pool Looking South-east
FIGURE 10.5	Photomontage – VP4 View at Water Fountain Inside Tin Shui Wai Park Looking South-west
FIGURE 10.6	Photomontage – VP5 View at Running Track Inside Tin Shui Wai Sports Ground Looking East
FIGURE 10.7	Photomontage – VP6 View at Tin Shui Wai Station / Tin Shui Wai Light Rail Station
FIGURE 10.8	Photomontage – VP7 View at Tin Tsz Garden Looking North
FIGURE 10.9	Photomontage – VP8 View at Ha Mei San Tsuen Sitting Out Area Looking North-west
FIGURE 11.1	Annual and Summer Prevailing Winds
FIGURE 11.2	Merit Designs Features in the Proposed Development Layout
FIGURE 12.1	Land Requirement Plan

Expression and Abbreviation

The following words and expressions shall have the meaning hereby assigned to them:-

- a) “Proposed Development” means the proposed private housing development, with associated facilities supporting the proposed housing development and the local community within the Site, site formation works and essential engineering infrastructure works within / outside the Site necessary for supporting the housing development.
- b) “Development Area” or “Site” means the area for Proposed Development as delineated in **FIGURE 1.1**.
- c) “Infrastructure” means the site formation works and any essential engineering infrastructure works including but not limited to roadworks, stormwater drains, sewerage, sewage treatment works, waterworks, landscaping and associated environmental mitigation measures which are necessary for supporting the Development.
- d) “Government” means the Government of the Hong Kong Special Administrative Region.
- e) “Engineering Feasibility Study” means the Engineering Feasibility Study for the Developments in Tin Shui Wai Area 14 – Feasibility Study under Agreement No. CE 23/2020(CE).
- f) “Project” means the project for Proposed Development at the Development Area.

The following table lists the abbreviated titles of Government bureau, departments, offices, statutory bodies, public organizations, etc. mentioned in the Report.

<u>Abbreviation</u>	<u>Full title</u>
ACE	Advisory Council on the Environment
AFCD	Agriculture, Fisheries and Conservation Department
AMO	Antiquities and Monuments Office
AOI	Area of Influence
ArchSD	Architectural Services Department
ASRs	Air Sensitive Receivers
AQOs	Air Quality Objectives
B/Ds	Bureaux/departments
BDTM	Base District Traffic Model
BH	Building Height
CAP	Contamination Assessment Plan
CAR	Contamination Assessment Report
C&D	Construction and Demolition
C&DMMP	Construction and Demolition Material Management Plan
CEDD	Civil Engineering and Development Department
CEDD TC	Civil Engineering and Development Department Technical Circular issued by CEDD
CLP	CLP Power Hong Kong Limited
DEP	Director of Environmental Protection
DBH	Diameter at Breast Height
DEVB	Development Bureau of the Government
DEVB TCW	Development Bureau Technical Circular (Works) issued by DEVB
DIA	Drainage Impact Assessment
DLC	District Lands Conference
DLO	District Lands Office of Lands Department
DO	District Officer of Home Affairs Department
DP	Designated Project
DSD	Drainage Services Department
DSO	District Survey Office of Lands Department
EDB	Education Bureau
EFS	Engineering Feasibility Study
EIA	Environmental Impact Assessment
EIAO	Environmental Impact Assessment Ordinance (Cap. 499)
EIAO-TM	Technical Memorandum on Environmental Impact Assessment Process
EMSD	Electrical and Mechanical Services Department
ENTLI	Enhanced Natural Terrain Landslide Inventory
EPD	Environmental Protection Department

<u>Abbreviation</u>	<u>Full title</u>
ExCo	Executive Council
FC	Finance Committee
FSD	Fire Services Department
FW	Freshwater
GEO	Geotechnical Engineering Office of CEDD
GFA	Gross Floor Area
G/IC	Government, Institution or Community
GLA	Government Land Allocation
GMB	Green Minibus
ha	Hectare
HAD	Home Affairs Department
HLCs	Historical Landslide Catchments
HKPSG	Hong Kong Planning Standards and Guidelines published by Planning Department
HPLB	Housing, Planning and Lands Bureau
HPs	Hillside Pockets
HyD	Highways Department
LandsD	Lands Department
LCAs	Landscape Character Areas
LCSD	Leisure and Cultural Services Department
LegCo	Legislative Council
LOS	Level of Service
LRs	Landscape Resources
LRT	Light Rail Transit
LTHS	Long Term Housing Strategy
MDD	Mean Daily Demand
NSRs	Noise Sensitive Receivers
O	Open Space
OVTs	Old and Valuable Trees
OZP	Outline Zoning Plan prepared under the Town Planning Ordinance
PFC	Public Fill Committee of CEDD
PlanD	Planning Department
PlanD/UD&L	Urban Design and Landscape Section of PlanD
PLB	Public Light Bus
PNAP	Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers
PR	Plot Ratio
PTI	Public Transport Interchange

<u>Abbreviation</u>	<u>Full title</u>
PTT	Public Transport Terminus
PWSC	Public Works Subcommittee
RAP	Remediation Action Plan
R(A)	Residential (Group A)
R(B)	Residential (Group B)
RBRGs	Risk-Based Remediation Goals
SAI	Site of Archaeological Interest
SIS	Slope Information System
SMO	Survey and Mapping Office of LandsD
S/R	Service Reservoirs
STT	Short Term Tenancies
SW	Saltwater
SWD	Social Welfare Department
TD	Transport Department
TKTSFWSR	Tan Kwai Tsuen South Fresh Water Service Reservoir
TPB	Town Planning Board
TPEDM	The Territorial Population and Employment Data Matrix
TPDM	Transport Planning and Design Manual
TPRP	Tree Preservation and Removal Proposal
TTIA	Traffic and Transport Impact Assessment
TSWTCSSPS	Tin Shui Wai Tin Chuk Street Sewage Pumping Station
UAF	Universal Accessibility Facilities
VE	Visual Envelope
VPs	Viewpoints
VRs	Visual Resources
WCFWSR	Wang Chau Fresh Water Service Reservoir
WPCO	Water Pollution Control Ordinance
WSD	Water Supplies Department
WSRs	Water Sensitive Receivers
WQO	Water Quality Objective

1 INTRODUCTION

1.1 Background

- 1.1.1 The proposed development site (the Site) is located within Tin Shui Wai Area 14 at the southeastern part of Tin Shui Wai which is bounded by Tin Pak Road and Tin Chuk Street at the west and Tin Tsz Road at the east (see **FIGURE 1.1**). The Site is currently zoned “Other Specified Uses” annotated “Bus Depot” (“OU(Bus Depot)”), “Government, Institution or Community” (“G/IC”) and an area shown as ‘Road’ on the approved Tin Shui Wai Outline Zoning Plan (OZP) No. S/TSW/16. The Site is situated on government land, majority of which is currently covered by Short Term Tenancy (STT) Nos. STT 1342 for a term of 5 years certain commencing from 1.7.1995 and thereafter quarterly and STT 1676 for a term of 3 years certain commencing from 23.10.2000 and thereafter quarterly to The Kowloon Motor Bus Company (1933) Limited (KMB) for the purpose of a temporary bus depot and ancillary facilities (see **FIGURE 1.2**).
- 1.1.2 To meet housing demand, the Site is identified as a potential site for private housing development. In conjunction with the housing development, some welfare facilities and supporting facilities may also be incorporated in the development. The purpose of the study is to demonstrate the technical feasibility of the proposed development intensity.
- 1.1.3 To facilitate the Proposed Development, a replacement site has been identified at the free-up area of Tuen Mun Chek Lap Kok Link (TMCLKL) Toll Plaza (for the Northern Connection, also known as the Tuen Mun-Chek Lap Kok Tunnel) for relocation of the existing bus depot from the Site. In addition, to support the rezoning of the Site for the Proposed Development, it is necessary to carry out an Engineering Feasibility Study (EFS) in a comprehensive manner to ascertain the technical feasibility and environmental acceptability of the Site for the Proposed Development, with a view to determine the scope of infrastructure works to support the Proposed Development and formulate mitigation measures against the impacts arising from the development and infrastructure works, as well as those arising from the surrounding areas onto the Proposed Development. With the existing bus depot scheduled to be vacated by 2024, the Site is targeted to be available for the Proposed Development in 2025.

1.2 Structure of Report

- 1.2.1 Apart from this introductory section, other sections of this Report include:-
- **Section 1 – Introduction:** to introduce and provide the background of this Project. The scope of this Report also outlined;
 - **Section 2 – Review on Site and Planning Context:** to review the Site’s and its planning context for identification of key issues and constraints to be addressed in formulating the development layout for the Proposed Development;
 - **Section 3 – Proposed Development Layout for the Development and Infrastructure Works:** to introduce the proposed development layout and the development scheme for the private housing development and development parameters;
 - **Section 4 – The Rezoning Proposal:** to present the preliminary rezoning proposal for the Proposed Development; and
 - **Section 5 to Section 12 – Summary of Technical Assessments:** to summarise the findings from the technical assessments on the proposed conceptual development scheme and proposed mitigation measures.

2 THE SITE AND ITS SURROUNDING CONTEXT

2.1 Study Site and Location

- 2.1.1 The Site, with an area of about 1.31 ha as provided in the Study Scope, is located in the southeastern part of Tin Shui Wai New Town. To enhance the development potential, the existing unleased and unallocated government land to the immediate south of the Site has subsequently been incorporated as part of the Site. Given the above, the boundary of the Site has been revised resulting in a total area of about 1.47 ha for the Proposed Development.
- 2.1.2 The Site is bounded by Tin Tsz Road, Tin Pak Road, Tin Chuk Street and nearby developments including Buddhist Mau Fung Memorial College, Tin Shui Wai Telephone Exchange, Tin Shui Wai Tin Chuk Street Sewage Pumping Station (TSWTCSSPS) and Tin Tsz Estate. The Site is currently mainly occupied by KMB as temporary bus depot with ancillary facilities under STTs issued by LandsD, with the remaining portion being an amenity area. The Site is generally flat with ground level at about +6.3mPD to +6.7mPD. The Site location and site boundary of the housing development is shown in **FIGURE 2.1**.

2.2 Statutory Planning Context

- 2.2.1 Under the approved Tin Shui Wai OZP No. S/TSW/16 as shown in **FIGURE 2.2**, the Site is currently zoned as “OU(Bus Depot)”, “G/IC”, and an area shown as ‘Road’.

2.3 Background of the Site

- 2.3.1 In accordance with the Tin Shui Wai Master Development Plan adopted in 1984 and the Tin Shui Wai South Eastern Layout Plan adopted in 1986, the Site was zoned “OU(Bus Depot)”, “OU(Funeral Parlour)” and an area shown as ‘Road’ on the draft Tin Shui Wai OZP No. S/TSW/1 exhibited for public inspection in 1994, the first OZP covering the Tin Shui Wai New Town. The area shown as ‘Road’ was intended as an amenity area to reduce the visual impact of the then proposed funeral parlour onto the Tin Tsz Estate to the south of the Site.
- 2.3.2 During the exhibition of the draft OZP No. S/TSW/1, a total of 2,587 objections were received, majority of which were against the proposed funeral parlour. After giving considerations to the objections, the Town Planning Board (TPB) proposed to rezone the “OU(Funeral Parlour)” zone to “G/IC” zone in 1997 to meet the objections. There was no designated use for the said “G/IC” zone.
- 2.3.3 To cope with the additional parking and maintenance requirements arising from the expansion of services in the Northwest New Territories and later new bus services in Tin Shui Wai North area, the Site (except the ‘Road’ portion) was let to KMB under STT Nos. 1342 (for a term of 5 years certain commencing from 1.7.1995 and thereafter quarterly) and 1676 (for a term of 3 years certain commencing from 23.10.2000 and thereafter quarterly) for the purpose of a temporary bus depot and ancillary facilities.
- 2.3.4 According to the 2013 Policy Address, the Government would adopt a multi-pronged approach to build up land reserve with a view to meeting housing and other development needs. It was reaffirmed in the 2014 Policy Address that the Government would continue to review various land uses and rezone sites as appropriate for residential use. This includes reviews on the government land currently vacant, under STTs or different short-term or government uses. The Site was identified to have potential for housing development. Nevertheless, relocation of the existing bus depot is required.
- 2.3.5 In this regard, with the toll waiving initiative announced in the 2019 Policy Address, the free-up area in the TMCLKL Toll Plaza was identified in 2019 for relocation of the existing bus depot. In December 2021, the planning application for proposed bus depot at the free-up area in TMCLKL Toll Plaza (for Tuen Mun-Chek Lap Kok Tunnel) was approved by the TPB, which is scheduled for full completion by 2025.

2.4 The Surrounding Area

- 2.4.1 Land use in the surrounding areas include medium- to high density residential developments, village type developments, government, institution and community (GIC) facilities and open space, which are shown in **FIGURES 2.2 and 2.3**.

Surrounding Residential Developments

- 2.4.2 The Tin Shui Wai New Town predominantly consists of residential developments. According to the Tin Shui Wai OZP, there are more than 140 ha zoned “R(A)” or “Residential (Group B)” (“R(B)”). In the immediate surrounding of the Site, public housing developments including Tin Tsz Estate, Tin Lai Court, Tin Yau Court and Tin Yiu Estate are located to the south and southwest. There is also a planned public housing development to the east of the Site across Tin Tsz Road zoned “R(A)6” subject to a maximum plot ratio (PR) of 6.7 and a maximum building height (BH) of +160mPD. Private housing developments are located to the north, including Kenswood Court, and Lynwood Court within 500m from the Site. The existing and planned housing developments are about +100mPD to +160mPD.
- 2.4.3 Building height and OZP zoning of a number of major housing developments in proximity to the Site are summarised and illustrated in **Table 2.1** below.

Table 2.1 Building Height Profile of Major Housing Developments in Proximity to the Site

Residential Development	Housing Type	OZP Zoning	Site Area (ha)	Current Building Height (mPD)	Building Height Restriction (mPD)
Existing Residential Development					
Tin Tsz Estate & Tin Lai Court	Public	R(A)	4.75	+114	-
Tin Yiu Estate & Tin Yau Court	Public	R(A)	15.86	+104 to +114	-
Kenswood Court	Private	R(B)	7.90	+106 to +123	-
Lynwood Court	Private	R(B)	4.37	+100 to +123	-
Planning Residential Development					
Public Housing Development near Tin Tsz Road	Public	R(A)6	6.2	-	+160

Surrounding Open Space

- 2.4.4 Within Tin Shui Wai New Town there are about 43ha of land zoned as “Open Space” (“O”) as stated in the Explanatory Statement of the Tin Shui Wai OZP. Major open spaces include Tin Shui Wai Park and Tin Shui Wai Sports Ground located at the centre of the district (see **FIGURE 2.3**), which are about 400m away from the Site. Tin Pak Road Park and Tin Tsz Garden are within walkable distance to the north and south of the Site, which are about 200m away (see **FIGURE 2.3**).

Surrounding Major GIC Facilities

- 2.4.5 The Site is surrounded by several GIC facilities in the immediate surrounding. Located to the north are Buddhist Mau Fung Memorial College and Water Supplies Department Tin Shui Wai Building (accommodating the H2O Public Education Centre). To the west across Tin Pak Road are Tin Shui Wai Swimming Pool and Tin Shui Wai Sports Centre. To the further southwest are Hoi Ming Primary School and Buddhist To Chi Fat She Yeung Yat Lam Memorial School. Other essential facilities serving the needs of the community are also found in the vicinity of the Site, including Tin Shui Wai Telephone Exchange across Tin Chuk Street and TSWTCSSPS to the southwest of the Site. The major GIC facilities surrounding the Site are shown in **FIGURE 2.3**.
- 2.4.6 In a wider context, other GIC facilities include Tin Shui Wai Hospital and Tin Shui Sports Centre to the far west, as well as Tin Shui Wai Fire Station, Police Station and Saint Jerome's Church to the southwest.

2.5 Site Accessibility

- 2.5.1 The Site is easily accessible to existing public transport network. A Public Transport Interchange (PTI) is located within Tin Tsz Estate, which is within walking distance of approximately 200m from the Site. MTR shuttle service K73 running from Tin Heng Estate to Yuen Long (West) can be accessed on Tin Shing Road, which is approximately 300m away from the site. Two taxi stands are located in close vicinity of the Site, including New Territories (NT) taxi stand at Tin Pak Road and urban and NT taxi stand located in Tin Tsz Estate, which are less than 100m and 200m away from the Site respectively.
- 2.5.2 Tin Shui Wai MTR Station is located over 500m away from the Site (walking distance of about 800m). Currently, the Tuen Ma Line (TML) is the only mass transit railway (metro) serving the area. Tin Wu Light Rail Station and Tin Tsz Light Rail Station are also located approximately 300m away (walking distance) from the Site to provide connection with destinations within Tin Shui Wai New Town and Tin Shui Wai MTR Station. The public transport facilities in the proximity of the Site are shown on **FIGURE 2.4**.

2.6 Land Status

- 2.6.1 Based on the information collected from LandsD, the land status of the Site is shown in **FIGURE 1.2**. STT Nos. 1342 and 1676 have been granted to KMB as temporary bus depot and ancillary facilities.

2.7 Overview of Key Technical Constraints and Design Considerations

- 2.7.1 The following sections present the key technical constraints and design considerations of the Proposed Development. Summary of the technical assessments on the proposed conceptual development scheme is presented in **Sections 5 to 12** below.

Potential Air Quality and Noise Impact

- 2.7.2 Bounded by Tin Tsz Road to the east and Tin Pak Road, Tin Chuk Street, TSWTCSSPS and Tin Shui Wai Telephone Exchange to the west and southwest, the Proposed Development is potentially impacted by noise and air quality issues. Mitigation measures shall be holistically considered and incorporated in the planning and design of the Proposed Development with reference to the HKPSG to minimise such impacts to sensitive receivers within the Site.

Landscape and Visual Impact

- 2.7.3 It is anticipated that the Proposed Development shall inevitably involve impact to the existing amenity strip and affect visual openness for the adjoining areas. Mitigation measures, such as provision of adequate site coverage of greenery, screen planting provision and considering

visual compatibility by ensuring aesthetically pleasing design of all man-made structures, shall be incorporated in the Proposed Development and implemented by the future developer.

Air Ventilation

- 2.7.4 The annual prevailing wind towards the Site and vicinity areas is mainly from NNE, NE and E directions. While in summer, the prevailing wind comprises S, SSE and SSW wind. The Proposed Development would be positioned in a sensitive manner to facilitate wind penetration into its surroundings. Sensitive design measures, such as bisected podia design, podium/building separation and podium setback could be adopted by the future developer to minimise the potential impact to the local/pedestrian wind environment and to enhance the air permeability.

Scheduled Area No. 2

- 2.7.5 The Site falls within Scheduled Area No. 2. The design and construction of foundation works, with ground investigation (GI) information by the future developer to suit their foundation design, should comply with the requirements for submission laid down in ETWB TC(W) No. 4/2004. The design of permanent foundation works in Scheduled Area shall be submitted by the future developer to GEO for checking.

Pedestrian Connectivity

- 2.7.6 Considering that the Proposed Development is located in close proximity to various developments/facilities, such as the cluster of sports and recreational facilities in the Tin Shui Wai Town Centre and light rail stations to the west of the Site, and the planned public housing development at Tin Tsz Road to the east, adequate pedestrian connections shall be provided for the convenience of residents as appropriate.

3 PROPOSED DEVELOPMENT SCHEME FOR THE DEVELOPMENT

3.1 The Conceptual Scheme

- 3.1.1 The development parameters are summarized in **Table 3.1** below. The conceptual development scheme at the Site is shown in **Appendix A**. It should be noted that the conceptual scheme is solely formulated for technical assessment of the proposed development intensity. The future developer of the Site may adopt a different development scheme.

Table 3.1 Development Parameters of the Conceptual Scheme

Site Area		about 14,700 m ²
Plot Ratio (PR) (Total / Domestic / Non-domestic)		6.4 / 6.0 / 0.4
Gross Floor Area (GFA)	Domestic	about 88,200 m ²
	Non-domestic	about 5,800 m ² (5,000 m ² for Retail Facilities; 800 m ² for Kindergarten)
	GIC facilities	about 4,300 m ² (for Social Welfare Facilities) <ul style="list-style-type: none"> - Residential Care Home for the Elderly cum Day Care Centre for the Elderly - Neighbourhood Elderly Centre (Sub-base) - Home Care Services (HCS) for Frail Elderly Persons
Building Height (BH)		+143 mPD
Estimated No. of Flats		about 1,760
Average Flat Size		50 m ²
No. of Towers		4
No. of Domestic Storeys		37
No. of Podium Storeys	Podium 1 (northwestern part of the Site)	2 storeys (mainly include Social Welfare Facilities)
	Podium 2 (southeastern part of the Site)	2 storeys (mainly include Club House, Retail Facilities and Kindergarten)
Estimate No. of Population ⁽¹⁾		about 4,760
Area of Private Open Space		about 5,320 m ²
Tentative Completion Year		2029

Parking Spaces, Loading/Unloading Bays ⁽²⁾	
Residential	
- Private Car Parking Spaces	477
- Visitor Parking Spaces	20
- Accessible Parking Spaces	6
- Motorcycle Parking Spaces ⁽³⁾	22
- Bicycle Parking Spaces ⁽³⁾	236
- Non-van-type Light Goods Vehicle and Private Light Bus Parking Spaces	7
- Loading/unloading Bays for Goods Vehicle	4
Kindergarten	
- Private Car Parking Spaces	1
- Taxi and Private Car Lay-bys	2
- School Bus Lay-bys	2
Social Welfare Facilities	
- Light Bus Parking Spaces	3
- Loading/unloading Bays	2
Retail	
- Private Car Parking Spaces	34
- Loading/unloading Bays	7
- Motorcycle Parking Spaces	4
General	
- General Lay-by ⁽³⁾	1

Note:-

1. 2.7 persons per flat is assumed.
2. Unless otherwise specified, number of parking and L/UL facilities is prepared in accordance with HKPSG where high-end standard is adopted for parking estimation.
3. The number of provision agreed with Transport Department.

Built Form and Layout

- 3.1.2 Under the conceptual scheme (**Appendix A**), four residential towers are proposed within the Site, with one tower over a 2-storey podium and three towers over another 2-storey podium. Bisected podia (with 15m separation in between) with basement design enable flexible space planning for car park, GIC and commercial facilities in support of the future residents and the community, whilst facilitate air ventilation. On top of podia, one residential tower at the northwest of the Site is proposed with building height up to about +143mPD and three residential towers at southeast of the Site are also proposed with building height up to about +143mPD, which is compatible with the existing and planned residential developments in close proximity ranging from about +100mPD to +160mPD. Podium setbacks from the site boundary and from nearby roads and structures including Tin Tsz Road, Tin Chuk Street, Tin Pak Road, TSWTCSSPS and refuse collection point (RCP) of Tin Tsz Estate, have been incorporated to facilitate air ventilation and to minimise the potential air quality and noise impacts. Provision of Emergency Vehicle Access (EVA) is in accordance with the existing guidelines.

- 3.1.3 The conceptual scheme for the Proposed Development is indicative in nature and devised for technical assessment purpose. It is anticipated that the development scheme, layout and building form will be further reviewed in the detailed design stage by the future developer. Nevertheless, in drawing up the conceptual scheme, relevant prevailing standards, guidelines and legislations have been considered, including HKPSG, PNAP APP-151 and 152.

3.2 Development Components

Scope of Development and Infrastructure Works

- 3.2.1 The scope of the Proposed Development includes private housing development, social welfare facilities, retail facilities, kindergarten, local open space, pedestrian and vehicular access. In order to develop the layout options and formulate the details of the Proposed Development, different B/Ds were approached to seek for potential site requirement.

Provision of GIC and Supporting Facilities

- 3.2.2 To support the additional population at the Site and the wider district, floor space for non-domestic and GIC facilities are reserved within the 2-storey podium.
- 3.2.3 A total of about 4,300m² (about 4.9% of the total domestic GFA) is allocated for the proposed social welfare facilities within the proposed housing development. The social welfare facilities proposed include a 150-place Residential Care Home for the Elderly cum 30-place Day Care Centre for the Elderly, a Neighbourhood Elderly Centre (Sub-base) and one team of Home Care Services for Frail Elderly Persons (4-team size non-kitchen based). The type and location of the proposed social welfare facilities will be further explored and confirmed in the detailed design stage by the future developer in consultation with the Social Welfare Department (SWD) and other relevant B/Ds.
- 3.2.4 A GFA of about 5,800m² is proposed for non-domestic facilities, including retail facilities and a 6-classroom kindergarten. The actual provision shall be determined by the future developer in the detailed design stage.

Provision of Local Open Space

- 3.2.5 With reference to the HKPSG, 1m² local open space per person shall be provided within the housing development. With an estimated population of about 4,760, local open space of not less than 4,760m² for enjoyment of the future residents will be provided at-grade or on roof level of podium within the housing site. Based on the preliminary landscape design, the total private open space provision is approximately 5,320m². The preliminary open space provision is shown in **FIGURE 3.1**.

Provision of Site Coverage of Greenery

- 3.2.6 A minimum of 20% greenery coverage shall also be provided in accordance with PNAP APP-152. The minimum greenery coverage required for the Proposed Development is 2,940m². Based on the current landscape design, the total greenery coverage achieves approx. 3,912m². Details are illustrated in **FIGURE 3.2**.

Pedestrian and Vehicular Access

- 3.2.7 As Site abuts Tin Pak Road and Tin Chuk Street, the pedestrian ingress/egress is proposed to be located at Tin Pak Road. Pedestrians can easily access the public transport or community/recreational facilities nearby using the existing and proposed at-grade pedestrian connections. 3 cautionary crossings are proposed at Tin Pak Road and Tin Chuk Street (see **FIGURE 3.3**).

- 3.2.8 As for vehicular ingress/egress, it is proposed to be located at Tin Chuk Street considering the number of vehicular ingresses/egresses currently present along Tin Pak Road (see **FIGURE 3.3**). The Site is further connected to Tin Shing Road, Tin Fuk Road and Long Tin Road, facilitating inter and intra-district commute for the residents. Provision of new road is not required to support the Proposed Development.

Tentative Development Programme

- 3.2.9 The tentative development programme is summarized in **Table 3.2** below.

Table 3.2 Tentative Development Programme

Major Task	Time
Zoning amendment	Q1 2024 to Q4 2024
Clearance and relocation of existing bus depot	Q4 2024
Design and construction of foundation and building works	Q2 2025 to Q1 2029

3.3 Planning Justification

- 3.3.1 The Site is considered appropriate for residential development having considered the following.

Increase Housing Supply and Optimise Land Utilisation

- 3.3.2 Meeting Hong Kong citizens' housing needs has been an important goal for the Government and reiterated in the Policy Address. Since 2013 Policy Address, the Government has been actively dealing with the problem of inadequate accommodation, investigating into and adopting various measures and solutions to address the problem of housing shortage. In line with the multi-pronged approach to build up land reserve and rezone sites as appropriate for residential use, the Proposed Development would provide land reserve for housing development. Under the principle of "single site, multiple use" model, GIC facilities and retail facilities are incorporated to optimise the use of valuable land resources.

Provision of Social Welfare Facilities for the Local Community

- 3.3.3 Social welfare facilities mainly catering for the elderly population will be incorporated in the Proposed Development to serve the needs of the community. As no major site formation works is required, the Proposed Development with social welfare facilities can be implemented within a shorter time frame.

Compatible with Surrounding Environment and Uses

- 3.3.4 The Site is located in the southeastern part of Tin Shui Wai New Town, which is characterised by high-rise and medium- to high-density residential developments. The surrounding developments including Tin Tsz Estate and Tin Yiu Estate have a building height ranging from +104mPD to +114mPD. There is also a planned public housing development to the east across Tin Tsz Road with a maximum building height of +160mPD. The conceptual scheme has demonstrated that a building height of +143mPD could cater for optimal development potential while achieving a compatible building height profile with the surrounding. Moreover, it is considered that the Site is not incompatible with the various existing GIC facilities (including sports facilities and schools) nearby.

Availability of Public Transport Services and GIC Facilities Nearby

- 3.3.5 The Site is located within a short walking distance to the existing major public transport services including Tin Wu Light Rail Station, bus stops and taxi stands. Moreover, the Site is surrounded by several GIC facilities such as swimming pool and sports centre. The nearby public transport

services and GIC facilities could serve the estimated population and additional services/facilities are not anticipated to be required to support the Proposed Development.

3.4 Technical Assessment for the Development

- 3.4.1 Preliminary technical assessments in various aspects have been carried out for the Proposed Development and associated infrastructure works at the Site according to the conceptual development scheme as mentioned in this Section. The preliminary technical assessments are to demonstrate the technical feasibility, to set out the constraints and to support the subsequent proposed zoning amendment for proposed housing development. An additional 10% buffer¹ in flat number/design population/GFA and worst case scenarios have been adopted in the technical assessments to cater for design flexibility. Summary of findings of the various technical assessments are discussed in following Sections.

¹ The additional 10% design buffer has been taken into consideration in technical assessments involving infrastructural capacity, which include traffic, sewerage and water supply aspects.

4 REZONING PROPOSAL

4.1 Proposal Amendments to OZP

- 4.1.1 Under the approved Tin Shui Wai OZP No. S/TSW/16 (the OZP), the Site is currently zoned “OU(Bus Depot)”, “G/IC” and an area shown as ‘Road’. There is no provision for housing development in the “OU(Bus Depot)” zone and area shown as ‘Road’, whereas ‘Flat’ is a Column 2 use of “G/IC” zone where planning permission is required from the TPB. To take forward the proposed private housing development, the Site is proposed to be rezoned to “R(A)”, with the planning intention for high-density residential development. Based on the conceptual scheme in which technical feasibility has been ascertained, “Residential (Group A) 2” (“R(A)2”) sub-area is proposed with a maximum domestic PR of 6, a maximum non-domestic PR of 0.4, and a maximum BH of +150mPD. While the BH in the conceptual scheme is +143mPD, the maximum BH as stipulated on the OZP is proposed to be +150mPD to allow for design flexibility. BH of about +150mPD has also been considered and adopted in technical assessments regarding visual and air ventilation aspects. It is also proposed that in determining the maximum plot ratio of the development and/or redevelopment, any floor space that is constructed or intended for use solely as GIC facilities, as required by the Government, may be disregarded to facilitate the provision of these facilities. The Notes and Explanatory Statement shall be amended to reflect the new “R(A)2” sub-area. The proposed rezoning area is shown on **FIGURE 4.1**.

5 TRAFFIC AND TRANSPORTATION ASPECTS

5.1 General

- 5.1.1 Preliminary Traffic and Transport Impact Assessment (TTIA) has been conducted under this Project to assess the traffic impact for the Proposed Development and infrastructure works to the road network within the Area of Influence (AOI). AOI identified in TTIA and the relative critical junctions are identified and shown in **FIGURE 5.1**. This section provides a summary of the key findings in the Preliminary TTIA.

5.2 Existing Traffic Condition

- 5.2.1 The Site is bounded by Tin Pak Road to the northwest, Tin Chuk Street to the west and Tin Tsz Road to the east. The major road links in the vicinity of the Site include Tin Tsz Road and Long Tin Road which provide the main external road access via Yuen Long Highway. On district and local level, Tin Fuk Road, Tin Shing Road, Tin Pak Road, Tin Chuk Street and Tin Cheung Road provide the connections between the Site and other areas of Tin Shui Wai. The existing road network surrounding the Site is shown in **FIGURE 5.1**.
- 5.2.2 Long Tin Road is a primary distributor with dual-3 lane arrangement along most of its length. It connects with Tin Tsz Road to the north and Tong Yan San Tsuen Interchange (TYSTI) to the south to Yuen Long Highway. It also leads to Yuen Long Town Centre to the east via Shui Pin Wai Interchange. Tin Tsz Road is a dual 2-lane/dual 3-lane district distributor, which connects with Tin Wah Road at its north and Long Tin Road at its south. Tin Pak Road and Tin Chuk Street are single 2-lane local distributors in north-south direction. The former connects with Tin Cheung Road to the north and Tin Shing Road to the west whereas the latter connects with Tin Pak Road via a priority junction and provides accesses to TSWTCSSPS and Tin Shui Wai Telephone Exchange.

5.3 Traffic Survey

- 5.3.1 Manual traffic counts within the AOI were conducted on typical working day in October 2021 for morning (07:00-09:30) and evening (17:00-19:30) hours to determine the existing peak hour traffic demand and identify base year traffic issues. Based on the surveyed data, the AM and PM peak hours for the AOI are 07:30-08:30 and 17:30-18:30 respectively.
- 5.3.2 The existing performances of critical junctions and links within the AOI were assessed based on the observed traffic flows. The assessment results are presented in **Tables 5.1** and **5.2** respectively.

Table 5.1 Existing Key Junctions Performance

Junction No.	Junction Location	Junction Type ⁽¹⁾	2021 Existing Case	
			RC ⁽²⁾ / DFC ⁽³⁾	
			AM	PM
J1	Tin Yan Road/ Tin Shing Road/ Tin Cheung Road	S	>100%	>100%
J2	Tin Pak Road / Tin Cheung Road	P	0.16	0.07
J3	Tin Shing Road / Tin Wu Road / Tin Pak Road	S	58%	>100%
J4	Tin Pak Road / Tin Hei Street	P	0.30	0.19
J5	Tin Pak Road / Tin Chuk Street	P	0.04	0.03
J6	Tin Shing Road / Tin Fuk Road	S	55%	77%
J7	Tin Fuk Road / Long Tin Road / Tin Tsz Road / Ha Mei San Tsuen Road	S	24%	45%

Junction No.	Junction Location	Junction Type ⁽¹⁾	2021 Existing Case	
			RC ⁽²⁾ / DFC ⁽³⁾	
			AM	PM
J8	Shui Pin Wai Interchange	S	51%	63%
J9	Tin Wu Road / Tin Shui Road	S	80%	>100%
J10	Tin Wu Road / Tin Yiu Road	S	70%	56%
J11	Ping Ha Road / Tin Yiu Road / Tin Fuk Road	S	>100%	>100%

Notes:

- (1) P - Priority Junction; R – Roundabout; S - Signalised Junction.
- (2) RC = Reserved Capacity. A positive RC indicates that the junction is operating with spare capacity. A negative RC indicates that the junction is overloaded that would result in traffic queues and longer delay time.
- (3) DFC = Design Flow to Capacity Ratio. DFC=1.0 indicates continual queuing and could not be considered acceptable. DFC = 0.85 indicates that queuing would theoretically be avoided in 85% of cases, can be considered reasonable. DFC = 0.7 indicates that queuing would be avoided in 95% of cases.

Table 5.2 Existing Key Road Links Performance

Link No.	Road Section	Road Configuration	Direction	Capacity ⁽¹⁾ (pcu/hr)	2021 Base Case			
					Traffic Flows (pcu/hr)		V/C Ratio	
					AM	PM	AM	PM
L1	Tin Tsz Road NB	Dual-2 Lane	NB	3,600	1,250	1,180	0.35	0.33
L2	Tin Tsz Road SB	Dual-2 Lane	SB	3,600	1,620	1,070	0.45	0.30
L3	Long Tin Road NB (West of Shui Pin Wai Interchange)	Dual-3 Lane	NB	5,400	2,040	2,110	0.38	0.39
L4	Long Tin Road SB (West of Shui Pin Wai Interchange)	Dual-3 Lane	SB	5,400	2,545	1,835	0.47	0.34

Notes:

- (1) Road link capacity was made reference to CTS-3 model.
- (2) A v/c ratio equal to or less than 1.0 indicates that a road has sufficient capacity to cope with the volume of vehicular traffic under consideration and the resultant traffic will flow smoothly. A v/c ratio above 1.0 indicates the onset of congestion. A v/c ratio above 1.2 indicates more serious congestion with traffic speeds deteriorating progressively with further increase in traffic.

5.3.3 The results in **Table 5.1** and **5.2** above show that the existing key junctions assessed have sufficient capacity during the peak hours, and the existing road links within the AOI have sufficient capacity, with v/c ratio less than 1.0.

5.4 Existing Public Transport Facilities

5.4.1 MTR Tin Shui Wai Station is located over 500m away from the Site. Currently, the Tuen Ma Line (TML) is the only mass transit railway (metro) serving the area. TML was renamed from West Rail Line since it has merged with the former Ma On Shan Line in late-June 2021 and formed the 56-kilometre long TML. Nevertheless, Tin Wu and Tin Tsz Light Rail Stations are

located approximately 300m away from the Site and provide connection with destinations within Tin Shui Wai area, Tin Shui Wai MTR Station and Tuen Mun.

5.4.2 Public Transport Interchange (PTI) and bus stops with various franchised bus and green minibus (GMB) services are located within walking distances from the Site. The nearest PTI is located in Tin Tsz Estate, which is approximately 200m from the Site, serving 5 franchised bus routes (269C, 276, B1, B2P & N269). MTR shuttle service K73 running from Tin Heng Estate to Yuen Long (West) can be accessed on Tin Shing Road, which is approximately 300m away from the site. In addition, more comprehensive public transport services can be accessed on Tin Shing Road, approximately 250m away from the Site. The existing public transport facilities are shown on **FIGURE 2.4**.

5.4.3 Two taxi stands are located in close vicinity of the Site, including NT taxi stand at Tin Pak Road and urban & NT taxi stand located in Tin Tsz Estate, which are less than 100m and 200m away from the Site respectively.

5.5 Existing Pedestrian and Cycling Network

5.5.1 Existing pedestrian facilities including footpaths, footbridges and at-grade crossings adjacent to the Site allow pedestrians to access nearby public transport facilities, recreational facilities, e.g. sports ground, sports centre, swimming pool, park etc., and commercial facilities. The facilities were observed with adequate width and capacity.

5.5.2 Cycle tracks are currently provided on Tin Shing Road, Tin Wu Road and Tin Fuk Road thus there is a lack of direct cycling connection between existing cycle tracks and the Site. Nevertheless, the closest cycle tracks are only 200m away from the Site. The existing pedestrian and cycling facilities are shown on **FIGURE 5.2**.

5.6 Traffic Impact Assessment for Year 2033 and 2036

5.6.1 Impacts on existing critical junctions and road links within the AOI were assessed for Reference and Design Scenarios in 2033 and 2036. Reference Scenario refers to background traffic changes without development of the Site, while Design Scenario refers to Reference Scenario adding development traffic from the Site. The performance of the key junctions and road links are assessed and summarized in **Table 5.3** and **5.4** below.

Table 5.3 Key Junction Assessments for Operational Stage in 2033 and 2036

No.	Location	Type (1)	2021 Base Scenario		2033 Reference Scenario		2033 Design Scenario		2036 Reference Scenario		2036 Design Scenario	
			RC ⁽²⁾ / DFC ⁽³⁾		RC ⁽²⁾ / DFC ⁽³⁾		RC ⁽²⁾ / DFC ⁽³⁾		RC ⁽²⁾ / DFC ⁽³⁾		RC ⁽²⁾ / DFC ⁽³⁾	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
J1	Tin Yan Road/ Tin Shing Road/ Tin Cheung Road	S	>100 %	>100 %	>100 %	>100 %	93%	>100 %	>100 %	>100 %	>100 %	>100 %
J2	Tin Pak Road / Tin Cheung Road	P	0.16	0.07	0.15	0.08	0.27	0.12	0.13	0.06	0.28	0.10
J3	Tin Shing Road / Tin Wu Road / Tin Pak Road	S	58%	>100 %	88%	93%	48%	56%	58%	>100 %	19%	54%

No.	Location	Type (1)	2021 Base Scenario		2033 Reference Scenario		2033 Design Scenario		2036 Reference Scenario		2036 Design Scenario	
			RC ⁽²⁾ / DFC ⁽³⁾		RC ⁽²⁾ / DFC ⁽³⁾		RC ⁽²⁾ / DFC ⁽³⁾		RC ⁽²⁾ / DFC ⁽³⁾		RC ⁽²⁾ / DFC ⁽³⁾	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
J4	Tin Pak Road / Tin Hei Street	P	0.30	0.19	0.27	0.15	0.29	0.16	0.29	0.15	0.30	0.16
J5	Tin Pak Road / Tin Chuk Street	P	0.04	0.03	0.05	0.02	0.39	0.22	0.04	0.01	0.39	0.20
J6	Tin Shing Road / Tin Fuk Road	S	55%	77%	44%	74%	44%	74%	29%	42%	29%	42%
J7	Tin Fuk Road / Long Tin Road / Tin Tsz Road / Ha Mei San Tsuen Road	S	24%	45%	1%	40%	0%	35%	-13%	4%	-15%	-1%
J8	Shui Pin Wai Interchange	S	51%	63%	4%	32%	-4%	23%	7%	25%	1%	17%
J9	Tin Wu Road / Tin Shui Road	S	80%	>100 %	75%	>100 %	71%	>100 %	96%	>100 %	94%	>100 %
J10	Tin Wu Road / Tin Yiu Road	S	70%	56%	>100 %	84%	>100 %	84%	88%	73%	87%	73%
J11	Ping Ha Road / Tin Yiu Road / Tin Fuk Road	S	>100 %	>100 %	84%	88%	74%	85%	35%	60%	23%	53%

Notes:

- (1) P - Priority Junction; R – Roundabout; S - Signalised Junction.
- (2) RC = Reserved Capacity. A positive RC indicates that the junction is operating with spare capacity. A negative RC indicates that the junction is overloaded that would result in traffic queues and longer delay time.
- (3) DFC = Design Flow to Capacity Ratio. DFC=1.0 indicates continual queuing and could not be considered acceptable. DFC = 0.85 indicates that queuing would theoretically be avoided in 85% of cases, can be considered reasonable. DFC = 0.7 indicates that queuing would be avoided in 95% of cases.

Table 5.4 Key Road Links Assessments for Operational Stage in 2033 and 2036

Link No.	Link Location	Dir.	Cap. (pcu/hr)	2021 Base Scenario				2033 Reference Scenario				2033 Design Scenario			
				Flow (pcu/hr)		V/C ⁽¹⁾		Flow (pcu/hr)		V/C ⁽¹⁾		Flow (pcu/hr)		V/C ⁽¹⁾	
				AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
L1	Tin Tsz Road	NB	3,600	1,250	1,180	0.35	0.33	1,265	1,795	0.35	0.50	1,285	1,825	0.36	0.51
L2		SB	3,600	1,620	1,070	0.45	0.30	2,380	1,615	0.66	0.45	2,405	1,625	0.67	0.45
L3	Long Tin Road (West of Shui Pin Wai Int.)	NB	5,400	2,040	2,110	0.38	0.39	2,225	2,895	0.41	0.54	2,270	2,955	0.42	0.55
L4		SB	5,400	2,545	1,835	0.47	0.34	3,575	2,450	0.66	0.45	3,650	2,500	0.68	0.46
Link No.	Link Location	Dir.	Cap. (pcu/hr)	2036 Reference Scenario				2036 Design Scenario							
				Flow (pcu/hr)		V/C ⁽¹⁾		Flow (pcu/hr)		V/C ⁽¹⁾					
				AM	PM	AM	PM	AM	PM	AM	PM				
L1	Tin Tsz Road	NB	3,600	1,380	1,505	0.38	0.42	1,395	1,525	0.39	0.42				
L2		SB	3,600	1,565	1,455	0.43	0.40	1,565	1,455	0.43	0.40				
L3	Long Tin Road (West of Shui Pin Wai Int.)	NB	5,400	2,380	2,725	0.44	0.50	2,405	2,750	0.45	0.51				
L4		SB	5,400	2,860	2,500	0.53	0.46	2,900	2,565	0.54	0.48				

Note:

- (1) A v/c ratio equal to or less than 1.0 indicates that a road has sufficient capacity to cope with the volume of vehicular traffic under consideration and the resultant traffic will flow smoothly. A v/c ratio above 1.0 indicates the onset of congestion. A v/c ratio above 1.2 indicates more serious congestion with traffic speeds deteriorating progressively with further increase in traffic.

5.6.2 As indicated in the junction assessment results for Reference Scenario and Design Scenario in **Table 5.3**, all assessed junctions will be operating with sufficient capacity except J7 Tin Fuk Road / Tin Tsz Road/ Long Tin Road / Ha Mei San Tsuen Road and J8 Shui Pin Wai Interchange.

5.6.3 Junction improvement schemes have been proposed under another project in the locality, Agreement No. CE 19/2021 (CE) Site Formation and Infrastructure Works for Public Housing Development near Tin Tsz Road, Tin Shui Wai, and Remaining Phases of Public Housing Development at Wang Chau, Yuen Long – Investigation, Design and Construction. The improvement schemes cover the following junctions under this study, which are provided in **Appendix B** and indicated in **FIGURE 5.1**:-

- J7 Tin Fuk Road / Long Tin Road / Tin Tsz Road / Ha Mei San Tsuen Road

Tin Fuk Road eastbound right turn taper would be lengthened to provide more capacity for heavy right turn traffic to Long Tin Road. The lengthened taper would narrow the central median, requiring relocation of traffic signage. Based on the latest available information, this improvement work will be completed before 2036.

- J8 Shui Pin Wai Interchange

Turning confirmation at Long Ping Road westbound would be modified to have two lanes turning left and a two-lane right-turn taper. Based on the latest available information, this improvement work will be completed before 2036.

5.6.4 The respective junction performance with proposed junction improvement schemes as stated in **Section 5.6.3** above are shown in **Table 5.5**. With the implementation of improvement

schemes, the key junction performance would be acceptable with sufficient junction capacities under the Design Scenario in year 2036.

Table 5.5 Key Junction Assessments for Operational Stage (with Improvement Schemes)

Junction No.	Junction Location	Junction Type ⁽¹⁾	2036 Reference Scenario		2036 Design Scenario		2036 Design Scenario with Imp. Schemes	
			RC ⁽²⁾		RC ⁽²⁾		RC ⁽²⁾	
			AM	PM	AM	PM	AM	PM
J7	Tin Fuk Road / Long Tin Road / Tin Tsz Road / Ha Mei San Tsuen Road	S	-13%	4%	-15%	-1%	22%	36%
J8	Shui Pin Wai Interchange	S	7%	25%	1%	17%	17%	25%

Notes:

(1) P - Priority Junction; R – Roundabout; S - Signalised Junction.

(2) RC = Reserved Capacity. A positive RC indicates that the junction is operating with spare capacity. A negative RC indicates that the junction is overloaded that would result in traffic queues and longer delay time.

5.6.5 The results as shown in **Table 5.4** above reveal that the key road links will be able to handle the future traffic flow with ample capacity for both Reference and Design Cases in year 2033 and 2036.

5.7 Pedestrian Traffic Impact Assessment for Year 2036

5.7.1 The purpose of the pedestrian demand forecast is for estimating the future pedestrian flows on each of the study footpath for level of service (LOS) assessment. Pedestrian LOS assessment was carried out to assess the pedestrian footpath condition during peak hours on weekday based on the results of pedestrian demand forecast. The result of LOS assessment are presented in **Table 5.6**.

Table 5.6 Estimation of Pedestrian Flow and LOS on Footpaths in 2036 with Proposed Development

Index	Footpath Section	Total Width (m)	Effective Width (m)	Two-way Pedestrian Flow Rate (in ped/hr)		Two-way Pedestrian Flow Rate (in ped/min/m)		Level-of-Service (LOS)	
				AM	PM	AM	PM	AM	PM
F1	Tin Shing Road	3.1	2.1	1,677	1,467	13.3	11.6	A	A
F2	Tin Pak Road	3	2	1,669	1,418	13.9	11.8	A	A
F3	Tin Pak Road	3.5	2.5	1,797	1,452	12.0	9.7	A	A
F4	Tin Hei Street	2.6	1.6	1,841	1,481	19.2	15.4	B	A
F5	Tin Hei Street	3.3	2.3	1,679	1,423	12.2	10.3	A	A
F6	Tin Pak Road	3.7	2.7	1,683	1,443	10.4	8.9	A	A

Index	Footpath Section	Total Width (m)	Effective Width (m)	Two-way Pedestrian Flow Rate (in ped/hr)		Two-way Pedestrian Flow Rate (in ped/min/m)		Level-of-Service (LOS)	
				AM	PM	AM	PM	AM	PM
F7	Tin Shing Road	3.6	2.6	1,721	1,547	11.0	9.9	A	A

5.7.2 The pedestrian assessment results as shown in **Table 5.6** indicate that all identified footpaths have sufficient capacity to cater the increasing walking trip demand from the Proposed Development.

5.8 Public Transport Demand Assessment for Estimation of Public Transport Facilities

5.8.1 For the Site, public transport mode mainly includes MTR, Light Rail Transit (LRT), franchised bus and public light bus (PLB). Ferry is considered not applicable due to lack of availability in the vicinity. For conservative approach, trips of ferry are redistributed proportionally among the major public transport modes. **Table 5.7** shows the redistributed modal split proportion assuming no ferry trips to be made. Hence, public transport demand of the Site during AM Peak was estimated according to the redistributed modal split proportion as shown in **Table 5.8**. The existing LRT Tin Wu Station is within 300m from the Site and is therefore within walking distance for pedestrians. Passengers could take the LRT and interchange to MTR Tuen Ma Line Tin Shui Wai Station (which is approximately 800m away from the Site) for continuing the MTR trips.

Table 5.7 Redistributed Modal Split Proportion

MTR	LRT	Franchised Bus	PLB
34.4%	10.8%	21.8%	3.3%

Table 5.8 Estimated Public Transport Demand of the Site by Mode

Item	MTR	LRT	Franchised Bus	PLB
Redistributed Modal Split Proportion	34.4%	10.8%	21.8%	3.3%
Estimated Public Transport Demand (AM Peak)	452	142	286	44

MTR

5.8.2 As shown in **Table 5.8**, approximately 452 passengers per hour would be generated by the proposed public housing development to use Tuen Ma Line. Considering the passengers would travel in both eastbound and westbound directions, directional split was extracted from the design year STM. The urban direction (eastbound) in AM Peak is considered the worst-case based on the patronage and directional split. There were approximately 75% of passengers that would travel to urban direction in peak hour. Based on the split, the worst direction demand during peak hour was estimated in **Table 5.9**. The demand only accounts for an insignificant fraction, approximately 0.5% of the design capacity (67,400 passengers per hour) of the Tuen Ma Line to urban direction. Therefore, it is considered that the proposed public housing development would not cause significant impacts to the Tuen Ma Line.

Table 5.9 Estimated MTR Demand for Developments at the Site

PT Mode	Estimated % of Public Transport to all Trips	Estimated Demand Trips Total in Peak Hour	Estimated Demand Trips to Urban Direction in Peak Hour	Estimated Service Capacity in Urban Direction (patronage / hr)	Estimated % of Carrying Capacity
MTR	34.4%	425	339	67,400 ⁽¹⁾	0.5%

Note:

(1) One-way capacity of West Rail Line in 2015 is 49,200 patronage / hr, based on 6 persons per square meter (ppsm) in peak hours (Refer to https://gia.info.gov.hk/general/201905/08/P2019050800294_309637_1_1557288693823.pdf). According to TD's reply on TTC Paper No. 2021/52a, after the opening Tuen Ma Line, The one-way capacity can increase by 37% than 2015 (Refer to https://www.districtcouncils.gov.hk/yl/doc/2020_2023/tc/committee_meetings_doc/ttc/19835/TTC_paper_2021_52a_TD.pdf). Estimated Service Capacity in future will be $49,200 \times 1.37 = 67,400$ patronage / hr.

Light Rail Transit (LRT)

- 5.8.3 In terms of LRT services, there are 4 LRT routes at Tin Wu Station during AM peak. It is anticipated that passengers would take the LRT at Tin Wu Station and interchange to MTR Tuen Ma Line Tin Shui Wai Station. The total demand generated by the Site is therefore 594 passengers/hr, equivalent to 4.3% of the carrying capacity of the 4 LRT routes. The estimated LRT demand generated from the Site is shown in **Table 5.10**.

Table 5.10 Estimated LRT Demand for Developments at the Site

Public Transport Mode	Estimate % of Public Transport to all Trips	Estimated Demand Trips Total in Peak Hour ⁽¹⁾	Routes at LRT Tin Wu Station	Estimated Carrying Capacity (patronage /hr) ⁽²⁾	Total Estimated Carrying Capacity (patronage /hr)	Estimated % of Carrying Capacity
LRT	10.8%	594	705	4,900	13,957	4.3%
			706	4,900		
			751	2,625		
			751P	1,532		

Note:

(1) Includes both MTR and LRT demand trips.

(2) Reference has been made to https://www.legco.gov.hk/yr16-17/english/panels/tp/tp_rdp/papers/tp_rdp20170210cb4-500-9-e.pdf for design capacity of LRT routes during peak hours.

Bus Services

- 5.8.4 In terms of bus services, approximately 286 passengers per hour would be generated by the Proposed Development to use bus services. The Proposed Development is served by comprehensive bus services in the vicinity, which the walking distances between the Proposed Development and Tin Tsz Estate Bus Terminus, bus stops at Tin Shing Road and bus stop at Tin Shui Road are around 250m, 300m to 550m and 600m respectively. To estimate the impact of the public transport demand of the Proposed Development on the existing bus services in the vicinity, the district of place of work of the population in Tin Shui Wai is referenced in order to estimate the distribution of the franchised bus demand among bus routes with destinations in different districts, which is shown in **Table 5.11**.

Table 5.11 Demand on Existing Franchised Bus Services to Different Districts

District of Place of Work	Working Population in Tin Shui Wai ⁽¹⁾	% Distribution	Peak Hour FB Demand
Hong Kong Island	13724	21.6%	62
Kowloon East / Tseung Kwan O	5939	9.3%	27
Kowloon West	13488	21.2%	61
Kowloon Central	2439	3.8%	11
N.T. North	2137	3.4%	10
Shatin / Ma On Shan	3978	6.3%	18
Tai Po	1350	2.1%	6
Tsuen Wan / Kwai Ching	11982	18.9%	54
Tung Chung / Airport	229	0.4%	1
Yuen Long	8253	13.0%	37
Total	63519	100.0%	286

Note:

(1) Source: Population Census 2021

- 5.8.5 The impact on occupancy rates of existing franchised routes is then estimated by distributing the franchised bus demand of different place of work districts to the corresponding bus services, which is shown in **Table 5.12**.

Table 5.12 Change in Occupancy Rates of Existing Bus Services

Route No.	Destination ⁽¹⁾	Peak Hour FB Demand	Peak Frequency	No. of Vehicles in Peak Hour	Peak Hour Capacity ⁽²⁾	District Total Peak Hour Capacity	Change in Occupancy Rate
269A	TW / KC	54	10	6	720	2,820	1.9%
269M			12	5	600		
69M			8	7.5	900		
69P			12	5	600		
967	HKI	62	6	10	1,200	5,589	1.1%
967X			--	4	480		
969			7	8.6	1,029		
969A			15	4	480		
969B			--	6	720		
969C			--	4	480		
969P			10	6	720		
969X			--	4	480		
269C	KLN E / TKO	27	5	12	1,440	2,880	0.9%
269S			--	2	240		

Route No.	Destination ⁽¹⁾	Peak Hour FB Demand	Peak Frequency	No. of Vehicles in Peak Hour	Peak Hour Capacity ⁽²⁾	District Total Peak Hour Capacity	Change in Occupancy Rate
69C			6	10	1,200		
265B	KLN W	61	5	12	1,440	1,920	3.2%
69X			15	4	480		
269B	KLN C	11	20	3	360	360	3.1%
276	N.T. North	10	15	4	480	2,400	0.4%
276A			5	12	1,440		
276B			15	4	480		
265S	TP	6	--	2	240	240	2.5%
269D	ST	18	5	12	1,440	1,440	1.3%
A37	TC / Airport	1	15	4	480	1,488	0.1%
E36A			25	2.4	288		
E37			10	6	720		
K73	YL	37	4	15	1,800	2,880	1.3%
K74			20	3	360		
K75P			10	6	720		
Total		287			22,017		1.3%

Note:

(1) TW / KC = Tsuen Wan / Kwai Ching, HKI = Hong Kong Island, KLN E / TKO = Kowloon East / Tseung Kwan O, KLN W = Kowloon West, KLN C = Kowloon Central, N.T. North = New Territories North, TP = Tai Po, ST = Shatin, TC / Airport = Tung Chung / Airport, YL = Yuen Long

(2) Capacity of each bus is assumed to be 120

- 5.8.6 As shown in **Table 5.12**, the public transport demand from the Proposed Development would not cause a significant impact to the existing bus services in the vicinity, which at most increase the occupancy rate of the existing bus route for around 3%. It is estimated that the existing bus services could absorb the public transport demand generated from the Proposed Development.
- 5.8.7 Furthermore, since the Proposed Development is well served by franchised bus services in the vicinity which provide frequent services to a wide range of destinations within the Territory, the provision of a new PTI or a bus layby for the Proposed Development are not considered necessary. In view of the relatively low additional franchised bus demand and the provision of numerous bus stops in the vicinity, it is expected the existing bus stops could cope with the demand generated from the Proposed Development.
- 5.8.8 In terms of GMB services, approximately 44 passengers per hour would be generated by the Proposed Development to use GMB services. The Proposed Development is served by 2 GMB services in the vicinity. Assuming the estimated GMB demand is equally split among the 2 GMB routes, proposed enhancement of the existing GMB routes are shown in **Table 5.13**.

Table 5.13 Proposed Enhancement of Existing GMB Services

Route No.	Additional Public Transport Trip Required	No. of Additional Vehicles required in an hour ⁽¹⁾	Original Frequency	New Frequency
618	22	2	12 to 15 mins	8 to 9 mins
621	22	2	20 to 30 mins	12 mins

Note:

(1) The capacity of a GMB is assumed to be 19 passengers.

- 5.8.9 In view of the relatively low additional GMB demand and there are ample waiting areas at the existing GMB stops, improvement on the GMB stops should not be required. Assessment on the GMB facilities should be revisited in future prior to the population intake to determine if improvements on GMB facilities are required in terms of the latest GMB operation condition.

5.9 Construction Traffic Impact

- 5.9.1 It was considered that site operation and excavation works would generate the most construction traffic considering the construction works type and sequences.
- 5.9.2 Based on the site operation and excavation works volume and the site operation of similar projects, the peak hour construction traffic generation is estimated around 25pcu/hr. It is anticipated that traffic impact of the Proposed Development is considered as insignificant during construction stage. The volume and pattern of construction traffic generated by this Development are subject to detailed planning during construction phase. In addition, off-peak operation of construction traffic may be considered if peak-hour congestion is identified.

5.10 Summary

- 5.10.1 Vehicular and pedestrian traffic impact and public transport demand assessment due to the Proposed Development are assessed under the Preliminary TTIA. All the critical junctions within AOI, pedestrian footpath and public transport would operate with sufficient capacity with the Proposed Development. Therefore, it is anticipated that the Development will not induce insurmountable problems to the traffic network from traffic point of view.

6 INFRASTRUCTURE ASPECTS

6.1 General

- 6.1.1 Preliminary Drainage Impact Assessment (DIA), Sewerage Impact Assessment (SIA), Water Supply Impact Assessment (WSIA) and Utilities Impact Assessment (UIA) have been carried out to assess the potential impacts in different aspects arising from the proposed housing development. This section provides a summary of the key findings in the assessment for infrastructure works.

6.2 Drainage Aspects

Existing Drainage Condition

- 6.2.1 According to as-built drainage record and model from DSD, there are two existing manholes, a catchpit and a tapping point connecting to existing drainpipes systems ranging from 300mm to 900mm laid at east and west side of the existing bus depot. Based on topographical information and model information, surface runoff is mainly to north-west, south-west and south-east direction as shown in **FIGURE 6.1**.
- 6.2.2 Surface runoff at north side is mainly (91.9%) conveyed by manhole SMH1011840 and via 900mm to 1800mm diameter drainpipes laid along existing Tin Pak Road. These runoffs are further conveyed via 1800mm to 2250mm diameter drainpipes along Tin Cheung Road, joining the existing dual 5.8m (width) x 4.2m (height) box culvert at Tin Tsz Road, and further discharged to Hong Kong Wetland Park.
- 6.2.3 Minor amount of surface runoff is drained to existing catchpit SCH1006285 (5.2%) and existing tapping point STH1001929 (2.9%) at the east of the existing bus depot. These runoffs are further conveyed via 450mm to 750mm and 2250mm drainpipes along Tin Cheung Road, joining the existing dual 5.8m (width) x 4.2m (height) box culvert at Tin Tsz Road, and further discharged to Hong Kong Wetland Park.
- 6.2.4 At south-east side of the Site, surface runoff is conveyed by existing manhole SMH1033420 (43%), catchpit SCH1014940 (40%), catchpit SCH1006269 (2%) and tapping point STH1003520 (15%). These runoffs further conveyed to a one cell 5.8m (width) x 4.2m (height) box culvert under Tin Tsz Road, expand as dual cell 5.8m (width) x 4.2m (height), and further discharged to Hong Kong Wetland Park.
- 6.2.5 At south-west side of the Site, surface runoff is conveyed by manhole SUH1000182 and via 600mm to 2100mm diameter drainpipes along Tin Chuk Street, Tin Hei Street, Tin Pak Road, Tin Shing Road and Tin Fuk Road, before joining the existing one-cell 4.0m (width) x 4.3m (height) box culvert along Tin Fuk Road. The box culvert further runs along Tin Yiu Road, joining another box culvert forming a size of dual 7.5m (width) x 4.33m (height). The box culvert continues to Tin Ho Road, and further discharged to 55m wide Tin Shui Wai drainage channel adjacent to Tin Shui Path at a dual 8.5m (width) x 4.44m (height) outfall near Locwood Court.

Drainage Impact Assessment

- 6.2.6 The drainage runoff inside the Site is proposed to be discharged to three directions towards two existing outfalls. The catchment plan before and after the Proposed Development are shown in **FIGURE 6.2** and **FIGURE 6.3** respectively. A comparison of catchment, before and after development, is presented in **Table 6.1**.

Table 6.1 Change of Catchment Areas before and after Development

	Catchment Area (ha) ⁽¹⁾		
	C1 – to Outfall 1	C2 – to Outfall 2	C3 – to Outfall 1
Before Development (refer to FIGURE 6.2)			
Paved Area (ha)	1.171	0.188	0.100
Unpaved Area (ha)	0	0	0
Total Area (ha)	1.171	0.188	0.100
After Development (refer to FIGURE 6.3)			
Paved Area (ha)	1.171	0.188	0.100
Unpaved Area (ha)	0	0	0
Total Area (ha)	1.171	0.188	0.100

Note:

(1) The catchment area was measured based on hydraulic model data.

- 6.2.7 Since the paved / unpaved characteristics of the Site and the flow pattern remain unchanged, there is no increase of flow after the Development. Hence there is no adverse drainage impact on the existing drainage system due to the Development.

Proposed Drainage Works

- 6.2.8 In order to enhance the development potential of the Site, it is proposed to abandon the existing public drains and manholes within the Site. Therefore no drainage reserves would be required within the Site. According to Section 15.6.2 of SDM, terminal manholes (TMs) should be provided at every drainage connection from the development and positioned within the allocated land as near to the site boundary as possible. Therefore, it is proposed to provide three new TMs in the Site near the site boundary as shown in **FIGURE 6.4**. The existing public drainage pipes and manholes at the upstream of the proposed TMs are to be abandoned and removed after the Proposed Development. The level and location of the proposed manhole and TMs are subject to detailed design in the next stage of Project.
- 6.2.9 In addition, according to the existing hydraulic model provided by DSD in November 2021, the existing manhole SMH1033420 receiving runoff from south-east side of the Site is about 80m away from the Site. A 375mm diameter pipe is proposed to connect with the proposed TM inside the Site and this existing manhole SMH1033420. The proposed layout is shown in **FIGURE 6.4**.

Summary

- 6.2.10 By connecting the new drainage pipes to the existing drainage network, it is concluded that the Proposed Development is technically feasible and no insurmountable impacts will be resulted from the Proposed Development.

6.3 Sewerage Aspects

Existing Sewerage Condition

- 6.3.1 There are existing sewers (225mm diameter pipe) along Tin Pak Road, which then connected to a 1200mm diameter pipe and discharged to TSWTCSSPS. Discharge pipes of TSWTCSSPS are connected to Ha Tsuen Sewage Pumping Station (HTSPS) via 1200mm to 2100mm diameter pipes along Tin Shing Road, Tin Fuk Road and Ping Ha Road. Discharge pipes of HTSPS are connected to San Wai Sewage Treatment Plant (SWSTP) via three 1200mm diameter pipes along Ping Ha Road, Tin Ha Road and Ha Tsuen Road. The existing sewerage

systems in the vicinity of the Site are shown on **FIGURE 6.5**. According to the information provided by DSD, the capacity of TSWTCSSPS, HTSPS and SWSTP are shown in **Table 6.2**.

Table 6.2 Sewage Treatment Capacity of TSWTCSSPS, HTSPS and SWSTP

	TSWTCSSPS	HTSPS	SWSTP
Design Average Dry Weather Flow (ADWF) capacity	32,400 m ³ /d (0.375 m ³ /s)	193,100 m ³ /d (2.235 m ³ /s)	200,000 m ³ /d (2.315 m ³ /s)
Current average daily flow (approx.)	32,800 m ³ /d (0.380 m ³ /s)	139,500 m ³ /d (1.615 m ³ /s)	141,000 m ³ /d (1.632 m ³ /s)
Design Peak Flow	1.12 m ³ /s	6.37 m ³ /s	5.72 m ³ /s

Sewerage Impact Assessment

- 6.3.2 The predicted peak sewage flow would be 0.09659 m³/s after the Proposed Development. As the existing TSWTCSSPS would be operating over its design capacity, the sewage generated from the Proposed Development is proposed to be discharged towards the existing manhole FMH1009254 at southwest of the Site, which will not enter TSWTCSSPS. The sewage would discharge to HTSPS via existing 1200mm to 2100mm diameter sewage pipes. The sewage is then further discharged to SWSTP via the existing sewerage system. The sewage generated from the Proposed Development will only occupy 1.52% and 1.69% of the capacity of HTSPS and SWSTP respectively. Hence, it is considered that the sewerage impact to the capacity of HTSPS and SWSTP is minimal.

Proposed Sewerage Works

- 6.3.3 Based on DSD's record plan, there is one existing lead-in for the Site. This existing lead-in will affect future development potential and should be abandoned. A new TM is proposed to convey the sewage generated to the existing manhole FMH1009254 at southwest of the Site. The capacity of the existing downstream sewers is assessed to be sufficiently capable to cater for the sewage generated from the Proposed Development. No upgrading works is required for the downstream sewerage system. The proposed sewerage works for the Site is shown on **FIGURE 6.6**.

Summary

- 6.3.4 By connecting the new sewage pipe to the existing sewerage network, it is concluded that the Proposed Development is technically feasible and no insurmountable impacts will be resulted from the Proposed Development.

6.4 Waterworks Aspects

Existing Water Supply Condition

- 6.4.1 Fresh water supply in the vicinity of the Site is currently provided by the Tan Kwai Tsuen North Fresh Water Service Reservoir (TKTNFWSR) (Capacity 81,516m³; Top Water Level (TWL) = +65mPD; Invert Level (IL) = +56.75mPD). The supply zone of TKTNFWSR is interconnected with Wang Chau Fresh Water Service Reservoir (WCFWSR) and Tan Kwai Tsuen South Fresh Water Service Reservoir (TKTSFWSR). According to revised WSD DI No. 1309, capacity requirement on fresh water service reservoir in interconnected supply zones is 75% of the Mean Daily Demand (MDD). Currently, fresh water is distributed to the Site from the existing water mains along Tin Pak Road, there are 1 no. of DN50 and 1 no. of DN25 fresh water main lead-ins at northwest side of the Site for fresh water supply.

- 6.4.2 Flushing water supply in the vicinity of the Site is within the supply zone of the Tan Kwai Tsuen Salt Water Service Reservoir (TKTSWSR) (Capacity 18,100m³; TWL = +67.5mPD; IL = +60mPD). According to WSD DI No. 1309, capacity requirement on salt water service reservoir is 25% of the MDD. Currently, the existing salt water mains are available along Tin Pak Road and Tin Chuk Street, but there is no salt water main lead-in for the Site for flushing water supply.
- 6.4.3 The location of TKTNFWSR and TKTSWSR is shown in **FIGURE 6.7**. The existing fresh and salt water mains in the vicinity of the Site are shown in **FIGURE 6.8**. The capacity and designed MDDs of TKTNFWSR and TKTSWSR are estimated and summarized in **Table 6.3**.

Table 6.3 The Capacity and Designed MDDs of TKTNFWSR and TKTSWSR

Service Reservoir	Capacity (m ³)	Designed MDD (m ³ /day)
TKTNFWSR	81,516	108,688
TKTSWSR	18,100	72,400

Water Supply Impact Assessment

- 6.4.4 The Proposed Development is located within the fresh water supply zone of TKTNFWSR, and the flushing water demand will be supplied by the proposed Wang Chau Reclaimed Water Service Reservoir (WC ReWSR), where the tentative completion date for the proposed WC ReWSR and its associated water mains is by 2031. As the tentative intake year for the Proposed Development is 2029, salt water is proposed for the flushing water supply before the commissioning of WC ReWSR. The salt water supply zone is under TKTSWSR.
- 6.4.5 The total fresh water demand is 1,805 m³/day, which is about 1.66% of the designed MDD of TKTNFWSR. The total flushing water demand is 706 m³/day, which is about 0.98% of designed MDD of TKTSWSR. Hence, it is considered that the impact to the TKTNFWSR and TKTSWSR is minimal.

Proposed Water Supply Works

- 6.4.6 Since the existing fresh water main lead-ins (1 no. of DN50 and 1 no. of DN25) branched off a DN150 fresh water main via a DN50 water main would be inadequate to serve for the development, it is proposed to change the lead-in locations. A DN200 lead-in for fresh water supply and a DN150 lead-ins for firefighting water supply at Tin Pak Road is proposed. The existing DN50 water main, DN50 lead-in and DN25 lead-in are proposed to be abandoned. The proposed fresh water mains in the vicinity of the Site is shown in **FIGURE 6.9**.
- 6.4.7 It is proposed to provide DN100 flushing water main lead-ins at Tin Chuk Street for flushing water supply. The proposed salt water mains in the vicinity of the Site is shown in **FIGURE 6.10**.

Summary

- 6.4.8 By connecting the new water supply mains to existing water supply network, it is concluded that the Proposed Development is technically feasible and no insurmountable impacts will be resulted from the Proposed Development.

6.5 Underground Utilities Aspect

- 6.5.1 Apart from the existing drainage, sewerage and water supplies systems as mentioned in **Sections 6.2, 6.3 and 6.4** above, potential conflicts between the Development and the existing and planned utilities including CLP cables for electricity power supply, public lighting, town gas supply and utilities for telecommunication services are identified. The layouts of existing and planned utilities are presented in **FIGURES 6.11 to 6.14**.

- 6.5.2 It is envisaged that majority of the existing and planned utilities laid underground do not have conflict with the Proposed Development. However, abandon, removal or diversion will be required for the portion of utilities and services encroached into the Site. The extent and location of re-provision of the utilities will be subject to agreement with corresponding utility undertakers in the next stage of the Project.
- 6.5.3 It is anticipated that the laying and construction of new utilities will be completed during the construction stage. Detailed arrangement and locations of proposed utility works will be subject to further liaison with utility undertakers in the next stage of the Project based on the user's requirements of the Proposed Development. Therefore, it is concluded that the Proposed Development is technically feasible and no insurmountable impacts will be resulted from the Proposed Development.

7 GEOTECHNICAL AND SITE FORMATION ASPECTS

7.1 General

- 7.1.1 The Site is generally flat with existing ground level of the Site ranging from about +6.3 to +6.7mPD. In addition, no natural terrain catchment is identified for the Site.
- 7.1.2 The Site is located within the Scheduled Area No. 2 as defined in Environment, Transport and Works Bureau Technical Circular (Works) No. 4/2004, which is recognized as an area of complex geology where karst features such as an uneven upper surface and dissolution cavities are known to occur due to the presence of marble.

7.2 Proposed Site Formation Works

- 7.2.1 The Site is currently mainly occupied by a bus depot. The bus depot should be relocated and the facilities within the Site should be demolished prior to the commencement of site formation.
- 7.2.2 As mentioned in **Section 7.1.1**, the Site is generally flat, and the proposed site formation level will match with the existing ground level with level ranging from +6.3mPD at the south, to +6.7mPD at the central portion of the Site and to +6.6mPD at the northern side of the Site. No major site formation works will be required. The preliminary site formation plan and section for the Proposed Development is shown in **FIGURES 7.1** and **7.2**.

7.3 Man-made Slopes and Retaining Walls

- 7.3.1 There is no existing registered slope feature located within or in the vicinity of the Site based on the records of the Slope Information System (SIS) from GEO. In addition, no man-made slope and retaining wall is proposed for the Development. Therefore, there is no geotechnical issue / constraint in relation to man-made slopes and retaining walls.

7.4 Scheduled Area No. 2

- 7.4.1 The Site is within Scheduled Area No. 2 in which cavity deposits were commonly recorded in boreholes together with the presence of meta-sedimentary rocks and / or marble. According to the existing GI records, the bedrock encountered within and in the vicinity of the Site is mainly metasiltstone and metasandstone. In addition, no marble is identified within or in the close vicinity of the Site. The nearest drillhole encountering marble is drillhole no. DD200/DH/309 (GIU Report No. 35415) located at Tin Wu Light Rail Station, approx. 170m to west. The potential for presence of marble or cavity within the Site is low.
- 7.4.2 Based on the result of project specific boreholes, no marble or cavity was encountered within the Site. In case of encountering marble or cavity within the Site, relevant guidelines for geotechnical works in marble area shall be followed. In general, presence of marble or cavity will not affect the feasibility and buildability of the Site.

7.5 Natural Terrain

- 7.5.1 The nearest natural hillside from the Site is located at 450 m away on Kai Shan. According to GEO Report No. 138 (2nd Edition), the Site does not satisfy the "Inclusion" guideline, and therefore, the Site is not affected by natural terrain hazard.
- 7.5.2 There is no Historical Landslide Catchments (HLCs) and Hillside Pockets (HPs) have been identified within or in the vicinity of the Site. Also, neither ENTLI (Enhanced Natural Terrain Landslide Inventory) feature, Large Landslide feature, nor reported landslide incidents have been recorded within or in the vicinity of the Site.

8 ENVIRONMENTAL ASPECTS

8.1 General

- 8.1.1 A Preliminary Environmental Review (PER) has been undertaken to identify and assess the potential environmental impacts in respect of air quality, noise, water quality, waste management, land contamination, culture heritage and ecological impact. According to the PER, the development layout has incorporated appropriate environmental setback of the residential development from the local or district distributor road and no insurmountable environmental impacts on the surrounding areas are anticipated. The 300m noise and 500m air quality assessment areas are shown in **FIGURE 8.1**.

8.2 Air Quality Impact Assessment

- 8.2.1 The major construction dust impact arising from the construction activities of the Project would be fugitive dust emissions due to site clearance, excavation, material handling, transport of spoils/sandfill materials and wind erosion of exposed area. With implementation of proper dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation and good site practices, potential construction dust impact could be minimised as far as possible and no adverse impact is anticipated.
- 8.2.2 Emissions of other air pollutants such as carbon monoxide and dioxide, nitrogen oxides and sulphur dioxide generated by powered mechanical equipment (PME) and vehicle exhausts on-site should be minor since on-site electricity supply would be provided for powered mechanical equipment during construction stage as much as practicable. Following the requirements stipulated in Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation and Air Pollution Control (Fuel Restriction) Regulations (i.e. use of ultra-low sulphur diesel), adverse air quality impacts from the criteria pollutants (such as NO₂, SO₂, and CO) are not anticipated.
- 8.2.3 Potential air quality impact on the Proposed Development during operation phase would be associated with the vehicular emissions from the surrounding open roads, such as Tin Tsz Road, Tin Pak Road and Tin Chuk Street. In accordance with the indicative development layout plan, all the planned air-sensitive uses of the Proposed Development including openable window, fresh air intake of ventilation system and recreational uses in open space would be located at about 20m from Tin Tsz Road which is a District Distributor, 7m from Tin Pak Road and 17m from Tin Chuk Street which are Local Distributors, which fulfil the buffer distance requirements of District Distributor (at least >10m) and Local Distributors (at least > 5m) recommended in the HKPSG. No adverse vehicular emission impact would be anticipated. The separation distances between the development block and Tin Tsz Road / Tin Pak Road / Tin Chuk Street are also shown in **FIGURE 8.2**.
- 8.2.4 Referring to the findings of the desktop review on the base map of the study area and finding of the surveys, there was no existing industrial chimney identified within 500m Assessment Area. In addition, no Specified Process was identified within 500m Assessment Area. Therefore, no chimney emission impact is expected on the Site.
- 8.2.5 The TSWTCSSPS and planned Fung Ka Wai Sewage Pumping Station (SPS) with the installation of the deodourizing unit would not pose adverse odour impact on the Proposed Development. Ha Mei San Tsuen SPS would not pose adverse odour impact on the Proposed Development of the Project in view of small scale and certain buffer distance from the Site. The locations of the existing sewage pumping stations are indicated in **FIGURE 8.3**.
- 8.2.6 The existing refuse collection point (RCP) located to the south-east of the Site is also not anticipated to pose adverse odour impact on the Development. Based on the indicative development layout, the two-storey podium near the RCP would be retail and club house uses which would be subject to central air-conditioning and the air intake would be located away from the RCP. Any air-sensitive uses of the Proposed Development would also be located away from the RCP as far as possible. The location of the RCP is indicated in **FIGURE 8.2**.

- 8.2.7 With implementation of mitigation measures such as good site practices and the provision of sufficient setback from nearby roads at the detailed design stage, potential air impacts would be further minimised under the latest development layout. It is anticipated that no insurmountable air quality impacts are anticipated to arise from the Proposed Development.

8.3 Noise Impact Assessment

- 8.3.1 As shown in **FIGURE 8.4**, the nearest noise sensitive receivers (NSRs) to the site boundary is the Buddhist Mau Fung Memorial College, which has only a 5m distance from the noise sensitive window to the site boundary. To mitigate the potential exceedance during the construction stage, adoption of quieter construction methods and use of quality powered mechanical equipment, noise barrier and noise enclosure should be adopted. In addition, good site practices should be adopted to abate noise impacts during the construction phase of the Project and noise mitigation measures stipulated in EPD's "Recommended Pollution Control Clauses for Construction Contracts" should be followed. Moreover, to avoid construction noise exceedance during examination period of the school, the Contractor should liaise with the school to avoid carrying out particular noisy construction activities during examination periods of the school.
- 8.3.2 The road traffic noise impact imposed on planned NSRs of the Proposed Development would be generated by the existing and planned roads within 300m from the boundary of the Site which are indicated in **FIGURE 8.4**. The main roads considered for road traffic noise impact assessment include Tin Tsz Road, Tin Fuk Road, Tin Pak Road, Tin Shing Road, Tin Cheung Road, etc. Based on the Conceptual Scheme, there are noise exceedances for both residential and non-residential uses under base case scenario (**Table 8.1**). The maximum predicted noise level for the Proposed Development is 75 dB(A) for residential uses.

Table 8.1 Summary of Predicted Road Traffic Noise Level under Base case Scenario

Noise Sensitive Uses	Assessment Points	Noise Standard, dB(A)	Range of Predicted Noise Level in Year 2041, L ₁₀ (1-hr), dB(A)	Mitigation Measures Required?
Residential Uses				
Block 1	N1a – N1l	70	63 – 70	No
Block 2	N2a – N2l	70	60 – 75	Yes
Block 3	N3a – N3l	70	62 – 74	Yes
Block 4	N4a – N4l	70	64 – 70	No
GIC (Social Welfare Facilities)	GIC1 – GIC12	55/65/70 *	57 – 74	Yes
Retail Facilities, Kindergarten and Clubhouse	R&C1 – R&C12	65 *	62 - 74	Yes

Note: *Subject to final uses of the Proposed Development

- 8.3.3 Mitigation measures such as consideration of building orientation, building setback, installation of cantilevered noise barrier at the podium roof, provision of architectural fin, adoption of acoustic window and/or acoustic balcony would be incorporated for those residential uses that exceed the noise criteria. According to the Practice Note on Application of INNOVATIVE NOISE MITIGATION DESIGNS in Planning Private Residential Developments against Road Traffic Noise Impact, acoustic window and enhanced acoustic balcony are proven to be capable of reducing the noise inside the flats by at least 6 dB(A), even in different configurations and dimensions to suit the individual needs, and at the same time allowing adequate natural ventilation. With implementation of mitigation measures as indicated in **FIGURE 8.5**, it is anticipated that all planned residential uses can meet the relevant noise standards. For non-residential uses that will mainly be accommodated at podium levels, subject to design by the

future private developer, with implementation of noise insulation with openable well-gasketted window and air-conditioning, no adverse road traffic noise impact on non-residential uses would be anticipated.

- 8.3.4 For fixed plant noise impact, noise exceedance due to existing fixed noise sources, such as operation of Tin Shui Wai Telephone Exchange, is predicted. Due to close distance and site constraint, further setback and using of single aspect building would largely reduce the flat number and fixed plant noise issue cannot be effectively solved. It is recommended the project proponent / future developer to liaise with the property management of Tin Shui Wai Telephone Exchange (i.e. HKT/PCW) to install at-source noise mitigation measures such as noise barrier, enclosure, silencers, etc. to alleviate fixed plant noise impact to the future development. The future designer/developer is also recommended to implement noise mitigation measures at receivers, such as using building orientation, building disposition, architectural fin, acoustic window/enhanced acoustic balcony, self-protective design, etc., to comply with noise criteria and requirement under HKPSG. Besides, in case there is any planned fixed plant noise sources due to the Proposed Development, the developer should ensure noise emitted by those noise sources to nearby NSRs would comply with noise criteria under Noise Control Ordinance and requirement under HKPSG.
- 8.3.5 With design and adoption of appropriate noise mitigation measures, it is anticipated that the Proposed Development would comply with the noise criteria under HKPSG. The design of appropriate noise mitigation measures will be subject to study in the detailed design stage by the developer.

8.4 Water Quality Assessment

- 8.4.1 The assessment area for water quality impact assessment is defined as all areas within 500m from the boundary of the Proposed Development as shown in **FIGURE 8.6**. Water quality impacts from the construction works are associated with the general construction activities, construction site run-off, accidental spillage of chemicals, sewage effluent from construction workforce, contaminated runoff / groundwater and wastewater from land decontamination process. The site practices as outlined in the ProPECCPN 2/23 “Construction Site Drainage” are recommended to minimise the potential water quality impacts from the construction activities. Proper site management and good site practices are also recommended to ensure that construction wastes and other construction-related materials would not enter the nearby watercourses. Sewage effluent arising from the construction workforce would be handled through provision of portable chemical toilets. Regular site inspection will be implemented for the construction works to ensure that the recommended mitigation measures are properly implemented.
- 8.4.2 All sewage generated from the Proposed Development will be discharged to the public sewerage system and diverted to sewage treatment works for proper treatment. No adverse water quality impact associated with sewage effluent is anticipated. Another source of potential impact during the operation phase will be the runoff or non-point source pollution from road surfaces and developed areas. Stormwater control measures including adequate stormwater drainage system with suitable pollutant removal devices and best stormwater management practices are recommended for the Project to minimise the non-point source pollution. With proper implementation of the recommended mitigation measures, it is anticipated that the water quality impacts associated with the non-point source discharge from road surfaces and developed areas would be minimised.

8.5 Waste Management Implications

- 8.5.1 Waste types generated by the construction activities would likely include inert and non-inert C&D materials from construction and excavation works, chemical wastes from the maintenance of construction vehicles and equipment, and Asbestos Containing Materials (ACM) (if any) as well as general refuse from the workforce. Provided that the identified wastes during construction phase would be handled, transported and disposed of using the recommended

methods and that good site practices would be strictly followed, adverse environmental impacts during construction phase would not be expected.

- 8.5.2 The quantities of general refuse arising from the Proposed Development during operational phase would be low. Thus, no significant waste implications would be anticipated.

8.6 Land Contamination Study

- 8.6.1 A site appraisal, in the form of desktop review and site walkover, was carried out in September 2021 to identify current / historical potentially contaminative land uses / activities within and in the vicinity of the Site. The site is divided into Area A and Area B for the purpose of land contamination assessment indicated in **FIGURE 8.7**. Based on the result of site appraisal, Area B has remained vegetated vacant land since pond reclamation in approximately 1997 and no land contamination issues are anticipated. Area A has been used for open parking of buses since 1997 with construction of bus refuelling facilities in 2013. Based on findings of the site appraisal, the only realistic potential source of soil and groundwater contamination is the bus refuelling facility with associated underground diesel fuel storage tanks and fuel pipelines within the Development Area A (see **FIGURE 8.7**).

- 8.6.2 A comprehensive site investigation plan in the form of a supplementary Contamination Assessment Plan (sCAP) in accordance with EPD's Guidance Manual, Guidance Note and Practice Guide has been submitted to EPD for approval. Land contamination assessment for Area A of the Site including intrusive SI works and, if required, remediation works is recommended in the sCAP and should follow EPD's Guidance Manual, Guidance Note and Practice Guide. In the event that any potentially contaminative activities occur within the bus depot after the approval of sCAP, then re-appraisal to update the sCAP may be required to reflect the latest land contamination potential. Detailed land contamination assessment for Area A should be undertaken in accordance with the sCAP at a later stage prior to the development. Any soil/groundwater contamination would be identified and properly treated prior to the commencement of construction works under the Project.

- 8.6.3 With the implementation of the recommended further works for the Project, any soil/groundwater contamination would be identified and properly treated prior to the construction works. No insurmountable land contamination impacts to the Proposed Development are therefore anticipated.

8.7 Cultural Heritage Aspects

- 8.7.1 No cultural heritage resource is located within the proposed works boundary. Three cultural heritage resources (i.e. Nos. 13-19 Ha Mei San Tsuen, No. 27 Ha Mei San Tsuen and Shrine of Ha Mei San Tsuen) are identified outside the proposed works boundary but within the 300m study area, including one Grade 3 Historic Building, and two buildings with no grade accorded. A heritage trail is located at over 500m from the proposed works boundary. The locations of the cultural heritage resources are displayed in **FIGURE 8.8**.

- 8.7.2 No impact would be anticipated to the graded building and non-graded buildings during the construction and operational phases. Hence, no mitigation measure would be required.

- 8.7.3 No impact would be anticipated to the Ping Shan Heritage Trail during the construction phase. Beneficial impact of increasing numbers of visitors would be anticipated during the operational phase due to the increase in population from the proposed housing development at the Site. As no adverse impact would be anticipated, no mitigation measure would be required during the construction and operational phase.

8.8 Ecological Impact Assessment

- 8.8.1 The assessment area for terrestrial ecological impact assessment included areas within 500m from the Site which are likely to be impacted by the construction and operation of the Proposed Development as indicated in **FIGURE 8.9**. Ten habitat types, including mixed woodland,

shrubland, grassland, plantation, village/orchard, dry agricultural land, developed area, pond, natural watercourse and modified watercourse, are identified within the 500m ecological assessment area. The Site is entirely covered by developed areas. A Conservation Area (CA) and Wetland Buffer Area (WBA) are situated at 360m east and 280m northeast to the Site. A total of one plant, four avifauna, four butterfly, one odonate, one herpetofauna, and seven mammal species of conservation importance are recorded within the assessment area from previous surveys and current site checks. No species of conservation importance is recorded within the Site. The ecological value of habitats within the assessment area are considered as low, except for mixed woodland with low to moderate value and grassland within CA with moderate value.

- 8.8.2 Potential direct impacts included habitat loss in developed areas are expected. However, given that the Site, located within the Tin Shui Wai New Town, only supports limited flora and fauna diversity and abundance, the impact is considered as minor.
- 8.8.3 Indirect impacts including disturbance impacts (i.e. glare, noise, air/dust, deterioration of water quality, and increase in human disturbance) on habitats in the vicinity and the associated wildlife. However, as the recorded species within the assessment area are common and widespread species and most of these records, including species of conservation importance, were made in habitats to the east of Tin Tsz Road. The disturbance impacts due to the construction and operation of the Project is considered as minor.
- 8.8.4 With the implementation of the recommended mitigation measures, no unacceptable adverse residual impacts would be expected during construction or operational phases.

8.9 Summary

- 8.9.1 With the implementation of the recommended mitigation measures, no unacceptable adverse residual impacts would be expected during construction or operational phases.

9 LANDSCAPE ASPECTS

9.1 General

- 9.1.1 Preliminary Tree and Vegetation Survey and Landscape Impact Assessment (LIA) were carried out to determine the value of the landscape and assess the potential landscape impacts arising from the proposed housing development. This section provides a summary of the key findings in the Preliminary LIA.

9.2 Findings of Tree and Vegetation Survey

- 9.2.1 Based on the tree survey, there are 104 nos. of existing trees identified within the Site. Identified tree species include *Ficus microcarpa*, *Acacia auriculiformis*, *Bridelia tomentosa*, *Acacia confuse*, and *Leucaena leucocephala*. Most of the trees within the Site are common species and no tree species with conservation interest are recorded.
- 9.2.2 No Registered OVTs under DEVB TC(W) No. 5/2020 are found within the development area boundary.
- 9.2.3 In accordance with the Guidelines for Tree Risk Assessment and Management Arrangement (9th Edition or the latest version), there is 1 no. of tree identified as Tree of Particular Interest (TPI) with trunk diameter exceeding 1.0 m (measured at 1.3 m above ground level). The TPI refers to T0875 (*Ficus macrocarpa* with DBH of 1.2 m) which has low amenity value, with poor form, health, and structural condition.
- 9.2.4 The tree survey plan is shown in **FIGURE 9.1** and the tree assessment schedule is presented in **Appendix C**.

9.3 Landscape Resources and Landscape Character Areas

- 9.3.1 There are 8 existing landscape resources (LRs) identified within 300m assessment area. Within the Assessment Area, the LR's which will be potentially affected by the Proposed Development together with their sensitivity are described in **Table 9.1**. The locations of LR's and their photographs are mapped in **FIGURES 9.2, 9.3** and **9.4**.

Table 9.1 List of Landscape Resources and their Sensitivity

LRs	Description	Sensitivity
LR1	Plantation within Temporary Landuse (eg. Open Storage, Workshop Areas, Parking, Recreational Use)	Low
LR2	Mixed Woodland	High
LR3	Village Planting in Rural Settlement Area	Medium
LR4	Landscape Area in Urban Development Areas	Medium
LR5	Tin Shui Wai Park, Tin Pak Road Park, other Local Open Spaces and Sitting-out Areas	Medium
LR6	Roadside Trees	Medium
LR7	Artificial Ponds	Low
LR8	Modified Watercourse	Low

- 9.3.2 The Site, which is currently mainly used as a bus depot, is located within LR4 (Landscape Area in Urban Development Areas). LR4 refers to the landscaped areas within the residential built-up areas including Kingswood Villas and several public housing estates in Tin Shui Wai and those recreational grounds such as Tin Shui Wai Swimming Pool, Tin Shui Wai Sports Centre and Tin Shui Wai Sports Ground. It is in the form of amenity areas, sitting-out areas,

playgrounds or rest gardens in between the residential or government/institution/community buildings. Common tree species such as *Acacia auriculiformis*, *Bauhinia variegata*, *Bombax ceiba*, *Crateva unilocularis* and *Ficus microcarpa* are observed in the vicinity of the Site. The vegetation is mainly landscaped for amenity, visual or buffer purposes. It is a common landscape resource with regular maintenance. The quality of this resource is medium and the ability of this resource to accommodate change is medium. Therefore, the overall sensitivity is considered as **Medium**.

- 9.3.3 There are 4 existing landscape character area (LCAs) identified within 300m assessment area. The LRs which will be potentially affected by the Development together with their sensitivity are described in **Table 9.2**. The locations of LCAs and their photographs are mapped in **FIGURES 9.5** and **9.6**.

Table 9.2 List of Landscape Character Area and their Sensitivity

LCAs	Description	Sensitivity
LCA1	Miscellaneous Rural Fringe Landscape	Medium
LCA2	Residential Urban Landscape	Medium
LCA3	Park Urban Landscape	Medium
LCA4	Mixed Modern Comprehensive Urban Development	Medium

- 9.3.4 The Site is located within LCA2 (Residential Urban Landscape). LCA2 is characterized by various high rise residential estates, roads and highways infrastructure, schools and associated facilities. Residential developments and institutional developments include Tin Tsz Estate, Ho Ming Primary School, Buddhist To Chi Fat She Yeung Yat Lam Memorial School, Tin Shui Wai Sports Centre, etc. It consists of self-contained local open space, recreational facilities and amenity landscape at street-level and podium level. In general, the landscape quality of this LCA is medium. The ability to accommodate change is medium and the overall sensitivity of this LCA is considered as **Medium**.

9.4 Landscape Impact Assessment

- 9.4.1 The Project will involve various sources of landscape impact. The Proposed Development will create varying levels of impact on the LRs and LCAs at different stages of its lifetime. Potential landscape impact from above ground development and the footprint of construction works and operational facilities is concentrated upon for the purpose of the assessment.

- 9.4.2 The sources of landscape impacts in the construction phase would include:-

- Site clearance and potential tree removal/ transplanting;
- Modification, retrofitting and/ or demolition of existing structures;
- Ground-breaking, excavation and construction of infrastructural and architectural structures;
- Temporary site areas, site offices, haul road, storage of construction materials, equipment and plants, hoarding, construction traffic, etc.; and
- Dust and construction debris.

Magnitude of Landscape Changes

- 9.4.3 Factors including compatibility of the project with the surrounding landscape, the duration of impacts under construction and operation phases, the scale of development, and irreversibility of change will be taken into account when determining the Magnitude of Changes. Landscape

Area in Urban Development Areas (LR4 with medium sensitivity) and Roadside Trees (LR6 with medium sensitivity) will be unavoidably affected. Although the proposed housing development is located within LR4, the affected area is currently mainly used as a bus depot with few trees located. Hence, the magnitude of change of LR4 is considered to be **intermediate** and the landscape impact before mitigation will be **moderate**. While the magnitude of change of LR6 is considered to be **small** as it only occupies a small portion of the Proposed Development. The landscape impact before mitigation will be **slight**.

- 9.4.4 Residential Urban Landscape (LCA2 with medium sensitivity) will be unavoidably affected. Considering the factors including compatibility of the project with the surrounding landscape, the duration of impacts under construction and operation phases, the scale of development, and reversibility of change, the magnitude of change of LCA2 is considered to be **intermediate**. The landscape impact before mitigation will be **moderate**.

9.5 Proposed Landscape Mitigation Measures

- 9.5.1 Based on the potential landscape changes identified in previous section, a list of design consideration and mitigation measures is proposed in **Table 9.3** and illustrated in **FIGURE 9.7** to alleviate any adverse landscape impacts.

Table 9.3 Landscape Mitigation Measures for Construction and Operation Phases

ID No.	Landscape Mitigation Measures
Construction Phase	
CM1	Preservation of Existing Vegetation
CM2	Transplanting of Affected Trees
CM3	Control of Night-time Lighting Glare
CM4	Erection of Decorative Screen Hoarding
CM5	Management of Construction Activities and Facilities
Operation Phase	
OM1	Compensatory Planting for Loss of Existing Trees
OM2	Provision of Screen Planting
OM3	Maximization of Roadside Planting
OM4	Aesthetically pleasing design of all man-made structures
OM5	Maximization of Greenery Provision
OM6	Provision of adequate open space

- 9.5.2 The potential significance of the impacts on landscape resources and character areas, during the construction and operation phases before and after mitigation, is provided in **Table 9.4**.
- 9.5.3 With the implementation of appropriate mitigation measures, it is predicted that there would be moderate residual impact on LR4 (Landscape Area in Urban Development Areas) during construction and slight impact on day 1 of operation. The residual impact on landscape resources would be further reduced to insubstantial when the proposed compensatory planting, buffer planting and woodland mix planting become mature in year 10 of operation. LR6 (Roadside Trees) would have slight residual impact during construction, and further reduced to insubstantial during day 1 and year 10 of operation.
- 9.5.4 With the implementation of appropriate mitigation measures listed in **Table 9.3**, it is predicted that there would be moderate residual impact on LCA2 (Residential Urban Landscape) during construction and slight impact on day 1 of operation. The residual impact on the landscape

character areas would be further reduced to insubstantial when the proposed compensatory planting, buffer planting and woodland mix planting become mature in year 10 of operation.

- 9.5.5 The overall predicted residual landscape impact of the Proposed Development is therefore reduced to an acceptable level.

Table 9.4 Significance of Landscape Impacts during Construction and Operation Phases

ID No.	Landscape Resource / Character Areas	Sensitivity (Low, Medium, High)		Magnitude of Change (Negligible, Small, Intermediate, Large)		Impact Significance before Mitigation (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Significance of Residual Impact (Insubstantial, Slight, Moderate, Substantial)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
Landscape Resources											
LR1	Plantation within Temporary Land use (e.g. Open Storage, Workshop Areas, Parking, Recreational Use)	Low	Low	Negligible	Negligible	Insubstantial	Insubstantial	Not required	Insubstantial	Insubstantial	Insubstantial
LR2	Mixed Woodland	High	High	Negligible	Negligible	Insubstantial	Insubstantial	Not required	Insubstantial	Insubstantial	Insubstantial
LR3	Village Planting in Rural Settlement Area	Medium	Medium	Negligible	Negligible	Insubstantial	Insubstantial	Not required	Insubstantial	Insubstantial	Insubstantial
LR4	Landscape Area in Urban Development Areas	Medium	Medium	Intermediate	Intermediate	Moderate	Moderate	CM1, CM2, CM3. CM4, CM5, OM1, OM2, OM3, OM4, OM5, OM6	Moderate	Slight	Insubstantial
LR5	Tin Shui Wai Park, Tin Pak Road Park, other Local Open Spaces and Sitting-out Areas	Medium	Medium	Negligible	Negligible	Insubstantial	Insubstantial	Not required	Insubstantial	Insubstantial	Insubstantial
LR6	Roadside Trees	Medium	Medium	Small	Small	Slight	Slight	CM1, CM2, CM3. CM4, CM5, OM1, OM2, OM3, OM4, OM5, OM6	Slight	Insubstantial	Insubstantial
LR7	Artificial Ponds	Low	Low	Negligible	Negligible	Insubstantial	Insubstantial	Not required	Insubstantial	Insubstantial	Insubstantial
LR8	Modified Watercourse	Medium	Medium	Negligible	Negligible	Insubstantial	Insubstantial	Not required	Insubstantial	Insubstantial	Insubstantial
Landscape Character Area											
LCA1	Miscellaneous Rural Fringe Landscape	Medium	Medium	Negligible	Negligible	Insubstantial	Insubstantial	Not required	Insubstantial	Insubstantial	Insubstantial
LCA2	Residential Urban Landscape	Medium	Medium	Intermediate	Intermediate	Moderate	Moderate	CM1, CM2, CM3. CM4, CM5, OM1, OM2, OM3, OM4, OM5, OM6	Moderate	Slight	Insubstantial

ID No.	Landscape Resource / Character Areas	Sensitivity (Low, Medium, High)		Magnitude of Change (Negligible, Small, Intermediate, Large)		Impact Significance before Mitigation (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Significance of Residual Impact (Insubstantial, Slight, Moderate, Substantial)		
		Construction	Operation	Construction	Operation	Construction	Operation		Construction	Operation	
										Day 1	Year 10
LCA3	Park Urban Landscape	Medium	Medium	Negligible	Negligible	Insubstantial	Insubstantial	Not required	Insubstantial	Insubstantial	Insubstantial
LCA4	Mixed Modern Comprehensive Urban Development	Medium	Medium	Negligible	Negligible	Insubstantial	Insubstantial	Not required	Insubstantial	Insubstantial	Insubstantial

9.6 Preliminary Compensatory Planting Proposal

- 9.6.1 Due to project needs and the site constraints identified, a total of 104 nos. of tree is proposed to be felled in the Project. The tree assessment schedule is presented in **Appendix C**.
- 9.6.2 There is 1 no. of Tree of Particular Interest (TPI) found within the Site in accordance with the Guidelines for Tree Risk Assessment and Management Arrangement (9th Edition or the latest version), and it is proposed to be felled (T0875 *Ficus macrocarpa* with DBH of 1.2 m). Transplantation is not recommended for tree with mature sizes and growing in proximity with adjacent tree which induce technical infeasibility for forming a proper root ball for transplanting. The specimens will be in irrecoverable form after transplanting and have a low chance of survival upon transplanting. Therefore, T0875 is proposed to be felled due to conflict with proposed works, details of layout will be addressed in the Tree Preservation and Removal Proposal (TPRP) prepared by future private developer. Sensitivity Analysis specified in the TRAM Guidelines shall also be prepared.
- 9.6.3 In accordance with Guidance Notes on Tree Preservation and Removal Proposal for Building Development in Private Projects - Compliance of Tree Preservation Clause under Lease (LAO PN No. 6/2023) issued by Lands Department, no compensatory planting is required for felling of *Leucaena leucocephala*. In order to fulfil the compensatory planting in ratio of 1:1, approx. 98 nos. of heavy standard size new trees could be provided within the site boundary. Compensatory planting proposal is summarized in **Table 9.5**. It should be stressed that the exact number and location of new trees shall be subject to the design by the future developer at later detailed design stages.

Table 9.5 Summary of Compensatory Planting Proposal

Location	Tree Proposed to be Removed	Number of Compensatory Trees
Within Site Boundary	104 (including 6 nos. of <i>Leucaena leucocephala</i> and 1 no. of TPI)	Approx. 98 nos. heavy standard size new trees

Note: Number of compensatory trees is subject to the design by future developer in detailed design stage.

9.7 Preliminary Landscape Design Proposal

- 9.7.1 The Conceptual Design Proposal, for indicative purpose at EFS Stage only and subject to detailed design by the future developer, for the Proposed Development is illustrated in **FIGURE 9.8**. Design proposed for the Site include the following:-
- The Proposed Development should integrate with the existing and planned landscape context from the landscape and visual perspective. It aims to create a harmonious and relaxing landscape setting for outdoor environment and provide a lush green space. The indicative design provides landscape areas on both G/F and Podium. Buffer planting will be incorporated along the boundary at G/F. Proposed children's play and fitness areas will be provided at Podium, along with pocket landscape garden. Thematic floor paving is proposed to create floor patterns, integrating walking paths, planters and children's play areas. Yet, the final design is subject to the future developer in the later design stage.
 - The Proposed Development shall provide adequate local open space to meet the standard for provision of local open space (i.e. 1m² per person) as stipulated in the Chapter 4 (Recreation, Open Space and Greening) of HKPSG. The minimum local open space required for the Proposed Development is 4,760 m². Based on the current landscape design, the total open space provision achieves approx. 5,320m². Details are illustrated in **FIGURE 3.1**.
 - A minimum of 20% greenery coverage shall also be complied with accordance with PNAP APP-152. The minimum greenery coverage required for the Proposed

Development is 2,940 m². Based on the current landscape design, the total greenery coverage achieves approx. 3,912 m². Details are illustrated in **FIGURE 3.2**.

- Existing trees shall be preserved where feasible and appropriate. The Proposed Development should maximise opportunities for the planting of new trees and shrubs within the development to enhance the amenity value of local landscape context.
- The landscape design should also consider incorporating design with Blue-Green Drainage Infrastructure, which include the incorporation of bioretention system (i.e. rain garden and bioswale), the use of recycled water (i.e. reclaimed water, treated grey water and harvested rainwater) for landscape irrigation, the adoption of permeable pavements, and etc. The detailed design shall be subject to the future developer at later design stage.

10 VISUAL ASPECTS

10.1 General

- 10.1.1 Preliminary Visual Impact Assessment (VIA) has been undertaken in accordance with Town Planning Board Guidelines on Submission of Visual Impact Assessment for Planning application to the Town Planning Board (TPB PG No. 41) to assess the potential impacts arising from the Proposed Development from visual perspectives.

10.2 Visual Envelope

- 10.2.1 The visual envelope (VE) of the Proposed Development has been identified by desktop study, maps, photographs and site visit to determine visibility of the Site from various locations. The Site is bounded by high-rise residential development (i.e. Tin Tsz Estate) to the South, sports ground and urban park (i.e. Tin Shui Wai Park) to the west, brownfield operation to the east across Tin Tsz Road and the hillside of Kai Shan to the further east. The extent of the VE is indicated in **FIGURE 10.1**.
- 10.2.2 The major key visual resources of the area include the distant hilly backdrop of Kai Shan and the open skyline. Tin Shui Wai Park serves as another key visual resource, providing visual interest and creating the visual character of the area. Another key visual resource is the scattered vegetation located within fragmented land used for industrial/open storage, rural residential developments, logistics and parking uses to the east of the Site.

10.3 Selection of Viewpoints

- 10.3.1 The following public viewpoints (VPs) are identified with reference to TPB PG No. 41, where it is easily accessible and popular to the public or tourists from different directions. When selecting the viewpoints, priority is given to major public open space, public focal points, existing / future pedestrian nodes, key pedestrian / vehicular corridor and existing major vistas, which are considered as major visual sensitive viewpoints.

- 10.3.2 The following viewpoints are selected as follows:-

- Viewpoint 1 (VP1) – View at Kai Shan looking South-west
- Viewpoint 2 (VP2) – View inside Tin Pak Road Park looking South
- Viewpoint 3 (VP3) – Pedestrian Road near Tin Shui Wai Swimming Pool looking South-east
- Viewpoint 4 (VP4) – View at water fountain inside Tin Shui Wai Park looking South-west
- Viewpoint 5 (VP5) – View at running track inside Tin Shui Wai Sport Ground looking East
- Viewpoint 6 (VP6) – View from Tin Shui Wai Station/Tin Shui Wai Light Rail Station
- Viewpoint 7 (VP7) – View at Tin Tsz Garden looking North
- Viewpoint 8 (VP8) – Ha Mei San Tsuen Sitting Out Area Looking at North-west

10.4 Appraisal of Visual Change

- 10.4.1 Summary of visual impact is presented in **Table 10.1**. VP2, VP3, VP5, and VP8 are anticipated to have a moderately adverse impact; VP1, VP4 and VP7 are expected to have a slightly adverse visual impact. For VP6, the visual impact is considered negligible. Appraisal of visual change for each VP is presented below.

Table 10.1 Summary of Visual Impact to Corresponding Viewpoints (VPs)

Viewpoint	Impact
VP1 View at Kai Shan Looking South-west	slightly adverse
VP2 View Inside Tin Pak Road Park Looking at South	moderately adverse
VP3 Pedestrian Road near Tin Shui Wai Swimming Pool Looking South-east	moderately adverse
VP4 View at Water Fountain Inside Tin Shui Wai Park Looking South-west	slightly adverse
VP5 View at Running Track Inside Tin Shui Wai Sports Ground Looking East	moderately adverse
VP6 View from Tin Shui Wai Station/Tin Shui Wai Light Rail Station	negligible
VP7 View at Tin Tsz Garden Looking at North	slightly adverse
VP8 View at Ha Mei San Tsuen Sitting Out Area Looking at North-west	moderately adverse

Viewpoint 1 (VP1) – Kai Shan looking south-west (refer to Photomontage 1 - FIGURE 10.2)

- 10.4.2 **Visual composition** – The VP is located on Kai Shan, which is mainly visited by hikers. Viewing from an elevated perspective, there is a panoramic view of the existing low-rise development, including open storage, construction work, and village houses, with the high-rise development of Tin Shui Wai New Town in the background. However, the Proposed Development would be largely obstructed by another planned public housing development near Tin Tsz Road. Since the Proposed Development can only be glimpsed through the building gap of the planned development near Tin Tsz Road, the impact to visual composition of this VP by the Proposed Development is considered slight.
- 10.4.3 **Visual obstruction** – In comparison to existing view towards the open skyline, the Proposed Development will not lead to significant obstruction since majority part of the Proposed Development will be obstructed by the planned public housing development near Tin Tsz Road in the foreground. The existing visual elements of the green slope in the foreground is retained and part of the open skyline is still visible. The Proposed Development will only lead to a minor loss of the open sky view.
- 10.4.4 **Effect on public viewers** – The value of the view is primarily attached to the visual amenity of the immediate green slope, scattered vegetation within low rise development, the relatively open skyline, and the distant hilly backdrop. As mentioned above, the Proposed Development would be largely obstructed by another planned public housing development near Tin Tsz Road, therefore the perceivable visual change is slight. In general, the magnitude of visual changes can be considered slight.
- 10.4.5 **Effect on visual resources** – As mentioned above, the key visual resources, including the green slope in the foreground and the relatively open skyline, will not be affected. However, the distant hilly backdrop will be partially obstructed. Along with the planned public housing development near Tin Tsz Road, the Proposed Development will replace some low-rise development and scattered vegetation. As the existing view already consists of high-rise buildings of Tin Shui Wai New Town on a long-distance view, the Proposed Development appears to be quite compatible with the surrounding landscape. Therefore, the condition, quality, and character of the view will not change significantly.
- 10.4.6 In consideration of the blockage arising from the planned public housing development near Tin Tsz Road, the Proposed Development can only be glimpsed through the building gap in the foreground, and it will not inflict significant visual impact or changes. Therefore, the visual impact is anticipated to be **slightly adverse**.

Viewpoint 2 (VP2) – View Inside Tin Pak Road Park Looking South (refer to Photomontage 2 - FIGURE 10.3)

- 10.4.7 **Visual composition** – The VP is situated inside Tin Pak Road Park, and the view is from a pedestrian perspective. In the foreground, there is a tree-lined pathway, while the basketball court and WSD Tin Shui Wai Building are visible in the background, with a relatively open sky. It is noted that the existing trees inside Tin Pak Road Park and the WSD Tin Shui Wai Building have already screened off part of the Proposed Development. As a result, the upper portion of the Proposed Development can be seen from the VP in the background which create a new visual element. The Proposed Development would moderately change the existing visual context and character of the urban setting.
- 10.4.8 **Visual obstruction** – As shown in the photomontage, there are no blockages of views towards the tree-lined pathway inside Tin Pak Road Park, while the Proposed Development will be partially visible in the middle of the background. This creates a loss in the open skyscape above the tree canopies, although there are no important ridgelines or landmarks in the background.
- 10.4.9 **Effect on public viewers** – The value of the view is primarily attached to the visual amenity of greenery within Tin Pak Road Park. As mentioned above, only part of the Proposed Development will be seen in the background, and the existing amenity trees within the park have already screened off part of the development. Design measures, including proper choice of façade colour scheme, could help to harmonize the Proposed Development with the adjoining environment. In general, the magnitude of visual changes can be considered slight to moderate.
- 10.4.10 **Effect on visual resources** – As mentioned above, the key visual resources of greenery will be retained, yet part of the open skyscape will be blocked. Owing to the distant viewing distance, the Proposed Development has a less prominent effect. In general, the condition, quality, and character of the view will be degraded.
- 10.4.11 In the view of the above, the Proposed Development will partially block the open skyscape, yet there will be no significant impact on the existing visual amenity. Considering it is an open space for the public, visitors, and nearby residents, who would be the major users of the space, they would be moderately sensitive to any visual changes. Therefore, the visual impact is anticipated to be **moderately adverse**.

Viewpoint 3 (VP3) – Pedestrian Road near Tin Shui Wai Swimming Pool Looking South-east (refer to Photomontage 3 - FIGURE 10.4)

- 10.4.12 **Visual composition** – The VP is located outside Tin Shui Wai Swimming Pool, and the view is from a pedestrian perspective. In the foreground, there is a formal landscaped area which consist of shrubs and palm trees (i.e., *Archontophoenix alexandrae*). The single-story height building façade of Tin Shui Wai Swimming Pool with open skyscape form the background of the view. The planned public housing development near Tin Tsz Road can be seen on the left side of the view, which is partially blocked by the Tin Shui Wai Swimming Pool. The Proposed Development will be located on the right side of the view at a short-medium distance. The Proposed Development would moderately change the existing visual context and character of the urban setting.
- 10.4.13 **Visual obstruction** – As shown in the photomontage, the Proposed Development will be located on the right side of the view, while the building structure (i.e., swimming pool and pergola) and palm tree in the foreground will partially screen off part of the building. However, the Proposed Development will fully block the open sky view when facing the right direction, creating visual obstruction and reducing the degree of visual openness.
- 10.4.14 **Effect on public viewers** – The value of the view is primarily attached to the visual amenity of greenery located in proximity to Tin Shui Wai Swimming Pool, as well as the open skyscape. As mentioned above, the view beyond the roadside palm tree and shrub outside the Tin Shui Wai Swimming Pool will be dominated by the two new housing developments, particularly the

Proposed Development on the right side, which fully obscures the open skyline view. Design measures, including proper choice of facade color scheme, could help to harmonize the Proposed Development with the adjoining environment. In general, the magnitude of visual changes can be considered moderate.

10.4.15 **Effect on visual resources** – As mentioned above, the key visual resources of greenery outside Tin Shui Wai Swimming Pool are retained. Yet, half of the open skyline will be obscured by the Proposed Development. Even though the Proposed Development appears to be quite compatible with the surrounding urban modern landscape, the condition, quality, and character of the view will change moderately.

10.4.16 In the view of the above, the Proposed Development will create a visual obstruction to the open skyline and degrade the quality of existing views. However, it could still fit into the existing modern urban landscape. Therefore, the visual impact is anticipated to be **moderately adverse**.

Viewpoint 4 (VP4) – View at Water Fountain Inside Tin Shui Wai Park Looking South-west (refer to Photomontage 4 - FIGURE 10.5)

10.4.17 **Visual composition** – The VP is located at Tin Shui Wai Park, adjacent to the water fountain. In the foreground, there is a formal landscape planter consisting of shrubs and ornamental trees, along with a water fountain located on the right side of the view. The planned public housing development of Tin Tsz Estate can be partially seen on the left side of the background of the view, with a relatively unobstructed sky view. The Proposed Development will be located in the middle of the view at a medium-to-long distance and will be partially blocked by the vegetation within Tin Shui Wai Park. Nonetheless, the Proposed Development will occupy a portion of open skyline above tree canopies which alters the existing visual composition.

10.4.18 **Visual obstruction** – As shown in the photomontage, the Proposed Development will be located in the middle of the view, with the foreground vegetation at Tin Shui Wai Park partially screening off a portion of the development. Considering the medium-long viewing distance, the relatively open sky view will not be largely obstructed.

10.4.19 **Effect on public viewers** – The value of the view is primarily attached to the visual amenity of greenery located within Tin Shui Wai Park, as well as the surrounding landscaped area. As mentioned above, only part of the Proposed Development will be seen in the background at distant, and the existing amenity tree within the park has already screened off part of the development. Design measures, including proper choice of facade color scheme, could help to harmonize the Proposed Development with the adjoining environment. In general, the magnitude of visual changes can be considered slight.

10.4.20 **Effect on visual resources** – As mentioned above, the key visual resources of greenery will be retained, and the open sky view will not be affected. Besides, owing to the distant viewing distance, the Proposed Development has a less prominent effect. Therefore, the condition, quality, and character of the view will not be significantly degraded.

10.4.21 In the view of the above, it is unlikely that the Proposed Development will degrade the visual amenity in the foreground that is currently enjoyed from the VP. Therefore, the visual impact is anticipated to be **slightly adverse**.

Viewpoint 5 (VP5) – View at running track inside Tin Shui Wai Sport Ground Looking East (refer to Photomontage 5 - FIGURE 10.6)

10.4.22 **Visual composition** – The VP is located at the running track inside Tin Shui Wai Sports Ground. In the foreground, there is a running track and football field, while scrub and trees surround the periphery of the Sports Ground. The high-rise buildings of Tin Tsz Estate on the right with open skyline form the background of the view. The Proposed Development is noticeable in the middle of the view, while another planned public housing development near Tin Tsz Road is located on the left. As the Proposed Development is highly visible, the existing visual and character of the urban setting will be altered to a certain extent.

10.4.23 **Visual obstruction** – As shown in the photomontage, the Proposed Development will be in the middle of the view. The trees located at the periphery of the sports ground will partially screen off the lower part of the building. Nonetheless, the Proposed Development creates an apparent visual obstruction and reduces the degree of visual openness.

10.4.24 **Effect on public viewers** – The value of the view is primarily attached to the visual amenity of greenery at the periphery of the sports ground, as well as open skyscape in the background. As mentioned above, the Proposed Development will sit in the middle of the view in the far distance with partial blockage of the open skyscape. Design measures, including proper choice of facade color scheme, could help to harmonize the Proposed Development with the adjoining environment. In general, the magnitude of visual changes due to the Proposed Development can be considered moderate.

10.4.25 **Effect on visual resources** – As mentioned above, the key visual resources of amenity planting within the sports ground are retained, while part of the open skyscape will be obscured by both the planned development and the Proposed Development. This will degrade the condition, quality or characters of the visual resources within this VP.

10.4.26 In view of the above, the Proposed Development could be considered as an extension of the surrounding residential clusters with compatible visual language. Yet it still creates significant blockage toward open sky, the visual impact is anticipated to be **moderately adverse**.

Viewpoint 6 (VP6) – View from Tin Shui Wai Station/Tin Shui Wai Light Rail Station (refer to Photomontage 6 - FIGURE 10.7)

10.4.27 **Visual composition** – The VP is located at Tin Fuk Road, and the view is from a pedestrian level. The view contains roadside planting, minibus stop shelter, and traffic lane in the foreground. The high-rise buildings of Tin Yiu Estate can be seen from a medium-long distance on the left side of the foreground, along with the high-rises of Tin Yau Court and Tin Tsz Estate form the background of the view. The proposed New Public Market in Tin Shui Wai will be located at this VP, which will be built on an elevated platform spanning across Tin Fuk Road. The proposed New Public Market will completely obstruct the view towards the Proposed Development. Therefore, the impact of the Proposed Development on the existing visual context and character of the urban setting is negligible.

10.4.28 **Visual obstruction** – As shown in the photomontage, the Proposed Development will be in the middle of the view at a far viewing distance. Yet, as abovementioned, the proposed New Public Market will completely obstruct the view toward the Proposed Development. Therefore, the impact of the Proposed Development on the visual obstruction and visual openness is negligible.

10.4.29 **Effect on public viewers** – The value of the view is primarily attached to the visual amenity of roadside planting as well as the open sky view in the background. Yet, as abovementioned, the proposed New Public Market will completely obstruct the view towards the Proposed Development. Therefore, the magnitude of visual changes of the Proposed Development is negligible.

10.4.30 **Effect on visual resources** – As mentioned above, the key visual resources of roadside planting and part of the open sky view will be obscured by the proposed New Public Market in Tin Shui Wai. Therefore, the Proposed Development has no impact on the condition, quality, and character of the view. In view of the above, the visual impact is anticipated to be **negligible**.

Viewpoint 7 (VP7) – View at Tin Tsz Garden looking North (refer to Photomontage 7 (refer to Photomontage 7 - FIGURE 10.8)

10.4.31 **Visual composition** – The VP is located at Tin Tsz Garden, and the view is from a pedestrian level. The view contains ornamental planting, trellises, and walking paths in the foreground. The high-rise buildings of Tin Tsz Estate can be seen from a close distance on the left side. The high-rise building of Kenswood Court in the far distance with open skyscape form the background of the view. The Proposed Development will be located in the middle of the view

at a short-medium distance, while another planned public housing development near Tin Tsz Road is located on the right at a far distance. The existing visual context and character of the urban setting would be slightly impacted.

10.4.32 Visual obstruction – As shown in the photomontage, the Proposed Development will be located in the middle of the view at a medium viewing distance, blocking both the sky view and the high-rise buildings of Kenswood Court. The buildings of Tin Tsz Estate in the foreground will obscure half of the Proposed Development, while the amenity planting inside Tin Tsz Garden will partially screen off the lower part of the Proposed Development. Considering the surrounding landscape setting, there is limited visual obstruction and loss of visual openness in relation to the Proposed Development.

10.4.33 Effect on public viewers – The value of the view is primarily attached to the visual amenity of amenity vegetation of trees and shrubs within the Tin Tsz Garden, as well as the open skyscape in the background. As mentioned above, the Proposed Development will sit in the middle of the view, where it is partially obscured by Tin Tsz Estate and trees. The existing visual elements of amenity vegetation will not be affected. Considering it is an open space for the public, visitors, and nearby residents, who would be the majority users of the space, they would be moderately sensitive to any visual changes. Design measures, including proper choice of facade color scheme, could help to harmonize the Proposed Development with the adjoining environment. In general, the magnitude of visual changes can be considered slight.

10.4.34 Effect on visual resources – As mentioned above, the key visual resources of amenity planting within the garden are retained, while a small portion of the open skyscape will be obscured by the new buildings. As the existing view already consists of high-rise buildings of Tin Tsz Estate in a close distance, the Proposed Development appears to be quite compatible with the surrounding landscape. Therefore, the condition, quality, and character of the view will not change significantly.

10.4.35 In view of the above, although the Proposed Development will create certain obstructions to the open skyscape, it is considered an extension of the surrounding residential clusters with compatible visual language. It is unlikely that the Proposed Development will degrade the visual amenity in the foreground that is enjoyed from the VP. Along with the far viewing distance, the visual impact is anticipated to be **slightly adverse**.

Viewpoint 8 (VP8) – Ha Mei San Tsuen Sitting Out Area Looking at North-west (refer to Photomontage 7 (refer to Photomontage 8 - FIGURE 10.9)

10.4.36 Visual composition – The VP is located at Ha Mei San Tsuen Sitting Out Area, and the view is from a pedestrian level. The view contains miscellaneous grass and scrub vegetation with semi-mature trees in the foreground which almost block the open sky view at the background. The Proposed Development will be located on the left side of the view, which is partially screened off by the existing vegetation. Considering the incompatibility with the surrounding landscape setting in relation to the Proposed Development, the existing visual context and character of the urban setting would be moderately impacted.

10.4.37 Visual obstruction – As shown in the photomontage, the Proposed Development will be located on the left of the view, and the entire new building block will be screened off by vegetation in the foreground. Meanwhile, the Proposed Development will also block the entire open skyscape on the left of the view. In comparison to the existing condition, the Proposed Development will create an apparent loss in open skyscape.

10.4.38 Effect on public viewers – The value of the view is primarily attached to the visual amenity of roadside planting along Ha Mei San Tsuen Sitting Out Area. As mentioned above, only a small portion of open skyscape can be seen through the gaps in the tree branches. The Proposed Development will almost block the entire skyscape on the left of the view. As the view is mainly occupied by passengers and drivers of vehicles during daily operation, they would not pay much attention to the visual amenity. Design measures, including proper choice of facade color

scheme, could help to harmonize the Proposed Development with the adjoining environment. In general, the magnitude of visual changes can be considered moderate.

10.4.39 **Effect on visual resources** – As mentioned above, the key visual resources of roadside planting are retained, while the existing partially open skyline will be further obscured by the Proposed Development. Due to the scale of the Proposed Development in the view, combined with poor compatibility with the existing landscape, the condition, quality, and character of the view will change moderately.

10.4.40 In view of the above, although the Proposed Development will create certain obstructions to the open skyline, it will be intercepted by the foreground vegetation, which will not create a significant impact on the existing visual amenity. Therefore, the visual impact is anticipated to be **moderately adverse**.

10.5 Evaluation of Overall Visual Impact

10.5.1 The design and layout of the Proposed Development has carefully considered the surrounding contexts and key public viewers located within the assessment area. Key mitigation measures to alleviate the effects of Proposed Development are described below and shown on **FIGURE 9.7**. The landscape mitigation measures mentioned in **Table 9.3** can also be applied to alleviate visual impacts.

(i) VM1 – Building Separation and Setback

10.5.2 The potential visual impact and obstruction resulting from the Proposed Development are inevitable. In order to reduce the effect, appropriate building separation and setbacks between the building blocks should be maintained. This helps to enhance the visual permeability of the development and reduce the impact on the surrounding environment.

(ii) VM2 – Control of Development Heights and Massing

10.5.3 Development heights and massing of the Proposed Development shall be designed to create and define the spatial character of the Site. Building disposition and massing control shall maximize the overall permeability of the area which shall also act to increase ventilation, allow sunlight penetration and preserve views.

(iii) VM3 – Visual Compatibility of the Development

10.5.4 Building disposition and massing control shall aim to minimize the adverse impact to the overall permeability, ventilation, sunlight penetration and views of the area as possible. Provision of buffer areas including soft and hard landscaping areas should be considered during design stage, in order to avoid visual impact due to hard edge of proposed structures.

10.5.5 The Proposed Development shall be visually compatible with the adjacent context. Coherent design of structures and materials should be considered, which helps to co-ordinate façade of built form with the surroundings in harmony through proper choice of colour scheme (e.g. Beige/ light brown) which would help to recess and harmonize with the adjoining environment, providing a compatible extension from the residential built-up areas in Tin Shui Wai New Town, for example the nearby Tin Tsz Estate. The proposed building façade shall seek to break down the scale and avoid a monotony outlook. VM3 is same as OM4 - Aesthetically pleasing design of all man-made structures.

(iv) VM4 – Maximization of Greenery Provision

10.5.6 The Proposed Development is expected to have unavoidable visual impacts and obstructions. To address this, efforts will be made to maximize greenery coverage. Compensatory planting for the loss of existing trees (OM1), provision of screen planting at the periphery of the above-ground structures along the roadside (OM2), roadside planting (OM3), exploration of different

ways of providing greenery, such as green roofs and vertical greening (OM5), and provision of adequate open space with proper landscape design (OM6) will provide visual relief and minimize any potential negative visual changes.

10.6 Summary

- 10.6.1 In summary, the visual impacts of the Proposed Development from the 8 selected viewing points range from negligible to moderately adverse, contingent upon various factors including viewing distances, visual sensitivity, visual composition, extent of visual obstruction, effect on public viewers, and effect on visual resources. Despite concerted efforts made to mitigate the potential visual impact of the Proposed Development, it is anticipated that some visual changes to the adjacent public viewing points may be unavoidable.
- 10.6.2 However, mitigation measures are proposed, which include considering building separation and setback (VM1), controlling development heights and massing (VM2), and ensuring visual compatibility (VM3; OM4). In addition, efforts will be made to maximize greenery provision (VM4) through measures such as compensatory planting for the loss of existing trees (OM1), provision of screen planting at the periphery of above-ground structures along the roadside (OM2), roadside planting (OM3), exploration of different ways of providing greenery, such as green roofs and vertical greening (OM5), and the provision of adequate open space with proper landscape design (OM6). It is anticipated that these measures will effectively mitigate significant adverse visual impacts on the surrounding area.
- 10.6.3 However, it is recommended that the future developer should consider more optimal schemes and additional design measures during the detailed design stage to further enhance the project's visual qualities, as well as ensure compliance with Sustainable Building Design Guidelines to promote a sustainable built environment.
- 10.6.4 As discussed in **Section 10.4**, with the exception of VP6 where the visual impact is negligible, the Proposed Development would generally be perceived as an extension of the existing and planned high-rise residential developments within the new town context. It would primarily result in partial obstruction of the open sky view in the background while not affecting any visual amenity in the foreground. Overall speaking, it is expected that the Proposed Development will make a positive contribution to the supply of housing units and optimize land utilization.

11 AIR VENTILATION ASPECTS

11.1 General

- 11.1.1 A Preliminary Air Ventilation Assessment in the form of Expert Evaluation (AVA-EE) has been carried out based on the conceptual development scheme to assess the potential air ventilation impacts arising from the Proposed Development. This AVA-EE has been conducted in accordance with “Housing Planning and Lands Bureau – Technical Circular No. 1/06, Environment, Transport and Works Bureau – Technical Circular No. 1/06” issued on 19th July 2006 (the Technical Circular) and “Technical Guide for Air Ventilation Assessment for Development in Hong Kong – Annex A” (the Technical Guide).

11.2 Summary on Wind Availability

Wind Availability

- 11.2.1 The annual prevailing wind towards the Site and vicinity areas are mainly from NNE, NE and E directions. While in summer, the prevailing wind comprises S, SSE and SSW wind. The annual and summer prevailing winds towards the Proposed Development is shown in **FIGURE 11.1**.

Existing Wind Environment

- 11.2.2 The Site is bounded by Tin Pak Road and Tin Chuk Street at the west and Tin Tsz Road at the east. The Site has a uniform terrain level, at around +6mPD. The areas to its south, west, and north have a smooth terrain feature, mostly with terrain elevation of below +10mPD. However, the terrain level at the eastern region gradually rises from the Ha Mei San Tsuen to the peak of Kai Shan.
- 11.2.3 It is anticipated that the summer prevailing wind from the S, SSW and SSE directions can reach the Site without experiencing much terrain blockage. Slight weakening on the wind environment at the Site is expected under the north-eastern quadrant prevailing wind (i.e., NNE/NE) due to the obstruction of the wind by the terrain features of Kai Shan. The E prevailing wind would be able to flow towards the Site via the valley between the hilly terrains of Kai Shan.
- 11.2.4 The Site is currently mainly being used as bus depot, in which there are no major developments within the Site under the current situation. Thus, the wind flows driven by the prevailing wind can freely penetrate the Site to reach the surrounding air ventilation sensitive receivers without experiencing great obstructions under the current condition.

Planned Development in the Locality

- 11.2.5 There is a planned and committed housing site adjacent to Ha Mei San Tsuen and Fung Ka Wai to the east of the Site across the Tin Tsz Road that is proposed to be developed into residential blocks of building heights ranging from +65 mPD to +160 mPD with non-residential buildings for welfare/ancillary facilities as well as welfare/ancillary facilities above a covered PTI (see **FIGURE 11.1**). It is anticipated that the planned and committed housing development would weaken the NE and E prevailing winds towards the Site.

11.3 Merit Design Features in the Proposed Scenario

- 11.3.1 Merit design features have been included in the indicative development layout to facilitate the flow of prevailing wind upon the construction of the proposed development within the Site. The merit designs included in the indicative development layout in relation to the flow of annual and summer prevailing winds are presented in **FIGURE 11.2**.
- 11.3.2 Under the annual prevailing wind directions, the setbacks of ~7m from the northern site boundary and ~10m from the southern site boundary facilitate the flow of E prevailing wind (see blue hatch in **FIGURE 11.2**) towards the downwind areas. The ~16m setback from the

southeastern boundary of the Site would facilitate the flow of NNE/NE prevailing wind (see magenta and orange hatches in Figure 11.2), while the ~15m separation in between Podium 1 and Podium 2 would elongate Tin Chuk Street and promote the penetration of the NE annual prevailing wind (see magenta hatch in **FIGURE 11.2**).

- 11.3.3 Under the summer prevailing wind directions, the setbacks of ~17m from the northeastern site boundary would facilitate the penetration of SSE prevailing wind towards the Buddhist Mau Fung Memorial College and its downwind areas (see green hatch in **FIGURE 11.2**). The ~7m setback of Podium 2 from the eastern site boundary would facilitate the flow of southerly prevailing wind along Tin Tsz Road (see purple hatch in **FIGURE 11.2**). Last but not least, the ~20m buffer area formed from the setback of Podium 2 from Tin Chuk Street would facilitate the S and SSW wind flow towards Tin Chuk Street and the Site (see hatches of yellow and purple in **FIGURE 11.2**).

11.4 Ventilation Performance of Proposed Scenario

- 11.4.1 Comparing to the existing situation, the Proposed Development within the Site would inevitably impose a certain magnitude of blockage in wind flow. The wind influence may be roughly estimated qualitatively by the extent of the wind wake areas downwind.
- 11.4.2 The Proposed Development within the Site does not obstruct the wind corridors/airpaths which include Tin Tsz Road, Tin Pak Road, Tin Chuk Street, Tin Shing Road and Tin Cheung Road. Also, there are major open spaces near and at the surrounding of the Site include Tin Pak Road Park, Tin Shui Wai Park, Tin Shui Wai Sports Ground and Ping Shan Cultural Farm that would help promote the regional wind environment.

Annual Prevailing Winds

- 11.4.3 Under the NNE/NE prevailing wind, the regions potentially being affected include Tin Tsz Estate, Tin Shui Wai Telephone Exchange, Buddhist To Chi Fat She Yeung Yat Lam Memorial School, Ho Ming Primary School, Tin Tsz Shopping Centre and Multi-storey Carpark located within the northern portion of Tin Tsz Estate as well as Tin Shing Road. Setting back the proposed Blocks B, C and D and Podium 2 within the Site for around 16m from the southeastern site boundary would promote the wind flow towards Tin Tsz Estate under the NNE/NE prevailing wind. Moreover, the indicative development layout within the Site has also maintained a separation of approximately 15m in between the podia to elongate the wind flow along Tin Chuk Street to facilitate the NE wind flow towards Tin Shing Road and the nearby downstream wind sensitive receivers.
- 11.4.4 Under the E prevailing wind, the regions near the Tin Pak Road and Tin Chuk Street, Tin Shui Wai Sports Centre, Tin Shui Wai Sports Ground, Tin Shui Wai Telephone Exchange as well as Buddhist To Chi Fat She Yeung Yat Lam Memorial College are identified as potential wind sensitive receivers. Incorporation of setback distance of at least 10m between the proposed Blocks B to D as well as Podium 2 and the southern site boundary, would facilitate the flow of easterly prevailing wind towards Tin Chuk Street, Tin Pak Road, and Tin Shui Wai Sports Ground, while the ~7m setback incorporated along the northern site boundary would facilitate the easterly wind to flow towards Tin Pak Road and Tin Shui Wai Swimming Pool.

Summer Prevailing Winds

- 11.4.5 Under the S/SSE prevailing wind, Buddhist Mau Fung Memorial College, Tin Shui Wai Telephone Exchange, WSD Tin Shui Wai Building, Tin Shui Wai Swimming Pool, Tin Cheung Road, Tin Chuk Street, Tin Pak Road Park are identified as potential wind sensitive areas. The ~17m setback of Podium 2 from the northeastern site boundary would be in favor of the flow of SSE prevailing wind to reach Buddhist Mau Fung Memorial College, WSD Tin Shui Wai Building as well as Tin Pak Road Park across Tin Cheung Road. For the S prevailing wind, the ~7m setback of Podium 2 from the eastern site boundary would facilitate the flow of southerly prevailing wind along Tin Tsz Road. Apart from that, the ~20m buffer area formed from the

setback of Podium 2 from Tin Chuk Street would facilitate the southerly wind flow towards Tin Chuk Street and the Site.

11.4.6 Under the SSW prevailing wind direction, the identified potential wind sensitive areas include Buddhist Mau Fung Memorial College, WSD Tin Shui Wai Building, Tin Cheung Road, Tin Tsz Road, a portion of Tin Chuk Street and the planned residential development near Fung Ka Wai across Tin Tsz Road. In addition, the planned residential development near Fung Ka Wai is also identified as potential wind sensitive receivers under the SSW summer prevailing wind. Podium 2 is placed away from the portion of site boundary near Tin Chuk Street, creating ~20m buffer area to facilitate the SSW wind flow towards Tin Chuk Street and the Site upon the construction of the Proposed Development.

11.4.7 Large and bulky podiums are broken down in the direction of the NE prevailing wind to enhance wind permeability. The above-mentioned measures in **Sections 11.3.1 to 11.3.3** have been considered in the building design of the Proposed Development within the Site. These are all good design measures in the perspective of air ventilation and would help to alleviate the wind impacts on air ventilation sensitive receivers near the Site.

11.5 Further Recommendations on the Proposed Development Layout

11.5.1 Several typical general recommendations in the aspect of air ventilation performance are also suggested to be taken into consideration in the future design stage for fine-tuning on the proposed development layout, which are listed as follows:-

- Adopt building permeability equivalent to 20% to 33.3% whenever possible with reference to PNAP APP-152;
- Adopt empty bay design on the ground floor of podium or incorporate permeable elements/podium gardens to enhance the wind permeability at pedestrian level;
- Adopt terraced podium designs for podia to enhance ventilation;
- Incorporate greening measures, preferably through tree planting at grade;
- Avoid long continuous façades of building clusters; and
- Refer to the recommendations of design measures in the HKPSG.

11.6 Summary

11.6.1 The Proposed Development within the Site under the Proposed Scenario are expected to induce wind wake areas to the respective downstream direction. To maximise the wind availability and alleviate the potential wind impacts upon development, the indicative development layout has incorporated several good design features including maintaining setback distances from the site boundaries. Podium separation of around 15m has been incorporated which mainly facilitate the penetration of NE and create elongation of Tin Chuk Street. In addition, large/bulky podiums are broken down in the direction of the NE prevailing wind to enhance the site permeability. All these mentioned good air ventilation designs in the indicative development layout aim at reducing the disturbance to the wind environment near the Site.

11.6.2 General good design measures to improve air ventilation performance are further recommended to the building designs for fine-tuning the development layout under the Proposed Scenario which include but not limited to incorporation of permeable elements/podium gardens to enhance wind permeability at pedestrian level, adopt terraced podium designs to enhance ventilation, incorporate greening measures, preferably through tree planting at grade etc. Most importantly, it is recommended that the future fine-tuning on proposed development layout should follow the recommendations documented in the

Sustainable Building Design Guidelines. In view of the extensive good air ventilation design measures already being incorporated, with the Proposed Development within the Site not obstructing the major wind corridors, no significant adverse air ventilation impacts due to the Proposed Development within the Site on the surrounding environment is not anticipated. Further quantitative AVA Study is considered not required at the detailed design stage.

12 LAND REQUIREMENT ASPECTS

12.1 Existing Land Uses

12.1.1 The Site, with a total area of about 1.47 ha, located at Tin Shui Wai bounded by Tin Tsz Road, Tin Pak Road and nearby structures including Buddhist Mau Fung Memorial College, TSWTCSSPS and Tin Tsz Estate. Currently the Site is mainly occupied by the Kowloon Motor Bus Company (1933) Limited (KMB) as temporary bus depot with ancillary facilities under STTs issued by LandsD. Under the current approved Tin Shui Wai OZP No. S/TSW/16, the Site is zoned as “OU(Bus Depot)” and “G/IC” and an area shown as ‘Road’.

12.2 Land Requirement for Proposed Works

12.2.1 A land requirement plan showing the proposed development boundary overdrawn on the land status plans obtained from LandsD is shown in **FIGURE 12.1**.

12.2.2 The proposed development boundary is delineated based on the following considerations:-

- The northern boundary will match with the GLA boundary and boundary wall of the adjacent Buddhist Mau Fung Memorial College;
- The eastern and southern boundaries will follow the alignment of existing fencing along Tin Tsz Road and near Tin Tsz Estate respectively;
- The south-western boundary will match with the GLA boundary and boundary wall of the adjacent TSWTCSSPS; and
- Existing footpath along Tin Pak Road and Tin Chuk Street outside the western boundary will be maintained.

12.3 Affected Government Land

12.3.1 The Site falls entirely with Government land. The existing Government land granted to KMB under STTs shall be terminated as a result of the Proposed Development.

Table 12.1 Affected Short Term Tenancy

Drawing No.	STT No.	Allocated Party	Approx. Area (m ²)	Current Land Use / Remarks
FIGURE 12.1	1342	KMB	10,900	Temporary Bus Depot
FIGURE 12.1	1676	KMB	2,180	Temporary Bus Depot

12.4 Affected Private Land

12.4.1 No private land is affected by the Proposed Development since the whole of the Site falls within Government land.

12.5 Affected Buildings / Structures

- 12.5.1 Associated structures / facilities of the bus depot including washroom, staff rest area, vehicle washing facility, bus refueling facility and underground fuel tank are identified within the Site. These structures / facilities should be cleared from the Site.
- 12.5.2 In addition, based on the information provided by FSD and in accordance with Dangerous Goods (Control) Regulation, Cap. 295G, which has come into operation on 31 March 2022, if a tank has been used for the storage of S2DG (e.g. diesel oils), the person who owns or possesses the tank must take necessary steps to decommission the tank and inform FSD on completion of decommissioning.

12.6 Other Features

- 12.6.1 Due to the limited site area, it is anticipated that the Proposed Development will inevitably involve removal of existing trees. No OVT is identified within the Site. Tree treatment proposal will be made to detail the preservation, transplanting, felling and/or compensatory proposal of the affected trees within the Site as required.
- 12.6.2 In addition, no grave, urn, kam tap, shrine or Fung Shui setting is identified within the Site.

12.7 Tentative Programme

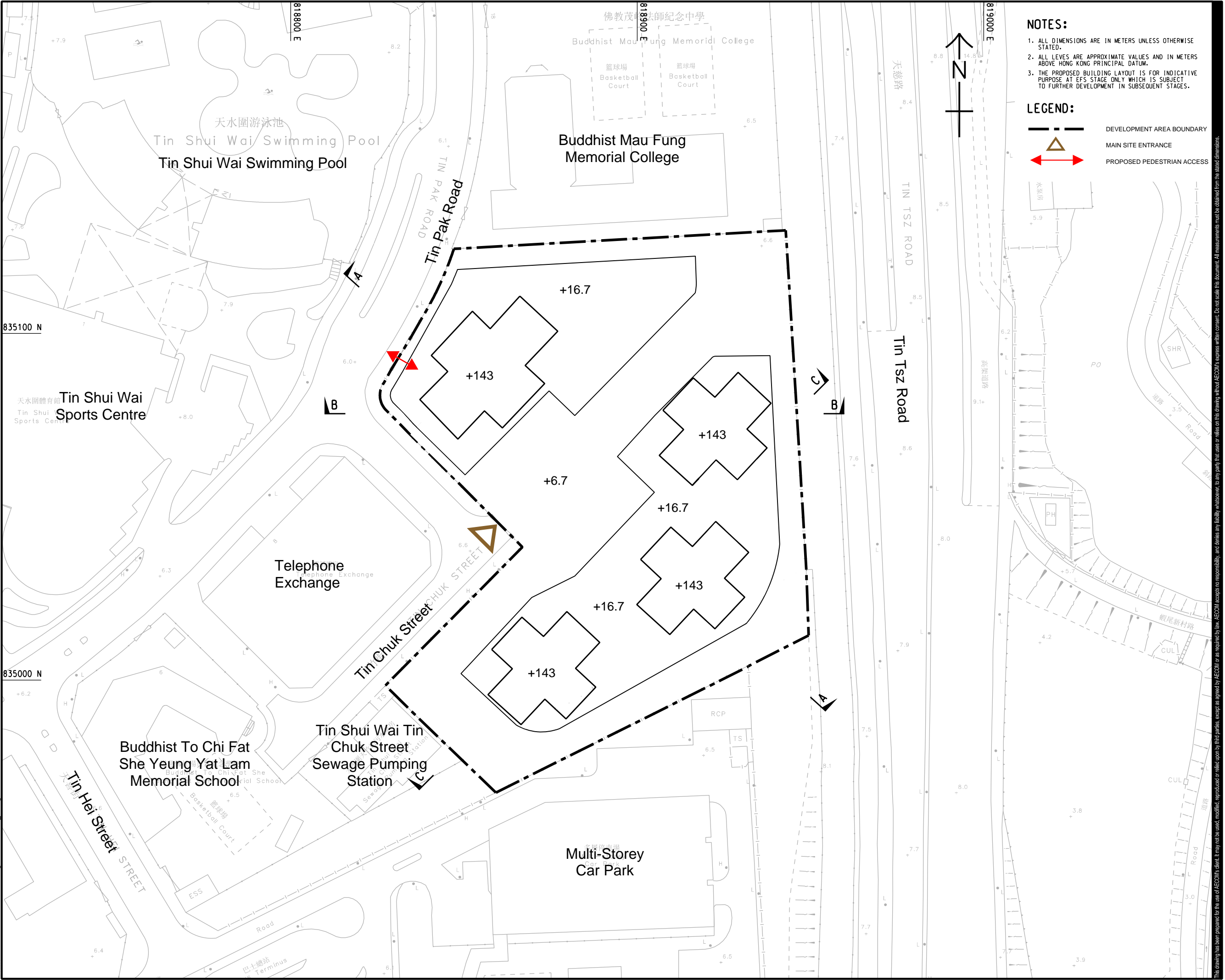
- 12.7.1 Based on the latest information, the area occupied by the STTs will be vacated by the end of 2024. Hence, the Site will be available for the Proposed Development in 2025.

13 CONCLUSION

- 13.1.1 After conducting various technical assessments on the Proposed Development and infrastructure works at the Site, it is concluded that no insurmountable impact would be resulted from the Proposed Development and it is technically feasible in terms of traffic, infrastructure, geotechnical, site formation, environmental, landscape, visual, air ventilation and land requirement aspects, subject to the implementation of the recommended mitigation measures and improvement works.

Appendix A
Conceptual Scheme of
Proposed Housing Development
at Tin Shui Wai Area 14
(Scheme for Technical Assessment Only)

ISO A1 594mm x 841mm
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ENGINEERING
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FOR DEVELOPMENTS IN
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CONCEPTUAL SCHEME FOR
DEVELOPMENT IN TIN SHUI
WAI AREA 14

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Appendix A

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3. THE PROPOSED BUILDING LAYOUT IS FOR INDICATIVE PURPOSE AT EFS STAGE ONLY WHICH IS SUBJECT TO FURTHER DEVELOPMENT IN SUBSEQUENT STAGES.



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NOTIONAL SCHEME FOR
DEVELOPMENT IN TIN SHUI
WAI AREA 14 - SECTION

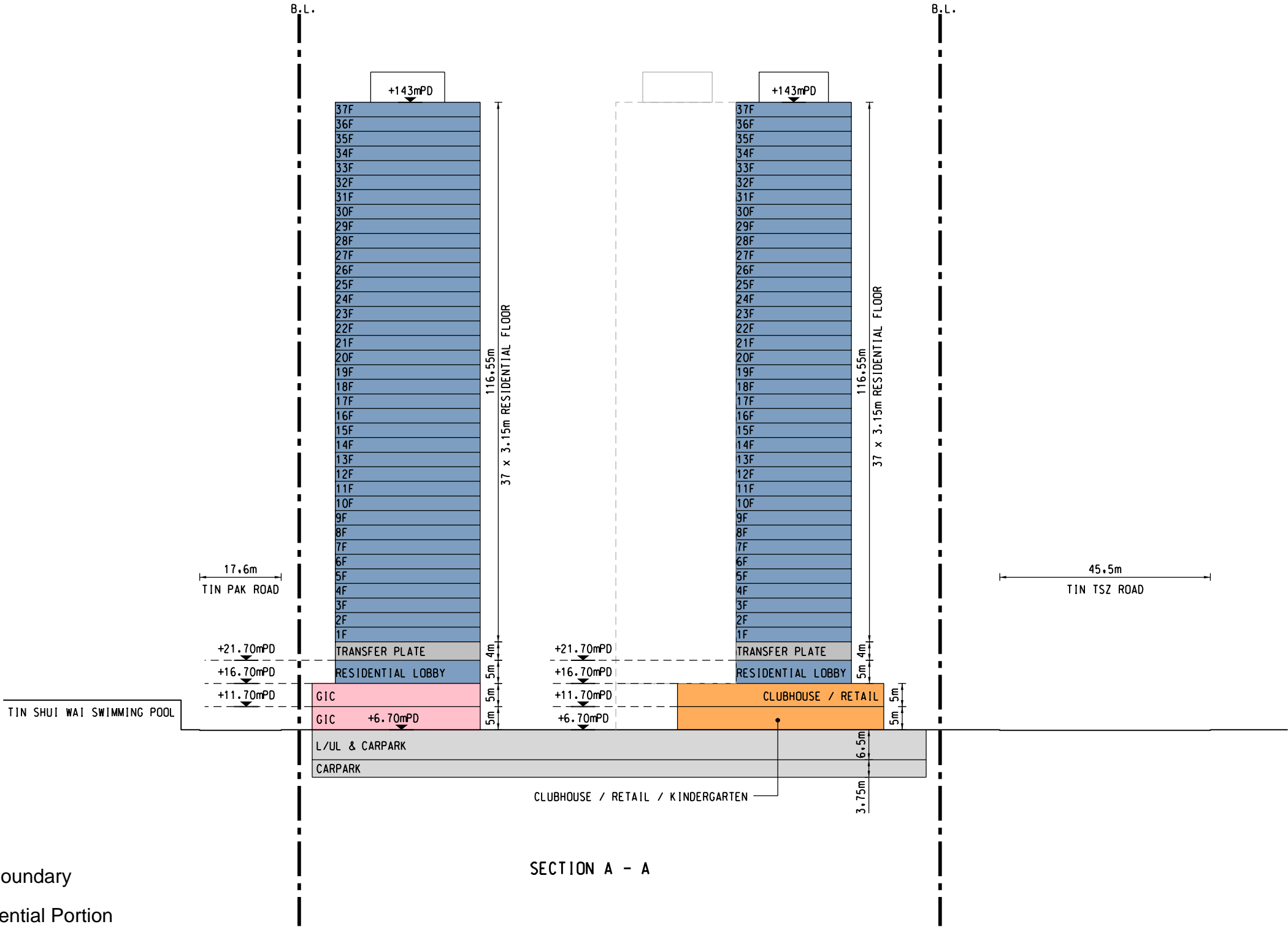
SHEET 1 OF 3

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Appendix A

Legend:

- Site Boundary
- Residential Portion
- GIC Facilities
- Non-Domestic Facilities
- Car Park



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NOTIONAL SCHEME FOR
DEVELOPMENT IN TIN SHUI
WAI AREA 14 - SECTION

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Appendix A

Legend:

- Site Boundary
- Residential Portion
- GIC Facilities
- Non-Domestic Facilities
- Car Park



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NOTIONAL SCHEME FOR
DEVELOPMENT IN TIN SHUI
WAI AREA 14 - SECTION

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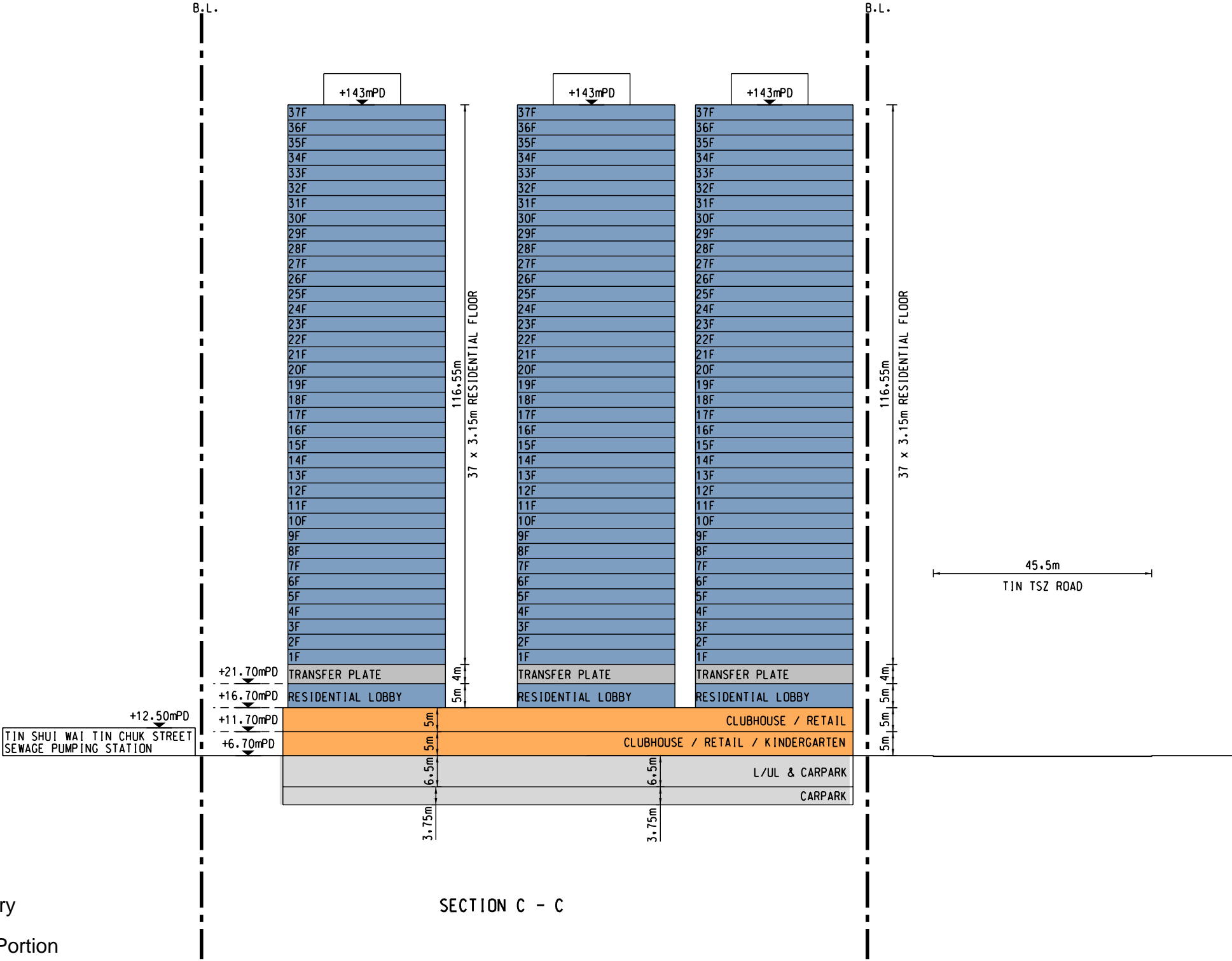
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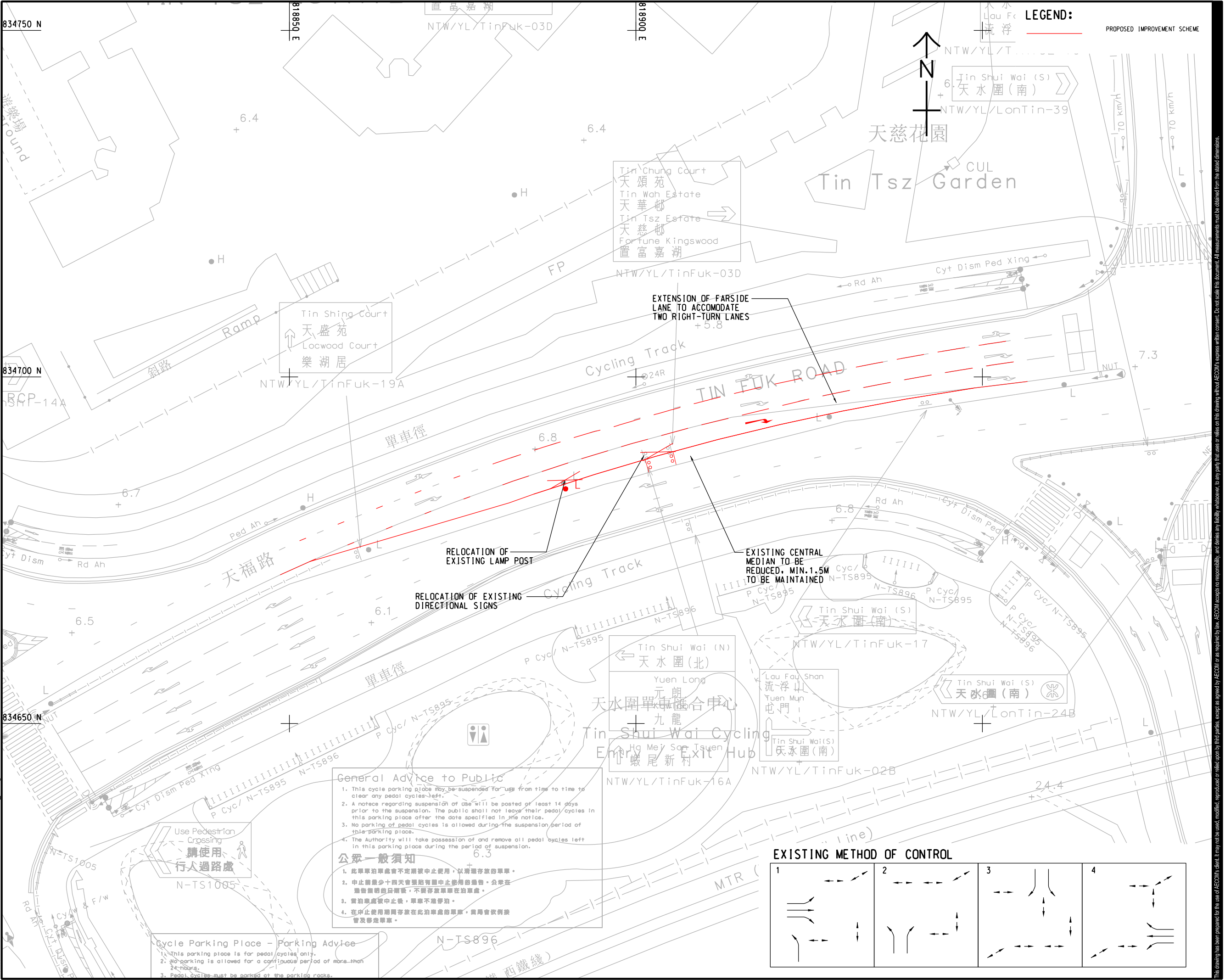
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Appendix B
Junction Improvement Works
Proposed by Other Projects

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CE 23/2020

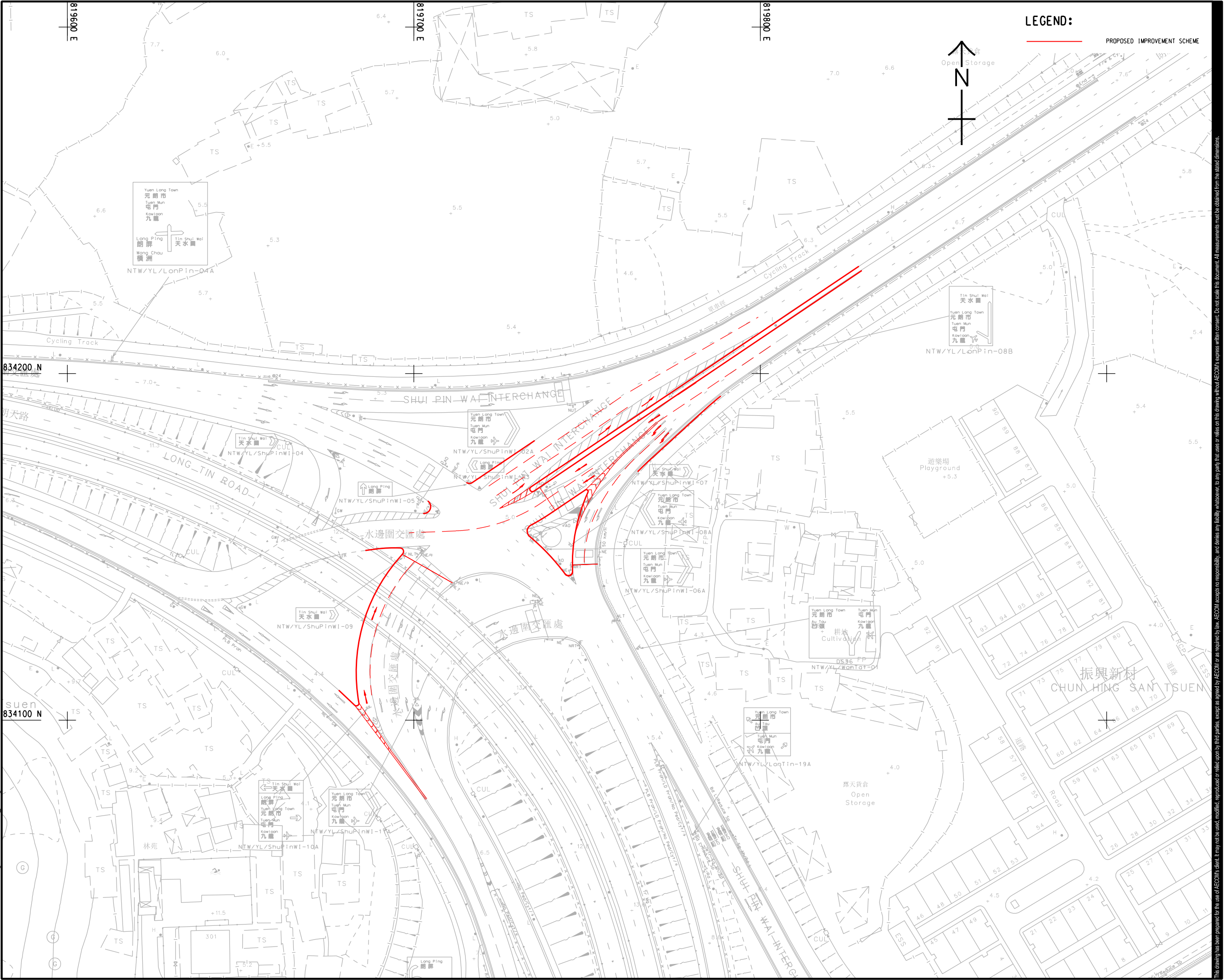
SHEET TITLE
圖紙名稱

PLANNED IMPROVEMENT
LAYOUT OF TIN TSZ
ROAD / TIN FUK ROAD (J7)
(PROPOSED UNDER CE19/2021)

SHEET NUMBER
圖紙編號

Appendix B

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項目編號
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CE 23/2020

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圖紙名稱

PLANNED IMPROVEMENT LAYOUT
OF SHUI PIN WAI INTERCHANGE
(J8) (PROPOSED UNDER CE19/2021)

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Appendix C
Tree Assessment Schedule

*The provision of tree treatment is for indicative purpose only which is subject to design of development layout by future developer in subsequent stages

Drawing No.	Tree No.	Species		Measurements			Top soil level above root collar (mPD)	Amenity Value	Form	Health Condition	Structural Condition	Suitability for Transplanting		Conservation Status	Recommendation (Retain/ Transplant/ Remove)	Justification	Maintenance department		Additional Remarks
								(High(H)/ Medium(M)/ Low(L))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(High(H)/ Medium(M)/ Low(L))	Remarks						
		Scientific Name	Chinese Name	Height (m)	DBH (mm)	Crown Spread (m)		Before	After										
Annex B	T0815	<i>Bauhinia variegata</i>	宮粉羊蹄甲	7.0	480	9.0	6.21	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	-
Annex B	T0816	<i>Mangifera indica</i>	芒果	4.0	300	6.0	6.19	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	crown topped,exposed root
Annex B	T0817	<i>Bombax ceiba</i>	木棉	8.0	300	4.0	6.38	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	-
Annex B	T0818	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	7.0	480	5.0	6.45	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	leaning trunk ,wounded trunk
Annex B	T0819	<i>Leucaena leucocephala</i>	銀合歡	6.0	200	5.0	6.46	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	multi-trunks
Annex B	T0820	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	7.0	200	5.0	6.50	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	leaning trunk
Annex B	T0821	<i>Leucaena leucocephala</i>	銀合歡	8.0	280	6.0	6.41	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	exposed root
Annex B	T0822	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	8.0	280	7.0	6.45	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	-
Annex B	T0823	<i>Leucaena leucocephala</i>	銀合歡	9.0	320	7.0	6.76	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	co-dominant trunks
Annex B	T0824	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	8.0	360	6.0	7.34	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	leaning trunk
Annex B	T0856	<i>Melia azedarach</i>	楝(苦楝)	14.0	320	10.0	7.60	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	-
Annex B	T0859	<i>Casuarina equisetifolia</i>	木麻黃	14.0	340	8.0	7.48	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LandsD	Proposed Housing Developer	-
Annex B	T0869	<i>Leucaena leucocephala</i>	銀合歡	10.0	220	5.0	6.31	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T0870	<i>Leucaena leucocephala</i>	銀合歡	12.0	190	8.0	6.52	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0871	<i>Morus alba</i>	桑	6.0	180	4.0	6.50	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0872	<i>Ficus microcarpa</i>	榕樹(細葉榕)	8.0	160	5.0	6.45	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0873	<i>Morus alba</i>	桑	8.0	120	6.0	6.51	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0874	<i>Dead tree</i>	死樹	10.0	150	2.5	6.51	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0875	<i>Ficus microcarpa</i>	榕樹(細葉榕)	12.0	1200	10.0	6.50	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	TPI
Annex B	T0876	<i>Acacia confusa</i>	台灣相思	12.0	580	11.0	6.57	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0877	<i>Dead tree</i>	死樹	14.0	280	8.0	6.79	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0878	<i>Dead tree</i>	死樹	10.0	240	5.0	6.59	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-

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Drawing No.	Tree No.	Species		Measurements			Top soil level above root collar (mPD)	Amenity Value	Form	Health Condition	Structural Condition	Suitability for Transplanting		Conservation Status	Recommendation (Retain/ Transplant/ Remove)	Justification	Maintenance department		Additional Remarks
								(High(H)/ Medium(M)/ Low(L))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(High(H)/ Medium(M)/ Low(L))	Remarks						
		Scientific Name	Chinese Name	Height (m)	DBH (mm)	Crown Spread (m)		(High(H)/ Medium(M)/ Low(L))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(High(H)/ Medium(M)/ Low(L))	Remarks				Before	After	
Annex B	T0879	Dead tree	死樹	7.0	200	2.0	6.77	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0880	Bridelia tomentosa	土蜜樹(逼迫仔)	6.0	180	5.0	6.52	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0881	Ficus microcarpa	榕樹(細葉榕)	7.0	300	4.0	6.54	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T0882	Acacia auriculiformis	耳果相思(耳葉相思)	9.0	320	4.0	6.58	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T0883	Bridelia tomentosa	土蜜樹(逼迫仔)	6.0	160	4.0	6.74	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0884	Ficus microcarpa	榕樹(細葉榕)	9.0	400	5.0	6.58	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T0885	Bridelia tomentosa	土蜜樹(逼迫仔)	7.0	300	5.0	6.53	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0886	Bridelia tomentosa	土蜜樹(逼迫仔)	8.0	320	4.0	6.67	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk ,exposed root
Annex B	T0887	Bridelia tomentosa	土蜜樹(逼迫仔)	10.0	330	5.0	6.74	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0888	Bridelia tomentosa	土蜜樹(逼迫仔)	10.0	280	6.0	6.59	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk ,exposed root
Annex B	T0889	Ficus microcarpa	榕樹(細葉榕)	10.0	400	7.0	6.45	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T0890	Ficus microcarpa	榕樹(細葉榕)	6.0	240	4.0	6.85	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	exposed root
Annex B	T0891	Lophostemon confertus	紅膠木	9.0	310	3.0	7.16	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T0892	Bridelia tomentosa	土蜜樹(逼迫仔)	10.0	290	5.0	7.33	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0893	Bridelia tomentosa	土蜜樹(逼迫仔)	12.0	330	7.0	7.22	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0894	Ficus microcarpa	榕樹(細葉榕)	12.0	560	8.0	7.48	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	exposed root
Annex B	T0895	Bridelia tomentosa	土蜜樹(逼迫仔)	7.0	180	4.0	7.57	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T0896	Bridelia tomentosa	土蜜樹(逼迫仔)	8.0	200	4.0	7.27	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T0897	Ficus microcarpa	榕樹(細葉榕)	8.0	240	4.0	6.64	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0898	Ficus microcarpa	榕樹(細葉榕)	7.0	500	10.0	7.90	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0899	Ficus microcarpa	榕樹(細葉榕)	8.0	260	6.0	7.30	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0900	Ficus microcarpa	榕樹(細葉榕)	12.0	680	14.0	7.98	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk

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		Scientific Name	Chinese Name	Height (m)	DBH (mm)	Crown Spread (m)		(High(H)/ Medium(M)/ Low(L))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(High(H)/ Medium(M)/ Low(L))	Remarks				Before	After	
Annex B	T0901	<i>Acacia confusa</i>	台灣相思	15.0	380	12.0	7.99	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0902	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	10.0	350	8.0	7.88	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0903	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	10.0	280	8.0	7.44	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T0904	<i>Ficus microcarpa</i>	榕樹(細葉榕)	8.0	240	8.0	6.83	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T0905	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	10.0	280	5.0	6.67	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0906	<i>Ficus microcarpa</i>	榕樹(細葉榕)	6.0	240	7.0	7.54	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0907	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	8.0	340	6.0	6.79	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0908	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	9.0	260	6.0	6.69	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T0909	<i>Ficus microcarpa</i>	榕樹(細葉榕)	10.0	440	12.0	7.24	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0910	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	12.0	430	10.0	7.37	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0911	<i>Bridelia tomentosa</i>	土蜜樹(逼迫仔)	6.0	150	4.0	6.80	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0912	<i>Ficus microcarpa</i>	榕樹(細葉榕)	5.0	180	7.0	7.43	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0913	<i>Ficus microcarpa</i>	榕樹(細葉榕)	7.0	320	10.0	7.69	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk ,exposed root
Annex B	T0914	<i>Ficus microcarpa</i>	榕樹(細葉榕)	6.0	380	8.0	7.24	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk ,exposed root
Annex B	T0915	<i>Bridelia tomentosa</i>	土蜜樹(逼迫仔)	7.0	170	5.0	6.97	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0916	<i>Lophostemon confertus</i>	紅膠木	8.0	280	7.0	6.72	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	exposed root
Annex B	T0917	<i>Ficus microcarpa</i>	榕樹(細葉榕)	6.0	320	10.0	7.20	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0918	<i>Ficus microcarpa</i>	榕樹(細葉榕)	5.0	240	10.0	6.72	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk ,exposed root
Annex B	T0919	<i>Dead tree</i>	死樹	10.0	280	4.0	7.22	N/A	N/A	N/A	N/A	N/A	N/A	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0920	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	12.0	660	8.0	7.22	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0921	<i>Ficus microcarpa</i>	榕樹(細葉榕)	7.0	240	8.0	6.70	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T0922	<i>Ficus microcarpa</i>	榕樹(細葉榕)	9.0	400	7.0	7.11	L	P	P	P	L	b,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-

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		Scientific Name	Chinese Name	Height (m)	DBH (mm)	Crown Spread (m)		(High(H)/ Medium(M)/ Low(L))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(High(H)/ Medium(M)/ Low(L))	Remarks				Before	After	
Annex B	T2018	<i>Ficus microcarpa</i>	榕樹(細葉榕)	4.0	182	3.0	7.39	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	exposed root,leaning trunk,dead branches,crossing branches
Annex B	T2019	<i>Ficus microcarpa</i>	榕樹(細葉榕)	6.0	468	5.0	7.29	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	crossing branches,exposed root,leaning trunk
Annex B	T2020	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	5.0	267	6.0	7.16	L	P	P	P	L	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk,dead trunk,co-dominant
Annex B	T2021	<i>Ficus microcarpa</i>	榕樹(細葉榕)	4.0	194	3.0	7.11	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	exposed root,leaning trunk
Annex B	T2022	<i>Schefflera heptaphylla</i>	鵝掌柴(鵝腳木)	3.0	113	4.0	7.91	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk,uproot
Annex B	T2023	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	8.0	331	5.0	7.28	L	P	P	P	L	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T2024	<i>Ficus microcarpa</i>	榕樹(細葉榕)	3.0	117	3.0	7.37	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk,exposed root
Annex B	T2025	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	4.0	137	3.0	7.45	L	P	P	P	L	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk,uproot
Annex B	T2026	<i>Ficus microcarpa</i>	榕樹(細葉榕)	4.0	241	3.0	6.97	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk,exposed root
Annex B	T2027	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	6.0	226	4.0	6.95	L	P	P	P	L	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T2028	<i>Ficus microcarpa</i>	榕樹(細葉榕)	3.0	135	3.0	6.75	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk,co-dominant,exposed root
Annex B	T2029	<i>Acacia confusa</i>	台灣相思	5.0	164	4.0	7.07	L	P	P	P	L	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T2030	<i>Acacia confusa</i>	台灣相思	7.0	227	3.0	7.79	L	P	P	P	L	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T2031	<i>Ficus microcarpa</i>	榕樹(細葉榕)	4.0	143	2.0	6.68	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	co-dominant
Annex B	T2032	<i>Ficus microcarpa</i>	榕樹(細葉榕)	5.0	428	5.0	6.74	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk,exposed root,co-dominant
Annex B	T2033	<i>Acacia confusa</i>	台灣相思	7.0	229	5.0	6.94	L	P	P	P	L	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T2034	<i>Bridelia tomentosa</i>	土蜜樹(逼迫仔)	5.0	124	5.0	7.59	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk,co-dominant
Annex B	T2035	<i>Schima superba</i>	木荷(荷樹)	6.0	157	5.0	7.30	L	P	P	P	M	a,d,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T2036	<i>Ficus microcarpa</i>	榕樹(細葉榕)	4.0	181	3.0	7.03	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	exposed root
Annex B	T2037	<i>Schima superba</i>	木荷(荷樹)	4.0	120	5.0	7.58	L	P	P	P	M	a,d,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T2038	<i>Dimocarpus longan</i>	龍眼	5.0	96	3.0	7.71	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T2039	<i>Dead tree</i>	死樹	7.0	165	3.0	7.84	N/A	N/A	N/A	N/A	N/A	N/A	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-

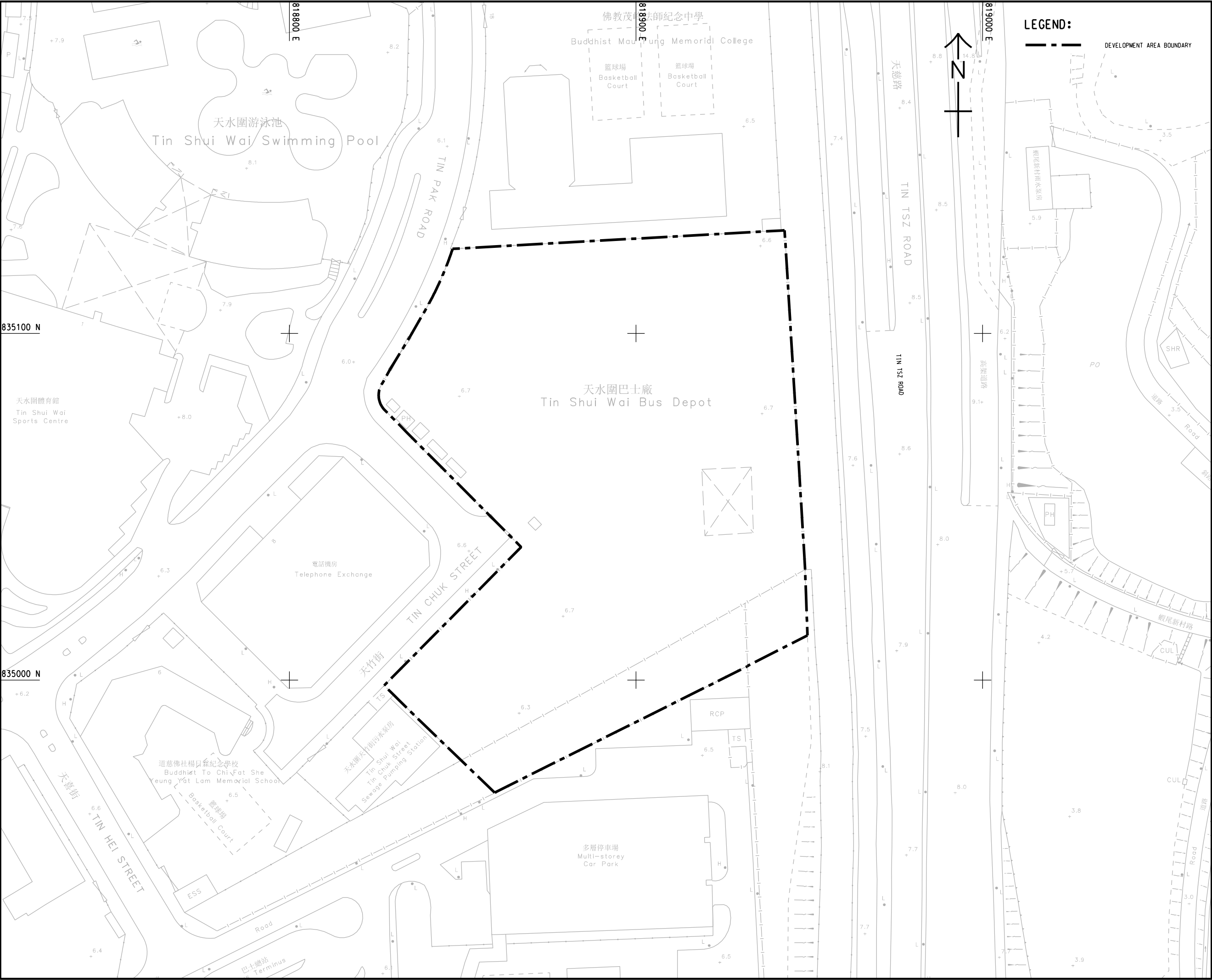
*The provision of tree treatment is for indicative purpose only which is subject to design of development layout by future developer in subsequent stages

Drawing No.	Tree No.	Species		Measurements			Top soil level above root collar (mPD)	Amenity Value	Form	Health Condition	Structural Condition	Suitability for Transplanting		Conservation Status	Recommendation (Retain/ Transplant/ Remove)	Justification	Maintenance department		Additional Remarks
								(High(H)/ Medium(M)/ Low(L))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(Good (G)/ Average (A)/ Poor (P))	(High(H)/ Medium(M)/ Low(L))	Remarks						
		Scientific Name	Chinese Name	Height (m)	DBH (mm)	Crown Spread (m)		Before	After										
Annex B	T2040	<i>Acacia auriculiformis</i>	耳果相思(耳葉相思)	8.0	228	4.0	8.12	L	P	P	P	L	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	dead branches
Annex B	T2041	<i>Acacia confusa</i>	台灣相思	5.0	204	6.0	6.82	L	P	P	P	L	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T2042	<i>Ficus microcarpa</i>	榕樹(細葉榕)	6.0	130	7.0	6.68	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	co-dominant
Annex B	T2043	<i>Bridelia tomentosa</i>	土蜜樹(逼迫仔)	4.0	131	5.0	7.81	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk,fungal fruiting bodies,dead branches
Annex B	T2044	<i>Ficus microcarpa</i>	榕樹(細葉榕)	4.0	180	4.0	7.93	L	P	P	P	L	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk
Annex B	T2045	<i>Melia azedarach</i>	楝(苦楝)	7.0	166	3.0	7.93	L	P	P	P	L	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	co-dominant
Annex B	T2046	<i>Bridelia tomentosa</i>	土蜜樹(逼迫仔)	4.0	108	5.0	6.69	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	co-dominant,leaning trunk
Annex B	T2047	<i>Broussonetia papyrifera</i>	構樹(殼木)	6.0	104	2.0	7.12	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T2048	<i>Celtis sinensis</i>	朴樹	5.0	90	4.0	6.61	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	co-dominant
Annex B	T2049	<i>Dead tree</i>	死樹	7.0	219	3.0	6.29	N/A	N/A	N/A	N/A	N/A	N/A	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T2050	<i>Ficus microcarpa</i>	榕樹(細葉榕)	6.0	274	5.0	6.44	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	leaning trunk,exposed root,co-dominant
Annex B	T2051	<i>Broussonetia papyrifera</i>	構樹(殼木)	8.0	208	3.0	6.55	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	exposed root
Annex B	T2052	<i>Dead tree</i>	死樹	6.0	461	5.0	7.07	N/A	N/A	N/A	N/A	N/A	N/A	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T2056	<i>Dead tree</i>	死樹	6.0	188	4.0	5.97	N/A	N/A	N/A	N/A	N/A	N/A	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-
Annex B	T2062	<i>Leucaena leucocephala</i>	銀合歡	5.0	162	4.0	5.59	L	P	P	P	L	a,e,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	vined
Annex B	T2063	<i>Broussonetia papyrifera</i>	構樹(殼木)	4.0	116	3.0	6.70	L	P	P	P	M	a,f	NIL	Remove	Conflicted with the Development	LCSD	Proposed Housing Developer	-

NOTE:
a - low amenity value
b - irrecoverable form after transplanting (e.g. transplanting requires substantial crown and
c - low chance of survival upon transplanting
d - very large size (unless the feasibility to transplant has been considered financially
e - with evidence of over-maturity and onset of senescence
f - with poor health, structure or form (e.g. imbalanced form, leaning, with major
g - undersirable species (e.g. *Leucaena leucocephala* which is an invasive exotic and self-

Figures

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835100 N
835000 N
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I/R	DATE	DESCRIPTION	CHK.
1/1	2022/7/6	Initial Issue	CE

STATUS

Final

SCALE

比例
A3 1 : 1000

DIMENSION UNIT

尺寸單位
METRES

KEY PLAN

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項目編號
60667362

AGREEMENT NO.

協議編號
CE 23/2020

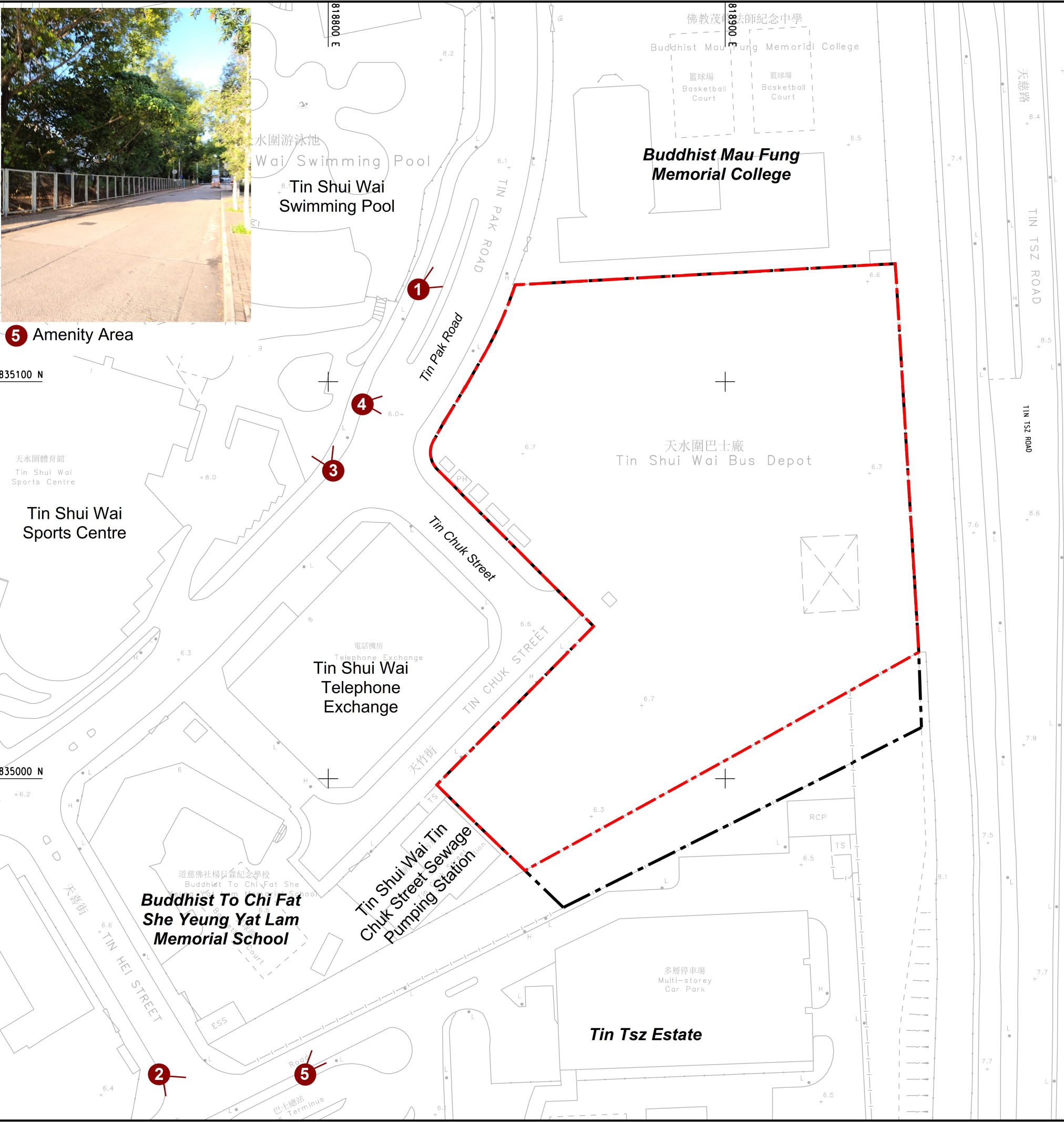
SHEET TITLE

圖紙名稱
LAYOUT PLAN OF DEVELOPMENT
AREA

SHEET NUMBER

圖紙編號
FIGURE 1.1

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2022/7/6
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1 Buddhist Mau Fung Memorial College



2 Tin Tsz Estate



3 Tin Shui Wai Swimming Pool



4 Existing Bus Depot

Legend

Original Site Area under the Scope

Revised Site Area

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STATUS
階段

SCALE
比例
A3 1 : 1000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

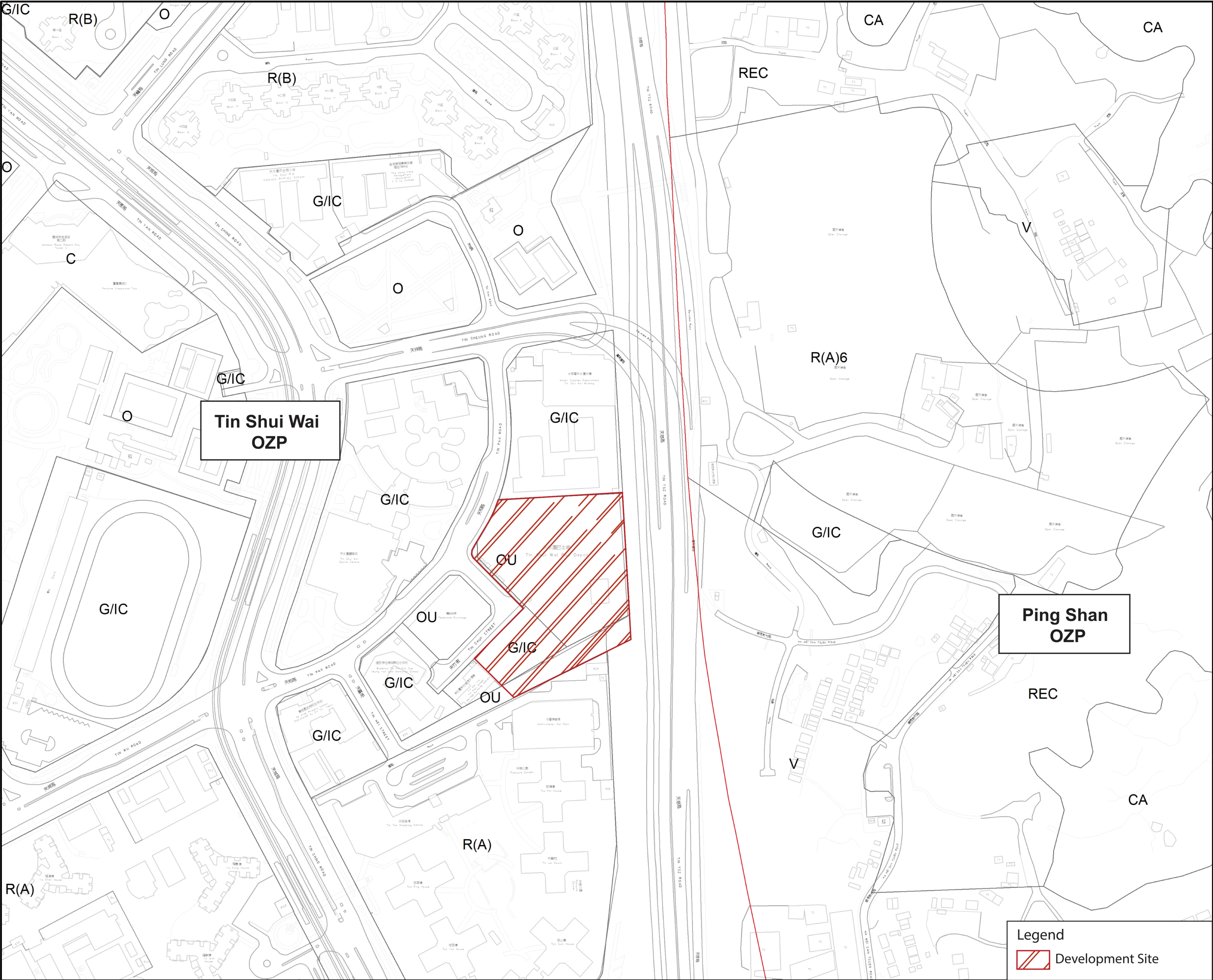
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THE SITE AND SURROUNDING
AREA

SHEET NUMBER
圖紙編號
FIGURE 2.1

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SCALE
比例

IMENSION UNIT
尺寸單位

KEY PLAN
索引圖

PROJECT NO.
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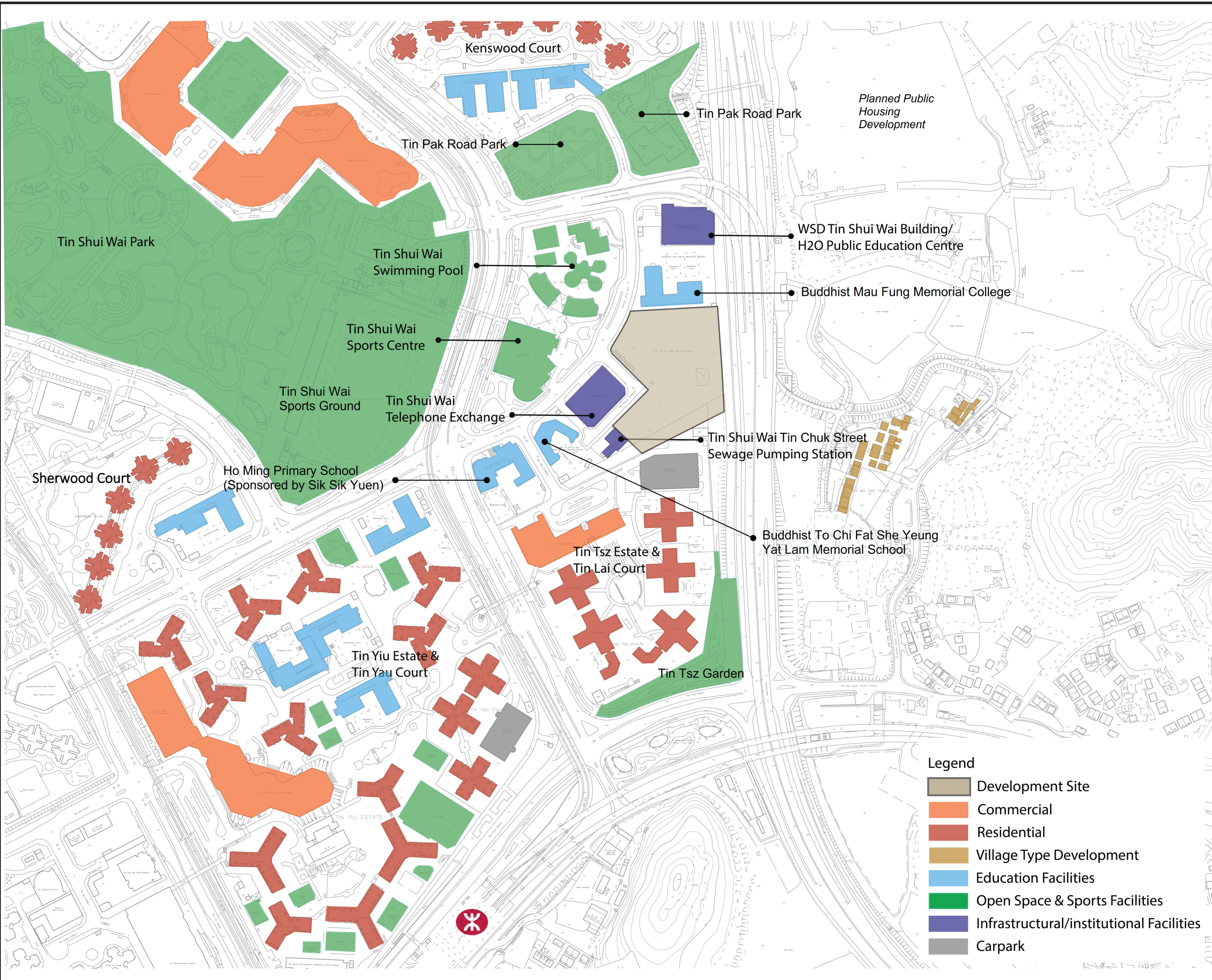
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圖紙名稱

STATUTORY PLANNING
CONTEXT

SHEET NUMBER
圖紙編號

FIGURE 2.2



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SCALE
IMENSION UNIT

KEY PLAN

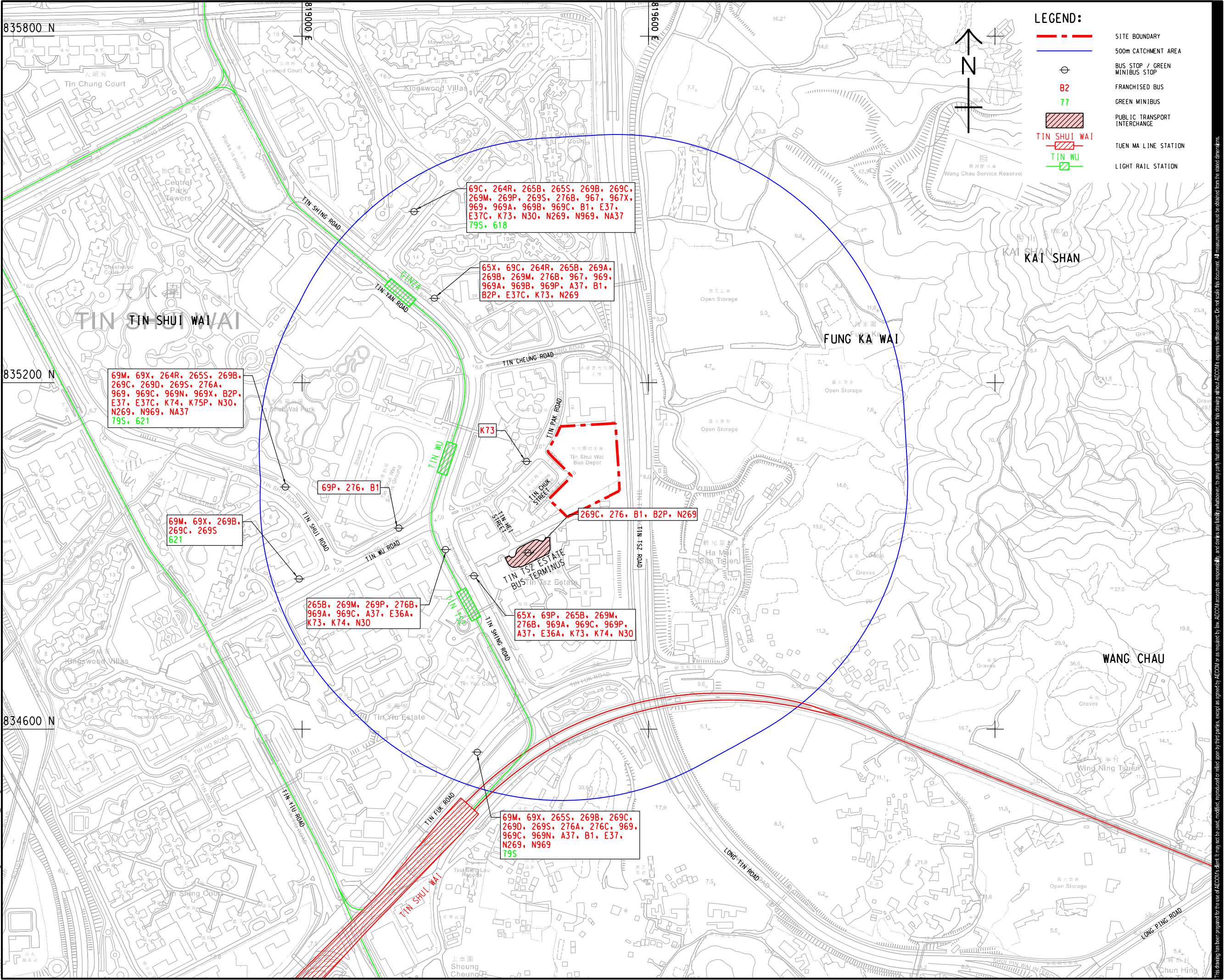
- Legend
- Development Site
 - Commercial
 - Residential
 - Village Type Development
 - Education Facilities
 - Open Space & Sports Facilities
 - Infrastructural/institutional Facilities
 - Carpark

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SHEET TITLE
SURROUNDING CONTEXT

SHEET NUMBER
FIGURE 2.3

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A3 1 : 6000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
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圖紙名稱

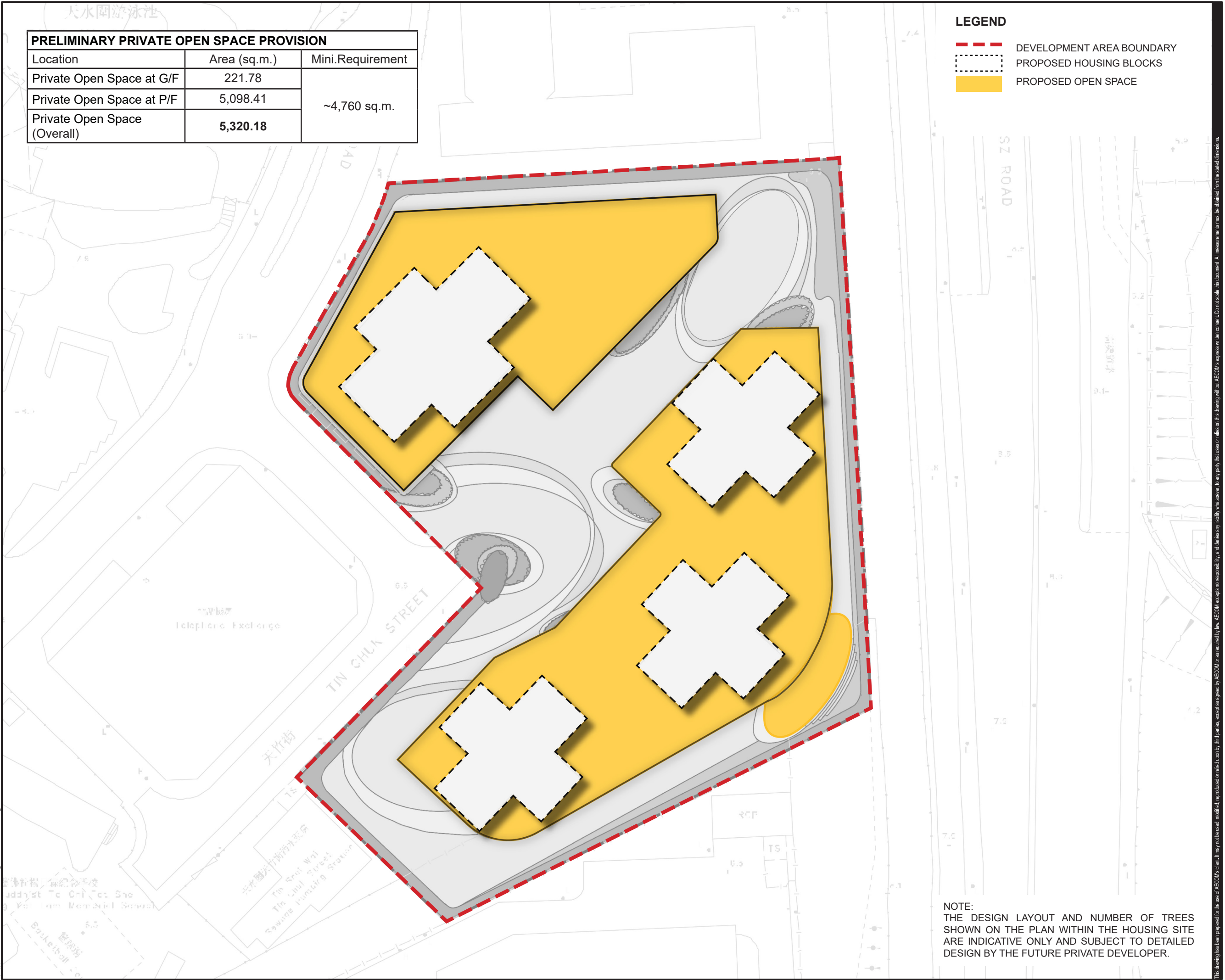
EXISTING PUBLIC TRANSPORT
FACILITIES

SHEET NUMBER
圖紙編號

FIGURE 2.4

ISO A1 594mm x 841mm
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12/2/2022



LEGEND

- DEVELOPMENT AREA BOUNDARY
- - - PROPOSED HOUSING BLOCKS
- PROPOSED OPEN SPACE

PRELIMINARY PRIVATE OPEN SPACE PROVISION		
Location	Area (sq.m.)	Mini.Requirement
Private Open Space at G/F	221.78	~4,760 sq.m.
Private Open Space at P/F	5,098.41	
Private Open Space (Overall)	5,320.18	

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尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
60667362

AGREEMENT NO.
協議編號
CE 23/2020

SHEET TITLE
圖紙名稱
PRELIMINARY OPEN SPACE
PROVISION

SHEET NUMBER
圖紙編號
FIGURE 3.1

NOTE:
THE DESIGN LAYOUT AND NUMBER OF TREES
SHOWN ON THE PLAN WITHIN THE HOUSING SITE
ARE INDICATIVE ONLY AND SUBJECT TO DETAILED
DESIGN BY THE FUTURE PRIVATE DEVELOPER.

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PRELIMINARY GREENERY COVERAGE		
Location	Area (sq.m.)	Mini.Requirement
Landscape Area at G/F	1832.68 (12.47%)	20% ~2,940 sq.m.
Landscape Area at P/F	2079.17	
Total Greenery Provision (Overall)	3911.85 (26.61%)	

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01	12/02/2022	Issue for comment	CE
02	12/02/2022	Revised drawing	CE
03	12/02/2022	Final drawing	CE

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SCALE

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DIMENSION UNIT

METRES

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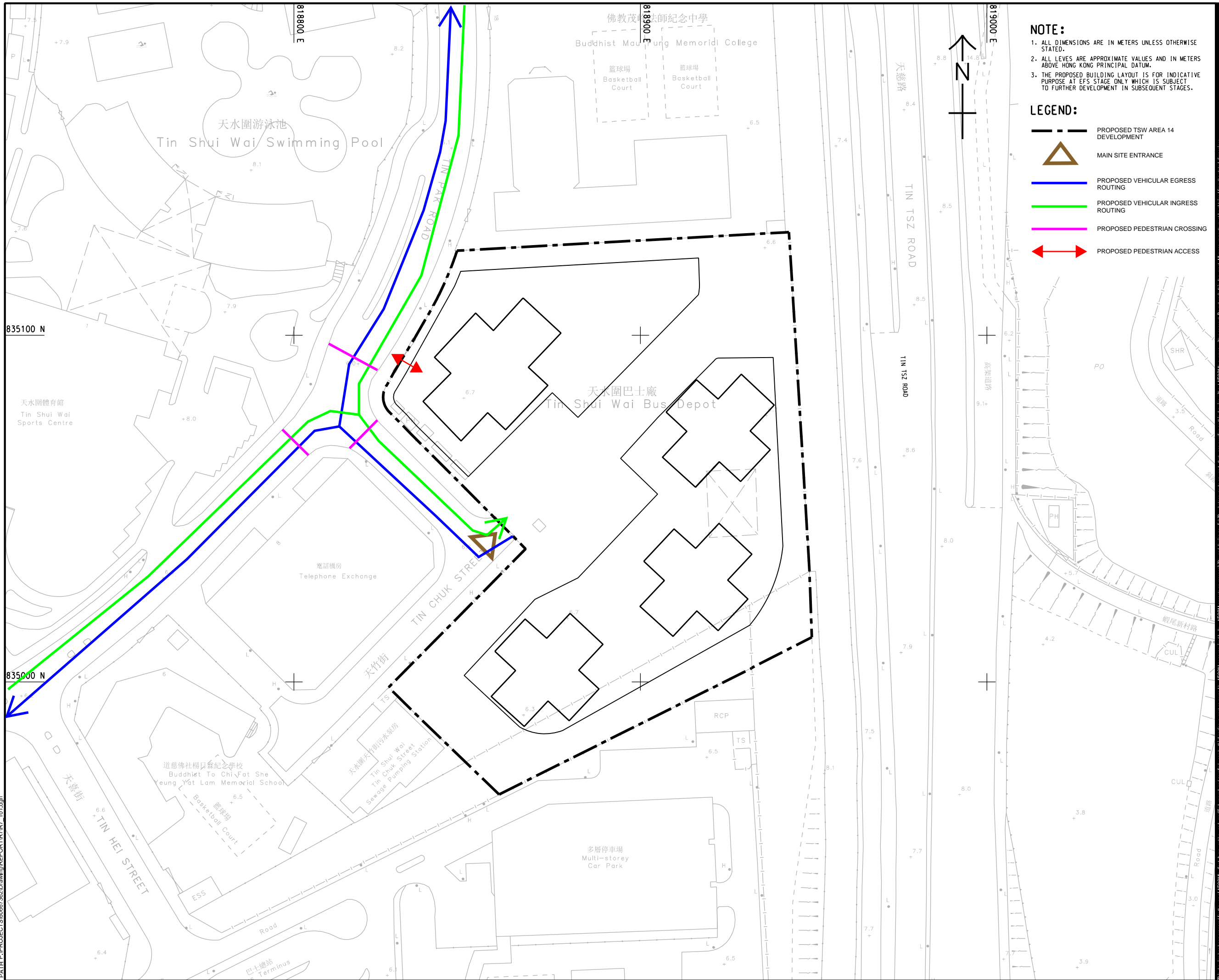
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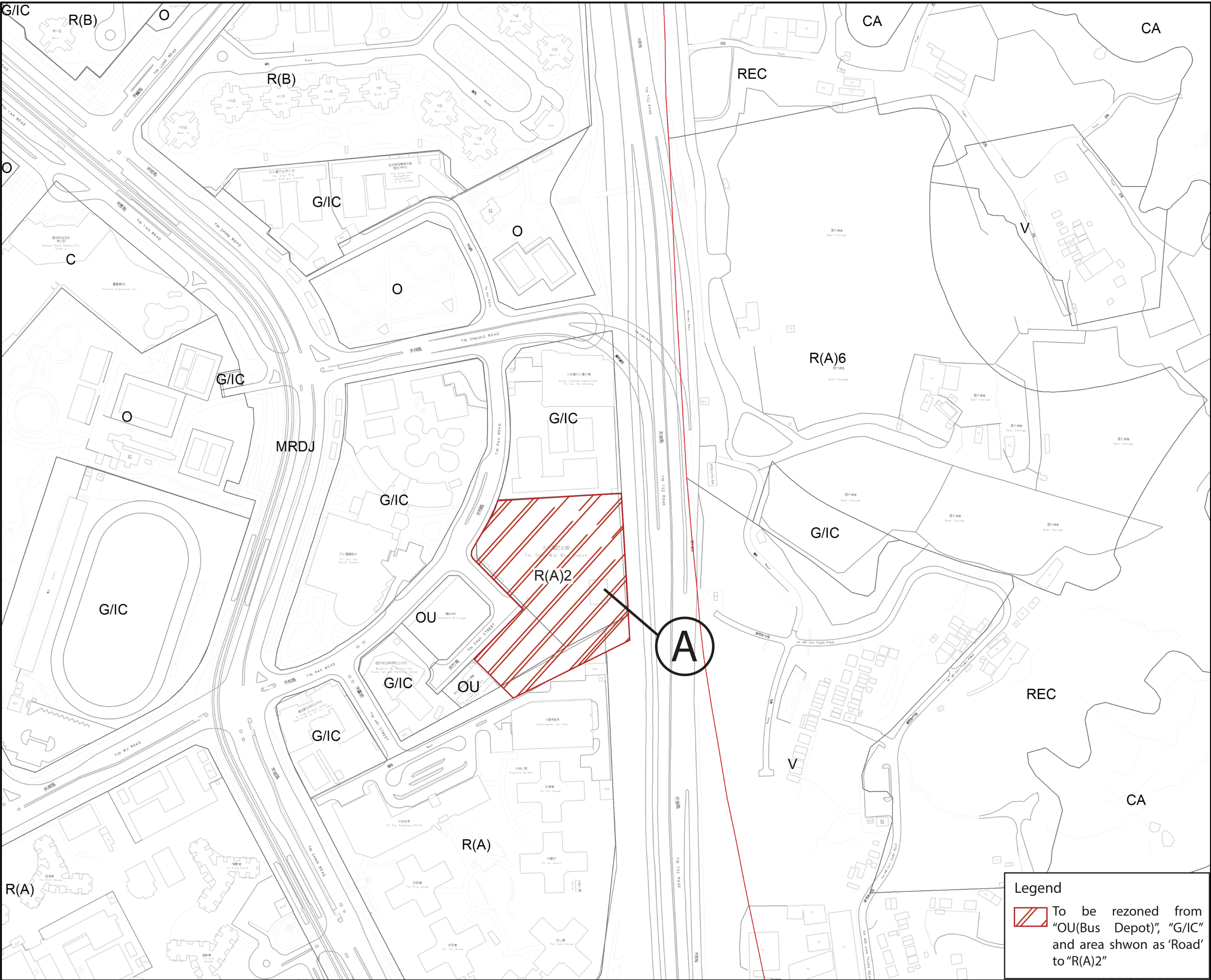
PRELIMINARY GREENERY
COVERAGE

SHEET NUMBER

FIGURE 3.2



ISO A1 894mm x 841mm
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Project Management Initials:
PLOT FILE BY: \$USERS\$ \$DATES\$
PATH: \$FILES\$



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SCALE
比例

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尺寸單位

KEY PLAN
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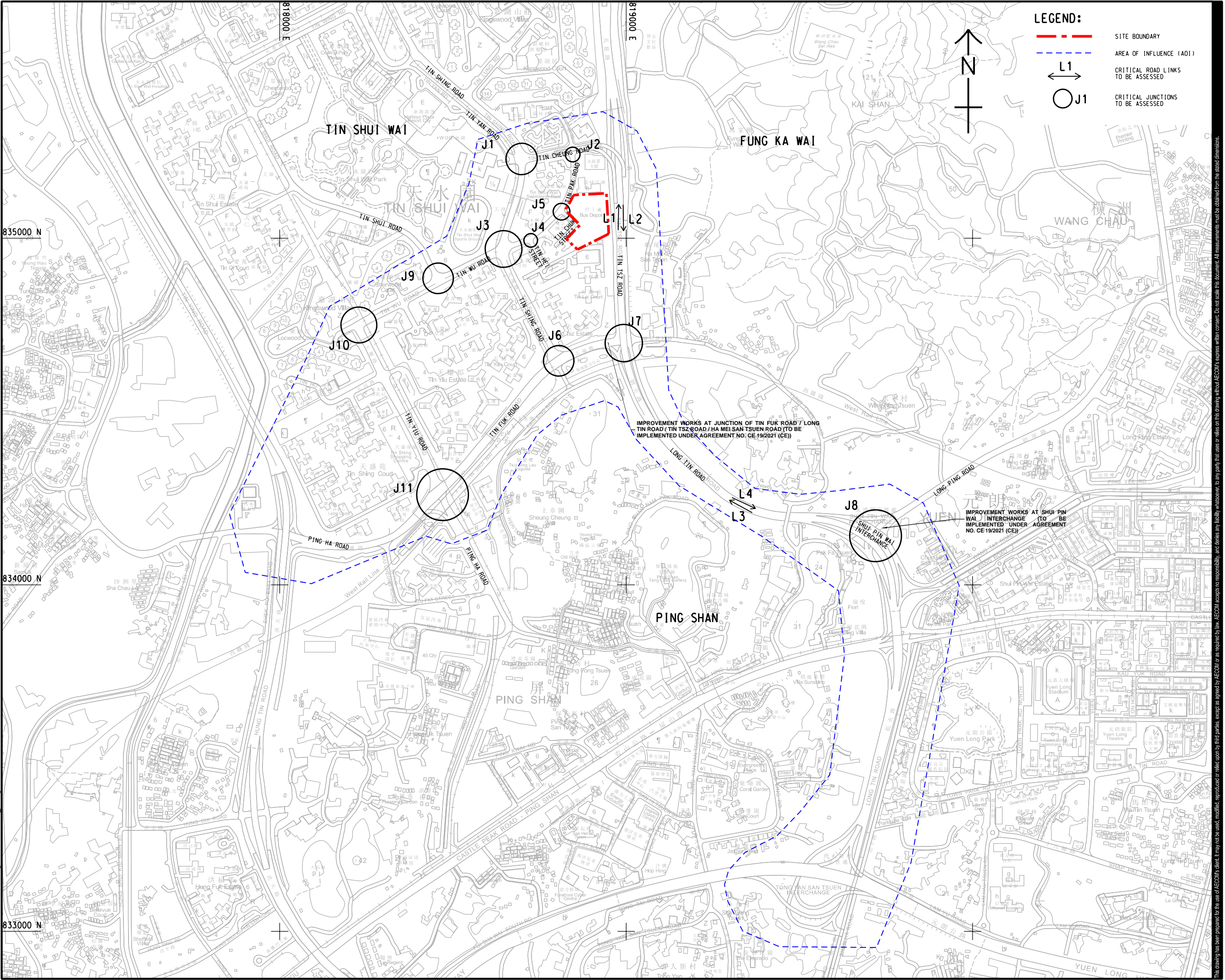
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項目編號
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SHEET TITLE
圖紙名稱
PROPOSED AMENDMENT TO
MATTERS SHOWN ON THE PLAN

SHEET NUMBER
圖紙編號
FIGURE 4.1

ISO A1 594mm x 841mm
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1/19/2024
PATH P:\PROJECTS\6067362\Drawing\REPORT\TR2_501.dgn



LEGEND:

- SITE BOUNDARY
- AREA OF INFLUENCE (AOI)
- ↔ L1 CRITICAL ROAD LINKS TO BE ASSESSED
- J1 CRITICAL JUNCTIONS TO BE ASSESSED

PROJECT
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SCALE
比例

A3 1: 10000

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號

60667362

AGREEMENT NO.
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SHEET TITLE
圖紙名稱

**CRITICAL ROAD LINKS AND
JUNCTION WITHIN THE AOI**

SHEET NUMBER
圖紙編號

FIGURE 5.1

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References

比例

尺寸單位

索引

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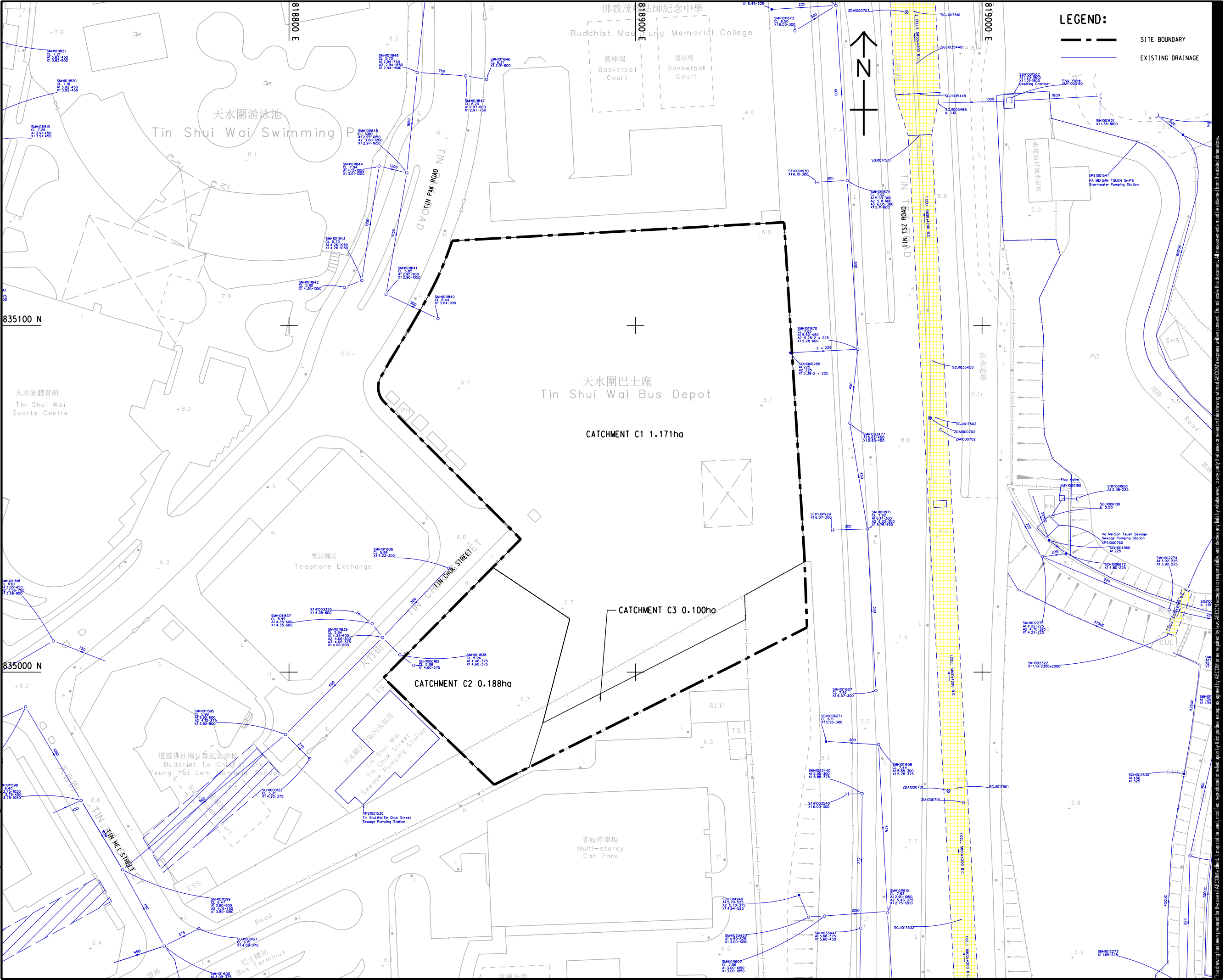
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圖紙名稱

PLAN

圖紙編號

ISO A1 594mm x 841mm
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Plot File by: jdw 2022/11/19
PATH: P:\PROJECTS\6067262\Drawing\REPORT\TRTSR 411.dgn



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SCALE
比例
A3 1:1000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
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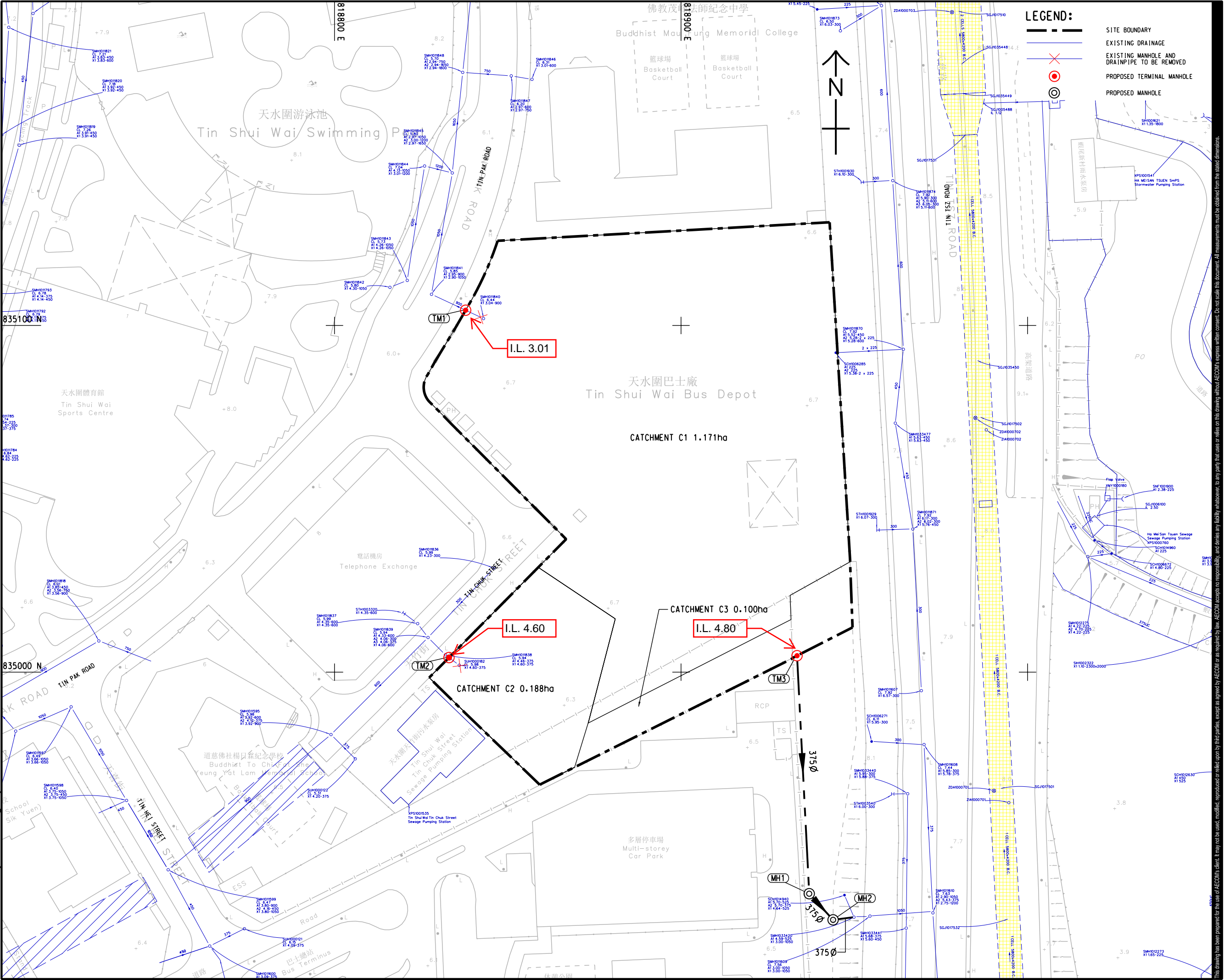
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SHEET TITLE
圖紙名稱
PROPOSED CATCHMENT PLAN

SHEET NUMBER
圖紙編號

FIGURE 6.3

ISO A1 594mm x 841mm
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SCALE
比例
A3 1:2000

DIMENSION UNIT
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METRES

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圖紙名稱
PROPOSED DRAINAGE LAYOUT
PLAN

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FIGURE 6.4



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階段

KEY PLAN

SHEET TITLE
圖紙名稱

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圖紙編號

FIGURE 6.5

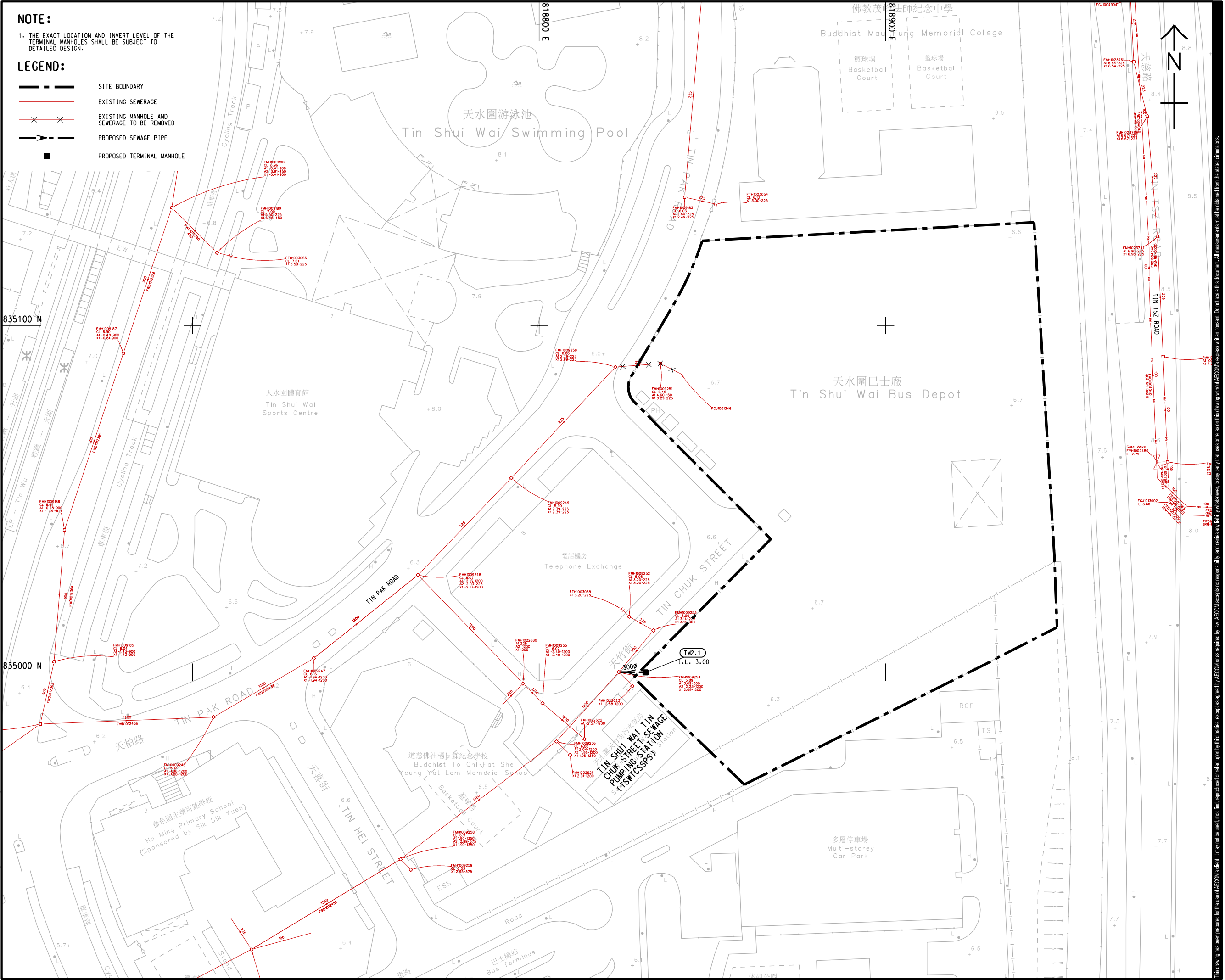
ISO A1 594mm x 841mm
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PATH P:\PROJECTS\6067362\Drawing\REPORT\TR06_452.dgn

NOTE:
1. THE EXACT LOCATION AND INVERT LEVEL OF THE TERMINAL MANHOLES SHALL BE SUBJECT TO DETAILED DESIGN.

LEGEND:

- SITE BOUNDARY
- EXISTING SEWERAGE
- EXISTING MANHOLE AND SEWERAGE TO BE REMOVED
- PROPOSED SEWAGE PIPE
- PROPOSED TERMINAL MANHOLE



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1/1	11/25/2022	Initial Issue	

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SCALE
比例 1:1000

DIMENSION UNIT
尺寸單位 METRES

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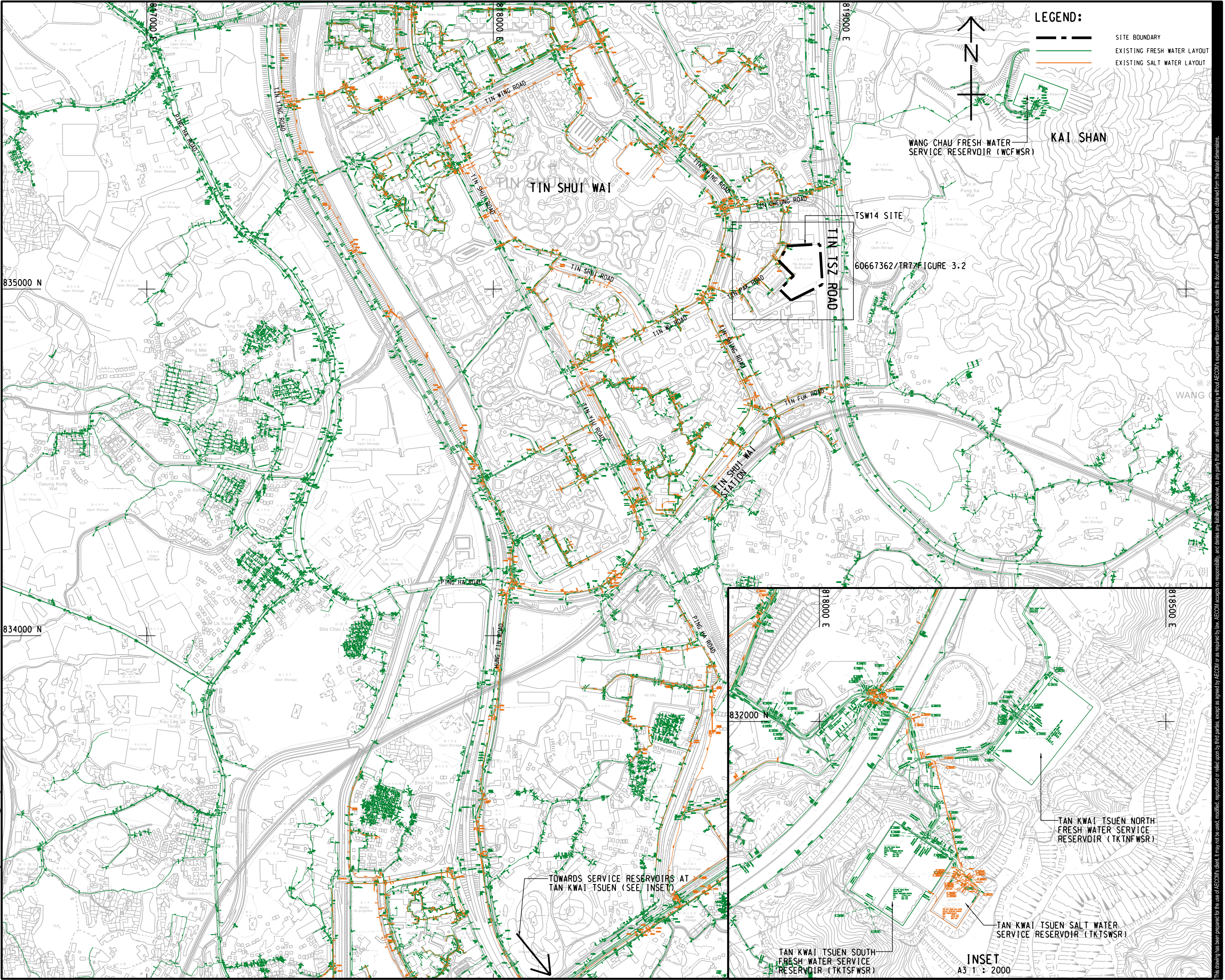
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SHEET TITLE
圖紙名稱 PROPOSED SEWERAGE PLAN

SHEET NUMBER
圖紙編號 FIGURE 6.6

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LEGEND:

- SITE BOUNDARY
- EXISTING FRESH WATER LAYOUT
- EXISTING SALT WATER LAYOUT

WANG CHAU FRESH WATER SERVICE RESERVOIR (WCFWSR)

KAI SHAN

TSW14 SITE

60667362/TR7/FIGURE 3.2

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備註				
SCALE				
比例		DIMENSION UNIT		
A3 1: 10000		METRES		
KEY PLAN				
索引圖				

PROJECT NO. 項目編號
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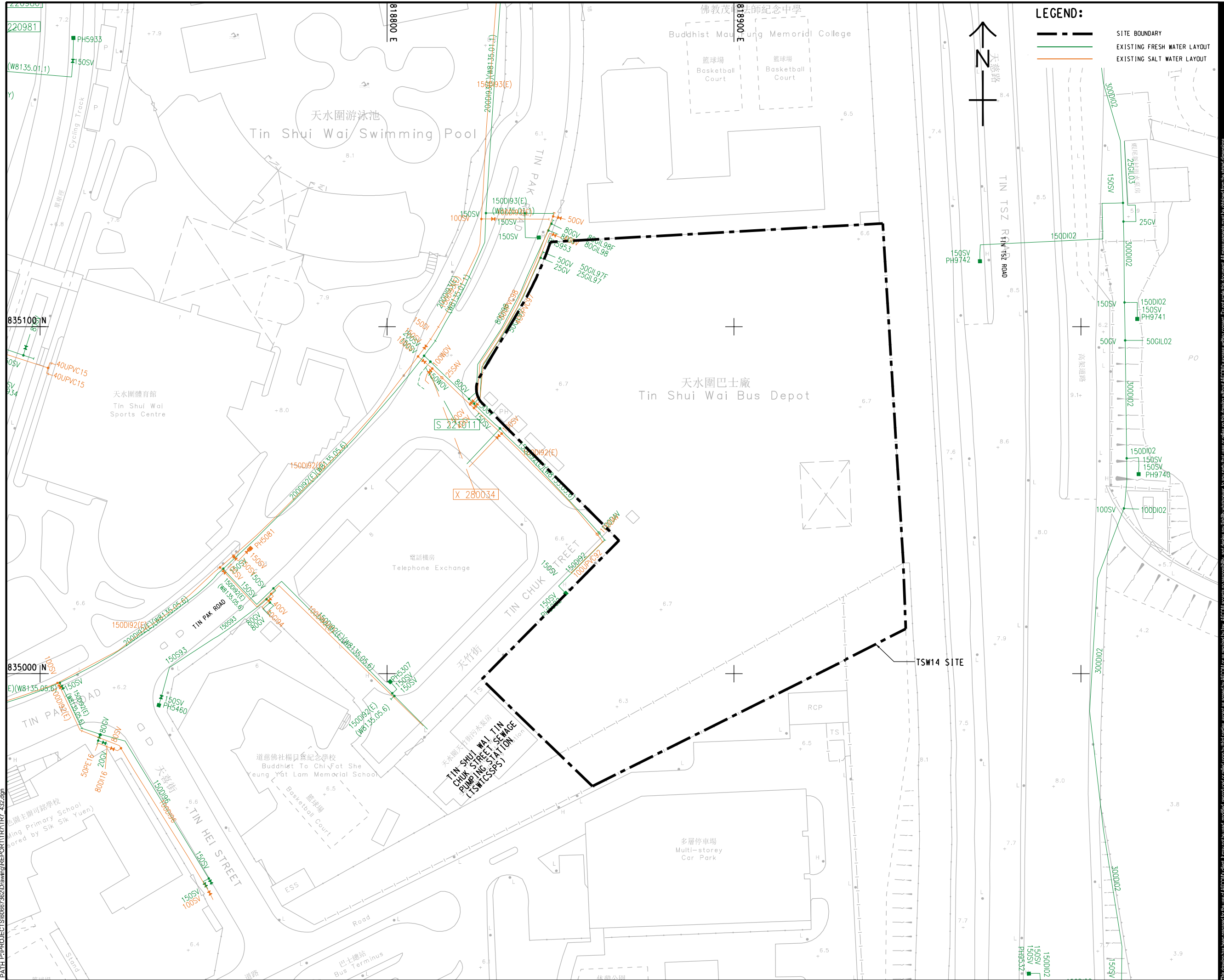
SHEET TITLE
圖紙名稱

EXISTING WATER SUPPLY FOR
TIN SHUI WAI AREA 14 -
LAYOUT KEY PLAN

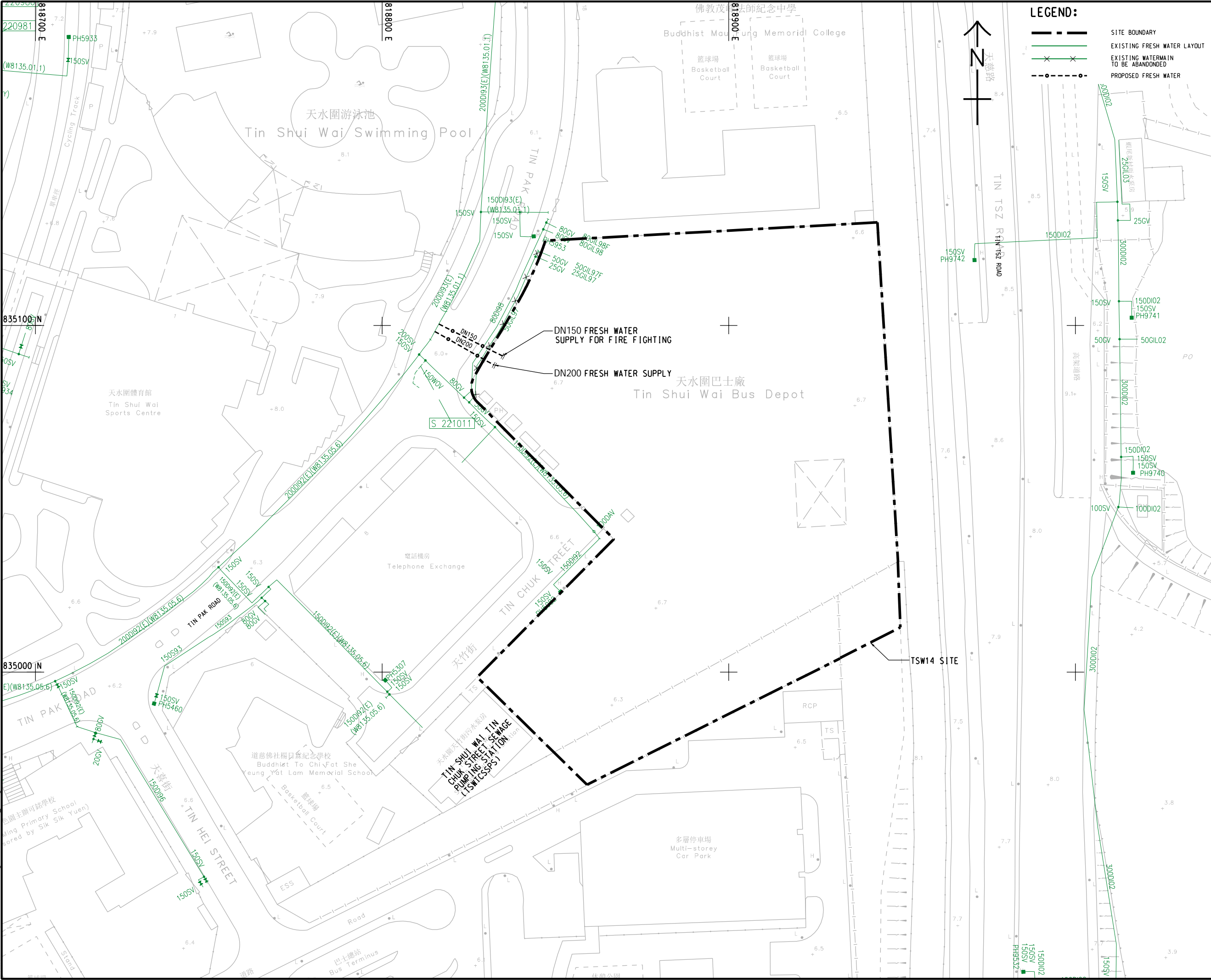
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FIGURE 6.7

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SCALE
比例
A3 1 : 1000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

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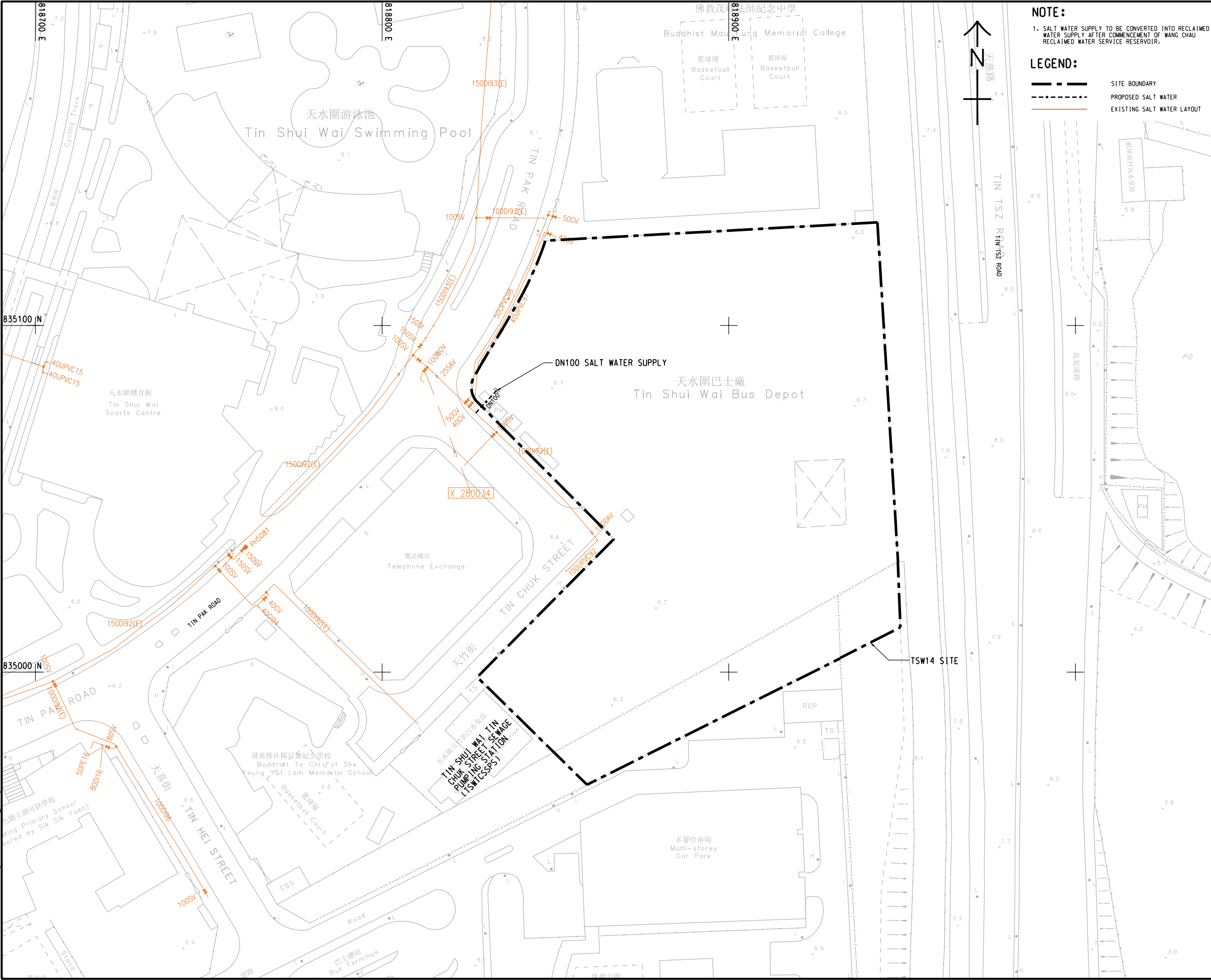
SHEET TITLE
圖紙名稱
**PROPOSED FRESH WATER
SUPPLY LAYOUT PLAN**

SHEET NUMBER
圖紙編號

FIGURE 6.9

ISO A1 594mm x 841mm
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2023/9/28
PATH P:\PROJECTS\6067362\Drawing\REPORT\TR7_452.dgn



NOTE:

1. SALT WATER SUPPLY TO BE CONVERTED INTO RECLAIMED WATER SUPPLY AFTER COMMENCEMENT OF WANG CHAU RECLAIMED WATER SERVICE RESERVOIR.

LEGEND:

- SITE BOUNDARY
- PROPOSED SALT WATER
- EXISTING SALT WATER LAYOUT



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SCALE

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DIMENSION UNIT

METRES

KEY PLAN

See attached

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60667362

AGREEMENT NO.

CE 23/2020

SHEET TITLE

PROPOSED FLUSHING WATER
SUPPLY LAYOUT PLAN

SHEET NUMBER







FIGURE 6.10

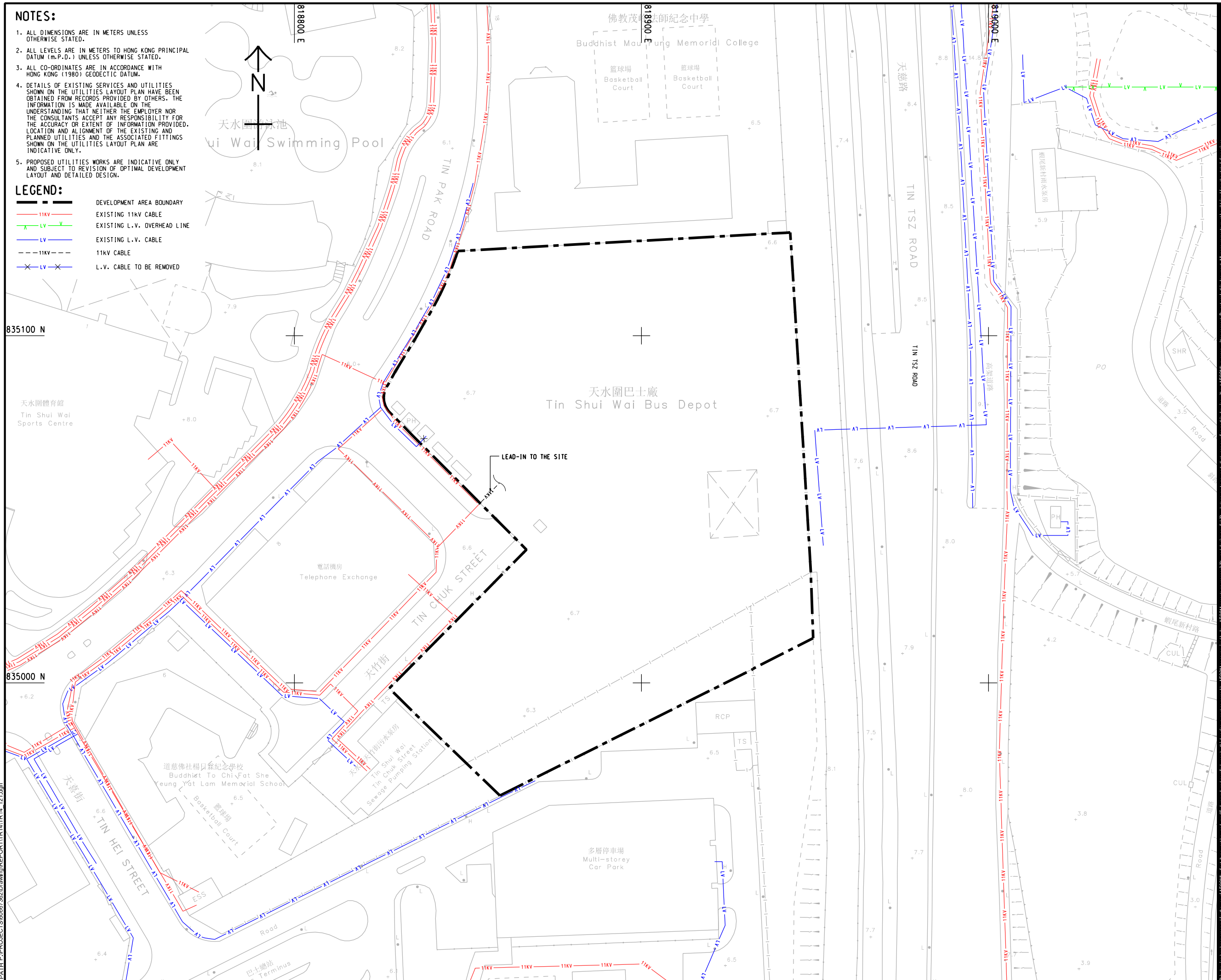
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LEGEND:

- | | |
|---|-----------------------------|
|  | DEVELOPMENT AREA BOUNDARY |
|  | EXISTING 11KV CABLE |
|  | EXISTING L.V. OVERHEAD LINE |
|  | EXISTING L.V. CABLE |
|  | 11KV CABLE |
|  | L.V. CABLE TO BE REMOVED |



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SCALE

A3 1 : 1000

DIMENSION UNIT

METRES

KEY PLAN

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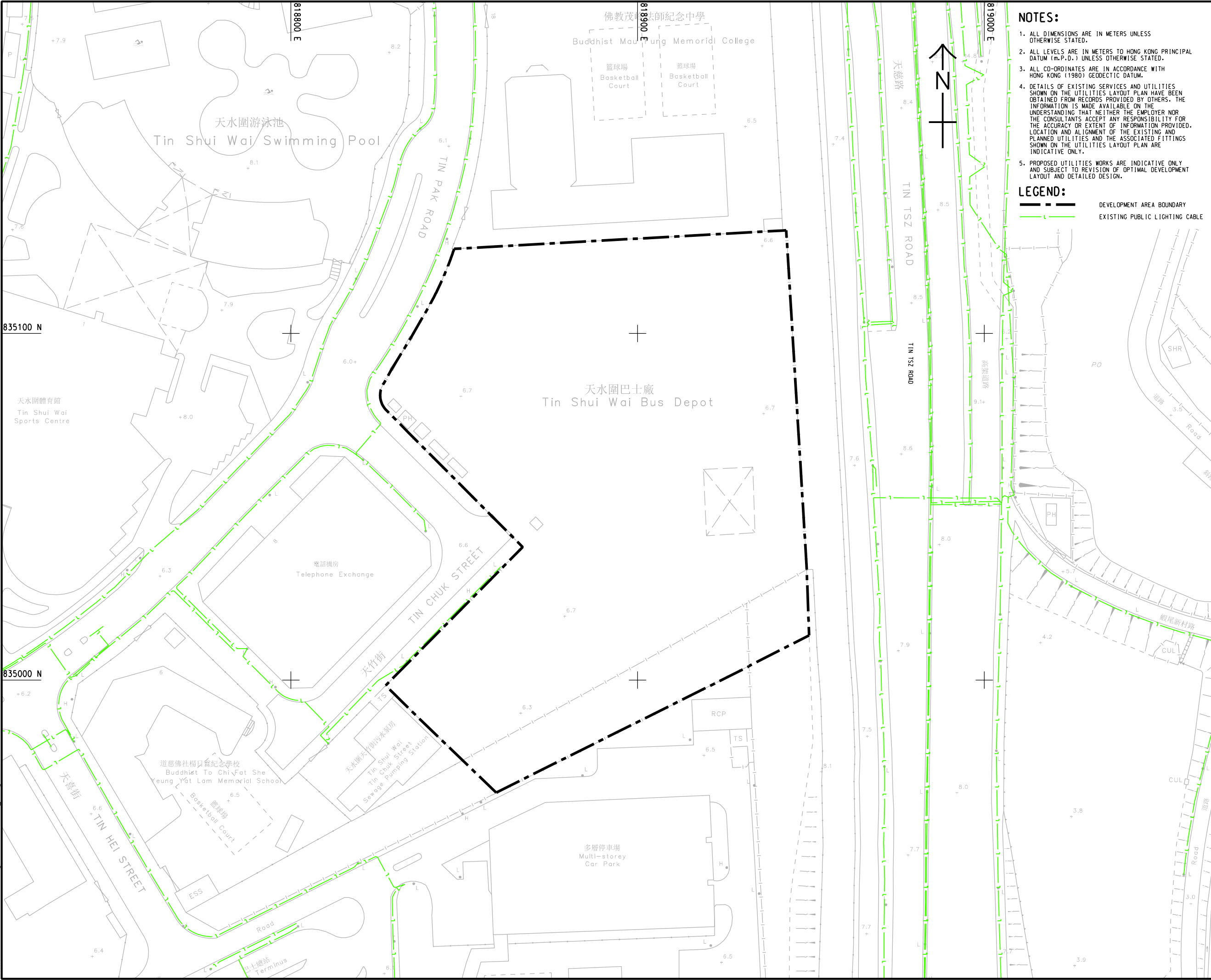
SHEET TITLE

EXISTING, PLANNED AND
PROPOSED CLP CABLE LAYOUT
PLAN AT TIN SHUI WAI AREA 14

SHEET NUMBER

FIGURE 6.11

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81800 E
81900 E
81900 E
835100 N
835000 N
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Plot File by: HED2



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5. PROPOSED UTILITIES WORKS ARE INDICATIVE ONLY AND SUBJECT TO REVISION OF OPTIMAL DEVELOPMENT LAYOUT AND DETAILED DESIGN.

LEGEND:

- DEVELOPMENT AREA BOUNDARY
- EXISTING PUBLIC LIGHTING CABLE

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比例
A3 1 : 1000

DIMENSION UNIT

尺寸單位
METRES

KEY PLAN

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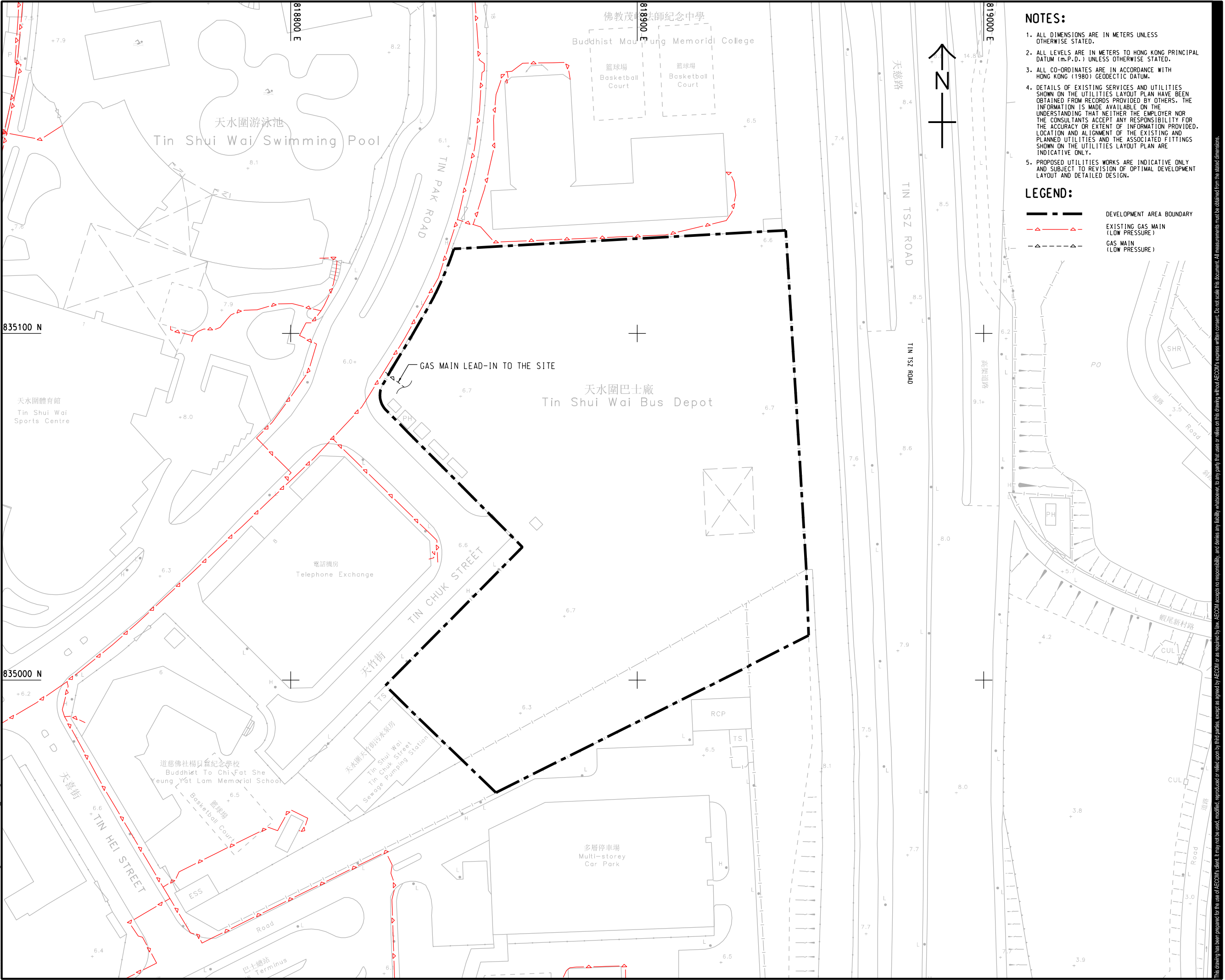
圖紙名稱
EXISTING, PLANNED AND
PROPOSED LIGHTING CABLE
LAYOUT PLAN AT TIN SHUI WAI
AREA 14

SHEET NUMBER

圖紙編號

FIGURE 6.12

ISO A1 594mm x 841mm
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Designer:
Project Management Initials:
835100 N
835000 N
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1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
2. ALL LEVELS ARE IN METERS TO HONG KONG PRINCIPAL DATUM (m.P.D.) UNLESS OTHERWISE STATED.
3. ALL CO-ORDINATES ARE IN ACCORDANCE WITH HONG KONG (1980) GEODECTIC DATUM.
4. DETAILS OF EXISTING SERVICES AND UTILITIES SHOWN ON THE UTILITIES LAYOUT PLAN HAVE BEEN OBTAINED FROM RECORDS PROVIDED BY OTHERS. THE INFORMATION IS MADE AVAILABLE ON THE UNDERSTANDING THAT NEITHER THE EMPLOYER NOR THE CONSULTANTS ACCEPT ANY RESPONSIBILITY FOR THE ACCURACY OR EXTENT OF INFORMATION PROVIDED. LOCATION AND ALIGNMENT OF THE EXISTING AND PLANNED UTILITIES AND THE ASSOCIATED FITTINGS SHOWN ON THE UTILITIES LAYOUT PLAN ARE INDICATIVE ONLY.
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LEGEND:

- DEVELOPMENT AREA BOUNDARY
- EXISTING GAS MAIN (LOW PRESSURE)
- GAS MAIN (LOW PRESSURE)



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SCALE
比例
A3 1 : 1000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
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PROJECT NO.
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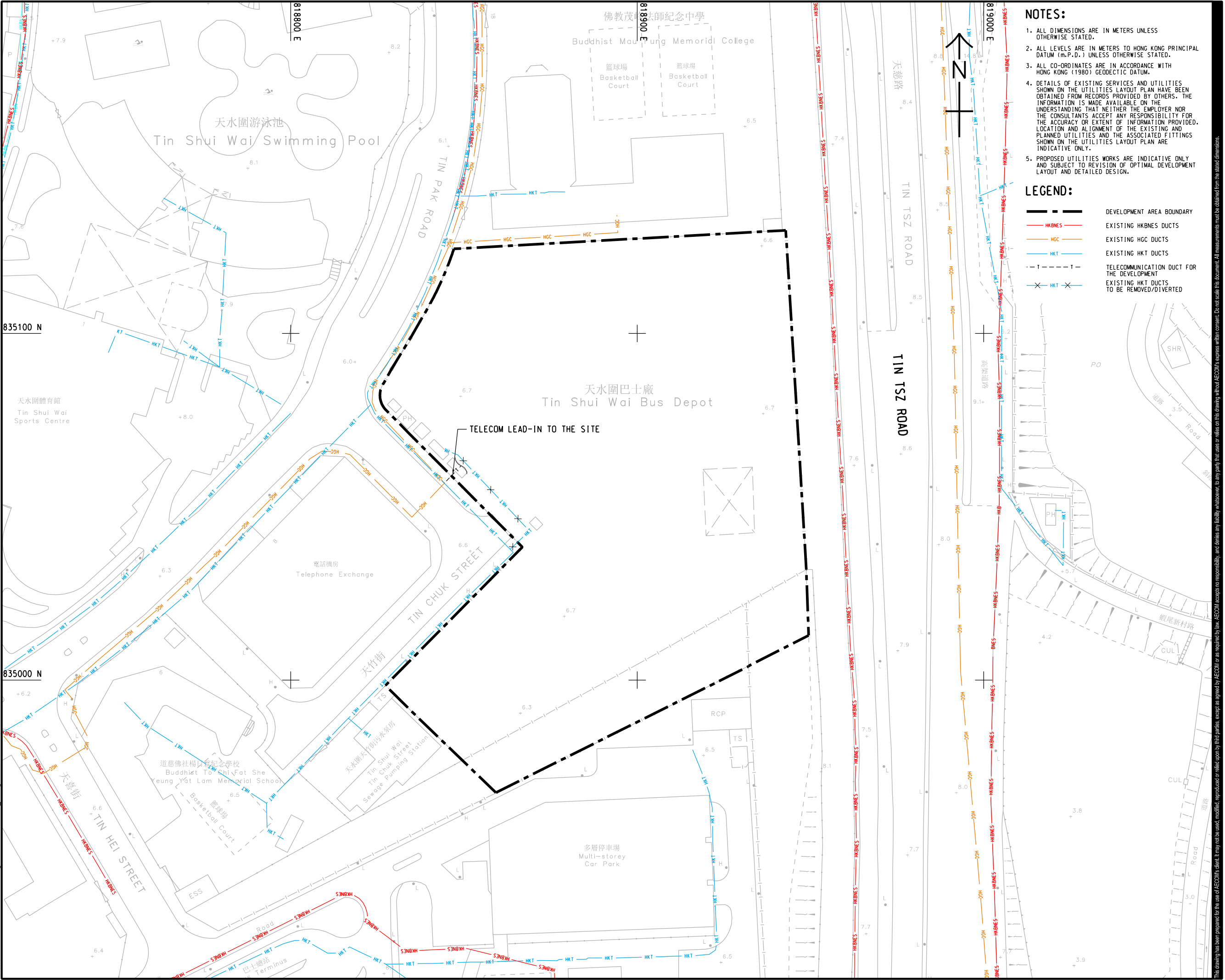
SHEET TITLE
圖紙名稱

EXISTING, PLANNED AND
PROPOSED TOWN GAS LAYOUT
PLAN AT TIN SHUI WAI AREA 14

SHEET NUMBER
圖紙編號

FIGURE 6.13

ISO A1 594mm x 841mm
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81800 E
81900 E
835100 N
835000 N
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- NOTES:**
1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
 2. ALL LEVELS ARE IN METERS TO HONG KONG PRINCIPAL DATUM (m.P.D.) UNLESS OTHERWISE STATED.
 3. ALL CO-ORDINATES ARE IN ACCORDANCE WITH HONG KONG (1980) GEODECTIC DATUM.
 4. DETAILS OF EXISTING SERVICES AND UTILITIES SHOWN ON THE UTILITIES LAYOUT PLAN HAVE BEEN OBTAINED FROM RECORDS PROVIDED BY OTHERS. THE INFORMATION IS MADE AVAILABLE ON THE UNDERSTANDING THAT NEITHER THE EMPLOYER NOR THE CONSULTANTS ACCEPT ANY RESPONSIBILITY FOR THE ACCURACY OR EXTENT OF INFORMATION PROVIDED. LOCATION AND ALIGNMENT OF THE EXISTING AND PLANNED UTILITIES AND THE ASSOCIATED FITTINGS SHOWN ON THE UTILITIES LAYOUT PLAN ARE INDICATIVE ONLY.
 5. PROPOSED UTILITIES WORKS ARE INDICATIVE ONLY AND SUBJECT TO REVISION OF OPTIMAL DEVELOPMENT LAYOUT AND DETAILED DESIGN.

- LEGEND:**
- DEVELOPMENT AREA BOUNDARY
 - HKBNS EXISTING HKBNS DUCTS
 - HGC EXISTING HGC DUCTS
 - HKT EXISTING HKT DUCTS
 - - - - - TELECOMMUNICATION DUCT FOR THE DEVELOPMENT
 - × HKT × EXISTING HKT DUCTS TO BE REMOVED/DIVERGED

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SCALE	DIMENSION UNIT
比例	尺寸單位
A3 1 : 1000	METRES

KEY PLAN
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PROJECT NO.
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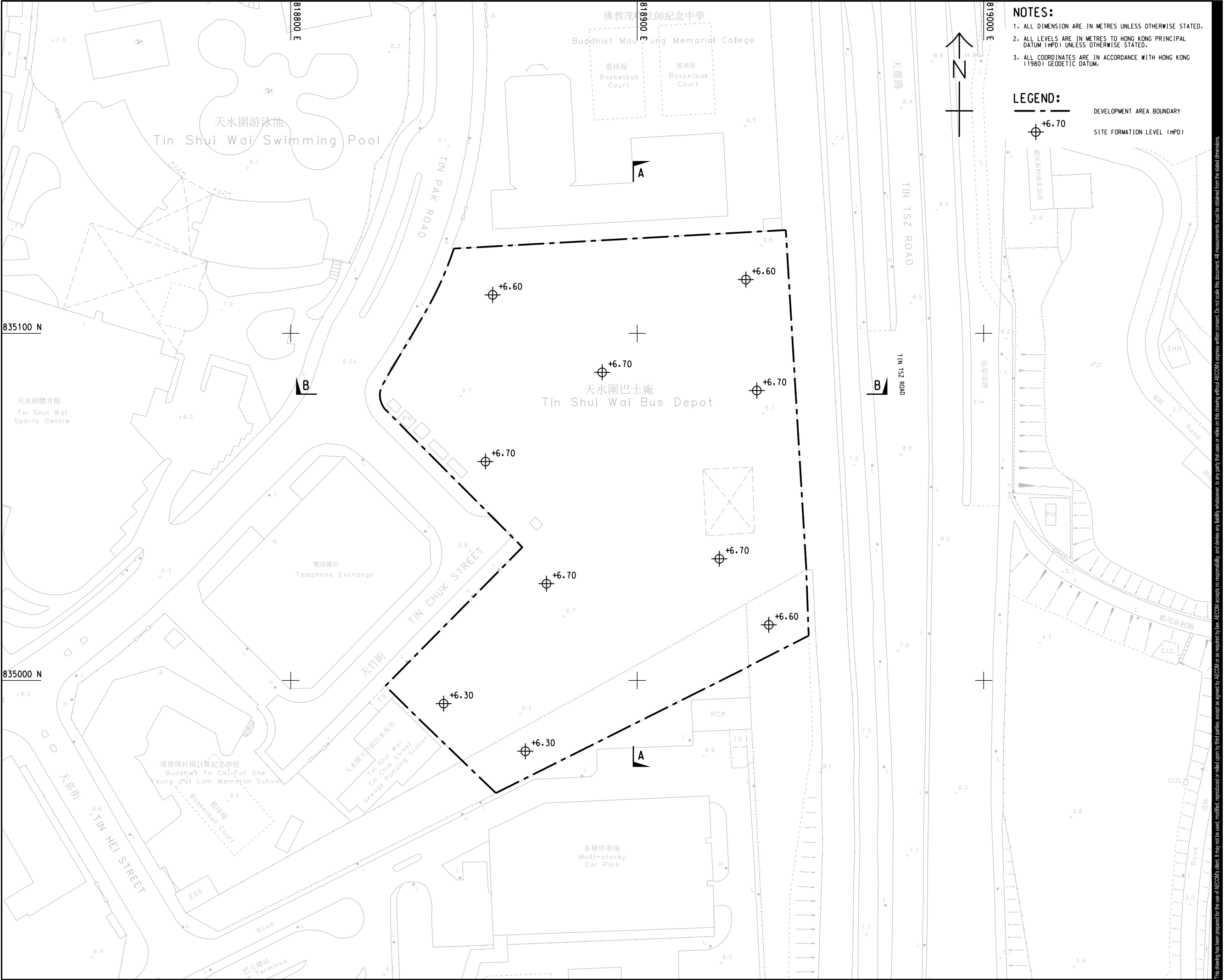
SHEET TITLE
圖紙名稱

EXISTING, PLANNED AND
PROPOSED TELECOMMUNICATION
DUCT LAYOUT PLAN AT
TIN SHUI WAI AREA 14

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FIGURE 6.14

ISO A1 594mm x 841mm
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- NOTES:**
1. ALL DIMENSION ARE IN METRES UNLESS OTHERWISE STATED.
 2. ALL LEVELS ARE IN METRES TO HONG KONG PRINCIPAL DATUM (mPD) UNLESS OTHERWISE STATED.
 3. ALL COORDINATES ARE IN ACCORDANCE WITH HONG KONG (1980) GEODETIC DATUM.

- LEGEND:**
- DEVELOPMENT AREA BOUNDARY
 - ⊕+6.70 SITE FORMATION LEVEL (mPD)

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SCALE

比例

A3 1: 1000

DIMENSION UNIT

尺寸單位

METRES

KEY PLAN

索引圖

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圖紙名稱

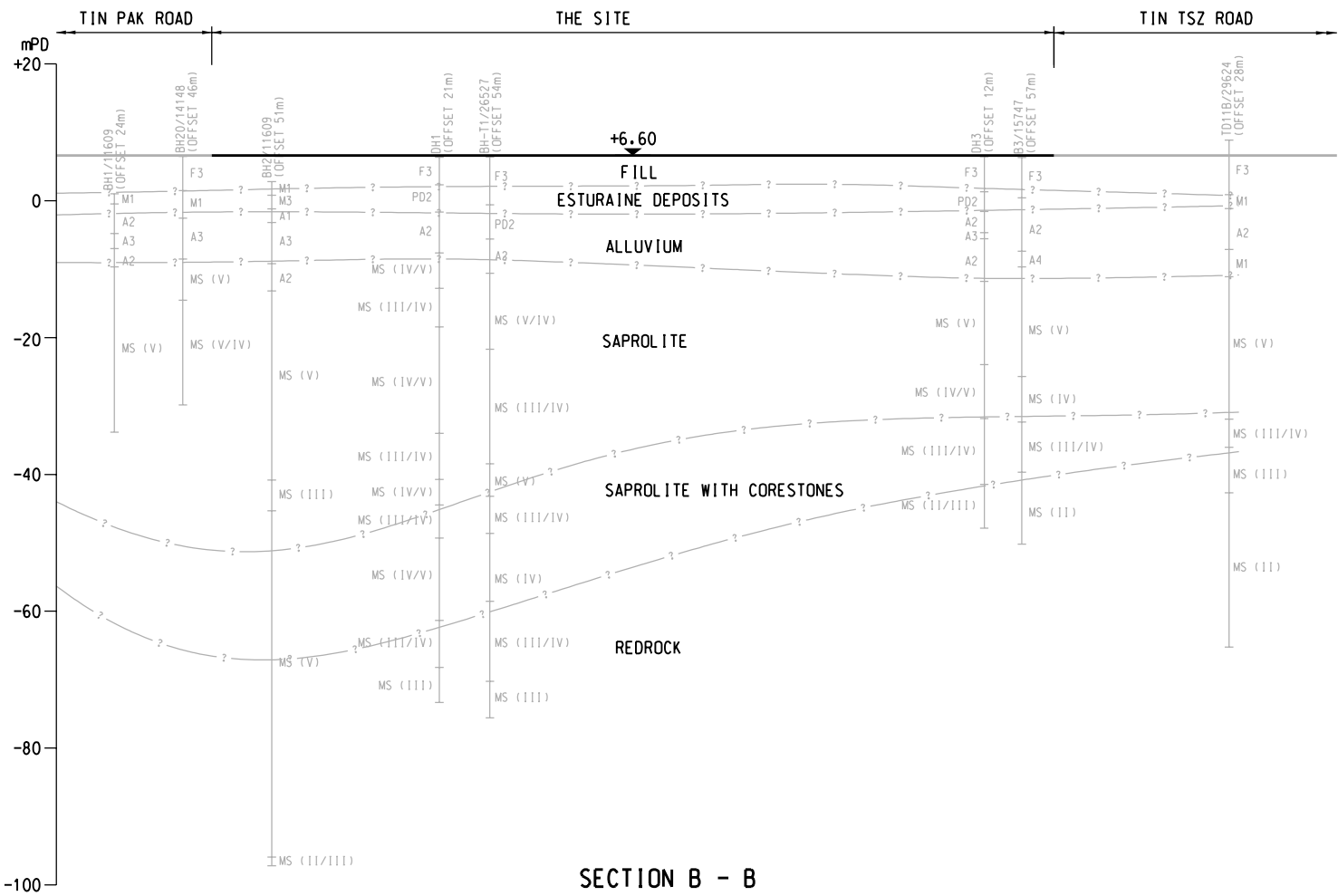
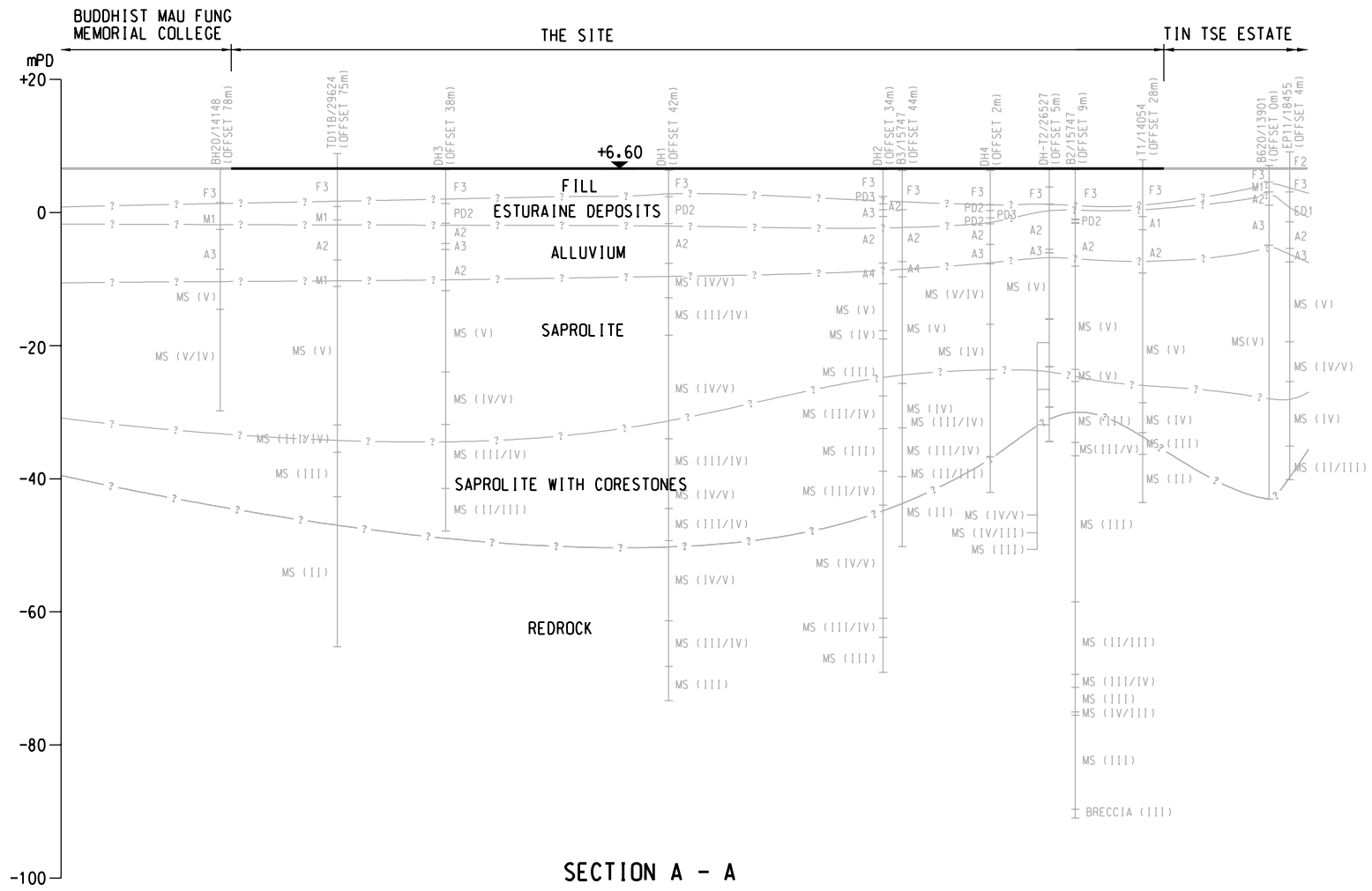
SITE FORMATION PLAN

SHEET NUMBER

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FIGURE 7.1

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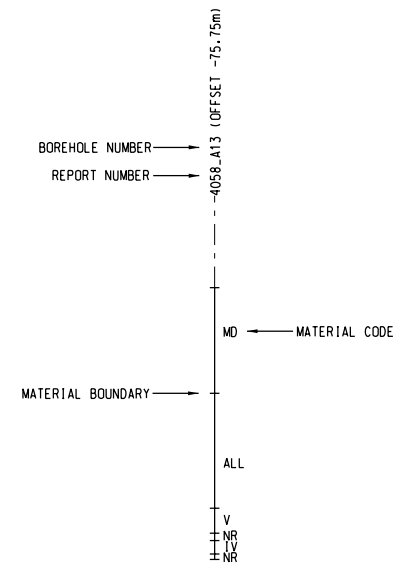
NOTES:

- 1. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM (mPD).
- 2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
- 3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NO. FIGURE 7.1
- 4. ROCKHEAD LEVEL AND MATERIAL PROFILES ARE INFERRED FROM ADJACENT DRILLHOLES.
- 5. GROUND PROFILE SHOWN IS THAT CUT ALONG THE SECTION LINE USING THE PUBLISHED TOPOGRAPHIC MAP BY HONG KONG GOVERNMENT.
- 6. ROCK WEATHERING GRADES HAVE BEEN GENERALISED FOR ILLUSTRATION PURPOSES. REFER TO THE INDIVIDUAL DRILLHOLE RECORD FOR DETAILED ROCK WEATHERING GRADES.
- 7. ROCK DECOMPOSITION GRADES WITHOUT BRACKET INDICATING ROCK TYPE SHOULD BE NOTED AS GRANITE.
- 8. THE ACTUAL GROUND CONDITIONS MAY VARY FROM THAT SHOWN ON THE GEOLOGICAL SECTION.
- 9. ALL INFORMATION SHOWN IN THE SECTIONS HAS BEEN INFERRED FROM LIMITED FACTUAL DATA, AS SUCH, THE ACTUAL GROUND CONDITIONS AND ENGINEERING IMPLICATIONS AT ANY LOCATION MAY BE DIFFERENT FROM THOSE INFERRED IN THIS DRAWING.
- 10. ROCKHEAD HAS BEEN INFERRED FROM DRILLHOLE DATA BASED ON THE CRITERION OF AT LEAST 5M PENETRATION BY DRILLHOLES INTO ROCK OF DECOMPOSITION GRADE III OR BETTER AND WITH A MINIMUM OF 85% TOTAL CORE RECOVERY.

LEGEND:

+6.70 SITE FORMATION LEVEL (mPD)

LEGEND FOR GEOLOGICAL SECTIONS:



TYPICAL SECTION FOR GEOLOGICAL CROSS SECTION



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A3 1:1000

DIMENSION UNIT

尺寸單位

METRES

KEY PLAN

索引圖

PROJECT NO.

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圖紙名稱

GEOLOGICAL SECTIONS

SHEET NUMBER

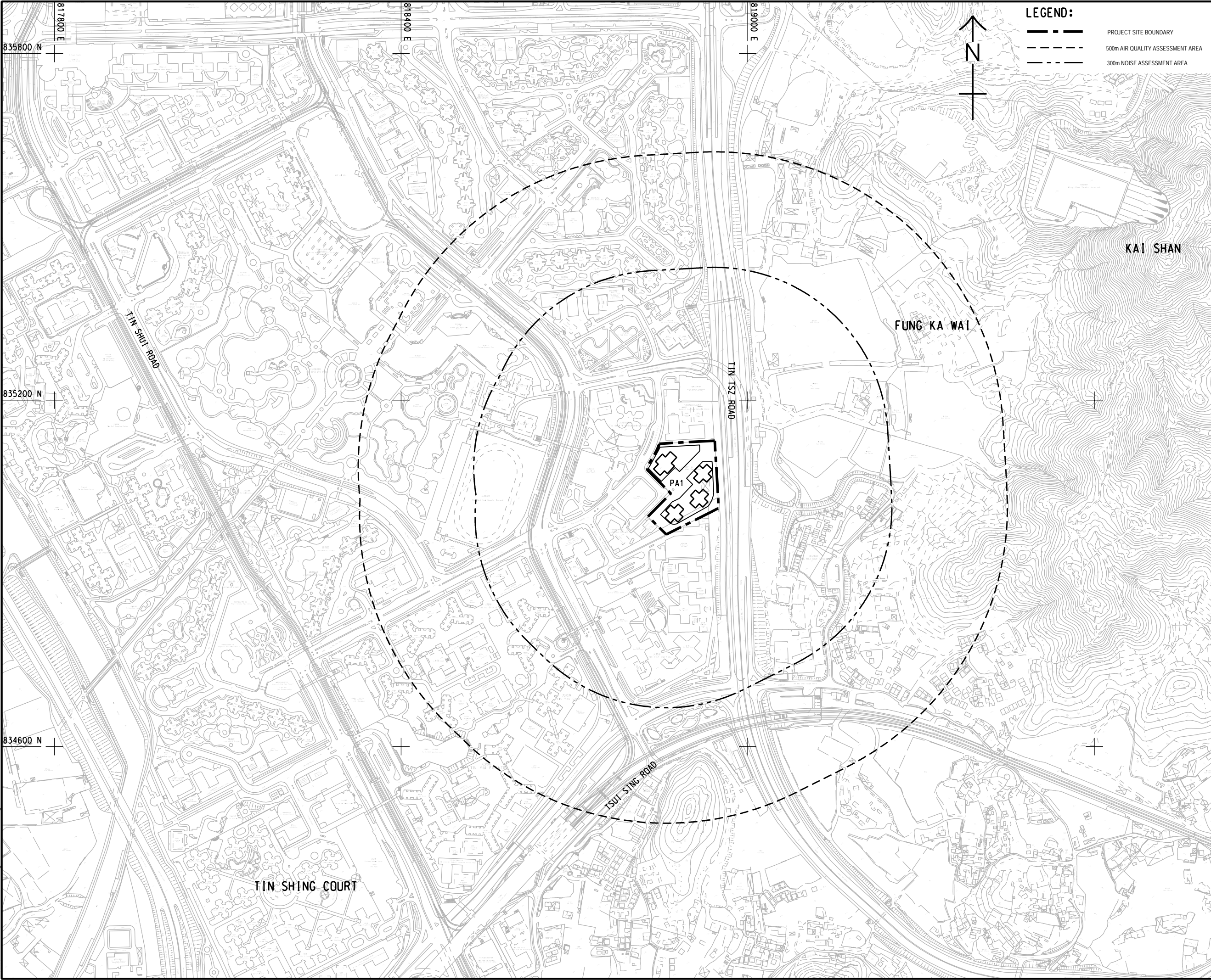
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FIGURE 7.2

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STATUS
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SCALE
比例

A3 1 : 6000

DIMENSION UNIT
尺寸單位

METRES

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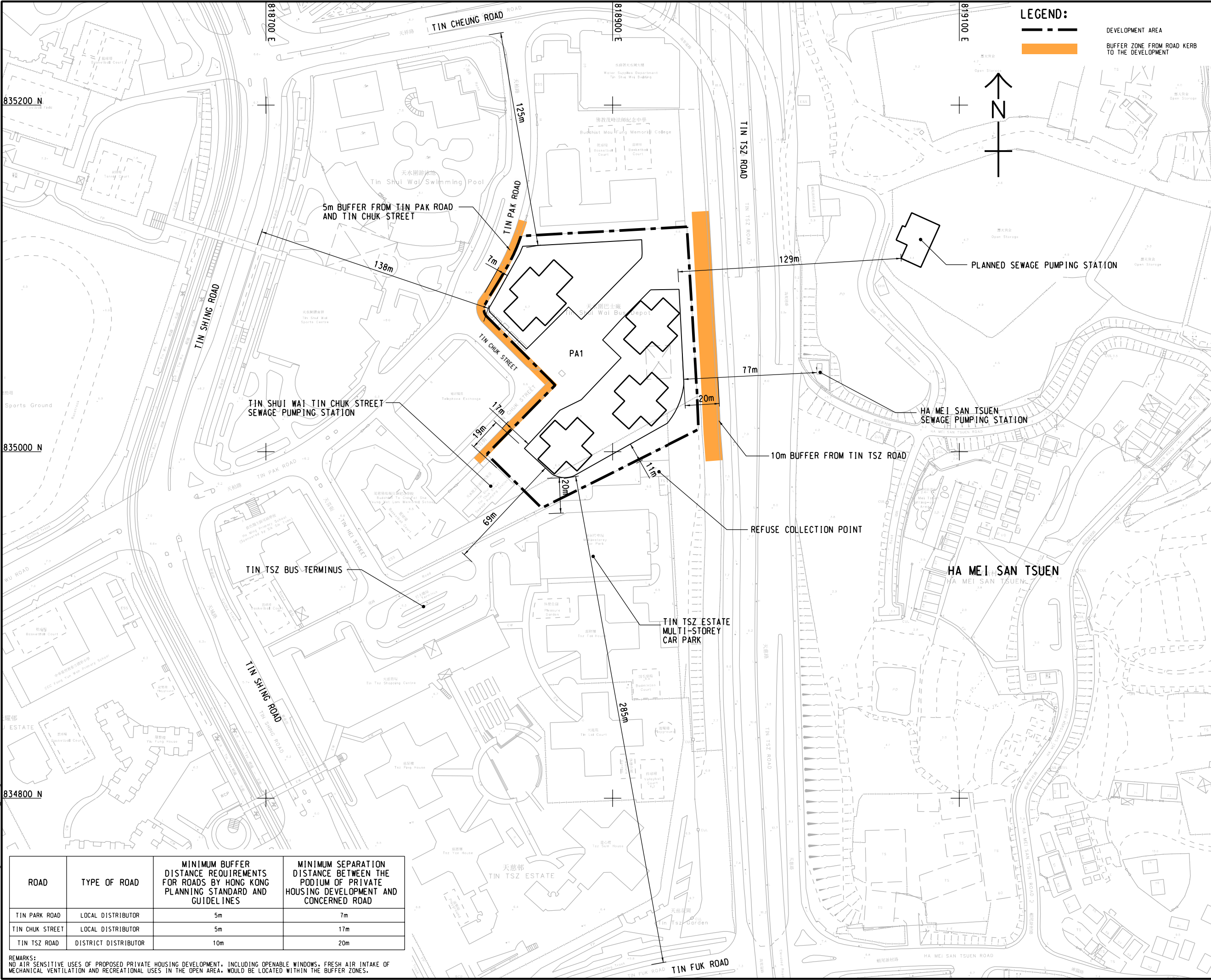
SHEET TITLE
圖紙名稱

300m NOISE AND 500m AIR
QUALITY ASSESSMENT
AREAS

SHEET NUMBER
圖紙編號

FIGURE 8.1

ISO A1 594mm x 841mm
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PLOT FILE BY: LQ
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ROAD	TYPE OF ROAD	MINIMUM BUFFER DISTANCE REQUIREMENTS FOR ROADS BY HONG KONG PLANNING STANDARD AND GUIDELINES	MINIMUM SEPARATION DISTANCE BETWEEN THE PODIUM OF PRIVATE HOUSING DEVELOPMENT AND CONCERNED ROAD
TIN PARK ROAD	LOCAL DISTRIBUTOR	5m	7m
TIN CHUK STREET	LOCAL DISTRIBUTOR	5m	17m
TIN TSZ ROAD	DISTRICT DISTRIBUTOR	10m	20m

REMARKS:
NO AIR SENSITIVE USES OF PROPOSED PRIVATE HOUSING DEVELOPMENT, INCLUDING OPENABLE WINDOWS, FRESH AIR INTAKE OF MECHANICAL VENTILATION AND RECREATIONAL USES IN THE OPEN AREA, WOULD BE LOCATED WITHIN THE BUFFER ZONES.

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SCALE
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A1 1:1000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

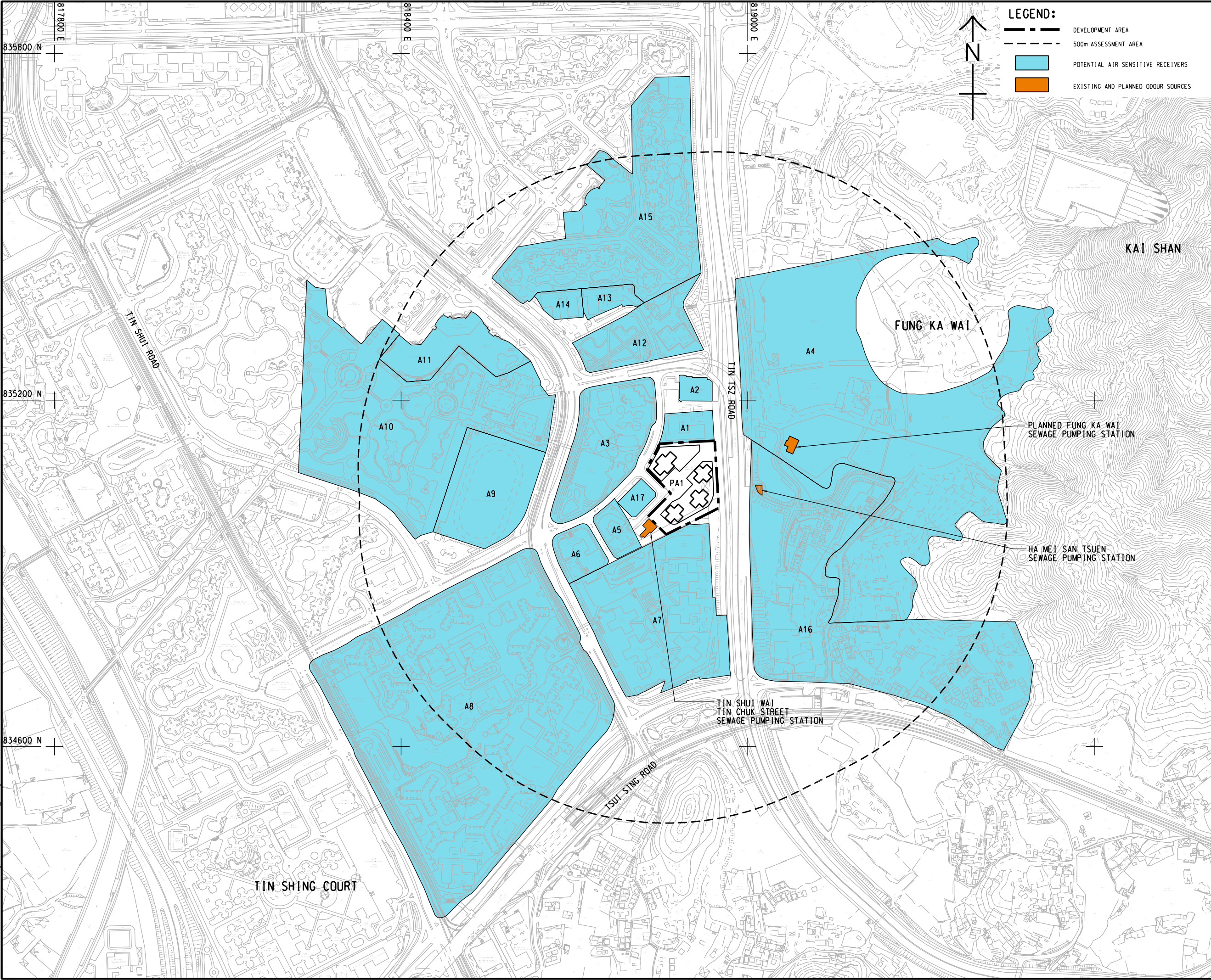
PROJECT NO.
項目編號
60667362

AGREEMENT NO.
協議編號
CE 23/2020

SHEET TITLE
圖紙名稱
LOCATIONS OF POTENTIAL
SOURCES AND BUFFER
DISTANCE

SHEET NUMBER
圖紙編號
FIGURE 8.2

ISO A1 594mm x 841mm
Approved:
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Project Management Initials:
2024/1/1
Plot File by: luyang
PATH P:\PROJECTS\60667362\Drawing\REPORT\TR01\TR0_701.dgn



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STATUS

階段

SCALE

比例

A1 1 : 3000

DIMENSION UNIT

尺寸單位

METRES

KEY PLAN

索引圖

PROJECT NO.

項目編號

60667362

AGREEMENT NO.

協議編號

CE 23/2020

SHEET TITLE

圖紙名稱

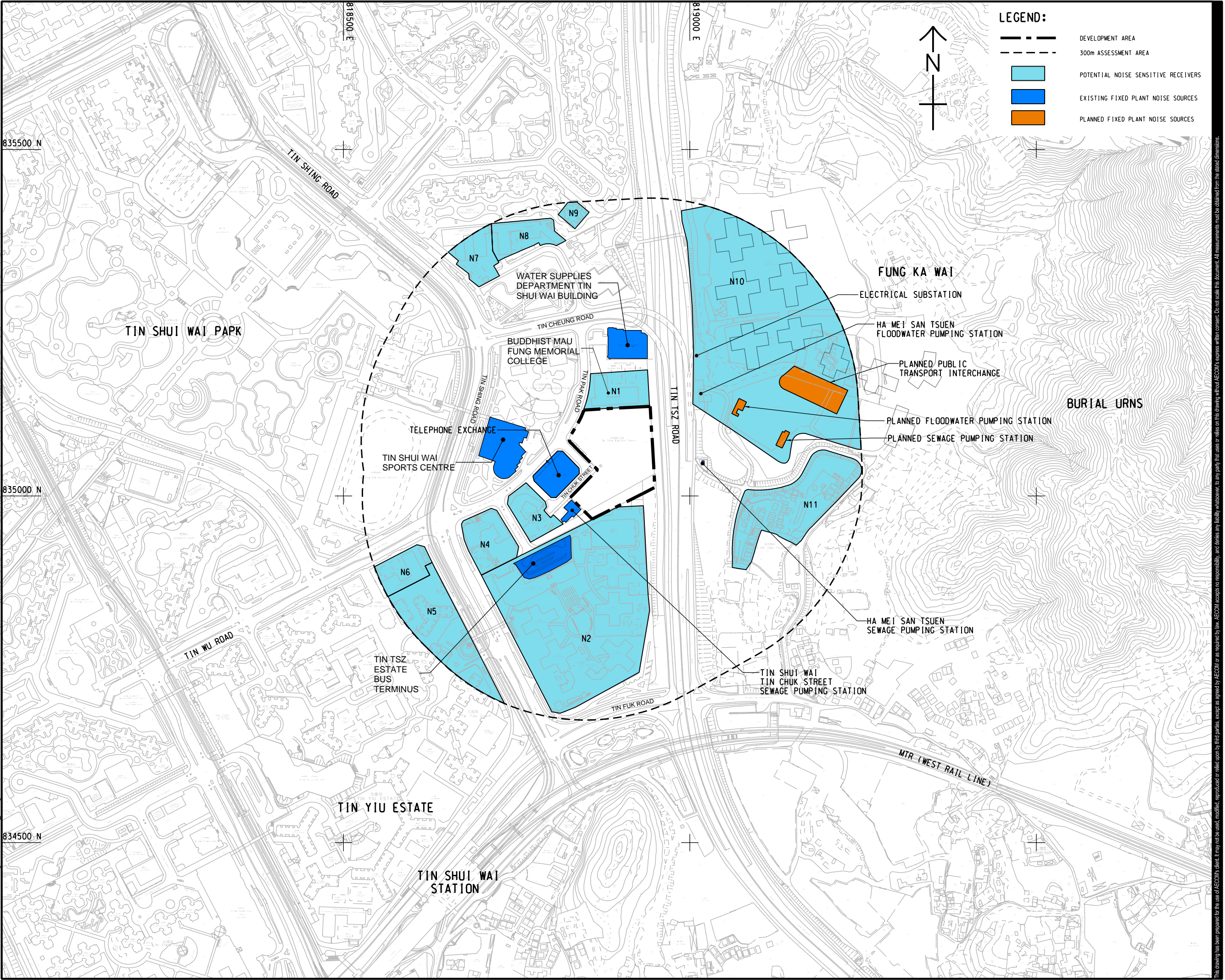
LOCATIONS OF REPRESENTATIVE
AIR SENSITIVE RECEIVERS AND
POTENTIAL ODOUR SOURCES

SHEET NUMBER

圖紙編號

FIGURE 8.3

ISO A1 594mm x 841mm
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Designer:
Project Management Initials:
Plot File by: Yifeng.QI 2021/10/27
PATH: P:\PROJECTS\6067362\Drawing\REPORT\2102_702.dgn



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SCALE
比例
A1 1:2500

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
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AGREEMENT NO.
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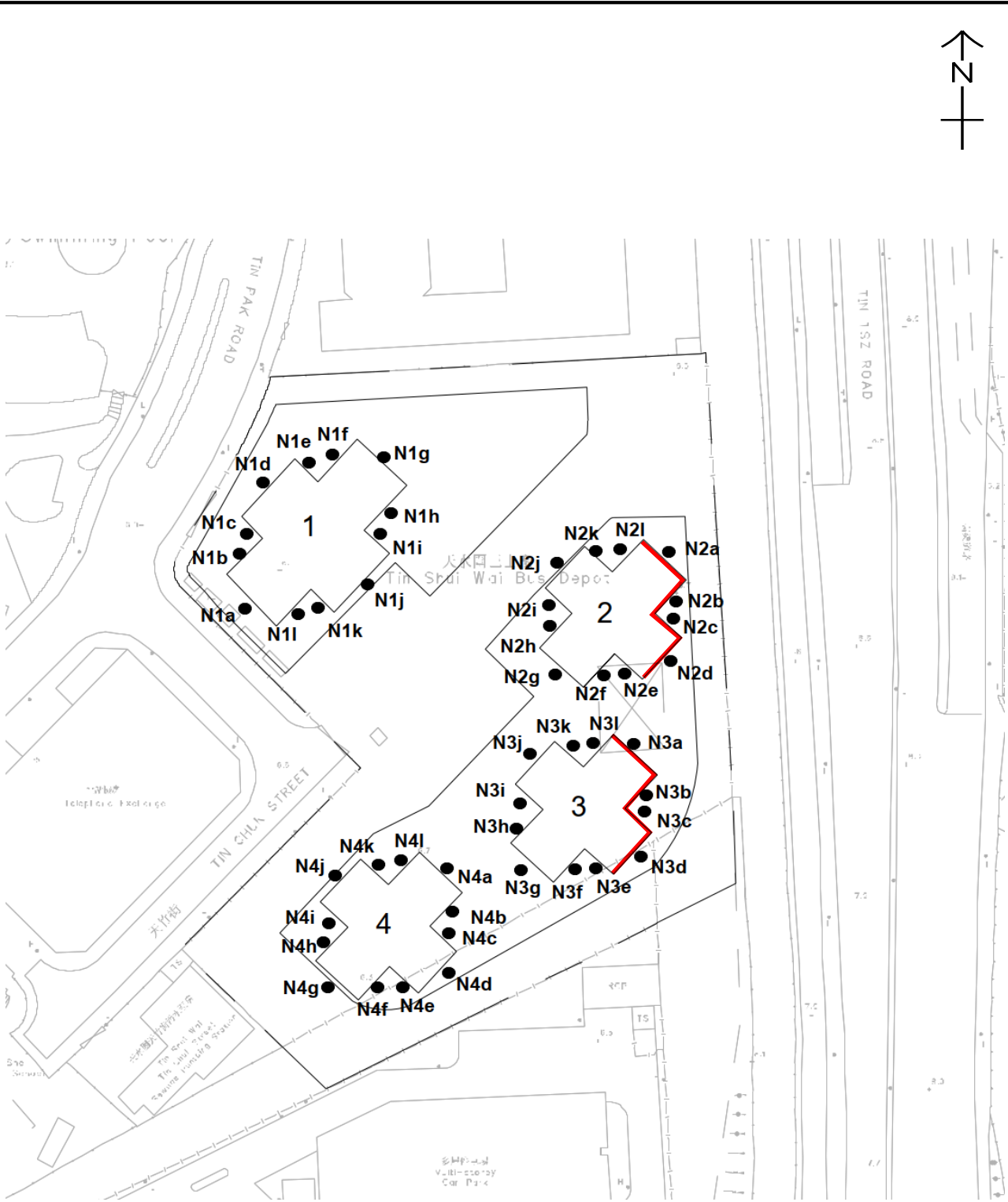
SHEET TITLE
圖紙名稱

LOCATIONS OF POTENTIAL NOISE
SENSITIVE RECEIVERS WITHIN 300m
STUDY AREA

SHEET NUMBER
圖紙編號



FIGURE 8.4

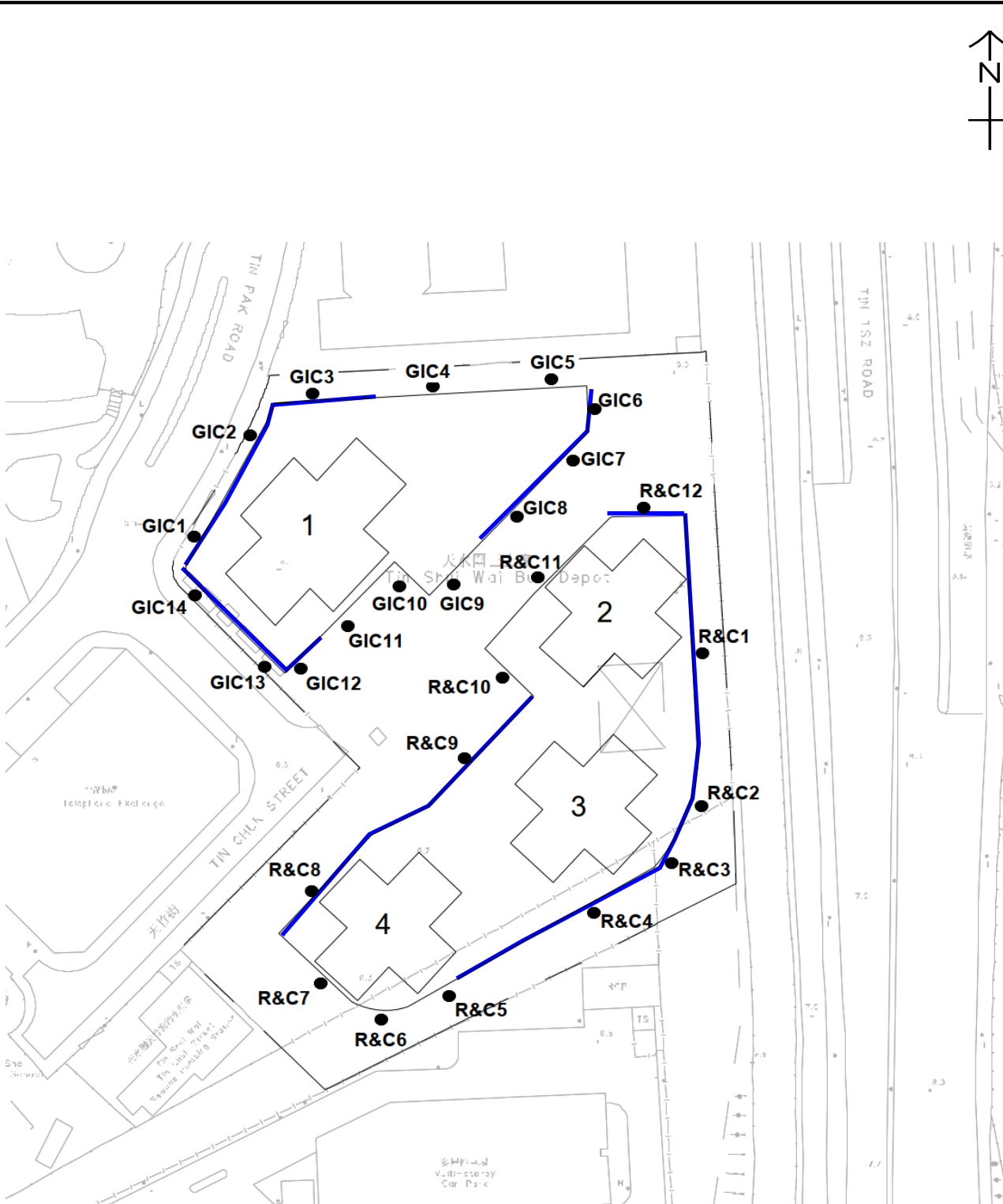
ISO A1 594mm x 841mm
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Checked:
Designer:
Project Management Initials:
Plot File by:
PATH



RESIDENTIAL USES


LEGEND

-  ACOUSTIC WINDOW / ACOUSTIC BALCONY WITH AT LEAST 5 dB(A) NOISE REDUCTION
-  NOISE INSULATION WITH SUITABLE WINDOW TYPE AND AIR-CONDITIONING



NON-RESIDENTIAL USES


REMARK:
RECOMMEND TO PROPERLY DESIGN FLOOR PLANS/LAYOUT PLANS OF G/IC AND KINDERGARTEN, ESPECIALLY FOR NOISE SENSITIVE USES SUCH AS SICK BAY, REHABILITATION AREA (IF ANY), AND FOR CLASSROOMS.



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SCALE	DIMENSION UNIT
N.T.S	METRES

KEY PLAN
索引圖

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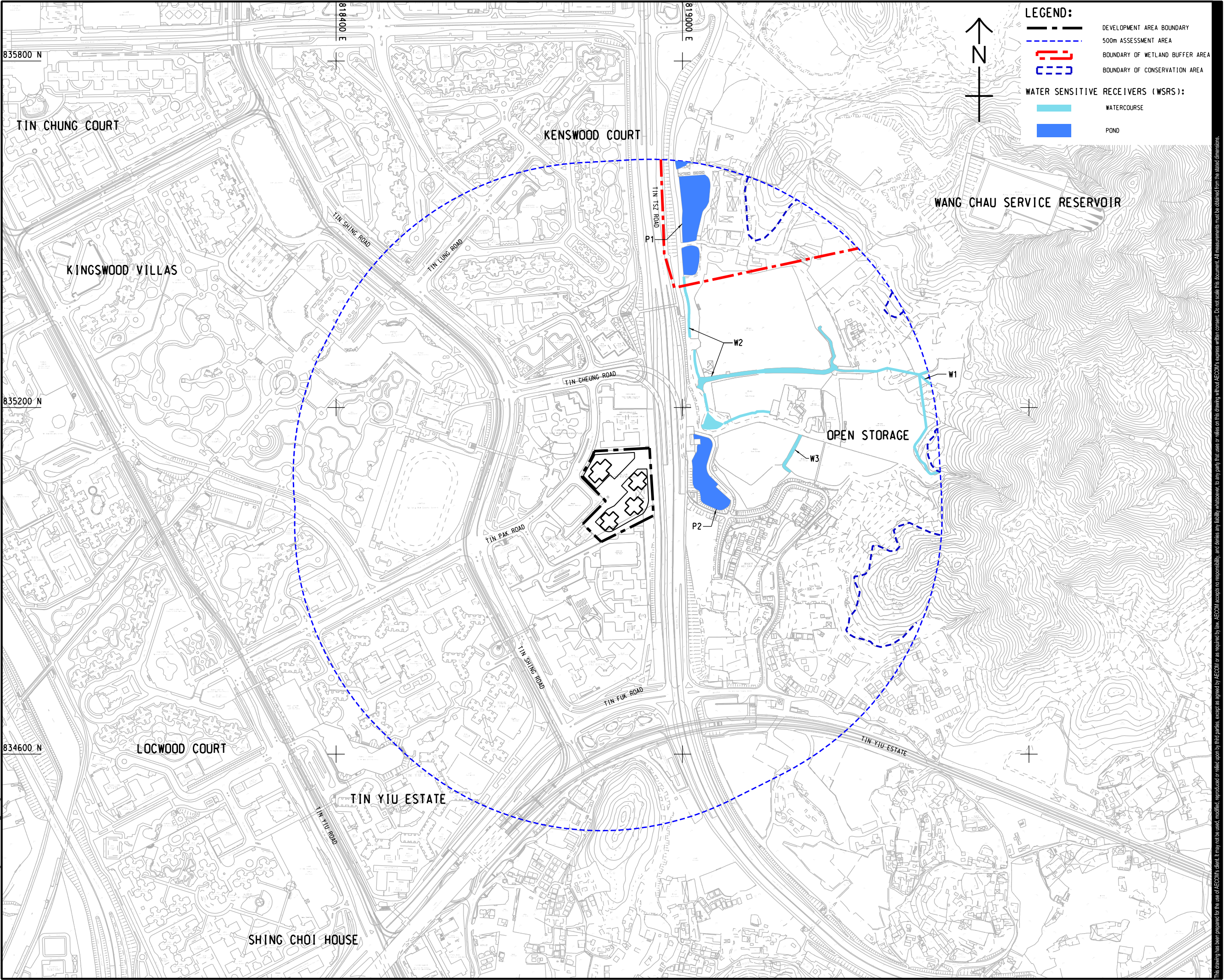
SHEET TITLE
圖紙名稱

RECOMMENDATION OF NOISE
MITIGATION MEASURES FOR
ROAD TRAFFIC NOISE IMPACT

SHEET NUMBER
圖紙編號

FIGURE 8.5

ISO A1 594mm x 841mm
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Plot File by: LingJ2
2023/9/12
PATH P:\PROJECTS\6067362\Drawing\REPORT\T2R2_701.dgn




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SCALE
比例

DIMENSION UNIT
尺寸單位

A3 1 : 6000

METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號

AGREEMENT NO.
協議編號

60667362

CE 23/2020

SHEET TITLE
圖紙名稱

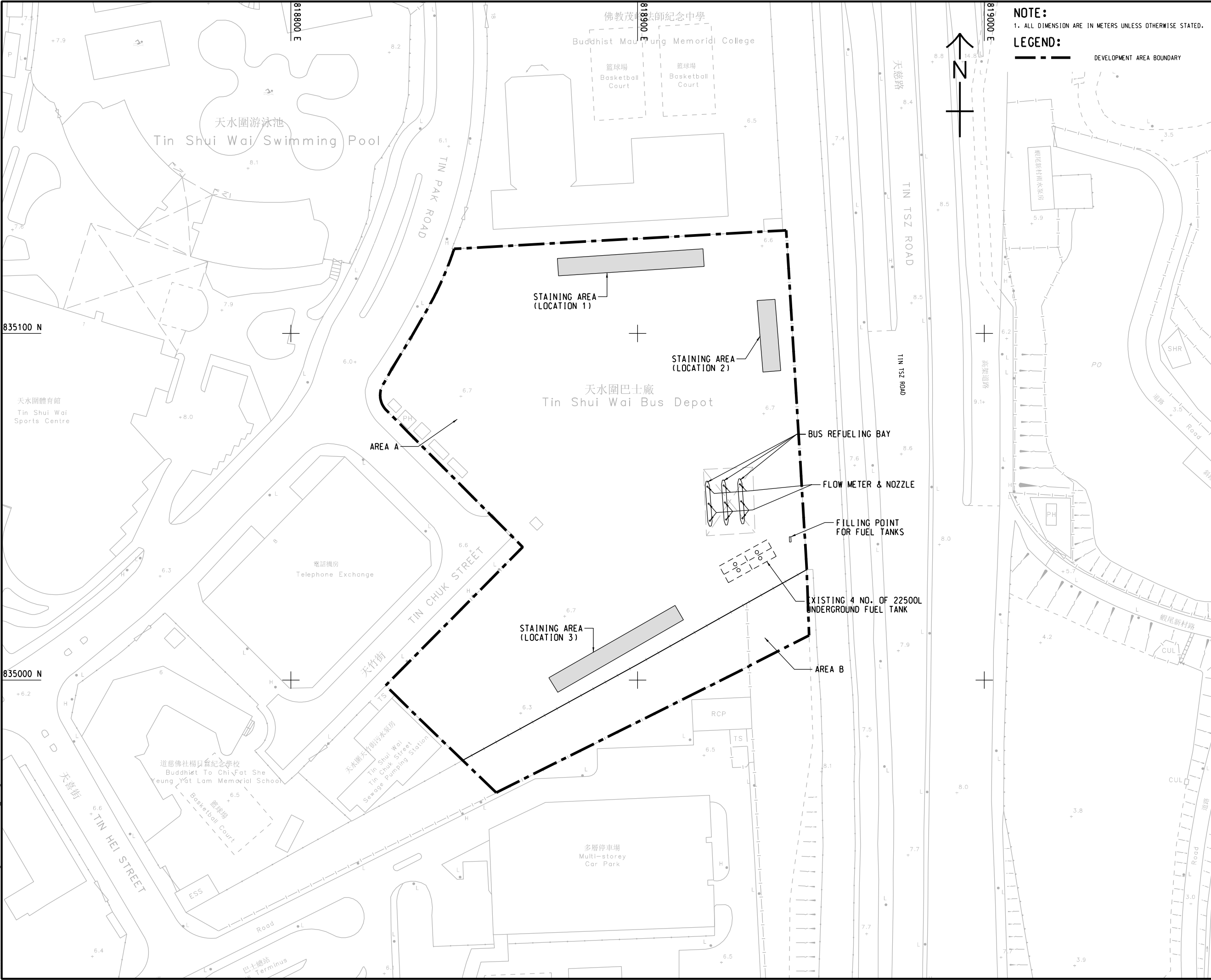
LOCATION OF WATER SENSITIVE
RECEIVERS

SHEET NUMBER
圖紙編號

FIGURE 8.6

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835100 N
835000 N
Plot File by: LUOYY
21/9/2022
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NOTE:
1. ALL DIMENSION ARE IN METERS UNLESS OTHERWISE STATED.
LEGEND:
--- DEVELOPMENT AREA BOUNDARY

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階段

SCALE	DIMENSION UNIT
比例	尺寸單位
A3 1 : 1000	METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號

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SHEET TITLE
圖紙名稱

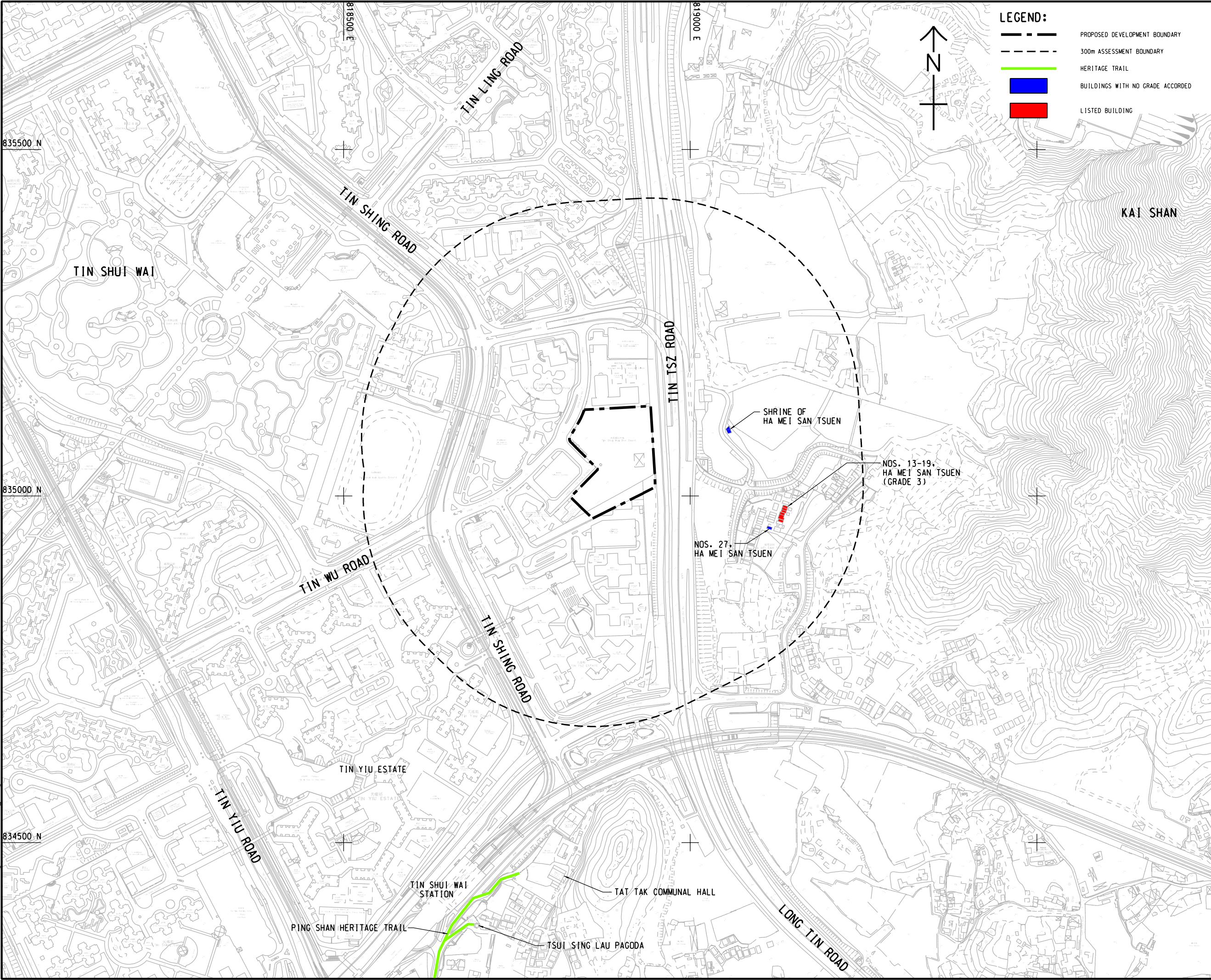
LOCATION PLAN OF
UNDERGROUND STORAGE TANK

SHEET NUMBER
圖紙編號

FIGURE 8.7

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Plot File by: LIANJ2



LEGEND:

- PROPOSED DEVELOPMENT BOUNDARY
- 300m ASSESSMENT BOUNDARY
- HERITAGE TRAIL
- BUILDINGS WITH NO GRADE ACCORDED
- LISTED BUILDING

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STATUS
階段

SCALE
比例

DIMENSION UNIT
尺寸單位

A3 1 : 5000

METRES

KEY PLAN
索引圖

PROJECT NO.
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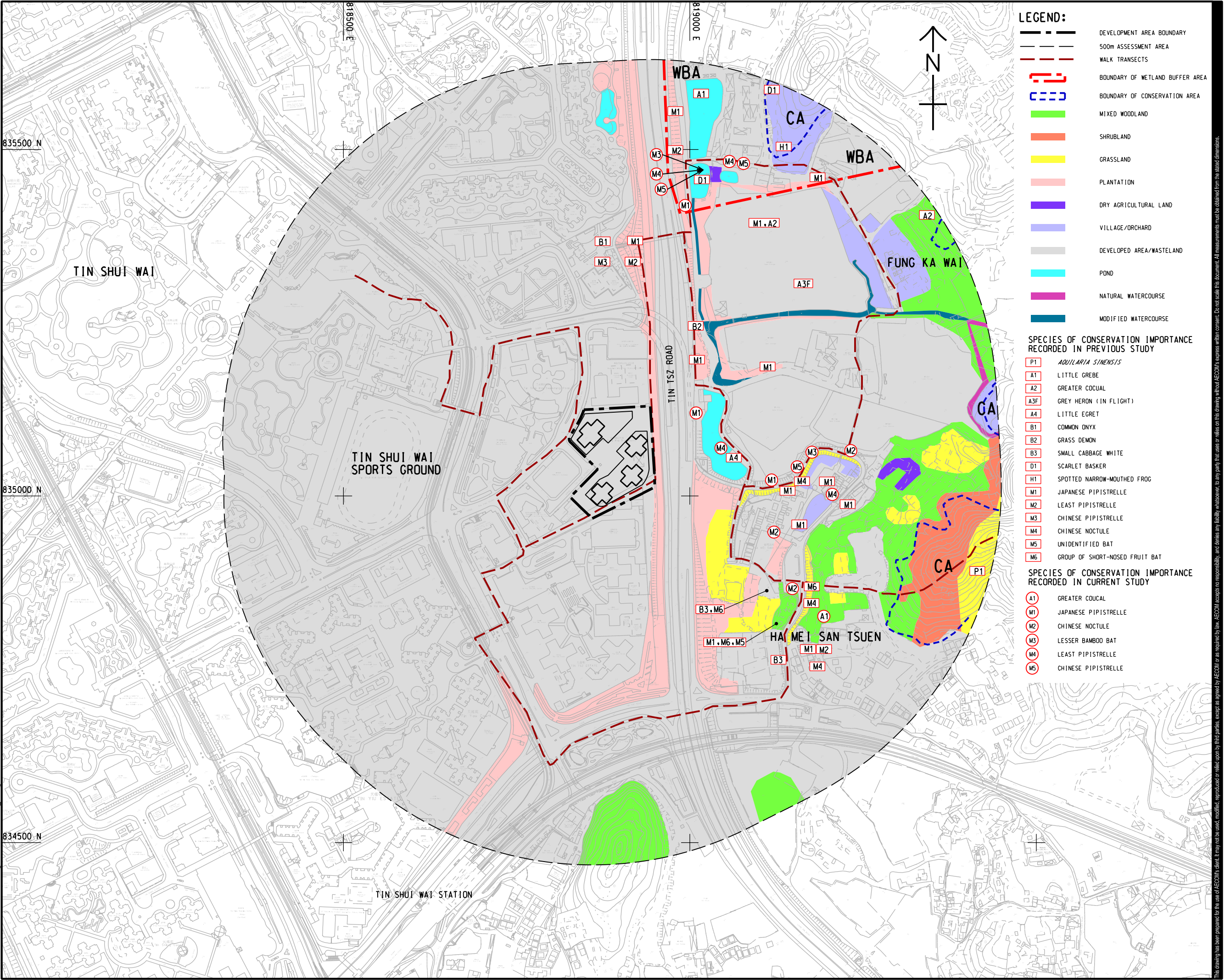
SHEET TITLE
圖紙名稱

**LOCATIONS OF CULTURAL
HERITAGE RESOURCES**

SHEET NUMBER
圖紙編號

FIGURE 8.8

ISO A1 594mm x 841mm
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11/4/2023
PLOT FILE BY: ZHUZC
PATH: P:\PROJECTS\6067362\Drawing\REPORT\TR-01\TR-01.dgn




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階段

SCALE
比例

DIMENSION UNIT
尺寸單位

A1 1:2500

METRES

KEY PLAN
索引圖

PROJECT NO.
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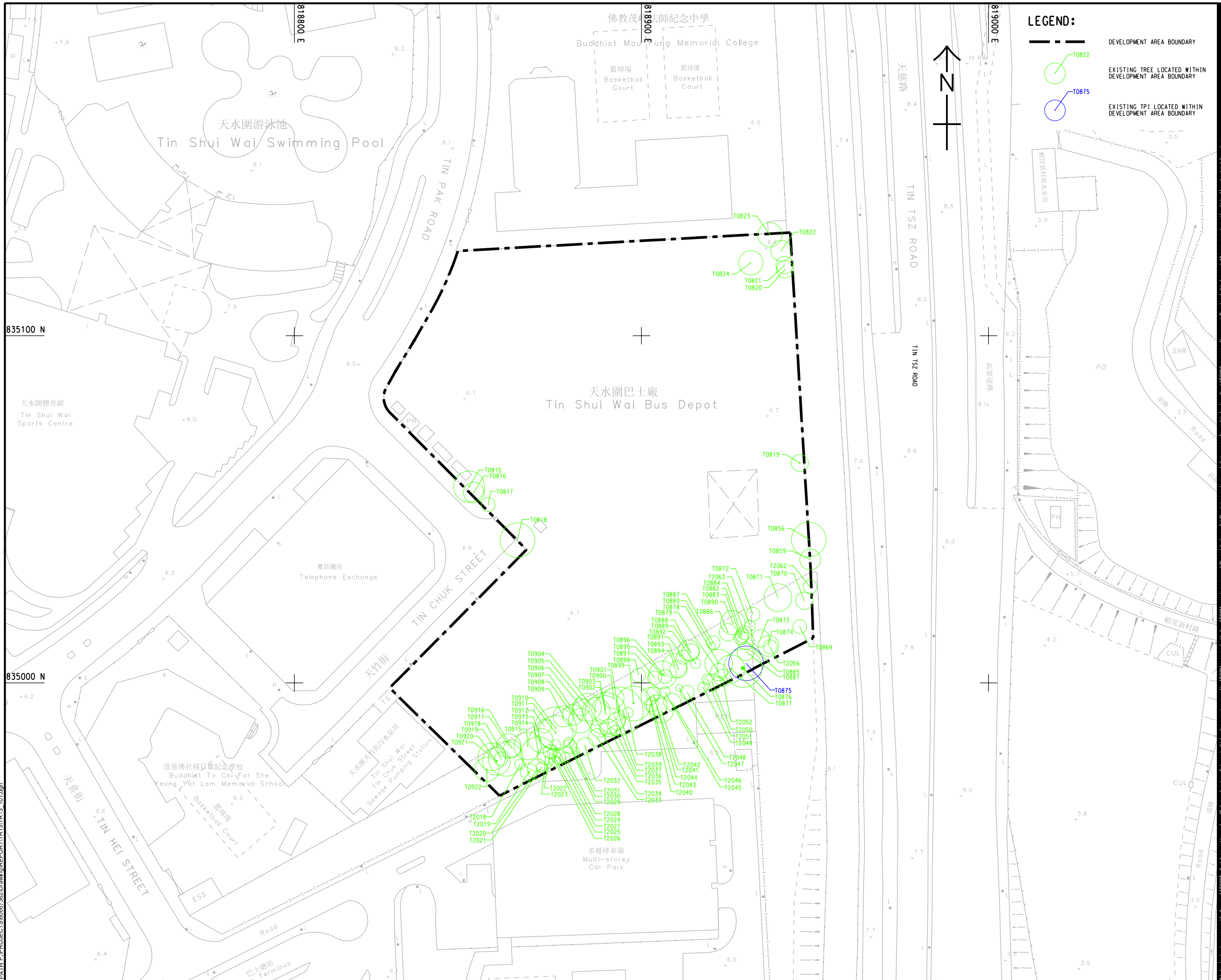
SHEET TITLE
圖紙名稱

HABITAT MAP AND LOCATION OF
SPECIES OF CONSERVATION
IMPORTANCE

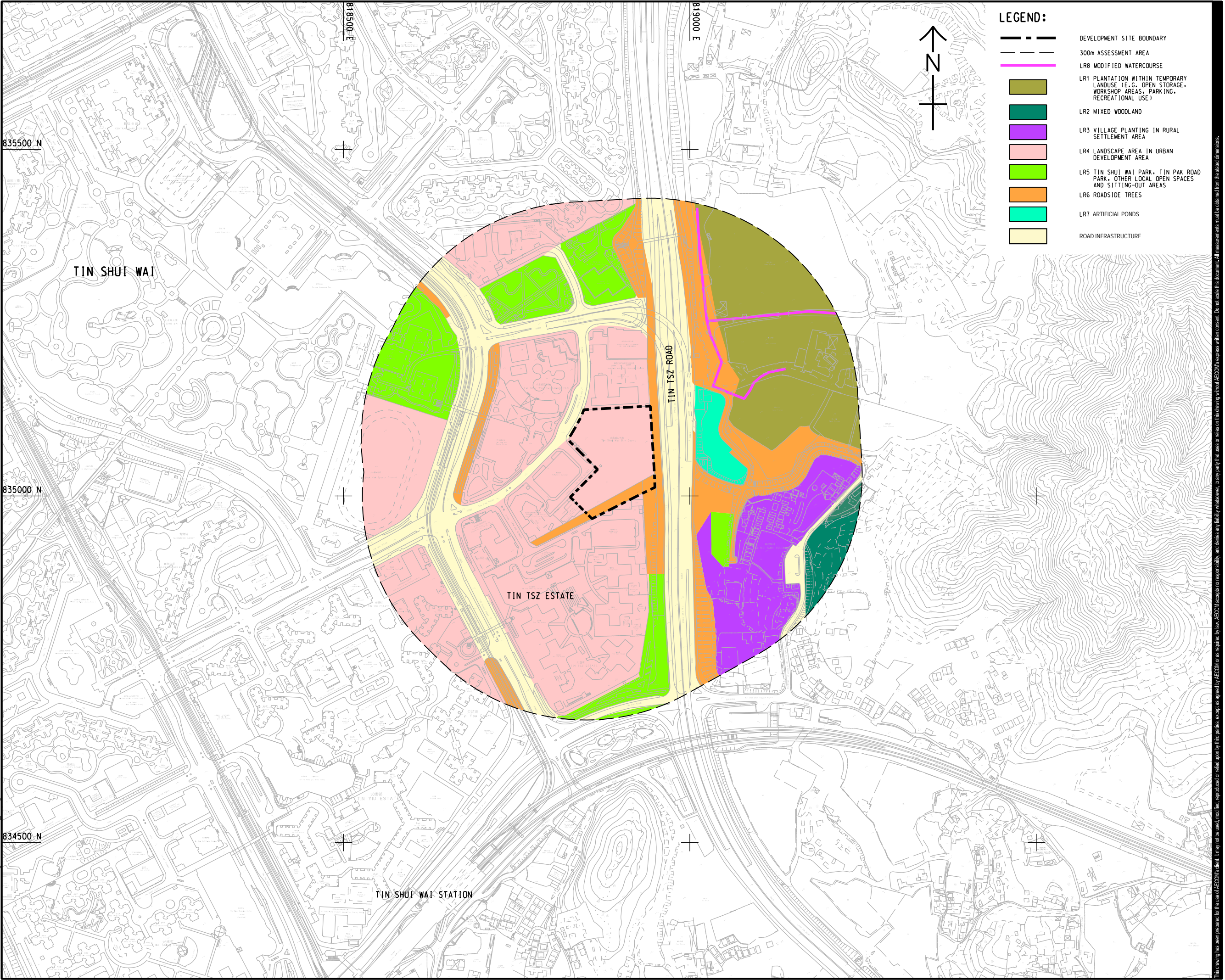
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圖紙編號

FIGURE 8.9

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Project Management Initials:
Plot File by: ying.chen1_2021/10/29
PATH: P:\PROJECTS\60607362\Drawing\REPORT\2102102_708.dgn




- LEGEND:
- DEVELOPMENT SITE BOUNDARY
 - 300m ASSESSMENT AREA
 - LR8 MODIFIED WATERCOURSE
 - LR1 PLANTATION WITHIN TEMPORARY LANDUSE (E.G., OPEN STORAGE, WORKSHOP AREAS, PARKING, RECREATIONAL USE)
 - LR2 MIXED WOODLAND
 - LR3 VILLAGE PLANTING IN RURAL SETTLEMENT AREA
 - LR4 LANDSCAPE AREA IN URBAN DEVELOPMENT AREA
 - LR5 TIN SHUI WAI PARK, TIN PAK ROAD PARK, OTHER LOCAL OPEN SPACES AND SITTING-OUT AREAS
 - LR6 ROADSIDE TREES
 - LR7 ARTIFICIAL PONDS
 - ROAD INFRASTRUCTURE

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階段

SCALE
比例

A3 1:5000

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
索引圖

PROJECT NO.
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AGREEMENT NO.
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SHEET TITLE
圖紙名稱

LANDSCAPE RESOURCES

SHEET NUMBER
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FIGURE 9.2

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NOTE: DESIGN LAYOUT AND NOS. OF TREES SHOWN ON PHOTOMONTAGE WITHIN HOUSING SITE INDICATIVE ONLY AND SUBJECT TO DETAIL DESIGN BY THE FUTURE PRIVATE DEVELOPER.

LR7: Other Ponds



LR8: Modified Watercourse

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SCALE
比例

A3 1 : 1000

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN

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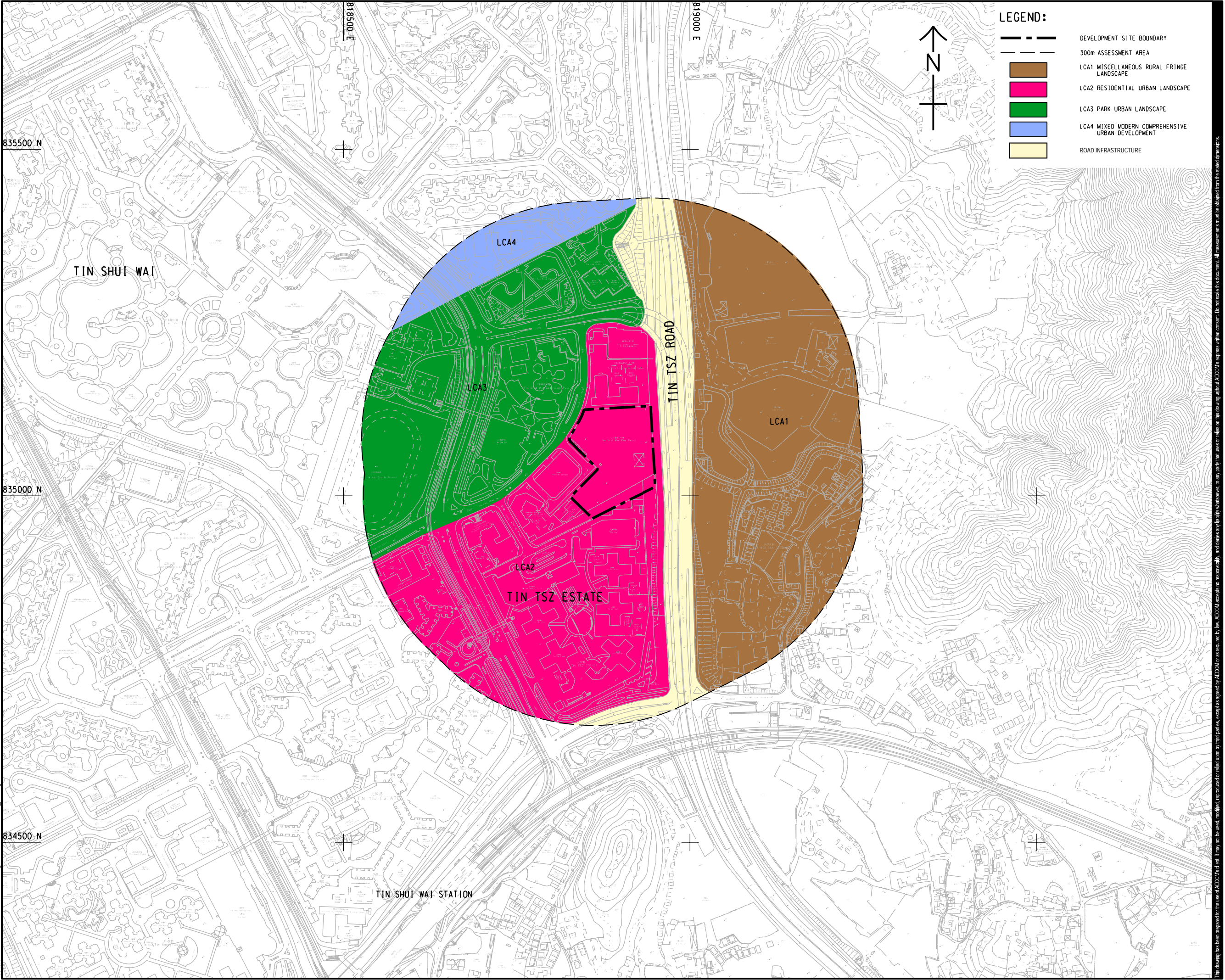
SHEET TITLE
圖紙名稱

PHOTOS OF LANDSCAPE RESOURCES

SHEET NUMBER
圖紙編號

FIGURE 9.4

ISO A1 594mm x 841mm
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階段

SCALE
比例
A3 1 : 5000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
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AGREEMENT NO.
協議編號
CE 23/2020

SHEET TITLE
圖紙名稱

LANDSCAPE CHARACTER AREAS

SHEET NUMBER
圖紙編號

FIGURE 9.5

ISO A1 594mm x 841mm
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2022/7/6
Plot File by: HED2
PATH

NOTE: DESIGN LAYOUT AND NOS. OF TREES SHOWN ON PHOTOMONTAGE WITHIN HOUSING SITE INDICATIVE ONLY AND SUBJECT TO DETAIL DESIGN BY THE FUTURE PRIVATE DEVELOPER.

LCA1: Miscellaneous Rural Fringe Landscape



LCA2: Residential Urban Landscape



LCA3: Park Urban Landscape



LCA4: Mixed Modern Comprehensive Urban Development



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STATUS
階段

SCALE
比例
A3 1 : 1000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
60667362

AGREEMENT NO.
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SHEET TITLE
圖紙名稱

PHOTOS OF LANDSCAPE
CHARACTERS

SHEET NUMBER
圖紙編號

FIGURE 9.6

ISO A1 594mm x 841mm
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12/2/2022



LEGEND

- DEVELOPMENT AREA BOUNDARY
- - - PROPOSED BUILDING BLOCKS
- PROPOSED NEW TREE PLANTING WITHIN DEVELOPMENT SITE
- PROPOSED LAWN AREA
- PROPOSED PLANTING AREA
- PROPOSED CHILDREN PLAY AREA/ FITNESS AREA
- PROPOSED PAVING PATTERN
- EXISTING TREES

- OM1
- OM2
- OM3
- VM4

- OM5
- VM4
- CM1

ID no.	Landscape Mitigation Measures
CM1	Preservation of Existing Vegetation
CM2	Transplanting of Affected Trees
CM3	Control of Night-time Lighting Glare
CM4	Erection of Decorative Screen Hoarding
CM5	Management of Construction Activities and Facilities
OM1	Compensatory Planting for Loss of Existing Trees
OM2	Provision of Screen Planting
OM3	Maximization of Roadside Planting
OM4	Aesthetically pleasing design of all man-made structures
OM5	Maximization of Greenery Provision
OM6	Provision of adequate open space
ID no.	Visual Mitigation Measures
VM1	Building Separation and Setback
VM2	Control of Development Heights and Massing
VM3	Visual Compatibility of the Development
VM4	Maximization of Greenery Provision

NOTE:
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階段

SCALE

比例

A3 1 : 6000

DIMENSION UNIT

尺寸單位

METRES

KEY PLAN

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PROJECT NO.

項目編號

60667362

AGREEMENT NO.

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SHEET TITLE

圖紙名稱

LANDSCAPE AND VISUAL
MITIGATION PLAN

SHEET NUMBER

圖紙編號

FIGURE 9.7

ISO A1 594mm x 841mm
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- LEGEND**
- DEVELOPMENT AREA BOUNDARY
 - PROPOSED BUILDING BLOCKS
 - PROPOSED NEW TREE PLANTING WITHIN DEVELOPMENT SITE
 - PROPOSED LAWN AREA
 - PROPOSED PLANTING AREA
 - PROPOSED CHILDREN PLAY AREA/ FITNESS AREA
 - PROPOSED PAVING PATTERN
 - EXISTING TREES
 - PROPOSED RUN-IN / OUT

NOTE:
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STATUS

階段

SCALE

比例

A3 1 : 6000

DIMENSION UNIT

尺寸單位

METRES

KEY PLAN

索引圖

PROJECT NO.

項目編號

60667362

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CE 23/2020

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圖紙名稱

CONCEPTUAL LANDSCAPE PLAN

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圖紙編號

FIGURE 9.8

ISO A1 594mm x 841mm
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Plot File by: LingJ2 12/2/2022
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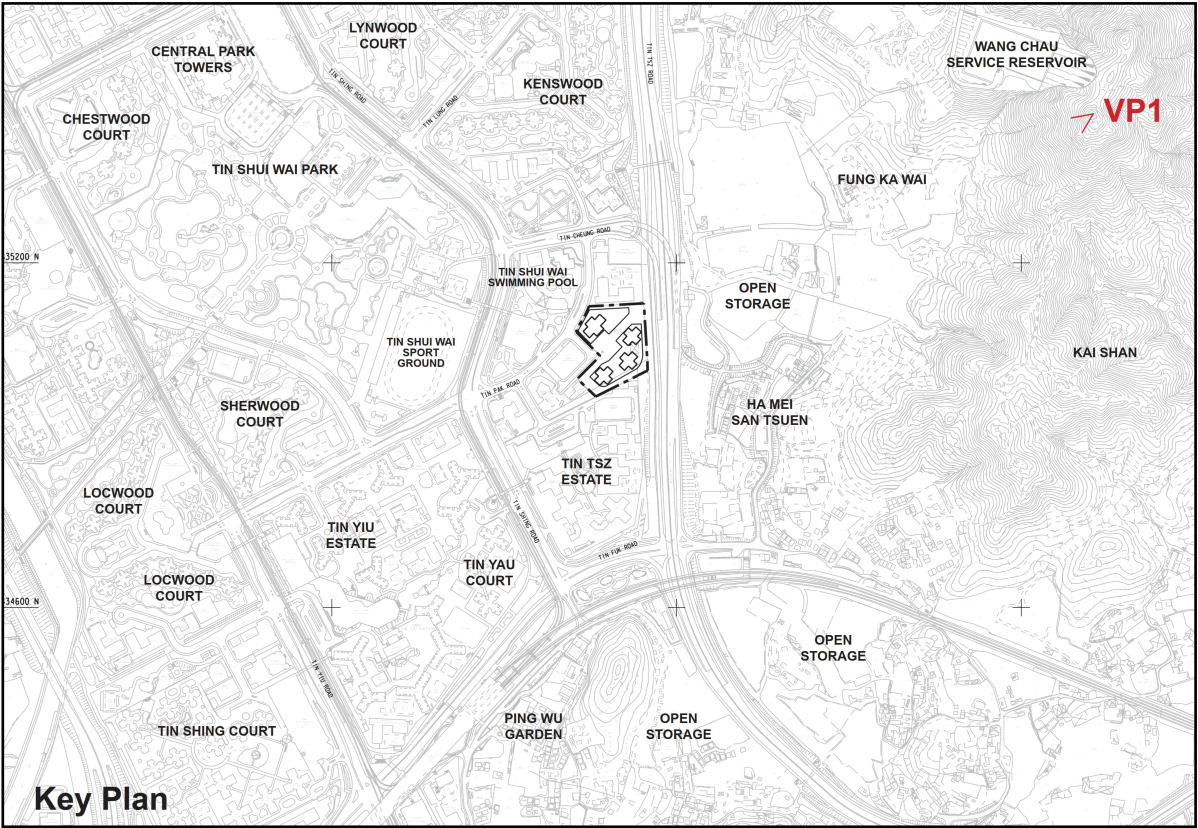
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Existing Condition



VP 1 with Proposed Development



Key Plan

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STATUS
階段

SCALE 比例	DIMENSION UNIT 尺寸單位
A3 1 : 6000	METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號	AGREEMENT NO. 協議編號
60667362	CE 23/2020

SHEET TITLE
圖紙名稱

PHOTOMONTAGE - VP 1
VIEW AT KAI SHAN LOOKING
SOUTH-WEST

SHEET NUMBER
圖紙編號

FIGURE 10.2

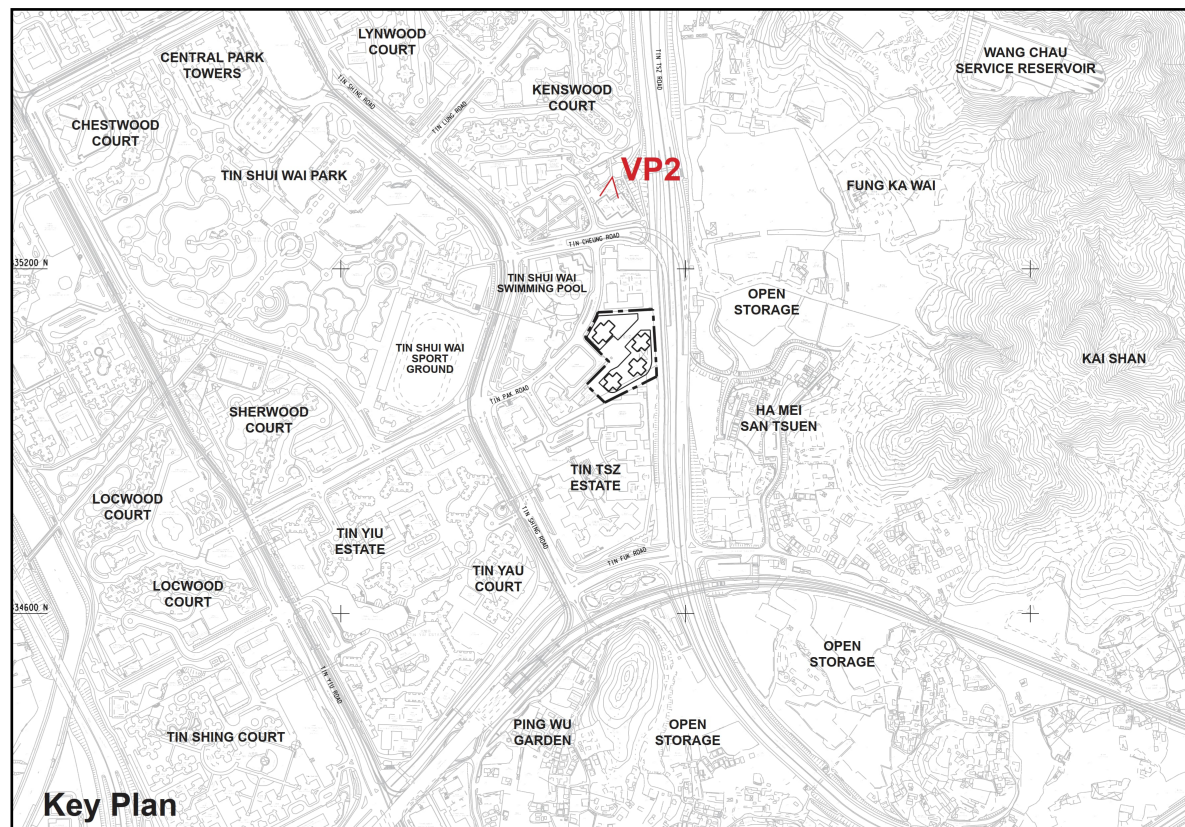
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Existing Condition



VP 2 with Proposed Development



Key Plan

PROJECT

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FOR DEVELOPMENTS IN
TIN SHUI WAI AREA 14

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STATUS

附設

SCALE

比例

A3 1 : 6000

DIMENSION UNIT

尺寸單位

METRES

KEY PLAN

索引图

PROJECT NO.

項目編號

60667362

AGREEMENT NO.

協議編號

CE 23/2020

SHEET TITLE

圖紙名稱

PHOTOMONTAGE - VP 2

VIEW INSIDE TIN PAK ROAD
PARK LOOKING SOUTH

SHEET NUMBER

圖紙編號

FIGURE 10.3

ISO A1 594mm x 841mm
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Plot File by: LingJ2

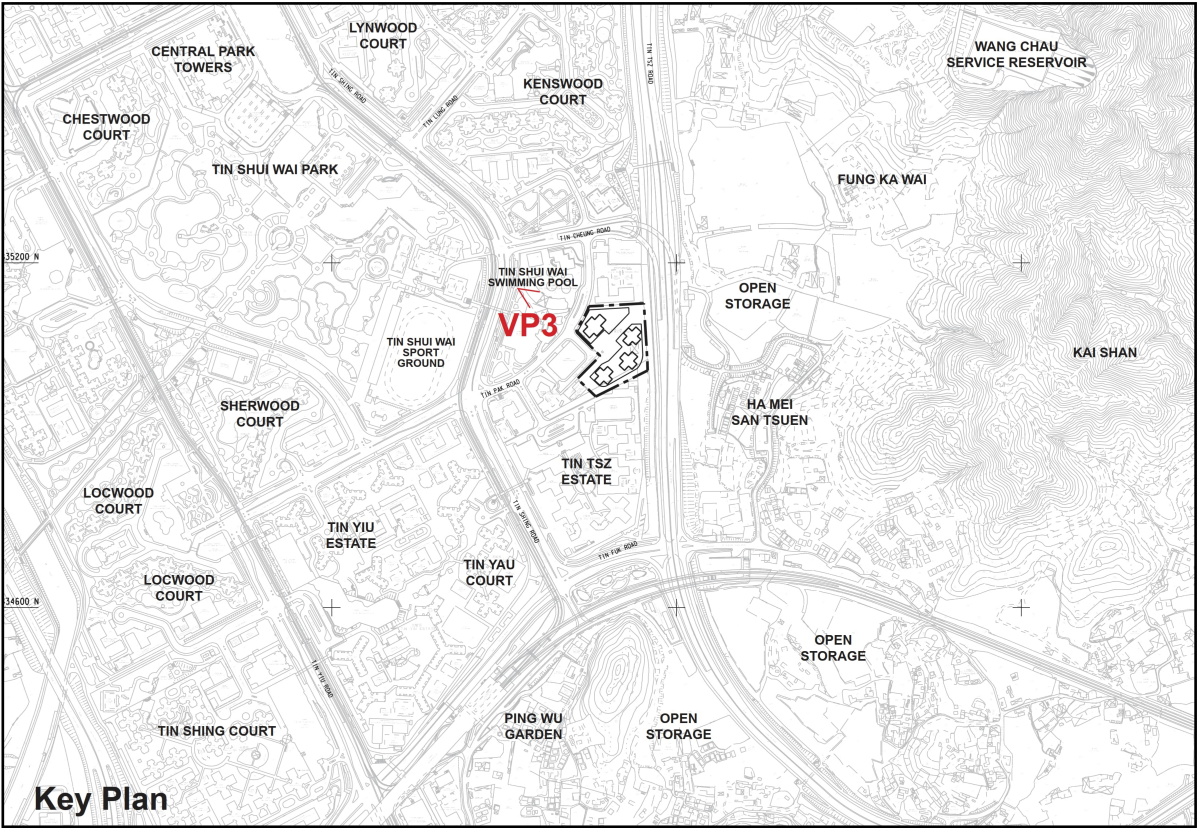
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Existing Condition



VP 3 with Proposed Development



Key Plan

AECOM

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STATUS
階段

SCALE
比例
A3 1 : 6000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
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PROJECT NO.
項目編號
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SHEET TITLE
圖紙名稱

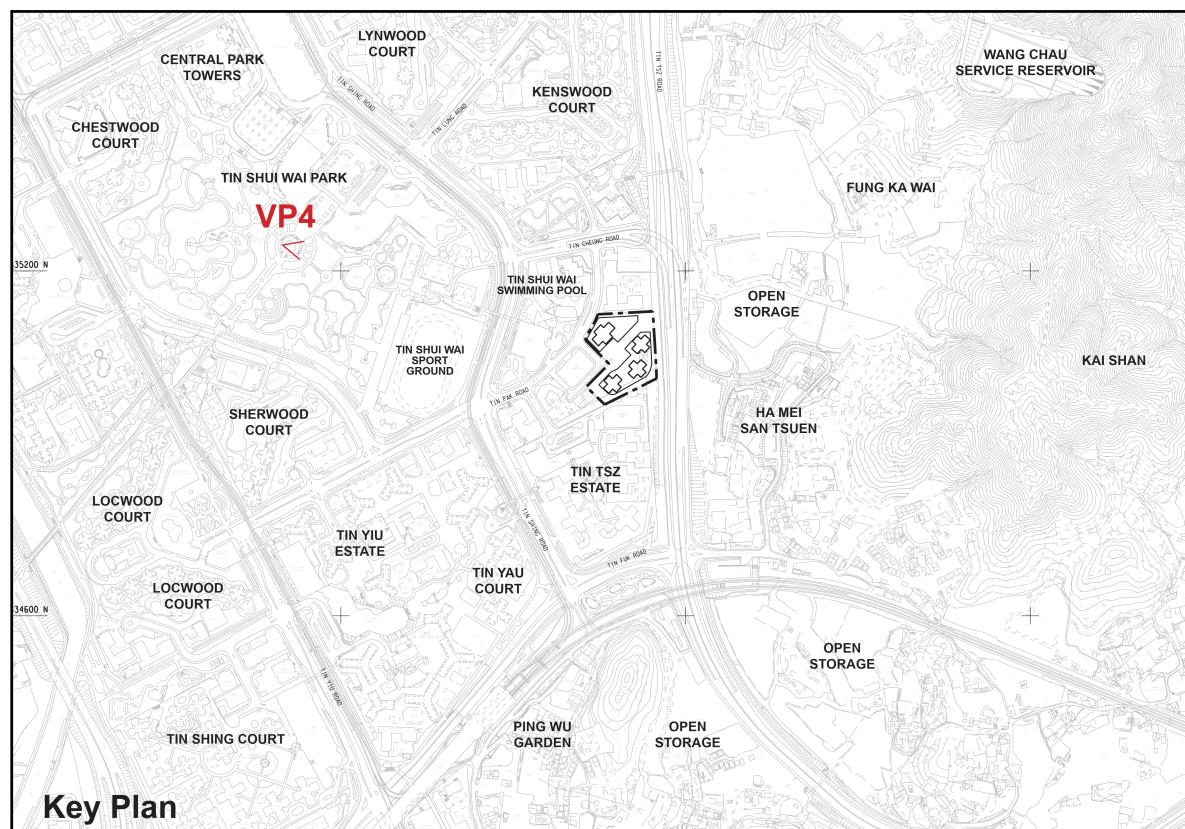
PHOTOMONTAGE - VP 3
PEDESTRIAN ROAD NEAR TIN SHUI
WAI SWIMMING POOL LOOKING
SOUTH-EAST

SHEET NUMBER
圖紙編號

FIGURE 10.4

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Existing Condition



VP 4 with Proposed Development

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STATUS

SCALE 比例 DIMENSION UNIT 尺寸單位

比例	尺寸单位
A3 1 : 6000	METRES

KEY PLAN
索引圖

PROJECT NO. 项目编号

60667362 CE 23/2020

SHEET TITLE
圖紙名稱

PHOTOMONTAGE - VP 4
VIEW AT WATER FOUNTAIN INSIDE
TIN SHUI WAI PARK LOOKING
SOUTH-WEST

SHEET NUMBER
圖紙編號

FIGURE 10.5

ISO A1 594mm x 841mm
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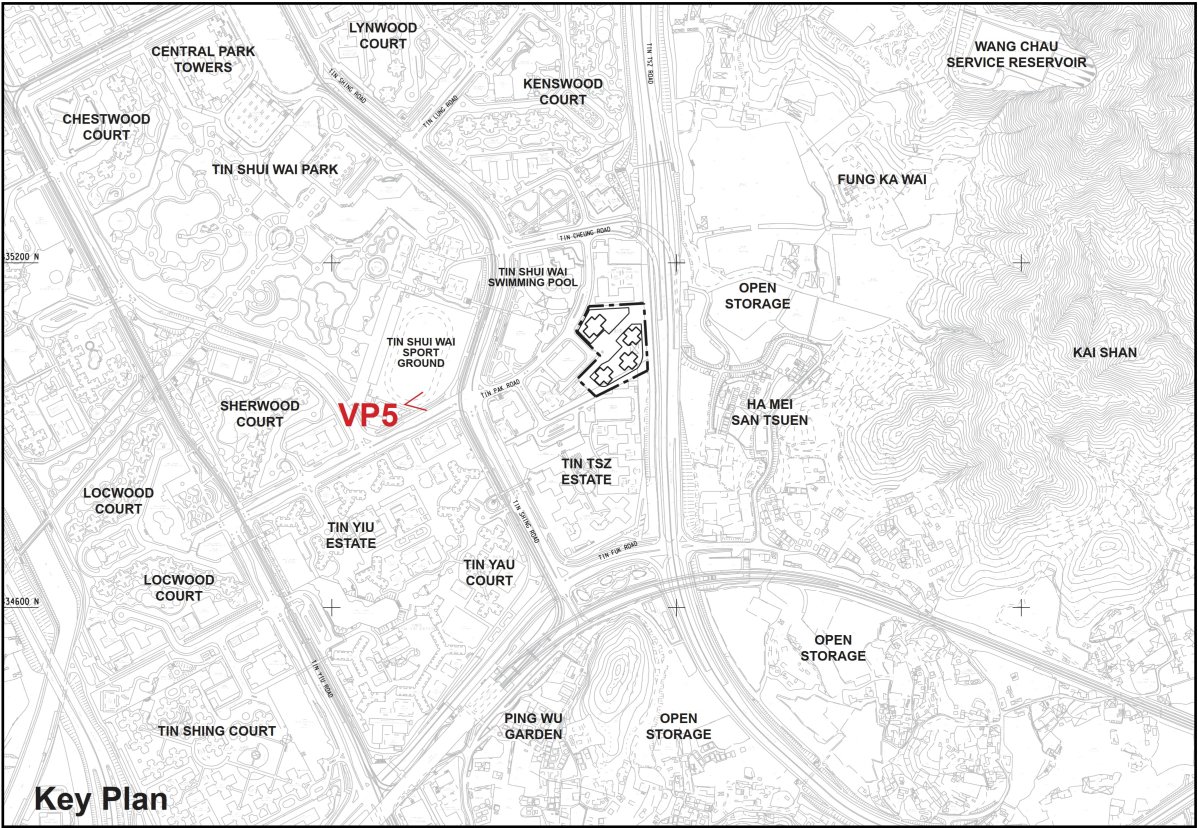
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Existing Condition



VP 5 with Proposed Development



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STATUS
階段

SCALE 比例	DIMENSION UNIT 尺寸單位
A3 1 : 6000	METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號	AGREEMENT NO. 協議編號
60667362	CE 23/2020

SHEET TITLE
圖紙名稱

PHOTOMONTAGE - VP 5
VIEW AT RUNNING TRACK INSIDE
TIN SHUI WAI SPORTS GROUND
LOOKING EAST

SHEET NUMBER
圖紙編號

FIGURE 10.6

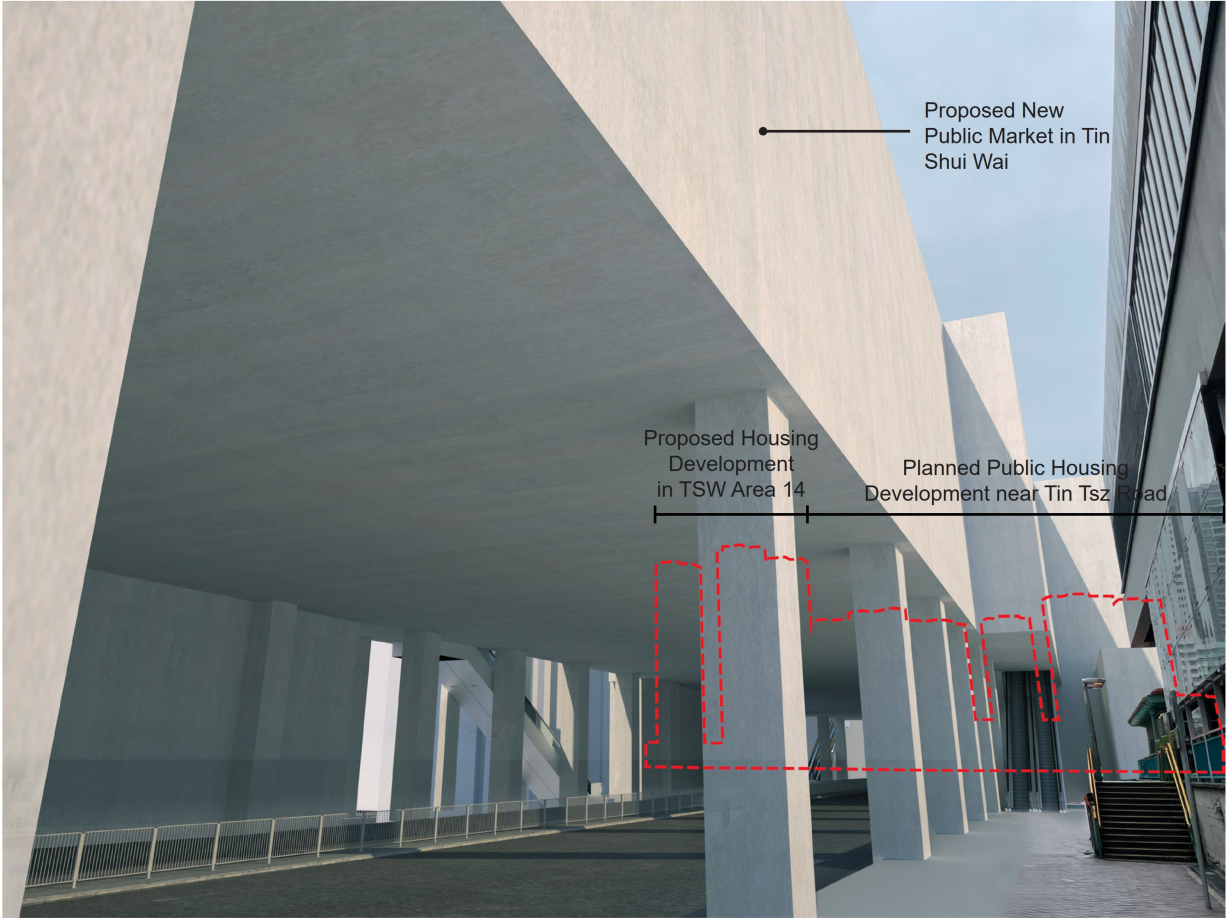
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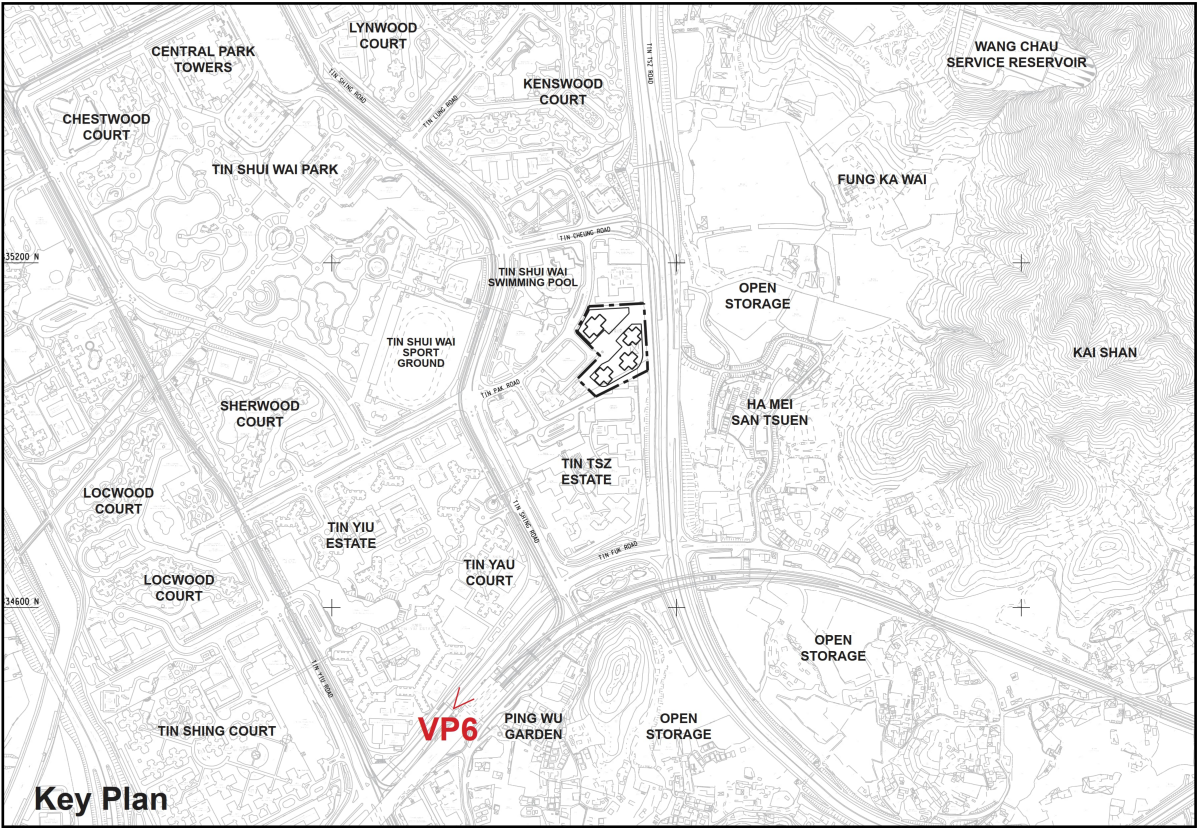
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Existing Condition



VP 6 with Proposed Development



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STATUS
階段

SCALE
比例
A3 1 : 6000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
60667362

AGREEMENT NO.
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SHEET TITLE
圖紙名稱

PHOTOMONTAGE - VP 6
VIEW FROM TIN SHUI WAI
STATION/TIN SHUI WAI LIGHT
RAIL STATION

SHEET NUMBER
圖紙編號

FIGURE 10.7

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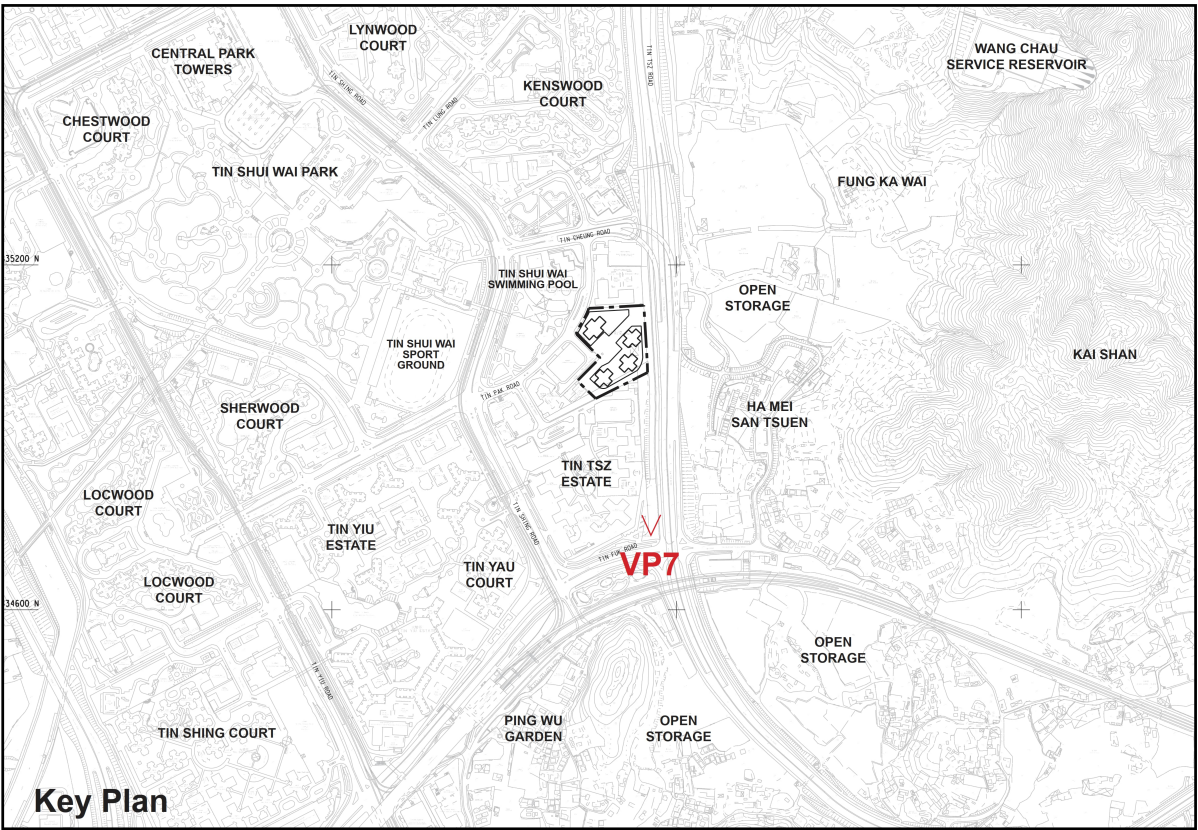
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Existing Condition



VP 7 with Proposed Development



AECOM

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STATUS
階段

SCALE
比例
A3 1 : 6000
DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
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60667362
AGREEMENT NO.
協議編號
CE 23/2020

SHEET TITLE
圖紙名稱

PHOTOMONTAGE - VP 7
VIEW AT TIN TSZ GARDEN
LOOKING NORTH

SHEET NUMBER
圖紙編號

FIGURE 10.8

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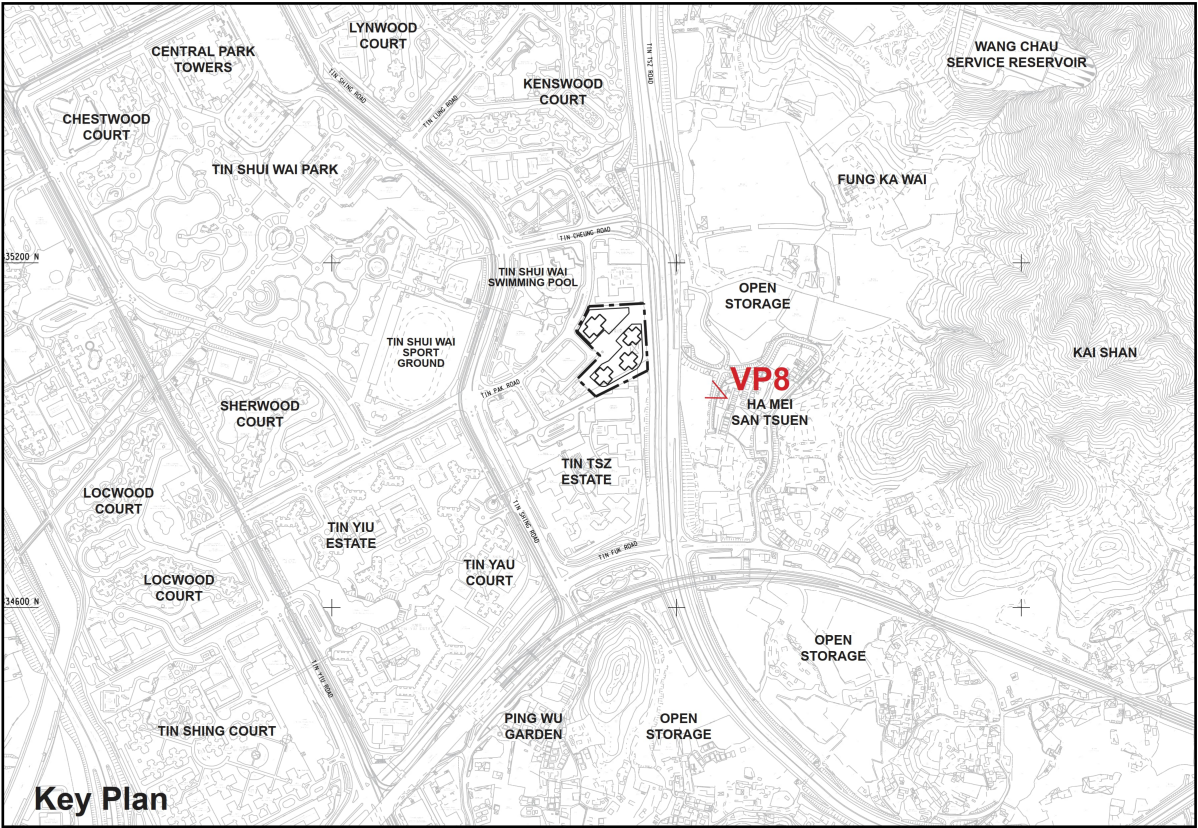
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Existing Condition



VP 8 with Proposed Development



Key Plan

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階段

SCALE
比例
A3 1 : 6000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
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AGREEMENT NO.
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SHEET TITLE
圖紙名稱

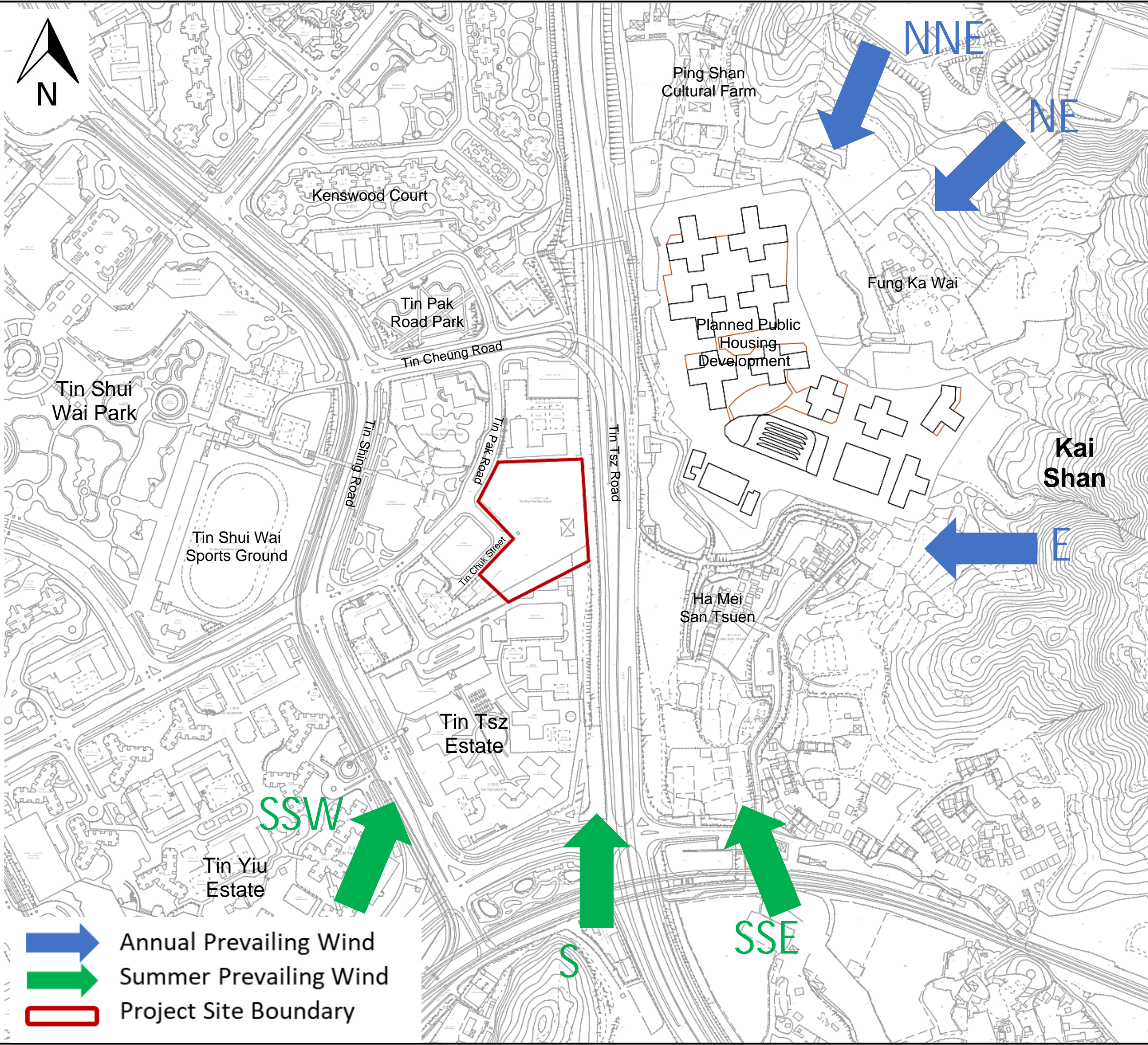
PHOTOMONTAGE - VP 8
VIEW AT HA MEI SAN TSUEN
SITTING OUT AREA LOOKING
NORTH-WEST




SHEET NUMBER
圖紙編號

FIGURE 10.9

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 Annual Prevailing Wind
 Summer Prevailing Wind
 Project Site Boundary

AECOM

PROJECT

ENGINEERING
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FOR DEVELOPMENTS IN
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階段

SCALE

比例

A3 1 : 2500

DIMENSION UNIT

尺寸單位

METRES

KEY PLAN

索引圖

PROJECT NO.

項目編號

60667362

AGREEMENT NO.

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CE 23/2020

SHEET TITLE

圖紙名稱

ANNUAL AND SUMMER
PREVAILING WINDS

SHEET NUMBER

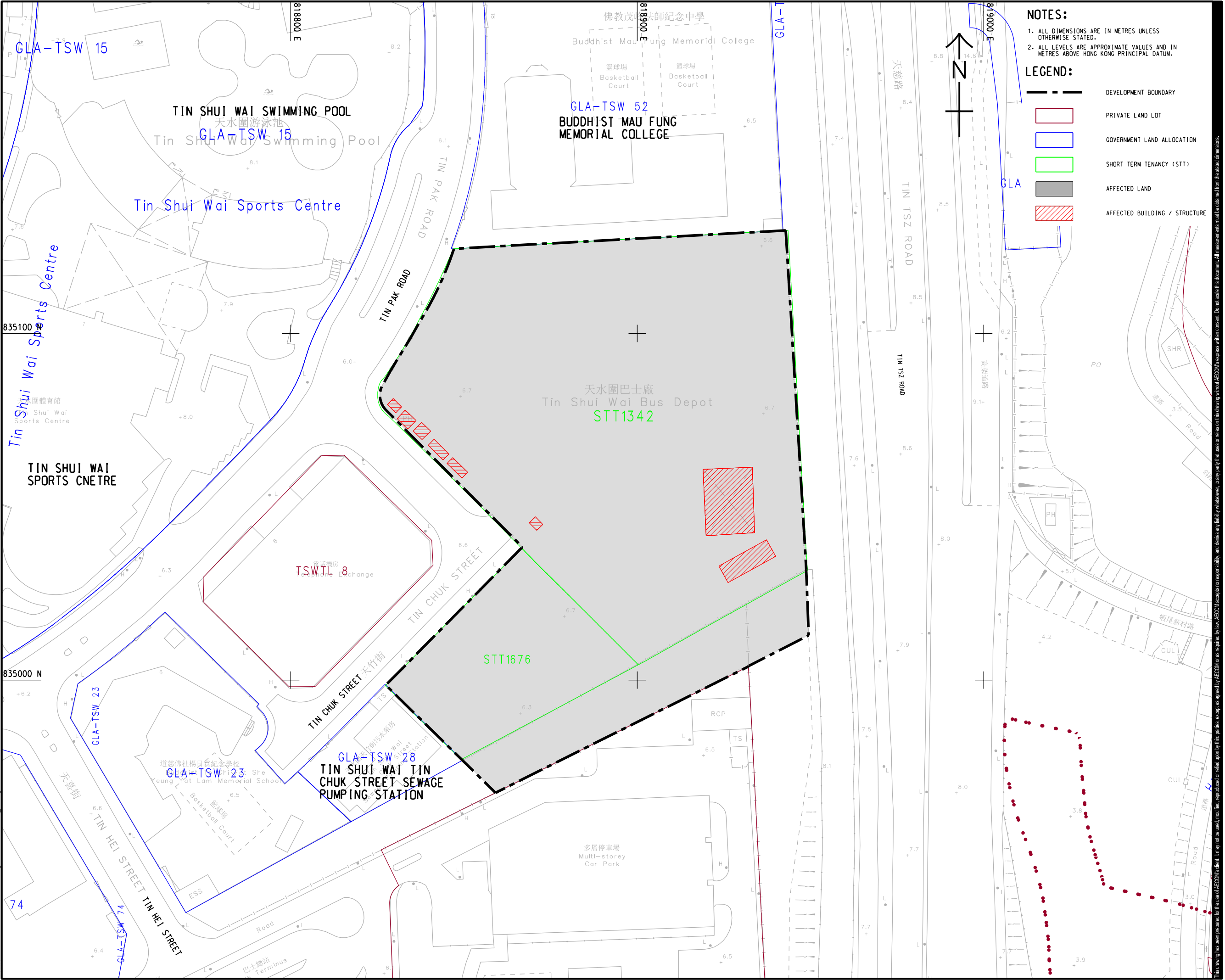
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FIGURE 11.1

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FIGURE 11.2

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PROJECT
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SCALE
比例
A3 1 : 1000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
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SHEET TITLE
圖紙名稱

LAND REQUIREMENT PLAN

SHEET NUMBER
圖紙編號

FIGURE 12.1

Provision of Major Community Facilities and Open Space in Tin Shui Wai OZP

Type of Facilities	Hong Kong Planning Standards and Guidelines (HKPSG)	HKPSG Requirement (based on planned population)	Provision		Surplus/ Shortfall (against planned provision)
			Existing Provision	Planned Provision (including Existing Provision)	
District Open Space	10 ha per 100,000 persons [#]	29.15 ha	22.79 ha	30.2 ha	+1.05 ha
Local Open Space	10 ha per 100,000 persons [#]	29.15 ha	68.82 ha	71.66 ha	+42.51 ha
Sports Centre	1 per 50,000 to 65,000 persons [#] (assessed on a district basis)	4	3	4	0
Sports Ground/ Sport Complex	1 per 200,000 to 250,000 persons [#] (assessed on a district basis)	1	1	1	0
Swimming Pool Complex – standard	1 complex per 287,000 persons [#] (assessed on a district basis)	1	0	1	0
District Police Station	1 per 200,000 to 500,000 persons (assessed on a regional basis)	0	0	0	0
Divisional Police Station	1 per 100,000 to 200,000 persons (assessed on a regional basis)	1	1	2	+1
Magistracy (with 8 courtrooms)	1 per 660,000 persons (assessed on a regional basis)	0	0	0	0
Community Hall	No set standard	N/A	4	4	N/A
Library	1 district library for every 200,000	1	1	1	0

Type of Facilities	Hong Kong Planning Standards and Guidelines (HKPSG)	HKPSG Requirement (based on planned population)	Provision		Surplus/ Shortfall (against planned provision)
			Existing Provision	Planned Provision (including Existing Provision)	
	persons (assessed on a district basis)				
Kindergarten/ Nursery	34 classrooms for 1,000 children aged 3 to 6 [#]	158 classrooms	213 classrooms	213 classrooms	+55 classrooms
Primary School	1 whole-day classroom for 25.5 persons aged 6-11 [#] (assessed by Education Bureau (EDB) on a district/school network basis)	490 classrooms	784 classrooms	784 classrooms	+294 classrooms
Secondary School	1 whole-day classroom for 40 persons aged 12-17 [#] (assessed by EDB on a territorial wide basis)	380 classrooms	606 classrooms	606 classrooms	+226 classrooms
Hospital	5.5 beds per 1,000 persons (assessed by Hospital Authority on a regional/cluster basis)	1,650 beds	300 beds	1,100 beds	-550 beds [^]
Clinic/Health Centre	1 per 100,000 persons (assessed on a district basis)	2	2	2	0

Type of Facilities	Hong Kong Planning Standards and Guidelines (HKPSG)	HKPSG Requirement (based on planned population)	Provision		Surplus/ Shortfall (against planned provision)
			Existing Provision	Planned Provision (including Existing Provision)	
Child Care Centre	100 aided places per 25,000 persons [#] (assessed by Social Welfare Department (SWD) on a local basis)	1,166 places	322 places	410 places	-756 places [@] (a long-term target assessed on a wider spatial context by SWD [@])
Integrated Children and Youth Services Centre	1 for 12,000 persons aged 6-24 [#] (assessed by SWD on a local basis)	3	8	8	+5
Integrated Family Services Centre	1 for 100,000 to 150,000 persons [#] (assessed by SWD on a service boundary basis)	1	3	3	+2
District Elderly Community Centres	One in each new development area with a population of around 170,000 or above [#] (assessed by SWD)	N.A.	0	0	N.A.
Neighbourhood Elderly Centres	One in a cluster of new and redeveloped housing areas with a population of 15,000 to 20,000 persons, including both public and private housing [#] (assessed by SWD)	N.A.	5	5	N.A.
Community Care Services (CCS) Facilities	17.2 subsidised places per 1,000 elderly persons aged 65 or above ^{#*}	1,690 places	290 places	412 places	-1,278 places [@] (a long-term target)

Type of Facilities	Hong Kong Planning Standards and Guidelines (HKPSG)	HKPSG Requirement (based on planned population)	Provision		Surplus/ Shortfall (against planned provision)
			Existing Provision	Planned Provision (including Existing Provision)	
	(assessed by SWD on a district basis)				assessed on a wider spatial context by SWD [@])
Residential Care Homes for the Elderly	21.3 subsidised beds per 1,000 elderly persons aged 65 or above [#] (assessed by SWD on a cluster basis)	2,092 beds	271 beds	271 beds	-1,821 beds [@] (a long-term target assessed on a wider spatial context by SWD [@])
Pre-school Rehabilitation Services	23 subvented places per 1,000 children aged 0-6 [#] (assessed by SWD on a district basis)	231 places	67 places	67 places	-164 places [@] (a long-term target assessed on a wider spatial context by SWD [@])
Day Rehabilitation Services	23 subvented places per 10,000 persons aged 15 or above [#] (assessed by SWD on a district basis)	588 places	408 places	408 places	-180 places [@] (a long-term target assessed on a wider spatial context by SWD [@])
Residential Care Services	36 subvented places per 10,000 persons aged 15 or above [#] (assessed by SWD on a cluster basis)	920 places	478 places	578 places	-342 places [@] (a long-term target assessed on a wider spatial context by SWD [@])

Type of Facilities	Hong Kong Planning Standards and Guidelines (HKPSG)	HKPSG Requirement (based on planned population)	Provision		Surplus/ Shortfall (against planned provision)
			Existing Provision	Planned Provision (including Existing Provision)	
Community Rehabilitation Day Centre	1 centre per 420,000 persons [#] (assessed by SWD on a district basis)	0	0	0	0
District Support Centre for Persons with Disabilities	1 centre per 280,000 persons [#] (assessed by SWD on a district basis)	1	1	1	0
Integrated Community Centre for Mental Wellness	1 standard scale centre per 310,000 persons [#] (assessed by SWD on a district basis)	0	1.7	1.7	+1.7

Note:

The planned resident population in Tin Shui Wai is about 291,500. If including transients, the overall planned population is about 299,900. All population figures have been adjusted to the nearest hundred.

Remarks:

The requirements exclude planned population of transients.

^ The deficit in provision is based on OZP planned population while the Hospital Authority plans its services on a cluster basis, and takes into account a number of factors in planning and developing various public healthcare services. The New Territories West Cluster (NTWC) provides services for residents in Tuen Mun and Yuen Long districts. There are a number of hospital redevelopment/expansion projects planned in the First and Second Ten-year Hospital Development Plans (HDPs), which will provide additional beds for serving the population in NTWC. The projected service demand will be catered for in the First and Second Ten-year HDPs.

* Consisting of 40% centre-based CCS and 60% home-based CCS.

@ The deficit in provision is based on OZP planned population while the SWD adopts a wider spatial context/cluster in the assessment of provision for such facility. In applying the population-based planning standards, the distribution of welfare facilities, supply in different districts, service demand as a result of the population growth and demographic changes as well as the provision of different welfare facilities have to be considered. As the HKPSG requirements for these facilities are a long-term goal, the actual provision will be subject to consideration of the SWD in the planning and development process as appropriate. The Government has been adopting a multi-pronged approach with long-, medium- and short-term strategies to identify suitable sites or premises for the provision of more welfare services which are in acute demand.

MARCH 2024