Appendix 8

Air Quality Impact Assessment

Rezoning From "Residential (Group C)2" and "Open Space" Zones to "Residential (Group C)4" Zone for a Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories

Environmental Air Quality Impact Assessment

Prepared for:

Kimpton Investments Limited

Pacific Top Development Limited

Worldchamp Investments Limited

Prepared by:

Westwood Hong & Associates Limited

Report No.:

22605-A1 Rev B

Date:

17 October 2025

Ir K. K. Iu	FHKIOA, MIOA, MCIBSE, MHKIE, MASA, APEC Engineer FMOIA, MIEAust, MHKIQEP, C Eng, RPE, CPEng
Ms Kit Wong	BEng, MHKIEIA
Mr Samuel Lee	BSc

Westwood Hong & Associates Ltd

2404, Tung Wai Commercial Building
109-111 Gloucester Road
Wanchai, Hong Kong

Tel: 2838 2738 Fax: 2591 6189
Email: wha@wha.com.hk
Website: https://whaacoustics.com

EIA · ACOUSTICS · NOISE · VIBRATION

CONTENTS

AIMS

To assess the air quality impact due to the surrounding industrial, vehicular and odour emissions on the proposed residential development at DD110 on Kam Tin Road in Yuen Long.

To assess the air quality impact in accordance with the air quality requirements set out in the Hong Kong Planning Standards & Guidelines (HKPSG).

SUMMARY

The buffer distance requirements in the proposed Development as set out for vehicular emissions in Table 3.1, Chapter 9 of HKPSG are satisfied. No industrial chimney, other industrial emissions and potential odour sources were identified within 500m of the site. Site inspections revealed that no odour has been detected at the site boundaries and the emission of dust or fluff has not been identified from buildings in the vicinity of the proposed Development. Therefore, no adverse air quality impacts on the proposed Development are anticipated.

Air quality control requirements in the Air Pollution Control (Construction Dust) Regulation will be complied with. Relevant mitigation measures for dust and gaseous emissions, if any, 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 the potential air quality impact caused by air pollution sources including industrial, vehicular and odour emissions in the vicinity of the proposed residential development at Lot Nos. 519 RP (Part) and 520 RP in DD110 and the adjoining government land in Shek Kong, Yuen Long (the "proposed Development").

1.2 This air quality impact assessment report aims to support the Rezoning Application for the proposed Development.

1.3 This report was prepared based on the architectural drawings provided by the Client (Appendix 1).

1.4 The report includes the following assessments:

- Industrial emission impact on the proposed Development;
- Vehicular emission impact on the proposed Development;
- Odour emission impact on the proposed Development; and
- Air Quality impact control during construction.

2. SITE LOCATION

Site Location

2.1 The development site adjoins Shek Kong Barracks to the south and is located north of Kam Tin Road. The residential development Seasons Villas is located to the north-east. The location of the development site is shown in Figure 1. The development parameters are summarised in Table 2.1.

Building Layout

2.2 The proposed Development comprises 6 low-rise residential blocks with 5 storeys ontop of carport and clubhouse. The carport and clubhouse are located at G/F. The building layouts are shown in Appendix 1.

Table 2.1 Development Parameters of the Proposed Development

	Parameters
Zoning	"Residential (Group C)2" and "Open Space" zones on Approved Kam Tin North Outline Zoning Plan No. S/YL-KTN/11
Site Area	8,580m^2
Number of Residential Units	240
Number of Residential Storeys	5 storeys
Height of Building	28.9mPD
Use	6 residential blocks with a clubhouse and carport at Ground Floor
Completion Year	2031

3. SITE INSPECTIONS

Site Surveys

3.1 Site surveys were conducted on 18 March 2025, 10 October 2022 and 17 November 2021. Photographs taken on site are shown in Appendix 2.

Industrial Emissions in the Vicinity

3.2 The site surveys were conducted covering the whole 500m assessment area of the development site. The results of site inspections have revealed that no industrial chimney and potential odour sources were identified within 500m of the development site.

3.3 The site inspections revealed that the nearby industrial uses are mainly vehicle repairing workshops, car trading centres and open storages, no air and odour emission sources from these industrial uses were observed during site surveys. No odour has been detected at the site boundaries and the emission of dust or fluff has not been identified from buildings in the vicinity of the proposed Development.

3.4 According to the Outline Zoning Plans, there are some areas in the vicinity of the development site zoned as I(D). Site inspections revealed that these I(D) zones are currently used as open storages and substation, which no industrial emissions are observed in these zones. Hence, adverse air quality impacts and I/R interface problem are not anticipated from these I(D) zones. Locations and photos of these I(D) zones are illustrated and provided in Figure 5.

4. HONG KONG AIR QUALITY OBJECTIVES

4.1 The Hong Kong Air Quality Objectives (HKAQO) are shown in Table 4.1.

Table 4.1 Hong Kong Air Quality Objectives

Pollutant	Averaging Time	AQO concentration ($\mu g/m^3$)	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.

5. EXISTING AND FUTURE AIR QUALITY IN YUEN LONG AREA

5.1 Air quality monitoring data from the Air Quality Monitoring Station (AQMS) operated by EPD were examined. The air quality monitoring data in the nearest AQMS (i.e. Yuen Long) in the past 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 ($\mu g/m^3$)	Annual Conc. ($\mu g/m^3$)	Highest 10-minutes Conc. beyond the allowed exceedance ($\mu g/m^3$)	Highest 24-hour Conc. beyond the allowed exceedance ($\mu g/m^3$)
NO_2	2019	161	**44**	-	86
	2020	135	32	-	64
	2021	148	40	-	78
	2022	122	37	-	68
	2023	130	37	-	67
	5-year Mean	139.2 [70%]	38 [95%]	-	72.5 [60%]
	AQOs	**200 (18)**	**40**	N/A	**120 (9)**
SO_2	2019	-	-	42	11
	2020	-	-	26	10
	2021	-	-	24	14
	2022	-	-	21	7
	2023	-	-	20	10
	5-year Mean	-	-	26.6 [5%]	10.4 [26%]
	AQOs	N/A	N/A	**500 (3)**	**40 (3)**
RSP (PM_{10})	2019	-	**37**	-	**83**
	2020	-	30	-	**77**
	2021	-	30	-	73
	2022	-	25	-	56
	2023	-	26	-	59
	5-year Mean	-	29.6 [99%]	-	69.6 [93%]
	AQOs	N/A	**30**	N/A	**75 (9)**

Pollutant	Year	Highest 1-hour Conc. beyond the allowed exceedance ($\mu g/m^3$)	Annual Conc. ($\mu g/m^3$)	Highest 10-minutes Conc. beyond the allowed exceedance ($\mu g/m^3$)	Highest 24-hour Conc. beyond the allowed exceedance ($\mu g/m^3$)
FSP ($PM_{2.5}$)	2019	-	**20**	-	**38**
	2020	-	**16**	-	33
	2021	-	**17**	-	36
	2022	-	**16**	-	**38**
	2023	-	**16**	-	34
	5-year Mean	-	**17 [113%]**	-	35.8 [95%]
	AQOs	N/A	**15**	N/A	**37.5 (18)**

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, the 4th highest 10-minute and 24-hr SO_2, 19th highest 1-hr NO_2, 10th highest 24-hour NO_2, 10th highest 24-hour RSP and 19th highest 24-hour FSP concentrations are presented in above table.

(v) N/A – Not applicable since there are no AQOs for these parameters.

5.2 The expected commencement year would be 2031, the nearest available future background concentration data predicted by PATH v3.0 in Year 2030 at Grids (30_46), (30_47), (31_46) and (31_47) are summarised in Table 5.2 below.

Table 5.2 Summary of PATH v3.0 Background in Year 2030

Pollutant	PATH Grid	Highest 1-hour Conc. beyond the allowed exceedance ($\mu g/m^3$) [1]	Annual Conc. ($\mu g/m^3$)	Highest 10-minutes Conc. beyond the allowed exceedance ($\mu g/m^3$) [2] [3]	Highest 24-hour Conc. beyond the allowed exceedance ($\mu g/m^3$) [4]
NO_2	(30_46)	56	11.44	-	22.31
	(30_47)	56.97	11.29	-	21.99
	(31_46)	48.98	10.36	-	19.43
	(31_47)	51.52	10.75	-	20.21
	AQOs	**200 (18)**[5]	**40**	N/A	**120 (9)**

Pollutant	PATH Grid	Highest 1-hour Conc. beyond the allowed exceedance ($\mu g/m^3$) [1]	Annual Conc. ($\mu g/m^3$)	Highest 10-minutes Conc. beyond the allowed exceedance ($\mu g/m^3$) [2] [3]	Highest 24-hour Conc. beyond the allowed exceedance ($\mu g/m^3$) [4]
SO_2	(30_46)	-	-	23.71	6.55
	(30_47)	-	-	24.57	6.43
	(31_46)	-	-	23.98	6.47
	(31_47)	-	-	24.32	6.43
	AQOs	N/A	N/A	**500 (3)**	**40 (3)**
RSP	(30_46)	-	19.35	-	50.33
	(30_47)	-	20.38	-	53.32
	(31_46)	-	19.11	-	49.98
	(31_47)	-	20.05	-	52.34
	AQOs	N/A	**30**	N/A	**75 (9)**
FSP	(30_46)	-	11.87	-	29.6
	(30_47)	-	12.71	-	31.83
	(31_46)	-	11.67	-	29.3
	(31_47)	-	12.45	-	31.54
	AQOs	N/A	**15**	N/A	**37.5 (18)**

Note:

[1] 19th highest 1-hour concentration of NO_2

[2] 4th highest 10-minute SO_2 concentration

[3] According to EPD's "Guidelines on the Estimation of 10-minute Average SO_2 Concentration for Air Quality Assessment in Hong Kong".

[4] 10th highest 24-hour NO_2; 4th highest 24-hour concentration of SO_2; 10th highest 24-hour concentration of RSP; 19th highest 24-hour concentration of FSP.

[5] Values in ( ) mean the number of exceedances allowed.

5.3 It can be seen from the above Table 5.1 that, the trends of NO_2, RSP, FSP and SO_2 concentrations in the area have been decreasing in general. According to the PATH data, all the pollutants are well within the AQOs.

6. PLUME IMPINGEMENT ASSESSMENT

6.1 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 18 March 2025, 10 October 2022 and 17 November 2021, no industrial chimney and dusty use are being identified within a 500m radius of the development 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 and dusty use are not anticipated for the proposed Development.

7. VEHICULAR EMISSION ASSESSMENT

7.1 According to The Annual Traffic Census 2023 by Transport Department (TD), the Kam Tin Road is classified as "Rural Road". For the Avenue De Versailles, where located to the easternmost of the proposed Development (i.e. access road leading to Kam Tin Road from Season Villas), as advised by the Traffic Consultant (CTA Consultants Ltd.), the peak traffic flows of Season Villas are only 35 veh/hr and 30 veh/hr for AM and PM peak respectively. For conservative, the Avenue De Versailles is considered as "Rural Road".

7.2 There is no recommended buffer distance for rural road in HKPSG. For conservative approach, buffer distances for District Distributor and Local Distributor have been adopted for Kam Tin Road and the Avenue De Versailles respectively in the present application. The required buffer distances for District Distributor and Local Distributor as stipulated in the HKPSG are 10m and 5m respectively.

7.3 No air-sensitive uses including openable window, fresh air intake and recreational uses in open space is allowed within the buffer zones. Table 7.1 summarises the shortest distance between ASRs and the roads, with considering the road widening of Kam Tin Road (widening of Kam Tin Road is not covered in the subject project). The locations of the buffer zones are demonstrated in Figure 3. Therefore, adverse air quality impact due to vehicle emission is not anticipated for the proposed development.

7.4 The access road located to the north of T3 of the proposed Development is the private access road of the adjoining residential development (i.e. Season Villas). According to desktop review, the access road is not solely for EVA purpose, but also for access to the G/F carparking spaces. As advised by the Traffic Consultant, the access road only serves for the Season Villas without any by-pass traffic. The peak traffic flow of

Season Villas is about 30 to 35 veh/hr and will further split into the eastern part and western part of Season Villas (about 15 to 20 veh/hr each side). Therefore, the traffic flow of the access road is limited. Hence, adverse air quality impact on the proposed Development is not anticipated.

Table 7.1 Separation between ASRs/site Boundaries and the Roads

Road Name	Road Type	Shortest Distance between ASRs and the Roads [2]	Remark
Kam Tin Road	Rural Road [1]	12m	All ASRs comply with the HKPSG requirement
Avenue De Versailles (i.e. access road leading to Kam Tin Road from Season Villas)	Rural Road [3]	7m	All ASRs comply with the HKPSG requirement

Remark:-

[1] According to The Annual Traffic Census 2023, Kam Tin Road is classified as Rural Road, buffer distance for District Distributor (i.e. 10m) is adopted.

[2] The road widening of Kam Tin Road is considered.

[3] As a conservative approach, the access road is considered as Rural Road, buffer distance for Local Distributor (i.e. 5m) is adopted.

7.5 For the internal roads of the proposed Development, they are not solely for EVA purpose, but also for access to the G/F carparking spaces and HGV loading/unloading bays. As advised by the Traffic Consultant, the maximum traffic generation/attraction of the proposed Development in peak hour is only 35 veh/hr, anticipating the traffic flow of each section of the internal road is even lower. Considering the traffic flow of the proposed internal road is relatively minor, adverse air quality impact on the proposed Development is not anticipated.

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

8.1 The proposed carparking spaces are accommodating at the open area of G/F, which allows natural ventilation. There is no PTI or public transport lay-by proposed in the proposed Development. Considering the carparking spaces are mainly for private car and light good vehicles only, and the numbers of carparking spaces are relatively small for small scale proposed residential development, adverse air quality impact due to the proposed carparking spaces is not anticipated.

9. ODOUR IMPACT FROM ON-SITE SEWAGE TREATMENT PLANT

9.1 The proposed Sewage Treatment Plant (STP) is located at the eastern part of the proposed Development on ground level and within an enclosed building structure, with its tank located at the underground level.

9.2 The design of the STP will be reviewed during detailed design stage, the Environmental Consideration specified in "Guidelines for the Design of Small Sewage Treatment Plants" for minimization of the odour impact from the proposed STP will be observed and followed.

9.3 The exhaust outlet of the proposed STP will be located away from all nearby existing ASRs and air-sensitive use of the proposed Development as far as possible. Also, the exhaust air of the stack will be discharged in the horizontal direction, which is away from any air-sensitive uses of Tower 6 and locate away from all other existing ASRs. The potential location of the exhaust outlet and its discharge direction are illustrated in Figure 4, which the separation distances from the potential exhaust outlet to the nearest existing ASR (i.e. houses of Season Villas) and the nearest air-sensitive use of the proposed Development (i.e. Tower 6) are 45m and 14m respectively.

9.4 The proposed Development would accommodate a total population of about 648. According to the Sewerage Impact Assessment, the design average dry weather flow (ADWF) of the proposed STP will be 247.5m^3/day.

9.5 The proposed STP will be housed indoors with full enclosure maintained at negative pressure. The STP will be design with an inlet chamber and wet well which will be enclosed by airtight and watertight cover. A high-efficiency deodorizer (with at least 99.5% odour removal efficiency for H_2S) with a forced ventilation system will also be installed at the STP building to remove odour before discharge into open air.

9.6 According to the Sewerage Impact Assessment Report of the proposed Development, the STP will be designed to treat sewage generated from the proposed Development and discharge to the nearby stormwater drainage system. Membrane Bioreactor (MBR) technology with ultra-filtration will be used for the proposed STP for meeting EPD's effluent discharge standard. The sludge from the STP as a by-product from the MBR treatment process will be temporarily stored in the STP and removed off-site by licensed sludge collection vehicles, which the temporary storage and collection of the sludge will be performed within a fully enclosed area inside the STP. With proper discharge of sewage and sludge generated from the STP, adverse odour issues related to disposal is not anticipated.

9.7 A desktop review has been conducted by making reference to an Application for Amendment of Plan under S12A of the Town Planning Ordinance (Cap. 131), to Rezone the Application Site from "Green Belt" and "Government, Institution or Community" to "Residential (Group B) 9", for Proposed Residential Development and Social Welfare Facilities at Lot Nos. 164 RP, 175 and 232 RP in D.D. 354, and Adjoining Government Land in Yau Kom Tau, Tsuen Wan, to compare the proposed STP against a committed STP which have similar design and odour removal efficiency. The comparison is summarised in Table 9.1.

Table 9.1 Summary Table of Committed STP and Proposed STP

Feature	STP in Yau Kom Tau, Tsuen Wan	Proposed STP
ADWF	2,142m^3/day	247.5m^3/day
Shortest Separation distance with closest ASR	25m	14m
Enclosure of odourous facilities	Yes	Yes
Odour removal efficiency of deodourising units	99 to 99.5%	99.5%

9.8 According to the air qualitative assessment of the report, it indicated the STP in Yau Kom Tau could be properly controlled the odour impacts and no adverse odour impacts would be anticipated. Although the separation distance to the closest ASR of the proposed STP is about 2 times shorter than that of the STP in Yau Kom Tau, the proposed STP is having much smaller ADWF (i.e. about 8 times smaller than the ADWF of STP in Yau Kom Tau). Hence, adverse air quality impact due to the proposed STP is not anticipated.

9.9 With STP design according to EPD's guidelines, high efficiency deodorizer installed at the exhaust outlet, locating the exhaust and discharge angle away from the ASRs as far as possible and proper disposal, adverse air quality impact due to the proposed STP is not anticipated.

10. AIR SENSITIVE RECEIVERS

10.1 In accordance with Annex 12 of the TM-EIAO, 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.

10.2 Existing ASRs were identified by means of reviewing topographic maps, aerial photos and supplemented by site inspection. They mainly include developed residential village houses. Representative ASRs within 500m assessment area have been identified in Table 10.1 and shown in Figure 2.

Table 10.1 Representative ASRs

ASR ID	Description	Existing Land Status	Distance from the Proposed Development	Number of Storeys
A01	Village Houses along Kam Tai Road	Residential	450m	1-3
A02	Village Houses along local road	Residential	200m	1-2
A03	Village Houses along Kam Tai Road	Residential	340m	1-2
A04	Village Houses along Kong Po Road	Residential	490m	1-3
A05	Village Houses along Kam Tai Road	Residential	215m	2-3
A06	Seasons Villas	Residential	5m	2
A07	Village Houses along Kam Tai Road	Residential	180m	2-3
A08	Village Houses in Shek Kong Tsuen	Residential	165m	1-3
A09	Village Houses in Pang Ka Tsuen	Residential	310m	1-3
A10	Seasons Monarch	Residential	490m	3
A11	Shek Kong Barracks	Barrack	10m	1-3
A12	Village Houses adjoining the northwestern site boundary	Residential	45m	2-3

11. MITIGATION MEASURES FOR CONSTRUCTION WORK

11.1 The major construction activities of the proposed Development are foundation and superstructural. There will be no basement area except the storm water storage tank, with volume of about 5000m^3 and the underground tank of the proposed STP, such that the scale of excavation involved in the proposed Development is relatively small. The construction activities will not be taking place concurrently at entire work sites.

11.2 During the construction phase, dust and gaseous emission would be generated from construction activities such as vehicles movement on haul roads, excavation, loading or unloading stockpile material, stockpiling of material, wind erosion of exposed areas and the use of construction machineries and construction vehicles.

11.3 The proposed Development comprises 6 low-rise residential blocks with 5 storeys above 1-storey ground floor carport and a clubhouse. Also, the proposed Development currently lies on a relatively flat terrain. Therefore, dusty activities such as excavation, site formation and superstructure works are expected to be relatively small in scale. Detailed information such as the estimated size of site formation and excavated areas, the amount of excavated materials, size of active workfront and number of dump trucks to be used on site at a time, etc. are not available at this stage and the details of construction programme will be provided once available. For conservative, a dust monitoring and audit programme will be implemented during the construction stage to ensure that the nearby ASRs will not be subject to adverse constructional air quality impact. In addition, exempted NRMMs shall be avoided.

11.4 Appropriate air quality control measures stipulated in the Air Pollution Control (Construction Dust) Regulation would be implemented during construction stage to control the dust and gaseous emission. These measures include:-

- Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading;
- Any dusty material remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;
- 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 discernible or 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;
- When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the Site boundary with provision for public crossing. Good site practice shall also be adopted by the contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period;
- The portion of any road leading only to construction site that is within 30m of vehicle entrance or exit should be kept clear of dusty materials;
- Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation take place should be sprayed with water or a dust suppression chemical continuously;
- Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding;
- Any skip hoist for material transport should be totally enclosed by impervious sheeting;
- Every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the three sides;
- Immediately before leaving a construction site, all vehicles shall be washed to remove any dusty materials from its body and wheels;
- Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with tan audible high level alarm which is interlocked with the material filling line and no overfilling is allowed;
- Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies;
- Regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather;
- Erect higher hoarding (e.g. 3.5m or above) at the locations with ASRs in immediate proximity (e.g. ASR A06, etc.) to the development site boundary;
- Locate all the dusty activities away from any nearby ASRs as far as practicable;

- Provide electric power supply for on-site machinery as far as practicable and avoid using diesel generators to minimize the aerial emissions; and
- Exempted non-road mobile machinery (NRMM) shall be avoided.

Emission from Fuel Combustion Equipment

11.5 Apart from the dust and gaseous emission 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 control the exhaust emissions from non-road mobile machineries and construction vehicles. As mentioned in Section 11.3, the scale of the project is relatively small, the number of construction plants will be limited.

Concurrent Project

11.6 According to the site surveys and desktop reviews, there is no concurrent project within 500m of the proposed Development. With the implementation of air quality 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, in addition the relatively small scale construction works of the proposed Development, adverse cumulative construction air quality impact is not anticipated.

11.7 Therefore, the potential dust and exhaust emission from the construction works to the ASRs in the vicinity would be controlled.

12. CONCLUSION

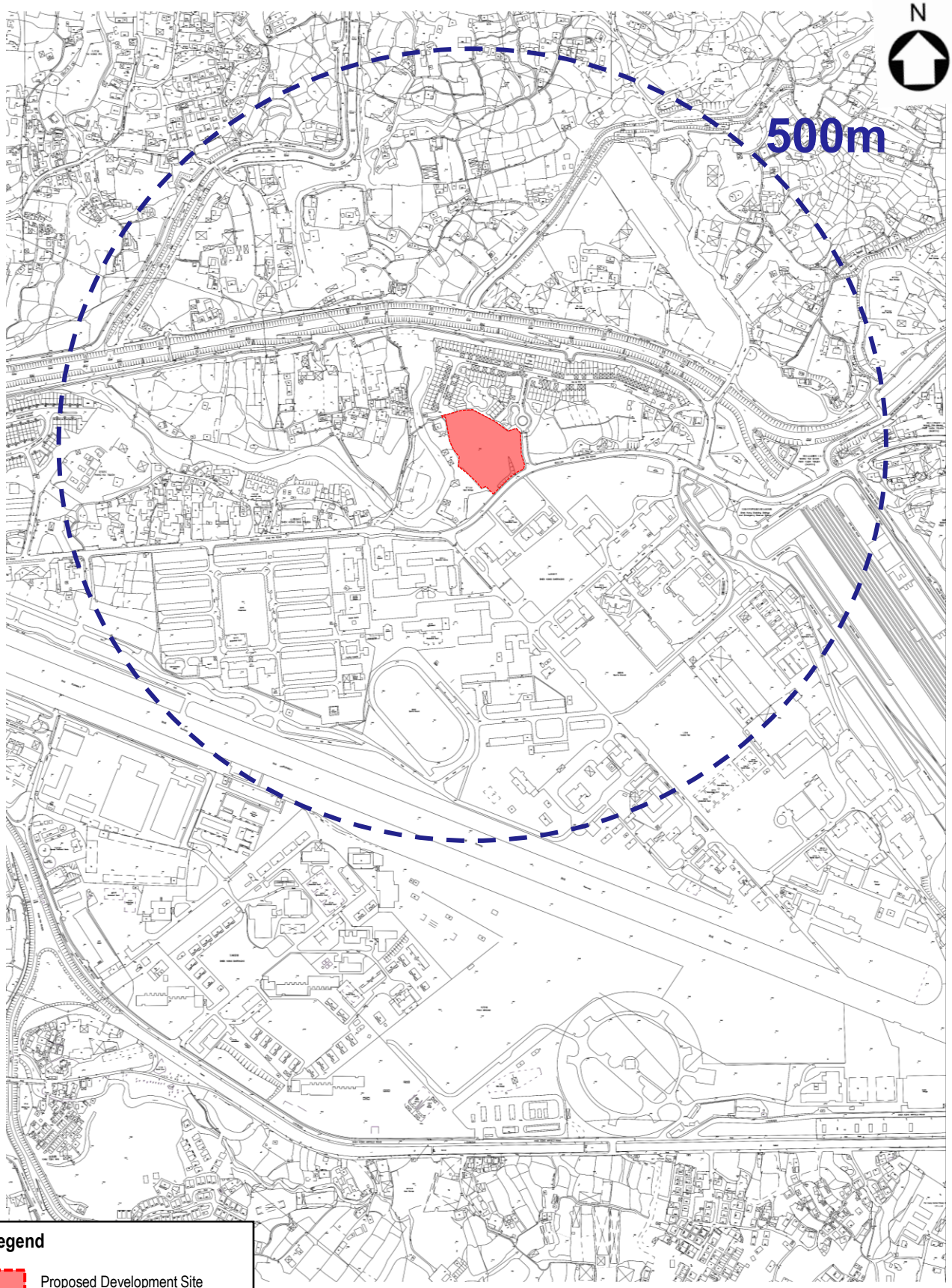
12.1 The proposed Development satisfies the buffer distance requirements for vehicular and industrial emissions stipulated under the Hong Kong Planning Standards and Guidelines (re. Table 3.1, Chapter 9, HKPSG). Site inspections revealed that no odour has been detected at the site boundaries and the emission of dust or fluff has not been identified from buildings in the vicinity of the proposed Development. Therefore, no adverse air quality impact associated with the proposed Development during operational phase is anticipated.

12.2 The proposed STP will be enclosed. With STP design according to EPD's guidelines, proper deodorization at the exhaust outlet and locating the exhaust away from the ASRs as far as possible, no adverse odour impact due to the proposed STP is anticipated.

12.3 Air quality control requirements in the Air Pollution Control (Construction Dust) Regulation will be followed. Relevant mitigation measures for dust and gaseous emissions will also be implemented. Therefore, no adverse air quality impact associated with the proposed Development during construction phase is anticipated.

13. REFERENCE

[1] "Hong Kong Planning Standards & Guidelines" of March 2014 of Hong Kong Government



Westwood Hong & Associates Ltd

PROJECT: 22605

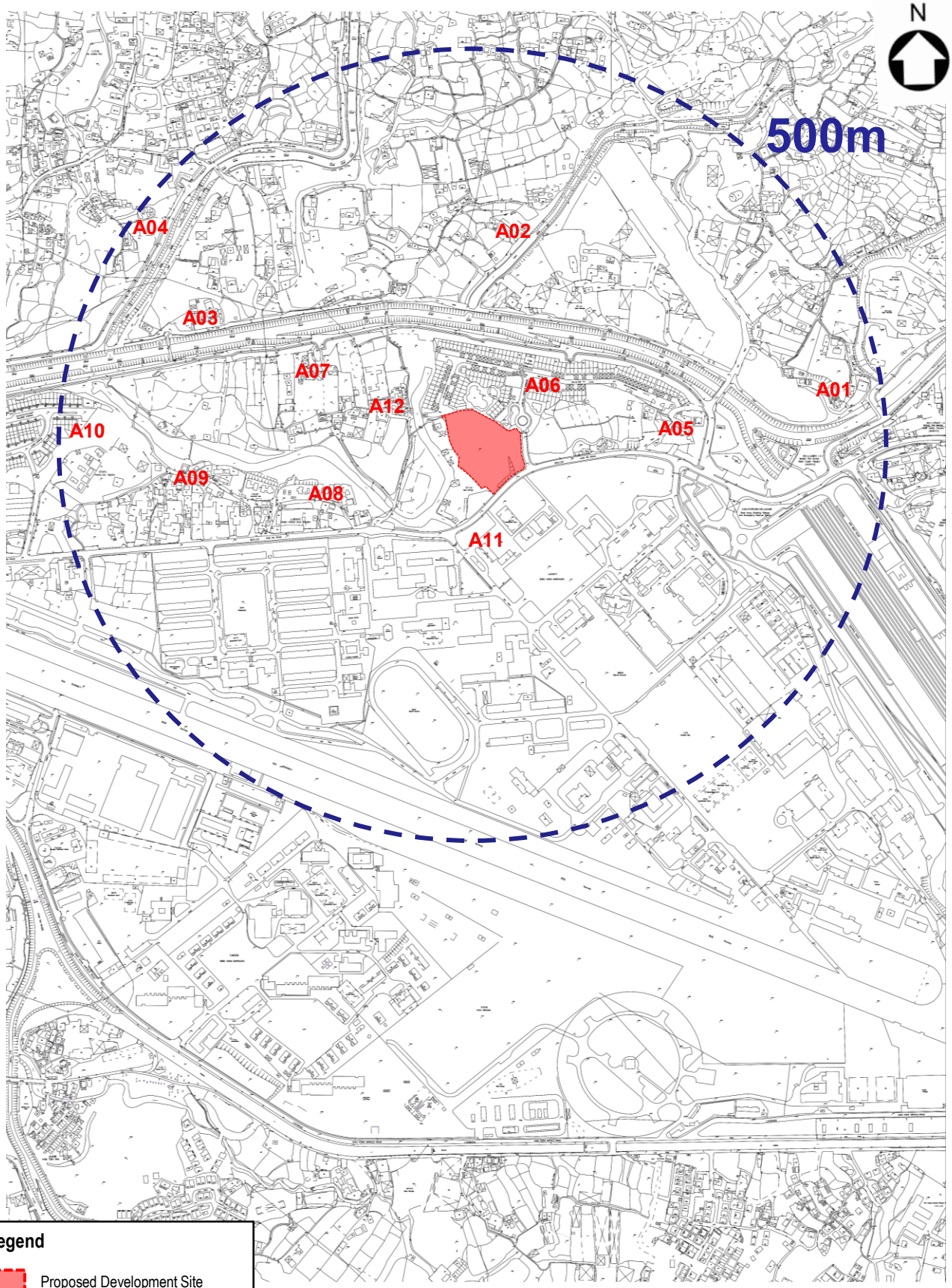
Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories

TITLE:

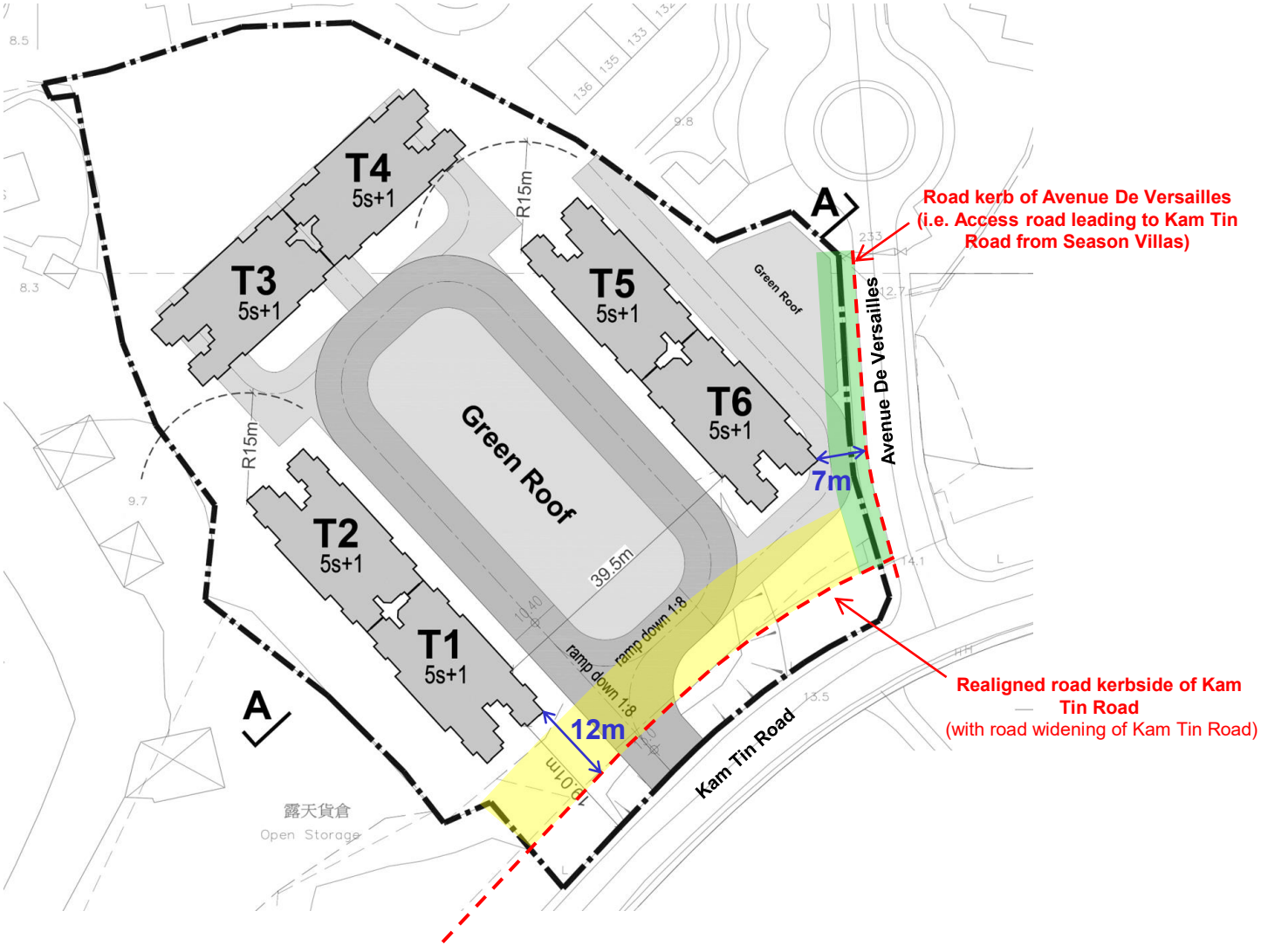
Site Location

FIGURE

1



Westwood Hong & Associates Ltd	TITLE:	FIGURE
PROJECT: 22605 Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories	**Locations of Identified ASRs within 500m from the Proposed Development**	**2**



Legend

- 5m Buffer Distance from Road
- 10m Buffer Distance from Road

*Remark: no air-sensitive use including openable window, fresh air intake and recreational use in open space shall be located within the buffer zones.

Westwood Hong & Associates Ltd

PROJECT: 22605

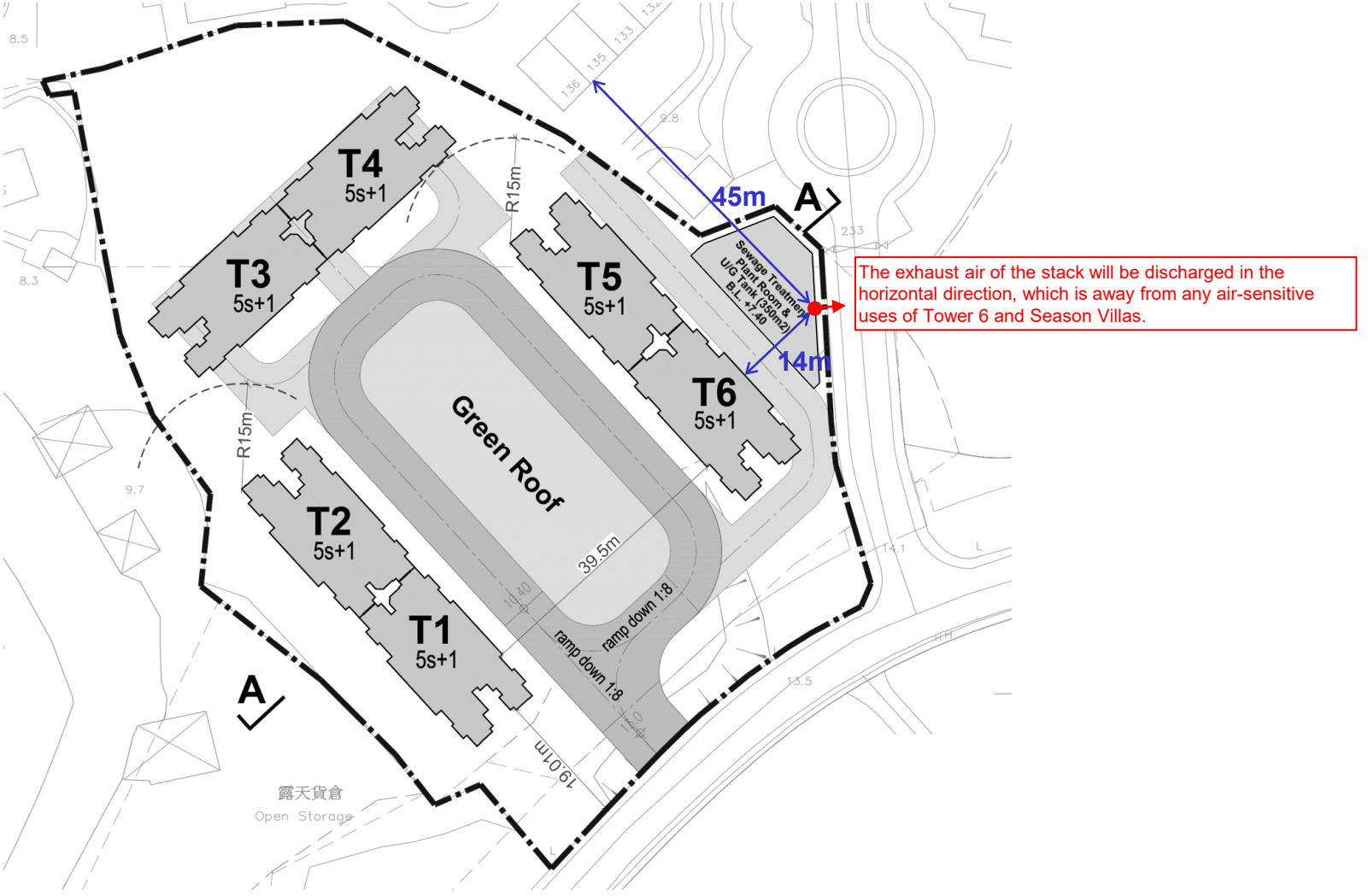
Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories

TITLE:

Shortest Distance between ASRs within the Proposed Development and the Road

FIGURE

3



Legend

Potential location of exhaust outlet and discharge direction

Westwood Hong & Associates Ltd

PROJECT: 22605

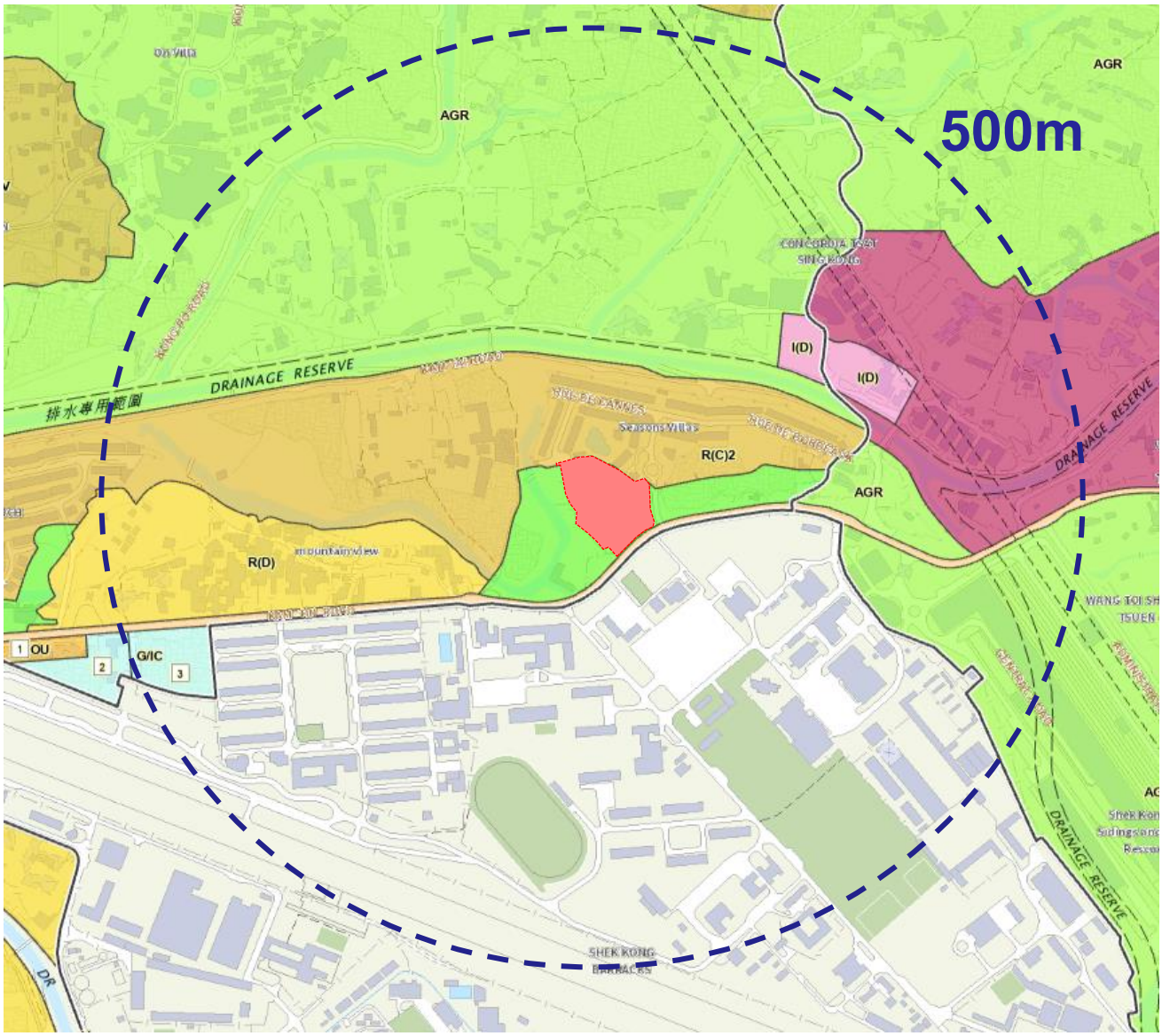
Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories

TITLE:

Potential Location of Exhaust Outlet and Discharge Direction

FIGURE

4

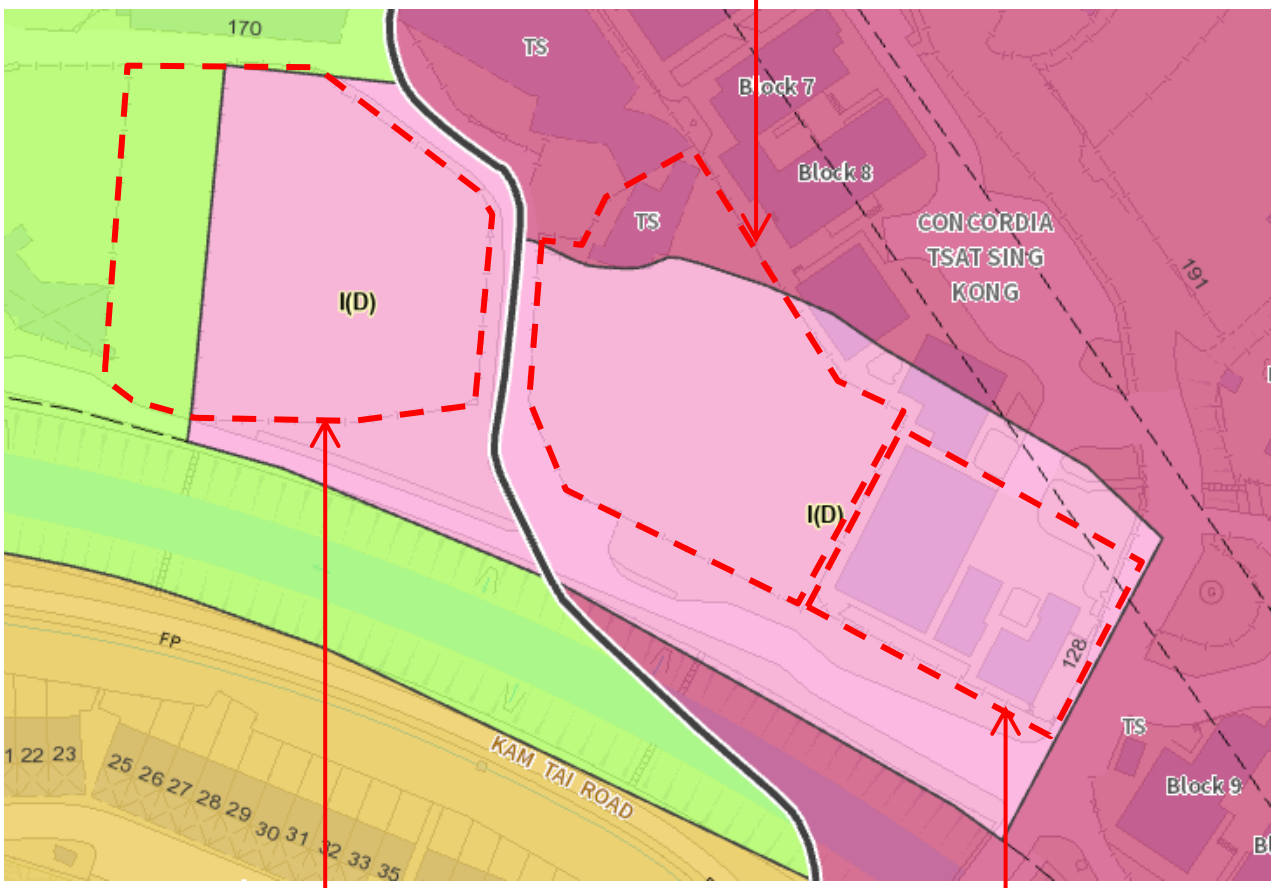


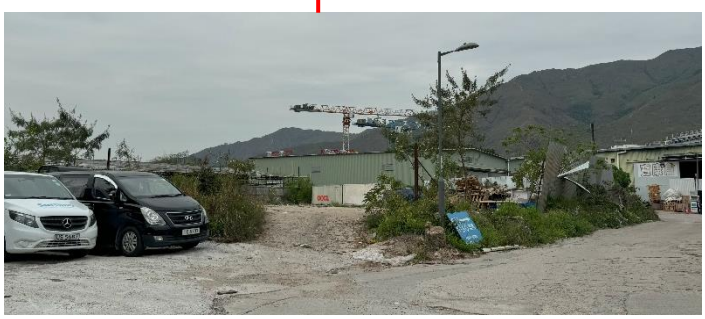
Legend

Proposed Development Site

Westwood Hong & Associates Ltd	TITLE:	FIGURE
PROJECT: 22605 Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories	**I(D) Zones within 500 Assessment Area**	**5a**

Observation: Used as open storage,
no active/heavy industrial operation





Observation: Used as open storage,
no active/heavy industrial operation

Observation: Used as substation,
no active/heavy industrial operation

Westwood Hong & Associates Ltd	TITLE:	FIGURE
PROJECT: 22605 Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories	**I(D) Zones within 500 Assessment Area**	**5b**

APPENDIX 1

ARCHITECTURAL DRAWINGS

T4
5s+1

T3
5s+1

T5
5s+1

T6
5s+1

T2
5s+1

T1
5s+1

Green Roof

Green Roof

R15m

R15m

39.5m

10.40

ramp down 1:8

ramp down 1:8

19.01m

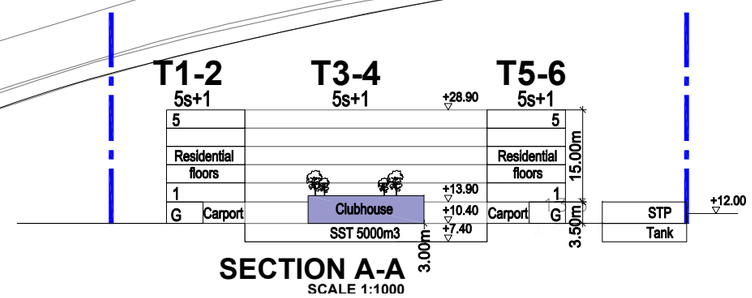
A

A

露天貨倉
Open Storage

錦田公路

斜路

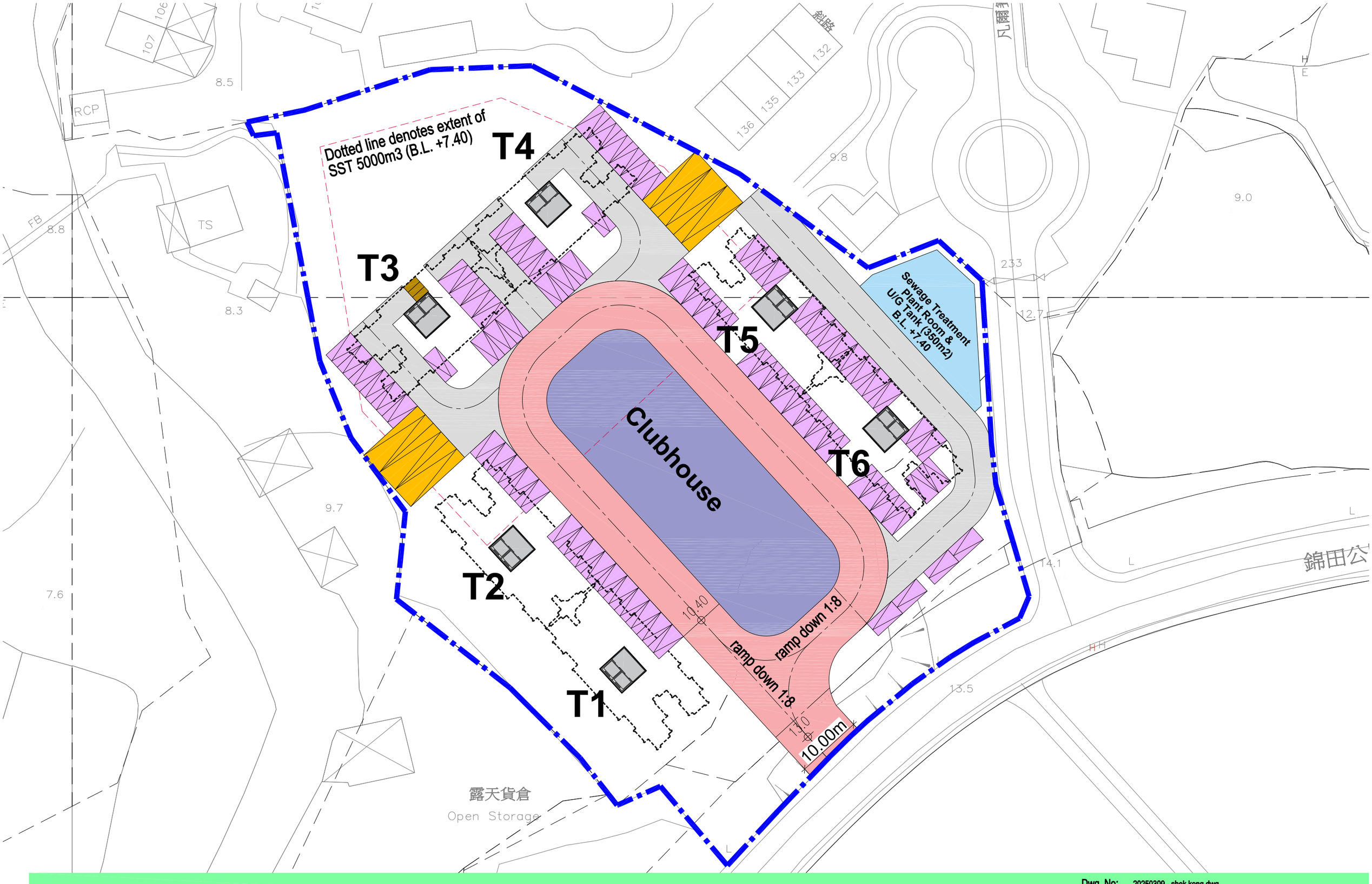


SECTION A-A
SCALE 1:1000

REZONING APPLICATION
AT DD110, SHEK KONG, KAM TIN ROAD,

MASTER LAYOUT PLAN

Dwg No: 20250309 - shek kong.dwg
Scale 1 : 500(A3)
Date: 24/04/2025
File Path: p:\dd110, shek kong, kam tin road, yuen long\g. scheme\2025_shek kong new alternative s12a



REZONING APPLICATION
AT DD110, SHEK KONG, KAM TIN ROAD,

GROUND FLOOR PLAN

Dwg No:	20250309 - shek kong.dwg
Scale	1 : 500(A3)
Date:	24/04/2025
File Path:	p:\dd110, shek kong, kam tin road, yuen long\g. scheme\2025_shek kong new alternative s12a

APPENDIX 2

PHOTOGRAPHS TAKEN ON SITE

Plate 1: Development Site

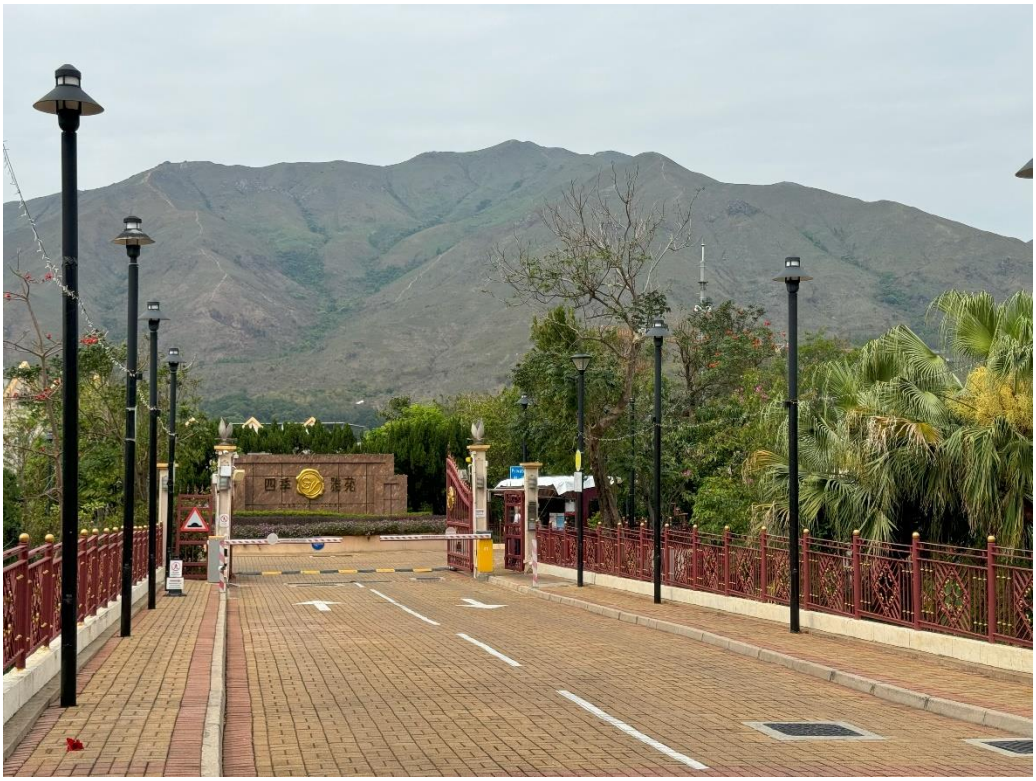


Plate 2: Seasons Villa

Westwood Hong & Associates Ltd	TITLE:	FIGURE
PROJECT: 22605 Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories	**Photographs taken on Site**	**A2-1**