

Appendix V
Drairage & Sewerage Impact Assessment

Prepared for

Health Link Investment Limited

Prepared by

Ramboll Hong Kong Limited

**PROPOSED COMPREHENSIVE DEVELOPMENT AT 8 LAM CHAK
STREET, KOWLOON – N.K.I.L. 6215**

DRAINAGE AND SEWERAGE IMPACT ASSESSMENT

Date **May 2026**

Prepared by **Miko Wan**
Environmental Consultant

Signed



Approved by

Calvin Chiu
Technical Director



Signed

Project Reference

CHPHBSHQEI00

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CHAPTERS

	Page
1. INTRODUCTION	1-1
1.1 Project Background.....	1-1
1.2 Subject Site and its Environs.....	1-1
1.3 Proposed Development.....	1-1
2. DRAINAGE IMPACT ASSESSMENT	2-1
2.1 Appraisal of Drainage Impact	2-1
3. SEWERAGE IMPACT ASSESSMENT.....	3-1
3.1 Scope of Work.....	3-1
3.2 Assessment Criteria and Methodology	3-1
3.3 Existing and Future Sewerage System.....	3-1
3.4 Wastewater Generated by the Proposed Development.....	3-1
3.5 Discussion	3-2
4. OVERALL CONCLUSION.....	4-1
4.1 Conclusion	4-1

TABLES

Table 3.1	Estimated Peak Flow	3-2
Table 3.2	Proposed Upgrading Work.....	3-2

FIGURES

Figure 1.1	Location of the Application Site and its Environs
Figure 2.1	Existing and Proposed Drainage System in the Vicinity of the Application Site
Figure 3.1	Existing and Proposed Sewerage System in the Vicinity of the Application Site
Figure 3.2	Catchment Areas in the Vicinity of the Application Site

APPENDICES

Appendix 1.1	Master Layout Plan (MLP)
Appendix 2.1	Detailed Drainage Impact Assessment Calculation
Appendix 3.1	Detailed Sewerage Impact Assessment Calculation
Appendix 3.2	Existing Drainage Plan
Appendix 3.3	Extracted Pages from Planning Application No. A/K22/43
Appendix 3.4	Extracted Pages from Planning Application No. A/K22/31

1. INTRODUCTION

1.1 Project Background

- 1.1.1 The Application Site at No. 8 Lam Chak Street is currently occupied by an office building (Harbourside HQ). The project proponent is proposing to redevelop the Subject Site to residential uses with retail facilities and clubhouse.
- 1.1.2 Ramboll Hong Kong Limited is commissioned by the Applicant to conduct this Drainage and Sewerage Impact Assessment (DSIA) based on the Proposed Development.

1.2 Subject Site and its Environs

- 1.2.1 The Subject Site is currently zoned as “Commercial (2)” (“C(2)”) under Kai Tak Outline Zoning Plan (No. S/K22/8). The site area is approximately 6,541m².
- 1.2.2 An existing building, Pacific Trade Centre, is located to the adjacent northeast. An existing LPG filling station is located some 30m apart to the north of the Subject Site. Kai Tak Fire Station is located on opposite side of Cheung Yip Street to the northwest and is about 40m apart. Kerry Dangerous Goods Waterhouse is situated at waterfront and separated from the Subject Site by around 40m to the south. The Quayside (office building) is on northeast side of Kwun Tong Bypass at more than 120m apart. The more recently completed Hong Kong Children’s Hospital is separated from the Subject Site by around 145m to the southwest.
- 1.2.3 There are a number of planned developments nearby. New Acute Hospital (NAH) is being constructed on the opposite side of Cheung Yip Street to the northwest. A waterfront site is on opposite side of Kai Hing Road to the southeast which was occupied by a godown and is being redeveloped as private residential development. Another site is on opposite side of Lam Chak Street to the southwest which is currently occupied by Lam Chak Street Substation and Public Works Central Laboratory Building and is planned to be redeveloped as private residential development. Regarding this private residential development, a S16 planning application was submitted in 2024 with minor relaxation of plot ratio and building height restriction (Application No. A/K22/43).
- 1.2.4 The location of the Application Site and its surrounding environs are shown in **Figure 1.1**.

1.3 Proposed Development

- 1.3.1 The Proposed Development will consist of 3 residential towers (T1 to T3), ancillary residential facilities (e.g. clubhouse), retail and car parking facilities. One swimming pool is provided. The ground level of the development will be elevated at 4.5mPD.
- 1.3.2 There will be altogether 1,140 flats, clubhouse of 1,913 m², commercial area of 2,780.5 m² (retail area of ~1,390m² and F&B area of ~1,390m²) and G/IC area of 490 m². The tentative occupation year of the development is 2033.
- 1.3.3 The Master Layout Plan (MLP) of the Proposed Development is included in **Appendix 1.1**.

2. DRAINAGE IMPACT ASSESSMENT

2.1 Appraisal of Drainage Impact

- 2.1.1 The Application Site is served by existing public drainage system. There is a Ø600mm drainage pipes (SWD4079122 and SWD4079123) to receive runoff from the Application Site and then connected to the existing Ø1200mm drainage pipe (SWD4055086) along Kai Hing Road. The Application Site currently is 100% paved and occupied by office building.
- 2.1.2 The estimated surface runoff under the existing and future conditions of the Application Site is shown in **Appendix 2.1**. 30% greenery coverage would be provided for the Proposed Development as a resilient measure. The peak 1 in 50-year runoff from the site is expected to decrease from 0.343m³/s to approximately 0.308m³/s after development. In other words, there will be a reduction of surface runoff when compared with the existing condition due to increased greenery. The surface runoff generated from the Application Site will be collected and connected to the aforementioned drainage pipe (existing manhole SMH4067261).
- 2.1.3 A proposed 300mm peripheral channel will be provided as shown in **Figure 2.1**. The details of the peripheral channel will be designed in detailed design stage. Existing drainage pipes (SWD4079230 and SWD4079121) will be abandoned.
- 2.1.4 As the total paved area and in turn the surface runoff is expected to decrease after development, it is anticipated that there is no adverse impact on the existing drainage pipe receiving runoff from the site.
- 2.1.5 It is expected that the Proposed Development (with reduced surface runoff) would not result in worsened drainage impact.
- 2.1.6 In addition, the ground level will be raised to 4mPD as another measure to ensure flood resilience of the development.

3. SEWERAGE IMPACT ASSESSMENT

3.1 Scope of Work

3.1.1 The aim of this study is to assess whether the existing sewerage facilities serving the Subject Site are sufficient to cope with the sewage flow from the Proposed Development and, if appropriate, to identify necessary improvement works and/or alternative disposal options.

3.2 Assessment Criteria and Methodology

3.2.1 Environmental Protection Department's (EPD's) Guidelines for Estimating Sewage Flows for Sewerage Infrastructure Planning, Version 1 (GESF) has been referred to for the purposes of estimating the quantity of the sewage generated from the Proposed Development and the existing catchment area. Sewage flow parameters and peaking factors in this document have been adopted for this SIA.

3.2.2 Based on the building types in the area, the following unit flow factors are used in the SIA calculation:

- Residents: 0.27 m³/person/day (R2)
- Clubhouse Staff: 0.28 m³/day (J11 - Community, Social & Personal Services)
- Retail employee: 0.28 m³/day (J4 - Wholesale & Retail)
- F&B employee: 1.58 m³/day (J10 - Restaurants & Hotels)
- Office employee: 0.08 m³/day (J6 - Finance, Insurance, Real Estate & Business Services)
- Manufacturing employee: 0.53 m³/day (J1 - Manufacturing + East Kowloon)

3.2.3 Catchment Inflow Factor (P_{CIF}) of East Kowloon (1.10) has been applied in the assessment.

3.3 Existing and Future Sewerage System

3.3.1 According to the GeoInfo Map, there are two of the Ø225mm sewers (FWD4061280 and FWD4061281) connected to the Ø525mm sewer (FWD4048825) along Kai Hing Road and then discharged to the 2.5m x 2.3m box culvert.

3.3.2 The existing sewers in the vicinity of the Application Site are shown in **Figure 3.1**.

3.3.3 Based on the drainage plan (see **Appendix 3.2**), the existing manhole (FLH4013520) is serving the Application Site. The sewerage system from the Proposed Development will be connected to the existing manhole (FLH4013520) and then convey sewage via sewers along Kai Hing Road.

3.3.4 Based on the Planning Application (A/K22/43) (**Appendix 3.3**), the planned development of Site 3E1 and Site 3E2 will be discharged to the existing manhole FMH4036432 (at Kai Hing Road) and FMH4096818 (at Cheung Yip Street) respectively. Therefore, the planned development of 3E2 would not be included as the upstream catchment.

3.4 Wastewater Generated by the Proposed Development

3.4.1 Wastewater arising from the Proposed Development will be primarily contributed by residents and staff.

3.4.2 Detailed calculation for the Proposed Development is given in **Table 3.1** below and **Appendix 3.1**.

Table 3.1 Estimated Peak Flow

Development Parameters	Proposed Development				
	Residential Tower	Clubhouse	Commercial Area (Retail)	Commercial Area (F&B)	G/IC
Total number of units	1,140	-	-	-	-
Assumed Area (m ²)	-	1,913	1,390	1,390	490
Number of Population	2850 ⁽¹⁾	63	49	71	16
Design Flow (m ³ /person/day)	0.27 ⁽²⁾	0.28 ⁽³⁾	0.28 ⁽⁴⁾	1.58 ⁽⁵⁾	0.28 ⁽⁴⁾
Flow Rate (m³/day)	769.5	17.7	13.7	112.2	4.5
Total Flow Rate with P_{CF} (m³/day)	1,009.4				
Peak Flow (L/s)	70.1				
Peak Flow with backwash from Swimming Pool	81.6				

(1) 2021 Population Census – Average Household Size of 2.5 in Kwun Tong Central District

(2) Refer to Table T-1 of GESF – Private R2

(3) Refer to Table T-2 of GESF – J11 Community, Social & Personal Services

(4) Refer to Table T-2 of GESF – J4 Wholesale & Retail

(5) Refer to Table T-2 of GESF – J10 Restaurants & Hotels

3.5 Discussion

3.5.1 Wastewater from the Proposed Development will be discharged to the existing sewerage manhole nos. FLH4013520 (S1).

3.5.2 The potential sewerage impact due to the Proposed Development has been quantitatively addressed. Sewage generation rate from the Application Site is estimated to be 1,009.4m³/day (i.e. peak flow 81.6 litre/sec with backwash from swimming pool).

3.5.3 According to Table 4a of **Appendix 3.1**, regarding the sewage generation rate from the Proposed Development and surrounding areas (**Figure 3.2**), one of the existing sewer pipes (S2-S3) would not have adequate capacity to receive the flow.

3.5.4 As such, upgrading work for the one existing sewer pipe (S2-S3) is proposed and summarized in **Table 3.2** below. The proposed upgraded pipe will be handed over to DSD for maintenance.

Table 3.2 Proposed Upgrading Work

Segment	Manhole Reference	Manhole Reference	Length (m)	Original Size (Ø)	Upgraded Size (Ø)
S2-S3	FMH4051820	FMH4043147	14.1	225	300

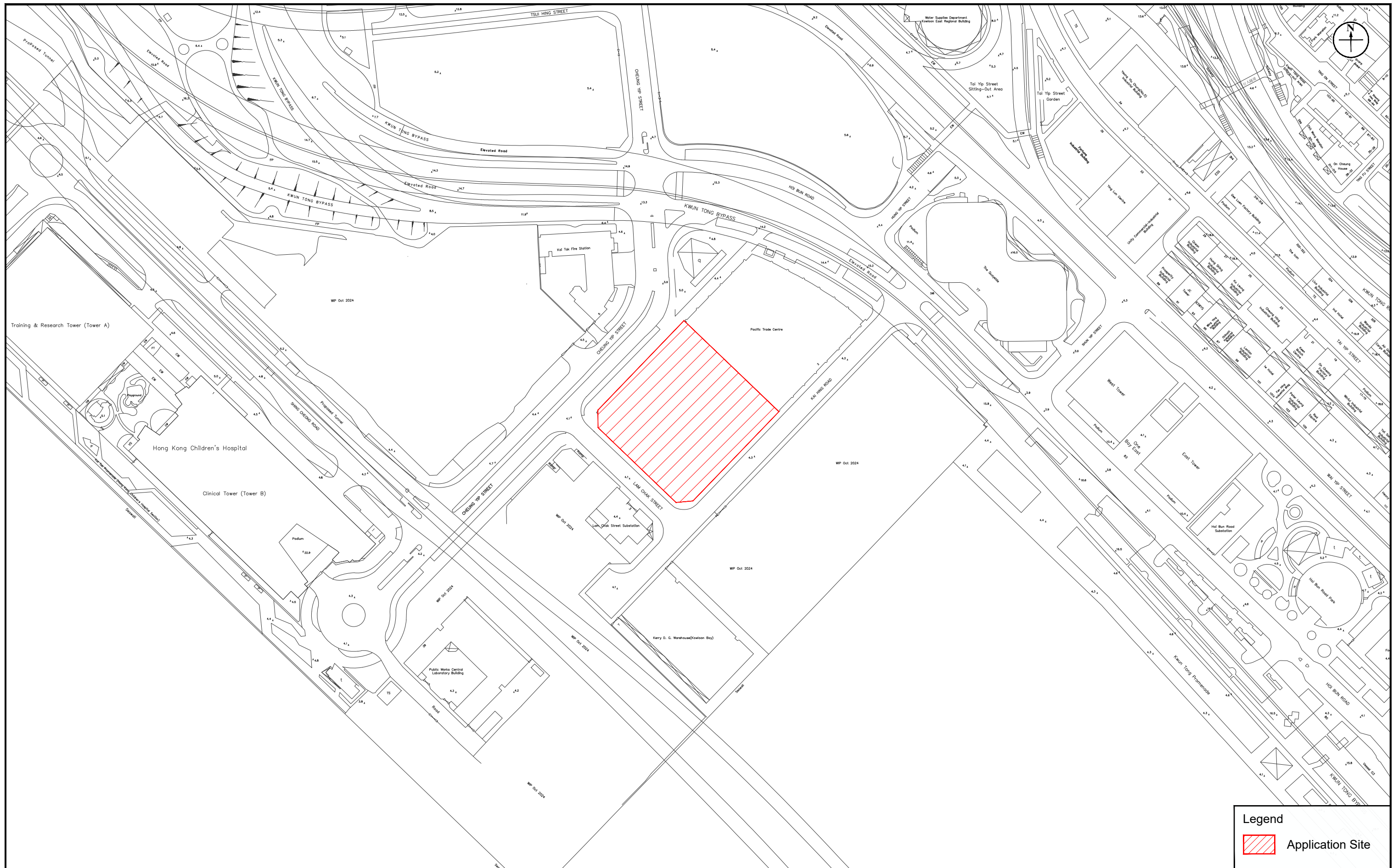
3.5.5 With the upgrading work in place, the sewerage system will have adequate capacity to cater the sewage from the Proposed Development and nearby catchments.

4. OVERALL CONCLUSION


4.1 Conclusion


- 4.1.1 A composite development is proposed at No.8 Lam Chak Street, Kowloon Bay. The potential sewerage impact has been quantitatively addressed.
- 4.1.2 The Application Site is currently served by public drainage system. The Proposed Development would result in reduced surface runoff and would follow the same flow regime as per existing condition (connected to the existing manhole SMH4067261). It would not result in worsened drainage impact. Resilient measures in terms of 30% greenery and raised ground floor level are provided.
- 4.1.3 Sewage generated from the Proposed Development will be discharged and connected to the existing manhole nos.: FLH4013520 (S1).
- 4.1.4 Based on the sewerage impact assessment results, it is found that the capacity of part of the existing sewerage system serving the area would not be sufficient to cater for cumulative sewage generated from the Proposed Development and nearby catchment areas. One existing sewerage pipe (S2-S3) is proposed to be upgraded to Ø300mm pipe.
- 4.1.5 With the proposed upgrading work in place, the hydraulic capacity will be adequate to receive cumulative sewage discharge. This SIA confirms the feasibility of the Proposed Development in terms of impact on the public sewerage system.

Figures



Legend

 Application Site

<p>Figure: 1.1</p> <p>Title: Location of the Application Site and its Environs</p> <p>Project: Proposed Comprehensive Development at 8 Lam Chak Street, Kowloon - N.K.I.L. 6215</p>	
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	<p>Checked by: CC</p>
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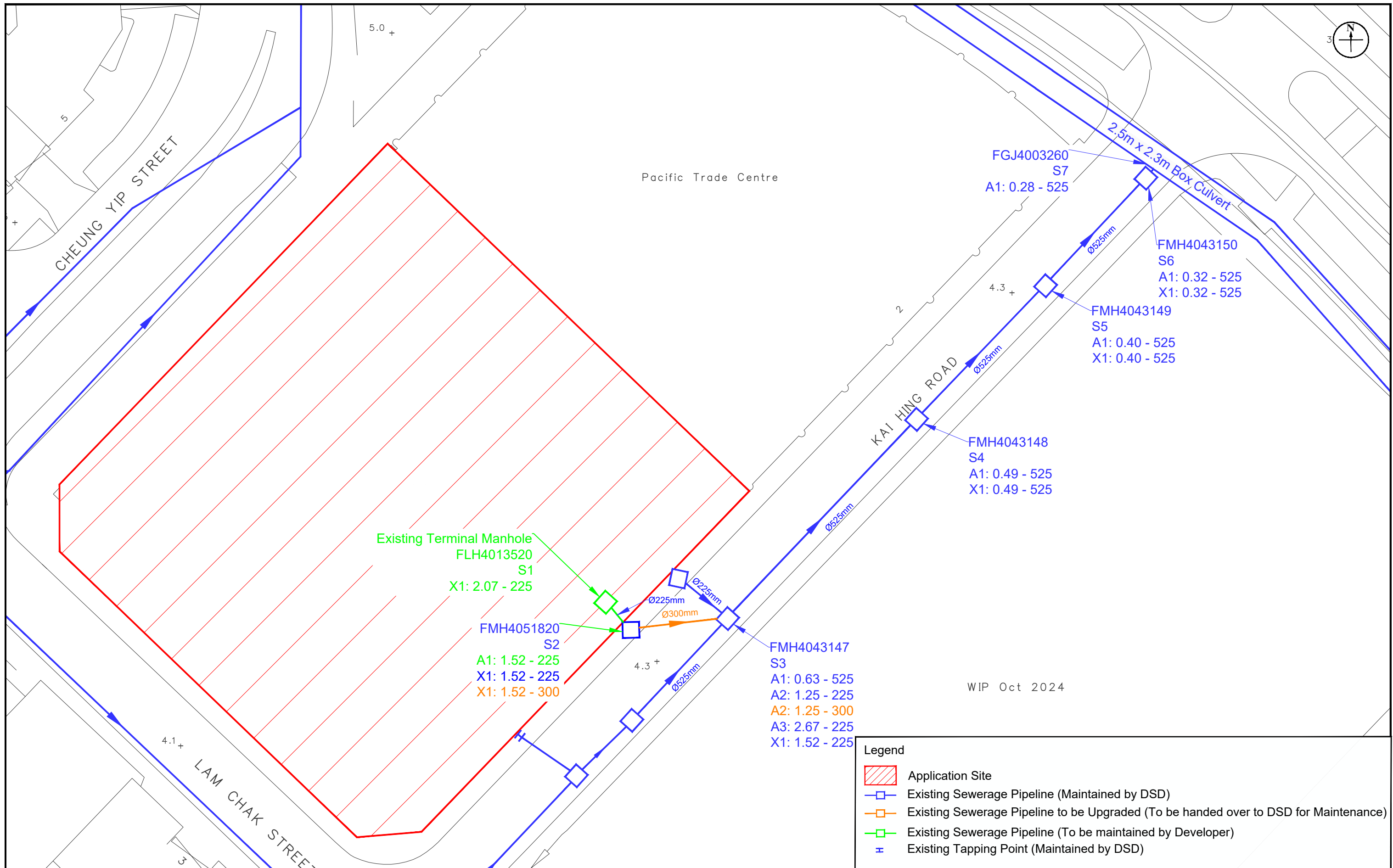


Figure: 3.1

Title: Existing and Proposed Sewerage System in the Vicinity of the Application Site

Project: Proposed Comprehensive Development at 8 Lam Chak Street, Kowloon - N.K.I.L. 6215

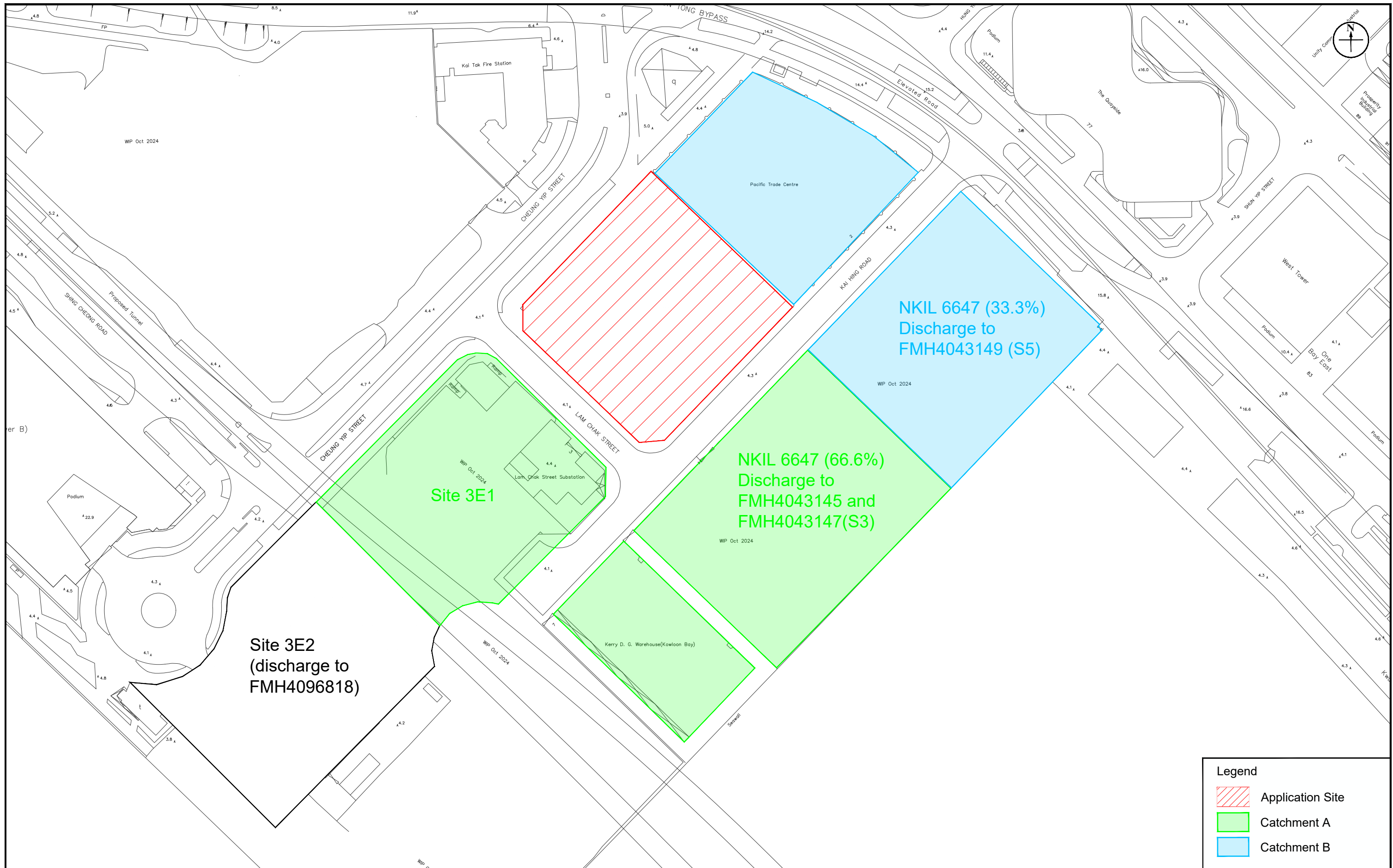
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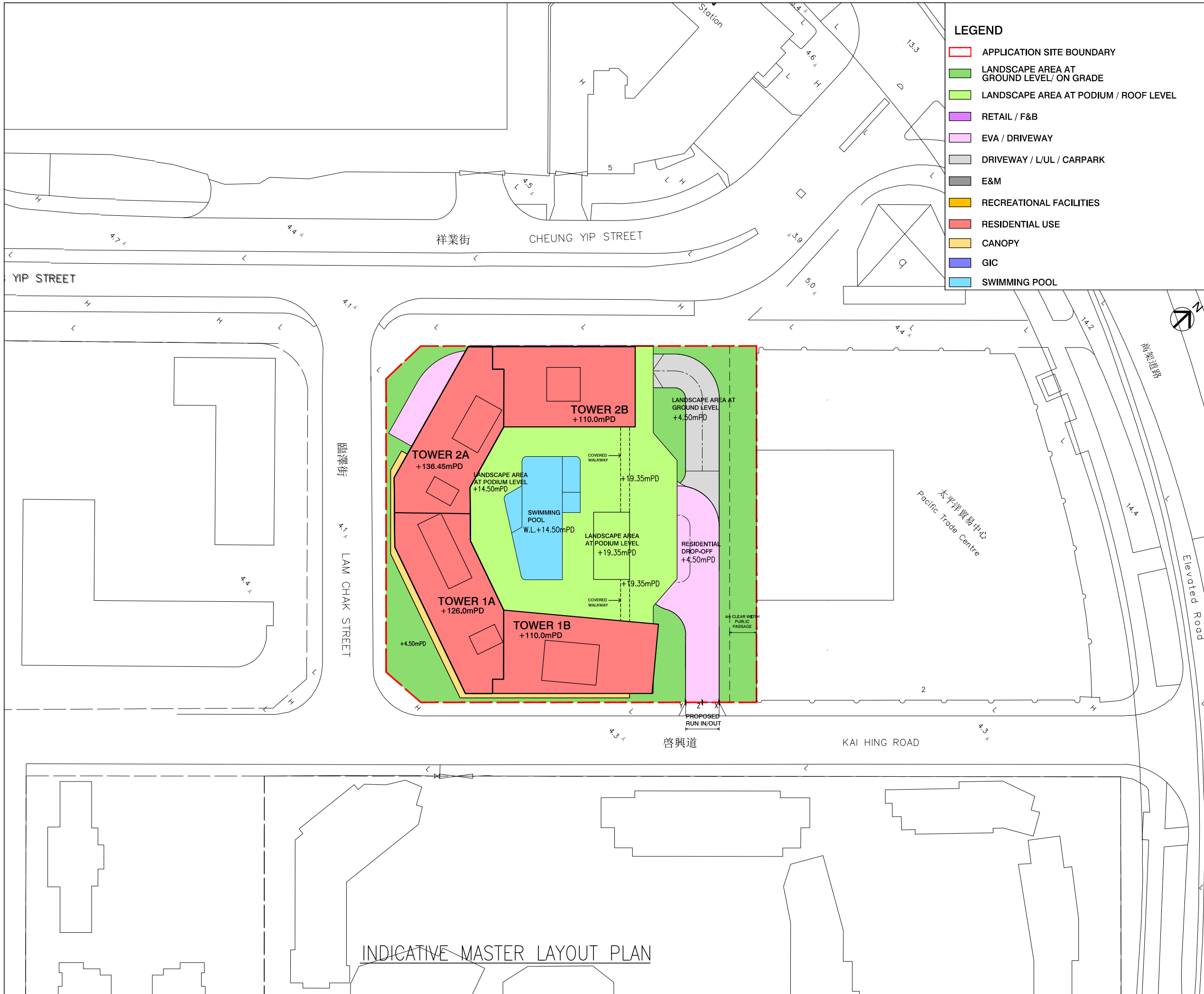
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Legend	
	Application Site
	Catchment A
	Catchment B

Figure: 3.2 Title: Catchment Area in the Vicinity of the Application Site Project: Proposed Comprehensive Development at 8 Lam Chak Street, Kowloon - N.K.I.L. 6215	
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Appendix 1.1 Master Layout Plan (MLP)



LEGEND

- APPLICATION SITE BOUNDARY
- LANDSCAPE AREA AT GROUND LEVEL/ ON GRADE
- LANDSCAPE AREA AT PODIUM / ROOF LEVEL
- RETAIL / F&B
- EVA / DRIVEWAY
- DRIVEWAY / L/UL / CARPARK
- E&M
- RECREATIONAL FACILITIES
- RESIDENTIAL USE
- CANOPY
- GIC
- SWIMMING POOL

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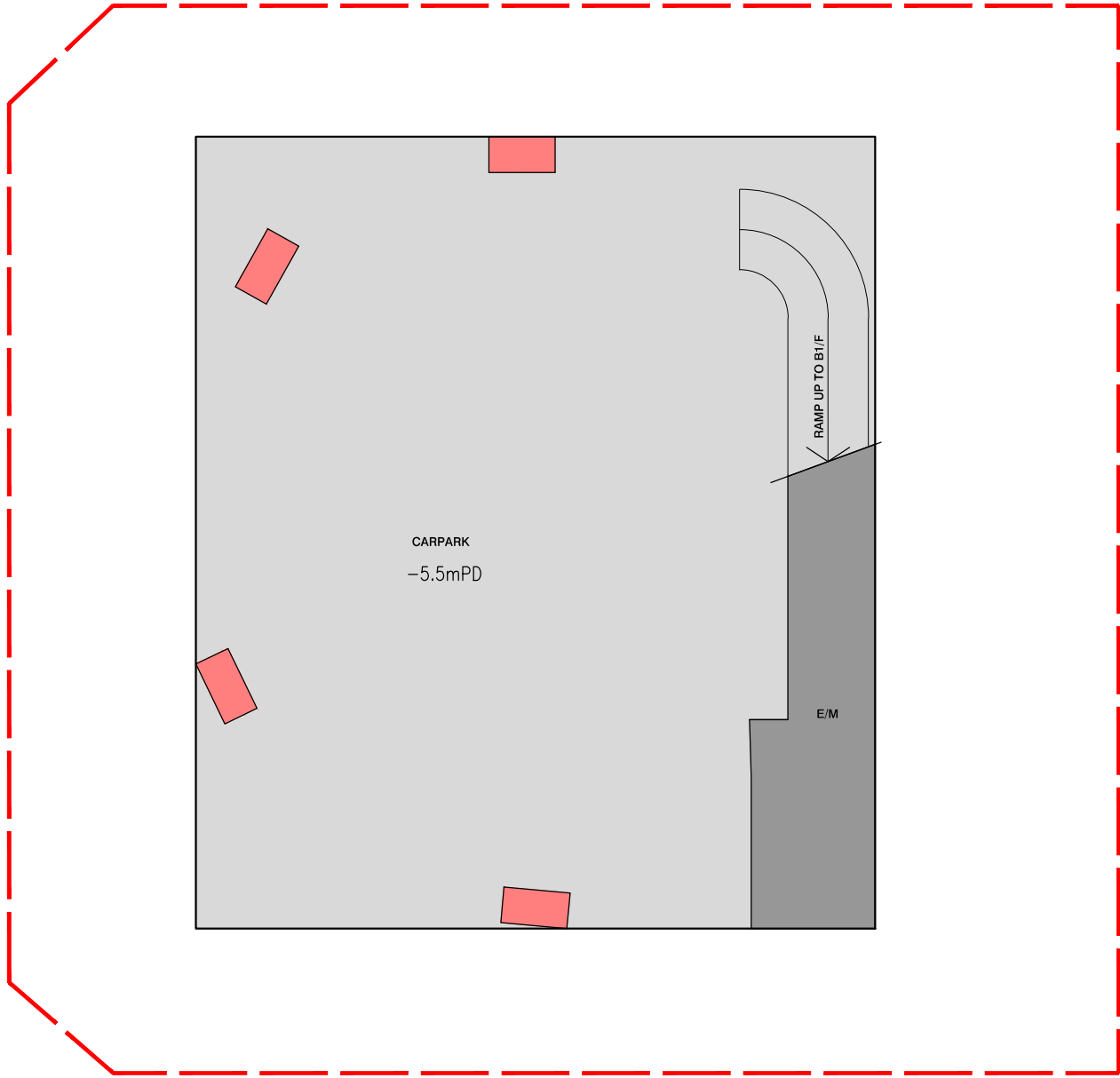
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TITLE	標題
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INDICATIVE MASTER LAYOUT PLAN



INDICATIVE BASEMENT 2 FLOOR PLAN

LEGEND

- APPLICATION SITE BOUNDARY
- LANDSCAPE AREA AT GROUND LEVEL/ ON GRADE
- LANDSCAPE AREA AT PODIUM / ROOF LEVEL
- RETAIL / F&B
- EVA / DRIVEWAY
- DRIVEWAY / L/UL / CARPARK
- E&M
- RECREATIONAL FACILITIES
- RESIDENTIAL USE
- CANOPY
- GIC
- SWIMMING POOL



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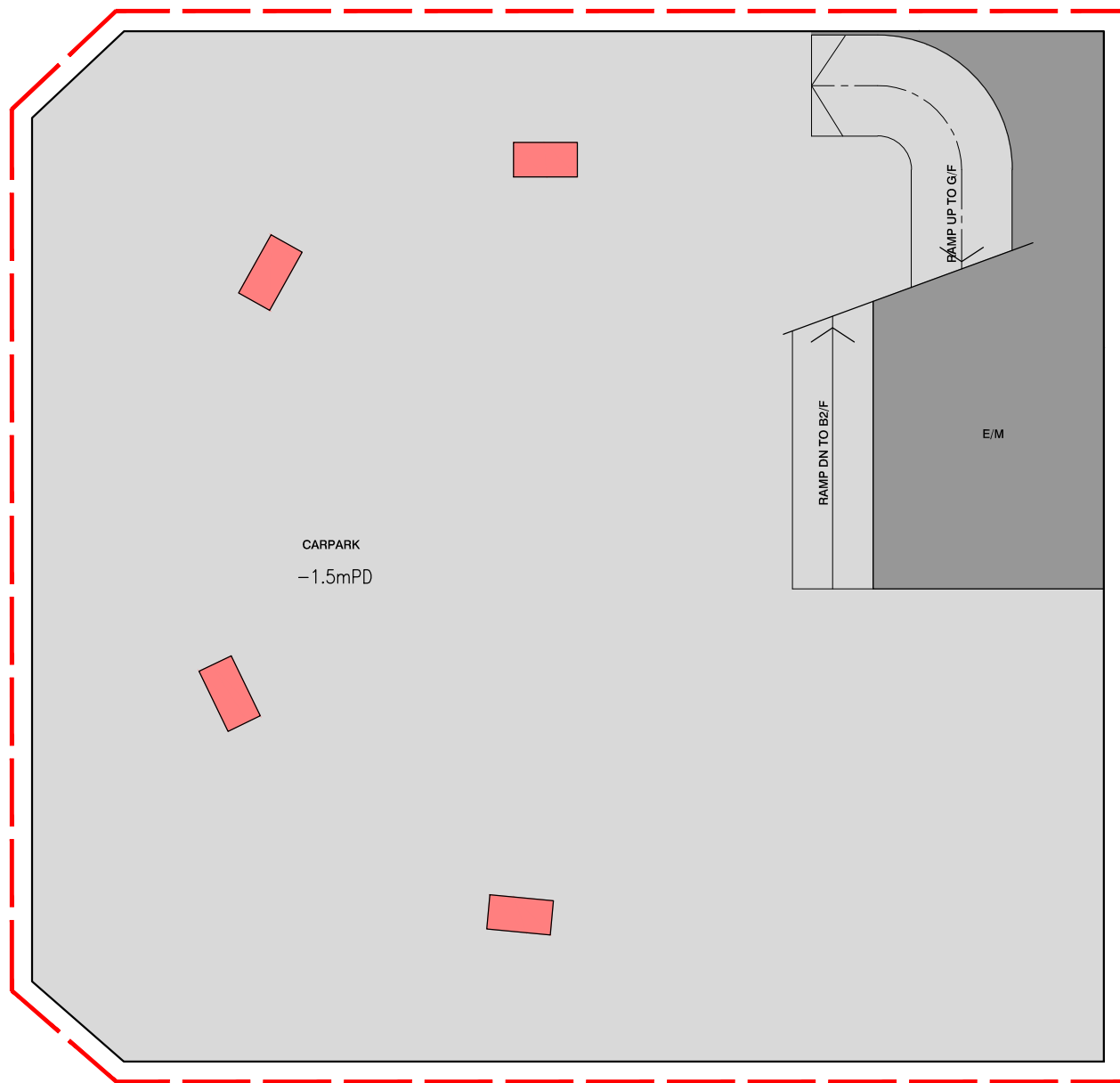
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INDICATIVE BASEMENT 1 FLOOR PLAN

LEGEND

- APPLICATION SITE BOUNDARY
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- RETAIL / F&B
- EVA / DRIVEWAY
- DRIVEWAY / L/UL / CARPARK
- E&M
- RECREATIONAL FACILITIES
- RESIDENTIAL USE
- CANOPY
- GIC
- SWIMMING POOL



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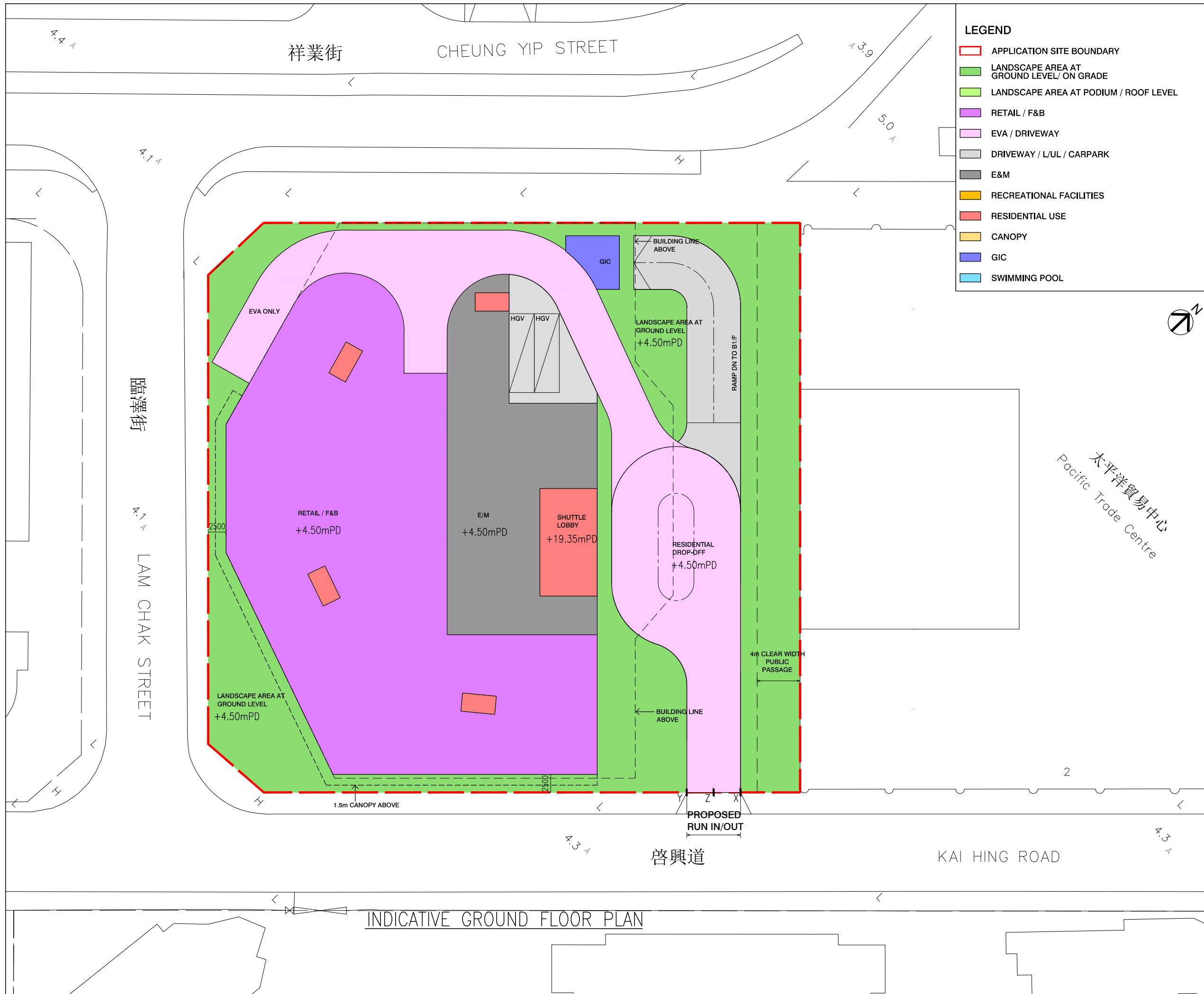
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INDICATIVE BASEMENT 1 FLOOR PLAN

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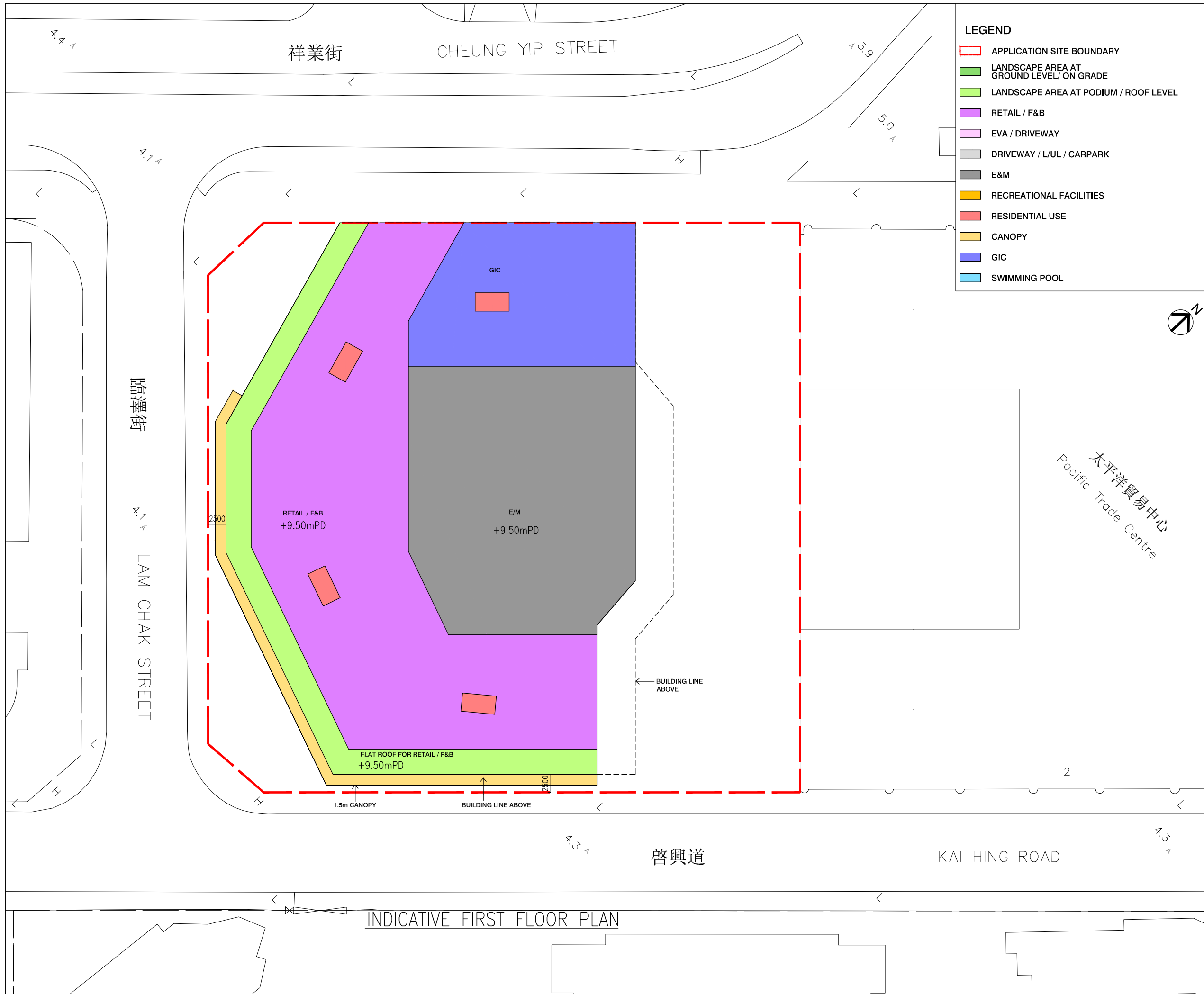
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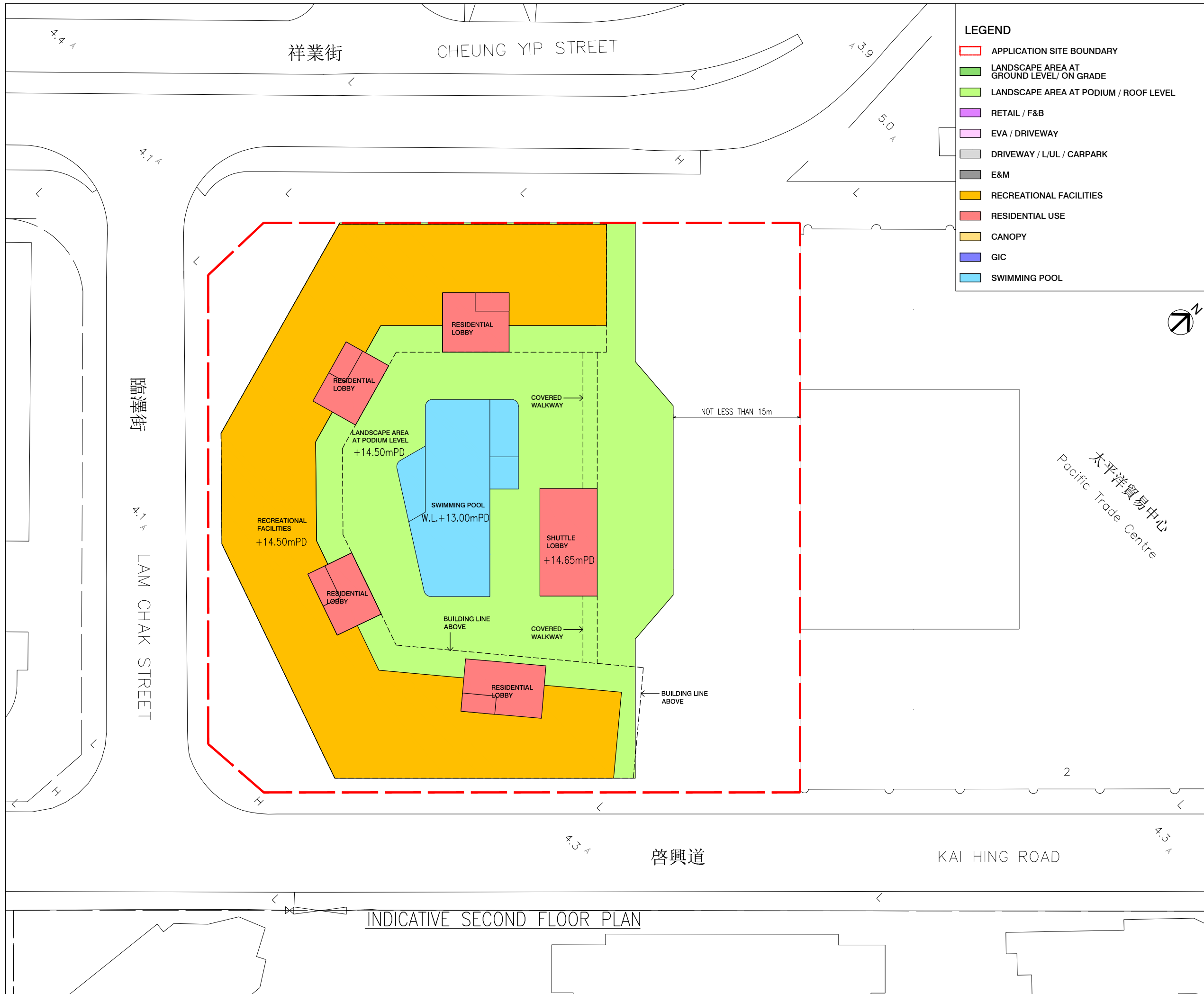
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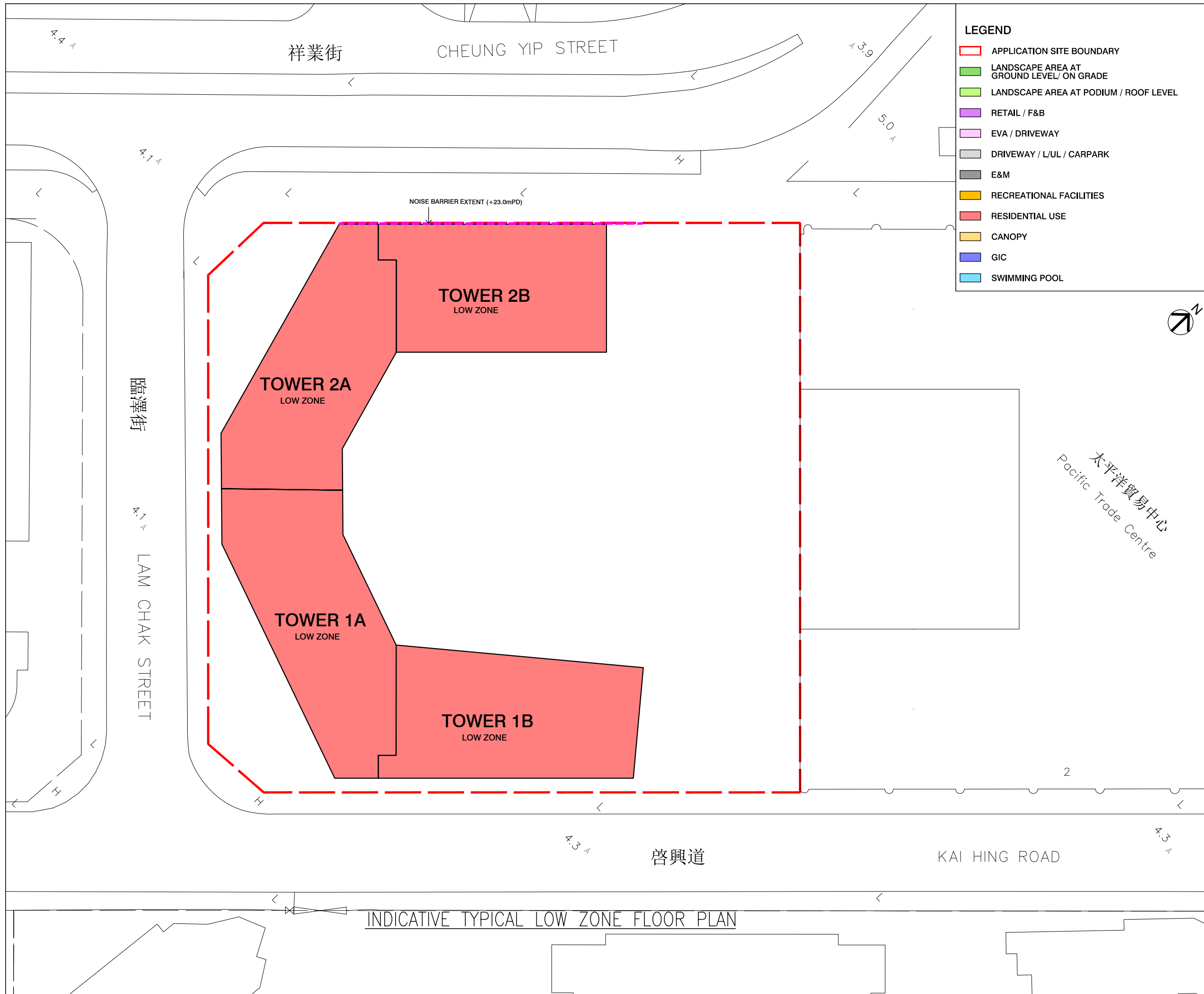
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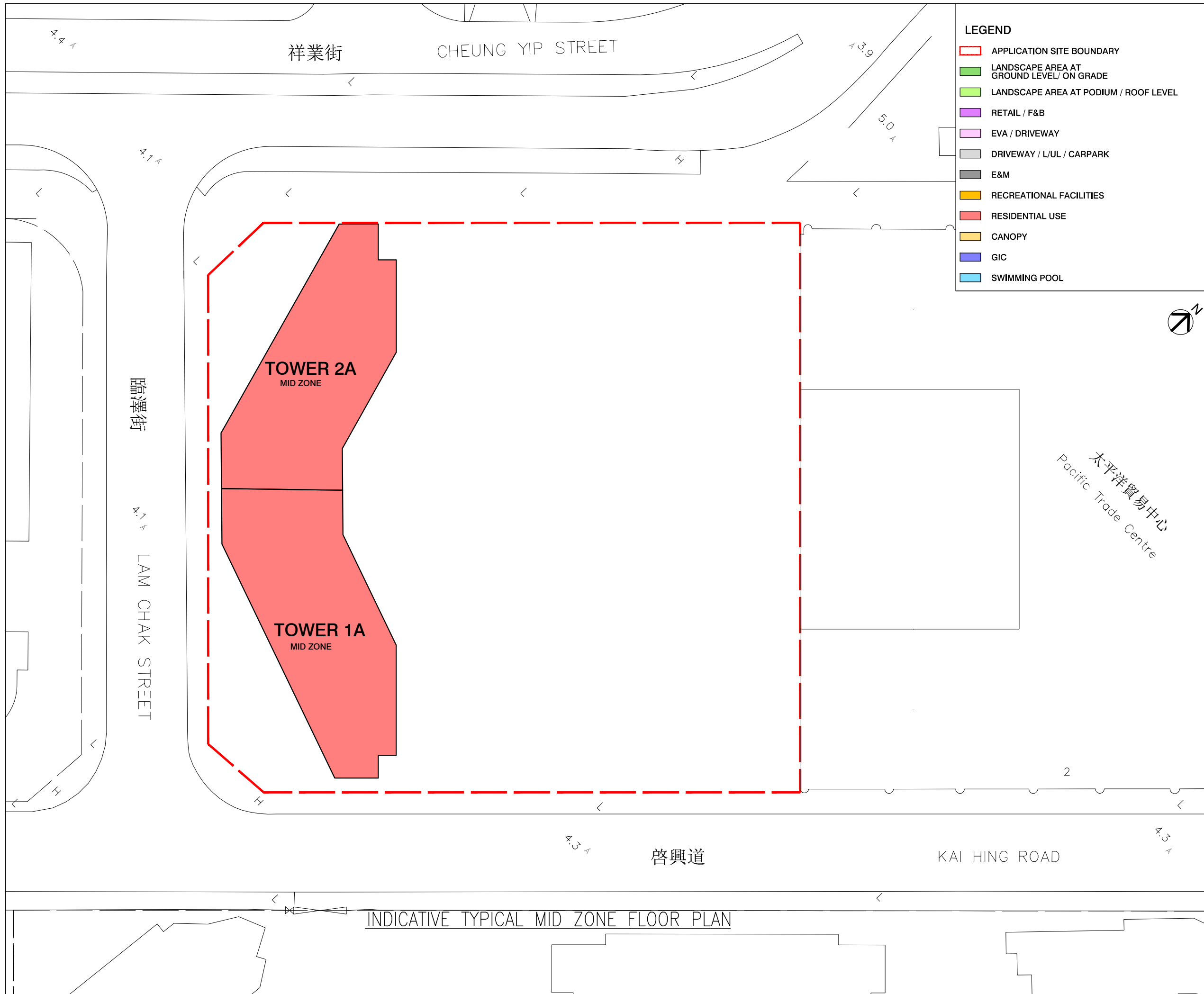
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TITLE	標題
INDICATIVE SECOND FLOOR PLAN	

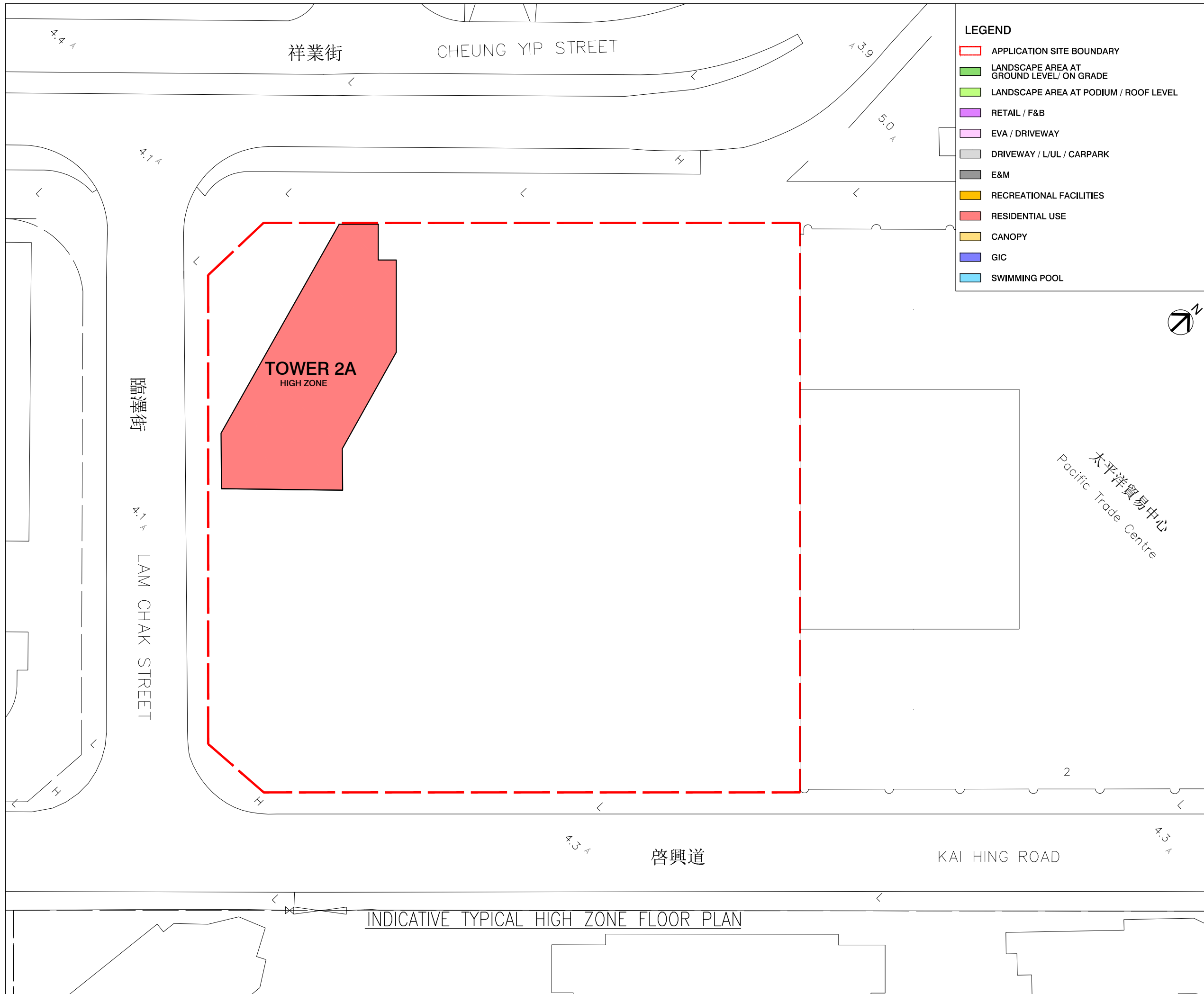
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TITLE		標題	
INDICATIVE LOW ZONE FLOOR PLAN			
SCALE 1:500(A3)	比例	DATE MAY 2026	日期
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TITLE		標題	
INDICATIVE MID ZONE FLOOR PLAN			
SCALE	比例	DATE	日期
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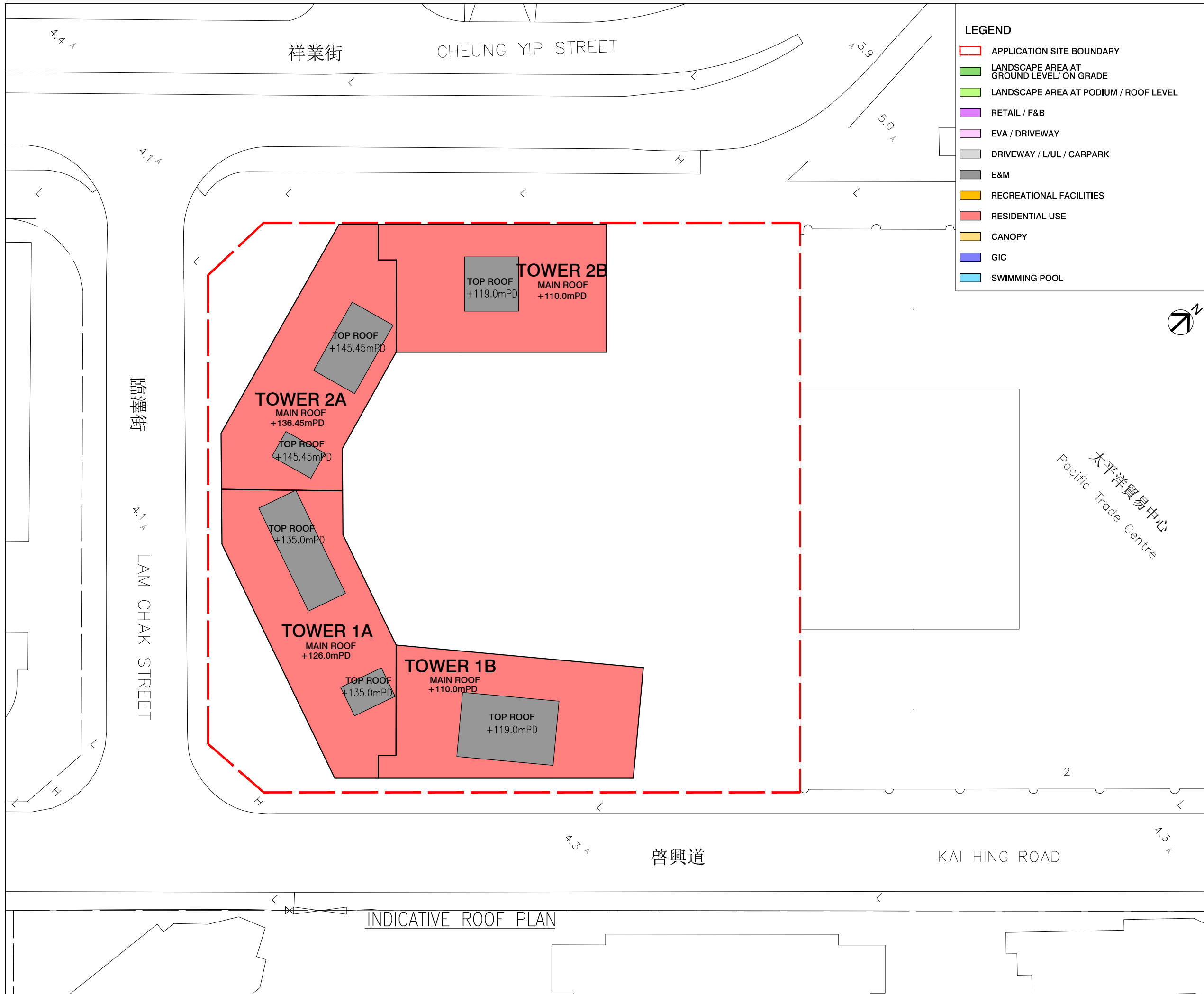
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TITLE 標題	INDICATIVE HIGH ZONE FLOOR PLAN
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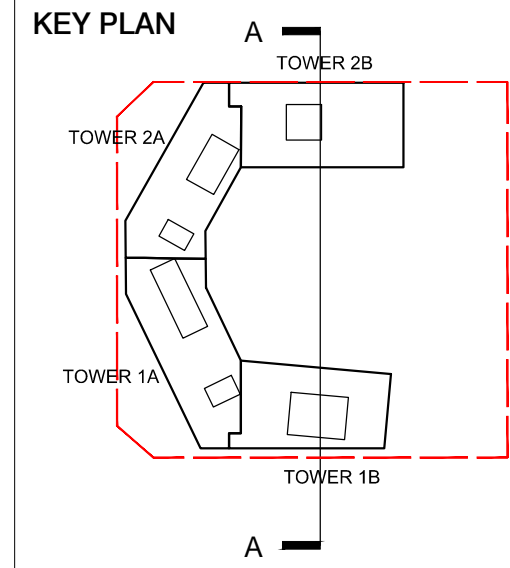
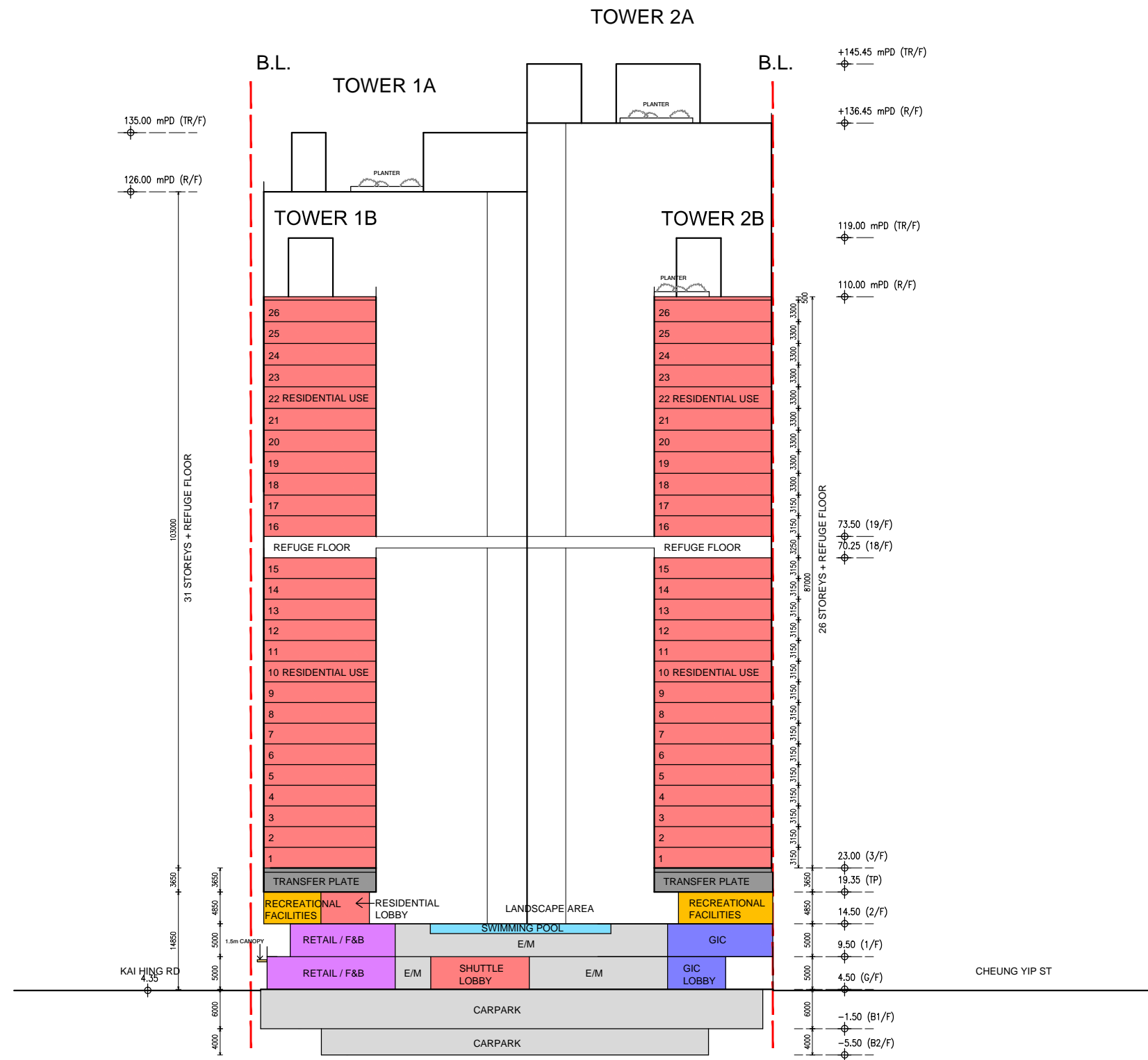
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TITLE	標題
INDICATIVE ROOF FLOOR PLAN	

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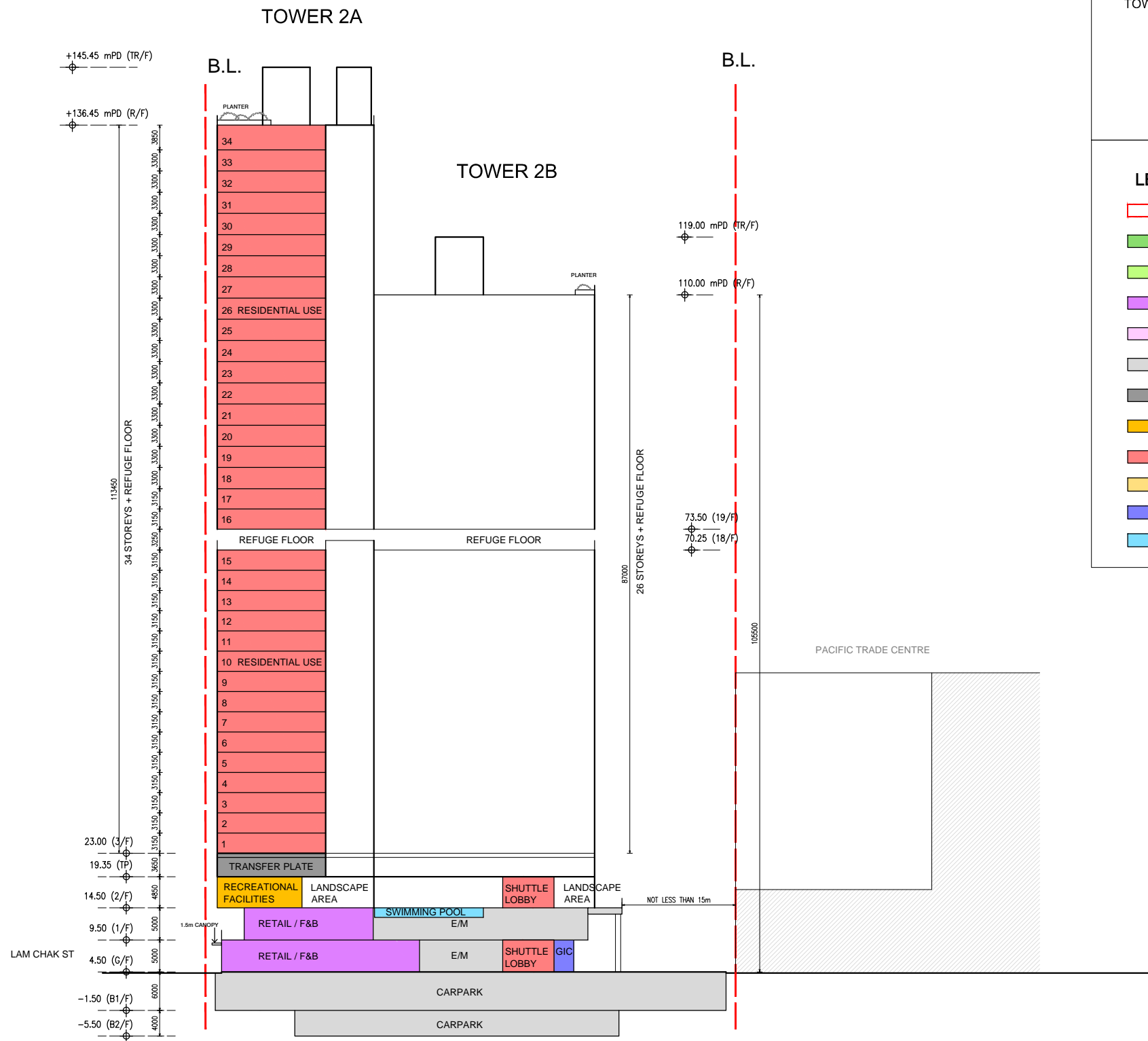
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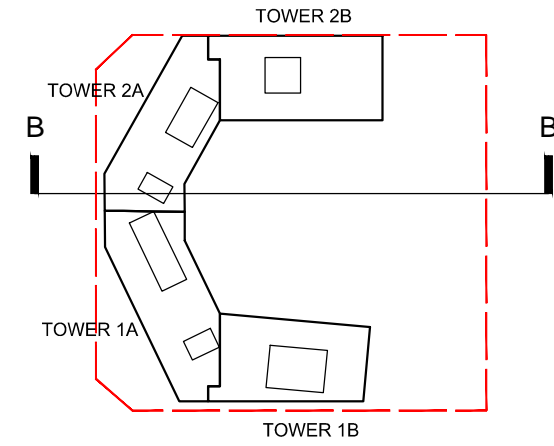
PROJECT	項目名稱
PROPOSED COMPOSITE DEVELOPMENT AT 8 LAM CHAK STREET, KOWLOON - N.K.I.L. 6215	

TITLE	標題
INDICATIVE SECTION A-A	

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KEY PLAN



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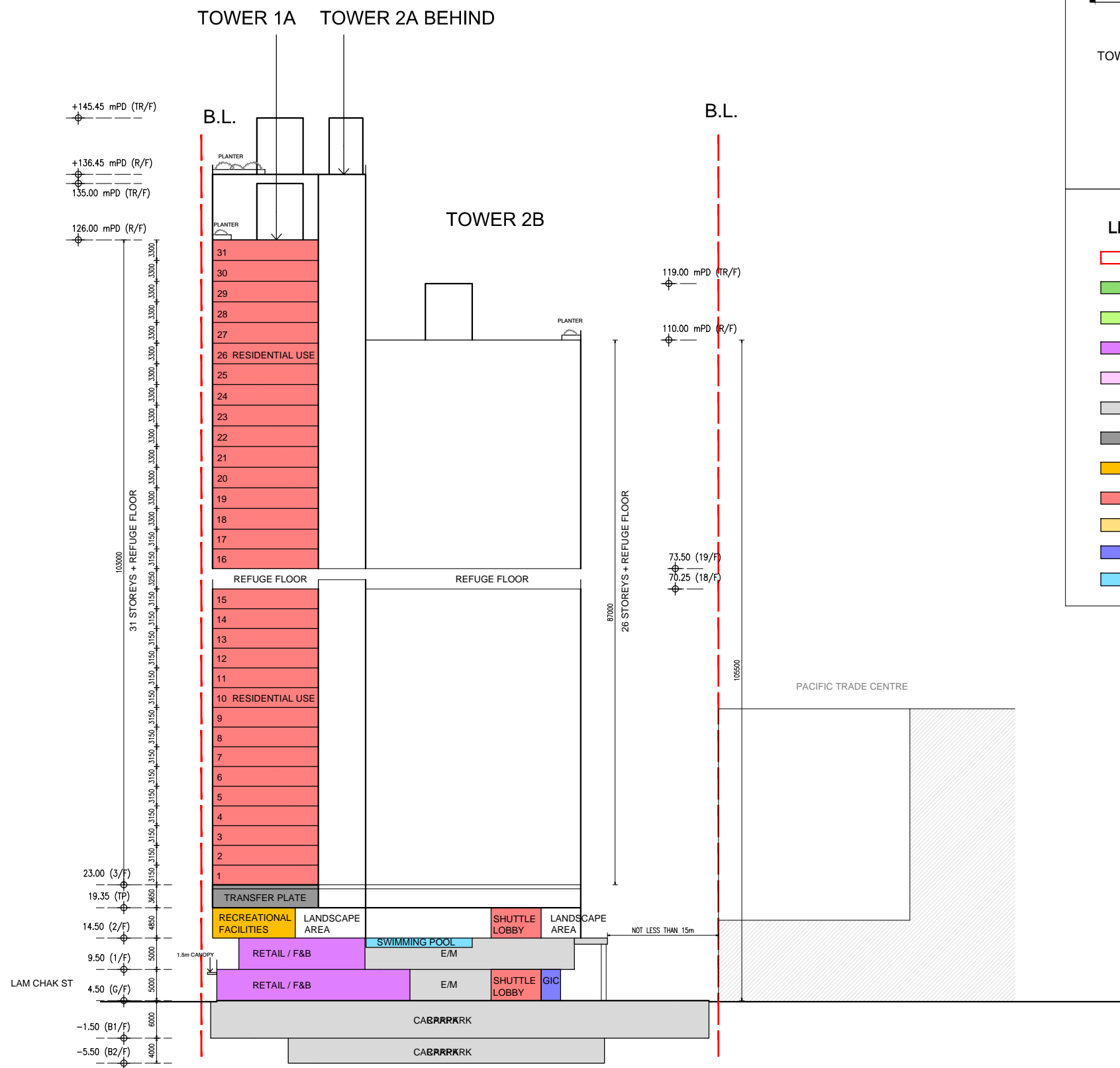
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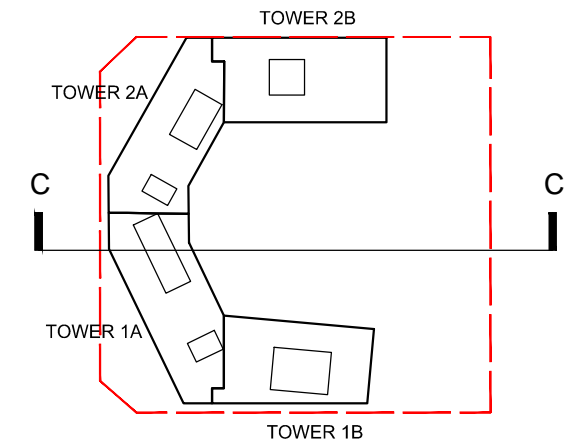
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KEY PLAN



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TITLE	標題
INDICATIVE SECTION C-C	

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Appendix 2.1 Detailed Drainage Impact Assessment Calculation

Proposed Composite Development at Harbourside HQ at No. 8 Lam Chak Street, Kowloon Bay
Table 1 - Proposed Catchment Areas and Run-off (1 in 50 year)

$$Q_p = 0.278 C i A$$

Notes:

Site Area 6,541 m²

where Q_p = peak runoff in m³/s
 C = runoff coefficient (dimensionless)
 i = rainfall intensity in mm/hr
 A = catchment area in km²

Catchments are small, so Rational Method is appropriate

1 in 50-year (according to Table 3 of DSD Manual)

a= 505.5

b= 3.29

c= 0.355

Surface Characteristics	Runoff coefficient, C*
Asphalt	0.70 - 0.95
Concrete	0.80 - 0.95
Brick	0.70 - 0.85
Grassland (heavy soil)**)	
Flat	0.13 - 0.25
Steep	0.25 - 0.35
Grassland (sandy soil)	
Flat	0.05 - 0.15
Steep	0.15 - 0.20

	Catchment	Discharge Manhole	Paved	Unpaved	Area	Total t_c	Intensity	Weighted Runoff Coefficient	Run-off	Run-off ²	Run-off ³
					(m ²)	(min)	(mm/h)		(m ³ /s)	(m ³ /s)	(m ³ /s)
Existing	Subject Site										
	S1	T1	100%	0%	6,541	5.00	239	0.95	0.412	0.458	0.478
Future	Subject Site										
	S1	T1	70%	30%	6,541	5.00	239	0.71	0.308	0.342	0.357

Remarks:

1. Assumed Time of Concentration
2. Runoff includes rainfall increase due to Climate Change 11.1% in the mid 21st Century
3. Runoff includes rainfall increase due to Climate Change 16% in the end of 21st Century

Proposed Composite Development at Harbourside HQ at No. 8 Lam Chak Street, Kowloon Bay
Hydraulic Calculations of Proposed Drainage System

Table 2a - 1 in 50 year Runoff of Future Catchments (m³/s)

Runoff at	Catchment	
	S1	Total
T1	0.308	0.31
T2	0.308	0.31

Table 3a - Hydraulic Capacities for Existing Drainage System

Segment	Manhole Reference	Manhole Reference	Type of Channel	Pipe Dia.	Pipe Length	Invert Level 1	Invert Level 2	g	k _s	s	Gradient	v	V	Area	Q	Q _{slt} ¹
				mm	m	mPD	mPD	m/s ²	m		1 in	m ² /s	m/s	m ²	m ³ /s	m ³ /s
T1 - T2	SLH4009501	SMH4067261	Circular	600	4.2	2.63	2.10	9.81	0.0030	0.125	8	0.000001	6.97	0.28	1.97	1.87
T2 - T3	SMH4067261	SMH4048704	Circular	600	5.5	2.10	1.58	9.81	0.0030	0.095	11	0.000001	6.05	0.28	1.71	1.63

Table 3b - Hydraulic Capacities for Proposed Drainage System (UC)

Segment	Type of Channel	Pipe Dia. (D)	Depth (H)	Slope	Gradient	Manning's roughness coefficient	Cross Section Area	Wetted Perimeter	Hydraulic Radius (R)	V	Q	Q _{slt} ¹
		m	m		1 in		m ²	m	m	m/s	m ³ /s	m ³ /s
Proposed Peripheral Channel	U-channel	0.600	0.300	0.010	1 in	0.016	0.231	1.242	0.186	2.04	0.47	0.45

Table 4a - Comparison of Runoff from Proposed Catchments and Hydraulic Capacities of Existing Drainage System

Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Q _{slt} ¹	Catchment Involved	Runoff	Occupancy	Sufficient Capacity?	Runoff [2]	Occupancy	Sufficient Capacity?	Runoff [3]	Occupancy	Sufficient Capacity?	Runoff [4]	Occupancy	Sufficient Capacity?
			mm	m ³ /s		m ³ /s			m ³ /s			m ³ /s			m ³ /s		
T1 - T2	SLH4009501	SMH4067261	600	1.87	S1	0.31	16.5%	YES	0.34	18.3%	YES	0.36	19.1%	YES	0.40	21.4%	YES
T2 - T3	SMH4067261	SMH4048704	600	1.63	S1	0.31	19.0%	YES	0.34	21.1%	YES	0.36	22.0%	YES	0.40	24.6%	YES

Table 4b - Comparison of Runoff from Proposed Catchments and Hydraulic Capacities of Proposed Drainage System

Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Q _{slt} ¹	Catchment Involved	Runoff	Occupancy	Sufficient Capacity?	Runoff [2]	Occupancy	Sufficient Capacity?	Runoff [3]	Occupancy	Sufficient Capacity?	Runoff [4]	Occupancy	Sufficient Capacity?
			mm	m ³ /s		m ³ /s			m ³ /s			m ³ /s			m ³ /s		
Proposed Peripheral Channel	-	-	300	0.45	S1	0.31	68.8%	YES	0.34	76.3%	YES	0.36	79.8%	YES	0.40	89.4%	YES

Remarks:

1. Q_{slt}: 10% reduction in flow for gradient is not greater than 1 in 25, 5% reduction in flow for gradient greater than 1 in 25.

Runoff [2] represents the situation in Mid 21st Century of 11.1%

Runoff [3] represents the situation in Late 21st Century of 16.0%

Runoff [4] represents the situation in Late 21st Century due to design allowance with additional runoff of 12.1%

Appendix 3.1 Detailed Sewerage Impact Assessment Calculation

Table 1 Calculation for Sewage Generation Rate of the Proposed Development at the Application Site

Proposed Development (S1)

1. Residential Tower

Total number of residential units	=	1140 units
Total number of residents	=	2850 people -- (2021 Population Census: Average Household Size of 2.5 in Kwun Tong Central District)
Design flow	=	0.27 m ³ /person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	769.5 m³/day

2. Clubhouse

Assumed Area	=	1913 m ²
Assumed floor area per employee	=	30.3 m ² per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	63 employees
Design flow for commercial activities	=	0.28 m ³ /employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	17.7 m³/day

3. Commercial Area (Retail)

Assumed Area	=	1390 m ²
Assumed floor area per employee	=	28.57 m ² per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	49 employees
Design flow for commercial activities	=	0.28 m ³ /employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	13.7 m³/day

4. Commercial Area (F&B)

Assumed Area	=	1390 m ²
Assumed floor area per employee	=	19.61 m ² per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	71 employees
Design flow for commercial activities	=	1.58 m ³ /employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	112.2 m³/day

5. G/IC

Assumed Area	=	490 m ²
Assumed floor area per employee	=	30.3 m ² per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	16 employees
Design flow for commercial activities	=	0.28 m ³ /employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	4.5 m³/day

6. Swimming Pools

Assumed Area of Swimming Pool	=	345.0 m ²
Average Depth of Water	=	1.2 m
Volume of Swimming Pool (Ordinary Assumption)	=	414.0 m ³
Turnover Rate	=	6 hr
Required Surface Loading Rate of Filter	=	69 m ³ /m ² /hr
Filter Areas required	=	1.0 m ²
Adopted Surface Loading Rate of Filter	=	50 m ³ /m ² /hr
Adopted Filter Area	=	1.4 m ²
Backwash Duration	=	7 min/d
Backwash flow rate	=	30 m ³ /m ² /hr
Average Daily Flow Rate for Swimming Pool Backwashing	=	4.8 m ³ /day
Flowrate for Swimming Pool Backwashing in 7 mins	=	11.5 litre/sec

Total Flow from Proposed Development

Flow Rate (without Catchment Inflow Factor)	=	917.6 m ³ /day
Catchment Inflow Factor	=	1.10 Catchment Inflow Factor for East Kowloon in Table T-4 of GEFS
Flow Rate (with Catchment Inflow Factor)	=	1009.4 m³/day
Contributing Population	=	3738 people
Peaking factor	=	6 Refer to Table T-5 of GESF for population 1,000-5,000 incl. stormwater allowance
Peak Flow	=	70.1 litre/sec
Peak Flow with Backwash from Swimming Pool	=	81.6 litre/sec

Table 2a Hydraulic Capacity of Existing Sewers

Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Pipe Length	Invert Level 1	Invert Level 2	g	k _s	s	v	V	Area	Q	Estimated Capacity
			mm	m	mPD	mPD	m/s ²	m	m ² /s	m/s	m ²	m ³ /s	L/s	
S1-S2	FLH4013520	FMH4051820	225	4.0	2.07	1.52	9.81	0.00060	0.136	0.000001	4.86	0.04	0.19	193
S2-S3	FMH4051820	FMH4043147	225	14.1	1.52	1.25	9.81	0.00060	0.019	0.000001	1.81	0.04	0.07	72
S3-S4	FMH4043147	FMH4043148	525	42.6	0.63	0.49	9.81	0.00060	0.003	0.000001	1.28	0.22	0.28	277
S4-S5	FMH4043148	FMH4043149	525	28.8	0.49	0.40	9.81	0.00060	0.003	0.000001	1.25	0.22	0.27	270
S5-S6	FMH4043149	FMH4043150	525	22.7	0.40	0.32	9.81	0.00060	0.004	0.000001	1.32	0.22	0.29	287
S6-S7	FMH4043150	FGJ4003260	525	1.4	0.32	0.28	9.81	0.00060	0.029	0.000001	3.80	0.22	0.82	822

Table 2b Hydraulic Capacity of Existing Sewers (After Upgrading Segment S2-S3)

Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Pipe Length	Invert Level 1	Invert Level 2	g	k _s	s	v	V	Area	Q	Estimated Capacity
			mm	m	mPD	mPD	m/s ²	m	m ² /s	m/s	m ²	m ³ /s	L/s	
S1-S2	FLH4013520	FMH4051820	225	4.0	2.07	1.52	9.81	0.00060	0.136	0.000001	4.86	0.04	0.19	193
S2-S3	FMH4051820	FMH4043147	300	14.1	1.52	1.25	9.81	0.00060	0.019	0.000001	2.18	0.07	0.15	154
S3-S4	FMH4043147	FMH4043148	525	42.6	0.63	0.49	9.81	0.00060	0.003	0.000001	1.28	0.22	0.28	277
S4-S5	FMH4043148	FMH4043149	525	28.8	0.49	0.40	9.81	0.00060	0.003	0.000001	1.25	0.22	0.27	270
S5-S6	FMH4043149	FMH4043150	525	22.7	0.40	0.32	9.81	0.00060	0.004	0.000001	1.32	0.22	0.29	287
S6-S7	FMH4043150	FGJ4003260	525	1.4	0.32	0.28	9.81	0.00060	0.029	0.000001	3.80	0.22	0.82	822

- Remarks:
- (1) g=gravitational acceleration; k_s=equivalent sand roughness; s=gradient; v=kinematic viscosity of water; V=mean velocity
 - (2) Table 2a & 2b: The value of k_s = 0.6mm is used for the calculation of slimed clayware sewer, poor condition (based on Table 5: Recommended roughness values in Sewerage Manual)
 - (3) The value of velocity (V) is referred to the Tables for the hydraulic design of pipes, sewers and channels (8th edition)
 - (4) Equation used:
$$V = \frac{1.49}{1.485} \sqrt[4]{\frac{8gDs}{3.7D + \frac{2.51v}{D\sqrt{2gDs}}}}$$

Table 3 Calculation for Sewage Generation Rate of the Existing Surrounding Building

Catchment A (S3)

1. Proposed Development (Site 3E1) - A/K22/43

Total number of residential units	=	888 units
Total GFA for Retail Area	=	2405 m ²
Total GFA for Social Services	=	3087 m ²
Sewage Generation rate	=	508.0 m³/day -- from SIA of A/K22/43 (Appendix 3.3)

2. Kerry D.G. Warehouse

Business Services

Assumed Area	=	26917 m ² -- from SIA of A/K22/43 (Appendix 3.3)
Assumed floor area per employee	=	18.18 m ² per worker -- (refer to Table 8 of CIFSUS - Business Services)
Total number of employees	=	1481 employees
Design flow for commercial activities	=	0.08 m ³ /employee/day -- (refer to Table T-2 of GESF - J6)
Sewage Generation rate	=	118.5 m³/day

Retail

Assumed Area	=	17129 m ² -- from SIA of A/K22/43 (Appendix 3.3)
Assumed floor area per employee	=	28.57 m ² per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	600 employees
Design flow for commercial activities	=	0.28 m ³ /employee/day -- (refer to Table T-2 of GESF - J4)
Sewage Generation rate	=	168.0 m³/day

F&B

Assumed Area	=	4894 m ² -- from SIA of A/K22/43 (Appendix 3.3)
Assumed floor area per employee	=	19.61 m ² per worker -- (refer to Table 8 of CIFSUS - Restaurants)
Total number of employees	=	250 employees
Design flow for commercial activities	=	1.58 m ³ /employee/day -- (refer to Table T-2 of GESF - J10)
Sewage Generation rate	=	395.0 m³/day

Total ADWF	=	681.5 m ³ /day
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3. NKIL 6647 (Tower T1&T2)

Total number of residential units	=	606 units
Total GFA for Social Services	=	124 m ²
ADWF to new manhole FMH-A	=	443.0 m³/day

Swimming Pool of NKIL 6647

Outdoor Swimming Pool

Assumed Area of Swimming Pool	=	463.6 m ²
Average Depth of Water	=	1.2 m
Volume of Swimming Pool (Ordinary Assumption)	=	556.3 m ³
Turnover Rate	=	6 hr
Required Surface Loading Rate of Filter	=	93 m ³ /m ² /hr
Filter Areas required	=	1.0 m ²
Adopted Surface Loading Rate of Filter	=	50 m ³ /m ² /hr
Adopted Filter Area	=	1.9 m ²
Backwash Duration	=	7 min/d
Backwash flow rate	=	30 m ³ /m ² /hr
Average Daily Flow Rate for Swimming Pool Backwashing	=	6.5 m ³ /day
Flowrate for Swimming Pool Backwashing in 7 mins	=	15.5 litre/sec

Indoor Swimming Pool

Assumed Area of Swimming Pool	=	625.0 m ²
Average Depth of Water	=	1.2 m
Volume of Swimming Pool (Ordinary Assumption)	=	750.0 m ³
Turnover Rate	=	4 hr
Required Surface Loading Rate of Filter	=	188 m ³ /m ² /hr
Filter Areas required	=	1.0 m ²
Adopted Surface Loading Rate of Filter	=	50 m ³ /m ² /hr
Adopted Filter Area	=	3.8 m ²
Backwash Duration	=	7 min/d
Backwash flow rate	=	30 m ³ /m ² /hr
Average Daily Flow Rate for Swimming Pool Backwashing	=	13.1 m ³ /day
Flowrate for Swimming Pool Backwashing in 7 mins	=	31.3 litre/sec

Overall Catchment A

Estimated Flow Rate	=	1632.5 m ³ /day
Catchment Inflow Factor	=	1.10 Catchment Inflow Factor for East Kowloon in Table T-4 of GEFS
Total Flow Rate	=	1795.7 m³/day

Catchment B (S4)

1. Pacific Trade Centre (50%)

Assumed Area	=	70856 m ² -- from SIA of A/K22/43 (Appendix 3.3)
Assumed floor area per employee	=	43.48 m ² per worker -- (refer to Table 8 of CIFSUS - Manufacturing)
Total number of employees	=	1630 employees
Design flow for commercial activities	=	0.53 m ³ /employee/day -- (refer to Table T-2 of GESF - J1 + East Kowloon)
Sewage Generation rate	=	863.9 m ³ /day
ADWF to FMH4043148 (S4)	=	432.0 m³/day

2. NKIL 6647 (Tower T3&T5)

Total number of residential units	=	606 units
Total GFA for Social Services	=	469 m ²
ADWF to FMH4043148 (S4)	=	446.2 m³/day

Overall Catchment B

Estimated Flow Rate	=	878.2 m ³ /day
Catchment Inflow Factor	=	1.10 Catchment Inflow Factor for East Kowloon in Table T-4 of GEFS
Total Flow Rate	=	966.0 m³/day

Catchment C (S5)

1. Pacific Trade Centre (50%)

Assumed Area	=	70856 m ² -- from SIA of A/K22/43 (Appendix 3.3)
Assumed floor area per employee	=	43.48 m ² per worker -- (refer to Table 8 of CIFSUS - Retail Trade)
Total number of employees	=	1630 employees
Design flow for commercial activities	=	0.53 m ³ /employee/day -- (refer to Table T-2 of GESF - J1 + East Kowloon)
Sewage Generation rate	=	863.9 m ³ /day
ADWF to FMH4043149 (S5)	=	432.0 m³/day

Overall Catchment C

Estimated Flow Rate	=	432.0 m ³ /day
Catchment Inflow Factor	=	1.10 Catchment Inflow Factor for East Kowloon in Table T-4 of GEFS
Total Flow Rate	=	475.1 m³/day

Catchment D (S6)

1. NKIL 6647 (T6, T8, T9)

Total number of residential units	=	383 units
Total GFA for Retail & F&B	=	600 m ²
Total GFA for Clubhouse	=	2053 m ²
ADWF to FMH4043150 (S6)	=	336.3 m³/day

Overall Catchment D

Estimated Flow Rate	=	336.3 m ³ /day
Catchment Inflow Factor	=	1.10 Catchment Inflow Factor for East Kowloon in Table T-4 of GEFS
Total Flow Rate	=	369.9 m³/day

Table 4a Comparison of the Hydraulic Capacity of Existing Sewers for Sewerage generated from the Proposed Development and Surrounding Catchment Areas

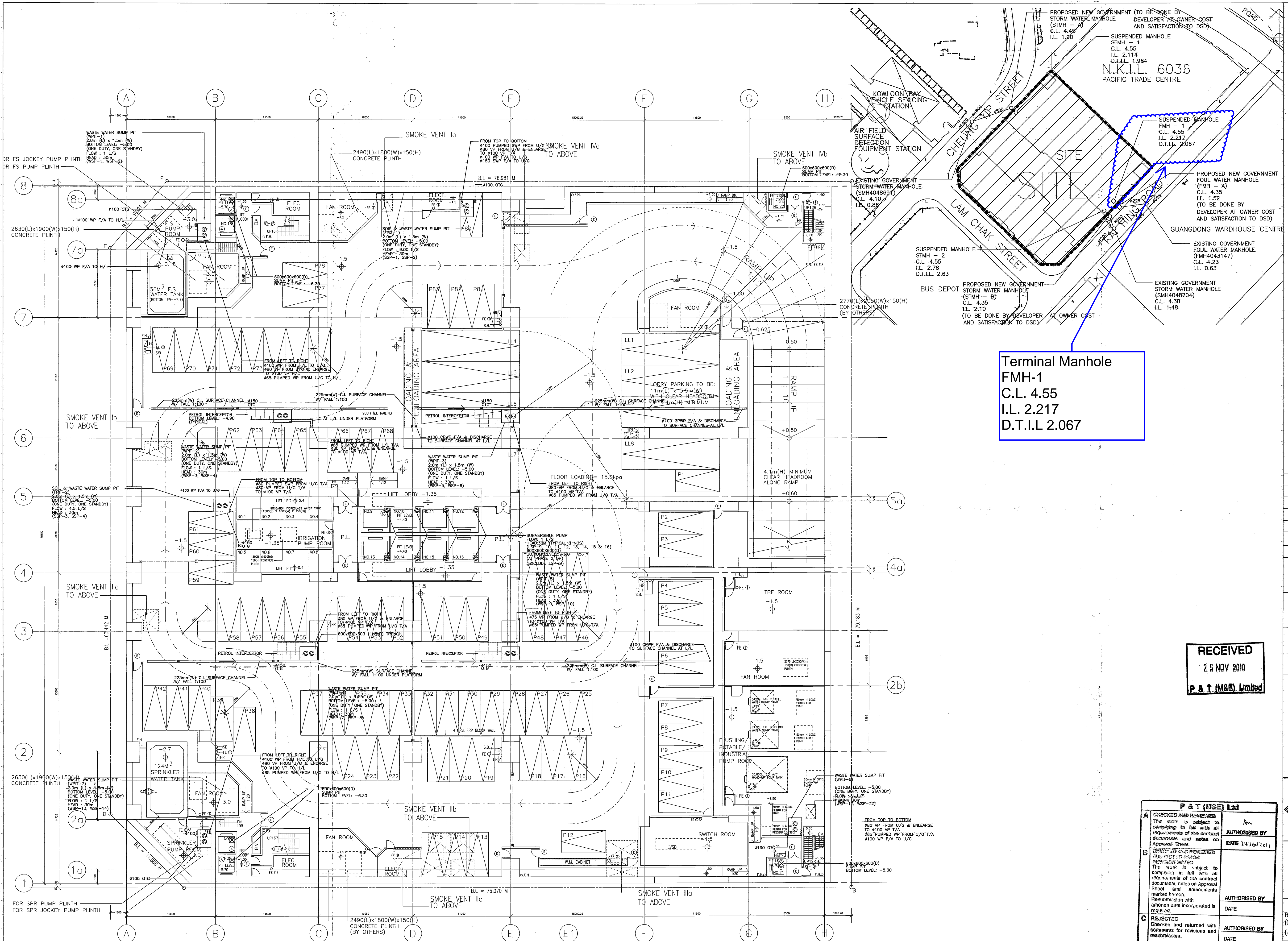
Segment	Pipe Dia. (mm)	Pipe Length (m)	Gradient	Estimated Capacity (L/s)	Catchment Involved	ADWF (m ³ /day)	Contributing Population	Peaking Factor	Swimming Pool/Public Toilet (L/s)	Peak Flow from the Proposed Development and Catchment Areas (L/s)	Contribution from the Proposed Development and the Surrounding Catchment Areas (%)	Status
S1-S2	225	4.0	0.136	193	Application Site	1009.4	3738	6	11.5	81.6	42.2%	OK
S2-S3	225	14.1	0.019	72	Application Site	1009.4	3738	6	11.5	81.6	113.1%	Not Adequate
S3-S4	525	42.6	0.003	277	Application Site + A	2805.1	10389	4	58.2	188.1	67.9%	OK
S4-S5	525	28.8	0.003	270	Application Site + A + B	3771.0	13967	4	58.2	232.8	86.3%	OK
S5-S6	525	22.7	0.004	287	Application Site + A + B + C	4246.2	15727	4	58.2	254.8	88.9%	OK
S6-S7	525	1.4	0.029	822	Application Site + A + B + C + D	4616.1	17097	4	58.2	271.9	33.1%	OK

Table 4b Comparison of the Hydraulic Capacity of Existing Sewers for Sewerage generated from the Proposed Development and Surrounding Catchment Areas (After Upgrade)

Segment	Pipe Dia. (mm)	Pipe Length (m)	Gradient	Estimated Capacity (L/s)	Catchment Involved	ADWF (m ³ /day)	Contributing Population	Peaking Factor	Swimming Pool/Public Toilet (L/s)	Peak Flow from the Proposed Development and Catchment Areas (L/s)	Contribution from the Proposed Development and the Surrounding Catchment Areas (%)	Status
S1-S2	225	4.0	0.136	193	Application Site	1009.4	3738	6	11.5	81.6	42.2%	OK
S2-S3	300	14.1	0.019	154	Application Site	1009.4	3738	6	11.5	81.6	52.9%	OK
S3-S4	525	42.6	0.003	277	Application Site + A	2805.1	10389	4	58.2	188.1	67.9%	OK
S4-S5	525	28.8	0.003	270	Application Site + A + B	3771.0	13967	4	58.2	232.8	86.3%	OK
S5-S6	525	22.7	0.004	287	Application Site + A + B + C	4246.2	15727	4	58.2	254.8	88.9%	OK
S6-S7	525	1.4	0.029	822	Application Site + A + B + C + D	4616.1	17097	4	58.2	271.9	33.1%	OK

Remarks: (a) The value of peaking factor = 6 is used for population 1,000-5,000 incl. stormwater allowance (refers to Table T-5 of GESF)
 (b) The value of peaking factor = 4 is used for population 10,000-50,000 incl. stormwater allowance (refers to Table T-5 of GESF)

Appendix 3.2 Existing Drainage Plan



Terminal Manhole
 FMH-1
 C.L. 4.55
 I.L. 2.217
 D.T.I.L. 2.067

RECEIVED
 25 NOV 2010
 P. A. T. (M&E) Limited

P & T (M&E) Ltd	
A CHECKED AND REVIEWED The work is subject to compliance in full with all requirements of the contract documents and notes on approved sheets.	AUTHORISED BY DATE 14/12/2011
B CHECKED AND REVIEWED The work is subject to compliance in full with all requirements of the contract documents, notes on approved sheets and amendments marked hereon. Resubmission with amendments incorporated is required.	AUTHORISED BY DATE
C REJECTED Checked and returned with comments for revisions and resubmission.	AUTHORISED BY DATE

Remarks: Refer to covering Contract Instruction No. / Approval Sheet No. 219/11/16/10-14

REV.	DESCRIPTION	DATE
AS FITTED DRAWING		13-11-10

PROJECT MANAGER
 BORDON CONSTRUCTION CO., LTD

CONSULTANT
 P & T (M&E) Ltd
 HONG KONG, PHILIP & TRENDS INTERNATIONAL INC. / PARTNER LTD
 25/F 258 BELLASHER ROAD, HONG KONG
 TEL: 333 8002
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ARCHITECT:
 CHAU & LEUNG ARCHITECTS & ENGINEERS LTD

SUB-CONTRACTOR:
 YUEN CHEONG ENGINEERING CO., LTD.
 源昌工程有限公司 TEL: 2381 8327

PROJECT:
 CHEUNG YIP ST. / LAM CHAK ST.
 N.K.I.L. 6215

TITLE:
 BASEMENT FLOOR DRAINAGE LAYOUT PLAN
 (LOW LEVEL) (PHASE 1)
 (AS FITTED DRAWING)

SCALE: 1 : 200 DATE: 13-11-10 Rev.

DRAWING No.: D1/201

APPROVED BY: —

CHECKED BY: Raymond Mark

DRAWN BY: Y.K.Luk

BASEMENT PLAN
 (LOW LEVEL)

Appendix 3.3 Extracted Pages from Planning Application No. A/K22/43

Table 4-3 Proposed Sewage Discharge Locations

Sites	Upstream Manhole	Downstream Manhole	Sewer size (mm)	Upstream Invert Level (mPD)	Downstream Invert Level (mPD)	Capacity (L/s)
3E1	FMH4036432	FMH4043143	225	2.00	1.80	80.83
3E2	FMH4096818	FMH4100328	300	2.54	1.11	236.15
4C4	FTH4011157	FMH4098424	300	2.48	2.13	190.66
4C5	FTH4011160	FMH4098431	300	1.74	1.35	212.82

- 4.3.2 The existing sewer at the discharge location has sufficient capacity to convey the proposed flows as detailed in **Appendix C**.
- 4.3.3 The development terminal manhole will be located close to the lot boundary, exact location will be determined in detailed design.
- 4.3.4 The proposed development utilizes the existing sewer networks; no existing sewer pipe is proposed to be abandoned. In case future detailed design will require the abandoning of existing sewers, these should comply with DSD Technical Circular No. 1/2022 - Handling of Abandoned Pipes under DSD's Purview.

Estimation of Sewage Flows Estimation from Catchments Not Affected by the Proposed Development

Design Code

1. Based on EPD Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning.
2. Planning Department CIFSUS.
3. BS EN 12056-2:2000 Gravity drainage systems inside buildings

External Discharge - Near Sites 3E1 and 3E2

ADWF Sewage Flow Estimates	Estimation	Unit	Remark
E_1 Kai Tak Fire Station			
Type	Social Services	-	
Total GFA	6,450	m ²	Building footprint on 5 floors
Assumed GFA per Employee	30.3	m ² /Person	Table 8 CIFSUS - Social Services
Employee Population	213	Persons	
Unit flow factor (UFF)	0.28	m ³ /person/day	Table T-2: Employee & Community, Social & Personal Services
Catchment Inflow Factors(PCIF)	1.1	-	Table T-4 of GESF - East Kowloon
ADWF	65.60	m ³ /day	
Total building ADWF	65.60	m ³ /day	
Discharges to:			
FMH4096823	65.60	m ³ /day	assumed
E_2 Pacific Trade Centre			
Type	Manufacturing	-	
Total GFA	70,856	m ²	Building footprint time 17 floors. Source: geoinfo and https://property.jll.com.hk/en/industrial-lease/hong-kong/kowloon-bay/pacific-trade-centre-hk-p-1933
Assumed GFA per Employee	43.5	m ² /Person	Table 8 CIFSUS - Manufacturing
Employee Population	1,630	Persons	
Unit flow factor (UFF)	0.53	m ³ /person/day	Table T-3: Employee & J1 Manufacturing - East Kowloon
Catchment Inflow Factors(PCIF)	1.1	-	Table T-4 of GESF - East Kowloon
ADWF	950.29	m ³ /day	
Total building ADWF	950.29	m ³ /day	
Discharges to:			
FMH4043148	475.15	m ³ /day	Assumed 50% flow split between the two discharge locations
FMH4043149	475.15	m ³ /day	Assumed 50% flow split between the two discharge locations
E_3 Harbourside HQ			
Type	Business Services	-	
Total GFA	63,080	m ²	Source: https://office.propwisser.com.hk/en/Building/kowloon-bay/harbourside-hq/316
Assumed GFA per Employee	18.2	m ² /Person	Table 8 CIFSUS - Business Services
Employee Population	3,470	Persons	
Unit flow factor (UFF)	0.08	m ³ /person/day	Table T-2: Employee & J6 Finance, Insurance, Real Estate & Business Services
Catchment Inflow Factors(PCIF)	1.1	-	Table T-4 of GESF - East Kowloon
ADWF	42.81	m ³ /day	
Total building ADWF	42.81	m ³ /day	
Discharges to:			
FMH4043146	42.81	m ³ /day	
E_4 Kerry D.G. Warehouse			
Type	Business Services	-	Source: https://www.tpb.gov.hk/en/papers/MPC/K/A_K22_27/A_K22_27_MainPaper(revised).pdf
Total GFA	26,917	m ²	Assumed 55% office
Assumed GFA per Employee	18.2	m ² /Person	Table 8 CIFSUS - Business Services
Employee Population	1,481	Persons	
Unit flow factor (UFF)	0.08	m ³ /person/day	Table T-2: Employee & J6 Finance, Insurance, Real Estate & Business Services
Catchment Inflow Factors(PCIF)	1.1	-	Table T-4 of GESF - East Kowloon
ADWF	130.33	m ³ /day	
Type	Retail Trade	-	
Total GFA	17,129	m ²	Assumed 35% retail trade
Assumed GFA per Employee	28.6	m ² /Person	Table 8 CIFSUS - Retail Trade
Employee Population	600	Persons	
Unit flow factor (UFF)	0.28	m ³ /person/day	Table T-2: Employee & J4 Retail
Catchment Inflow Factors(PCIF)	1.1	-	Table T-4 of GESF - East Kowloon
ADWF	184.80	m ³ /day	
Type	Restaurants	-	
Total GFA	4,894	m ²	Assumed 10% restaurants
Assumed GFA per Employee	19.6	m ² /Person	Table 8 CIFSUS - Restaurants
Employee Population	250	Persons	
Unit flow factor (UFF)	1.58	m ³ /person/day	Table T-2: Employee-Customers & J10 Restaurants
Catchment Inflow Factors(PCIF)	1.1	-	Table T-4 of GESF - East Kowloon
ADWF	434.50	m ³ /day	
Total building ADWF	749.63	m ³ /day	
Discharges to:			
FMH4043143	749.63	m ³ /day	
E_5 NKIL 6647			
Type	Residential	-	
Number of flats	1,782	flats	Source: https://www.tpb.gov.hk/plan_application/Attachment/20210803/s16fi_A_K22_31_4_gist.pdf
Average household	2.7	Persons/flat	Census, Household Characteristics of Population in Kowloon City District, 2021
Population	4,812	Persons	
Unit flow factor (UFF)	0.27	m ³ /person/day	Table T-1 of GESF - Residential R2
Catchment Inflow Factors(PCIF)	1.0	-	GESF section 10 - Not applicable for new developments.
ADWF	1,299.24	m ³ /day	
Type	Social Services	-	
Total GFA	5,500	m ²	Club house
Assumed GFA per Employee	30.3	m ² /Person	assumed
Employee Population	182	Persons	Table 8 CIFSUS - Social Services
Unit flow factor (UFF)	0.28	m ³ /person/day	Table T-2: Employee & Community, Social & Personal Services
Catchment Inflow Factors(PCIF)	1.0	-	GESF section 10 - Not applicable for new developments.
ADWF	50.96	m ³ /day	
Total building ADWF	1,350.20	m ³ /day	
Discharges to:			
FMH4043145	450.07	m ³ /day	Assumed split in 3 terminal manholes
FMH4043147	450.07	m ³ /day	Assumed split in 3 terminal manholes
FMH4043149	450.07	m ³ /day	Assumed split in 3 terminal manholes
E_6 Gas station			
Type	Retail Trade	-	
Total GFA	106	m ²	Source: plan form geoinfo map
Assumed GFA per Employee	28.6	m ² /Person	Table 8 CIFSUS - Retail Trade
Employee Population	4	Persons	
Unit flow factor (UFF)	0.28	m ³ /person/day	Table T-2: Employee & J4 Retail
Catchment Inflow Factors(PCIF)	1.1	-	Table T-4 of GESF - East Kowloon
ADWF	1.23	m ³ /day	
Total building ADWF	1.23	m ³ /day	
Discharges to:			
FMH4036900	1.23	m ³ /day	EXTERNAL (on box culvert)

Localised Sewage Flow Estimates	Estimation	Unit	Remark
EL_1 Hong Kong Children's Hospital			
Total building Localised Flow	36.24	l/s	information provided by development
Discharges to:			

Estimation of Sewage Flows Estimation for Proposed Development

Design Code

1. Based on EPD Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning.
2. Planning Department CIFSUS.
3. BS EN 12056-2:2000 Gravity drainage systems inside buildings

Proposed Discharge - Sites 3E1 and 3E2

ADWF Sewage Flow Estimates			
	Estimation	Unit	Remark
P_1 Site 3E1			
Type	Residential	-	
Number of flats	888	flats	
Average household	2.7	Persons/flat	Census, Household Characteristics of Population in Kowloon City District, 2021
Population	2,398	Persons	
Unit flow factor (UFF)	0.19	m ³ /person/day	Table T-1 of GESF - Residential R1
Catchment Inflow Factors(PCIF)	1.0	-	GESF section 10 - Not applicable for new developments.
ADWF	455.62	m ³ /day	
Retail Trade			
Type	Retail Trade	-	
Total GFA	2,405	m ²	FROM PRELIM LAYOUT
Assumed GFA per Employee	28.6	m ² /Person	Table 8 CIFSUS - Retail Trade
Employee Population	85	Persons	
Unit flow factor (UFF)	0.28	m ³ /person/day	Table T-2: Employee & J4 Retail
Catchment Inflow Factors(PCIF)	1.0	-	GESF section 10 - Not applicable for new developments.
ADWF	23.80	m ³ /day	
Social Services			
Type	Social Services	-	Club house and social and welfare facilities
Total GFA	3,087	m ²	FROM PRELIM LAYOUT
Assumed GFA per Employee	30.3	m ² /Person	Table 8 CIFSUS - Social Services
Employee Population	102	Persons	
Unit flow factor (UFF)	0.28	m ³ /person/day	Table T-2: Employee & Community, Social & Personal Services
Catchment Inflow Factors(PCIF)	1.0	-	GESF section 10 - Not applicable for new developments.
ADWF	28.56	m ³ /day	
Total building ADWF	507.98	m ³ /day	
Discharges to:			
TMH_3E1	507.98	m ³ /day	
P_2 Site 3E2			
Type	Residential	-	
Number of flats	1,040	flats	
Average household	2.7	Persons/flat	Census, Household Characteristics of Population in Kowloon City District, 2021
Employee Population	2,808	Persons	
Unit flow factor (UFF)	0.19	m ³ /person/day	Table T-1 of GESF - Residential R1
Catchment Inflow Factors(PCIF)	1.0	-	GESF section 10 - Not applicable for new developments.
ADWF	533.52	m ³ /day	
Retail Trade			
Type	Retail Trade	-	
Total GFA	3,843	m ²	FROM PRELIM LAYOUT
Assumed GFA per Employee	28.6	m ² /Person	Table 8 CIFSUS - Retail Trade
Employee Population	135	Persons	
Unit flow factor (UFF)	0.28	m ³ /person/day	Table T-2: Employee & J4 Retail
Catchment Inflow Factors(PCIF)	1.0	-	GESF section 10 - Not applicable for new developments.
ADWF	37.80	m ³ /day	
Social Services			
Type	Social Services	-	Club house and social
Total GFA	2,065	m ²	FROM PRELIM LAYOUT
Assumed GFA per Employee	30.3	m ² /Person	Table 8 CIFSUS - Social Services
Employee Population	69	Persons	
Unit flow factor (UFF)	0.28	m ³ /person/day	Table T-2: Employee & Community, Social & Personal Services
Catchment Inflow Factors(PCIF)	1.0	-	GESF section 10 - Not applicable for new developments.
ADWF	19.32	m ³ /day	
Total building ADWF	590.64	m ³ /day	
Discharges to:			
TMH_3E2	590.64	m ³ /day	
TOT ADWF	1,098.62	m³/day	

Appendix 3.4 Extracted Pages from Planning Application No. A/K22/31

**Broad Development Parameters of the Applied Use/Development
in respect of Application No. A/K22/31**

關乎申請編號 A/K22/31 的擬議用途/發展的概括發展規範

Revised broad development parameters in view of
the further information received on 28.1.2022, 31.1.2022 and 9.2.2022

因應於 2022 年 1 月 28 日、2022 年 1 月 31 日及 2022 年 2 月 9 日接獲的進一步資料而修訂的概括發展規範

Application No. 申請編號	A/K22/31		
Location/address 位置/地址	New Kowloon Inland Lot Nos. 5805, 5806 and 5982, 1-5 Kai Hing Road, Kowloon Bay, Kowloon 九龍九龍灣啟興道 1-5 號新九龍內地段第 5805 號、5806 號及 5982 號		
Site area 地盤面積	About 約 15,404 sq. m 平方米		
Plan 圖則	Section 16 application 第 16 條申請 Approved Kai Tak Outline Zoning Plan No. S/K22/6 啟德分區計劃大綱核准圖編號 S/K22/6		
	Further information received 接獲進一步資料 Draft Kai Tak Outline Zoning Plan No. S/K22/7 啟德分區計劃大綱草圖編號 S/K22/7		
Zoning 地帶	Section 16 application 第 16 條申請 "Commercial (2)" 「商業(2)」		
	Further information received 接獲進一步資料 "Commercial (2)" 「商業(2)」		
Applied use/ development 申請用途/發展	Proposed Residential Development with Public Waterfront Promenade, a Pier (Landing Steps) and Shop and Services/Eating Place 擬議住宅發展連公眾海濱長廊、碼頭(登岸梯級)及商店及服務行業 / 食肆		
Gross floor area and/or plot ratio 總樓面面積及/ 或地積比率		sq. m 平方米	Plot ratio 地積比率
	Domestic 住用	About 約 76,420	About 約 4.96
	Non-domestic 非住用	About 約 600	About 約 0.04
No. of block 幢數	Domestic 住用	7	
	Non-domestic 非住用	1	
	Composite 綜合用途	-	

Building height/No. of storeys 建築物高度／層數	Domestic 住用	-	m 米
		Not more than 不多於 100	mPD 米(主水平基準上)
		Not more than 不多於 28 2	Storey(s) 層 Exclude 不包括 Basement 地庫
	Non-domestic 非住用	-	m 米
		-	mPD 米(主水平基準上)
		1	Storey(s) 層
	Composite 綜合用途	-	m 米
		-	mPD 米(主水平基準上)
		-	Storey(s) 層
Site coverage 上蓋面積	About 約 33.33 %		
No. of units 單位數目	Not more than 不多於 1,782 Flats 住宅單位		
Open space 休憩用地	Private 私人	Not less than 不少於 4,634	sq. m 平方米
	Public 公眾	About 約 3,821	sq. m 平方米
No. of parking spaces and loading / unloading spaces 停車位及上落客貨車位數目	Total no. of vehicle spaces 停車位總數		568
	Private Car Parking Spaces 私家車車位		437
	Motorcycle Parking Spaces 電單車車位		19
	Bicycle Parking Spaces 單車停泊位		112
	Total no. of vehicle loading/unloading bays/lay-bys 上落客貨車位／停車處總數		8
Heavy Goods Vehicle Spaces 重型貨車車位		8	

* 有關資料是為方便市民大眾參考而提供。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會概不負責。若有任何疑問，應查閱申請人提交的文件。

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