

Appendix 4

Environmental Air Impact Assessment

**PROPOSED EXHIBITION OR CONVENTION HALL WITHIN
THE PERMITTED IN-SITU CONVERSION OF EXISTING
HOTEL INTO RESIDENTIAL DEVELOPMENT CUM SHOP
AND SERVICES / EATING PLACE IN
“RESIDENTIAL (GROUP A) 12”,
NO. 29 ON CHUN STREET, MA ON SHAN
(SHA TIN TOWN LOT NO. 461)**

ENVIRONMENTAL AIR QUALITY IMPACT ASSESSMENT REPORT

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AIMS

To assess the air quality impact due to the industrial and vehicular emissions on the proposed development at Sha Tin Town Lot No. 461, Ma On Shan, Shatin.

To assess the air quality impact with respect to the air quality requirements stipulated in the Hong Kong Planning Standards & Guidelines (HKPSG).

SUMMARY

The buffer distance requirements in the proposed Development as setout for vehicular emissions in Table 3.1, Chapter 9 of HKPSG are satisfied. No industrial chimney was identified within 500m of the site. Therefore, no adverse air quality impacts on the proposed Development are anticipated.

Control requirements in the Air Pollution Control (Construction Dust) Regulation, Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation and Air Pollution Control (Fuel Restriction) Regulations will be complied with. Relevant mitigation measures will be implemented accordingly. Under such circumstances, no adverse air quality impacts in association with the proposed Development during construction phase are anticipated.

1. INTRODUCTION

- 1.1 Westwood Hong & Associates Ltd. was commissioned to prepare an environmental air quality impact assessment report to assess potential air quality impact caused by air pollution sources in the vicinity of the proposed development at Ma On Shan Town Lot No. 461, Ma On Shan (the “proposed Development”).
- 1.2 This environmental air quality impact assessment report supports the Section 16 Planning Application for the proposed Development.
- 1.3 This report has been prepared based on the architectural drawings as provided in Appendix 1.
- 1.4 The development will provide 772 nos. of residential flats.
- 1.5 The report presents assessments of the following:
- Industrial chimney emission impact on the proposed Development;
 - Marine emission impact on the proposed Development;
 - Vehicular emission impact on the proposed Development; and
 - Air Quality impact control during construction.

2. SITE LOCATION

Site Location

- 2.1 The project site is located at No. 29 On Chun Street, Ma On Shan and fronts onto Tolo Harbour. It is bounded by On Chun Street to its southeast, a sitting-out area to its northeast, Ma On Shan promenade to its northwest and a temporary open-air carpark to its southwest (Figure 1).

Building Layout

- 2.2 The project site is currently occupied by the 15-storey Ma On Shan Horizon Suites Hotel. The architectural drawings are provided in Appendix 1.
- 2.3 The future residential flats will rely on openable window for ventilation. The commercial uses area are being served with central air ventilation system, not relying on openable window for ventilation.

Programme for Construction Phase and Operation Phase

- 2.4 The major construction activities of the proposed Development are Alterations and Additions works (A&A works). The A&A works include the demolition of the roof and the uppermost typical floor of the existing hotel building, reconstruction of the new roof, construction of new pipe ducts at the typical floor, adjustment of internal partitions at podium floors as per the approved A&A plans, and all associated interior fitting-out works. Detailed construction programme is not available at this stage.
- 2.5 The project involves a wholesale conversion of the existing hotel development into a residential and commercial development. There will be no overlap between the construction and operation phases. The commercial part will not be opened during the A&A work. The tentative occupation year of the proposed Development is 2028.

3. SITE INSPECTION

Site surveys

- 3.1 Site surveys were conducted on 4 December and 10 September 2024. Photographs taken on site are given in Appendix 2. The details of the site surveys (i.e. time, weather condition and route) are provided in Appendix 3.

Industrial Emissions in the Vicinity

- 3.2 Site inspections have revealed that there was not any industrial chimney locating within 500m of the project site.
- 3.3 The site inspections have confirmed that odour was not detected at the site boundaries and that emission of dust or fluff was not observed from buildings in the vicinity of the proposed Development.

4. ENVIRONMENTAL LEGISLATION AND STANDARDS

Hong Kong Air Quality Objectives

- 4.1 Table 4.1 shows the Hong Kong Air Quality Objectives (HKAQOs) that updated in year 2025:-

Table 4.1 Hong Kong Air Quality Objectives

Pollutant	Averaging Time	AQO concentration ($\mu\text{g}/\text{m}^3$)	Number of exceedances allowed
Sulphur Dioxide	10 minute	500	3
	24 hour	40	3
Respirable Suspended Particulate (PM10) (ii)	24 hour	75	9
	Annual	30	NA
Fine Suspended Particulates (PM2.5) (iii)	24 hour	37.5	18
	Annual	15	NA
Nitrogen Dioxide	1 hour	200	18
	24 hour	120	9
	Annual	40	NA
Carbon Monoxide	1 hour	30,000	0
	8 hour	10,000	0
	24 hour	4000	0
Ozone	8 hour	160	9
	Peak season	100	NA
Lead	Annual	0.5	NA

- Notes
- (i) All measurements of the concentration of gaseous air pollutants, i.e., sulphur dioxide, nitrogen dioxide, ozone and carbon monoxide, are to be adjusted to a reference temperature of 293 Kelvin and a reference pressure of 101.325 kilopascal.
 - (ii) Respirable suspended particulates means suspended particles in air with a nominal aerodynamic diameter of 10 micrometres or less.
 - (iii) Fine suspended particulates means suspended particles in air with a nominal aerodynamic diameter of 2.5 micrometres or less.
 - (iv) 24 hour level for NO_2 , peak season level for O_3 and 24 hour level for CO are new parameters in World Health Organization (WHO) Air Quality Guidelines (AQGs) as well as HKAQOs.

Air Pollution Control (Construction Dust) Regulation

- 4.2 Enacted under Section 43 of the APCO, the Air Pollution Control (Construction Dust) Regulation defines notifiable and regulatory works to ensure effective dust abatement measures have been properly implemented to reduce dust emissions for a number of construction activities.
- 4.3 The Regulation requires that any notifiable work shall give advance notice to EPD, and the contractor shall ensure that the notifiable and regulatory works are carried out in accordance with the Schedule of the Regulation. Dust control and suppression measures are also provided in the Schedule.

Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation

- 4.4 This Regulation requires Non-road Mobile Machinery (NRMM), except those exempted, to comply with the prescribed emission standards. All regulated machines sold or leased for use in Hong Kong must be approved or exempted with a proper label in a prescribed format issued by EPD. Only approved or exempted NRMMs with a proper label are allowed to be used in specified activities and locations including construction sites, container terminals and back up facilities, restricted areas of the airport, designated waste disposal facilities and specified processes.

Air Pollution Control (Fuel Restriction) Regulations

- 4.5 This Regulation was enacted in 1990 to impose legal control on the type of fuels allowed for use and their sulphur contents in commercial and industrial processes to reduce sulphur dioxide (SO₂) emissions. In April 2025, the Regulation was amended to tighten the control requirements of liquid fuels, i.e. using liquid fuel with a sulphur content of less than 0.001% by weight. The Regulation does not apply to any fuel-using equipment that is used or operated in premises used solely as a dwelling, or is used or operated in or on a vessel, motor vehicle, railway locomotive or aircraft.

Recommended Pollution Control Clauses for Construction Contracts

- 4.6 The Recommended Pollution Control Clauses (RPCC) are generally good engineering practice to minimize inconvenience and environmental nuisance to nearby residents and other sensitive receivers. Some modifications may be necessary to suit specific site conditions.

Hong Kong Planning Standards and Guidelines (HKPSG)

- 4.7 The AQOs shall be achieved as soon as reasonably practicable and every planning effort should be made to reduce the air pollution emitters in those areas with exceedances of AQOs.
- 4.8 The HKPSG specify buffer distances between sources of pollution and sensitive land uses to ensure acceptable air quality at the sensitive land uses. Examples of recommended buffer distance extracted from the HKPSG for relevant source and sensitive land use combinations are given in Table 4.2 below.

Table 4.2 HKPSG Recommended Buffer Distances

Source	Sensitive Land Use	Recommended Buffer Distance
Multi-storey industrial buildings without chimney	Residential areas and schools	100m
Multi-storey industrial buildings without chimney	Commercial and G/IC uses	30m
Industrial chimneys	Active and passive recreational uses	10-200m, depending on difference in height
Industrial chimneys	Passive recreational uses	5-200m, depending on difference in height
Odour sources	Sensitive uses	200m
Construction and earth moving activities	Passive recreational uses	<50m
Construction and earth moving activities	Active and passive recreational uses	>50m
Dusty uses	Sensitive uses	100m
Trunk road and primary distributor	Active and passive recreation uses	>20m
Trunk road and primary distributor	Passive recreational uses	3 – 20m
Trunk roads and primary distributor	Amenity areas	<3m
District distributor	Active and passive recreation uses	>10m
District distributor	Passive recreational uses	<10m
Local distributor	Active and passive recreation uses	>5m
Local distributor	Passive recreational uses	<5m

5. EXISTING AND FUTURE AIR QUALITY IN TAI PO AREA

5.1 Air quality monitoring data from the Air Quality Monitoring Station (AQMS) operated by EPD have been examined. The air quality monitoring data in the nearest AQMS (i.e. Tai Po) for recent 5 years (i.e. Year 2019 to Year 2023) are tabulated in Table 5.1 below.

Table 5.1 Summary of AQMS data from Year 2019 to Year 2023

Pollutant	Year	Highest 1-hour Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$)	Annual Conc. / O ₃ 's Peak Season Conc. ($\mu\text{g}/\text{m}^3$)	Highest 10-minutes Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$)	Highest 24-hour Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$)	Highest 8-hour Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$)
NO₂	2019	142	36	-	65	-
	2020	106	30	-	51	-
	2021	115	32	-	65	-
	2022	93	27	-	49	-
	2023	95	27	-	51	-
	5-year Mean	110.2 [55%]	30.4 [76%]	-	56.2 [47%]	-
	AQOs	200 (18)	40	N/A	120 (9)	N/A
SO₂	2019	-	-	20	10	-
	2020	-	-	19	7	-
	2021	-	-	15	8	-
	2022	-	-	12	5	-
	2023	-	-	27	4	-
	5-year Mean	-	-	18.6 [4%]	6.8 [17%]	-
	AQOs	N/A	N/A	500 (3)	40 (3)	N/A
RSP (PM₁₀)	2019	-	31	-	65	-
	2020	-	24	-	58	-
	2021	-	26	-	60	-
	2022	-	21	-	48	-
	2023	-	25	-	53	-
	5-year Mean	-	25.4 [85%]	-	56.8 [76%]	-
	AQOs	N/A	30	N/A	75 (9)	N/A

Pollutant	Year	Highest 1-hour Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$)	Annual Conc. / O ₃ 's Peak Season Conc. ($\mu\text{g}/\text{m}^3$)	Highest 10-minutes Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$)	Highest 24-hour Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$)	Highest 8-hour Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$)
FSP (PM_{2.5})	2019	-	<u>20</u>	-	<u>41</u>	-
	2020	-	15	-	33	-
	2021	-	<u>16</u>	-	32	-
	2022	-	14	-	30	-
	2023	-	15	-	30	-
	5-year Mean	-	<u>16 [107%]</u>	-	33.2 [89%]	-
	AQOs	N/A	15	N/A	37.5 (18)	N/A
O₃	2019	-	<u>111</u>	-	-	<u>197</u>
	2020	-	<u>103</u>	-	-	<u>165</u>
	2021	-	<u>101</u>	-	-	<u>168</u>
	2022	-	99	-	-	<u>188</u>
	2023	-	96	-	-	<u>163</u>
	5-year Mean	-	<u>102.1 [102%]</u>	-	-	<u>176.2 [110%]</u>
	AQOs	N/A	100	N/A	N/A	160 (9)

- Notes: (i) Underlined and **bold** values mean exceedance of the AQOs.
- (ii) Values in () mean the number of exceedances allowed.
- (iii) Percentages (%) of the AQOs are shown in []. The 5-year mean is the arithmetic average.
- (iv) In consideration of the numbers of exceedances allowance in the AQOs, 19th highest 1-hour NO₂, 10th highest 24-hour NO₂, 10th highest 24-hour RSP, 19th highest 24-hour FSP, 4th highest 24-hour SO₂, 4th highest 10-minute SO₂, and 10th highest 8-hour O₃ concentrations are presented in above table.
- (v) N/A – Not applicable since there are no AQOs for these parameters.

5.2 The future background concentration data predicted by PATH v3.0 in Year 2028 at Grid (45_45) are summarised in Table 5.2 below.

Table 5.2 Summary of PATH v3.0 Background in Year 2028

Pollutant	PATH Grid	Highest 1-hour Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$) ^[1]	Annual Conc. / O ₃ 's Peak Season Conc. ($\mu\text{g}/\text{m}^3$)	Highest 10-minutes Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$) ^[2]	Highest 24-hour Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$) ^[3]	Highest 8-hour Conc. beyond the allowed exceedance ($\mu\text{g}/\text{m}^3$) ^[4]
NO ₂	(45_45)	55	12	-	26	-
	AQOs	200 (18) ^[5]	40	N/A	120 (9)	N/A
SO ₂	(45_45)	-	-	25	8	-
	AQOs	N/A	N/A	500 (3)	40 (3)	N/A
RSP	(45_45)	-	20	-	54	-
	AQOs	N/A	30	N/A	75 (9)	N/A
FSP	(45_45)	-	13	-	32	-
	AQOs	N/A	15	N/A	37.5 (18)	N/A
O ₃	(45_45)	-	<u>128</u>	-	-	<u>179</u>
	AQOs	N/A	100	N/A	N/A	160 (9)
CO	(45_45)	611	-	-	523	563
	AQOs	30000 (0)	N/A	N/A	4000 (0)	10000 (0)

Noted:

- [1] 19th highest 1-hour concentration of NO₂; highest 1-hour concentration of CO
- [2] 4th highest 10-minute SO₂ concentration.
- [3] 10th highest 24-hour concentration of NO₂; 4th highest 24-hour concentration of SO₂; 10th highest 24-hour concentration of RSP; 19th highest 24-hour concentration of FSP; highest 24-hour concentration of CO.
- [4] 10th highest 8-hour concentration of O₃; highest 8-hour concentration of CO.
- [5] Values in () mean the number of exceedances allowed.
- [6] Underlined and **bold** values mean exceedance of the AQOs.

5.3 It can be seen from the above Table 5.1 that, the trends of NO₂, RSP and FSP concentrations in the area have been decreasing in general since 2019. According to the PATH data, the predicted concentrations for all the pollutants in 2028 are below the AQO limit values except the O₃. According to the latest Air Quality Objectives Review 2030, the 8-hour concentration of O₃ in most parts of Hong Kong exceed the previous AQO (no change for 8-hour concentration of O₃ in the current AQO) due to the relatively high regional background concentration of O₃. The Government will continue to work closely with the Guangdong Provincial Government to improve regional air quality, and explore the scope for further tightening the relevant AQOs in the next review.

6. AIR SENSITIVE RECEIVERS

- 6.1 In accordance with Annex 12 of the TM-EIAO, Air Sensitive Receivers (ASRs) include any domestic premises, hotel, hostel, hospital, clinic, nursery, temporary housing accommodation, school, educational institution, office, factory, shop, shopping centre, place of public worship, library, court of law, sports stadium or performing arts centre. Any other premises or places with which, in terms of duration or number of people affected, have a similar sensitivity to the air pollutant as the aforelisted premises and places would also be considered as a sensitive receiver.
- 6.2 Existing ASRs were identified by means of reviewing topographic maps, aerial photos and supplemented by site inspection. They mainly include developed residential buildings and schools. Representative ASRs within assessment area and ASRs of the proposed Development have been identified in Table 6.1 and shown in Figures 2a and 2b.

Table 6.1 Representative ASRs

ASR ID	Description	Land Use	Distance from the proposed Development	Number of Storeys
Existing ASRs				
A01	PLK Riverain Primary School	Educational	28m	9
A02	HKTA Shun Yeung Primary School	Educational	30m	7
A03	Ma On Shan Swimming Pool	GIC	91m	-
A04	Ma On Shan Park	GIC	255m	-
A05	Marbella	Residential	35m	34
A06	The Waterside	Residential	125m	39
A07	Fok On Garden	Residential	165m	31
A08	The Tolo Place	Residential	220m	31
A09	Bayshore Towers	Residential	290m	25
A10	Villa Oceania	Residential	440m	17
A11	Ma On Shan Centre	Residential	485m	32
A12	Sunshine City	Residential	380m	37
A13	Kam Fung Court	Residential	145m	13
A14	Chung On Estate	Residential	165m	35
A15	CUHKFAA Chan Chun Ha Secondary School	Educational	230m	9

ASR ID	Description	Land Use	Distance from the proposed Development	Number of Storeys
A16	Tsung Pik Shan Secondary School	Educational	381m	8
A17	KCWC Fung Yiu King Memorial Secondary School	Educational	477m	7
A18	St. Francis Church	GIC	396m	4
A19	Chung On Shopping Centre	Commercial	356m	4
A20	Ma On Shan Sports Centre	GIC	145m	3
A21	Ma On Shan Public Library	GIC	230m	3
A22	Ma On Shan Promenade	Leisure	4m	-
A23	Ma On Shan Sai Sha Road Garden	Leisure	90m	-
A24	HKCT Jockey Club Undergraduate Campus	Educational	445m	8
A25	The Met. Bliss	Residential	355m	15
A26	Potential Developments at On Chun Street Car Park	GIC	6m	8
ASRs of the proposed Development				
A27	Residential tower	Residential	-	14
A28	Clubhouse / Shops / Eating Places	Commercial	-	3
A29	Exhibition or Convention Hall	Commercial	-	1
A30	Swimming Pool	Recreational	-	-

7. PLUME IMPINGEMENT ASSESSMENT

7.1 According to the HKPSG^[1], the buffer distance for industrial chimney is 200m. For the proposed Development, as validated by the site surveys conducted on 4 December and 10 September 2024, no industrial chimney is located within a 500m radius of the project site. Therefore, air quantitative impact assessment due to the industrial emission is hence not necessary. It is confirmed that adverse air quality impact due to industrial chimney is not anticipated for the proposed Development.

7.2 No chimney will be developed from the proposed Development, adverse air quality impact from the proposed Development due to industrial chimney is not anticipated.

8. MARINE EMISSION ASSESSMENT

8.1 As validated by the site surveys conducted on 4 December and 10 September 2024, no pier and vessel in operation are located within a 500m radius of the project site. Therefore, adverse air quality impact due to marine emission is not anticipated for the proposed Development.

9. VEHICULAR EMISSION ASSESSMENT

9.1 According to the Annual Traffic Census 2023 published by Transport Department, On Chun Street is classified as “Local Distributor”. The required buffer distance for ‘Local Distributor’ is 5m as stipulated in the HKPSG. For the proposed Development, the distance between the local road and the project boundary is 6m. The separation is greater than the required buffer distance as specified in the HKPSG with a summary given in Table 9.1 and illustrated in Figures 3a – 3e. Therefore, air quantitative impact assessment due to the vehicle emission is not necessary to be carried out.

Table 9.1 Separation between Road and the Project Boundary

Road name	Road Type	Shortest Distance between Project Boundary and the Road	Remark
On Chun Road	Local Distributor	6m	All ASRs comply with the HKPSG requirement

9.2 The residential flats will rely on openable window for ventilation. The location of openable windows can satisfy the buffer distance requirements under HKPSG. No air-sensitive uses including openable window, fresh air intake and recreational use in the open space would be located within the buffer zone. Therefore, adverse air quality impact due to vehicle emission is not anticipated for the proposed Development.

10. AIR QUALITY IMPACT DUE TO CARPARK OF THE PROPOSED DEVELOPMENT

- 10.1 The detailed design of the proposed carpark is not available at this stage. The location of the exhaust outlet would be designed with reference to the “ProPECC PN 2/96 – Control of Air Pollution in Car Park”^[2]. The exhaust air from the carpark would be discharged to the atmosphere with proper mitigation treatments in such a manner and at a location not to result in any air nuisance to occupants in the proposed Development and to the neighboring building and to the public. Hence, adverse air quality impact due to the proposed carpark is not anticipated.

11. AIR QUALITY IMPACT DUE TO EATING PLACE OF THE PROPOSED DEVELOPMENT

- 11.1 The detailed design of the proposed eating place is not available at this stage. The exhaust system of the eating place and the location of the exhaust outlet would be designed with reference to the EPD’s guideline “Control of Oily Fume and Cooking Odour from Restaurant and Food Business”^[3]. Appropriate high performance air pollution control equipment will be installed for treating cooking fume emissions before discharged to the atmosphere and at a location not to result in any air nuisance to occupants in the proposed Development and to the neighboring building and to the public, which it is preferable to extend the exhaust to a level of at least 3m above the highest point of the eating place’s own building and of any adjacent or attached buildings that fall within a 20m radius according to the EPD’s guideline. Hence, adverse air quality impact due to the proposed eating place is not anticipated.

12. MITIGATION MEASURES FOR CONSTRUCTION WORK

- 12.1 The major construction activities of the proposed Development are Alterations and Additions works (A&A works). In addition, the construction activities will not be taking place concurrently at entire work sites. Detailed construction programme is not available at this stage. With the implementation of dust suppression measures and good site management, adverse construction air quality impact is not anticipated.

Emission from Fuel Combustion Equipment

- 12.2 Apart from the dust impact during construction phase, there will be exhaust emissions from the construction plants and machineries. Requirements stipulated in the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation and Air Pollution Control (Fuel Restriction) Regulations (i.e. using liquid fuel with a Sulphur content of less than 0.001% by weight) will be complied with to minimise the exhaust emissions from non-road mobile machineries and construction vehicles. The scale of the project is relatively small, the number of construction plants will be limited.

Recommended Construction Best Practices

- 12.3 As the proposed Development only involves A&A works, without any major dusty activities. However, the Contractor is recommended to follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation. The following dust suppression measures should be incorporated by the Contractor to control the dust nuisance throughout the construction phase:-

- Any stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed where practicable within 24 hours of unloading;
- Any dusty material remaining after a stockpile is removed should be wetted with water and removed where practicable;
- A stockpile of dusty material should not extend beyond the pedestrian barriers, fencing or traffic cones;
- The load of dusty materials on vehicles leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle;

- Where practicable, vehicles washing facilities including a high pressure water jet should be provided at every designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores;
- Immediately before leaving a construction site, all vehicles shall be washed to remove any dusty materials from its body and wheels;

12.4 Enhanced dust mitigation measures will be provided for the institutional ASRs which have less than 10m distance to the proposed Development:-

- Adopt site hoarding at sufficient height close to the concerned ASRs;
- Locate the haul road away from the concerned ASRs;
- Avoid dusty works or placing stockpiles near to the concerned ASRs;
- Minimise unpaved and exposed earth by immediate covering or permanent paving as soon as the works have been completed; and
- Avoid the works during school hour as far as practicable.

Concurrent Project

12.5 There is no concurrent project within 500m of the proposed Development. With the implementation of dust control measures stipulated in the Air Pollution Control (Construction Dust) Regulation and requirements stipulated in the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, adverse cumulative air quality impact is not anticipated

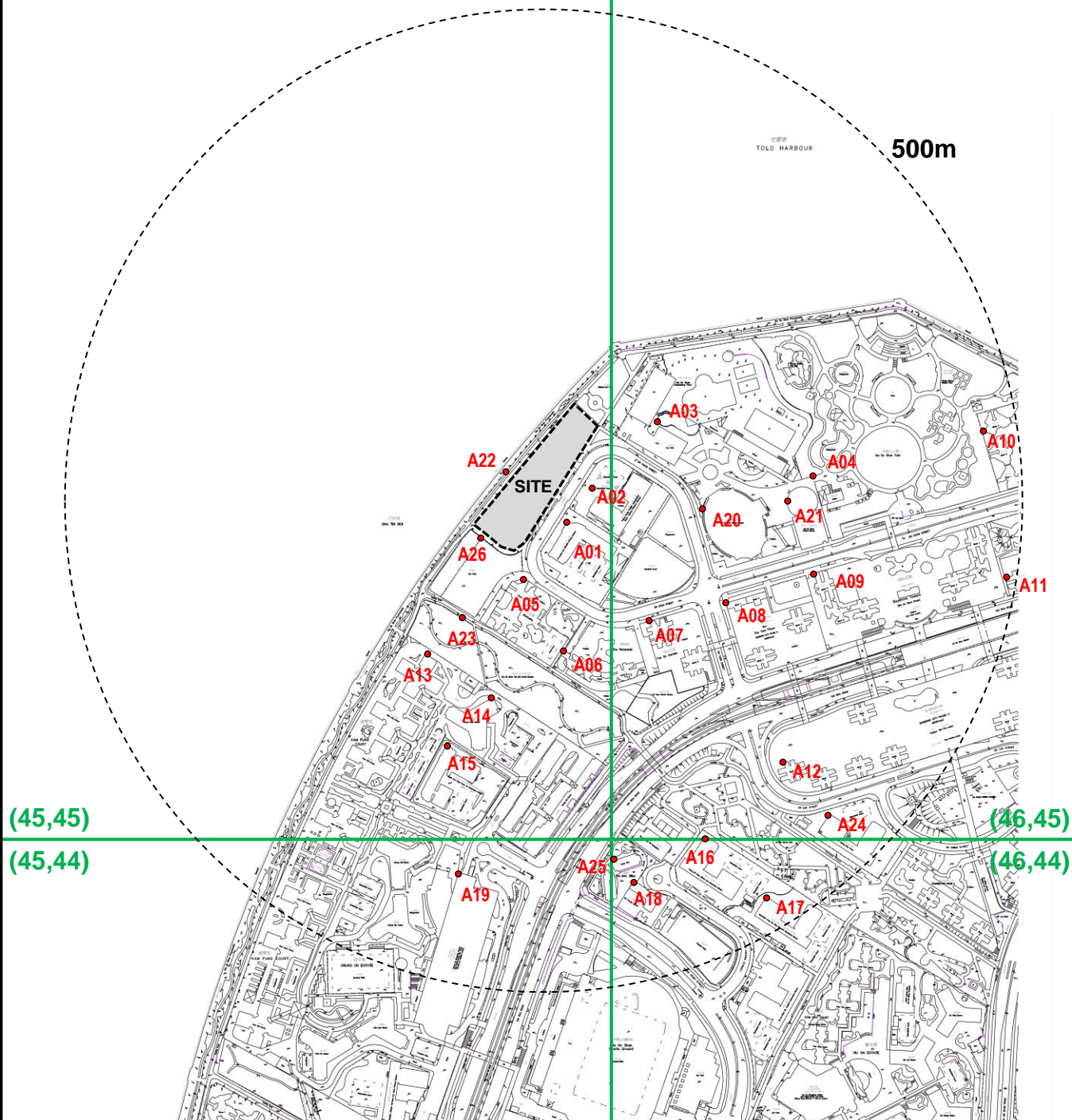
12.6 Therefore, the potential dust and exhaust emission impact from the construction works to the ASRs in the vicinity would be limited.

13. CONCLUSION

- 13.1 The buffer distance requirements are satisfied for vehicular and chimney emissions stipulated under the Hong Kong Planning Standards and Guidelines (re. Table 3.1, Chapter 9, HKPSG). Therefore, adverse air quality impacts associated with the proposed Development during operational phase are not anticipated.
- 13.2 Control requirements in the Air Pollution Control (Construction Dust) Regulation, Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation and Air Pollution Control (Fuel Restriction) Regulations will be complied with. Relevant mitigation measures will be implemented accordingly. Under such circumstances, no adverse air quality impacts in association with the proposed Development during construction phase are anticipated.

14. REFERENCE

- [1] "Hong Kong Planning Standards & Guidelines" (Chapter 9), March 2014 of Hong Kong Government
- [2] ProPECC PN 2/96 “Control of Air Pollution in Car Park” of the Environmental Protection Department
- [3] “Control of Oily Fume and Cooking Odour from Restaurant and Food Business”, EPD



Legend



Proposed Development



Nearest Point of the Identified ASR to the Proposed Development

(45,45) PATH Grid (45,45)

Westwood Hong & Associates Ltd

PROJECT: 22580

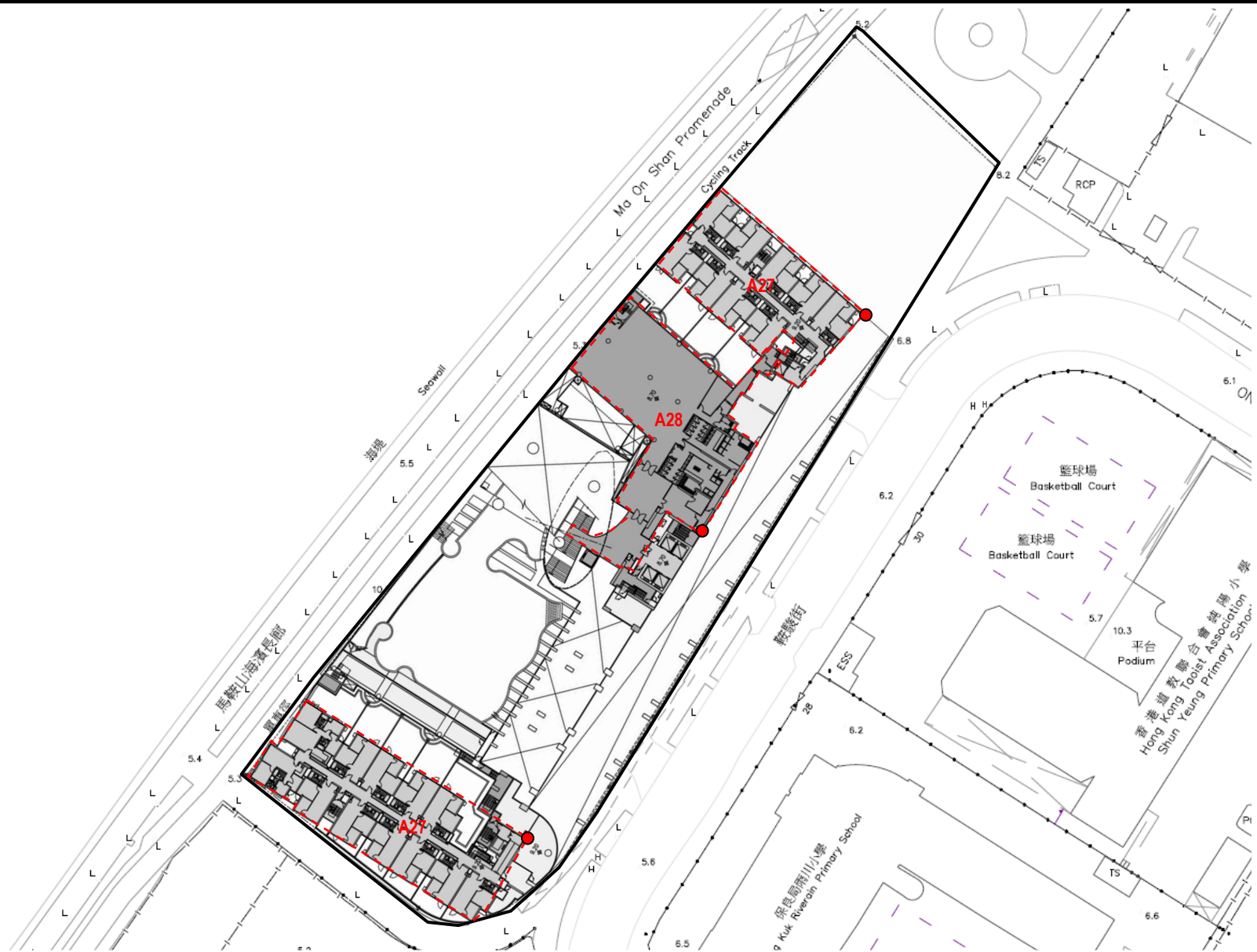
Proposed Development at Sha Tin
Town Lot No. 461, Ma On Shan,
Shatin

TITLE:

**Locations of Identified ASRs within 500m
from The Proposed Development**

FIGURE

2a



Legend

- Identified ASRs within The Proposed Development
- Nearest Point of the Identified ASR to On Chun Road

Westwood Hong & Associates Ltd

PROJECT: 22580

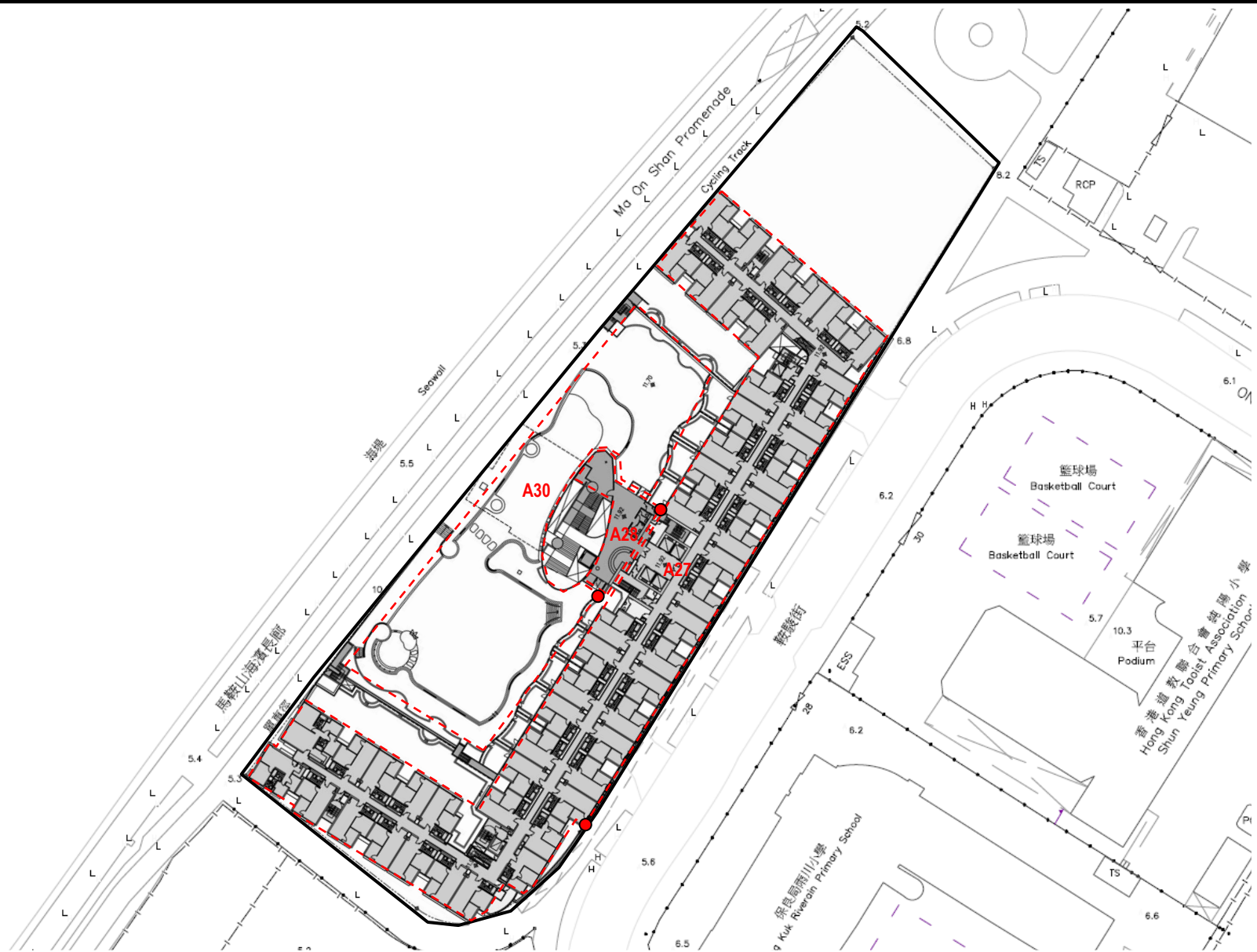
**Proposed Development at Sha Tin
Town Lot No. 461, Ma On Shan,
Shatin**

TITLE:

**Locations of Identified ASRs within The
Proposed Development – Mezz Floor**

FIGURE

2b-2



Legend

- Identified ASRs within The Proposed Development
- Nearest Point of the Identified ASR to On Chun Road

Westwood Hong & Associates Ltd

PROJECT: 22580

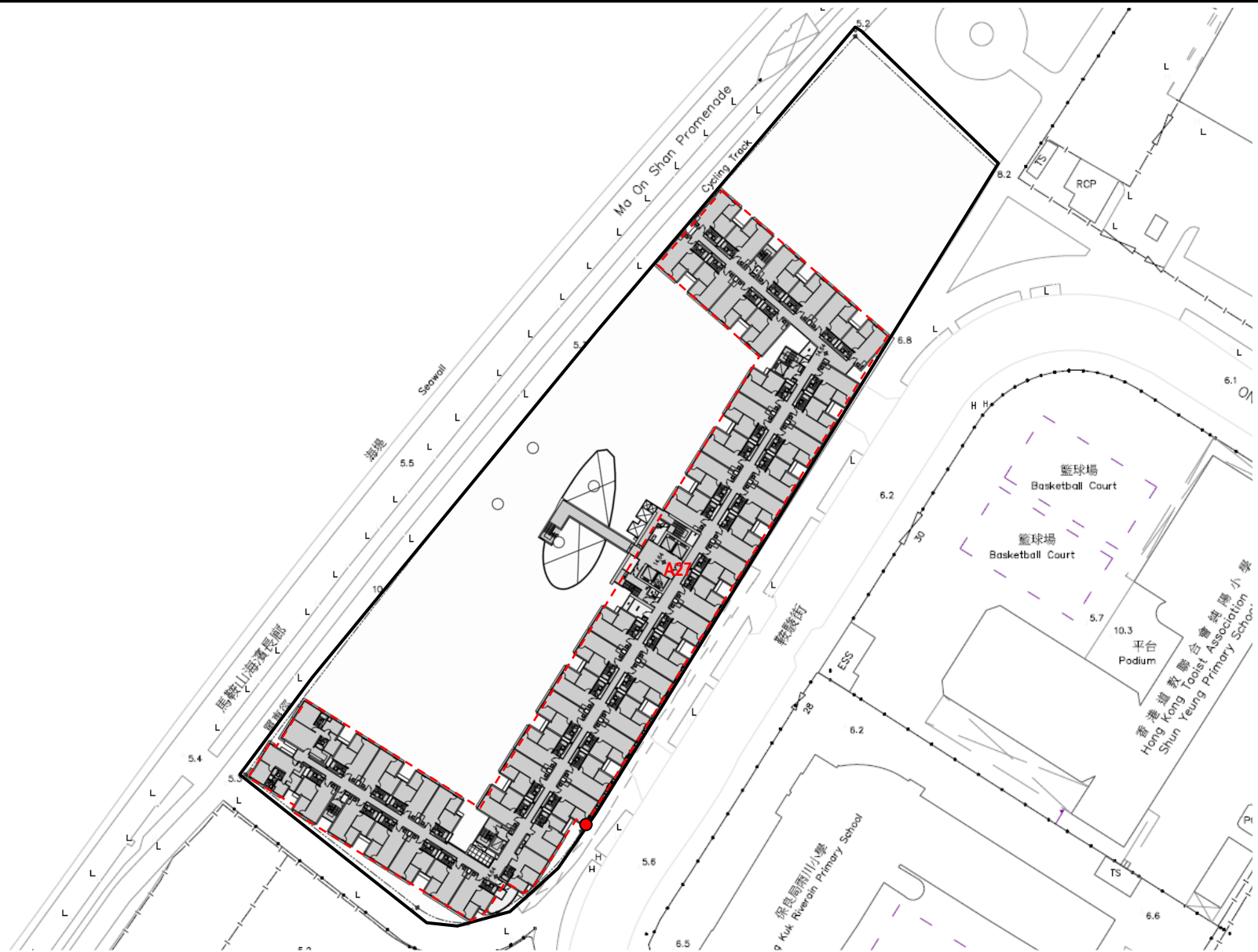
**Proposed Development at Sha Tin
Town Lot No. 461, Ma On Shan,
Shatin**

TITLE:

**Locations of Identified ASRs within The
Proposed Development – L2 Floor**

FIGURE

2b-3



Legend

- Identified ASRs within The Proposed Development
- Nearest Point of the Identified ASR to On Chun Road

Westwood Hong & Associates Ltd

PROJECT: 22580

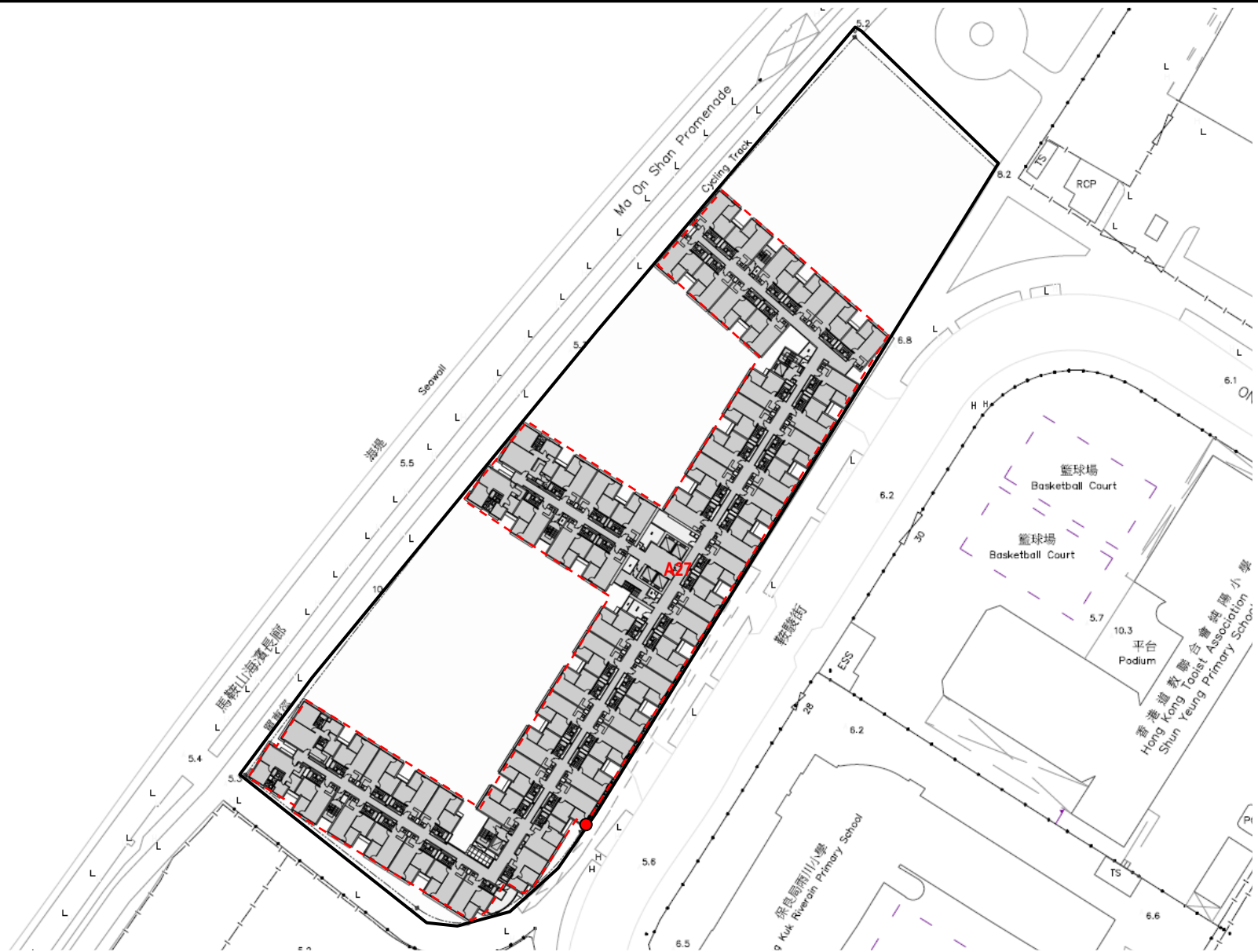
**Proposed Development at Sha Tin
Town Lot No. 461, Ma On Shan,
Shatin**

TITLE:

**Locations of Identified ASRs within The
Proposed Development – L3 Floor**

FIGURE

2b-4



Legend

- Identified ASRs within The Proposed Development
- Nearest Point of the Identified ASR to On Chun Road

Westwood Hong & Associates Ltd

PROJECT: 22580

**Proposed Development at Sha Tin
Town Lot No. 461, Ma On Shan,
Shatin**

TITLE:

**Locations of Identified ASRs within The
Proposed Development – Typical Floor**

FIGURE

2b-5

Remark:
No air-sensitive uses including openable window, fresh air intake and recreational use in the open space would be located within the buffer zone.

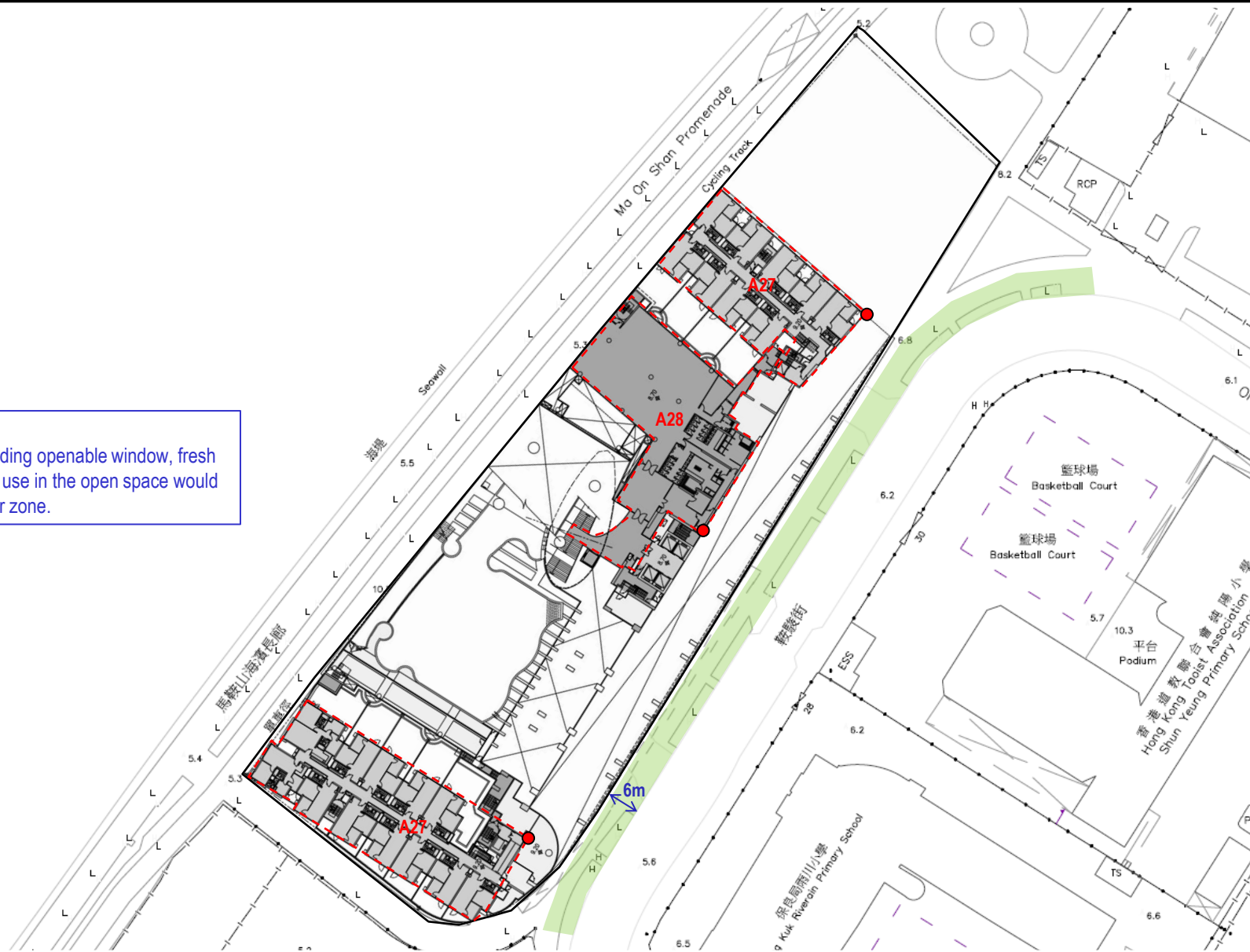


Legend

- 5m Buffer Distance from Local Road
- Nearest Point of the Identified ASR to On Chun Road

Westwood Hong & Associates Ltd	TITLE:	FIGURE
PROJECT: 22580 Proposed Development at Sha Tin Town Lot No. 461, Ma On Shan, Shatin	Shortest Distance between Project Boundary and the Road – L1 Floor	3a

Remark:
No air-sensitive uses including openable window, fresh air intake and recreational use in the open space would be located within the buffer zone.



Legend

- 5m Buffer Distance from Local Road
- Nearest Point of the Identified ASR to On Chun Road

Westwood Hong & Associates Ltd

PROJECT: 22580

Proposed Development at Sha Tin Town Lot No. 461, Ma On Shan, Shatin

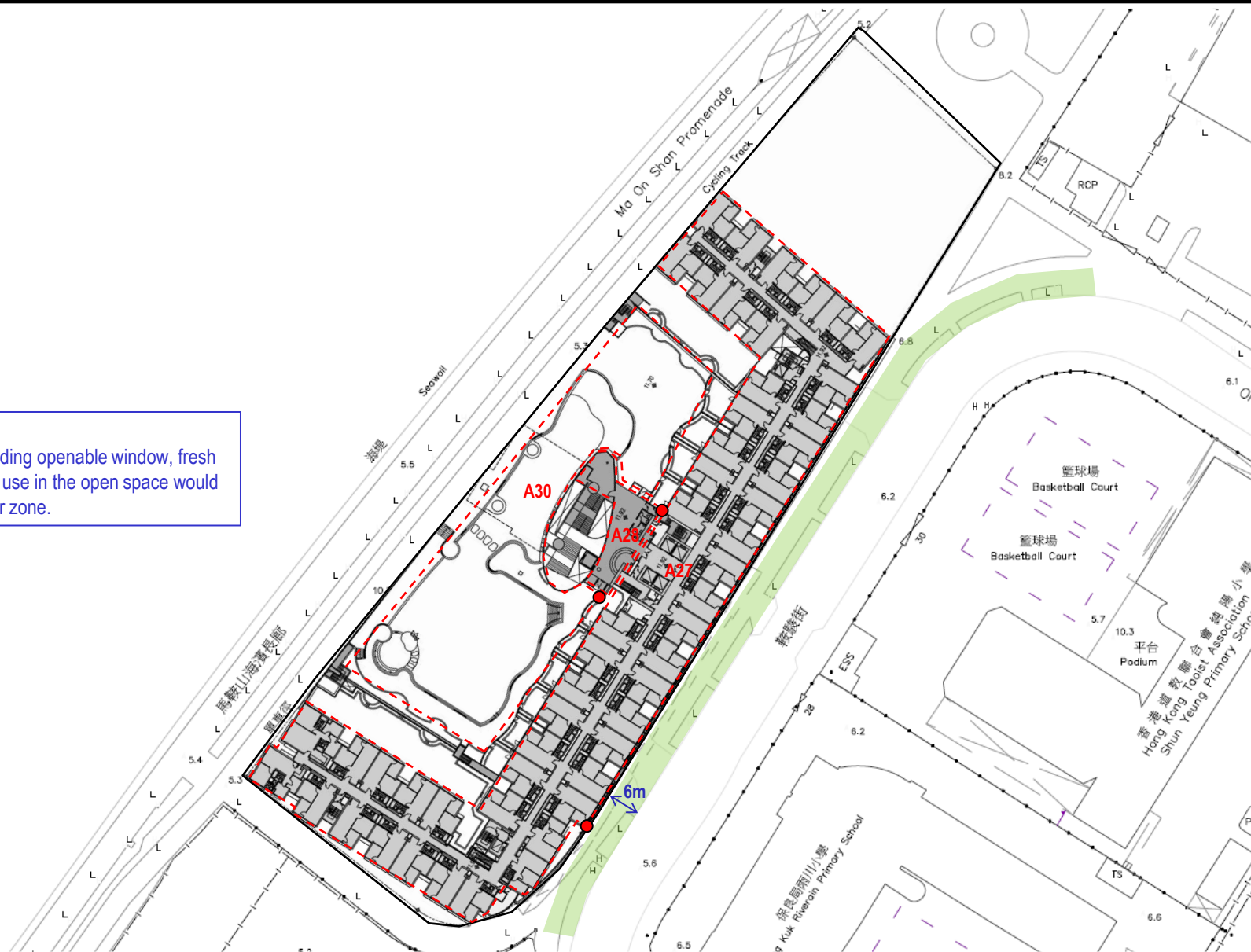
TITLE:

Shortest Distance between Project Boundary and the Road – Mezz Floor

FIGURE

3b

Remark:
No air-sensitive uses including openable window, fresh air intake and recreational use in the open space would be located within the buffer zone.



Legend

- 5m Buffer Distance from Local Road
- Nearest Point of the Identified ASR to On Chun Road

Westwood Hong & Associates Ltd

PROJECT: 22580
Proposed Development at Sha Tin Town Lot No. 461, Ma On Shan, Shatin

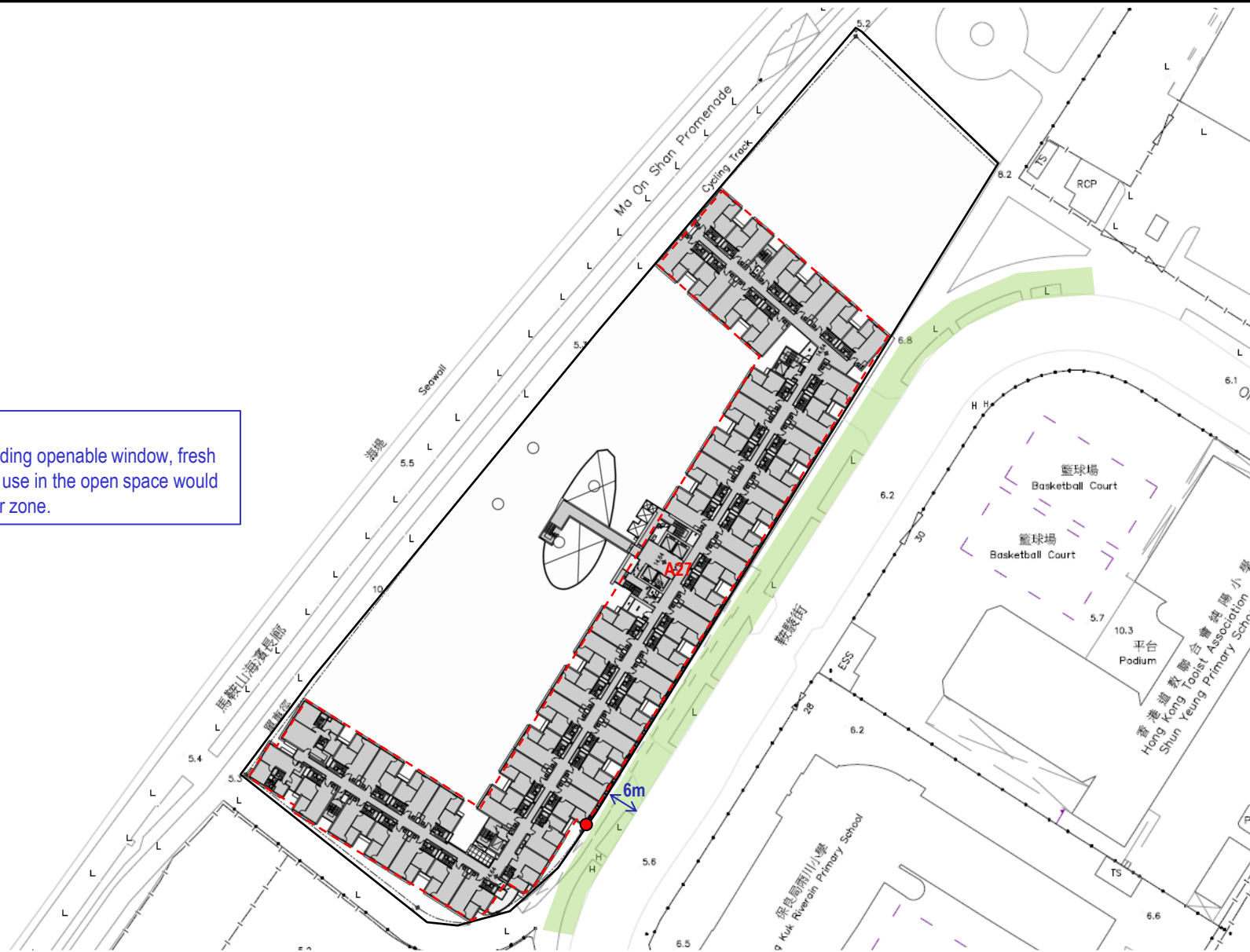
TITLE:

Shortest Distance between Project Boundary and the Road – L2 Floor

FIGURE

3c

Remark:
No air-sensitive uses including openable window, fresh air intake and recreational use in the open space would be located within the buffer zone.



Legend

- 5m Buffer Distance from Local Road
- Nearest Point of the Identified ASR to On Chun Road

Westwood Hong & Associates Ltd

PROJECT: 22580
Proposed Development at Sha Tin Town Lot No. 461, Ma On Shan, Shatin

TITLE:

Shortest Distance between Project Boundary and the Road – L3 Floor

FIGURE

3d

No air-sensitive uses including openable window, fresh air intake and recreational use in the open space would be located within the buffer zone.



5m Buffer Distance from Local Road

Nearest Point of the Identified ASR to On Chun Road

PROJECT: 22580

Proposed Development at Sha Tin Town Lot No. 461, Ma On Shan, Shatin

Shortest Distance between Project Boundary and the Road – Typical Floor

3e

APPENDIX 1

ARCHITECTURAL DRAWINGS



- Application Site Boundary
- Residential
- Commercial
- Covered Carpark & Driveway
- E&M













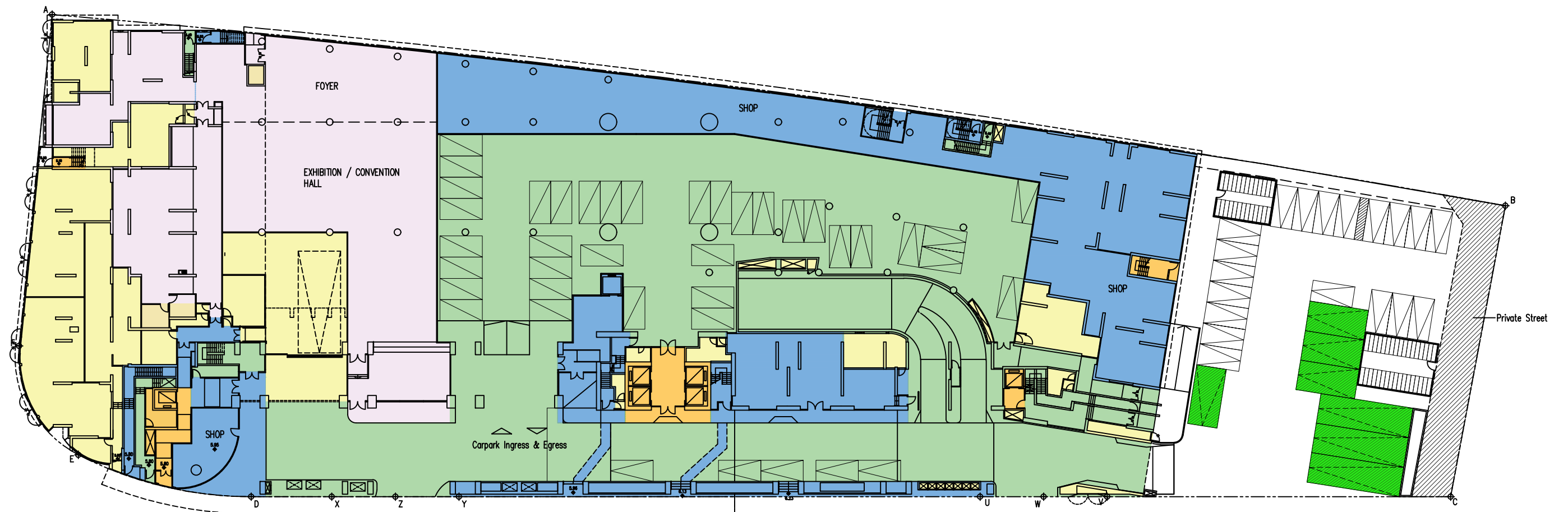
CARPARK SCHEDULE:

RESIDENTIAL C/P	:148 Nos.
RESIDENTIAL VISITOR	: 5 Nos.
COMMERCIAL C/P	: 21 Nos.
EXHIBITION/CONVENTION HALL C/P	: 7 Nos.
TOTAL	:181 Nos

Motorcycle : 12 Nos
Bicycle :120 Nos



- | | | | |
|---|------------------------------|---|--------------------------------------|
|  | Application Site Boundary |  | E&M |
|  | Residential |  | Double Decked Mechanical Car Parking |
|  | Commercial |  | Car Parking Space |
|  | Exhibition / Convention Hall |  | Double Decked Bicycle Parking |
|  | Covered Carpark & Driveway |  | Loading / Unloading Bay |



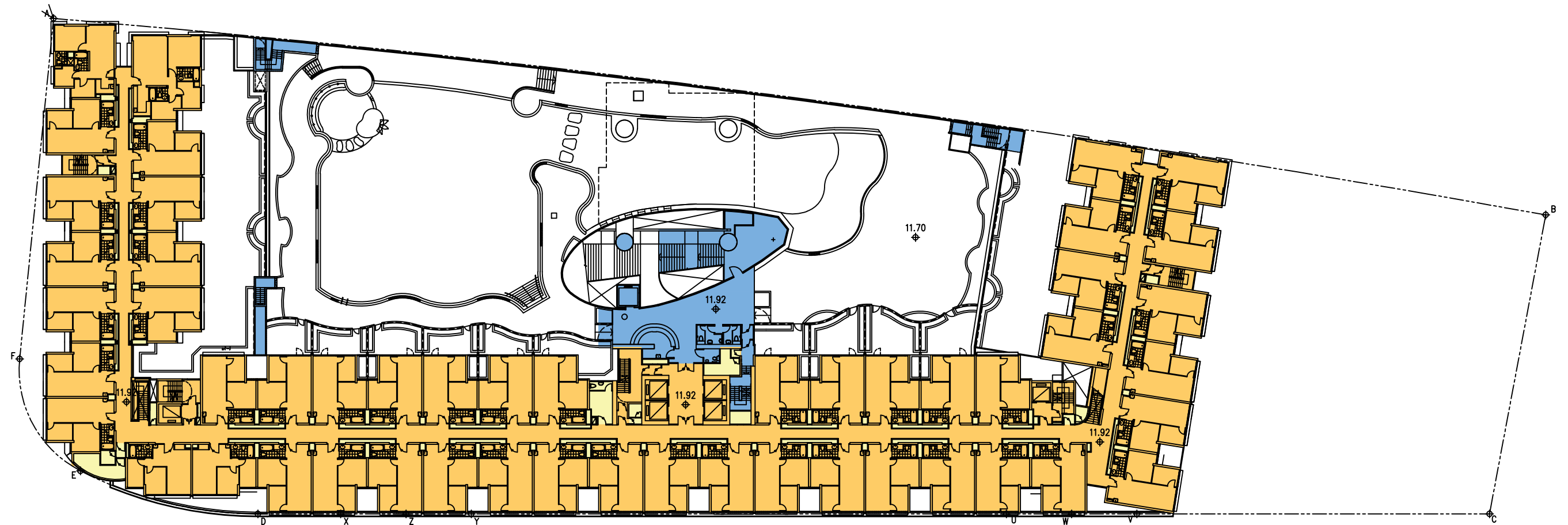


- Application Site Boundary
- Residential
- Commercial
- E&M





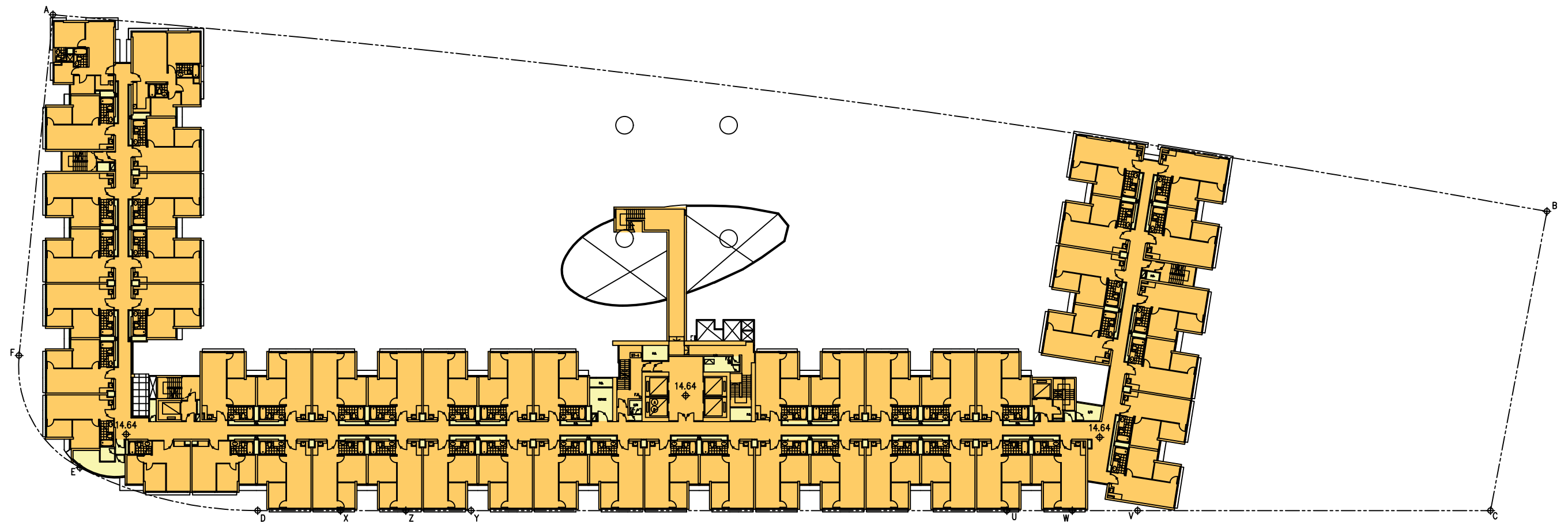
- Application Site Boundary
- Residential
- Commercial
- E&M

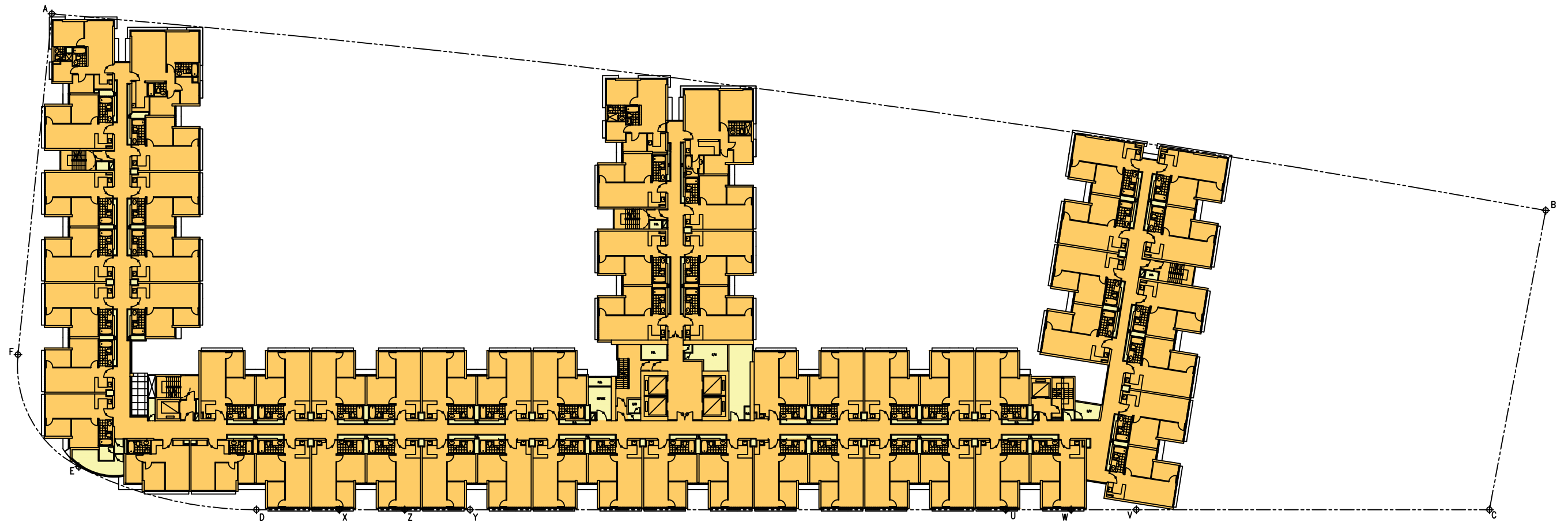
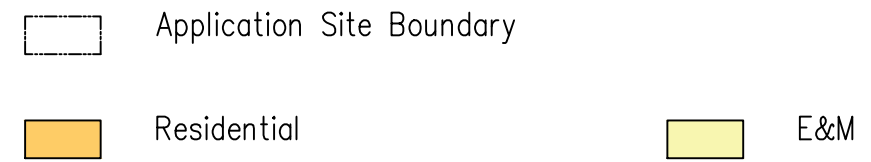


Application Site Boundary




Residential

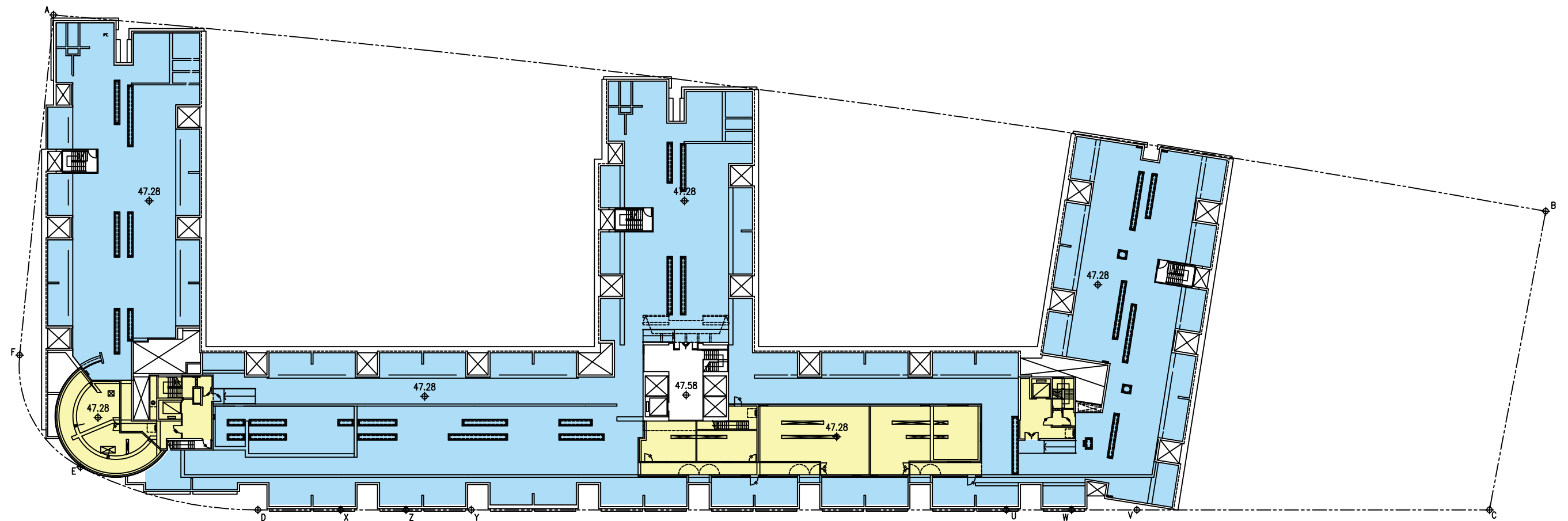
E&M

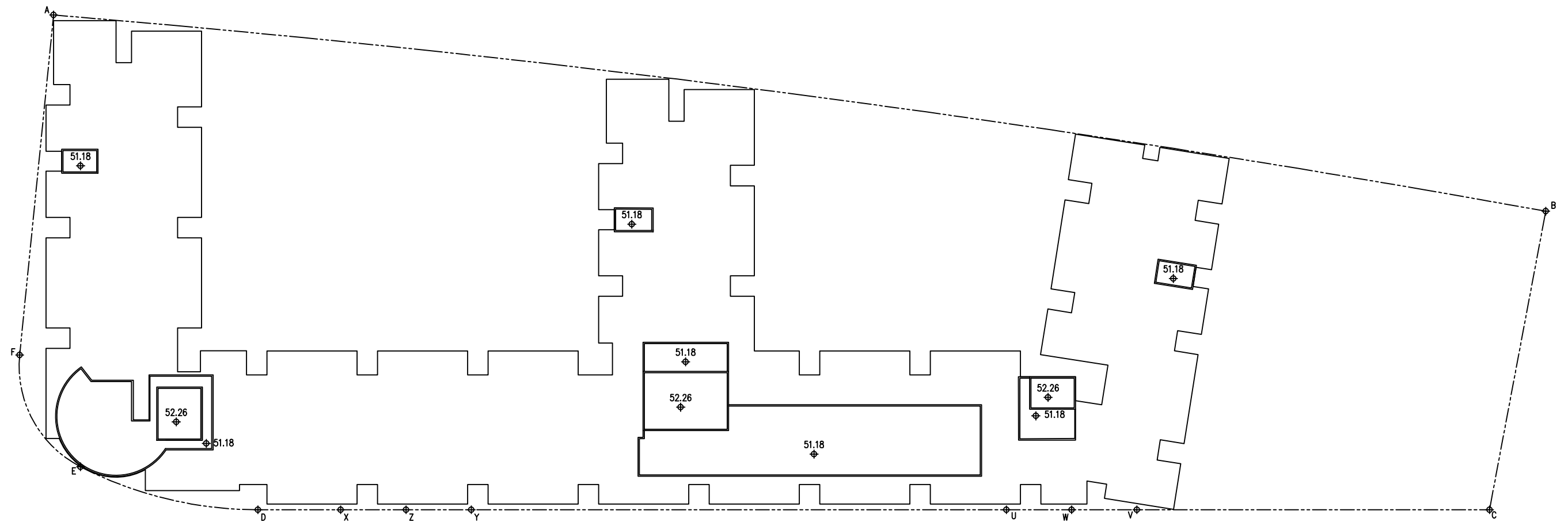




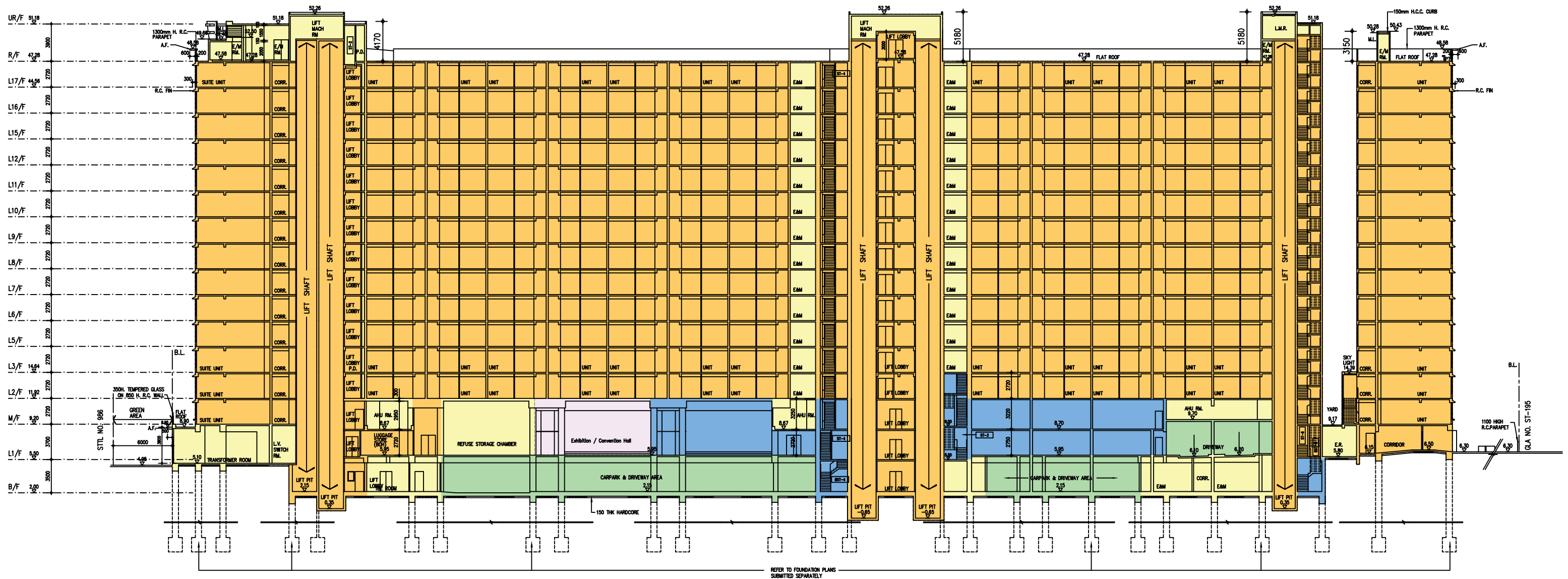


-  Application Site Boundary
-  E&M
-  Private Open Space (2,162 sq.m.)





- Residential GFA
- E&M Area
- Commercial GFA
- Carpark & Driveway Area
- Exhibition / Convention Hall



APPENDIX 2

PHOTOGRAPHS TAKEN ON SITE



Plate 1: The Project Site



Plate 2: Photo showing the Project Site and On Chun Street

Westwood Hong & Associates Ltd	TITLE:	FIGURE
PROJECT: 22580 Proposed Development at Sha Tin Town Lot No. 461, Ma On Shan, Shatin	Photographs taken on Site	A2

APPENDIX 3

DETAILS OF SITE SURVEY

1st Site Survey

Date: 10 September 2024
Time: 1:30pm – 6:30pm

Weather: 31°C, 75%RH, generally fine and calm

By: Kit Wong and Samuel Lee of WHA

2nd Site Survey

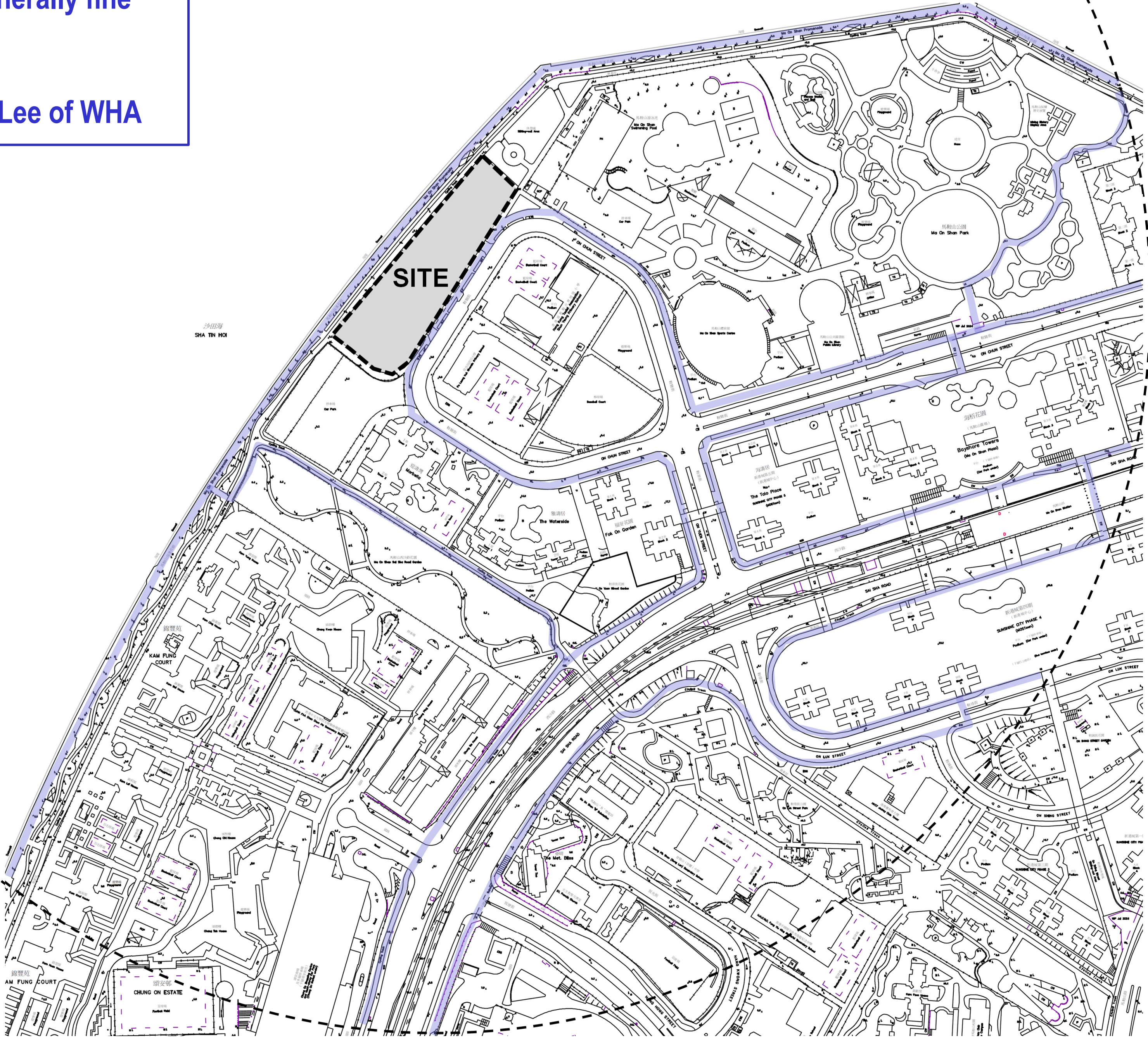
Date: 4 December 2024
Time: 1:30pm – 6:30pm

Weather: 23°C, 65%RH, generally fine and calm



By: Kit Wong and Samuel Lee of WHA



500m



Legend

-  Proposed Development
-  Route of Site Survey

Westwood Hong & Associates Ltd

PROJECT: 22580

**Proposed Development at Sha Tin
Town Lot No. 461, Ma On Shan,
Shatin**

TITLE:

Details of Site Surveys

FIGURE

A3