Rezoning from "Residential (Group D)" to "Residential (Group C) 1" Zone
For a Proposed Residential Development
at Various Lots in D.D. 104 and the Adjoining Government Land
in Yuen Long, N.T.
- S12A Amendment of Plan Application -

(Planning Application No: Y/YL-MP/10)

Further Information No. 4

Appendix I

Revised Environmental Assessment

Prepared for

Capital Chance Ltd.

Prepared by

Ramboll Hong Kong Limited

S.12A AMENDMENT OF PLAN APPLICATION ON MAI PO & FAIRVIEW PARK OZP NO. Y/YL-MP/8

REZONING FROM "R(D)" TO "R(C)1" ZONE FOR A PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 104 & THE ADJOINING G.L. IN YUEN LONG, N.T.

ENVIRONMENTAL ASSESSMENT REPORT

Date	**10 June 2025**
Prepared by	**Crystal Lui *et al.***
Signed	
Approved by	**Henry Ng** **Principal Consultant**
Signed	
Project Reference	**SHKFVPRDEI01**
Document No.	**R9373_v7.1.docx**

Ramboll Hong Kong Limited

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APPENDICES

1. INTRODUCTION

1.1 Background

1.1.1 Ramboll Hong Kong Ltd. (the Consultant) has been commissioned by the Applicant, Capital Chance Limited, who is also the registered owner of the Subject Site to conduct the Environmental Assessment (EA) for a proposed residential development. Architectural drawings and technical information of the Subject Site were provided by the Project Architect (Archiplus International Ltd.) and the Project Consultants team, whereas information on road traffic forecast was provided by the traffic consultant of this Project employed by the Applicant.

1.1.2 The Subject Site is designated for residential use by the government under a "R(D)" zoning. It was previously approved by Town Planning Board (TPB) for house development under a planning application (Application No. A/YL-MP/205) in mid-2013. A supplementary EA Report for the Subject Site (R2838_V3.F, dated February 2013) was previously submitted to TPB under the above-mentioned planning application. The EA report at that time identified and addressed potential noise impact upon proposed sensitive receivers at the Subject Site.

1.1.3 A planning application for a proposed comprehensive residential development with a domestic plot ratio (DPR) of about 1.8 and 2,771 dwellings, was previously submitted under the Application No. Y/YL-MP/6. The proposed villa blocks at that time were 3 to 5 storeys high whereas the residential blocks varied from 17 to 19 storeys. An EA report (R7345) was submitted in support of the above-mentioned planning application with no further technical comment received at that time (hereinafter referred to as the Previous EA report).

1.1.4 Since then both the development schedule and DPR have been further reviewed and the current proposed DPR for the Site is slightly reduced from 1.8 to **1.5**. Accordingly, the maximum building height proposed is reduced from 19 to 16 storeys and less number of dwellings (2,322 units) is proposed for the Site. The residential blocks in the inner and eastern parts of the Site are now ranged from 14 to 16 storeys. No villa block is now proposed which is changed to non-domestic blocks on the northern part of the Site with a view to maximize the extent of proposed landscape pond. The non-domestic blocks are proposed for commercial, retail, transport layby, and E&M room.

1.1.5 It is noteworthy that the proposed minor amendments mostly involve a lower maximum building height and hence the resultant minor reduction in DPR and no. of storeys. The block form, building disposition, building orientation and buffer distance of the residential blocks from site boundary line under the Current Scheme remain unchanged.

1.1.6 The current EA report serves as an updated report to support the planning application for the Current Scheme from an environmental perspective. Practical pollution control and mitigation measures, if required for this low- to medium-rise residential development with respect to the Hong Kong Planning Standards and Guidelines (HKPSG) and other relevant legislation for the current layout are recommended in this EA report.

1.1.7 The proposed residential development is a designated project (DP) under the Environmental Impact Assessment Ordinance (EIAO) under Item P.1, Part 1, Schedule 2 of the EIAO (i.e. a residential development or recreational development other than New Territories exempted houses within Deep Bay Buffer Zone 1 or 2). A separate EIA study will be carried out for the proposed development and an Environmental Permit will be required before construction and operation of the proposed development. A

detailed air quality impact assessment will be conducted during the EIA stage. The Applicant will observe and ensure the proposed development will comply with all statutory requirements under the EIAO.

1.1.8 The Subject Site is also the subject of a few previous approved planning applications such as those under the application nos. A/YL-MP/110, A/YL-MP/132, A/YL-MP/146, A/YL-MP/193, and A/YL-MP/205. All of these have been approved previously for residential development. There was no physical construction work at the Subject Site since then, and the Subject Site is still a vacant land (i.e. no change in land use status). As mentioned above the proposed development is a designated project and an EIA study will be carried out separately including a review on historic land uses and potential of land contamination. Operation of the development will generate domestic waste during its operation stage. Waste will be collected and disposed of properly by a licensed contractor. Evaluation on construction phase waste management and best practices are provided in Sections 6.6 and 7.

1.2 The Project Location

1.2.1 The Subject Site is bounded by the Ngau Tam Mei Drainage Channel (NTMDC) and Kam Pok Road to its immediate north and west, Ha Chuk Yuen Road and a "Village" ("V") zone (covering Chuk Yuen Tsuen, Hang Fook Garden, etc.) to its east and south-east, and vacant land and Drainage Services Department (DSD)'s flood storage pond to its south.

1.2.2 Further to the west and north of the site across the said drainage channel are residential zones including several existing residential developments such as Fairview Park, Palm Springs, Royal Palms, Yau Mei San Tsuen and Wo Sang Wai.

1.2.3 **Figure 1-1** shows the location of the Subject Site and its environs, while **Figure 1-2** shows the layout plan of the proposed residential development for the Subject Site.

1.3 The Project Description

1.3.1 Like the previously approved scheme, the current scheme is also for residential use. With a proposed domestic plot ratio of about 1.5, the current scheme comprises 2 nos. of 14-storey residential towers, 2 nos. of 15-storey residential towers and 6 nos. of 16-storey residential towers, providing small- and medium-sized flats. There are also 4 nos. of ancillary residents' clubhouse blocks (one incorporated with a private underground sewage pumping station (SPS)), 4 nos. of blocks accommodating local retail use, E&M, transport laybys, and GIC facilities [including a kindergarten on G/F and a neighbourhood elderly centre (NEC) on 1/F], and outdoor swimming pool. The mean site formation level proposed under the current scheme is also about 5.4mPD. Development parameters are tabulated in **Table 1.1.**

1.3.2 During operation, sewage generated by the proposed development will be discharged into proposed SPS and proposed sewers, which then conveys to existing Nam Sang Wai SPS. Thus, no adverse impact is envisaged for the operational phase of the Project due to effluent discharge.

Table 1.1 Development Parameters of the Proposed Development

Major Development Parameters	Proposed Scheme
Application Site Area (m^2) (about)	65,690
Domestic GFA (m^2) (approximate) **Non-domestic GFA & NOFA of GIC facilities (m^2)**	98,535 6,020
Domestic Plot Ratio	Not more than 1.5
No. of Blocks	10 residential towers
Designed Population (based on SIA study)	About 6,898
Ancillary facilities	Resident's clubhouses, Outdoor swimming pool, E&M facilities, Transport layby, GIC facilities (Kindergarten and NEC), Retail
Number of car parking spaces	568 private car parking spaces, 24 motorcycles, and 28 loading and unloading spaces.
Installed capacity of onsite SPS (ADWF) **(Estimated sewage flow form the Proposed Development)**	<2500 m^3/day (~1,973 m^3/day)

1.4 Scope

1.4.1 The potential ecological, sewerage and its discharge, and drainage impacts, if any, of the proposed residential development are addressed in separate submissions under the same application.

1.4.2 This EA has identified and addressed the following major environmental issues of the proposed development:

- Traffic noise impact from the adjacent road networks on the proposed development;
- Industrial noise impact due to identified fixed noise sources;
- Operational noise due to existing planning, and proposed pumping stations;
- Potential air quality impact from and upon the proposed development;
- Potential water quality impact; and
- Evaluation on construction phase impacts.

2. AIR QUALITY

2.1 Introduction

2.1.1 This Chapter assesses and addresses the potential air quality impacts from and upon the proposed residential development at the Subject Site. The Assessment Area for air quality impact assessment is defined by a distance of 500m from the boundary of the Subject Site.

2.1.2 As mentioned in Sections 1.1.3 and 1.1.8, the Subject Site is also the subject of a few previous approved planning applications such as those under the application nos. A/YL-MP/193, and A/YL-MP/205. The current proposed development is also the subject of a previous planning application under the Application No. Y/YL-MP/6 with a submitted EA (R7345) without further comment received (Previous EA Report). Thus, the current EA report serves as an updated report to support the current application. Setback distance from nearby existing roads as presented in previous approved planning applications has been maintained in current proposed development.

2.2 Proposed Development

2.2.1 As discussed in **Sections 1.1.3 to 1.1.8 and 1.3**, an EA report (R7345) was submitted in support of the planning application under Application No. Y/YL-MP/6. The Current Scheme only involves a lowered maximum building height and reduced no. of storeys and hence the resultant minor reduction in DPR. The MLP, block form, building disposition, building setback from site boundary line and separation distance between air sensitive receivers (ASRs) and nearby public roads, as well as proposed separation distance for potential odour impact all remain unchanged. The master layout plan of the proposed Current Scheme is shown in **Figure 1-2**.

2.3 Legislation, Standards, Guidelines and Criteria

2.3.1 The principal legislation regulating air quality in Hong Kong is the Air Pollution Control Ordinance (APCO) (Cap. 311). Air Quality Objectives (AQOs) are set for the whole of Hong Kong, which specify the statutory limits for various criteria pollutants and the maximum number of exceedance allowed over a specified period of time.

2.3.2 According to the Air Pollution Control (Amendment) Bill 2024, the new set of AQOs are adopted in the assessment. The AQOs for Carbon Monoxide (CO), Nitrogen Dioxide (NO_2), Sulphur Dioxide (SO_2), and Respirable Suspended Particulates (RSP), and Fine Suspended Particulates (FSP, also known as $PM_{2.5}$), which are relevant to this assessment, are summarized in **Table 2.1** below.

2.3.3 Asides from the above, Air Pollution Control (Construction Dust) Regulation and Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation are also relevant during construction phase.

Table 2.1 Hong Kong Air Quality Objectives

Pollutants	Averaging Period	Pollutants Concentration ($\mu g/m^3$)	No. of Exceedances Allowed per year
CO	1 hour	30,000	0
	8 hours	10,000	0
	24-hour	4,000	0
NO_2	1 hour	200	18
	Annual	40	N.A.
	24-hour	120	9
SO_2	10-min.	500	3
	Daily (24 hours)	40	3
RSP (PM10)	Daily (24-hours)	75	9
	Annual	30	N.A.
FSP (PM2.5)	Daily (24-hours)	37.5	18
	Annual	15	N.A.

Remarks:

N.A. Not applicable.

FSP means particulate matters *in air with a nominal aerodynamic diameter of 2.5 µm or less. Also known as PM2.5.*

RSP means particulate matters in air with a nominal aerodynamic diameter of 10 µm or less. *Also known as PM10.*

2.4 Air Quality Impact Assessment

2.4.1 During construction phase, the major air quality impact of concern will be the potential fugitive dust emission during site formation stage and the particulate matters (PM) and gaseous emissions from the use of powered mechanical equipment and construction vehicles on site. The first layer of existing ASRs that are nearby the Subject Site (i.e. nearest to the site boundary) which would be worst affected are selected as representative ASRs for the purpose of this study. There are also a few other approved planned development sites in adjacent, which are identified as planned ASRs. These identified nearby ASRs are shown in **Figure 2-3** with details summarized in **Table 2.2**.

Table 2.2 Representative Nearby Existing and Planned ASRs

ASR ID	Description	Type	Status	No. of Storey	Approx. Shortest Horizontal Distance to Boundary of Development Site (m)
A01	260 Ha Chuk Yuen Rd, Tam Mei	Village house	Existing	3	28
A02	261 Ha Chuk Yuen Rd, Tam Mei	Village house	Existing	3	25
A03	251 Ha Chuk Yuen Rd, Tam Mei	Village house	Existing	3	50
A04	253 Ha Chuk Yuen Rd, Tam Mei	Village house	Existing	3	45
A05	257 Ha Chuk Yuen Rd, Tam Mei	Village house	Existing	3	28
A06	210 Ha Chuk Yuen Rd, Tam Mei	Village house	Existing	3	60
A07	216 Ha Chuk Yuen Rd, Tam Mei	Village house	Existing	3	36
A08	Block 9, Hang Fook Garden	Residential	Existing	3	123
A09	Block 1, Hang Fook Garden	Residential	Existing	3	125
A10	Fairview Park	Residential	Existing	3	140
A11	348 Ha Chuk Yuen Rd, Tam Mei	Village house	Existing	3	43
A12	437 Ha Chuk Yuen Rd, Tam Mei	Village house	Existing	3	20
A13	Fairview Park	Residential	Existing	3	122
A14	Temporary structure in Yau Mei San Tsuen	Village house	Existing	1	108

ASR ID	Description	Type	Status	No. of Storey	Approx. Shortest Horizontal Distance to Boundary of Development Site (m)
A15	Planned development (A/YL-MP/247)	Residential	Planned	3	73
A16	Planned development (Y/YL-MP/3)/ A/YL-MP/341 *	Residential	Planned/ Existing*	3	83
A17	Planned development (Y/YL-MP/3)/ A/YL-MP/341 *	Residential	Planned/ Existing*	3	78
A18	Planned development (A/YL-MP/287)	Residential	Planned	2	84
	Remark: * The concerned REC Site is also the subject of an approved public light housing development by the government (3 storeys high) under application no. A/YL-MP/341, which is a temporarily use. The site boundary at the REC Site nearest to the current Subject Site are already considered in the table.				

Since some existing ASRs are found to be in close proximity of the site boundary, additional mitigation measures such as erection of higher hoarding and relocation of dusty activities away from the nearest ASRs shall be considered. In addition, it is also recommended that electric power supply should be provided for on-site machinery as far as practicable to minimize aerial emissions.

2.4.2 During operation stage, proposed buildings within current proposed development site will be the ASRs. Other nearby existing and planned developments as identified in **Table 2.2** above are also the ASRs. During operation, there are some air quality impacts arising from the operation of proposed private SPS and transport-layby of the proposed development, which have been addressed in the following paragraphs.

Vehicular Emissions

2.4.3 The Subject Site is away from roads such as Castle Peak Road – Tam Mi (a Rural Road) and San Tin Highway (an Expressway) by more than 180m (**Figure 2-1** refers), and is physically separated by clusters of existing village houses at Chuk Yuen Tsuen, Tai Yuen Villa, and the existing 3-storey high Golden Age Home for Senior Citizens located between the Subject Site and the concerned roads. According to the published Annual Traffic Census 2023 report, Castle Peak Road – Tam Mi is a Rural Road while San Tin Highway is an Expressway. There is no specific buffer distance for rural road under the HKPSG. Given that the proposed development has a separation distance over 180m from Castle Peak Road – Tam Mi, which can already satisfy relevant buffer distance requirement for a district distributor road (i.e. >10m), there should be no adverse air quality impact upon the proposed development. Accordingly, the said separation distance between proposed development and San Tin Highway, can also satisfy the buffer distance requirement for a Trunk Road and Primary Distributor (i.e. >20m). Thus, no adverse air quality impact upon the proposed development is anticipated.

2.4.4 In addition, the air sensitive uses within Subject Site are also setback from the adjacent Kam Pok Road, which is a Rural Road by >5m. It is also setback from local access roads (single track access road) such as Ha Chuk Yuen Road and Fung Chuk Road by about 26m to 43m, respectively (see **Figure 2-1**). Peripheral setback for the residential blocks has also been provided along the eastern boundary near Ha Chuk Yuen Road as well as nearby Kam Pok Road, this buffer area, which will be planted with trees, is not designed to be accessible by general public. The locations of the concerned local access roads and the separation distance measured between the nearest air sensitive uses of the Subject Site and the road edge are shown in **Figure 2-1**. For the purpose of this study, buffer distance which is referenced to a DD road

(i.e. >10m) is currently adopted to be conservative. Thus, Kam Pok Road, Ha Chuk Yuen Road, and Fung Chuk Road are considered as DD road in this assessment as a conservative approach. (see **Figure 2-1**). For the buildings in which part of them fall within the buffer zone for Kam Pok Road (i.e. buildings namely the E&M, Commercial, Commercial & Transport Layby, Commercial & GIC Facilities), it is confirmed that these buildings will be designed in such a way that there shall be no air-sensitive use including openable window, fresh air intake of air-conditioning system, and recreational use in open space located within the buffer zone. Such requirement will be incorporated in later stage of development as details of these buildings are not available which will be subject to later detailed design stage. Thus, there should be no adverse air quality impact upon the proposed development. For Ha Chuk Yuen Road and Fung Chuk Road, the proposed development is already setback from these local access roads by >10m shown in **Figure 2-1**, it can already satisfy the buffer distance requirement for DD road (i.e. >10m), there should be no adverse air quality impact upon the proposed development.

2.4.5 Internal access roads within the proposed development are EVA roads only. Since the buffer distance at the Subject Site can satisfy the HKPSG requirements and that no air sensitive uses, including fresh air intake of ventilation system, openable windows and recreational uses in open space of the proposed development are located within the buffer zone, no adverse air quality impacts on the proposed residential development due to vehicular emissions are expected.

2.4.6 The non-domestic blocks at the northern part of the subject site abutting Kam Pok Road are proposed for commercial, retail, GIC use, transport lay-by and E&M room. It is expected these facilities will unlikely involve air pollution emission except the transport lay-by. Details of design of the transport laybys is not available at this stage and will only be available in later detailed design stage. The potential location of the exhaust of the proposed transport layby will be located away from any air-sensitive uses as far as possible such as facing Kam Pok Road. The potential location of the exhaust for the proposed transport lay-by is shown in **Figure 2-2**, and the exact location is subject to detailed design stage. The transport layby will be designed to follow relevant guidelines. The applicability of either the EPD's ProPECC PN 2/96 on Control of Air Pollution in Car Parks or ProPECC PN 1/22 Control of Air Pollution in Semi-Confined Public Transport Interchanges for the design and operation of the transport layby will be subject to further review based on the design in detailed design stage later on. With design and operation following relevant guidelines, no adverse air quality impacts on the proposed residential development due to transport-layby are expected.

2.4.7 There is one-storey of basement carpark proposed within the proposed development. Based on preliminary information, the carpark will be mainly for private cars which would provide about 568 private car parking spaces, 24 motorcycles, and 28 loading and unloading spaces. Details of the carpark is not yet available and will only be available in later detailed design stage. The potential location of the exhaust of the carpark will be located away from any air-sensitive uses as far as possible such as facing Kam Pok Road (**Figure 2-2** refers). The carpark will be designed to follow EPD's ProPECC PN 2/96 on Control of Air Pollution in Car Parks. With design and operation following relevant guideline, no adverse air quality impacts on the proposed residential development due to carpark are expected.

Industrial Emissions

2.4.8 Based on the latest design scheme, there are no planned industrial emission sources from the operation of this Project.

2.4.9 A review of chimney locations based on EPD's register previously obtained, were carried out. No chimneys were identified within the 500m Assessment Area. Additional chimney surveys were also conducted to verify the findings during previous planning application with further visits conducted in July 2019, August 2022, September 2023, September 2024, and February 2025. As no chimneys were identified within the Assessment Area, no air quality impact related to chimney emissions is expected.

Odour from Proposed San Tin No.1 Sewage Pumping Station

2.4.10 Potential odour impact due to other nearby sewage pumping stations is also considered. There are three existing private sewage treatment plants serving Palm Springs, Royal Palms and Fairview Parks. However, these plants are all located more than 500 m from the boundary of proposed development. Therefore, it is anticipated that no adverse odour impact from these existing sewage treatment plants upon the proposed development. There is also the future San Tin No.1 Sewage Pumping Station (SPS) planned to be located at the junction of Kam Pok Road and Castle Peak Road (about 145m northeast of the Subject Site) (**Figure 2-2** refers).

2.4.11 With the careful design of the sewage pumping station and installation of odour removal system, it is expected that odour impact due to the sewage pumping station will be insignificant. Based on the latest information, San Tin No.1 SPS will be provided at the junction of Kam Pok Road and Castle Peak Road under PWP Item 4235DS. In addition, according to the EIA report for the said SPS project (i.e. the "EIA and TIA Studies for the Stage 2 of PWP Item No. 215DS - Yuen Long and Kam Tin Sewerage and Sewage Disposal), it has a design capacity of about 13,000 m^3/day and odour removal filtering system (with efficiency of 99.5% for H_2S) will be installed in the San Tin No.1 SPS. The maximum predicted odour concentration at existing ASRs surrounding the SPS, San Tin Rural Committee with a separation distance of ~42m, which are much closer to the SPS, would be about 0.093 OU (Odour Unit), which is 1.9% of the 5 OU criteria. While the current proposed development, as mentioned above, is about 145m away from the SPS. With the odour removal filtering system and long buffer distance of the future SPS, adverse odour impact upon the proposed development is not anticipated.

Other Odour Sources

2.4.12 Provision of a private sewage pumping station (SPS) within the Site has been proposed, which may potentially give rise to odour impact. The indicative location of the proposed private SPS is shown in **Figure 2-2**. During the operational stage, sewage generated by the proposed development will be discharged to the proposed private SPS before discharging into proposed sewers along Kam Pok Road and Pok Wai South Road and then finally discharges into existing Nam Sang Wai Sewage Pumping Station. Future management and maintenance issues will be further discussed with DSD. Site surveys were conducted in July 2021, August 2022, September 2023, September 2024, and February 2025 please refer to **Figure 2-4**. No odour source from Ngau Tam Mei Channel was identified during the site visit, which has a separation distance of about 21m from the proposed development. No particular air and odour emission sources were identified at nullah along Ha Chuk Yuen Tsuen, pond at DSD's Chuk Yuen Floodwater pumping station or within 200m radius from the proposed development. It is noted that a separate EIA study and air and odour impact assessment will also be carried out for the proposed development later on.

2.4.13 Detailed information regarding the design of the proposed SPS is not available at this stage, which will be subject to detailed design stage. Design of the proposed private SPS has been integrated into the Proposed Development, where the SPS with provision

of odour removal system (with an odour removal efficiency of not less than 99% for H_2S), will be located underground and provided inside an enclosed building structure, such that impact of odour from the SPS will be minimal. Also, the proposed exhaust point of the SPS is directed towards Kam Pok Road. By making reference to other similar SPSs as described in Section 2.4.14, it is recommended that odour removal system should be installed and a minimum separation distance of >15m between the exhaust of SPS and any air sensitive uses including the proposed development and nearby existing and planned ASRs, should be maintained in the design of SPS. Based on current design, separation distances between the closest ASRs and the exhaust of the private SPS is shown in **Figure 2-2**, which illustrates that the current design can meet this requirement. Thus, with the careful design of this underground SPS and provision of odour removal filtering system, it is expected that odour impact arising from the SPS will be properly controlled.

2.4.14 With reference to the previously approved EIA Report for the project, "Outlying Island Sewerage Stage 2 - Upgrading of Cheung Chau Sewage Collection, Treatment and Disposal Facilities (EIA-219/2013)", the odour impact assessment conducted for the Pak She SPS (with a capacity of 42,336 m^3/day) has revealed that odour levels at sensitive receivers with a separation distance varying from 1m to 68m from the SPS could meet the relevant criteria for odour level after the implementation of odour removal filtering system (with efficiency of 99% for H2S). Furthermore, according to the Project Profile for "Public Housing Development at Lin Cheung Road Site - Temporary Sewage Pumping Station and Associated Sewer Pipes" (DIR-239/2014), an odour survey was conducted at the existing Cheung Sha Wan Sewage Pumping Station (with a design capacity of 456,863 m^3/day), which was reported to be equipped with odour removal filtering system with a removal efficiency of 95%. That sewage pumping station serves the developed areas in urban area. The survey found that no odour could be detected at a location over 10m away from the exhaust vent of that SPS. The exhaust height for the Pak She SPS, according to the above-mentioned EIA report, is at ground floor (~1.5m above ground level), while the above-mentioned Project Profile for Cheung Sha Wan SPS has indicated its exhaust located on G/F as well. Given the similar nature of the current proposed SPS and the relatively small scale of current proposed development (with the capacity of SPS <2,500 m^3/day), the separation distance of >15m from the exhaust point of proposed SPS (i.e. 63m between the proposed SPS and air sensitive uses including the proposed development and nearby existing and planned ASRs) as illustrated in **Figure 2-2,** should be adequate. The exhaust of current proposed SPS will also be located on ground floor. With an environmentally conscious design, adequate separation distance, and provision of the recommended odour removal filtering system at the exhaust point (with an odour removal efficiency of not less than 99% for H_2S) (removal efficiency of above-mentioned SPS EIA refers), adverse odour impact on the proposed development is not anticipated.

2.5 Conclusion

2.5.1 The proposed development meets the buffer distance requirements stated in the HKPSG for the air sensitive uses within the Subject Site, thus no adverse air quality impacts due to vehicular emission are expected. In addition, as no industrial emission sources were identified within 500m from the Subject Site boundary, no adverse air quality impacts due to industrial emissions are expected. Sewage generated by the proposed development will be discharged to the proposed private SPS before discharging into proposed sewers and then conveyed to existing Nam Sang Wai Sewage Pumping Station, while the proposed private SPS will be fully underground and equipped with an odour removal filtering system (with an odour removal efficiency

of not less than 99% for H2S). With adequate buffer distance provided between the sewage pumping stations and the air sensitive uses, and provision of odour removal filtering system for the proposed private SPS, no adverse odour impact on the proposed development and nearby existing sensitive uses is anticipated. Since the proposed development will constitute a designated project under the EIAO, an air quality impact assessment which includes both vehicular and odour impacts during the operational stage, is required to demonstrate the compliance of the criteria stipulated in the EIAO-TM under the EIA process.

3. TRAFFIC NOISE IMPACT ASSESSMENT

3.1 Introduction

3.1.1 Noise standards are recommended in Chapter 9 of the HKPSG for planning against possible road traffic noise impacts. For new dwellings, as in the case of the proposed development within the Subject Site, the maximum allowable road traffic noise level expressed in terms of L_{10}(1 hr) at the typical façades of the proposed residential uses, proposed neighbourhood elderly centre (NEC) and proposed kindergarten are recommended to be 70 dB(A) and 65dB(A), respectively. The proposed NEC and its activity room does not involve any educational use. As for the proposed kindergarten, the intended use of sick bay at kindergarten is to provide a resting place for students who are sick, and there should be no clinical or diagnostical activity involved at kindergarten. Thus, it should be subject to 65dB(A) noise criteria for educational use. However, for the purpose of this noise assessment exercise, a more stringent criteria, which is 55 dB(A) has been assumed based on a conservative approach. The presence of any clinical/diagnostical uses at sick bay at kindergarten will be subject to further confirmation in later detailed design stage. As the proposed development is still at early planning stage, detailed layout and uses of ancillary facilities are not yet available at this stage. There are no known noise sensitive uses within ancillary facilities such as clubhouse at this stage.

3.1.2 As mentioned in Sections 1.1.3 and 1.1.8, the Subject Site is also the subject of a few previous approved planning applications such as those under the application nos. A/YL-MP/193, and A/YL-MP/205. The current proposed development is also the subject of a previous planning application under the Application No. Y/YL-MP/6 with a submitted EA (R7345) without further comment received (Previous EA Report). Thus, the current EA report serves as an updated report to support the current application. The block form, building disposition, building orientation and buffer distance of the residential blocks from nearby existing roads under the Current Scheme remain unchanged.

3.2 Identification of Potential Noise Impacts

3.2.1 The local road network (e.g. Kam Pok Road, Yau Pok Road, Ha Chuk Yuen Road, Castle Peak Road – Tam Mi, and San Tin Highway) are considered as the major noise sources potentially affecting the proposed development (**Figure 1-1** refers). The Subject Site is bounded by Kam Pok Road at the west, Fung Chuk Road at the south, and Ha Chuk Yuen Road to the east. To the immediate north of the Subject Site is the existing Kam Pok Road. Castle Peak Road – Tam Mi and San Tin Highway are further away to the east and is partially shielded by the existing villages between the Subject Site and the said road segments.

3.2.2 The traffic projection data has already taken into account other planned development projects nearby.

3.3 Determination of Traffic Noise Sensitive Receivers

3.3.1 Representative Noise Sensitive Receivers (NSRs) locations proposed under this Project, which are selected for operational phase road traffic noise are shown in **Figure 3-1**. The assessment points are taken at 1.2 m above the floors of the selected storey and 1m away from the external facades of openable windows. Floor mPD levels at NSRs have been updated based Current Scheme. Typical internal layouts of the proposed residential towers are presented in **Appendix 3–1**.

3.3.2 As for the proposed NEC and kindergarten uses at GIC facilities at north-eastern corner of the Subject Site (**Figure 3-1** refers), its detailed design and layout will only be available at the later detailed design stage. A preliminary indicative layout plan is provided in **Appendix 3-1**. Based on current design, there is a solid wall in front of classrooms 1 to 3 and multi-purpose room at kindergarten and there are no openable window at these rooms, thus these rooms are not identified as noise sensitive receivers.

Table 3.1 Representative NSRs for Operational Phase Road Traffic Noise Assessment

NSR ID	No. of Storeys (excl. basement)	mPD Level (1.2m above Floor Level)
T1	15	6.6 (G/F) – 54.4 (14/F)
T2	15	6.6 (G/F) – 54.4 (14/F)
T3	14	6.6 (G/F) – 51.2 (13/F)
T5	14	6.6 (G/F) – 51.2 (13/F)
T6	16	6.6 (G/F) – 57.5 (15/F)
T7	16	6.6 (G/F) – 57.5 (15/F)
T8	16	6.6 (G/F) – 57.5 (15/F)
T9	16	6.6 (G/F) – 57.5 (15/F)
T10	16	6.6 (G/F) – 57.5 (15/F)
T11	16	6.6 (G/F) – 57.5 (15/F)
GIC-GF (Kindergarten)	1	6.6 (G/F)
GIC-1F (NEC)	1	11.6 (1/F)

3.4 Assessment Methodology

3.4.1 The extent of noise assessment was based on an area within 300m radius from the Subject Site boundary. Pervious road surface is applied at San Tin Highway in noise model. While bitumen road surface is applied at other roads. **Appendix 3–2**, refers.

3.4.2 The assessment concerns the prediction of the maximum hourly L_{10} traffic noise level at NSRs of the proposed development due to the projected peak hour traffic flow on the adjacent major road networks (e.g. Kam Pok Road, Castle Peak Road, San Tin Highway, and nearby local village roads). The traffic flow data was provided by the Project traffic consultant. Further details of the projected traffic flow data are described in the following paragraphs.

3.4.3 The traffic flow data was predicted by the Project traffic consultant for Year 2046, which is considered to be the worst case scenario within 15 years upon completion of the proposed development on the Subject in Year 2031. Traffic forecast data has taken into account nearby planned development sites.

3.4.4 The UK Department of Transport's procedures - "Calculation of Road Traffic Noise" (CRTN) has been used in the prediction of the road traffic noise at the representative noise sensitive receivers of the proposed development within the Subject Site. The existing topographic details, such as the existing village houses near the Subject Site, have been considered in the assessment.

3.4.5 The noise prediction was carried out using the *RoadNoise 2000* software, which is a computerized model developed on the basis of the U.K. Department of Transport's CRTN procedures, and is acceptable to the EPD.

3.5 Prediction and Evaluation of Noise Impacts

3.5.1 The proposed development has adopted various precautionary measures in the design, which have been incorporated into the unmitigated scenario:

- Building setback from site boundary line;
- Incorporation of landscaping area to abut adjacent public road;
- Using noise-tolerant uses such as landscape pond, retail building as the buffer to help shield road traffic noise.; and
- Environmental conscious layout design at proposed kindergarten development, with noise sensitive uses facing away from public roads as far as possible .

3.5.2 Details of information on peak hour traffic volume and percentage of heavy vehicle using these roads provided by the Project traffic consultant is shown in **Appendix 3–2**, which represents the worst-case scenario of the projected traffic flows.

3.5.3 An assessment on the road traffic noise level at the NSRs based on the above traffic flow data as well as adopted precautionary measures in design has been conducted and the results in both AM and PM peak hours are presented in **Appendix 3–3** as unmitigated scenario. The results revealed that worse road traffic noise impact would generally occur in AM peak hour, which are summarized and presented in **Table 3.2**. Based on the assessment results, the predicted road traffic noise levels can comply with the relevant noise criteria except a few locations at kindergarten which would exceed the relevant noise criteria.

Table 3.2 Range of Predicted Unmitigated Road Traffic Noise Levels at Representative NSRs (AM Peak)

NSR ID	Noise Criteria, dB(A)	Range of Estimated Noise Level, L_{10} dB(A)
T1	70	34 – 63
T2	70	40 - 61
T3	70	43 - 60
T5	70	51 - 61
T6	70	37 - 61
T7	70	43 - 62
T8	70	46 - 66
T9	70	39 - 65
T10	70	52 - 65
T11	70	52 - 68
GIC-GF (Kindergarten) -sick bay of kindergarten	65 70 *	61 – **70** 65
GIC-1F (NEC)	70	62 – 70

Remarks: Please refer to **Appendix 3–3** for the estimated noise levels at each NAP and **Figure 3-1** for the geographical locations of NSRs. Proposed NEC does not involve any educational use.

(1) * The intended use of sick bay at kindergarten is to provide a resting place for students who are sick, and there should be no clinical or diagnostical activity involved at kindergarten. Thus, criteria of domestic premise, i.e. 70 dB(A) has been assumed.

(2) NAPs assigned at the corridor and entrance at G/F such as GIC-GF-01, GIC-GF-08 and GIC-GF-09 are not NSRs according to current layout and the results of these NAPs shown in **Appendix 3-3** are for reference only.

3.5.4 Since noise exceedances were identified at kindergarten. Noise mitigation measure has been proposed to alleviate road traffic noise impact (**Figure 3-2**). The concerned measure include:

- Fence Wall (3m in height) in front of kindergarten building

3.5.5 The proposed incorporation of the above-mentioned measures in the design of the proposed scheme has been accepted by the Applicant and the Project Architect. With these precautionary noise measures, the mitigated road traffic noise levels (based on the projected traffic flow data of this Project) at the representative NSRs are predicted. The results revealed that worse road traffic noise impact would generally occur in AM peak hour, which are summarized and presented in **Table 3.3** below. Details of the mitigated road traffic noise levels in AM and PM peak hours are also depicted in **Appendix 3–4**.

Table 3.3 Range of Predicted Mitigated Road Traffic Noise Levels at Representative NSRs (AM Peak)

NSR ID	Noise Criteria, dB(A)	Range of Estimated Noise Level, L_{10} dB(A)
GIC-GF (Kindergarten)	65	56 – 59
-sick bay of kindergarten	70	65
GIC-1F (NEC)	70	62 – 70

Remarks: Please refer to **Appendix 3–4** for the estimated noise levels at each NAP and **Figure 3-1** for the geographical locations of NSRs. Since only GIC building has exceedance in unmitigated scenario, only NSRs in GIC building are presented.

(1) * The intended use of sick bay at kindergarten is to provide a resting place for students who are sick, and there should be no clinical or diagnostical activity involved at kindergarten. Thus, criteria of domestic premise, i.e. 70 dB(A) has been assumed.

(2) NAPs assigned at the corridor and entrance at G/F such as GIC-GF-01, GIC-GF-08 and GIC-GF-09. are not NSRs according to current layout and the results of these NAPs in **Appendix 3-4** are for reference only.

(3) The current presented predicted noise results at NAP GIC-GF-07 in **Appendix 3-4**, is based on the unmitigated result given that there is no noise exceedance.

3.6 Conclusion

3.6.1 Noise impact on the Proposed Development due to road traffic has been examined. With the implementation of precautionary measures in design and proposed noise mitigation in terms of a fence wall (3m in height) for the kindergarten on G/F, the predicted road traffic noise levels would be within the relevant noise criteria. Thus, no adverse traffic noise impact on the proposed development is then anticipated.

3.6.2 It is recommended that glass panes in all windows of all noise sensitive rooms (e.g. living rooms, dining rooms and bedrooms) within the development should have a minimum thickness of 6mm. All these windows are well-gasketted, providing the future occupants an option for a quieter indoor noise environment.

4. INDUSTRIAL NOISE IMPACT ASSESSMENT

4.1 Introduction

4.1.1 This assessment is to identify the potential noise impact due to existing, planned fixed noise sources and assess their impacts on the presentative sensitive receivers of the proposed residential development. The extent of noise assessment was based on an area within 300m radius from the Subject Site boundary.

4.1.2 As mentioned in Sections 1.1.3 and 1.1.8, the Subject Site is also the subject of a few previous approved planning applications such as those under the application nos. A/YL-MP/193, and A/YL-MP/205. The current proposed development is also the subject of a previous planning application under the Application No. Y/YL-MP/6 with a submitted EA (R7345) without further comment received (Previous EA Report). Thus, the current EA report serves as an updated report to support the current application. The block form, building disposition, building orientation and buffer distance of the residential blocks from nearby existing roads under the Current Scheme remain unchanged. As such, noise assessment and findings in the above-mentioned Previous EA report, which was based on horizontal separation distance, are still valid and are also reproduced in below paragraphs.

4.1.3 The Subject Site is located to the south of the completed Ngau Tam Mei Drainage Channel and to the west of San Tin Highway and Castle Peak Road – Tam Mi Section. Within 300m radius from the boundary of the Subject Site, there are a few existing industrial activities outside the Subject Site boundary to the south and east of the Subject Site, respectively. However, these industrial activities are relatively far away from the Subject Site, and the horizontal distance between the NSRs of the proposed development and the identified industrial activities ranges from over 180m to more than 300m. In addition, direct line of sight from the Subject Site to these industrial activities is partially blocked by the clusters of the existing village houses, which are located between the Subject Site and the said industrial activities.

4.1.4 As discussed above, the Subject Site is the subject of a few previous planning application which was also for residential use. The findings in Previous EA Report (R7345) has been referenced in current submission. Existing fixed noise sources and noise strength were already identified and established in the above-mentioned Previous EA Report. Further site visits have been conducted and found that the concerned fixed noise sources remain unchanged. Thus, noise strength data in the Previous EA Report is extracted and used in the current EA report.

4.2 Government Legislation and Standards

Noise Control Ordinance (NCO)

4.2.1 The Noise Control Ordinance (NCO) provides the statutory framework for the control of fixed plant. It defines statutory limits applicable to the fixed plants used during the operational phase of the Project. The Technical Memorandum for the Assessment of Noise from Places other than Domestic Premises, Public Places or Construction Sites (**IND-TM**) sets the criteria - Acceptable Noise Level (ANL) for governing fixed plant noise.

Hong Kong Planning Standards and Guidelines

4.2.2 The HKPSG requires that the planned fixed noise sources shall comply with 5 dB(A) below the ANLs, or the prevailing background noise levels, whichever lower. While for existing fixed noise sources, it shall comply with the Acceptable Noise Levels (ANL) laid

down in Table 2 of IND-TM. Both the noise standard should refer to façade noise level according to HKPSG, which is defined as 1m from the exterior of the building façade.

4.2.3 NSRs are classified according to the Area Sensitivity Rating (ASR). Any NSR shall be assigned an ASR of "C" if it is within 100 m of a zone designated as "Industrial" or "Industrial Estate" on a statutory Outline Zoning Plan, or an ASR of "B" if it is between 100 m and 250 m from such a zone, except for cases which indicate an ASR of "C".

4.2.4 As the Subject Site is located in rural area, to be conservative, the ASR of "A" has been assumed. The ANL for ASRs of "A" is depicted in **Table 4.1**.

Table 4.1 Relevant Noise Standard for Fixed Noise Sources

Standards	Criteria in relevant Time Periods	Acceptable Noise Level (ANL), Leq (30 minutes) dB(A) (for existing noise source)
NCO	Day and Evening (07:00 – 23:00)	60
NCO	Night (23:00 – 07:00)	50

4.2.5 As the concerned fixed noise sources are existing uses, the ANL noise criteria is applicable. The ASRs and ANLs proposed in this EA are intended for assessment only. Nothing in the EA shall bind the Noise Control Authority in the context of enforcement against any of the fixed noise sources identified and assessed in the future under the NCO. The exact ANL for proposed development will be confirmed later on when more information about the proposed development is available.

4.2.6 Measured background noise level of LA_{90} (façade level) near site boundary line was about 56 dB(A) during day-time and about 47 dB(A) during night-time, which was higher than ANL-5 criteria. The measurement was using Precision Integration Sound Level Meter, which complies with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1). The weather condition was good with calm wind condition (<5m/s) during measurement. The equipment was properly calibrated immediately prior to and following each measurement by a Sound Level Calibrator. The noise levels before and after measurement agreed to within 1.0dB. The microphone was oriented 1.2m above ground level to obtain a representative baseline condition of the Project Site. A +3 dB(A) correction factor has been applied to the measured noise levels in order to represent the façade noise levels.

4.3 Identification of Potential Noise Impacts

Industrial Noise Sources

4.3.1 Within 300m radius from the Subject Site, there are a few existing industrial activities. These existing noise sources and no. of equipment were identified in the Previous EA Report. These include:

- An open storage site for precast units and totally enclosed godown located to the south of the Subject Site;
- Roadside open storage sites along the northbound of Castle Peak Road; and
- A totally enclosed godown, small vehicle repair/ cleaning workshops, a storage site of construction materials, and an open storage site for storage of scrap metals along the southbound of Castle Peak Road, respectively.

4.3.2 Although these industrial sites are within 300m from the Subject Site boundary, they are relatively far away, and the horizontal distance between the NSRs of the residential

development and these industrial activities would range from over 180m to more than 300m. Furthermore, there are clusters of existing village houses at Chuk Yuen Tsuen, Tai Yuen Villa, and the existing Golden Age Home for Senior Citizens located between the Subject Site and the said industrial activities, which are worst affected (**Figure 4-2** refers).

4.3.3 The above-mentioned Previous EA Report for the Subject Site has already identified and assessed the noise impacts due to these storage activities based on prolonged observations. Further site visits have been conducted in January 2019, March 2020, July 2021, August 2022, September 2023, September 2024, and February 2025 which found that the patterns of operation of the concerned storage activities, noise sources and their characteristics remain the same. Thus, noise strength as identified in Previous EA Report are still valid. Site visits records are provided in **Appendix 4-1**. During the site visits, the concerned activities were found to be closed in the evening.

4.3.4 The **Table 4.2** summarises the identified industrial noise sources and number of plants. The respective locations of the identified industrial sites are also depicted in **Figure 4-2**.

Table 4.2 Identified Industrial Sites and Noise Sources

Source ID	Description	Consideration of Shielding Effect	Identified Noise Source
S1-1	sheltered warehouse	The concerned warehouse is within a sheltered area with hoarding erected on 3 sides and the top, which shields the Subject Site from this warehouse	General operating noise at the warehouse
S1-2	open storage)	-	Loading and unloading using forklift
S2-1	open storage of precast units	-	Movement of Lorry
S2-2	open storage of precast units	-	Lifting of container by a mobile crane
S3	Open storage site for container offices	The Subject Site is partially shielded by Hang Fook Garden. There is also an existing layer of containers (one is placed on top of another) near the western site boundary facing the Subject Site.	Loading and Unloading of container office by lorry
S4	Open storage site for storage of scrap metals	The Golden Age Home for Senior Citizens and Tai Yuen Village shield the Subject Site from this storage site	Operation and movement of breaker machine within the storage site
S6	Storage area for construction materials	The Golden Age Home for Senior Citizens and Tai Yuen Village shield the Subject Site from this storage site	Loading and unloading using forklift
S7	Open storage for vehicles	Existing village buildings at Chuk Yuen Tsuen shield the Subject Site.	Movement of Vehicles
S8	A totally enclosed godown	Existing village buildings at Chuk Yuen Tsuen shield the Subject Site.	Uploading/ unloading using a lorry at the entrance of the godown
S9	(No longer exists in Previous EA Report)		

Source ID	Description	Consideration of Shielding Effect	Identified Noise Source
S10-1	Totally enclosed godown	The structure of the godown shields the Subject Site.	Loading and unloading using forklift
S10-2	Totally enclosed godown	The structure of the godown shields the Subject Site.	Movement of lorry

Remark: * Maximum no. of equipment adopted in the Previous EA Report.

The noise emission strength as adopted in the Previous EA Report is presented in **Appendix 4–2**.

Existing, Planned and Proposed Pumping Stations

4.3.5 There is an existing Chuk Yuen floodwater pumping station to the southwest of the Subject Site, which is managed by the Hong Kong SAR Government Drainage Services Department (DSD). There are also planned public sewerage networks and a sewage pumping station (i.e. San Tin No.1 SPS) in the area. The operational noise level during the operation of these activities could potentially affect the Subject Site.

4.3.6 Besides, provision of a private sewage pumping station within the Site has been proposed. While the detailed design of the proposed SPS is not available at this stage, the SPS has been integrated into the Proposed Development. It will be located underground and provided inside an enclosed building structure, such that noise impact from the SPS will be minimal.

4.3.7 The locations of the existing and planned pumping stations are also depicted in **Figure 4-4** .

4.3.8 Detailed assessment of fixed plant noise impact arising from the existing and planned pumping stations is further studied and assessed in the following paragraphs in Section 4.6.

4.4 Determination of Noise Sensitive Receivers

4.4.1 Noise sensitive uses of the proposed development are the planned residential blocks within the Subject Site. The representative sensitive uses proposed under this Project, which are selected for industrial noise impact assessment, are provided in **Table 4.3** below.

Table 4.3 Representative NSRs for Operational Phase Noise Impact Assessment

NSR ID	No. of Storeys	mPD Level (1.2m Above Floor)
Ni-01a	15	13.1 (1/F) – 54.4 (14/F)
Ni-01b	14	13.1 (1/F) – 51.2 (13/F)
Ni-02	16	13.1 (1/F) – 57.5 (15/F)
Ni-03	16	
Ni-04	16	
Ni-05	16	
Ni-06	16	
Ni-07	3	6.6 (G/F) – 15.6 (2/F)

*Remarks: Please refer to **Figure 4-3** and **Figure 4-4** for the locations of NSRs.*

4.5 Assessment Methodology

4.5.1 Like the previously scheme and in line with the assessment methodology adopted in the Previous EA Report, the current scheme takes into account the noise impact of fixed noise sources based on an area of 300m radius from the Subject Site boundary.

4.5.2 In the Previous EA Report, the noise emission strengths at fixed noise sources (i.e. S3 to S9 in **Figure 4-2**) were identified for the noise assessment (a summary table of noise strengths at fixed noise sources, is extracted and reproduced in **Appendix 4–2** of this EA report).

4.5.3 It should be noted that for industrial noise sources to the east of the Subject Site (i.e. S3 to S9 in **Figure 4-2**), there are clusters of existing village houses at Chuk Yuen Tsuen, Tai Yuen Villa, and the existing 3-storey high Golden Age Home for Senior Citizens located between the Subject Site and the said industrial activities (**Figure 4-2** refers). As these existing NSRs would be worst affected by the industrial sites due to their proximity to the fixed noise sources, noise strength was based on on-site noise measurements at the existing NSRs. For the industrial sites to the south of the Subject Site (i.e. S1-1 to S2-2, and S10-1 to S10-2), reference was made to the SWL and no. of equipment adopted in the fixed plant noise assessment of an approved EIA Project (i.e. "Proposed Residential Cum Recreation Development within "Recreation" Zone and "Residential (Group C) Zone at Various Lots in D104, Yuen Long, N.T." (AEIA-182/2014)). The concerned SWLs are also reproduced in in **Appendix 4–2** of this EA report.

4.5.4 As there is no change to the identified fixed noise source activities, the noise strengths in the Previous EA Report are adopted in this noise assessment.

4.5.5 To predict the noise level at the future noise sensitive uses, the following correction factors, as adopted in the Previous EA Report, have been accounted for:

- Distance correction: based on the slant distance between the identified noise sources and the NSR, the distance correction is projected based on standard acoustical principle for point source;
- As observed during the site visits, the noise sources were found to operate occasionally. Although it is unlikely that all the identified industrial sources will be in operation simultaneously, to be conservative, it has been assumed that all the identified noise sources are in operation at the same time, which also represents a worst case scenario. Noise sources are assumed to operate continuously instead of in occasion as observed onsite and all noise sources are regarded as point source;
- Façade correction: a +3dB(A) correction is applied to account for noise reflection from façade; and
- Barrier correction: The barrier attenuation is calculated based on Path Difference Method. Maekawa equation is applied in the calculation of barrier effect.

4.5.6 As discussed in Section 4.1.2, the current Subject Site is also the subject of a few previous planning applications. Both the characteristics and emission strength of identified fixed noise sources and the noise assessment methodology have previously been established in the Previous EA Reports. In the previous study, no tonality, intermittency, and impulsiveness were identified at the fixed noise sources, and such characteristics remain unchanged in the updating site visits as described in Section

4.3.3. As the noise assessment methodology has previously been established and there is no change at the environment and its characteristics based on the latest site visit, it is also adopted in this noise assessment. Corrected Noise Level (CNL) at the NSRs of the proposed development can be calculated by applying the above corrections to the measured SWL of the noise sources in accordance with the following formula:

$$\mathbf{CNL = SWL + C_{dist} + C_{fac} + C_{barr}}$$

Where,

CNL is the corrected noise level at the Noise Sensitive Receiver in dB(A)

SWL is the measured sound power level of the industrial plant in dB(A)

$\mathbf{C_{dist}}$ is the distance correction in dB(A) in accordance with the Technical Memorandum on Noise From Construction Works Other than Percussive Piling.

$\mathbf{C_{fac}}$ is façade correction, +3 dB(A)

$\mathbf{C_{barr}}$ is the barrier correction in dB(A). The barrier attenuation is calculated based on Path Difference Method. Maekawa equation and general acoustic principle is applied in the calculation of barrier effect.

4.5.7 It shall be noted that these industrial activities are relatively far away from the Subject Site, and the horizontal distance between the NSRs of the proposed Development and the identified industrial activities ranges from over 190m to more than 300m. There are also clusters of existing village houses at Chuk Yuen Tsuen, Tai Yuen Villa, and the existing 3-storey high Golden Age Home for Senior Citizens located between the Subject Site and these industrial activities, which would be worst affected by the industrial sites due to their proximity to the industrial noise sources. However, in the noise assessment no noise shielding effect has been taken into account due to these village houses.

4.6 Prediction and Evaluation of Noise Impacts

Industrial Noise Assessment Results

4.6.1 Based on the assumptions mentioned above and information of noise sources in **Section 4.3**, noise estimation on representative NSRs at the Subject Site was carried out. According to the assessment results (**Appendix 4–2**), the calculated noise levels at the NSRs of this Project would comply with the relevant noise criteria (ANL). As confirmed from various site visits, night-time operation of the concerned noise sources was not observed, thus only day-time noise impact is assessed.

4.6.2 According to current assessment results, for residential buildings along and the kindergarten at the eastern boundary of the Subject Site, the predicted noise level at the representative NSRs is up to 55 dB(A), which can satisfy the noise criteria in **Table 4.1** above.

4.6.3 Therefore, the Subject Site is not significantly affected by the industrial noise sources, and no noise mitigation measures will be necessary.

Existing Pumping Station

4.6.4 As discussed **Section 4.3**, there is an existing floodwater pumping station (i.e. Chuk Yuen Floodwater Pumping Station) and a planned DSD's sewage pumping station (i.e. San Tin No.1 SPS) in the area. The potential impacts due to operation of these pumping stations are evaluated further in the following paragraphs.

4.6.5 It was found that a totally enclosed Chuk Yuen floodwater pumping station, managed by Hong Kong Government Drainage Services Department (DSD), is located to the southwest of the Subject Site (**Figure 4-2** refers). This pumping station is a completely enclosed structure and it is used for the discharge of collected rainwater.

4.6.6 Noise levels at two closest representative NSRs are selected for assessment of fixed plant noise impact, and the results are presented in **Table 4.4**. Geographical locations of the NSRs are indicated in **Figure 4-2**.

Table 4.4 Calculated Noise Level at the Existing Chuk Yuen Floodwater Pumping Station

NSR ID	SWL, dB(A)	Horizontal Distance between NSR and the Pumping Station, m	Distance Correction, dB(A)	Façade Correction, dB(A)	Calculated Noise Level at NSR, dB(A)
Ni-01a	79#	67	-45	3	37
Ni-01b	79#	181	-53	3	29

Remarks: # SWL based on approved EIA report of "Proposed Low-rise and Low-density Residential Development at Various Lots and their Adjoining Government Land in D.D. 104, East of Kam Pok Road, Mai Po, Yuen Long. N.T.". While the measured SWL as reported in a NIA report (Report No. 22356-N1) prepared for the approved planning application no. A/YL-MP/287 for an adjacent planned development site at Kam Pok Road, was reported as 53 dB(A).

4.6.7 The assessment shows that no adverse noise impact resulting from the existing Chuk Yuen Floodwater Pumping Station is anticipated, and no noise mitigation measure is deemed necessary.

Planned Pumping Station

4.6.8 As for the Government's planned sewage pumping station near the junction of Castle Peak Road / Kam Pok Road, according to the relevant approved EIA report (i.e. "EIA and TIA Studies for the Stage 2 of PWP Item No. 215DS - Yuen Long and Kam Tin Sewerage and Sewage Disposal"), this San Tin No.1 SPS has been proposed to be located at an offsite location about 145m northeast from the Subject Site boundary. The approximate location of the proposed SPS, based on the above EIA report, is shown in **Figure 4-2**. According to this approved EIA report, this future SPS will be self-protected with openings or louvers directed away from NSRs. It is a requirement in the above approved EIA Report that the SPS must be designed to minimize potential noise impact to the nearby NRS locations. Mitigation measures such as acoustic enclosure, silencer at inlet and outlet, anti-vibration spring mount, and acoustic louver are required during the detailed design of the SPS. It is also a requirement in the EIA report that the maximum permissible Sound Power Level (SWL) at the louver location of the SPS should not exceed 83.3 dB(A).

4.6.9 Calculation of noise level at the closest representative NSRs due to the planned SPS, based on the above SWL level, has been carried out. To be conservative, it was assumed in this report that louvers of the SPS will be facing the Subject Site. Details and calculation results are provided in **Table 4.5** with the locations of assessment point indicated in **Figure 4-4**.

Table 4.5 Calculated Noise Level Due to Operation of Planned San Tin No.1 SPS

NSR ID	SWL at the SPS, dB(A) *	Shortest horizontal distance between the SPS and the NSR, m #	Distance Correction, dB(A)	Façade Correction , dB(A)	Calculated Noise Level at NSR, dB(A)
Ni-06	83.3	208	-54	3	32
Ni-07	83.3	157	-52	3	34

Remarks: # Shortest horizontal distance between the proposed SPS and the nearest NSR under this development.
* According to the Agreement No. CE 66/2001(EP), EIA and TIA Studies for the Stage 2 of PWP Item No. 215DS - Yuen Long and Kam Tin Sewerage and Sewage Disposal (YLKTSSD), Environmental Impact Assessment (Final), Mar 2004.

Proposed Private Pumping Station

4.6.10 As mentioned previously, a private SPS within the Subject Site has been proposed under this Proposed Development. Details of design of the proposed SPS will only be available in later detailed design stage but design of the proposed private SPS has been integrated into the Proposed Development, where the SPS will be located underground in a basement and inside an enclosed building structure, such that noise impact from the SPS will be minimal. As indicated in **Figure 4-4** of this report, exhaust point of the proposed private SPS will be directed towards Kam Pok Road and away from the nearby sensitive uses, where its associated noise impact will be minimized. The exhaust of the planned SPS should be properly designed to meet the relevant noise criteria as stipulated in Chapter 9 of the HKPSG and NCO.

4.6.11 According to the approved "EIA and TIA Studies for the Stage 2 of PWP Item No. 215DS-Yuen Long and Kam Tin Sewerage and Sewage Disposal (AEIAR- 078/2004)" (Sections 9.6 and 9.7 refer), the sound power level (SWL) at the louvre of the Ha Tsuen Sewage Pumping Station is reported to be 94 dB(A). According to the EIA, the said Ha Tsuen SPS didn't have acoustic treatment. In the same EIA report, it was recommended that with noise mitigation measures such as acoustic silencer and enclosure, a noise reduction of about 20-30 dB(A) can be achieved. Accordingly, the maximum permissible SWLs at louvre of various sewage pumping stations proposed in that EIA study, are reported to be in the range of 64 – 74dB(A).

4.6.12 Based on general acoustic principles, the estimated noise level due to current proposed SPS at nearby noise sensitive receivers will be about 30dB(A), which is lower than ANL-5 criteria. Details and calculation results are provided in **Table 4.6** with the location of assessment point indicated in **Figure 4-4** .

Table 4.6 Calculated Noise Level Due to Operation of Proposed Private SPS

NSR ID	SWL at the louvre of SPS, dB(A) *	Shortest horizontal distance between the louvre of SPS and the NSR, m #	Distance Correction, dB(A)	Façade Correction, dB(A)	Calculated Noise Level at NSR, dB(A) *
Ni-01a	74	94	-48	3	30
Ni-01b	74	131	-50	3	27

Remarks: # Shortest horizontal distance between the proposed SPS and the nearest NSR under this development. The above estimation on noise level is for reference only. Based on current design, the proposed SPS will be underground and the exhaust will face away from NSRs of proposed development which are unlikely be affected.
* According to the SWL in Agreement No. CE 66/2001(EP), EIA and TIA Studies for the Stage 2 of PWP Item No. 215DS - Yuen Long and Kam Tin Sewerage and Sewage Disposal (YLKTSSD), Environmental Impact Assessment (Final), Mar 2004.
The planned SPS should be designed in a such a way to be free from tonality, intermittency and impulsiveness in accordance with the IND-TM requirement under the NCO.

4.6.13 Based on the above calculation results, the calculated noise level at the NSRs of this development is well below the relevant noise criteria described in **Table 4.1** above. Therefore, it is anticipated that this proposed development will not be subject to any unacceptable noise impact due to operation of the proposed SPS in the future.

Pumping Stations and other Fixed Noise Sources

4.6.14 To be conservative, cumulative noise level due to the pumping stations and the identified fixed noise sources at the representative NSR locations, are also calculated. The calculation results are provided in **Table 4.7** below.

4.6.15 Based on the results, the estimated cumulative noise levels at the selected representative NSRs can comply with the relevant noise criteria specified in **Table 4.1** above. Therefore, no unacceptable industrial noise impact is anticipated.

Table 4.7 Cumulative Noise Level Due to Operation of the Pumping Station and the Identified Fixed Noise Source

NSR ID	Noise Level Due to Chuk Yuen Pumping Station, dB(A)	Noise Level Due to Proposed Private Sewage Pumping Station, dB(A)	Noise Level Due to Proposed San Tin No.1 Sewage Pumping Station, dB(A)	Noise Level Due to Fixed Noise Source, dB(A)	Cumulative Noise Level, dB(A)	Noise Criteria, dB(A)
	A	B	C	D	A+B+C+D	
Ni-01a	37*	*	#	#	**37**	**60**
Ni-01b	29 *	*	#	#	**29**	**60**
Ni-06	#	#	32 *	52 **	**52**	**60**
Ni-07	#	#	34 *	53 **	**53**	**60**

Remarks: * Estimated noise level due to operation of the existing Chuk Yuen Pumping station, planned San Tin No.1 SPS and proposed private SPS are presented in **Table 4.4**, **Table 4.5** and **Table 4.6** respectively. Based on current design, the proposed SPS will be underground and the exhaust will face away from NSRs of proposed development, which are unlikely be affected.

** Estimated noise level due to identified fixed noise sources as presented in **Appendix 4–2**.

No noise estimation is provided as there are no other pumping stations and/or fixed noise source within 300m from the concerned NSR.

4.6.16 To ensure the fixed plant noise generated by the Proposed Development would not cause excessive impact to nearby noise sensitive receivers, potential fixed noise sources within the Proposed Development, such as future noise sources at E&M room and ventilation system at transport lay-by and commercial blocks, shall be properly designed to meet the relevant noise criteria as stipulated in Chapter 9 of the HKPSG and NCO. Provisions shall be made to control the fixed noise sources by suitable at source noise control measures such as quieter plant, silencers and acoustic linings when necessary. As such, it is anticipated that the fixed plant noise impact on the surrounding NSRs due to the operation of the Proposed Development will not exceed the relevant noise criteria under the HKPSG and NCO.

5. WATER QUALITY IMPACT ASSESSMENT

5.1 Introduction

5.1.1 This section addresses the potential water quality impact that may arise from the proposed development within a study area of 500m.

5.1.2 As mentioned in Sections 1.1.3 and 1.1.8, the Subject Site is also the subject of a few previous approved planning applications such as those under the application nos. A/YL-MP/193, and A/YL-MP/205. The current proposed development is also the subject of a previous planning application under the Application No. Y/YL-MP/6 with a submitted EA (R7345) without further comment received (Previous EA Report). The current proposed development is also for a residential development. Practicable mitigation measures/ best practices have been recommended where necessary. A separate EIA study will be required at the later stage to identify and address both construction and operation phases impacts, and proper mitigation measures, if any, will be proposed subject to findings of the EIA study.

5.1.3 An EA report (R7345) was submitted in support of the planning application under Application No. Y/YL-MP/6. As discussed in Sections 1.1.3 to 1.1.8 and 1.3, MLP in current proposed scheme largely remains same. The block form, building disposition, building orientation and buffer distance of the residential blocks from nearby existing roads under the Current Scheme remain unchanged, but amendments on lowering the building height and development plot ratio. Thus, findings in above-mentioned Previous EA Report are still valid which are reproduced in below paragraphs.

5.1.4 The Subject Site is located within OZP S/YL-MP/8. According to the OZP explanatory statement, "no-net increase of pollution load into Deep Bay" is applicable to the Proposed Development.

5.2 Relevant Environmental Legislation and Guidelines

5.2.1 The relevant legislations, standards and guidelines for the assessment of water quality impacts include:

- Water Pollution Control Ordinance (WPCO) CAP 358;
- Technical Memorandum on "Standards for Effluent Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters" (TM-DSS);
- Hong Kong Planning Standards and Guidelines;
- *ProPECC PN* 2/24 "Construction Site Drainage";
- *ProPECC PN* 1/23 - Drainage Plans Subject to Comment by the Environmental Protection Department; and
- TPB PG No. 12C "Town Planning Board Guidelines for Application for Developments Within Deep Bay Area under Section 16 of Town Planning Ordinance".

5.2.2 The Water Pollution Control Ordinance (WPCO) (Cap. 358) enacted in 1980 is the principal legislation controlling water quality in Hong Kong. Under the WPCO, Hong Kong waters are classified into 10 Water Control Zones (WCZ). The Subject Site is situated within the Deep Bay Catchment Area of the Deep Bay Water Control Zone (WCZ) and the Ramsar Site. The TM-DSS issued under Section 21 of the WPCO defines acceptable discharge limits of effluent to different types of receiving waters. Under the Ordinance, any discharge into the WCZ requires licensing and must comply with the terms and conditions specified in the licence, except for domestic sewage

discharged into public foul sewers, and unpolluted water into storm water drains and river courses.

5.2.3 The discharge from proposed development will be to nearby existing drainage system and Ngau Tam Mei Drainage Channel which is for stormwater discharge. The discharge from the proposed development shall comply with the Group D and Group C standard for effluent discharge into inland waters.

5.3 Description of Environs and Water Sensitive Receivers

5.3.1 The proposed development is surrounded by existing road networks. Existing Kam Pok Road is located to the immediate north and north-west directions. Ha Chuk Yuen Road and existing Chuk Yuen Tsuen are to the east and south-east, and vacant land and Drainage Services Department (DSD)'s flood storage pond to the south at Chuk Yuen floodwater pumping station. Ngau Tam Mei Drainage Channel (NTMDC) is also situated to the further west of the Subject Site. **Figure 5-1** refers.

5.3.2 The existing Chuk Yuen Floodwater Pumping Station is managed by DSD for the discharge of collected rainwater. NTMDC is an existing engineered channel for collection of stormwater in the area, which is separated from the Subject Site by existing Kam Pok Road. Currently, the Subject Site is unpaved and surface runoff from the Subject Site would then flow into NTMDC without any treatment via existing u-channels at Kam Pok Road and Ha Chuk Yuen Road. Thus, water bodies at NTMDC, flood storage pond at Chuk Yuen Floodwater Pumping Station, and those existing stormwater drains at Kam Pok Road and Ha Chuk Yuen Road are the potential water sensitive receivers (WSRs) of this project during both construction and operational phases. All these are in fact designated stormwater collection system in the area. The proposed landscape pond within the Subject Site will be constructed at the same time as the proposed development, which will be another WSR during operation of the proposed development (during construction, it will be part of a construction site). **Figure 5-1** refers. There is existing reed within Subject Site, which will be filled up as part of the proposed development. During construction, they will be part of a construction site thus it is not a water sensitive receiver. As a general requirement, construction site runoff and effluent from construction site shall be properly collected by construction site drainage system and treated through screening facilities before discharge. In operation, proper stormwater drainage system will be provided for the proposed development to properly collect stormwater runoff, and discharge through screening facilities following the existing flow regime. Thus, there should be no adverse water quality impact due to proposed development.

5.3.3 To the further west of Subject Site are the existing Fairview Park Nullah, a proposed landscape pond of adjacent planned development. To the north and northwest are water ponds, reed near Yau Mei San Tsuen. Also water ponds and drainage to the further south such as those near Ha Chuk Yuen Road, near Hang Fook Gardens, as well as to the east and south-east of Yau Tam Mei Tsuen across San Tin Highway. The wetland conservation area (WCA) is also located to the further north, where a planned wetland conservation park (WCP), i.e. Sam Po Shue WCP largely overlaps with the WCA. **Figure 5-1** refers. However, these water bodies (potential WSRs) are relatively far away from the Subject Site and are physically separated by other lands and roads, thus they are unlikely be affected by the proposed development.

5.3.4 Water quality monitoring data of existing Fairview Park Nullah, which is the nearest water quality monitoring station by EPD, is summarised in **Table 5.1** as the reference of baseline condition. Please also refer to **Appendix 5-1** for recent 3 years' monitoring data. According to the River Water Quality in Hong Kong in 2023, the water quality at

Fairview Park Nullah was graded "Fair" in 2023 and its WQO compliance rate is generally improving over years from 2003 to 2023 from about 43% compliance recorded in 2003 to about 73% in 2023.

Table 5.1 Water monitoring data of nearest river in 2023

Parameter	Unit	Fairview Park Nullah (FVR1)
Dissolved Oxygen	mg/L	5.4 (3.7 - 11.7)
pH	-	7.4 (7.1 - 8.5)
Suspended Solids	mg/L	11.5 (6.8 - 22.0)
5-Day Biochemical Oxygen Demand	mg/L	6.9 (3.0 - 13.0)
Chemical Oxygen Demand	mg/L	30 (9 - 70)
Oil & Grease	mg/L	<0.5 (<0.5 - <0.5)
E. coli	counts/ 100mL	25146 (2900 - 120000)
Faecal Coliforms	counts/ 100mL	71882 (14000 - 440000)
Ammonia-Nitrogen	mg/L	1.450 (0.450 - 2.800)
Nitrate-Nitrogen	mg/L	0.760 (0.340 - 1.200)
Total Kjeldahl Nitrogen	mg/L	2.40 (0.92 - 4.00)
Orthophosphate Phosphorus	mg/L	0.275 (0.095 - 0.530)
Total Phosphorus	mg/L	0.45 (0.12 - 0.73)
Sulphide	mg/L	<0.02 (<0.02 - 0.04)
Aluminium	µg/L	<50 (<50 - <50)
Cadmium	µg/L	<0.1 (<0.1 - <0.1)
Chromium	µg/L	<1 (<1 – 1)
Copper	µg/L	2 (<1 – 2)
Lead	µg/L	<1 (<1 - <1)
Zinc	µg/L	10 (<10 – 20)
Flow	m^3/s	No measurement taken
Above values are directly extracted from River Water Quality in Hng Kong in 2023, published by EPD.		

Parameter	Unit	Fairview Park Nullah (FVR1)
1. Data presented are in annual medians of monthly samples; except those for faecal coliforms and E. coli which are in annual geometric means. 2. Figures in brackets are annual ranges. 3. Values at or below laboratory reporting limits are presented as laboratory reporting limits 4. Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.		

5.3.5 WSRs within 500m assessment area were identified and presented in **Table 5.2** and shown in Figure 5.1.

Table 5.2 Description of Water Sensitive Receivers

WSR ID	Description	Type	Status	Estimated distance (m)
C01	Wetland Conservation Area which covers the ponds between Fairview Park and Palm Springs, and those near Yau Mei San Tsuen	Wetland Conservation Area	Existing zoning	143
C02	Wetland Buffer Area which covers areas such as Fairview Park, Palm Springs, Yau Mei San Tsuen and Chuk Yuen Tsuen etc.	Wetland Buffer Area	Existing zoning	Site is partly within the buffer area
C03	Planned Sam Po Shue Wetland Conservation Park which covers the ponds between Fairview Park and Palm Springs, and those near Yau Mei San Tsuen	Planned Wetland Conservation Park	Under planning	91
D01	Ngau Tam Mei Drainage Channel	Channelized Drainage Channel	Active	21
D02	Fairview Park Nullah (Main)	Channelised Nullah	Active	90
D03	Fairview Park Nullah (surrounding Fairview Park)	Channelised Nullah	Active	76
D04	Watercourse near Palm Springs	Drainage ditches	Active	131
D05	Watercourse near Yau Tam Mei Tsuen	Drainage ditches	Active	373

WSR ID	Description	Type	Status	Estimated distance (m)
D06	Drainage ditch along Ha Chuk Yuen Road	Drainage ditches	Active	3-78
D07	Drainage ditch along Ha San Wai Road	Drainage ditch	Active	343
M01	Marsh near Yau Tam Mei Tsuen	Natural Marsh	Active	337
M02	Marsh between Fairview Park and Palm Springs	Natural Marsh	Active	314
M03	Reed/marsh between Fairview Park and Palm Springs	Reed/ Marsh	Active	227
M04	Reed at the north of Yau Pok Road	Reed	Active	129
M05	Reed near the Site and Chuk Yuen Tsuen	Reed	Active	Partly within the site
P01	Ponds at the north of Yau Pok Road (temporary wetland created under construction phase of a planned development site in AEIAR-189/2015)	Ponds	Active*	83
P02	Ponds near Yau Tam Mei Tsuen	Ponds	Active*	386
P03	Ponds at the south of Palm Springs	Ponds	Active*	380
P04	Ponds near Yau Mei San Tsuen	Ponds	Active*	138
P05	Pond near Yau Mei San Tsuen and Royal Palms	Ponds	Active*	312
P06	Proposed landscape pond under application no. Y/YL-MP/8	Proposed pond	-	66
P07	Ponds between Fairview Park and Palm Springs	Ponds	Active*	368
P08	Ponds near Hang Fook Gardens	Ponds	Active*	154
P09	Pond near Ha Chuk Yuen Road	Ponds	abandoned	209

WSR ID	Description	Type	Status	Estimated distance (m)
P10	Water storage pond at DSD's Chuk Yuen Floodwater Pumping Station	Ponds	Active*	3
P11	Proposed landscape pond of the current development during operation stage	Newly Proposed Ponds	-	Within site

Remark: Status is based on desktop review for reference. Exact status should be subject to further review during later EIA study stage.

5.4 Water Quality Impacts During Operation Phase

Identification of Sources of Wastewater

5.4.1 During operation stage of the proposed development, potential water quality impacts would be the discharge of wastewater from domestic and commercial activities. Sewage generated should be collected and direct discharge of sewage effluent should not be allowed. Asides from that, there will be also surface runoff from Subject Site during rainfall events which is known as non-point source of pollution. Currently, there is also discharge of surface runoff at the Subject Site which is directly discharged without any treatment into nearby drainage system and Ngau Tam Mei Drainage Channel.

Recommendations on Mitigation Measures

a) Wastewater from Domestic and Commercial Activities

5.4.2 The proposed development will be connected to the proposed sewerage system during its operation through sewage pipeline and pumping station. The proposed development will follow EPD's Practice Note PN 1/23. Drainage in covered carparks, covered transport interchange, covered loading and unloading area should be connected to foul sewer via petrol interceptors while drainage serving open space should be connected to stormwater drain via screening facilities in accordance with EPD's Practice Note PN 1/23. Swimming pool drainage design will follow the *ProPECC PN* 1/23 requirements as well. As such, there should be no particular water pollution concern. As mentioned above, the proposed development will be subject to an EIA study to be conducted at a later stage, construction and operation phases water quality impact assessment will be carried out and with proper mitigation measures recommended.

5.4.3 According to the Sewerage Impact Assessment (SIA) prepared by others, sewage from the Subject Site will be collected by proposed sewers and a sewage pumping station and then conveyed via proposed rising mains and gravity sewers along Kam Pok Road and Pok Wai South Road to the existing Nam Sang Wai Sewage Pumping Station, and then conveyed to the Yuen Long Effluent Polishing Plant for treatment. As there will be no direct discharge of sewage to nearby area, no adverse water quality impact is expected. The proposed SPS has a ADWF capacity slightly less than 2,500 m^3/day. Detailed of the proposed SPS is only available during later detailed design stage. However, as a guidance the SPS will be designed in accordance with the requirements under DSD's Sewerage Manual – Part II. As general measures, the proposed pump(s)

will be designed to operate with start/stop about 5 times per hour. Measures have also been proposed for emergency such as adequate spare parts for the plant; provision of duty & standby pumps; backup power arrangement; wet well/ equalization tank; twin rising mains; and qualified personnel will be hired to inspect the plant condition and carry out maintenance on a regular basis. In addition, detection sensor will be installed at SPS and the signal will be conveyed to control room/ management office for a timely response. With the provision of these measures and standby units in place, the potential water quality impact due to sewage overflow is considered very unlikely to occur. In case of prolonged outage of the SPS, equalization tank with storage capacity around 1,033 m^3 or equivalent to ~8-hours of averaged sewage flow, has been proposed to temporarily store the collected sewage, which can also satisfy the EPD's Guidelines for the Design of Small Sewage Treatment Plants. It is anticipated that 2- to 4-hours preparation time should be adequate to mobile repair team and install backup units and arrange tank away disposal where necessary. The above measures for SPS are preliminary only, which should be subject to later detailed design stage as well as EIA study. In addition, twin rising mains is proposed. In case of maintenance of one of the rising mains, the other rising main can still operate as normal. As such, with the provision of twin rising mains, duty and standby pump units, backup power arrangement, and equalization tank, the potential water quality impact due to sewage overflow is considered very unlikely to occur. The operation of the SPS should also prevent direct discharge of raw sewage during emergency. The proposed development will also need to undergo an EIA study at the later stage, and the issue of sewerage and water quality impact due to SPS will be properly addressed.

b) Surface Runoff from Subject Site

5.4.4 Currently, there is also discharge of surface runoff at the Subject Site which is directly discharged without any treatment into nearby drainage system and Ngau Tam Mei Drainage Channel. During operation, proper stormwater drainage system will be provided for the proposed development to properly collect stormwater runoff, and discharge through screening facilities following the existing flow regime. Details of the drainage system will only be available in detailed design stage. It is proposed that drainage system should also be provided along the site boundary to intercept stormwater. As discharge will be through screening facilities such as standard gully grating and trash grille, with spacing which is capable of screening off large substances such as fallen leaves and rubbish, there will be no direct discharge of untreated stormwater runoff into nearby WSRs. As pollutants contributed by non-point source are often bound or adsorbed onto particles, an effective stormwater management system will be the removal of pollution sources prior to rainstorm and the provision of screening facilities that collect debris or sediment. It is recommended that regular cleaning and sweeping of road surface/ open areas as well as prior to occurrence of rainstorm should be carried out to minimize exposure of pollutants to stormwater.

5.4.5 It is also recommended that fertilizers will only be applied at landscape area when needed e.g. in early Spring and in late summer and to avoid major rainy season. Slow-release type fertilizers should be selected as far as possible and over dosage should be avoided.

c) *Surface Runoff from Landscape Pond*

5.4.6 As for the proposed landscape pond, it will be solely for landscape purpose, and will not serve as a compensated wetland nor a compensation pond. Details of design for the landscape pond will only be available in later detailed design stage, but proper stormwater drainage system with standard screening facilities will be provided so as to intercept the landscape pond away from other surface runoff such as open space

and landscaping area. During normal operation of the landscape pond, no particular discharge is anticipated except under heavy rainfall. In case of pond maintenance, it will be arranged during dry season as far as possible when the water level at the pond is relatively low. Stormwater drains with standard screening facilities will also be designed at the outlet of drainage system of landscape pond, so that in case of draining of pond there will be no direct discharge of stormwater without treatment. The discharge from landscape pond would comply with the above-mentioned TM-DSS under WPCO, and the discharge may be subject to a licence control under the WPCO and is also subject to findings of EIA study.

5.4.7 Therefore, with the proposed drainage system and recommended pollution control measures in place as described in above paragraphs, no adverse water quality impact due to stormwater discharge or domestic and commercial sewage generated from the development is anticipated.

5.5 Water Quality Impacts During Construction Phase

Identification of Sources of Wastewater

5.5.1 The potential source of water quality impacts during the construction phase of the Proposed Development mainly includes sewage from construction workforce, construction site surface runoff, and accidental spillage.

Sewage from Construction Workforce

5.5.2 Sewage will be generated from construction workforce. Discharging of sewage without proper treatment will likely deteriorate the water quality of local drainage system. Sewage generated should be collected onsite using chemical toilets and be appropriately handled by licensed contractor. No direct discharge of sewage effluent would be allowed.

Construction Site Runoff and Wastewater

5.5.3 The potential water quality impact during construction stage of the proposed development as well as construction of the proposed sewers, will be the potential discharge of construction site runoff and wastewater. Construction site runoff contains increased loads of sediments, other suspended solids and contaminants. Wastewater generated from construction activities, such as general cleaning, wheel washing, dust suppression, often contains significant concentrations of suspended solid (SS). If not properly controlled, construction site runoff generated may bring along pollutants (e.g. sediment-laden surface runoff) and pollute the nearby water bodies depending upon the topography. During construction, no direct discharge without treatment of construction site runoff from the construction site will be allowed. Construction site runoff and effluent from construction site shall be properly collected by construction site drainage system and treated through screening facilities before discharge into the nearby storm drains by following the existing flow regime. The design of the site drainage system will only be available in later detailed design stage, but the drainage system shall follow the Practice Notes for Professional Persons on "Construction Site Drainage" (*ProPECC PN 2/24*). The quality of discharge should also comply with relevant effluent discharge licence to be issued under the WPCO. The proposed sewers are underneath existing roads. The exact construction method of proposed sewers will be subject to detailed design. However, it is proposed that construction of the sewers should be carried out in phases to minimise exposed area. The temporary works area should be carefully planned and located to avoid potential disturbance. Temporary stockpile area should be located away from nearby receiving water body or drainage

channel. Trenchless construction method should also be explored as far as possible. Best practices as per "Construction Site Drainage" *(ProPECC PN 2/24)* should be adopted.

Accidental Spillage

5.5.4 The utilisation, handling and storage of chemicals, including engine oil, lubricants, fuels and solvents, carrying the potential to impact water quality in the event of spillage. Thus, it is imperative to proper handle, store and dispose of chemicals properly to prevent spillage.

Proposed Mitigation Measures

5.5.5 With regards to the above-mentioned sources of water quality impacts, details of recommended pollution control measures are provided in Section 6.5 of this report. Various measures proposed in above paragraph as well as those presented in Section 6.5 should be applied. With the proposed construction phase drainage system and recommended pollution control measures in place, no adverse water quality impact during construction phase will be expected.

5.6 Conclusion

5.6.1 Locations of relevant WSRs as well as potential sources of water quality impact that may arise during construction and operational phases of the proposed development, have been identified. Relevant pollution control and mitigation measures have also been recommended.

5.6.2 With the proposed measures in place, no adverse water quality impact during both construction and operational phases of the proposed development will be expected.

6. CONSTRUCTION PHASE IMPACTS

6.1 Introduction

6.1.1 During construction phase of proposed development, there may be potential air quality, noise and water quality impacts upon the nearby sensitive receivers. Practicable environmental mitigation measures are recommended to reduce these impacts to acceptable ranges.

6.1.2 During construction phase, the nearest sensitive receivers will be surrounding residential and village development sites such as existing Fairview Park, Yau Mei San Tsuen, Chuk Yuen Tsuen, Hang Fook Gardens, and Ha San Wai Tsuen (**Figure 1-1** refers).

6.2 Construction Phase Air Quality Impact

6.2.1 The major air quality impact of concern during the construction phase will be the potential fugitive dust emission during site formation stage and the particulate matters (PM) and gaseous emissions from the use of powered mechanical equipment and construction vehicles on site. The nearest ASRs and their separation distance are identified in Section 2.4.1.

Dust Emission Source

6.2.2 The major air quality impact of concern during the construction phase will be the potential fugitive dust emission. The major dust emission sources during the construction phase of the proposed development are expected to arise from construction activities during site formation stage such as.

- Excavation resulting in exposed ground vulnerable to soil erosion;
- Earth moving, loading and unloading of excavated material; and
- Vehicle movements on haul roads and over the construction site.

6.2.3 The Subject Site is relatively a flat land and is already served by existing road network, thus significant earth works is not anticipated during construction. The current concerned development site is still at its very early planning stage, many construction details are not yet available. It is expected that phased construction should be considered during the earth works in site formation stage with a view to minimize the active works area, although details of construction and its phasing will only be available in later detailed design stage. Further measures will be considered during the detailed design at a later stage to explore feasibility of use of electric NRMMs and avoiding the exempted NRMMs as far as practicable subject to the availability of on-site electricity, close liaison with the contractors of concurrent projects to avoid overlapping of heavy/duty works when the construction programmer becomes available. Thus, construction works should be under control and adverse construction air quality impact is not anticipated. It is noted the proposed development will be subject to a separate Environmental Impact Assessment (EIA) study including a construction phase impact assessment under the EIA Ordinance later on. Concurrent projects, if any, will also be identified and assessed accordingly. There is an approved public light housing development by the government under application no. A/YL-MP/341. However, it is understood that it is a temporary use only. According to its planning document the said public light housing development would be removed around 2029 or so, which is before the current proposed development. There are also a few previously approved planned development sites in adjacent such as the approved planning application under A/YL-MP/247, A/YL-MP/287, and Y/YL-MP/3 (as shown in **Figure 2-3**). Having

reviewed, there is no solid construction programme of these development sites available at this stage. It is understood that all these planned development sites are also subject to separate EIA study and their construction activities would be controlled under their respective statutory Environmental Permit (EP) issued or to be issued under the EIA Ordinance (EIAO). It is anticipated that relevant identified projects would implement appropriate mitigation measures as recommended in their EIA study which shall be monitored for compliance under their EM&A programme. During construction of current proposed development, contractor(s) will be required to review the construction programme of adjacent planned development sites and closely liaise with the other contractors of planned development sites in order to avoid overlapping of heavy or dusty works as far as possible. As for the current proposed development will also undergo its EIA study, relevant mitigation measures will be proposed for implementation to control construction air quality impact subject to the findings of EIA study. It is understood that the project proponent will recommend the implementation of a construction environmental monitoring and audit program and carrying out of continuous dust monitoring during construction phase as Environmental Monitoring and Audit requirements in the future EIA study. Details of which will be subject to the findings of the EIA study to be conducted in future. The proposed development will follow the statutory requirement on EM&A programme/ activities accordingly. The Applicant will observe and ensure relevant mitigation measures are implemented during construction stage and that the proposed development will comply with all statutory requirements.

Other Pollutants Sources

6.2.4 The Subject Site is relatively a flat land and is already served by existing road network, thus significant extent of earth works, and site formation works are not anticipated. It is also suggested that the contractor should plan their construction activities in such a way that only the required number of construction plants should be deployed to the construction site at different stages of works in order to minimize the number of construction plants working at the same time. The Air Pollution Control (Fuel Restriction) (Amendment) Regulation 2024 controls the fuel to be used. In particular, liquid fuel with a sulphur content not exceeding 0.001% by weight and a viscosity not more than 6 centistokes at 40°C, such as Ultra Low Sulphur Diesel should be used. In addition, emissions from all the regulated machines within construction site will be controlled under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation. Only approved or exempted Non-road Mobile Machinery with a proper label will be allowed to be used at construction site. In addition, electrified NRMM should be considered and used as far as practicable and exempted NRMM should be avoided. As such, emissions due to construction equipment will be under control and adverse construction air quality impact is not anticipated.

6.3 Mitigation Measures for Fugitive Dust and Gaseous Emission

6.3.1 Fugitive dust and gaseous emissions arising from construction activities can be effectively controlled by incorporating proper mitigation measures into work procedures through contractual clauses, good site management, and close monitoring by the resident engineers. The contractor shall be required to follow the requirements of the Air Pollution Control (Construction Dust) Regulations. With implementation of control measures stipulated under the Air Pollution Control (Construction Dust) Regulation and adoption of good site practices, it is expected that dust and gaseous emissions will be controlled. The recommended mitigation measures are described below.

General Site Management

6.3.2 Appropriate working methods should be devised and arranged to minimise dust emissions and to ensure any installed control system and/or measures are operated and/or implemented in accordance with their design merits. No free falling of construction debris should be allowed, which should be let down by hoist or enclosed tunnel to the ground; immediately before leaving the construction site, all vehicles shall be washed to remove any dust materials from its body and wheels; providing hoarding of not less than 2.4m high from ground level along site boundary which is next to a road or other public area; provide effective dust screens, sheeting, or netting to enclose any scaffolding built around the perimeter of a building; prevent placing dusty material storage piles near ASRs; and minimizing exposed surface and properly cover stockpile as far as possible and apply frequent watering when working close to the ASRs to supress dust emission. In view of relatively close separation distance to ASRs near Ha Chuk Yuen Road, higher hoarding could also be considered during construction; locating the haul road away from this ASR as far as possible; and careful arrangement of construction program to avoid concurrent dusty works as far as practicable. Covering of exposed soil surface and regular watering to suppress any dust emission. In addition, feasibility of providing electric power supply can be explored for on-site machinery as far as practicable to minimise aerial emissions.

6.3.3 Frequent mist/ water spraying should be applied on dusty areas. The frequency of spraying will depend upon local conditions such as rainfall, temperature, wind speed and humidity. The amount of water spraying should be just enough to dampen the material without over-watering which could result in surface water runoff.

Vehicles and Unpaved Site Roads

6.3.4 Dust emission from unpaved roads comes predominantly from travelling of vehicles. Areas within the site where there are regular vehicle movements should have a hard surface such as crushed stone, gravel or other granular materials. Speed controls at an upper limit of 10 km/hr should be imposed and their movements should be confined to designed roadways within the site. All dusty vehicle loads should have side and tail boards covered by tarpaulin sheeting. Wheel-wash troughs and hoses should be provided at exit points of the site.

Material Stockpiling and Handling

6.3.5 The amount of stockpiling should be minimised where possible. Construction material or debris should be covered and stored inside enclosed areas. Other control measures such as enclosed or semi-enclosed windboard should be used, where applicable, to minimise dust emission. Regular watering is needed at areas such as storage piles, where there could be potential dust emission.

Concrete Batching Plant

6.3.6 No concrete batching plant is anticipated at this stage. Should a concrete batching plant be required, a specified process licence shall be obtained from the authority, which will give guidelines on dust mitigation measures required as terms and conditions, and its implementation will be controlled through the specified process licence. A quantitative construction impact assessment will be required should a concrete batching plant be required later on to ensure that no adverse construction air quality impact will be imposed on the nearby ASRs.

6.4 Construction Noise Impact

6.4.1 During the construction phase, major noise impacts would arise from piling works, operation of Powered Mechanical Equipment (PME), and construction-related traffic.

Construction Noise Criteria

6.4.2 Construction noise is controlled under the Noise Control Ordinance (NCO) which prohibits the use of powered mechanical equipment (PME) during the restricted hours (7 p.m. to 7 a.m. on normal weekdays and any time on a public holiday, including Sunday) without a valid Construction Noise Permit (CNP) from the Authority. The criteria and procedures for issuing such a permit are specified in the "Technical Memorandum on Noise From Construction Works Other than Percussive Piling" (TM1).

6.4.3 With effect from 1 November 96, the use of specified powered mechanical equipment (SPME) for carrying out construction work other than percussive piling and/ or the carrying out of prescribed construction work (PCW) within a designated area are also brought under control. The relevant technical details are provided in the "Technical Memorandum on Noise from Construction Work in Designated Areas" (TM2).

6.4.4 Percussive pilling is controlled similarly by a construction noise permit system and described in the NCO and the "Technical Memorandum On Noise From Percussive Piling" (TM3) which restrict the number of hours during which piling can be conducted. Percussive piling is prohibited between 7 p.m. and 7 a.m. and on holidays (including Sundays). Percussive piling during the daytime (i.e. between 7 a.m. and 7 p.m. on any day not being a holiday) may be carried out in accordance with the permitted hours and other conditions under a valid construction noise permit.

6.4.5 For construction works other than percussive piling, although TM1 does not provide control over daytime construction activities, noise limits as shown in below Table are set out in the "Minimizing Noise from Construction Activities" (*ProPECC*) PN1/24.

Table 6.1 Noise Limit for Daytime Construction Activities

NSR	0700 to 1900 Hours on Any Day Not Being a Sunday or General Holiday $L_{eq(30min.)}$, dB(A)
All domestic premises including temporary housing accommodation	75
Educational institutions including kindergartens, nurseries	70 / 65 (during examination)

Notes:
(i) the above standards apply to uses which rely on opened windows for ventilation;
(ii) the above standards shall be viewed as the maximum permissible noise levels assessed at 1m from the external façade

Recommended Mitigation Measures for Construction Noise

6.4.6 Sufficient noise mitigation measures should be introduced in the development to alleviate potential noise impacts on nearby NSRs. The Contractor(s) will be required under the contractual requirements to ensure regular maintenance of all plants and equipment, and that noise generation at source should be minimized and practicable noise mitigation measures should be in use. The Contractor(s) will be required to adopt quiet type construction plants (e.g. EPD's quality powered mechanical equipment (QPME) inventory), wherever practicable. Movable noise barriers should be erected around noisy plants in order to minimize noise generation at source. With these measures in place noise generation due to construction activities would be minimized.

6.4.7 The following general noise mitigation measures are recommended for implementation:

- Application of properly designed silencers, mufflers, acoustically dampened panels and acoustic sheds or shields, etc.;
- Use of electric-powered equipment where applicable instead of diesel-powered or pneumatic-powered equipment;
- Erecting noise enclosures/ movable noise barriers around noisy plants;
- Only well-maintained plants should be operated on-site;
- Plants should be serviced regularly during the construction programme;
- Noisy activities can be scheduled to minimize exposure of nearby NSRs to high levels of construction noise. For example, noisy activities can be scheduled for midday or at times coinciding with periods of high background noise;
- Noisy equipment such as emergency generators shall always be sited as far away as possible from noise sensitive receivers;
- Location of noise emitting plants at maximum possible distances from sensitive receivers;
- Contractual clauses for construction works; and
- Schedule of noisy operations during non-restricted hours where possible.

The above-mentioned noise mitigation measures will be included in the construction stage. With these measures in place, construction noise due to the proposed development can be minimized, and no adverse noise impact is anticipated.

6.4.8 It is suggested that due consideration should be given by the contractor(s) of the project to prioritize the application of quieter construction methods and equipment for mitigating the potential construction noise impact and will refer to the latest PN1/24 "Minimizing Noise from Construction Activities" for incorporating the necessary specifications into the Works Contract(s) for deployment and implementation of the quieter construction methods and equipment as well as other recommended noise mitigation measures as far as possible. Requirements stipulated in the EPD's Recommended Pollution Control Clauses for Construction Contracts (RPCC) should also be observed and incorporated into the Works Contract(s) as far as necessary and appropriate to ensure the implementation of noise mitigation measures and minimization of the potential construction noise impact.

6.5 Water Quality Impacts and Recommended Mitigation Measures During Construction Phase

Source of Construction Wastewater

6.5.1 Construction activities would inevitably have the potential to generate wastewater. Works should be carried out in such a manner as to minimise adverse impacts on local water bodies. Sources of construction wastewater are identified and described in Sections 5.5.1 to 5.5.4. Activities that are likely to cause water pollution include:

- Construction runoff and wastewater;
- Sewage from construction workforce; and
- Accidental spillage of chemicals, e.g. oil, diesel, solvents etc.

Mitigation Measures

6.5.2 The good practice given in the Practice Notes for Professional Persons on "Construction Site Drainage" (*ProPECC PN* 2/24) in controlling water pollution at construction site shall be implemented during the construction phase of the Proposed Development. Soil erosion from the construction site can be minimised through good on-site management practices by implementing viable erosion control measures which should be incorporated in contract clauses. The main practices provided in the above-mentioned document (i.e. *ProPECC PN* 2/24) are also summarized in the following paragraphs which should be enforced to prevent unacceptable construction stage impacts and for compliance with the statutory criteria.

(i) Construction Site Runoff and Wastewater

- Exposed soil surfaces should be protected from rainfall through, for example, by covering temporarily exposed slope surfaces or stockpiles with tarpaulin and protect temporary access roads by crushed stone or gravel;
- Exposed soil areas should be minimised to reduce the potential for increased siltation and contamination of runoff;
- Minimise the time that soil surfaces are exposed;
- Slow down water run-off flowing across exposed soil surfaces;
- Channels, earth bunds or sandbag barriers should be provided on site to properly direct surface runoff through drainage systems;
- Oil interceptors are also recommended to be provided for stormwater drains near plant maintenance/ repair areas, where necessary.
- Manholes (including newly constructed ones) should be adequately covered or temporarily sealed so as to prevent slit, construction materials or debris from getting into the drainage system;
- Construction works should be programmed to minimise soil excavation works where practicable during rainy conditions;
- Drainage facilities must be adequate for the controlled release of storm flows;
- Sedimentation basins and sand traps designed in accordance with the requirements of *ProPECC PN* 2/24 should be installed at the construction site for collecting surface runoff. Perimeter channels at site boundaries should be provided where necessary to intercept surface runoff from outside the site. Silt removal facilities, channels and manholes should be maintained and deposited silt and grit should be removed regularly;
- There should be no direct discharge without treatment of construction site runoff into the nearby streams and public drains;
- The Contractor shall prepare a construction site drainage management plan with details of the construction phase drainage system proposed to be constructed; discharge location(s); and screening facilities;
- The Contractor(s) shall apply for a discharge licence under the WPCO and the discharge shall comply with the terms and conditions of the licence throughout the construction phase;
- Construction of proposed sewers should be carried out in phases to minimise exposed area. Asides from above-mentioned general best practices, the

temporary works area should be carefully planned and located to avoid potential disturbance. Temporary stockpile area should be located away from nearby receiving water body or drainage channel. Best practices in "Construction Site Drainage" (*ProPECC PN* 2/24) should be adopted. Trenchless construction method should also be explored as far as possible. Visual inspection to nearby receiving drainage channels should be carried out during construction phase;

- Currently, there is existing reed within the Subject Site, which will be filled up as part of the proposed development. The concerned locations will be part of a construction site during construction stage. It is expected any spare water during construction will be absorbed by soakaway mechanism so as to minimize the chance of draining. Proper construction drainage system will also be provided on site to control and collect site surface runoff and it is treated before discharge. As such, no unacceptable water quality impacts would be expected;
- Vehicle wheel washing facilities should be provided at site exit such that mud, debris, etc. deposited onto the vehicle wheels or body can be washed off before leaving the site area;
- Section of construction road between the wheel washing bay and the public road should be paved with backfill to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains; and
- If bentonite is used, bentonite slurry should be reconditioned and reused as far as practicable. Spent bentonite should be kept in a separate slurry collection system for disposal at a marine spoil grounds subject to obtaining a marine dumping licence from EPD. If used bentonite slurry is to be disposed of through public drainage system, it should be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the WPCO Technical Memorandum on Effluent Standards in accordance with *ProPECC PN* 2/24.

(ii) Sewage from Construction Workforce

- Sewage generated from the construction workforce should be contained by chemical toilets before connection to public foul sewer can be provided. The number of chemical toilets required would be subject to the capacity of the chemical toilets, and contractor's practices/ work programme. The Contractor(s) will be required to provide an estimation on the amount of sewage to be generated and to provide sufficient number of chemical toilets for construction workers. The chemical toilets should be serviced and cleaned by a specialist contractor at regular intervals. No discharge of sewage into nearby environment will be allowed during construction stage. Such requirements will be incorporated into relevant contractual clauses of this Proposed Amendment Scheme for proper implementation;
- Canteen facilities are not expected. However, in case canteen is required, foul water from canteens on-site, if any, should also be contained by chemical toilets/ sewage holding tank before connection to public foul sewer can be provided. Wastewater collected from canteen kitchens, should be treated via grease traps and contained by chemical toilets/ sewage holding tanks, and collected by a licensed contractor regularly;

(iii) Accidental Spillage

- Spillage of fuel oils or other polluting fluids should be prevented at source. It is recommended that all stocks should be stored inside proper containers and sited on sealed areas, preferably surrounded by berms;
- Regular site inspections to ensure the proper implementation of the above measures shall be carried out; and
- For the disposal of chemical wastes, the Contractor would be required to register with the EPD as a Chemical Waste Producer and to follow the requirements stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes and Cap.354 C Waste Disposal (Chemical Waste) (General) Regulation. Chemical waste should be collected by a licensed collector and to be disposed of at a licensed chemical waste treatment and disposal facility.

6.6 Construction Waste Disposal

Legislation

6.6.1 Waste disposal from construction site is subject to control under the Waste Disposal Ordinance. The principal legislation controlling waste materials in Hong Kong is the Waste Disposal Ordinance (WDO) (Cap. 354) and its subsidiary regulations.

Type of Construction Waste

6.6.2 Construction of proposed development would involve site clearance, site formation and excavation, foundation and piling works, as well as superstructure building construction works. Construction activities will generate waste materials requiring appropriate management and disposal. Likely range of waste types includes:

- excavated C&D materials and site clearance waste;
- general refuse generated by the workforce; and
- chemical and oily wastes due to maintenance of equipment.

6.6.3 The general waste management strategy is to avoid waste generation in the first place. If that is unavoidable, source reduction and segregation should be exercised as far as practicable and at the same time, recycling and reuse should be adopted to salvage as much as possible all the recyclable and reusable materials. The following paragraphs provide a general waste management approach as well as good practices for waste management.

Construction and Demolition (C&D) Materials

6.6.4 On-site sorting of construction wastes will be recommended. On-site sorting can be achieved by avoiding the generation of "mixed waste" through good site control.

6.6.5 Waste generated by construction activities should be sorted into inert C&D materials and non-inert C&D materials. The inert C&D materials which usually comprise soil, rock, concrete, brick, cement plaster/mortar, inert building debris, aggregates shall be reused in earth filling, reclamation or site formation works as far as possible. The non-inert C&D materials which comprises metal, timber, paper, glass, junk and general garbage shall be reused or recycled as far as practicable and, as the last resort, disposal of at landfills. On the other hand, it should explore other disposal method such as the timber and woody materials to the Yard Waste Recycling Centre in Y-Park for recycling prior to disposal at the designated landfill site, to minimise the quantity sent to landfill disposal.

6.6.6 Construction wastes shall be sorted, with the inert C&D materials broken up into small pieces for disposal at public fill reception facility, and the non-inert C&D materials should be disposed of at landfill. A Waste Management Plan (WMP) will be submitted in accordance with ADV-19 to the Engineer/Architect for approval prior to the commencement of construction works.

Table 6.2 Estimated Quantities of C&D Materials to be Generated

Type	Total Quantity Generated (m^3)	Disposal Method
Site Clearance	~19,707*	Recyclable non-inert C&D materials such as tree trunks and woody materials will be sent to Yard Waste Recycling Centre in Y-Park subject to availability and/or at landfill. Other non-inert C&D materials such as garbage that cannot be reused or recycled will be disposed of at landfill. Inert C&D materials to be reused as fill materials on site as far as practicable and any surplus amount to be sent to public fill reception facilities for reuse, e.g. in Tuen Mun Area 38 or designated location assigned by government.
Site formation & filling, etc.	~340,000**	Inert C&D materials will be reused on-site as fill material where practicable. Any surplus inert C&D materials to be sent to public fill reception facilities for reuse in Tuen Mun Area 38 or designated location assigned by government.
Building construction	~10,456***	Inert C&D materials to be sent to public fill reception facilities for reuse in Tuen Mun Area 38 or designated location assigned by government. Non-inert C&D materials that cannot be reused or recycled, to be sent to landfill as last resort.

Remarks:

The above figures and disposal method are estimation only. The exact amount to be generated and disposal method will be subject later detailed design stage.

* Based on estimation of removal of top 300mm of the ground, e.g. soil and vegetation. Exact volume is subject to detailed design stage.

** Preliminary estimation of excavation and fill materials based on current proposed scheme and formation level. Exact volume is subject to detailed design stage.

*** Estimated based on the generation rate of 0.1m^3 per 1m^2 of Gross Floor Area (GFA). The total GFA of the Proposed Development is ~104,555m^2. The waste generated due to construction of building structures is estimated based on the generation rate of 0.1m^3 per 1m^2 of GFA (similar waste generation rate was also adopted in the approved EIA Report in the "Agreement No. CE61/2007 (CE), North East New Territories New development Area Planning and Engineering Study – Investigation", Section 7.5.1.2). Exact volume is subject to detailed design stage.

Chemical Waste

6.6.7 Chemical and oily wastes generated from the construction activities, vehicle and plant maintenance and oil interceptors should be handled and disposed of as chemical waste in strict compliance with the Waste Disposal (Chemical Waste) (General) Regulations and the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. The Contractor should be required to register with the EPD as a Chemical Waste Producer. It is recommended to avoid undertaking maintenance of equipment on-site

as far as possible in order to avoid generation of chemical waste. In case chemical waste is generated, the quantity of chemical waste arising from the proposed Project is expected to be a few litres per month. The chemical waste should be collected by licenced chemical waste collectors and disposal of at licenced waste disposal facilities such as Chemical Waste Treatment Centre (CWTC). Provided that the handling, storage and disposal of chemical wastes are in accordance with these requirements, adverse environmental impacts are not expected.

General Refuse

6.6.8 Throughout the construction stage, the workforce would generate general refuse comprising food scraps, wastepaper, empty containers, etc. It has been estimated that the quantity of general refuse to be generated by the construction workforce is about 162.5 kg/ day, which is based on a general refuse generation rate of about 0.65 kg per worker per day and an assumed 250 workers on-site. The exact number of construction workers and quantity of general refuse to be generated will be subject to later detailed design stage. The following general waste management practices are proposed to minimise the amount of general refuse generated during construction phase.

6.6.9 Release of general refuse into the nearby storm drain should not be permitted. Effective collection of site wastes would be required to prevent waste materials being blown around by wind, flushed or leached into the surrounding environment.

6.6.10 Recyclable materials (i.e. paper, plastic bottles and aluminium cans) should be separated from other materials for recycling, in order to reduce the amount of general refuse to be disposed of at landfill. Adequate number of enclosed waste containers should be provided to avoid over-spillage of waste. The non-recyclable refuse should be placed in bags, stored in enclosed containers, and disposed of at designated landfill on a daily basis.

6.6.11 With the implementation of the recommended waste management practices on site, adverse environmental impacts would not arise from the storage, handling and transportation of general refuse.

6.7 Conclusion

6.7.1 Potential environmental impacts arising from construction activities of the proposed development, including air quality, construction wastewater, noise and waste impacts have been qualitatively assessed. Potential environmental impacts are anticipated to be within acceptable bounds with the implementation of effective environmental mitigation measures. In conclusion, it is envisaged that construction phase environmental impacts arising from the Proposed Amendment Scheme would be surmountable.

7. WASTE MANAGEMENT

7.1 Introduction

7.1.1 This section reviews the types and quantities of potential sources of waste that will arise during the construction and operation of the proposed development. Potential environmental impacts associated with the handling and disposal of waste have been identified. Options for avoidance, minimization, reuse, recycling, treatment, storage, collection, transport and disposal of such wastes are examined.

7.2 Environmental Legislation, Policies, Standards and Criteria and other Relevant Guidelines

7.2.1 There are various types of waste which may arise during construction works. The various types of waste may require a different approach for management according to their specific characteristics. The regulations and requirements regarding waste management (collection, storage, transfer and disposal) of the various waste streams are summarised below.

7.2.2 The principal legislation controlling waste materials in Hong Kong which are relevant to this proposed development are:

- Waste Disposal Ordinance (WDO) (Cap. 354);
- Waste Disposal (Chemical Waste) (General) Regulation; and
- Waste Disposal (Charges for Disposal of Construction Waste) Regulation.

7.2.3 Other key relevant guidelines published by various Government Departments and Bureaux include:

- Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes;
- Works Branch Technical Circular No. 2/93 "Public Dumps"; and
- PNAP No. 243 (ADV-19) – "Construction and Demolition Waste".

7.3 Identification and Evaluation of Potential Impacts

Operation phase

7.3.1 It is anticipated that general refuse will be generated during operation of the proposed development. General refuse will be generated by residents during the operation of the proposed development.

7.3.2 With the domestic nature and scale of development, the amount of general refuse to be generated during operation phase is estimated to be about 6.14 tons/day, which is based on a per capita waste disposal rate at 0.89 kg/person/day indicated in the Monitoring of Solid Waste in Hong Kong 2023 and a population of about 6,898. Standard refuse handling approach that is widely adopted in other residential development sites that is required by the government e.g. provision of refuse collection and storage facility as required under the Buildings Ordinance, will be adopted for the provision of facility for handling and disposal of collected waste. Refuse should be properly collected and stored at a designated location, and collection of waste will be arranged by a contracted waste collection contractor on regular basis. Other measures for instance, set up of recycling bins and recycling point shall be adopted to encourage segregation and recycling of aluminium and plastic wastes, and wastepaper in order to reduce general refuse generation. Subject to detailed design stage, the proposed development will consider feasibility of other appropriate recycling means for food

waste, e.g. delivering food waste generated to Organic Resource Recovery Centre (ORRC) or installation of food waste recycling machines for composing treatment, etc.

Construction Phase

7.3.3 Type of construction waste to be generated during construction and relevant best practices are provided in Section 6.6.

8. OVERALL CONCLUSION

8.1.1 The Subject Site is located between Kam Pok Road, Ha Chuk Yuen Road and Fung Chuk Road, and bounded by a number of existing and planned residential developments adjacent to Castle Peak Road and San Tin Highway. The site is designated for residential use by the government under the current OZP. A residential scheme was previously approved by TPB for the site (A/YL-MP/205). The Applicant currently proposes to rezone the site to allow for a high domestic plot ratio and hence more flat supply from the site in line with the government policy on utilizing the development potential of undeveloped housing sites to increase flat supply for the Territory.

8.1.2 To assess the environmental impact of the revised residential scheme, traffic noise impact assessment, industrial noise assessment, noise impact due to planned nearby sewage pumping station, and qualitative air quality impact assessment have been conducted.

8.1.3 Appropriate precautionary measures (e.g. setback of the proposed buildings from the site boundaries, provision of a buffer area, and fence wall) have been incorporated in the layout to alleviate potential noise impacts due to road traffic noise as well as fixed noise sources. Precautionary building design has been adopted at NEC uses to have noise sensitive uses directed away from road traffic noise source as far as possible and flat roof design to shield noise sources. With these measures, the proposed development will not be subject to unacceptable traffic noise impact, and 100% traffic noise compliance rate can be achieved.

8.1.4 Most of identified industrial sites are distant away from the Subject Site (varying from over 180m to over 300m). With sufficient buffer distance and proposed precautionary measures, the predicted noise level at NSRs due fixed noise sources is within the relevant noise criteria. No additional noise mitigation measures will be necessary.

8.1.5 The Government's planned San Tin No. 1 sewage pumping station is relatively far away from the Subject Site, mitigation measures have already been recommended in the approved EIA Report of that project. With these mitigation measures in place, no adverse noise and air quality or odour impacts due to operation of the pumping station is anticipated.

8.1.6 During the operational stage, the sewage generated by the proposed development will be discharged into proposed private SPS before discharging into proposed sewers along Kam Pok Road and Pok Wai South Road and finally discharges into existing Nam Sang Wai Sewage Pumping Station. Also, a proposed private sewage pumping station will be located underground and inside an enclosed building structure, and the exhaust louvre will be directed towards Kam Pok Road and away from the nearby sensitive uses, its associated noise impact will be minimized. Thus, no adverse odour and noise impacts are envisaged for the operational phase of the Project.

8.1.7 It was found that the Subject Site can satisfy the buffer distance requirements stated in the HKPSG for air sensitive uses of the proposed development. For the buildings in which part of them fall within the buffer zone for Kam Pok Road (i.e. buildings namely E&M, Commercial, Commercial & Transport Layby, Commercial & GIC Facilities), it is confirmed that these buildings will be designed in such a way that there shall be no air-sensitive use including openable window, fresh air intake of air-conditioning system and recreational use in open space located within the buffer zone. Thus, no adverse air quality impacts due to vehicular emission are expected. No adverse air quality impacts due to industrial emissions are expected as no industrial emissions sources have been identified within 500m from the Study boundary.

8.1.8 Potential sources of air quality impacts during construction have been identified and practicable good practices are also recommended. With appropriate control measures and good housekeeping practice in place, adverse air quality impact is not anticipated. Since the proposed residential development will constitute a designated project under the EIAO, an air quality impact assessment which includes both vehicular and odour impacts, will be carried out at the later stage under the EIA process to demonstrate the compliance of the criteria stipulated in the EIAO-TM.

8.1.9 To this end, it can be concluded that the proposed development is considered sustainable in environmental terms.

Figures

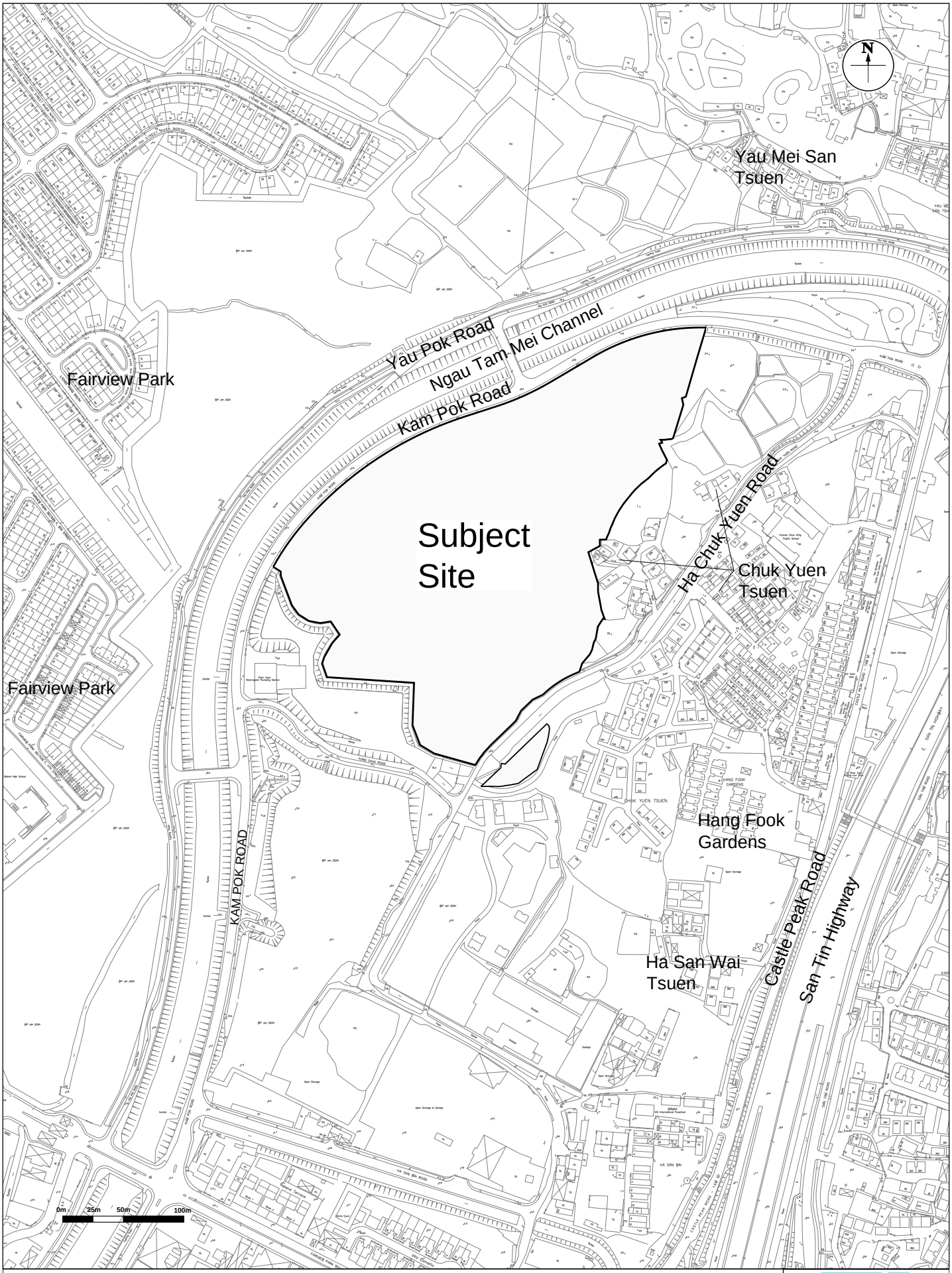

Figure: 1-1		RAMBOLL
Title: Location of the Subject Site and the Environs		Drawn by: CL
		Checked by: HN
Project: S.12A Planning Application on the Approved Mai Po & Fairview Park OZP No. S/YL-MP/7 – Rezoning from "Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in DD 104 and Adjacent G.L. in Yuen Long, N.T.		Rev.: 6.1
		Date: May 2025

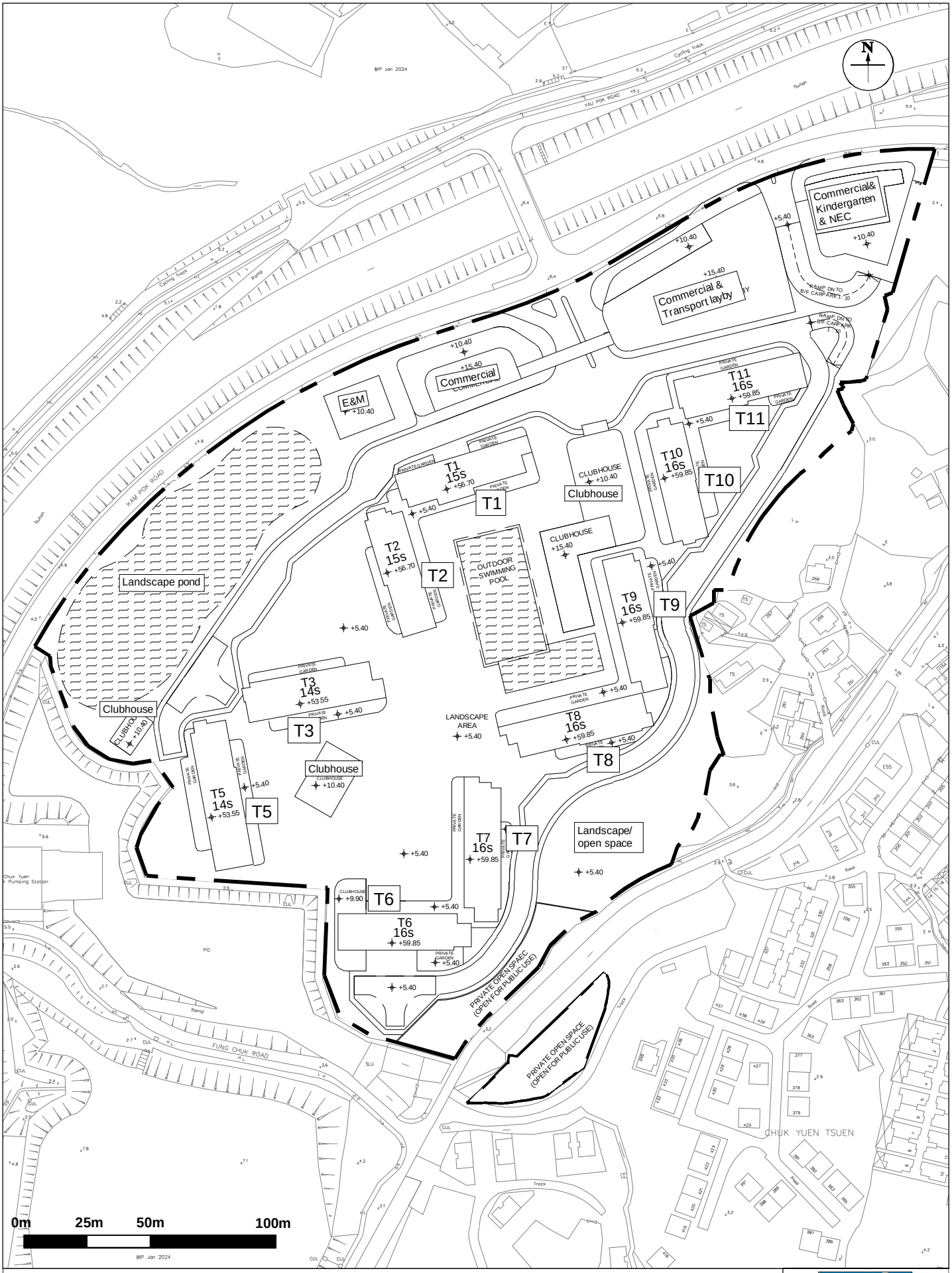

Figure: 1-2

Title: Master Layout Plan for the Proposed Development

Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.

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Drawn by: CL

Checked by: HN

Rev.: 3.1

Date: Nov 2024

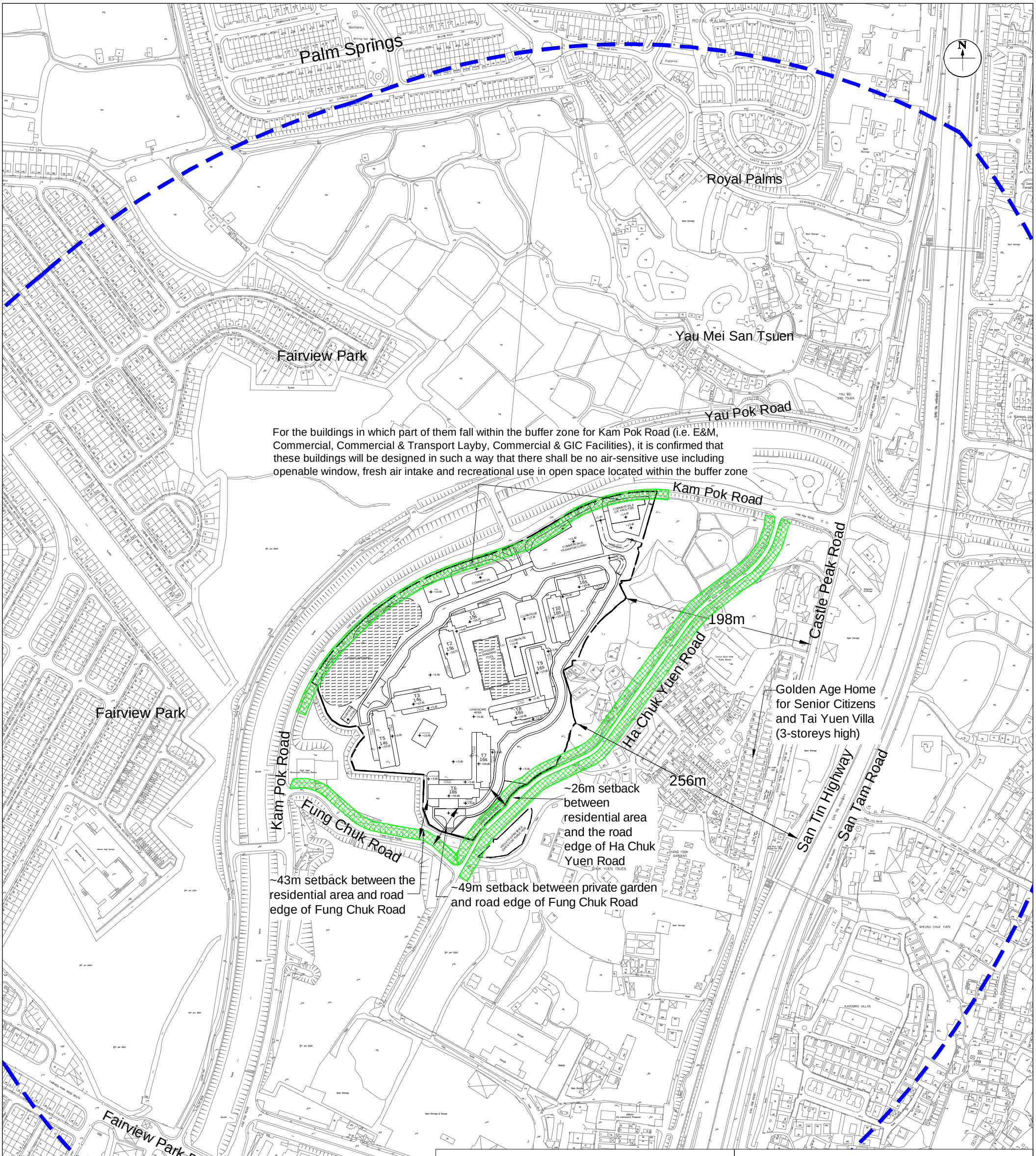


Figure: 2-1

Title: Buffer Distances Between the Subject Site and Nearby Roads

RAMBOLL

Drawn by: CL

Checked by: HN

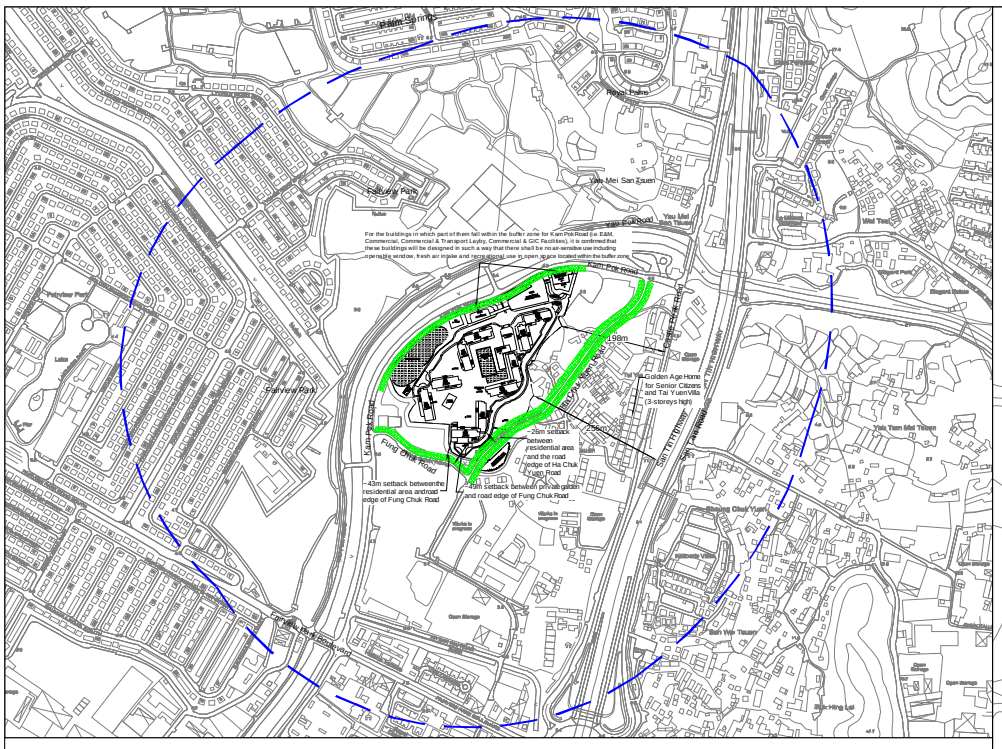
Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.

Rev.: 6.0

Date: Apr 2025

BLOCK PLAN

For the buildings in which part of them fall within the buffer zone for Kam Pok Road (i.e. E&M, Commercial, Commercial & Transport Layby, Commercial & GIC Facilities), it is confirmed that these buildings will be designed in such a way that there shall be no air-sensitive use including openable window, fresh air intake and recreational use in open space located within the buffer zone



Remark (2): Kam Pok Road is a Rural Road, and Ha Chuk Yuen Road and Fung Chuk Road are single track access road. To be conservative, a 10m buffer zone from road edge is currently assumed for the purpose of this assessment.
For the buildings in which part of them fall within the buffer zone for Kam Pok Road (i.e. E&M, Commercial, Commercial & Transport Layby, Commercial & GIC Facilities), it is confirmed that these buildings will be designed in such a way that there shall be no air-sensitive use including openable window, fresh air intake and recreational use in open space located within the buffer zone

Legend

- 10m Buffer zone for nearby access road
- 500m Assessment Area
- Subject Site Boundary

Remark (1): No air sensitive uses, including fresh air intake of ventilation system, openable windows and recreational uses in open space of proposed development should be located within the buffer zone.

Figure: 2-1-1

Title: Buffer Distances Between the Subject Site and Nearby Roads

Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.

RAMBOLL

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Checked by: HN

Rev.: 6.0

Date: Apr 2025

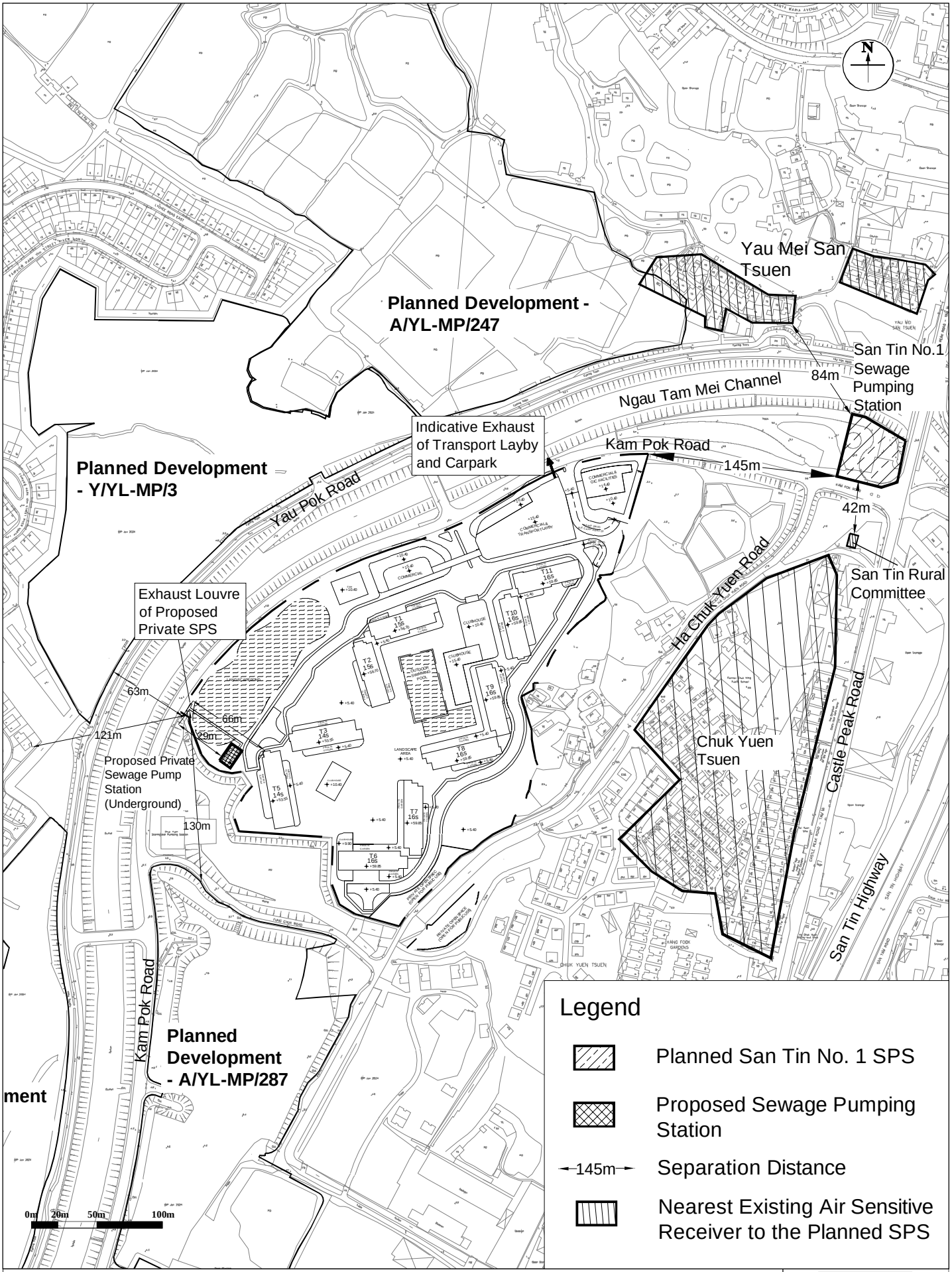


Figure:	2-2	RAMBOLL
Title:	Locations of the Planned San Tin No. 1 Sewage Pumping Station and Proposed Private Sewage Pumping Station	Drawn by: CL Checked by: HN
Project:	S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.	Rev.: 6.1 Date: May 2025

Block Plan

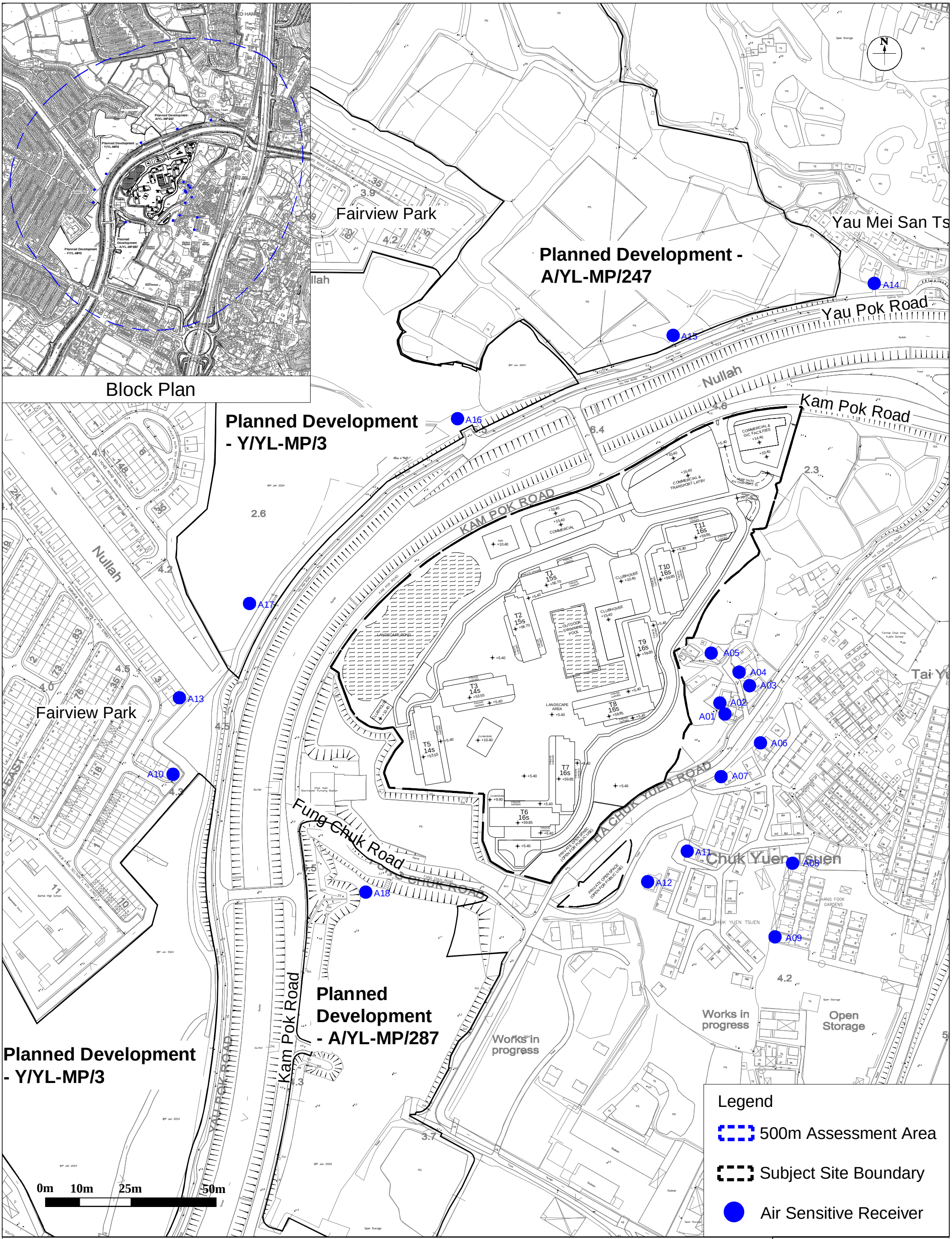


Figure: 2-3

Title: Locations of Other Nearby Representative Air Sensitive Receivers

RAMBOLL

Drawn by: CL

Checked by: HN

Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.

Rev.: 4.0

Date: Feb 2025

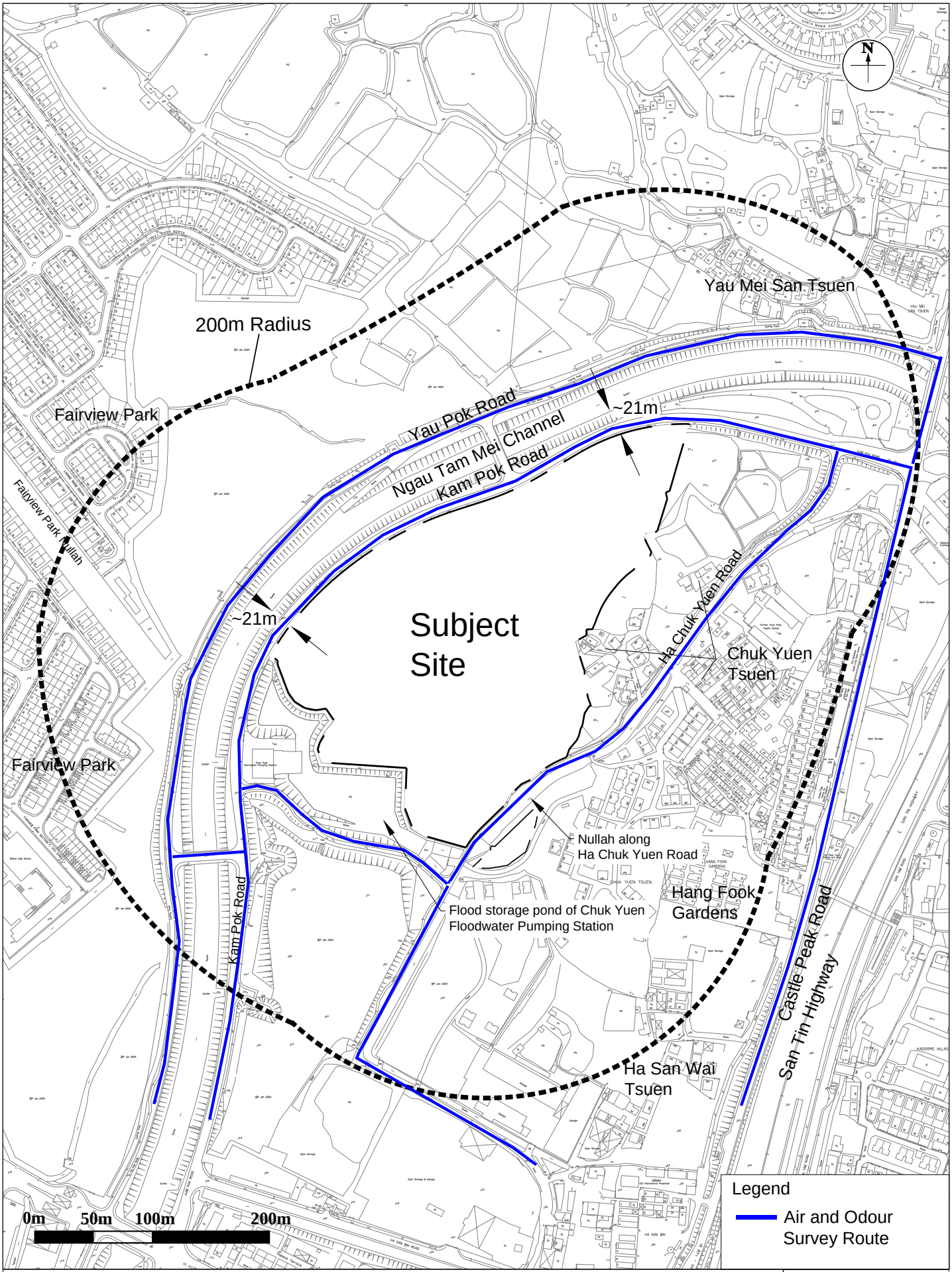


Figure: 2-4	RAMBOLL
Title: Air and Odour Survey Route	Drawn by: CL
	Checked by: HN
Project: S.12A Planning Application on the Approved Mai Po & Fairview Park OZP No. S/YL-MP/7 – Rezoning from "Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in DD 104 and Adjacent G.L. in Yuen Long, N.T.	Rev.: 6.1
	Date: May 2025

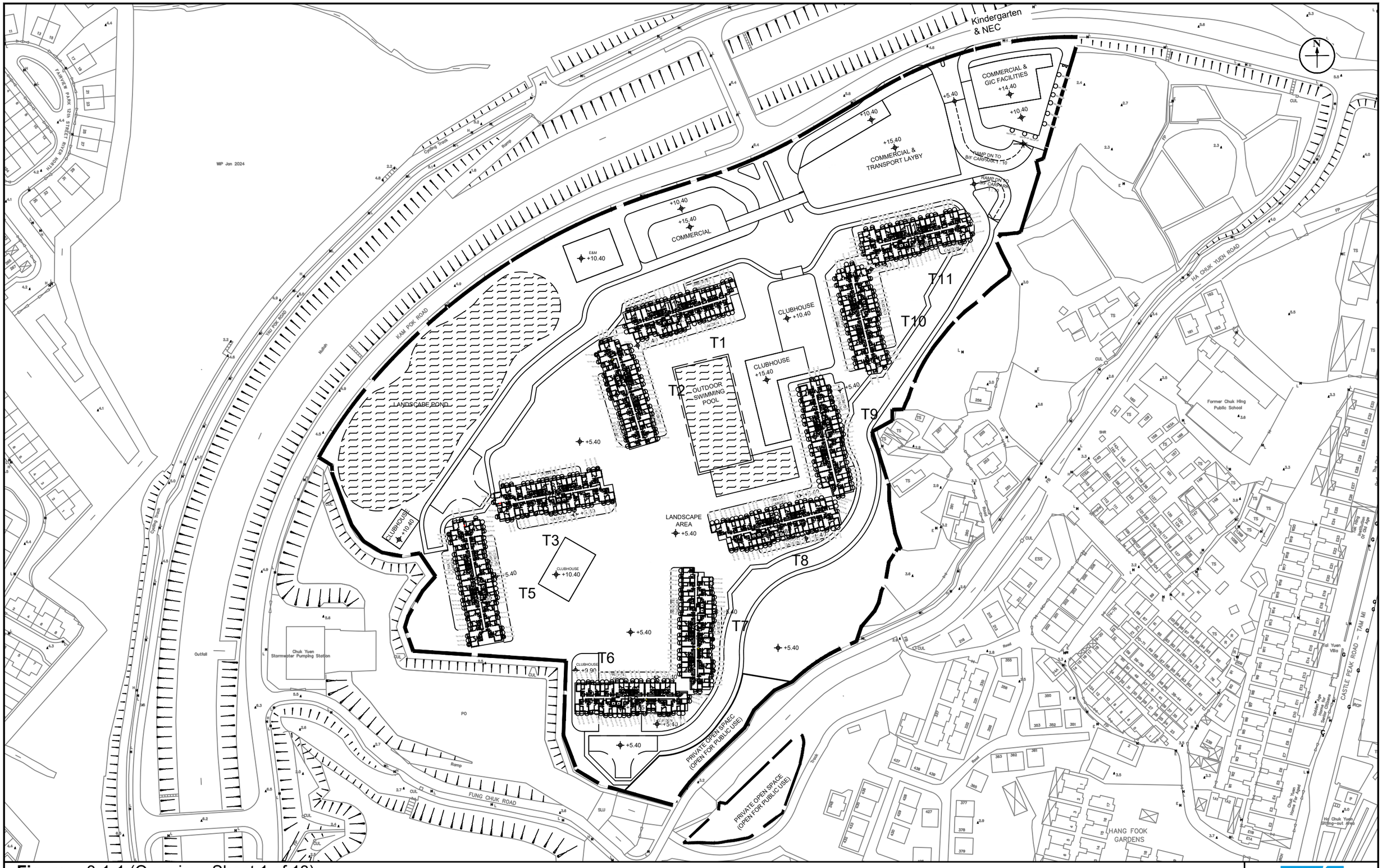


Figure: 3-1-1 (Overview, Sheet 1 of 13)

Title: Locations of NSRs for Road Traffic Noise Impact Assessment

Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.

RAMBOLL

Drawn by:	CL
Checked by:	HN
Rev.:	3.0
Date:	Sep 2024

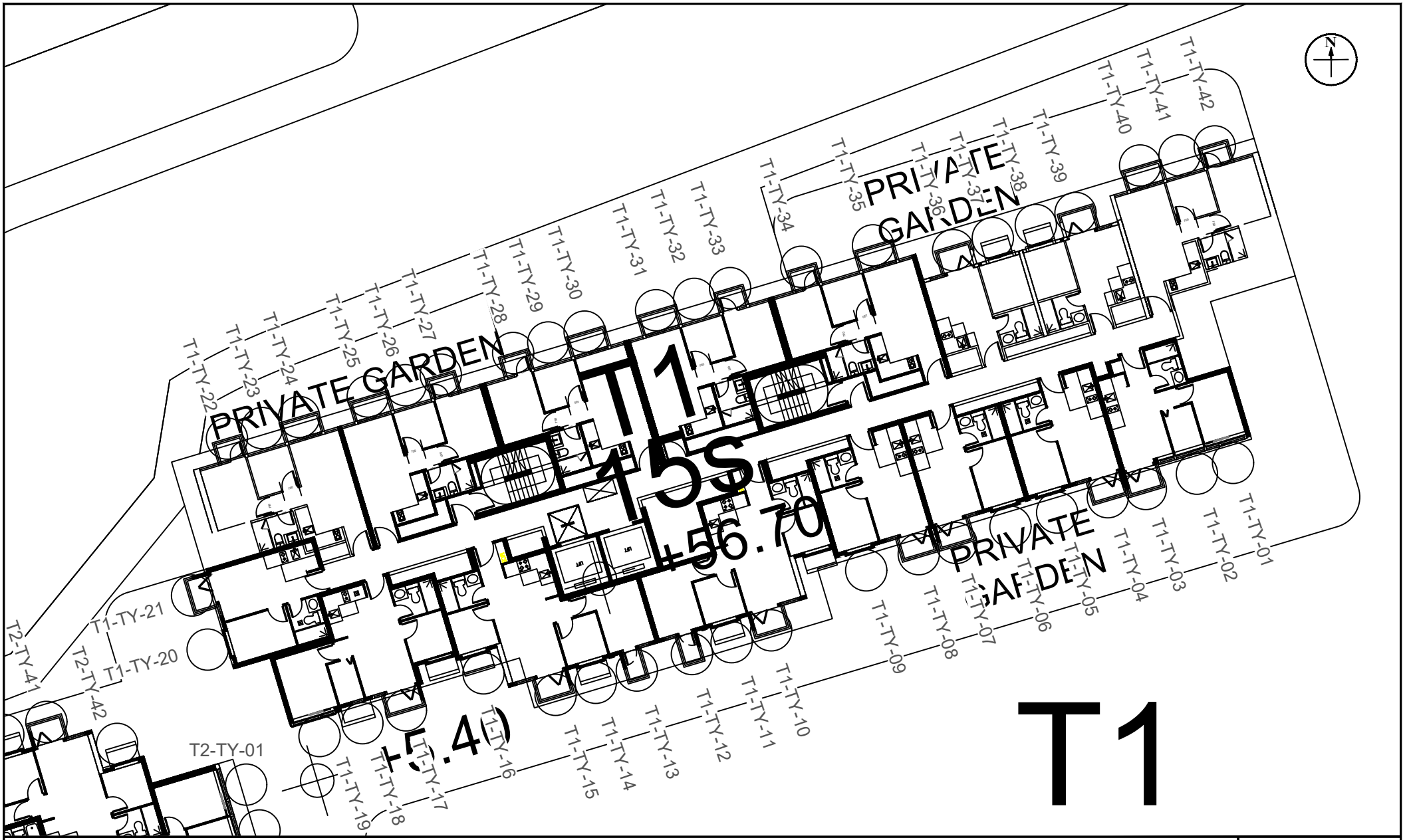


Figure: 3-1-2 (Tower 1, Sheet 2 of 13))

Title: Locations of NSRs for Road Traffic Noise Impact Assessment

Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.

RAMBOLL

Drawn by: CL

Checked by: HN

Rev.: 3.0

Date: Sep 2024

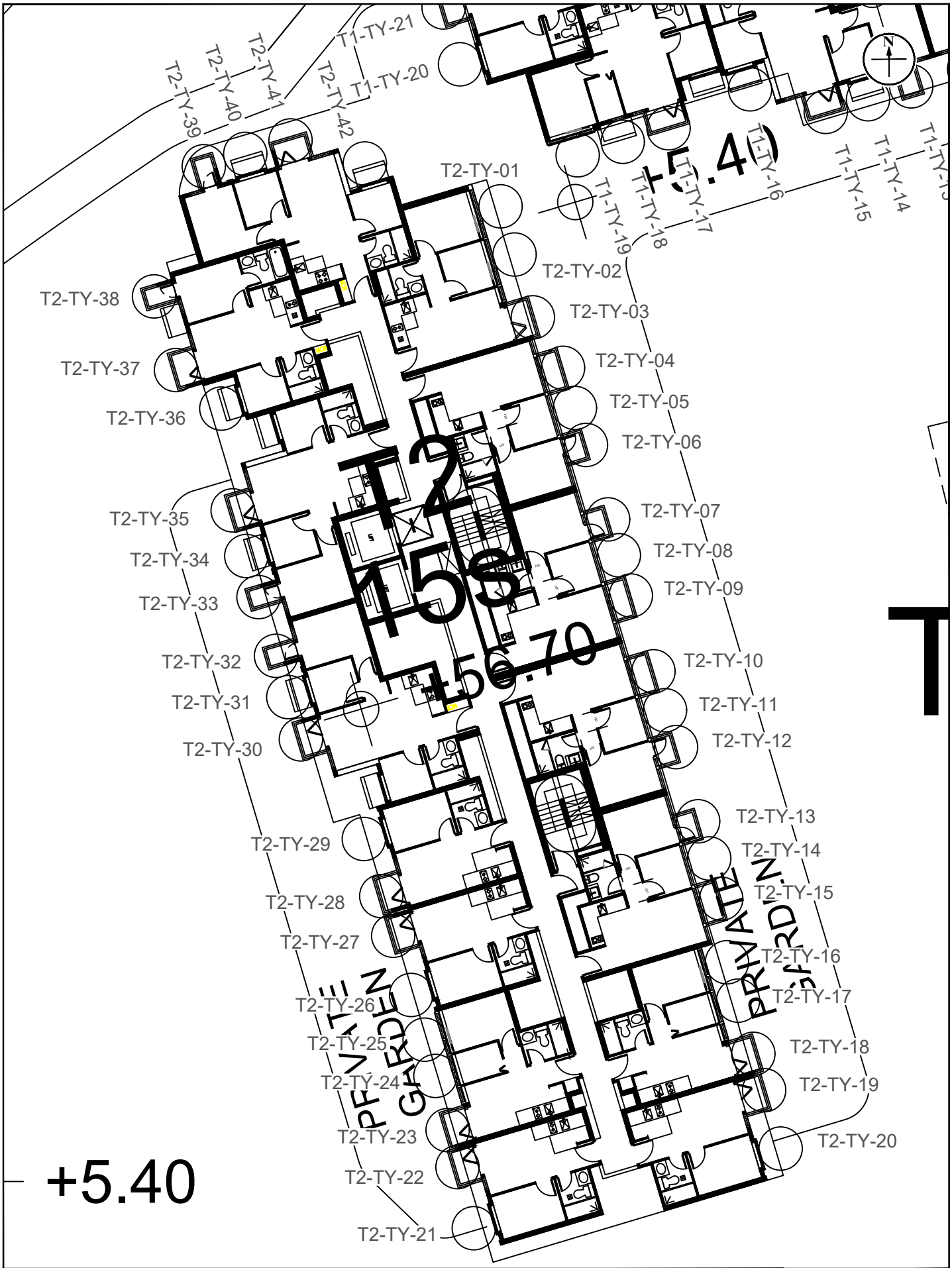


Figure:	3-1-3 (Tower 2, Sheet 3 of 13)	RAMBOLL
Title:	Locations of NSRs for Road Traffic Noise Impact Assessment	Drawn by: CL Checked by: HN
Project:	S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.	Rev.: 3.0 Date: Sep 2024

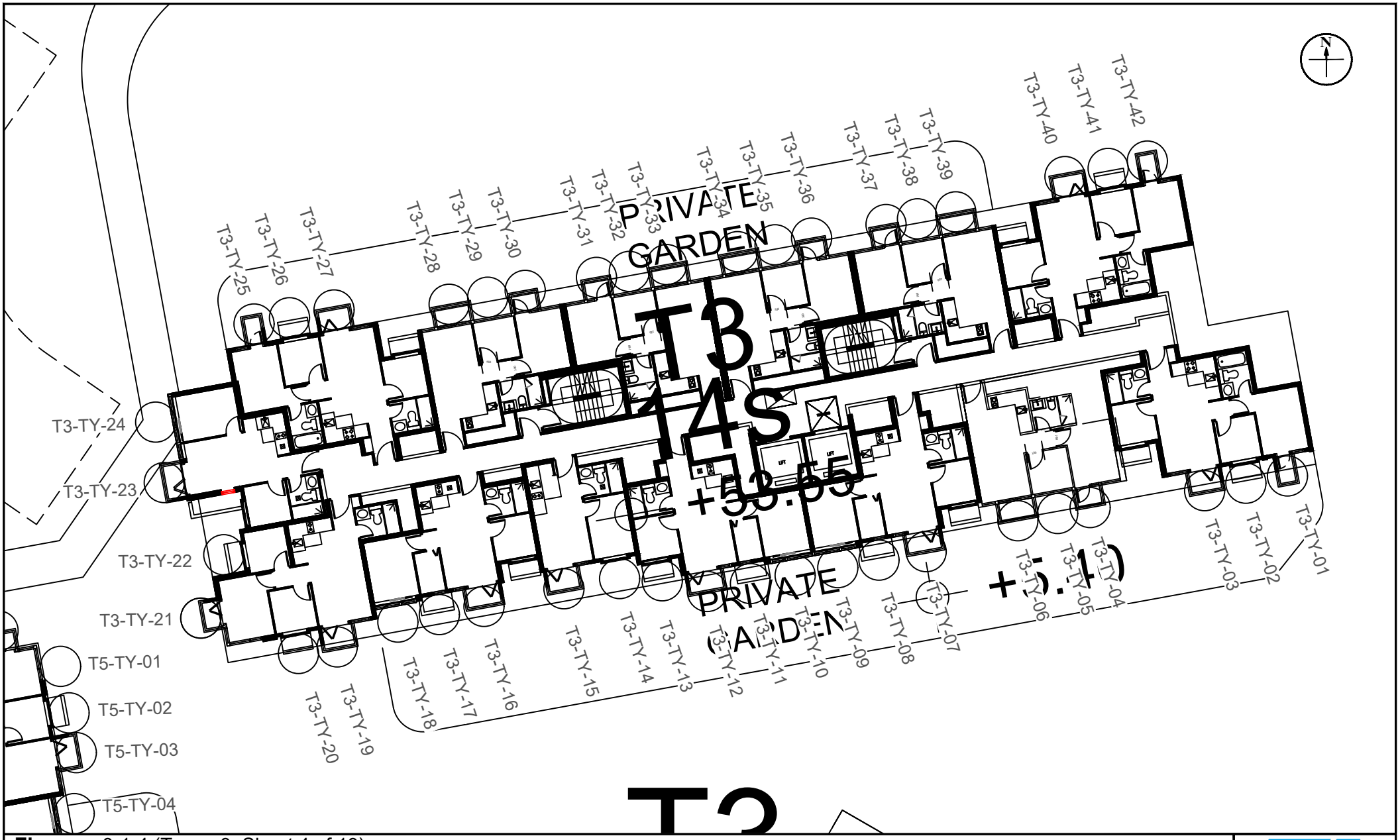


Figure: 3-1-4 (Tower 3, Sheet 4 of 13)	RAMBOLL
Title: Locations of NSRs for Road Traffic Noise Impact Assessment	Drawn by: CL Checked by: HN
Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.	Rev.: 3.0 Date: Sep 2024

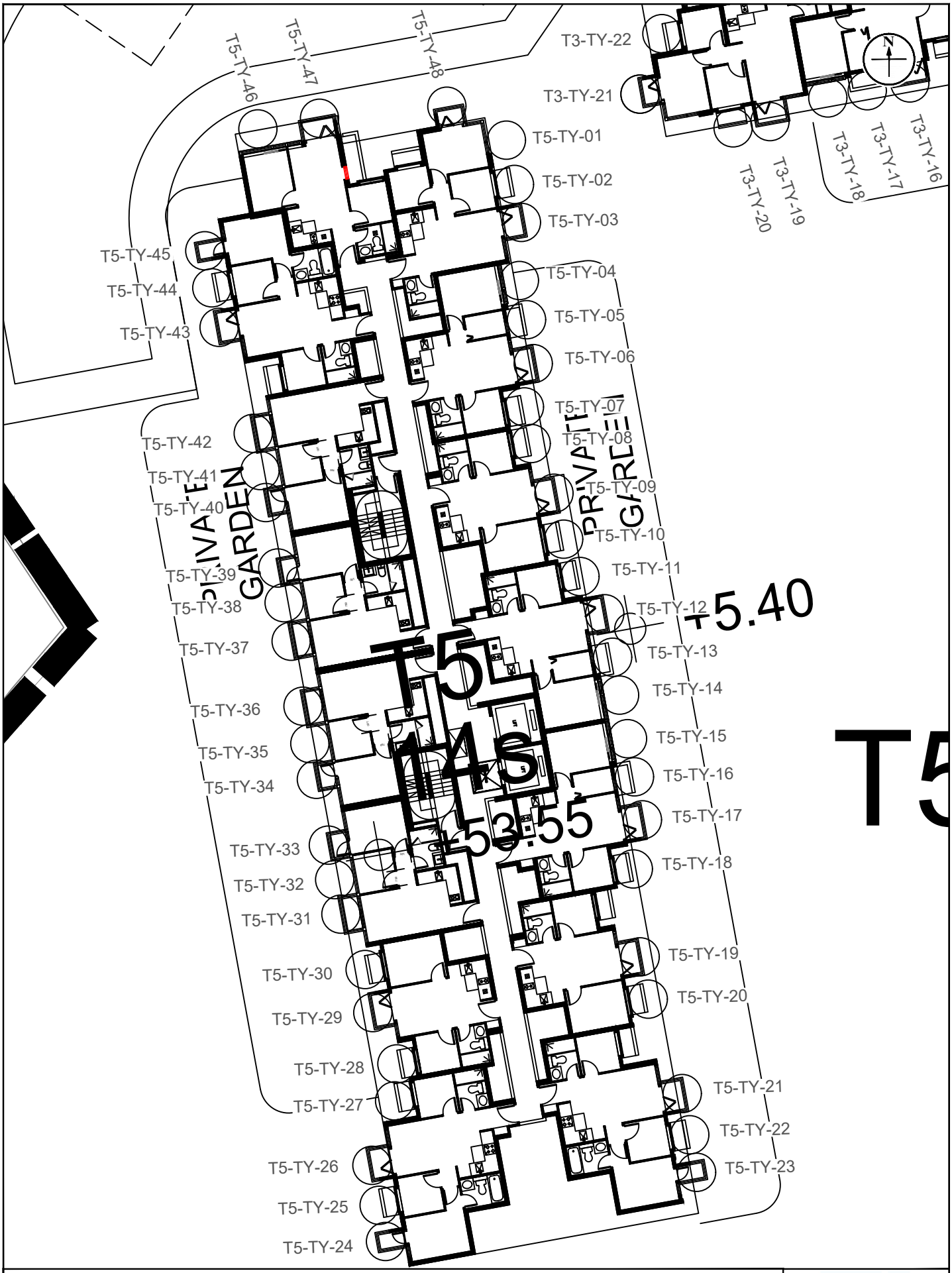


Figure:	3-1-5 (Tower 5, Sheet 5 of 13)	RAMBOLL
Title:	Locations of NSRs for Road Traffic Noise Impact Assessment	Drawn by: CL Checked by: HN
Project:	S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.	Rev.: 3.0 Date: Sep 2024

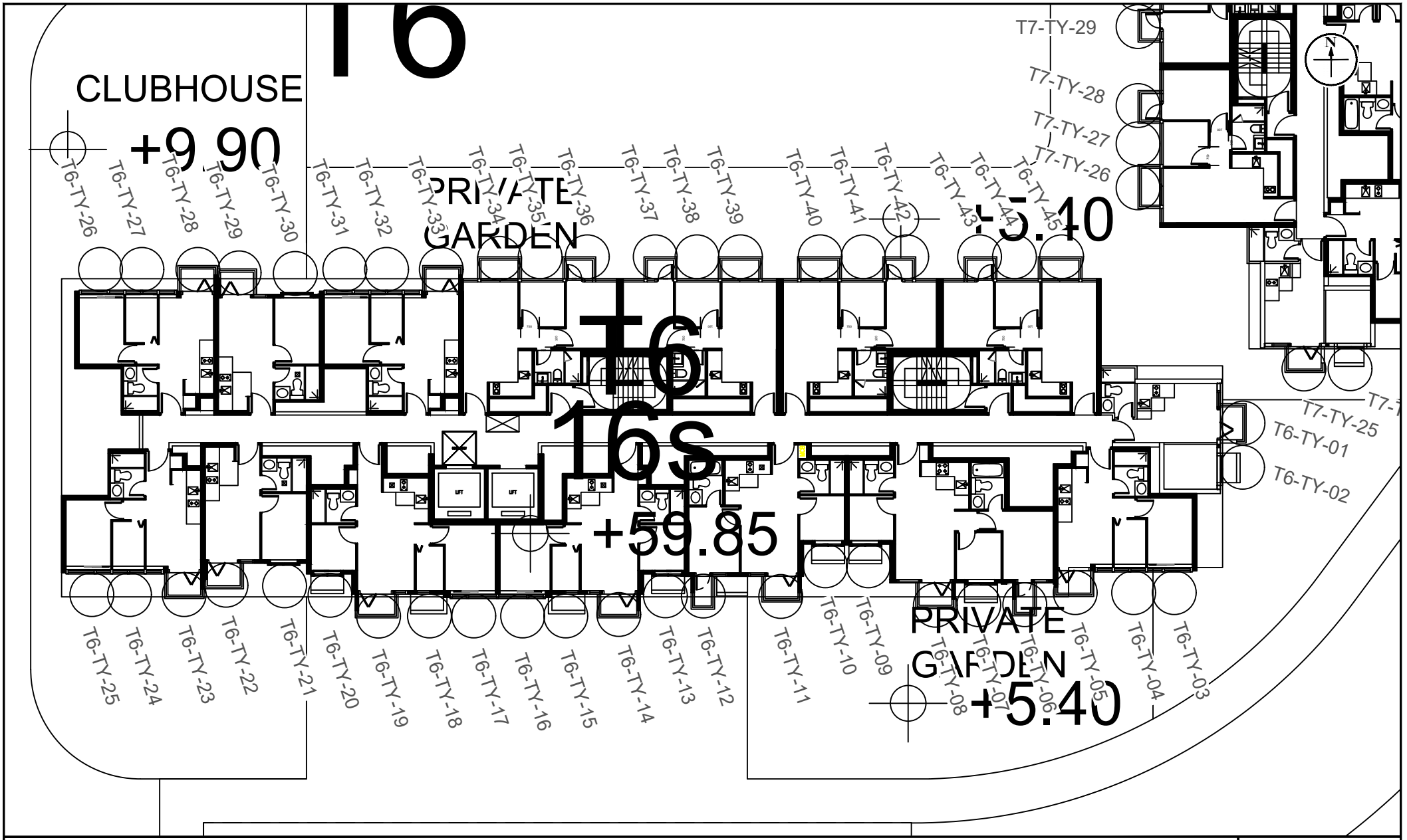


Figure: 3-1-6 (Tower 6, Sheet 6 of 13)

Title: Locations of NSRs for Road Traffic Noise Impact Assessment

Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.

RAMBOLL

Drawn by: CL

Checked by: HN

Rev.: 3.0

Date: Sep 2024

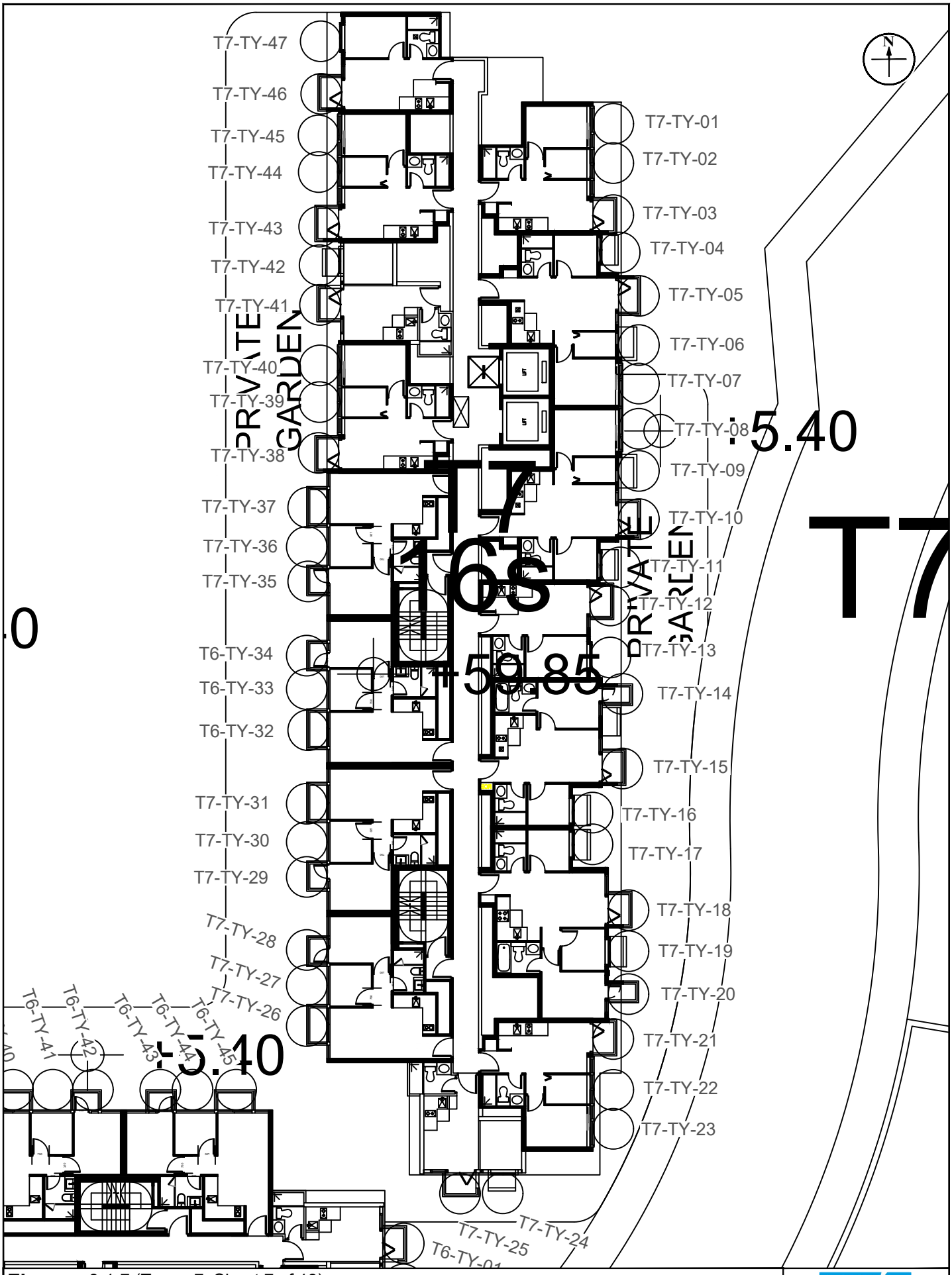


Figure:	3-1-7 (Tower 7, Sheet 7 of 13)	RAMBOLL
Title:	Locations of NSRs for Road Traffic Noise Impact Assessment	Drawn by: CL Checked by: HN
Project:	S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.	Rev.: 3.0 Date: Sep 2024

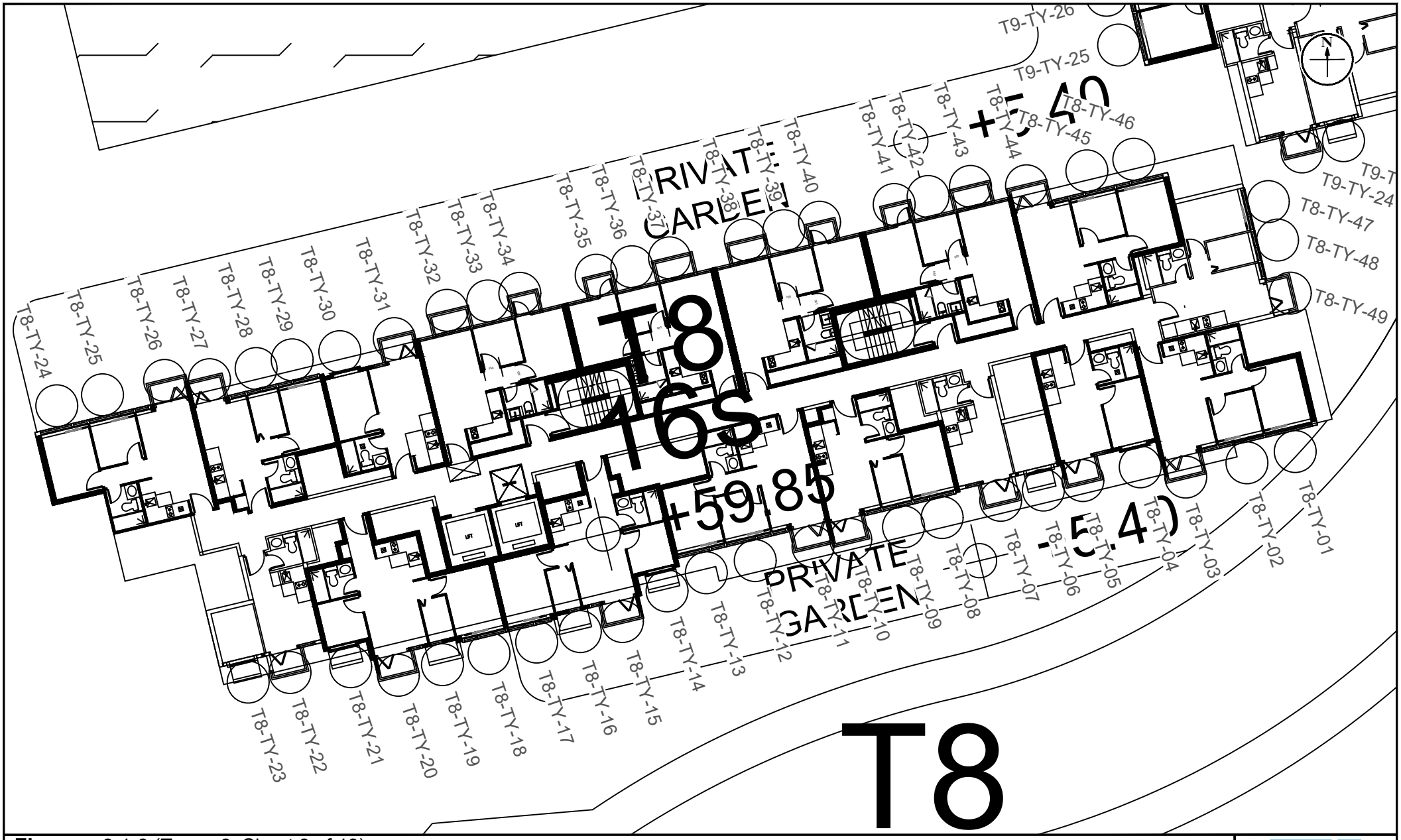


Figure: 3-1-8 (Tower 8, Sheet 8 of 13)

Title: Locations of NSRs for Road Traffic Noise Impact Assessment

Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.

RAMBOLL

Drawn by: CL

Checked by: HN

Rev.: 3.0

Date: Sep 2024

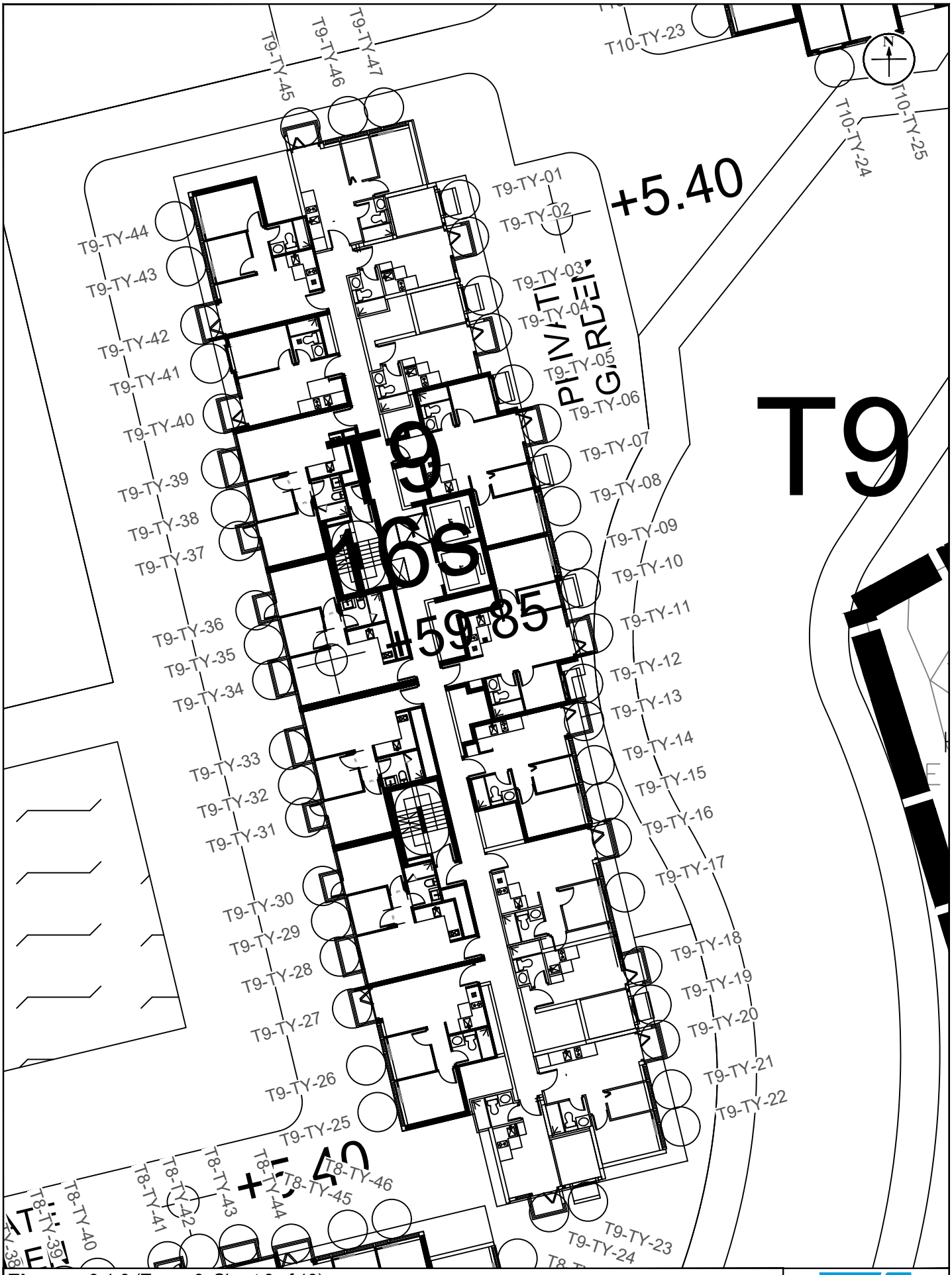


Figure:	3-1-9 (Tower 9, Sheet 9 of 13)	RAMBOLL
Title:	Locations of NSRs for Road Traffic Noise Impact Assessment	Drawn by: CL Checked by: HN
Project:	S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.	Rev.: 3.0 Date: Sep 2024

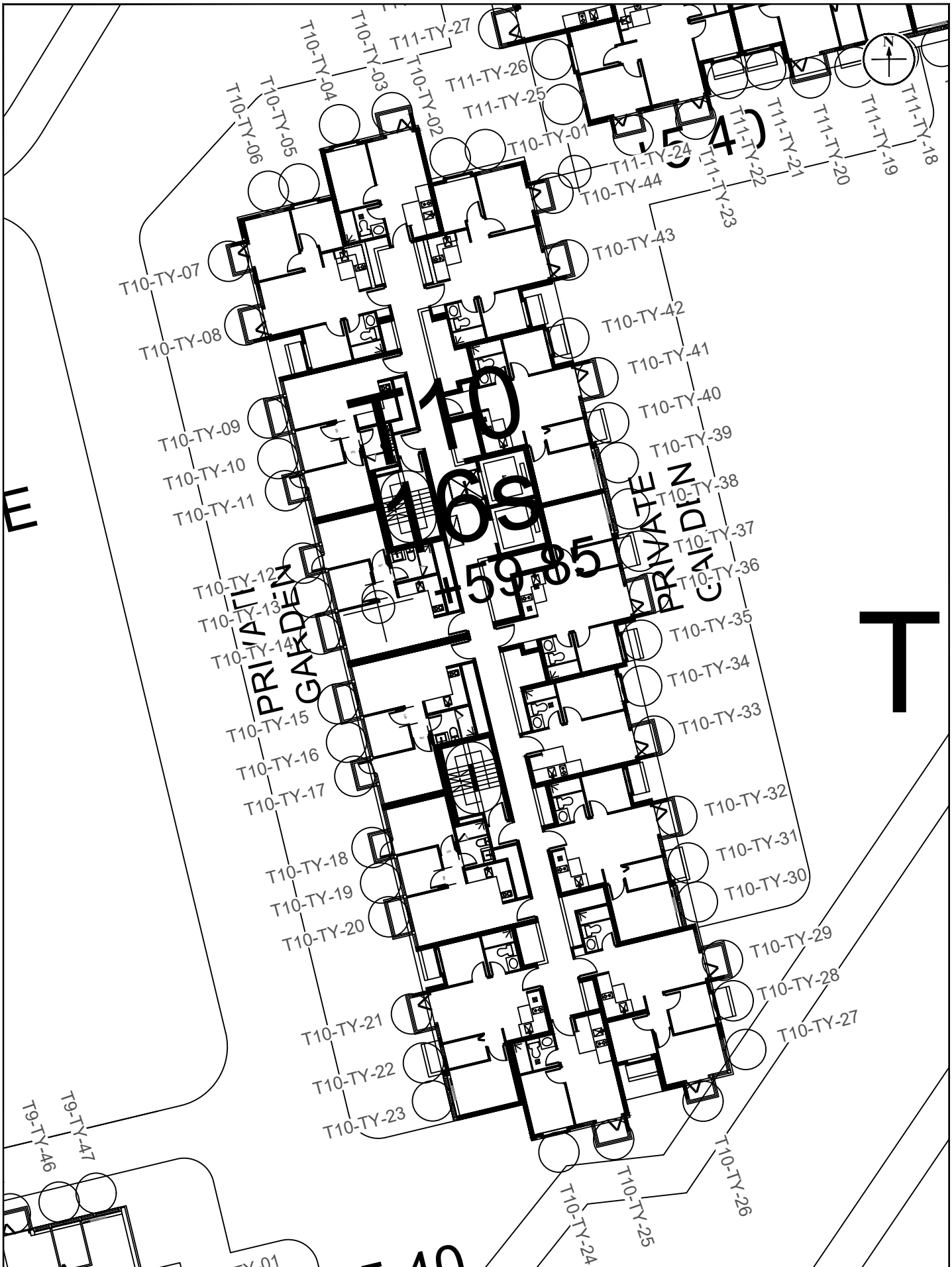


Figure:	3-1-10 (Tower 10, Sheet 10 of 13)	RAMBOLL
Title:	Locations of NSRs for Road Traffic Noise Impact Assessment	Drawn by: CL
		Checked by: HN
Project:	S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.	Rev.: 3.0
		Date: Sep 2024

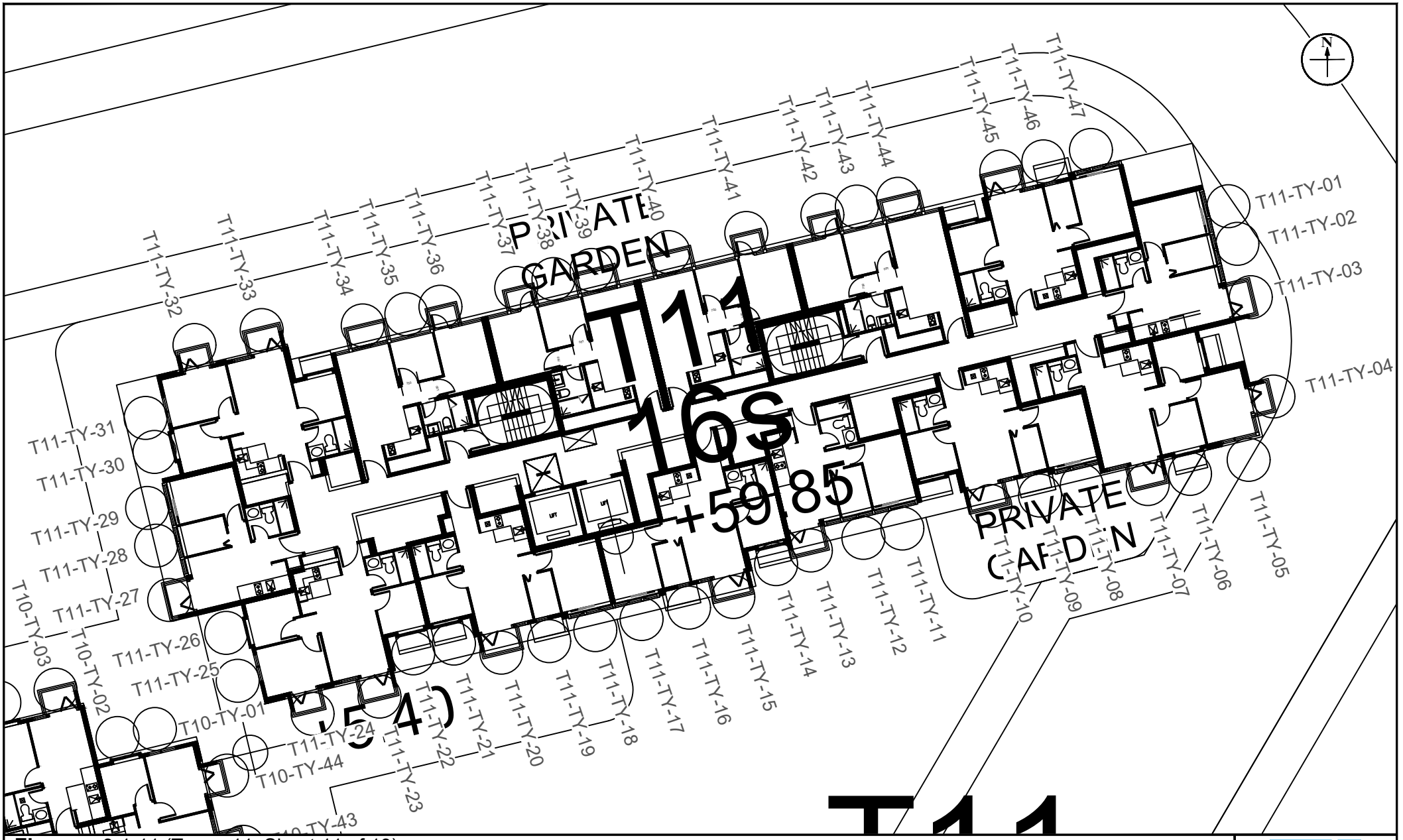


Figure: 3-1-11 (Tower 11, Sheet 11 of 13)

Title: Locations of NSRs for Road Traffic Noise Impact Assessment

Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.

RAMBOLL

Drawn by: CL

Checked by: HN

Rev.: 3.0

Date: Sep 2024

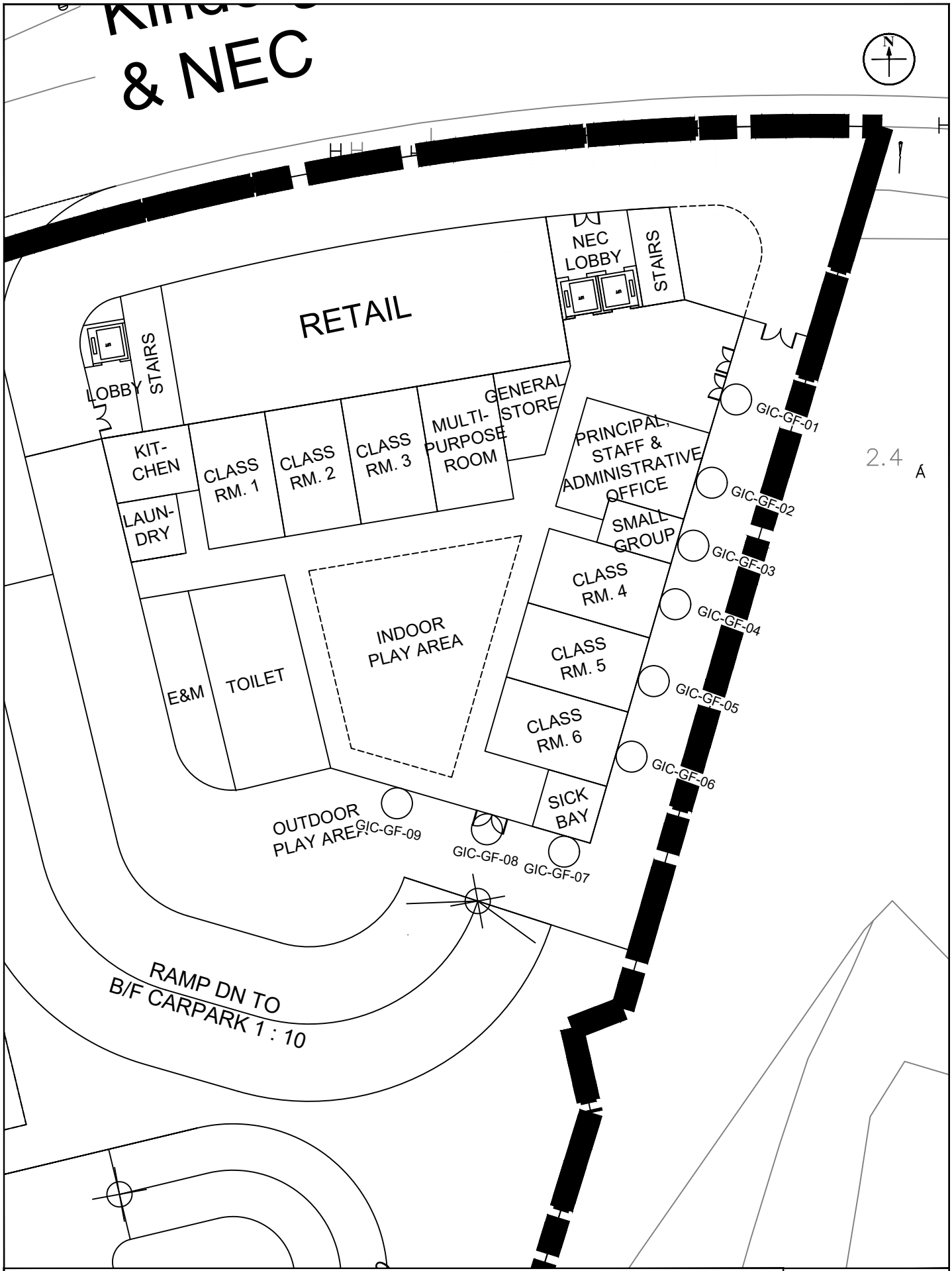


Figure:	3-1-12 (GIC G/F, Sheet 12 of 13)	RAMBOLL
Title:	Locations of NSRs for Road Traffic Noise Impact Assessment	Drawn by: CL
		Checked by: HN
Project:	S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.	Rev.: 3.0
		Date: Sep 2024

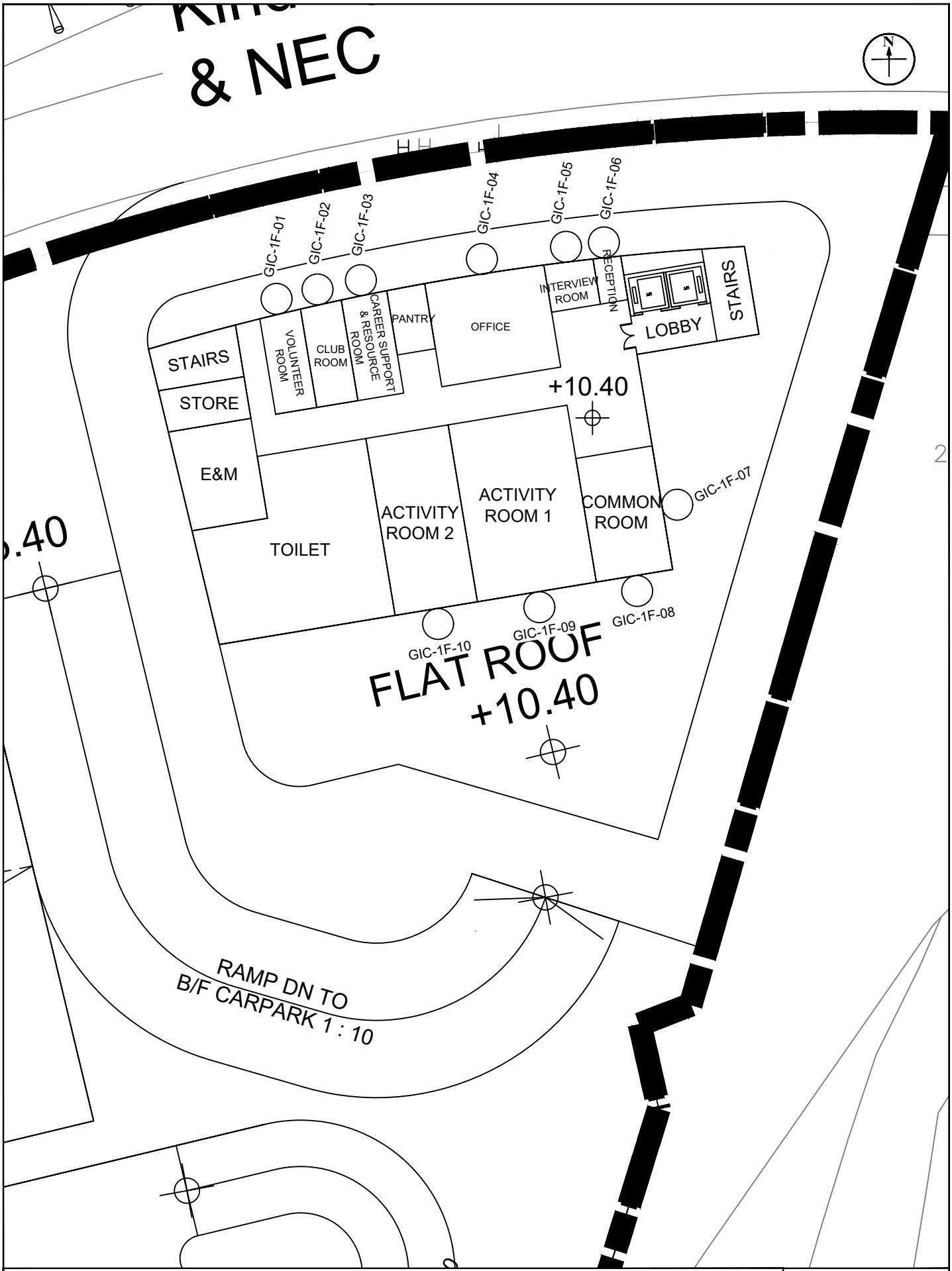


Figure:	3-1-13 (GIC 1/F, Sheet 13 of 13)	RAMBOLL
Title:	Locations of NSRs for Road Traffic Noise Impact Assessment	Drawn by: CL
		Checked by: HN
Project:	S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.	Rev.: 3.0
		Date: Sep 2024

Remark: There is a solid wall in front of classrooms 1-3 and multi-purpose room.

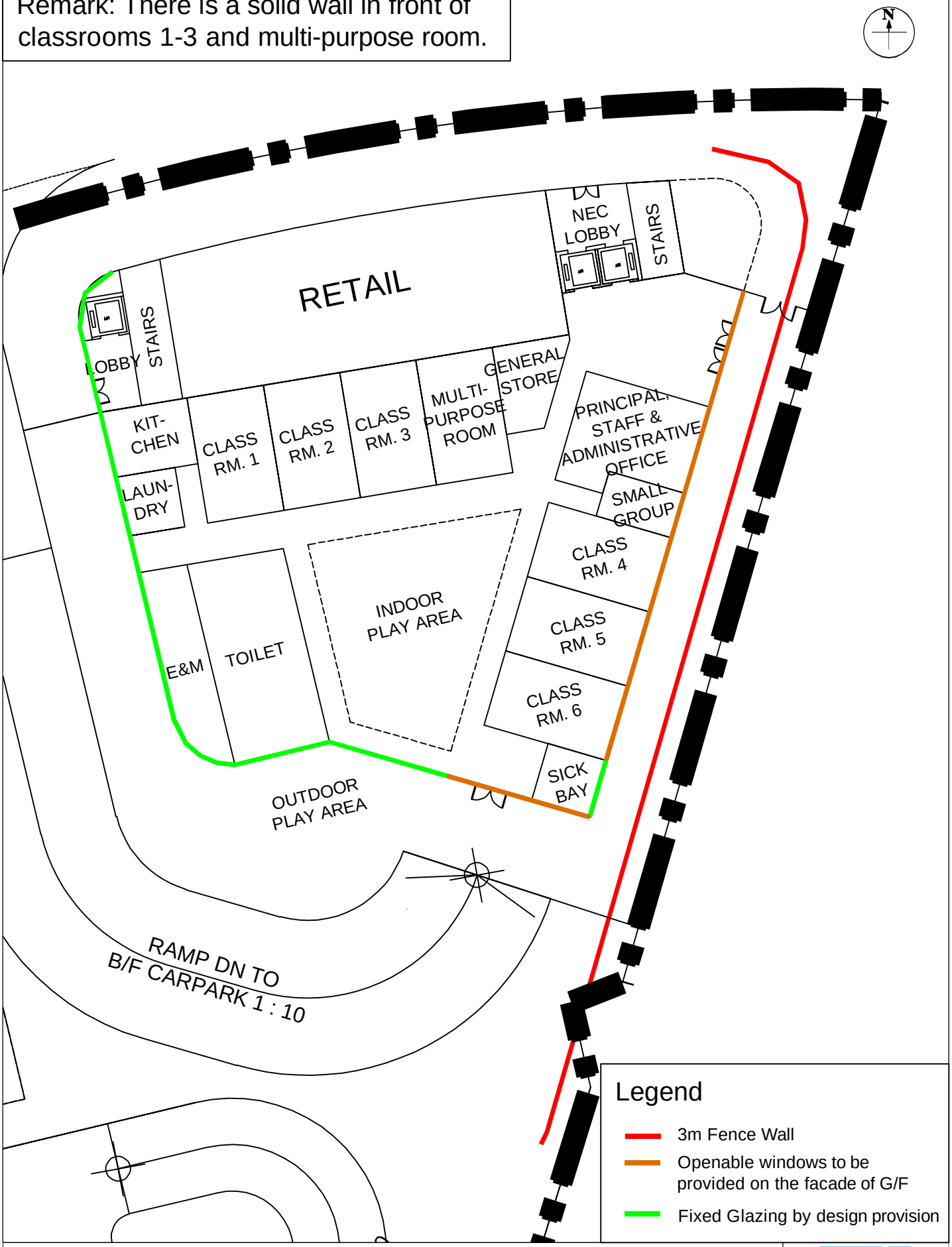


Figure: 3-2		RAMBOLL
Title:	Proposed Noise Mitigation Measures for Road Traffic Noise Impact Assessment - Kindergarten on G/F	Drawn by: CL Checked by: HN
Project:	S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.	Rev.: 4.0 Date: Jan 2025

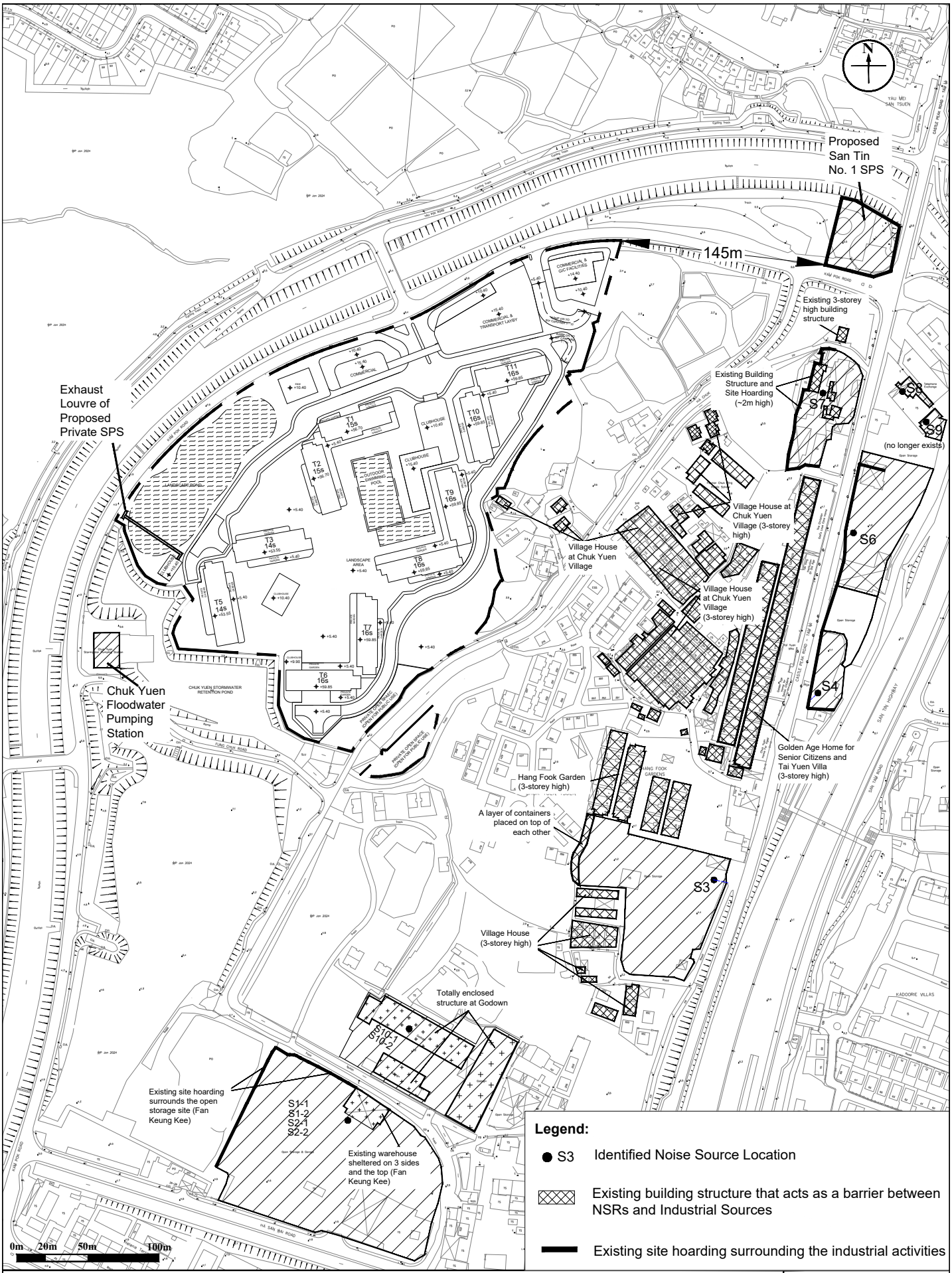


Figure: 4-2

Title: Locations of Fixed Noise Sources

Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.

RAMBOLL

Drawn by: CL

Checked by: HN

Rev.: 3.0

Date: Sep 2024

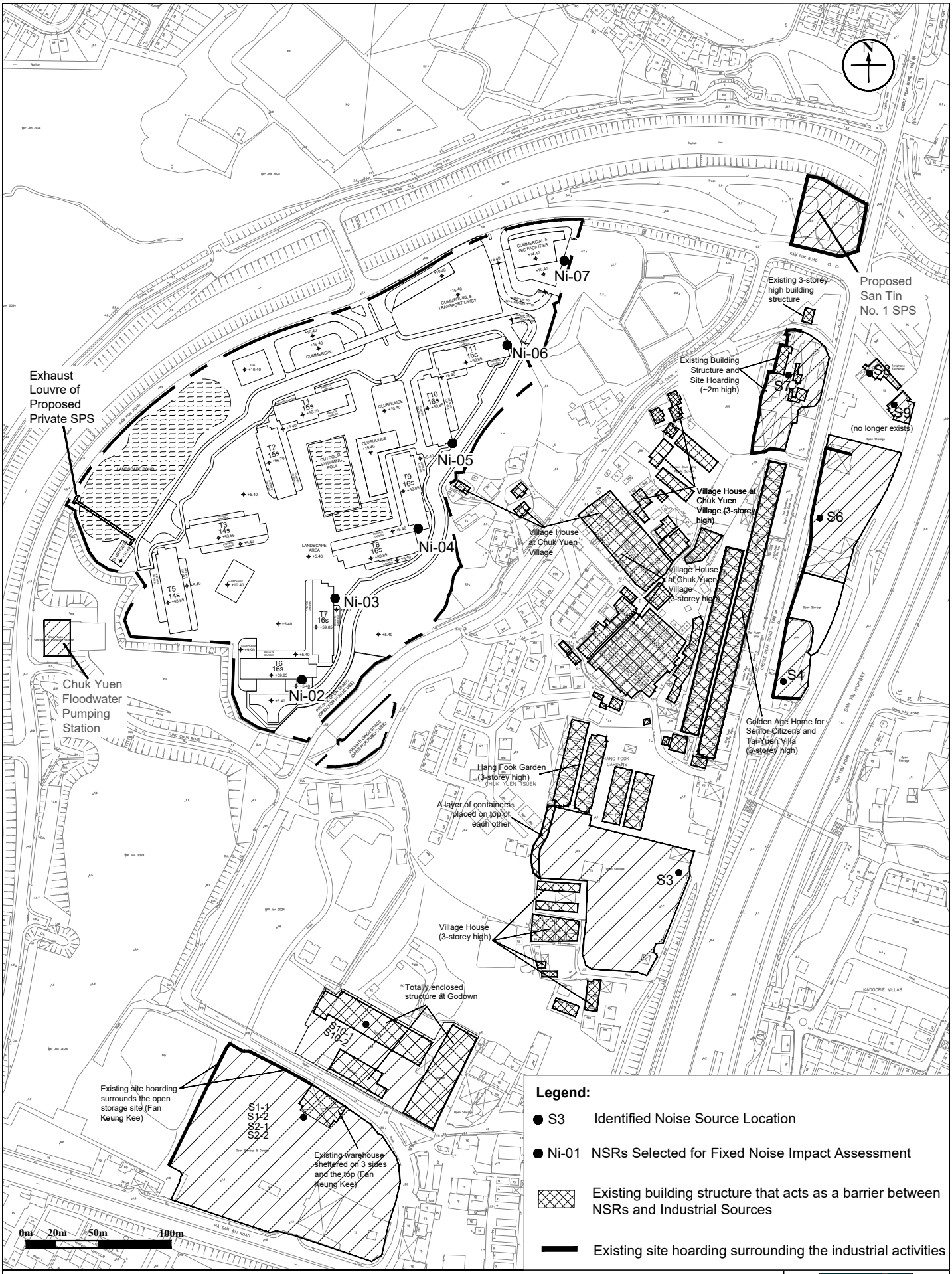


Figure: 4-3

Title: Locations of Noise Assessment Points for Fixed Noise Source Impact Assessment

Project: S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.

RAMBOLL

Drawn by: CL

Checked by: HN

Rev.: 3.0

Date: Sep 2024

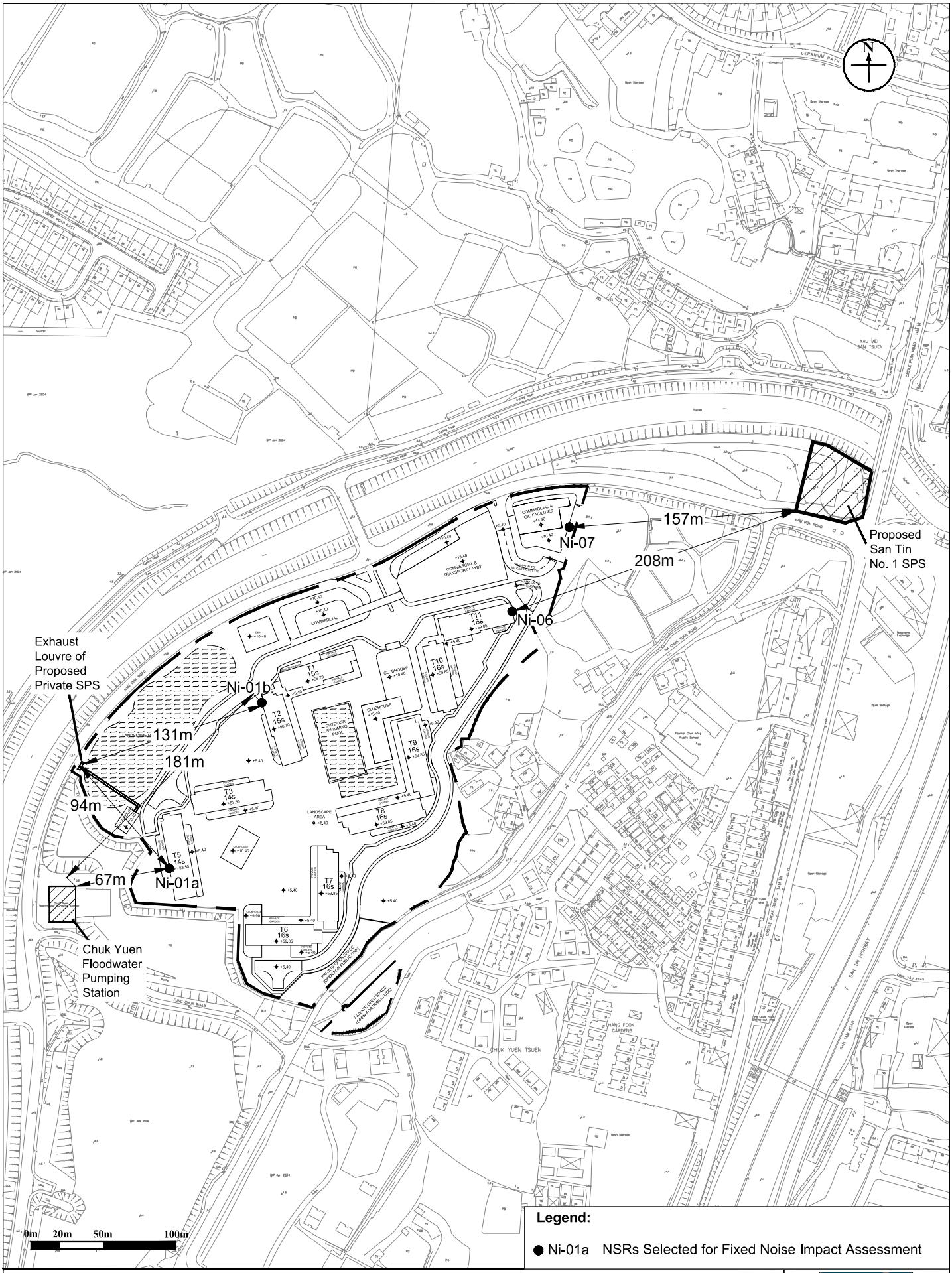


Figure:	4-4	RAMBOLL
Title:	Locations of Noise Assessment Points for the Existing Floodwater Pumping Station and the Proposed Sewage Pumping Station	Drawn by: CL Checked by: HN
Project:	S.12A Amendment of Plan Application on Mai Po & Fairview Park OZP No. Y/YL-MP/8 - Rezoning from Rezoning from Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in D.D. 104 & the adjoining G.L. in Yuen Long, N.T.	Rev.: 3.0 Date: Sep 2024

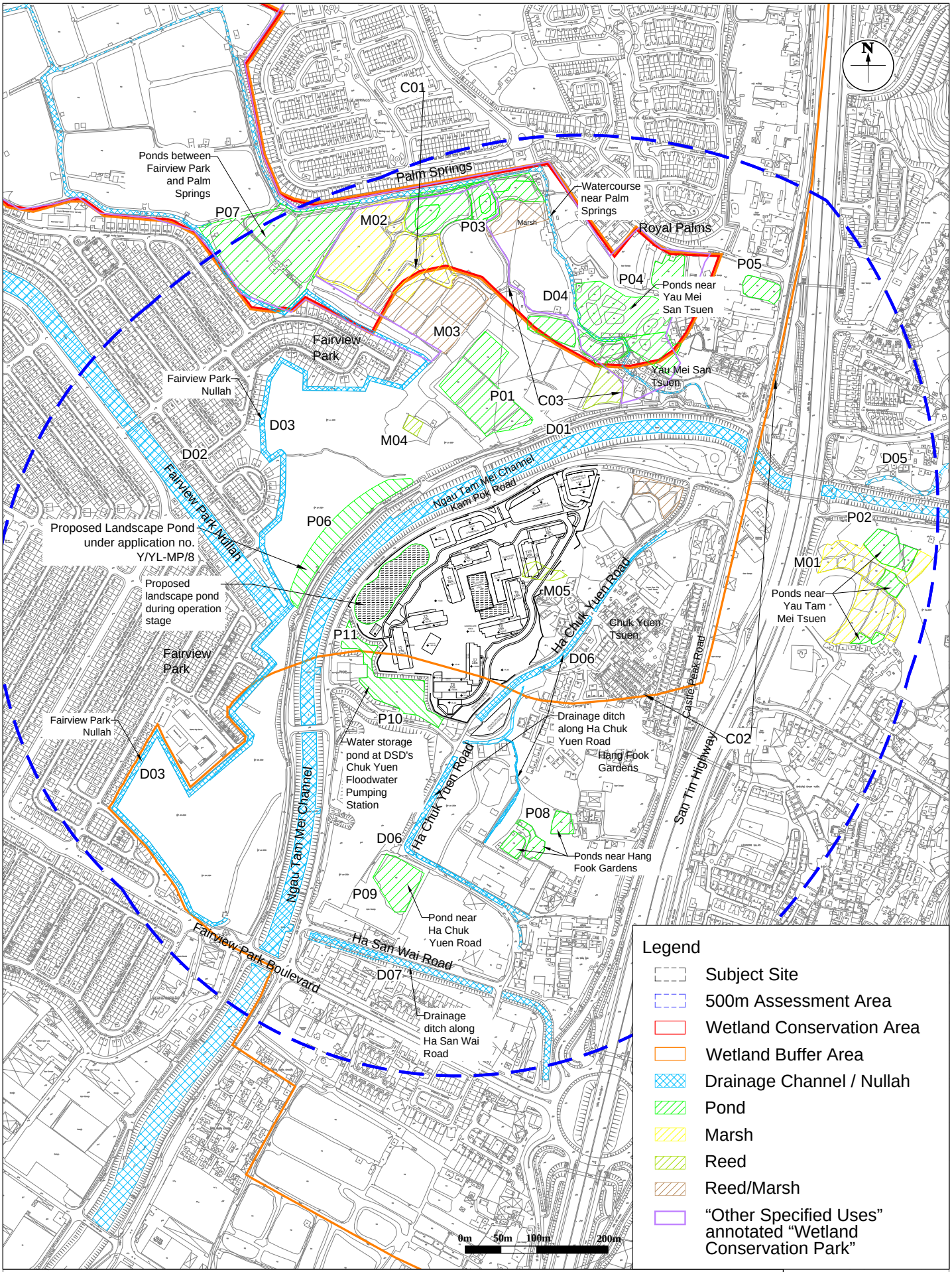


Figure: 5-1

Title: Locations of WSRs during Construction and Operation Phases

RAMBOLL

Drawn by: CL

Checked by: HN

Project: S.12A Amendment of Plan Application on Draft Mai Po & Fairview Park OZP No. S/YL-MP/7 – Rezoning from "Residential (Group D)" to "Residential (Group C)1" Zone for a Proposed Residential Development at Various Lots in DD 104 and Adjacent G.L. in Yuen Long, N.T.

Rev.: 7.0

Date: May 2025

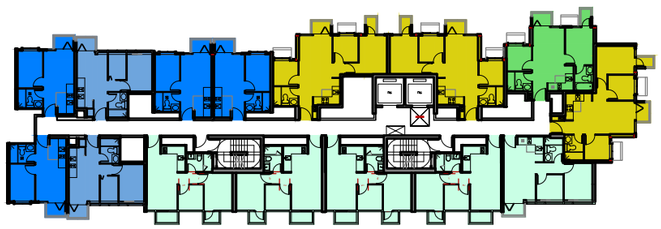
Appendix

Appendix 3–1

Typical Internal Layout Plan

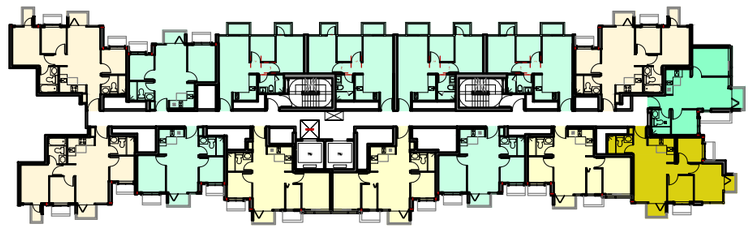
TOWER 1

TOWER 2



TOWER 3

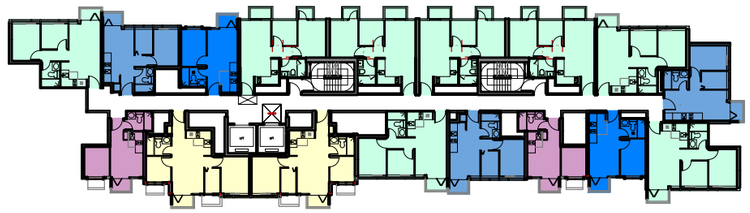
TOWER 5



TOWER 6

TOWER 7

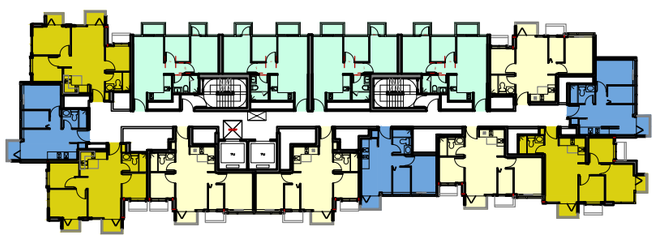
TOWER 8



TOWER 9

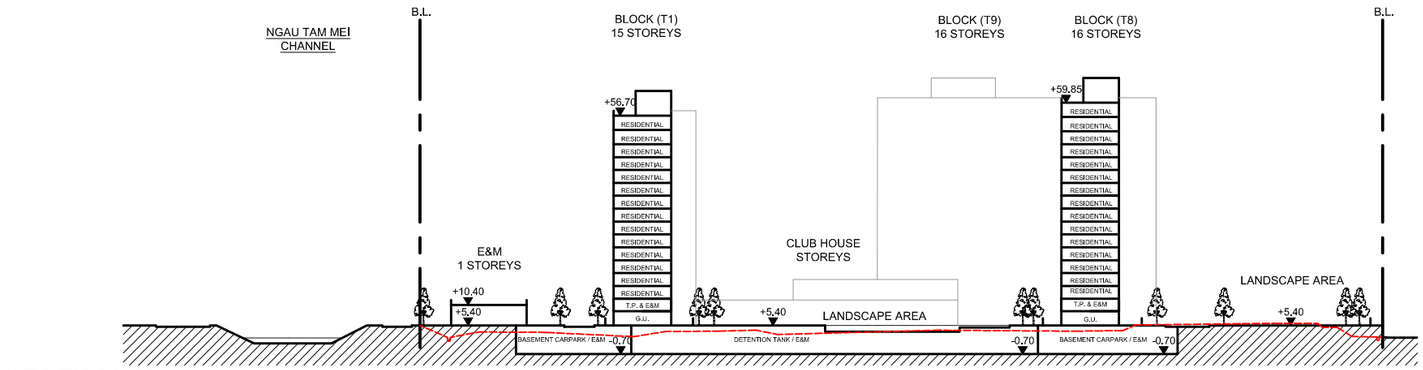
TOWER 10

TOWER 11



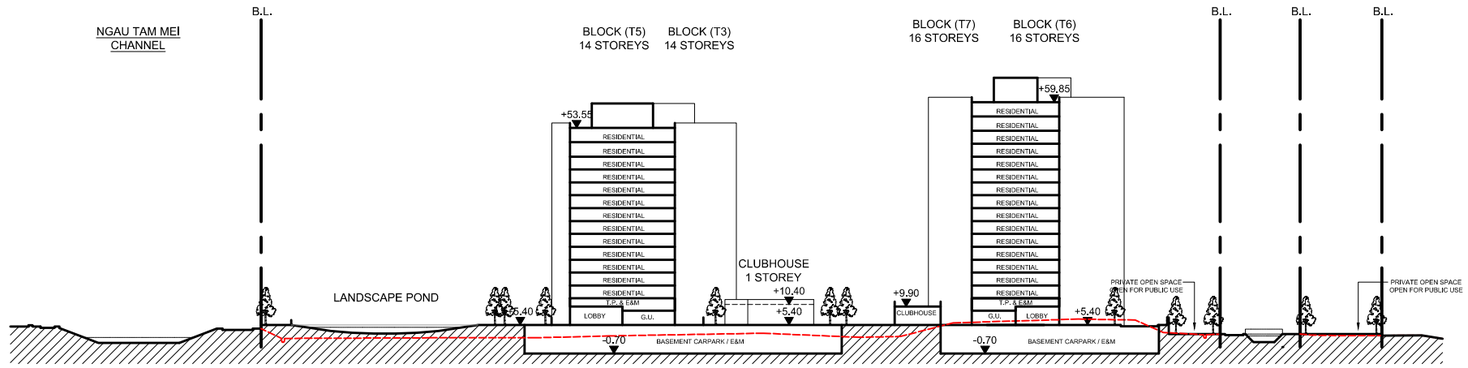
Tower Layout Plan (Typical Floor Only)

DATE : 22 FEB 2024
SCALE 1: 600(A3)



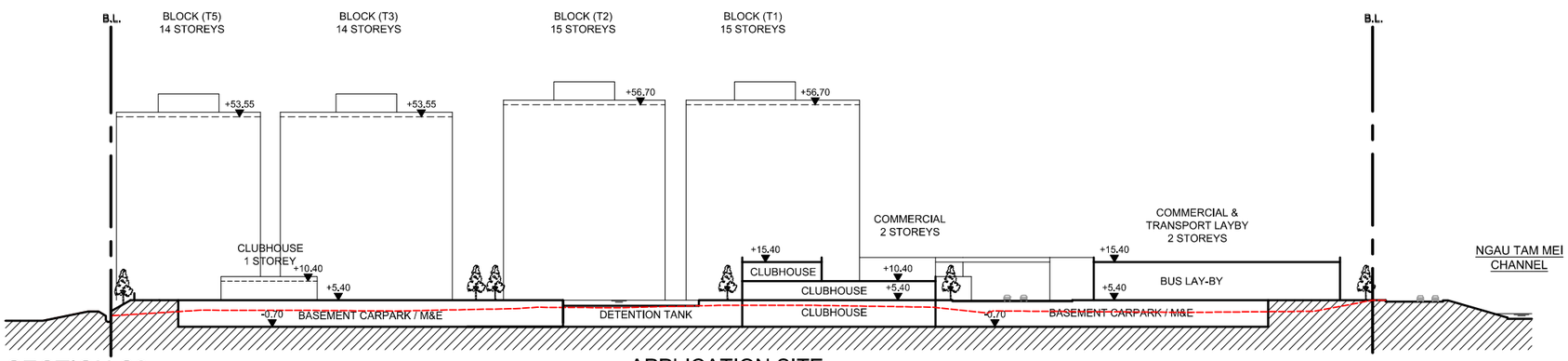
SECTION S1

APPLICATION SITE



SECTION S2

APPLICATION SITE



SECTION S3

APPLICATION SITE

LEGEND

EXISTING SITE LEVEL

Previous Submission Level dated on June 2023

Remark: 1. All spot levels marked on building structures (including towers and clubhouse) refer to the main roof levels.
2. No. of storeys marked on plan excludes basement floor / refuge floor.

0 5 10 25 50 100

B.D. REF. :

F.S.D. REF. :

REVISIONS :

NO.	DESCRIPTION	DATE

NOTE:
DETAIL DESIGN INCLUDING BARRIER FREE ACCESS, F.S. REQUIREMENT, STRUCTURAL REQUIREMENT, ETC. TO BE DETERMINED IN GBP STAGE.

ARCHI+
ARCHIPLUS INTERNATIONAL (HK) LIMITED

PROJECT :

SECTION 12A PLANNING APPLICATION FOR REZONING FROM "RESIDENTIAL (GROUP D)" TO "RESIDENTIAL (GROUP C) 1" ZONE FOR A PROPOSED RESIDNEITLA DEVELOPMENT AT VARIOUS LOTS IN D.D. 104 AND THE ADJOINING GOVERNMENT LAND IN YUEN LONG, THE NEW TERRITORIES

DRAWING TITLE :

INDICATIVE SECTIONS

DATE : FEB 2020	PAPER SIZE : A3
SCALE : 1:1500	DRAWN : AIL
PROJECT NO. :	767
DWG. NO. :	(767)S16-S-01

Appendix 3–2

Predicted Traffic Flow Forecast Data

Year 2046 Traffic Forecast for NIA

Road Link	Road Name	Direction	2023 AM		2046 AM (w/o Dev)		2046 AM (w Dev)		2023 PM		2046 PM (w/o Dev)		2046 PM (w Dev)	
			Veh/hr	HV%	Veh/hr	HV%	Veh/hr	HV%	Veh/hr	HV%	Veh/hr	HV%	Veh/hr	HV%
1	San Tin Highway	NB	3160	36%	4430	36%	4500	35%	2470	40%	3960	40%	4010	40%
		SB	2780	38%	4030	38%	4120	37%	2740	39%	3790	39%	3830	39%
2	San Tin Highway - Slip Road	NB	750	28%	1560	20%	1640	20%	830	22%	1620	17%	1670	18%
		SB	950	25%	1470	21%	1560	21%	530	30%	950	23%	990	23%
3	San Tam Road	NB	320	42%	970	22%	980	22%	230	35%	610	21%	610	21%
		SB	820	27%	1670	19%	1680	19%	670	40%	1370	27%	1370	27%
4	San Tam Road	NB	340	30%	390	30%	390	30%	290	24%	360	23%	360	23%
		SB	490	25%	610	24%	610	24%	340	25%	480	22%	480	22%
5	San Tin Highway - Slip Road	NB	390	42%	900	26%	940	26%	350	45%	660	32%	670	31%
		SB	430	48%	750	36%	760	36%	580	29%	840	25%	860	25%
6	Castle Peak Road - Tam Mi	NB	350	36%	470	33%	580	31%	300	36%	430	31%	500	30%
		SB	470	28%	600	26%	760	25%	240	47%	350	40%	400	38%
7	Fairview Park Boulevard	EB	800	12%	830	12%	830	12%	630	20%	730	20%	730	20%
		WB	550	20%	590	20%	590	20%	690	14%	800	14%	800	14%
8	Castle Peak Road - Tam Mi	NB	360	39%	610	30%	610	30%	230	56%	460	37%	460	37%
		SB	210	45%	430	30%	430	30%	190	52%	450	31%	450	31%
9	San Tin Highway	NB	3300	35%	4410	32%	4420	32%	2900	40%	4170	34%	4180	34%
		SB	3250	38%	3880	37%	3890	37%	3370	38%	4370	35%	4380	35%
10	Yau Pok Road	NB	10	0%	10	0%	10	0%	10	0%	10	0%	10	0%
11	Yau Pok Road	NB	10	41%	20	19%	20	19%	0	0%	10	13%	10	13%
12	Yau Pok Road	NB	10	90%	60	25%	60	25%	20	0%	50	7%	50	7%
13	Kam Pok Road	NB	30	39%	50	28%	70	26%	40	12%	60	11%	70	12%
		SB	60	34%	100	26%	120	23%	70	7%	90	9%	100	9%
14	Kam Pok Road	NB	30	37%	50	28%	70	26%	30	16%	60	15%	70	15%
		SB	70	17%	120	15%	140	15%	60	6%	90	5%	100	6%
15	Kam Pok Road	EB	50	14%	110	13%	290	15%	50	10%	90	10%	170	16%
		WB	50	19%	140	15%	270	16%	80	10%	170	10%	260	14%
16	Castle Peak Road - Tam Mi	NB	310	24%	420	20%	520	20%	300	16%	470	15%	530	16%
		SB	440	13%	570	13%	720	14%	250	20%	370	18%	430	19%
17	Castle Peak Road - Tam Mi	NB	330	17%	440	16%	480	15%	340	11%	500	11%	510	11%
		SB	440	11%	520	10%	570	11%	300	17%	400	16%	420	16%
18	San Tam Road	NB	130	9%	150	9%	150	9%	110	1%	130	1%	130	1%
		SB	240	7%	280	7%	280	7%	190	10%	220	10%	220	10%
19	San Tam Road	NB	40	25%	260	26%	260	26%	20	25%	250	25%	250	25%
		SB	110	28%	510	28%	510	28%	50	28%	380	28%	380	28%
20	Fung Chuk Road	EB	10	22%	10	20%	10	20%	10	22%	10	23%	10	22%
		WB	30	25%	30	25%	30	25%	20	25%	20	24%	20	24%
21	Ha Chuk Yuen Road	NB	10	22%	10	20%	10	20%	10	23%	10	17%	10	17%
		SB	30	25%	30	25%	30	25%	20	30%	20	24%	20	24%
22	Fairview Park Boulevard	EB	750	8%	930	8%	930	8%	560	10%	630	9%	630	9%
		WB	630	1%	730	1%	730	1%	860	1%	980	1%	980	1%
23	Kam Pok Road	NB	80	4%	140	6%	150	7%	100	7%	190	7%	200	8%
		SB	90	17%	150	16%	170	16%	50	8%	100	8%	110	8%
24	Kam Pok Road	NB	50	28%	110	25%	120	25%	80	4%	110	5%	120	6%
		SB	140	3%	190	5%	210	6%	90	6%	170	6%	180	6%
25	Ha San Wai Road	EB	30	18%	40	17%	40	17%	40	19%	50	17%	50	17%
		WB	50	23%	60	22%	60	22%	40	18%	50	17%	50	17%
26	Ngau Tam Mei Road	EB	70	21%	80	21%	80	21%	140	14%	160	13%	160	13%
		WB	150	12%	180	12%	180	12%	100	9%	120	9%	120	9%
27	Chun Shin Road	EB	70	21%	90	22%	90	22%	40	8%	40	7%	40	7%
		WB	80	23%	90	23%	90	23%	30	13%	30	10%	30	10%
28	Chuk Yau Road	EB	130	23%	150	23%	150	23%	100	11%	120	11%	120	11%
		WB	110	22%	120	23%	120	23%	100	14%	110	13%	110	13%

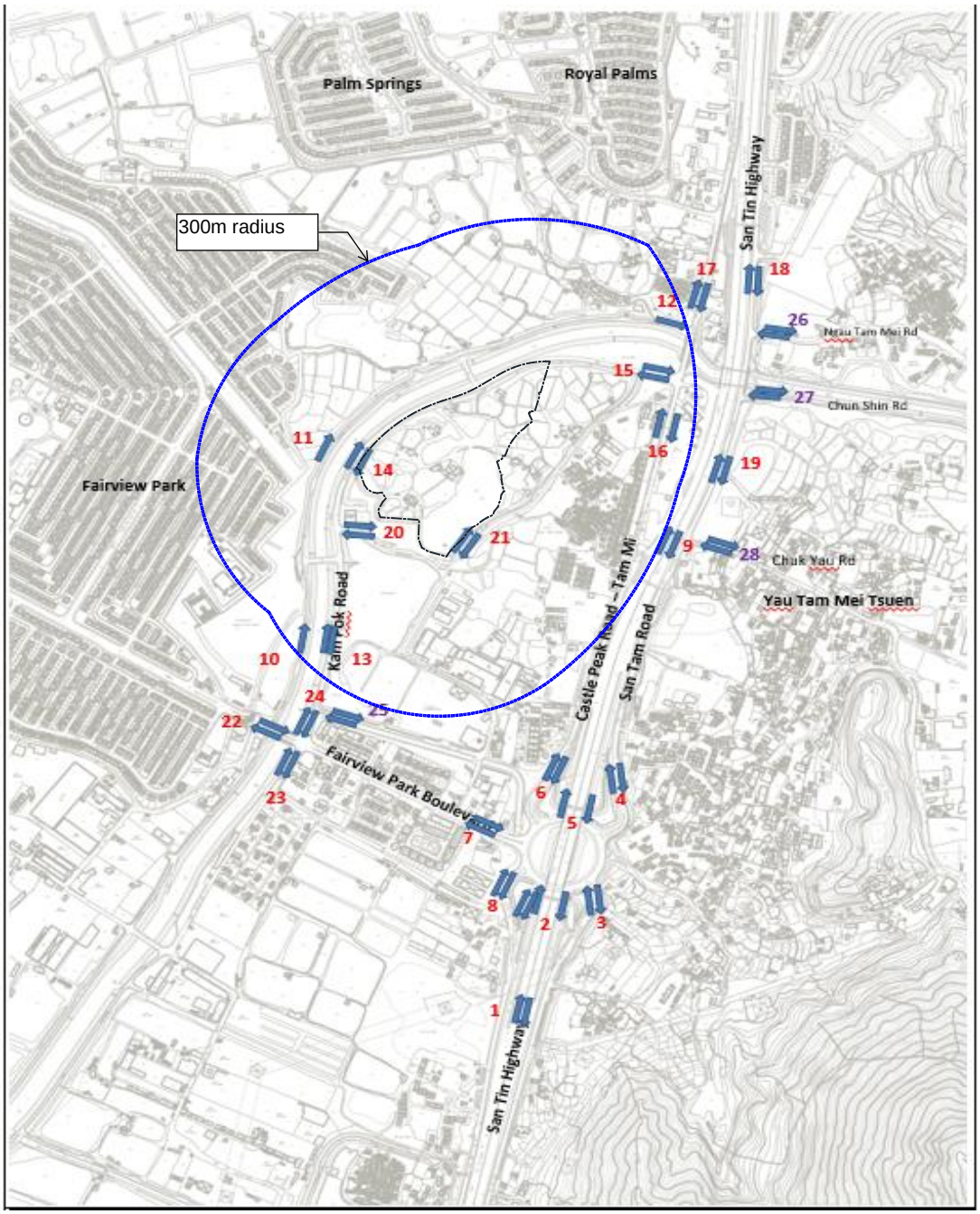
Year 2046 Traffic Forecast Data During Peak Hours

Two-ways Flows:

Road No.	Direction	2023 AM		2046 AM (with dev)		2023 PM		2046 PM (with Dev)		Speed of road (km/hr)	Road material
		Veh/hr	HV%	Veh/hr	HV %	Veh/hr	HV%	Veh/hr	HV %		
1	two-ways	5940	36.7%	8620	36.2%	5210	39.9%	7840	39.6%	100	Pervious
2	two-ways	1700	26.4%	3200	20.3%	1360	25.4%	2660	19.6%	50	Bitumen
3	two-ways	1140	31.4%	2660	20.4%	900	38.4%	1980	24.8%	50	Bitumen
4	two-ways	830	27.2%	1000	26.7%	630	24.7%	840	22.8%	50	Bitumen
5	two-ways	820	45.4%	1700	30.2%	930	35.2%	1530	28.0%	50	Bitumen
6	two-ways	820	31.4%	1340	27.3%	540	40.7%	900	33.3%	50	Bitumen
7	two-ways	1350	15.0%	1420	15.4%	1320	16.7%	1530	16.7%	50	Bitumen
8	two-ways	570	41.4%	1040	29.8%	420	54.6%	910	34.0%	50	Bitumen
9	two-ways	6550	36.7%	8310	34.4%	6270	38.8%	8560	34.4%	100	Pervious
13	two-ways	90	35.8%	190	24.5%	110	8.9%	170	10.4%	50	Bitumen
14	two-ways	100	23.0%	210	18.6%	90	9.1%	170	9.9%	50	Bitumen
15	two-ways	100	16.6%	560	15.2%	130	9.8%	430	14.7%	50	Bitumen
16	two-ways	750	17.8%	1240	16.3%	550	17.8%	960	17.2%	50	Bitumen
17	two-ways	770	13.5%	1050	12.7%	640	14.2%	930	13.6%	50	Bitumen
18	two-ways	370	7.5%	430	7.7%	300	6.8%	350	6.6%	50	Bitumen
19	two-ways	150	27.2%	770	26.9%	70	27.1%	630	26.7%	50	Bitumen
20	two-ways	40	24.3%	40	23.8%	30	24.0%	30	23.2%	50	Bitumen
21	two-ways	40	24.3%	40	23.8%	30	27.6%	30	21.7%	50	Bitumen
22	two-ways	1380	4.9%	1660	5.0%	1420	4.4%	1610	4.3%	50	Bitumen
23	two-ways	170	11.3%	320	11.7%	150	7.3%	310	8.1%	50	Bitumen
24	two-ways	190	10.0%	330	12.7%	170	5.5%	300	6.1%	50	Bitumen
25	two-ways	80	21.0%	100	19.7%	80	18.6%	100	17.3%	50	Bitumen
26	two-ways	220	14.7%	260	14.7%	240	11.8%	280	11.4%	50	Bitumen
27	two-ways	150	22.0%	180	22.7%	70	10.3%	70	8.1%	50	Bitumen
28	two-ways	240	22.6%	270	23.1%	200	12.5%	230	12.3%	50	Bitumen

* Road No. 1 and 9 is with pervious road surface using PMFC.

*One-way flows for two directions of other road links are combined into two-way flows and presented in this table, while the road links 10 to 12 are one-way road (Yau Pok Road) and they are only presented on the first page of Appendix 3-2.



Road Index Plan

Crystal Lui

From: Chi Kong LEUNG <chikongleung@td.gov.hk>
Sent: 11 March 2025 19:14
To: Wong, Sam
Cc: Chu, Sin Yi
Subject: Re: Fairview R(D) Technical Note on Traffic Forecast for NIA
Attachments: 2025003150L-TD_Traffic Forecast for NIA.pdf

Dear Sam,

I have no objection in principle to the proposed methodology of traffic forecast for the TNIA as per the submission in your preceding email.

Thank you.

Regards,
Donald Leung
E/B3, TE/NTW
Transport Department
Tel. 2399 2778

From: "Wong, Sam" <[redacted]
To: "Chi Kong LEUNG" <chikongleung@td.gov.hk>
Cc: "Chu, Sin Yi" <[redacted]
Date: 28/02/2025 04:14 PM
Subject: Fairview R(D) Technical Note on Traffic Forecast for NIA

Dear Donald,

As per our phone conversation this morning, attached is the Technical Note on Traffic Forecast for NIA for your consideration.

Thanks

Sam Wong CEng MHKIE

Project Engineer, Traffic & Transport Planning, LSM, GC – Hong Kong
[redacted]

AECOM

From: Chu, Sin Yi <[redacted]
Sent: Monday, February 17, 2025 6:17 PM
To: Chi Kong LEUNG <chikongleung@td.gov.hk>
Cc: Wong, Sam <[redacted]
Subject: Fairview R(D) Previous NIA Methodology Paper & TD Endorsement

Dear Donald,

As per our phone conversation just now, please find the previous NIA methodology paper and TD Endorsement for your information.
Thank you!

Regards
Sin Yi Chu MHKIE, Accredited NEC4:ECC Project Manager

Associate, Traffic & Transport Planning, LSM, GC – Hong Kong
[redacted]

AECOM

AECOM
[redacted]

Our Ref : CSY:wtsk:60607989-2025004317L

24 March 2025

By Email

Ramboll Hong Kong Limited
[redacted]

Attn: Mr. Henry Ng

Dear Mr. Ng,

Rezoning from "Residential (Group D)" to "Residential (Group C) 1" Zone
For a Proposed Residential Development
at Various Lots in D.D. 104 and the Adjoining Government Land in Yuen Long, N.T.
S12A Amendment of Plan Application
(Planning Application No: Y/YL-MP/10)

Traffic Forecast for Noise Impact Assessment

We write to confirm that Transport Department's endorsed methodology prepared by us has been strictly adopted in preparing the traffic forecast for the Road Traffic Noise Impact Assessment prepared by Ramboll Hong Kong Ltd.

Thank you for your kind attention.

Yours faithfully,
For and on behalf of
AECOM Asia Co. Ltd.

Sin Yi Chu
Associate, Traffic & Transport Planning
Land Supply / Municipal, Hong Kong

Henry Ng

From: Kinox Kin Chun WONG <kinchunwong@td.gov.hk>
Sent: Wednesday, April 13, 2022 5:17 PM
To: Ho, Siu Nam Steven
Cc: Ku, Cheuk Ning Magdalene; Ming Yip TSE
Subject: [EXTERNAL] RE: RE: Re: FW: RE: Fairview R(D) - Traffic Forecasts for noise assessment

Dear Steven,

Please ignore previous email.

In accordance with HKPSG Chapter 8 Section 3.3, please note the road types as follows:

- Kam Pok Road: Rural Road
- Ha Chuk Yuen Road: Single Track Access Road
- Fung Chuk Road: Single Track Access Road

Regards,
Kinox Wong
E/B,TD

From: Kinox Kin Chun WONG/TD/HKSARG
To: "Ho, Siu Nam Steven" [redacted]
Cc: "Ku, Cheuk Ning Magdalene" <[redacted] Ming Yip TSE <mingyiptse@td.gov.hk>
Date: 13/04/2022 12:25 PM
Subject: RE: [EXTERNAL] RE: Re: FW: RE: Fairview R(D) - Traffic Forecasts for noise assessment
TENTW/EB

Dear Steven,

According to TIS, it was noted that Kam Pok Road, Ha Chuk Yuen Road , and Fung Chuk Road are Local Distributor.

Regards,
Kinox Wong
E/B,TD

From: "Ho, Siu Nam Steven" [redacted]>
To: Kinox Kin Chun WONG <kinchunwong@td.gov.hk>
Cc: Ming Yip TSE <mingyiptse@td.gov.hk>, "Ku, Cheuk Ning Magdalene" <[redacted]>
Date: 12/04/2022 07:13 PM
Subject: RE: [EXTERNAL] RE: Re: FW: RE: Fairview R(D) - Traffic Forecasts for noise assessment

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Appendix 3–3

Unmitigated Road Traffic Noise Assessment Results

Environmental Assessment for Proposed Residential Development at Various Lots in D.D. 104, Yuen Long, N.T.
Appendix 3-3 Road Traffic Noise Impact Assessment - unmitigated scenario (AM Peak Hour)

Tower 1

Floor	mPD	T1-01	T1-02	T1-03	T1-04	T1-05	T1-06	T1-07	T1-08	T1-09	T1-10	T1-11	T1-12	T1-13	T1-14	T1-15	T1-16	T1-17	T1-18	T1-19	T1-20
G/F	6.6	47	47	46	44	36	36	34	34	35	36	36	36	44	44	44	37	37	42	52	58
1/F	13.1	47	47	46	44	37	37	35	35	35	36	37	37	44	44	44	37	38	42	52	58
2/F	16.2	48	47	46	45	38	38	36	36	36	37	37	38	44	44	44	37	38	42	52	58
3/F	19.4	48	47	46	45	39	38	37	37	37	38	38	38	45	45	45	37	39	42	52	58
5/F	22.5	48	47	46	45	40	39	38	37	38	38	39	39	45	45	45	37	39	42	52	59
6/F	25.7	49	48	47	45	41	40	39	37	38	39	39	39	45	45	45	37	39	42	52	59
7/F	28.8	50	48	47	46	42	42	40	37	38	39	39	39	45	45	45	37	39	42	52	59
8/F	32.0	50	49	47	46	43	42	40	37	38	39	39	39	45	45	45	37	39	42	52	59
9/F	35.1	51	49	48	47	44	43	41	38	38	39	39	39	45	45	45	37	39	42	52	59
10/F	38.3	51	50	48	47	44	43	41	38	38	39	39	39	45	45	45	37	39	42	52	59
11/F	41.4	52	50	48	47	44	43	41	38	38	39	39	39	45	45	45	37	39	42	52	59
12/F	44.6	52	50	48	47	45	44	41	38	38	39	39	39	45	45	45	37	39	42	52	59
13/F	47.7	52	50	48	47	45	44	41	39	39	40	40	40	45	45	45	38	40	42	52	59
15/F	50.9	52	50	48	47	45	44	42	40	40	41	41	41	45	45	45	39	41	43	52	59
16/F	54.4	53	51	49	48	46	45	44	43	43	43	43	43	46	46	46	42	43	45	52	59
Max. Noise Level		53	51	49	48	46	45	44	43	43	43	43	43	46	46	46	42	43	45	52	59
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T1-21	T1-22	T1-23	T1-24	T1-25	T1-26	T1-27	T1-28	T1-29	T1-30	T1-31	T1-32	T1-33	T1-34	T1-35	T1-36	T1-37	T1-38	T1-39	T1-40	T1-41	T1-42
G/F	6.6	58	58	58	58	57	57	57	56	56	56	55	54	54	54	54	54	55	56	56	57	57	58
1/F	13.1	58	59	58	58	58	58	57	57	57	56	56	55	55	55	56	55	56	56	57	57	58	58
2/F	16.2	59	59	59	59	58	58	58	57	57	57	57	57	57	57	57	57	57	57	57	58	58	59
3/F	19.4	59	60	60	59	59	59	59	58	58	58	58	58	58	58	58	58	58	58	58	59	59	59
5/F	22.5	59	61	60	60	60	60	60	59	59	59	59	59	59	59	59	59	59	59	59	60	60	60
6/F	25.7	60	61	61	61	61	61	61	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
7/F	28.8	60	62	62	62	61	61	61	61	61	61	61	61	61	61	61	60	60	60	60	61	61	61
8/F	32.0	60	62	62	62	62	62	62	62	62	62	62	62	62	62	62	61	61	61	61	61	61	61
9/F	35.1	60	63	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
10/F	38.3	60	63	63	63	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
11/F	41.4	60	63	63	63	62	62	62	62	62	62	62	62	62	63	62	62	62	62	62	63	63	62
12/F	44.6	60	63	63	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	63	63	63
13/F	47.7	60	63	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	63
15/F	50.9	60	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
16/F	54.4	60	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
Max. Noise Level		60	63	63	63	62	62	62	62	62	62	62	62	62	63	62	62	62	62	62	63	63	63
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 2

Floor	mPD	T2-01	T2-02	T2-03	T2-04	T2-05	T2-06	T2-07	T2-08	T2-09	T2-10	T2-11	T2-12	T2-13	T2-14	T2-15	T2-16	T2-17	T2-18	T2-19	T2-20	T2-21	T2-22
G/F	6.6	49	41	41	40	40	41	42	43	44	45	45	46	46	47	47	48	48	48	48	50	57	57
1/F	13.1	50	42	42	41	41	42	43	43	44	45	46	46	47	47	47	48	48	48	48	50	57	57
2/F	16.2	50	44	43	42	42	43	43	44	44	45	46	46	47	47	47	48	48	48	48	50	57	57
3/F	19.4	51	45	44	43	43	43	44	44	45	46	46	46	47	47	48	48	48	48	49	50	57	57
5/F	22.5	52	46	45	44	44	44	44	45	45	46	46	47	47	47	48	48	48	48	49	50	57	57
6/F	25.7	52	47	45	45	44	44	45	45	45	46	46	47	47	47	48	48	48	49	49	50	57	57
7/F	28.8	53	48	47	46	45	45	45	46	46	46	47	47	47	48	48	48	48	49	49	51	57	57
8/F	32.0	54	49	47	46	46	46	46	46	46	46	47	47	48	48	48	49	49	49	50	51	57	57
9/F	35.1	54	51	48	48	47	46	46	47	47	47	47	47	48	48	48	49	49	49	50	51	57	57
10/F	38.3	55	51	49	48	48	47	47	47	47	47	47	48	48	48	48	49	49	49	50	51	57	57
11/F	41.4	55	52	49	49	48	48	48	48	48	47	48	48	48	48	48	49	49	50	50	51	57	57
12/F	44.6	55	52	50	49	49	48	48	48	48	48	48	48	48	49	49	49	49	50	51	52	57	57
13/F	47.7	55	52	50	49	49	48	49	48	48	48	48	48	49	49	49	49	50	50	51	52	57	57
15/F	50.9	55	52	50	50	49	49	49	49	49	48	48	49	49	49	49	50	50	50	51	52	57	57
16/F	54.4	55	52	50	50	49	49	49	49	49	49	49	49	49	49	49	50	50	50	51	52	57	57
Max. Noise Level		55	52	50	50	49	49	49	49	49	49	49	49	49	49	49	50	50	50	51	52	57	57
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T2-23	T2-24	T2-25	T2-26	T2-27	T2-28	T2-29	T2-30	T2-31	T2-32	T2-33	T2-34	T2-35	T2-36	T2-37	T2-38	T2-39	T2-40	T2-41	T2-42
G/F	6.6	57	57	57	57	57	57	57	58	58	58	59	59	59	58	59	60	60	59	59	55
1/F	13.1	57	57	57	57	57	57	57	58	58	58	59	59	59	58	59	60	60	59	59	55
2/F	16.2	57	57	57	57	57	57	57	58	58	58	59	59	59	58	59	60	60	60	59	55
3/F	19.4	57	57	57	57	57	57	57	58	58	58	59	59	59	58	59	60	60	60	59	56
5/F	22.5	57	57	57	57	57	58	57	58	58	58	59	59	59	58	59	60	60	60	60	56
6/F	25.7	57	57	57	57	57	58	57	58	58	58	59	59	59	58	59	60	60	60	60	57
7/F	28.8	57	57	57	57	57	58	58	58	58	58	59	59	59	58	59	60	61	60	60	57
8/F	32.0	57	57	57	57	57	58	58	58	58	58	59	59	59	58	59	60	61	61	60	57
9/F	35.1	57	57	57	57	57	57	57	58	58	58	59	59	59	58	60	60	61	61	60	58
10/F	38.3	57	57	57	57	57	57	57	58	58	58	58	59	59	58	60	60	61	61	61	58
11/F	41.4	57	57	57	57	57	57	57	58	58	58	58	59	59	58	60	60	61	61	61	58
12/F	44.6	57	57	57	57	57	57	57	58	58	58	58	59	59	58	60	60	61	61	61	58
13/F	47.7	57	57	57	57	57	57	57	58	58	58	58	58	59	58	59	60	61	61	61	58
15/F	50.9	57	57	57	57	57	57	57	58	58	58	58	58	59	58	59	60	61	61	61	58
16/F	54.4	57	57	57	57	57	57	57	58	58	58	58	58	58	58	59	60	61	61	61	58
Max. Noise Level		57	57	57	57	57	58	58	58	58	58	59	59	59	58	60	60	61	61	61	58
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 3

Floor	mPD	T3-01	T3-02	T3-03	T3-04	T3-05	T3-06	T3-07	T3-08	T3-09	T3-10	T3-11	T3-12	T3-13	T3-14	T3-15	T3-16	T3-17	T3-18	T3-19	T3-20	T3-21
G/F	6.6	44	44	43	43	43	43	46	49	49	48	46	44	44	45	46	48	48	48	49	49	58
1/F	13.1	50	50	50	50	50	50	50	50	50	49	48	47	47	47	47	48	48	48	49	50	58
2/F	16.2	51	51	51	51	51	51	51	51	51	50	49	48	48	48	48	48	49	49	49	50	58
3/F	19.4	52	52	52	52	52	52	51	51	51	50	49	48	48	48	49	49	49	49	49	51	58
5/F	22.5	52	52	52	52	52	52	51	51	51	50	49	49	49	49	49	49	49	49	49	51	58
6/F	25.7	52	52	52	52	52	52	51	51	51	51	49	49	49	49	49	49	49	49	49	51	58
7/F	28.8	52	52	52	52	52	52	51	51	51	51	50	49	49	49	49	49	49	49	49	51	58
8/F	32.0	52	52	52	52	52	52	51	52	51	51	50	49	49	49	49	49	49	49	50	51	58
9/F	35.1	52	52	52	52	52	52	51	52	51	51	50	49	49	49	49	50	50	50	50	51	58
10/F	38.3	52	52	52	52	52	52	51	52	51	51	50	49	49	49	50	50	50	50	50	51	58
11/F	41.4	51	51	51	52	52	52	51	52	51	51	50	50	50	50	50	50	50	50	50	51	58
12/F	44.6	51	51	51	51	52	52	51	52	51	51	50	50	50	50	50	50	50	50	50	51	58
13/F	47.7	51	51	51	51	52	52	51	52	51	51	50	50	50	50	50	50	50	50	50	51	58
15/F	51.2	52	52	51	52	52	52	51	52	52	51	50	50	50	50	50	50	50	50	50	51	58
Max. Noise Level		52	52	52	52	52	52	51	52	52	51	50	50	50	50	50	50	50	50	50	51	58
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T3-22	T3-23	T3-24	T3-25	T3-26	T3-27	T3-28	T3-29	T3-30	T3-31	T3-32	T3-33	T3-34	T3-35	T3-36	T3-37	T3-38	T3-39	T3-40	T3-41	T3-42
G/F	6.6	56	59	59	59	59	59	59	59	58	58	58	58	58	58	58	58	57	57	57	57	57
1/F	13.1	56	59	59	59	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
2/F	16.2	56	59	60	59	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
3/F	19.4	56	59	60	60	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
5/F	22.5	57	59	60	60	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
6/F	25.7	57	59	60	60	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
7/F	28.8	57	59	60	60	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
8/F	32.0	57	59	60	60	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
9/F	35.1	57	59	60	60	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
10/F	38.3	57	59	60	60	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
11/F	41.4	56	59	60	60	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
12/F	44.6	56	59	60	60	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
13/F	47.7	56	59	60	60	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
15/F	51.2	56	59	60	60	59	59	59	58	58	58	58	58	58	58	58	58	57	57	57	57	57
Max. Noise Level		57	59	60	60	59	59	59	59	58	58	58	58	58	58	58	58	57	57	57	57	57
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 5

Floor	mPD	T5-01	T5-02	T5-03	T5-04	T5-05	T5-06	T5-07	T5-08	T5-09	T5-10	T5-11	T5-12	T5-13	T5-14	T5-15	T5-16	T5-17	T5-18	T5-19	T5-20	T5-21	T5-22	T5-23	T5-24
G/F	6.6	57	55	55	54	53	53	52	52	52	52	52	52	52	52	52	52	52	52	51	52	53	54	55	61
1/F	13.1	57	55	55	54	53	53	52	52	52	52	52	52	52	52	52	52	52	52	52	52	53	54	55	61
2/F	16.2	57	55	55	54	53	53	52	52	52	52	52	52	52	52	52	52	52	52	52	52	53	54	55	61
3/F	19.4	57	55	55	54	53	53	52	52	52	52	52	52	52	52	52	52	52	52	52	52	53	54	55	61
5/F	22.5	57	55	55	54	53	53	52	52	52	52	52	52	52	52	52	52	52	52	52	52	53	54	55	61
6/F	25.7	57	55	55	54	53	53	52	52	52	52	52	52	52	52	52	52	52	52	52	52	53	54	55	61
7/F	28.8	57	55	55	53	53	53	52	51	52	52	52	52	52	52	52	52	52	52	52	52	53	54	55	61
8/F	32.0	57	55	55	53	53	53	52	51	52	51	52	52	52	52	52	52	52	52	52	52	53	54	55	61
9/F	35.1	57	55	55	53	53	53	52	51	52	51	52	52	52	52	52	52	52	52	52	52	53	54	55	61
10/F	38.3	57	55	54	53	53	53	52	51	52	51	52	52	52	52	52	52	52	52	52	52	53	54	55	61
11/F	41.4	57	55	54	53	53	53	52	51	52	51	52	52	52	52	52	52	52	52	52	52	53	54	55	61
12/F	44.6	57	55	54	53	53	53	51	51	52	51	52	52	52	52	52	52	52	52	52	52	53	54	55	61
13/F	47.7	57	55	54	53	53	53	51	51	52	51	52	52	52	52	52	52	52	52	52	52	53	54	55	61
15/F	51.2	57	55	54	53	53	53	52	51	52	51	52	52	52	52	52	52	52	53	52	52	53	54	55	61
Max. Noise Level		57	55	55	54	53	53	52	52	52	52	52	52	52	52	52	52	52	53	52	52	53	54	55	61
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T5-25	T5-26	T5-27	T5-28	T5-29	T5-30	T5-31	T5-32	T5-33	T5-34	T5-35	T5-36	T5-37	T5-38	T5-39	T5-40	T5-41	T5-42	T5-43	T5-44	T5-45	T5-46	T5-47	T5-48
G/F	6.6	60	60	59	60	60	60	60	60	60	60	60	60	60	59	59	59	59	59	60	60	60	59	59	59
1/F	13.1	60	60	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	59	59	59
2/F	16.2	61	60	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	60	60	59
3/F	19.4	61	60	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	60	60	59
5/F	22.5	61	61	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	60	60	59
6/F	25.7	61	60	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	60	60	59
7/F	28.8	61	61	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	60	60	59
8/F	32.0	61	61	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	61	60	60	59
9/F	35.1	61	61	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	61	60	60	59
10/F	38.3	61	61	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	61	60	60	59
11/F	41.4	61	61	59	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	61	61	61	60	60	59
12/F	44.6	61	61	59	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	61	61	60	60	59
13/F	47.7	61	61	59	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	61	61	60	60	59
15/F	51.2	61	60	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	60	60	59
Max. Noise Level		61	61	59	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	61	61	61	60	60	59
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 6

Floor	mPD	T6-01	T6-02	T6-03	T6-04	T6-05	T6-06	T6-07	T6-08	T6-09	T6-10	T6-11	T6-12	T6-13	T6-14	T6-15	T6-16	T6-17	T6-18	T6-19	T6-20	T6-21
G/F	6.6	59	60	61	61	60	60	60	60	59	59	59	59	59	59	59	58	58	58	57	56	43
1/F	13.1	59	60	61	61	60	60	60	60	59	59	60	59	59	60	60	59	59	59	59	59	59
2/F	16.2	59	60	61	61	60	60	60	60	59	59	60	60	60	60	60	60	60	60	60	60	60
3/F	19.4	59	60	61	61	60	60	60	60	59	59	60	60	60	60	60	60	60	60	60	60	60
5/F	22.5	59	60	61	61	60	60	60	60	59	59	60	60	60	60	60	60	60	60	60	60	60
6/F	25.7	59	60	61	61	60	60	60	60	59	59	60	60	60	60	60	60	60	60	60	60	59
7/F	28.8	59	60	61	61	60	60	60	60	59	59	60	60	60	60	60	60	60	60	60	60	59
8/F	32.0	59	60	61	61	60	60	60	60	59	59	60	60	60	60	60	60	60	60	60	60	59
9/F	35.1	59	60	61	61	60	60	60	60	59	59	60	60	60	60	60	60	60	60	60	60	59
10/F	38.3	59	60	61	61	60	60	60	60	58	58	59	59	59	60	60	59	60	60	60	60	59
11/F	41.4	59	60	61	61	59	60	60	59	58	58	59	59	59	60	60	59	59	59	60	59	59
12/F	44.6	59	60	61	61	59	59	59	59	58	58	59	59	59	59	60	59	59	59	59	59	59
13/F	47.7	59	60	61	60	59	59	59	59	58	58	59	59	59	59	59	59	59	59	59	59	59
15/F	50.9	59	60	61	60	59	59	59	59	58	58	59	59	59	59	59	59	59	59	59	59	59
16/F	54.0	59	60	61	60	59	59	59	59	58	58	59	59	59	59	59	59	59	59	59	59	59
17/F	57.5	59	60	61	60	59	59	59	59	58	58	59	59	59	59	59	59	59	59	59	59	59
Max. Noise Level		59	60	61	61	60	60	60	60	59	59	60	60	60	60	60	60	60	60	60	60	60
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T6-22	T6-23	T6-24	T6-25	T6-26	T6-27	T6-28	T6-29	T6-30	T6-31	T6-32	T6-33	T6-34	T6-35	T6-36	T6-37	T6-38	T6-39	T6-40	T6-41	T6-42	T6-43	T6-44	T6-45
G/F	6.6	43	43	43	43	39	38	38	37	37	42	42	43	43	43	44	44	44	44	45	43	42	40	40	44
1/F	13.1	59	59	60	60	55	52	50	49	48	48	48	47	47	47	47	46	46	46	46	45	44	42	42	45
2/F	16.2	60	60	60	60	55	52	51	50	49	49	48	48	48	48	48	47	47	47	47	46	45	44	44	46
3/F	19.4	60	60	60	60	55	52	51	50	49	49	48	48	48	48	48	48	48	48	47	47	46	45	45	46
5/F	22.5	60	60	60	60	55	52	51	50	49	49	48	48	48	48	48	48	48	48	48	47	46	45	45	46
6/F	25.7	60	60	60	60	55	52	51	50	49	49	49	48	48	48	48	48	48	48	48	47	46	45	45	46
7/F	28.8	60	60	60	60	55	52	51	50	49	49	49	48	49	48	48	48	48	48	48	47	46	45	45	47
8/F	32.0	60	60	60	60	55	52	51	50	49	49	49	48	49	49	48	48	48	48	48	47	46	45	45	47
9/F	35.1	59	60	60	60	55	52	51	50	49	49	49	48	49	49	48	48	48	48	48	47	46	45	45	47
10/F	38.3	59	60	60	60	55	52	51	50	49	49	49	48	49	49	48	48	48	48	48	47	46	45	45	47
11/F	41.4	59	60	60	60	55	52	51	50	49	49	49	49	49	49	48	48	48	48	48	47	46	45	45	47
12/F	44.6	59	60	60	60	55	52	51	50	49	49	49	49	49	49	49	48	48	48	48	47	46	45	46	47
13/F	47.7	59	59	60	60	55	52	51	50	49	49	49	49	49	49	49	48	48	48	48	47	46	46	46	47
15/F	50.9	59	59	59	60	55	53	51	50	50	49	49	49	49	49	49	49	48	48	48	47	47	46	46	47
16/F	54.0	59	59	59	60	55	53	51	50	50	50	49	49	49	49	49	49	49	48	48	48	47	46	46	47
17/F	57.5	59	59	59	60	55	53	51	51	50	50	50	50	50	50	49	49	49	49	49	48	47	46	47	47
Max. Noise Level		60	60	60	60	55	53	51	51	50	50	50	50	50	50	49	49	49	49	49	48	47	46	47	47
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 7

Floor	mPD	T7-01	T7-02	T7-03	T7-04	T7-05	T7-06	T7-07	T7-08	T7-09	T7-10	T7-11	T7-12	T7-13	T7-14	T7-15	T7-16	T7-17	T7-18	T7-19	T7-20	T7-21	T7-22	T7-23	T7-24
G/F	6.6	55	56	56	56	57	57	57	57	57	57	58	58	58	58	59	59	57	59	60	60	60	61	61	61
1/F	13.1	55	56	56	57	57	57	57	57	57	58	58	58	58	58	59	59	57	60	60	60	60	61	61	61
2/F	16.2	55	56	56	57	57	57	57	57	58	58	58	58	58	58	59	59	57	60	60	60	60	61	61	61
3/F	19.4	55	56	56	57	57	57	57	57	58	58	58	58	58	58	59	59	57	60	60	60	60	61	61	61
5/F	22.5	56	56	56	57	57	57	58	58	58	58	58	58	58	59	59	59	58	60	60	60	60	61	61	61
6/F	25.7	56	56	57	57	57	58	58	58	58	58	58	59	59	59	60	59	58	60	60	60	60	61	62	61
7/F	28.8	56	57	57	57	58	58	58	58	59	59	59	59	59	59	60	60	58	60	60	60	60	61	62	61
8/F	32.0	56	57	57	58	58	58	58	58	59	59	59	59	59	59	60	60	59	60	61	61	61	61	62	61
9/F	35.1	56	57	57	58	58	58	58	59	59	59	59	59	59	59	60	60	59	61	61	61	61	62	62	61
10/F	38.3	56	57	57	58	58	59	59	59	59	59	59	59	60	60	61	60	59	61	61	61	61	62	62	61
11/F	41.4	56	57	58	58	58	59	59	59	59	60	60	60	60	60	61	60	59	61	61	61	61	62	62	61
12/F	44.6	56	58	58	58	58	59	59	59	60	60	60	60	60	60	61	61	59	61	61	61	61	62	62	61
13/F	47.7	56	58	58	58	58	59	59	59	60	60	60	60	60	60	61	61	60	61	61	61	61	62	62	61
15/F	50.9	56	58	58	58	59	59	59	59	60	60	60	60	60	60	61	61	60	61	61	61	61	62	62	61
16/F	54.0	56	58	58	58	59	59	59	59	60	60	60	60	60	60	61	61	60	61	61	61	61	62	62	61
17/F	57.5	56	58	58	58	59	59	59	59	60	60	60	60	60	60	61	61	60	61	61	61	61	62	62	61
Max. Noise Level		56	58	58	58	59	59	59	59	60	60	60	60	60	60	61	61	60	61	61	61	61	62	62	61
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T7-25	T7-26	T7-27	T7-28	T7-29	T7-30	T7-31	T7-32	T7-33	T7-34	T7-35	T7-36	T7-37	T7-38	T7-39	T7-40	T7-41	T7-42	T7-43	T7-44	T7-45	T7-46	T7-47
G/F	6.6	59	46	43	43	44	44	44	45	46	47	49	49	49	50	50	51	51	51	51	51	51	52	53
1/F	13.1	59	47	45	46	46	47	47	48	48	49	50	50	50	51	51	51	52	52	52	52	52	53	53
2/F	16.2	59	49	47	47	48	49	49	50	50	50	51	51	51	51	52	52	52	52	52	52	52	53	53
3/F	19.4	59	49	47	48	49	49	50	50	51	51	51	51	52	52	52	52	52	52	52	52	52	53	54
5/F	22.5	59	49	48	48	49	49	50	50	51	51	51	52	52	52	52	52	52	52	52	53	53	53	54
6/F	25.7	59	49	48	48	49	49	50	50	51	51	51	52	52	52	52	52	52	52	52	53	53	53	54
7/F	28.8	59	49	48	48	49	49	50	50	51	51	51	52	52	52	52	52	52	52	52	53	53	53	54
8/F	32.0	59	50	48	48	49	50	50	50	51	51	51	52	52	52	52	52	52	52	52	53	53	53	54
9/F	35.1	59	50	48	48	49	49	50	50	51	51	51	52	52	52	52	52	52	52	52	53	53	53	54
10/F	38.3	60	50	48	48	49	49	50	50	51	51	51	52	52	52	52	52	52	52	52	53	53	53	54
11/F	41.4	60	49	48	48	49	49	50	50	51	51	51	52	52	52	52	52	52	52	52	52	53	53	54
12/F	44.6	60	49	48	48	49	49	50	50	51	51	51	52	52	52	52	52	52	52	52	52	53	53	54
13/F	47.7	60	49	48	48	49	49	50	50	51	51	51	52	52	52	52	52	52	52	52	52	52	53	54
15/F	50.9	60	49	48	48	49	50	50	50	51	51	51	52	52	52	52	52	52	52	52	52	52	53	54
16/F	54.0	60	50	48	48	49	50	50	51	51	51	51	52	52	52	52	52	52	52	52	52	52	53	54
17/F	57.5	60	50	48	49	49	50	50	51	51	51	51	52	52	52	52	52	52	52	53	53	53	53	54
Max. Noise Level		60	50	48	49	49	50	50	51	51	51	51	52	52	52	52	52	52	52	53	53	53	53	54
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 8

Floor	mPD	T8-01	T8-02	T8-03	T8-04	T8-05	T8-06	T8-07	T8-08	T8-09	T8-10	T8-11	T8-12	T8-13	T8-14	T8-15	T8-16	T8-17	T8-18	T8-19	T8-20	T8-21	T8-22	T8-23	T8-24
G/F	6.6	61	60	60	59	59	59	59	59	59	59	59	58	58	58	58	58	58	57	57	56	56	56	55	52
1/F	13.1	61	60	60	60	59	59	59	59	59	59	59	58	58	58	58	58	58	57	57	57	57	56	55	53
2/F	16.2	61	60	60	60	60	60	59	59	59	59	59	59	59	59	59	59	58	57	57	57	57	56	56	53
3/F	19.4	62	61	61	60	60	60	59	59	59	59	59	59	59	59	59	59	59	57	57	57	57	56	56	53
5/F	22.5	62	61	61	61	60	60	59	59	59	59	59	59	59	59	59	59	59	57	57	57	57	56	56	53
6/F	25.7	63	62	62	61	61	61	60	60	60	60	60	59	59	59	59	59	59	58	58	57	57	57	56	53
7/F	28.8	63	62	62	61	61	61	60	60	60	60	60	60	60	59	59	59	59	58	58	58	58	57	56	53
8/F	32.0	64	63	62	62	61	61	60	60	60	60	60	60	60	60	60	60	60	58	58	58	58	57	56	53
9/F	35.1	64	63	63	62	62	62	61	61	61	61	60	60	60	60	60	60	60	59	59	58	58	57	57	53
10/F	38.3	65	63	63	62	62	62	61	61	61	61	61	60	60	60	60	60	60	59	59	59	59	58	57	54
11/F	41.4	65	64	63	63	62	62	61	61	61	61	61	61	60	60	60	60	60	59	59	59	59	58	57	54
12/F	44.6	65	64	63	63	63	63	61	61	61	61	61	61	61	61	61	61	61	59	59	59	59	58	57	54
13/F	47.7	65	64	64	63	63	63	61	61	61	61	61	61	61	61	61	61	61	60	60	59	59	58	57	54
15/F	50.9	65	64	64	63	63	63	61	61	61	61	61	61	61	61	61	61	61	60	60	59	59	58	57	54
16/F	54.0	66	64	64	63	63	63	61	61	61	61	61	61	61	61	61	61	61	60	60	60	59	58	57	54
17/F	57.5	66	64	64	63	63	63	61	61	61	61	61	61	61	61	61	61	61	60	60	60	60	58	57	54
Max. Noise Level		66	64	64	63	63	63	61	61	61	61	61	61	61	61	61	61	61	60	60	60	60	58	57	54
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T8-25	T8-26	T8-27	T8-28	T8-29	T8-30	T8-31	T8-32	T8-33	T8-34	T8-35	T8-36	T8-37	T8-38	T8-39	T8-40	T8-41	T8-42	T8-43	T8-44	T8-45	T8-46	T8-47	T8-48	T8-49
G/F	6.6	50	49	49	48	48	47	47	47	47	47	46	46	46	46	46	46	47	47	47	46	48	49	59	60	60
1/F	13.1	50	50	49	49	49	48	48	48	48	48	48	48	48	47	47	47	47	48	48	47	48	49	59	60	60
2/F	16.2	51	50	50	50	49	49	49	49	49	49	49	48	48	48	48	48	48	48	48	47	48	49	59	60	61
3/F	19.4	51	51	50	50	50	50	50	50	50	50	49	49	49	49	49	49	49	49	49	48	48	49	60	61	61
5/F	22.5	51	51	51	51	51	51	50	50	50	50	50	50	50	50	50	50	50	50	50	49	49	49	60	61	62
6/F	25.7	51	51	51	51	51	51	51	51	51	51	50	50	50	50	50	50	50	50	50	49	49	50	61	62	62
7/F	28.8	51	51	51	51	51	51	51	51	51	51	51	51	51	51	50	50	51	50	50	49	49	50	61	62	62
8/F	32.0	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	50	49	49	50	62	63	63
9/F	35.1	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	50	49	49	50	62	63	63
10/F	38.3	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	50	49	49	50	63	63	64
11/F	41.4	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	50	50	49	50	63	64	64
12/F	44.6	52	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	50	50	49	50	63	64	64
13/F	47.7	52	52	51	51	51	51	51	52	52	52	51	51	51	51	51	51	51	51	51	50	50	50	63	64	64
15/F	50.9	52	52	51	52	52	52	52	52	52	52	52	52	51	51	51	51	51	51	51	50	50	50	64	64	64
16/F	54.0	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	51	51	51	51	50	50	51	64	64	64
17/F	57.5	52	52	52	52	52	52	52	52	52	53	53	52	52	52	52	52	52	52	52	52	52	52	64	64	64
Max. Noise Level		52	52	52	52	52	52	52	52	52	53	53	52	52	52	52	52	52	52	52	52	52	52	64	64	64
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 9

Floor	mPD	T9-01	T9-02	T9-03	T9-04	T9-05	T9-06	T9-07	T9-08	T9-09	T9-10	T9-11	T9-12	T9-13	T9-14	T9-15	T9-16	T9-17	T9-18	T9-19	T9-20	T9-21	T9-22	T9-23	T9-24
G/F	6.6	55	56	57	57	58	59	59	59	59	59	59	59	59	59	59	59	60	60	60	60	60	60	59	58
1/F	13.1	56	57	57	58	58	59	59	59	60	60	60	60	60	60	60	60	60	60	60	61	61	61	59	59
2/F	16.2	57	57	58	58	59	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	61	60	59
3/F	19.4	57	58	58	58	59	60	60	60	60	60	61	60	60	60	60	61	61	61	61	61	61	62	60	60
5/F	22.5	58	58	59	59	60	60	61	61	61	61	61	61	61	61	61	61	61	61	61	62	62	62	61	60
6/F	25.7	58	59	59	59	60	61	61	61	61	61	61	61	61	61	61	62	62	62	62	62	62	63	61	61
7/F	28.8	59	59	60	60	60	61	61	62	62	62	62	62	62	62	62	62	62	62	62	63	63	63	62	61
8/F	32.0	60	60	60	60	61	62	62	62	62	62	62	62	62	62	62	62	63	63	63	63	63	64	62	62
9/F	35.1	60	60	60	60	61	62	62	62	63	63	63	63	63	63	63	63	63	63	63	64	64	64	63	62
10/F	38.3	60	61	61	61	61	62	63	63	63	63	63	63	63	63	63	63	63	63	63	64	64	64	63	63
11/F	41.4	61	61	61	61	62	63	63	63	63	63	63	63	63	63	63	63	63	64	64	64	64	65	63	63
12/F	44.6	61	61	61	61	62	63	63	63	63	63	63	63	63	63	63	64	64	64	64	65	65	65	63	63
13/F	47.7	61	61	61	61	62	63	63	63	63	64	64	64	63	64	64	64	64	64	64	65	65	65	64	63
15/F	50.9	61	61	61	61	62	63	63	63	64	64	64	64	64	64	64	64	64	64	64	65	65	65	64	63
16/F	54.0	61	61	61	61	62	63	63	64	64	64	64	64	64	64	64	64	64	64	64	65	65	65	64	64
17/F	57.5	61	61	61	61	62	63	63	64	64	64	64	64	64	64	64	64	64	64	64	65	65	65	64	64
Max. Noise Level		61	61	61	61	62	63	63	64	64	64	64	64	64	64	64	64	64	64	64	65	65	65	64	64
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T9-25	T9-26	T9-27	T9-28	T9-29	T9-30	T9-31	T9-32	T9-33	T9-34	T9-35	T9-36	T9-37	T9-38	T9-39	T9-40	T9-41	T9-42	T9-43	T9-44	T9-45	T9-46	T9-47
G/F	6.6	51	44	44	44	44	45	46	46	46	45	45	46	39	39	39	39	39	39	40	40	43	45	47
1/F	13.1	52	45	45	45	45	46	46	47	47	47	47	48	48	48	48	47	47	48	49	49	49	50	51
2/F	16.2	52	46	46	46	46	46	47	47	48	48	48	49	49	49	49	49	49	50	52	52	52	52	53
3/F	19.4	52	46	46	46	47	47	48	48	48	49	49	49	50	50	50	49	50	51	53	53	53	53	54
5/F	22.5	52	46	47	47	47	47	48	48	49	49	49	50	50	50	51	50	50	51	53	53	53	54	54
6/F	25.7	52	47	47	47	47	47	48	48	49	49	49	50	50	50	51	50	50	51	53	54	54	54	54
7/F	28.8	53	47	47	47	47	48	48	49	49	49	50	50	50	50	51	50	50	51	53	54	54	54	55
8/F	32.0	53	47	47	47	47	48	48	49	49	49	50	50	50	51	51	50	51	51	53	54	54	55	55
9/F	35.1	53	47	47	47	47	48	48	49	49	50	50	50	50	51	51	50	51	51	53	54	54	55	55
10/F	38.3	53	47	47	47	48	48	49	49	49	50	50	50	51	51	51	51	51	52	54	54	55	55	55
11/F	41.4	54	47	47	47	48	48	49	49	49	50	50	50	51	51	51	51	51	52	54	54	55	55	56
12/F	44.6	54	47	47	48	48	48	49	49	49	50	50	50	51	51	51	51	51	52	54	54	55	55	56
13/F	47.7	54	48	48	48	48	48	49	49	49	50	50	50	51	51	51	51	51	52	54	54	55	56	56
15/F	50.9	54	48	48	48	48	49	49	49	50	50	50	51	51	51	52	51	51	52	54	54	55	56	56
16/F	54.0	55	49	49	49	49	49	50	50	50	51	51	51	51	51	52	51	52	52	54	55	55	56	56
17/F	57.5	55	51	51	51	51	51	51	51	51	52	52	52	52	52	53	52	52	53	54	55	56	56	56
Max. Noise Level		55	51	51	51	51	51	51	51	51	52	52	52	52	52	53	52	52	53	54	55	56	56	56
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 10

Floor	mPD	T10-01	T10-02	T10-03	T10-04	T10-05	T10-06	T10-07	T10-08	T10-09	T10-10	T10-11	T10-12	T10-13	T10-14	T10-15	T10-16	T10-17	T10-18	T10-19	T10-20	T10-21	T10-22	T10-23
G/F	6.6	56	53	55	56	56	56	56	55	55	55	55	54	54	54	53	53	53	52	52	52	54	55	55
1/F	13.1	56	53	55	56	56	56	56	56	55	55	55	55	54	54	54	54	53	53	53	53	55	56	56
2/F	16.2	56	53	55	56	56	56	56	56	55	55	55	55	55	55	54	54	54	54	53	53	55	56	57
3/F	19.4	56	54	56	56	56	56	57	56	56	55	55	55	55	55	55	54	54	54	54	54	55	57	57
5/F	22.5	57	54	56	56	56	57	57	56	56	56	55	55	55	55	55	55	54	54	54	54	56	57	58
6/F	25.7	57	55	57	57	57	57	57	56	56	56	56	55	55	55	55	55	55	54	54	55	56	58	58
7/F	28.8	57	55	57	57	57	57	57	57	56	56	56	56	56	55	55	55	55	55	55	55	57	58	59
8/F	32.0	58	55	58	58	57	58	58	57	56	56	56	56	56	56	55	55	55	55	55	55	57	59	60
9/F	35.1	58	56	58	58	58	58	58	57	56	56	56	56	56	56	56	56	55	56	56	56	58	60	60
10/F	38.3	59	56	59	58	58	58	58	57	57	56	56	56	56	56	56	56	56	56	56	56	58	60	61
11/F	41.4	59	57	59	59	59	59	59	58	57	57	56	56	56	56	56	56	56	56	56	56	58	60	61
12/F	44.6	59	57	60	60	59	59	59	58	57	57	57	57	57	56	56	56	56	56	56	56	59	61	61
13/F	47.7	60	58	60	60	60	60	59	58	57	57	57	57	57	57	56	56	56	56	56	56	59	61	61
15/F	50.9	60	58	61	61	60	60	60	59	58	57	57	57	57	57	57	56	56	56	56	57	59	61	62
16/F	54.0	60	59	61	61	61	61	60	59	58	58	57	58	57	57	57	57	57	57	57	57	59	61	62
17/F	57.5	61	59	61	61	61	61	61	59	58	58	58	58	58	57	57	57	57	57	57	57	59	61	62
Max. Noise Level		61	59	61	61	61	61	61	59	58	58	58	58	58	57	57	57	57	57	57	57	59	61	62
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T10-24	T10-25	T10-26	T10-27	T10-28	T10-29	T10-30	T10-31	T10-32	T10-33	T10-34	T10-35	T10-36	T10-37	T10-38	T10-39	T10-40	T10-41	T10-42	T10-43	T10-44
G/F	6.6	56	57	59	60	60	59	59	59	59	59	59	59	59	59	58	58	58	58	57	57	56
1/F	13.1	57	58	60	60	60	60	60	59	59	59	59	59	59	59	59	59	58	58	58	57	57
2/F	16.2	57	58	60	60	60	60	60	60	60	60	59	59	59	59	59	59	59	59	58	58	57
3/F	19.4	58	59	60	61	61	61	60	60	60	60	60	60	60	60	60	59	59	59	59	58	57
5/F	22.5	59	59	61	61	61	61	61	61	60	60	60	60	60	60	60	60	60	59	59	59	58
6/F	25.7	59	60	61	62	62	62	61	61	61	61	61	61	61	61	60	60	60	60	60	59	58
7/F	28.8	60	61	62	62	62	62	62	61	61	61	61	61	61	61	61	61	61	60	60	60	59
8/F	32.0	61	61	63	63	63	63	62	62	62	62	62	62	62	62	61	61	61	61	61	60	60
9/F	35.1	61	62	63	63	63	63	62	62	62	62	62	62	62	62	62	62	62	61	61	61	60
10/F	38.3	62	62	63	64	64	63	63	63	63	62	62	62	62	62	62	62	62	62	61	61	60
11/F	41.4	62	62	64	64	64	64	63	63	63	63	63	63	63	62	62	62	62	62	62	62	61
12/F	44.6	62	63	64	64	64	64	63	63	63	63	63	63	63	63	63	62	62	62	62	62	61
13/F	47.7	62	63	64	64	64	64	63	63	63	63	63	63	63	63	63	63	62	62	62	62	61
15/F	50.9	63	63	64	64	64	64	63	63	63	63	63	63	63	63	63	63	63	62	62	62	61
16/F	54.0	63	63	64	64	64	64	63	63	63	63	63	63	63	63	63	63	63	63	62	62	61
17/F	57.5	63	63	64	65	64	64	64	63	63	63	63	63	63	63	63	63	63	63	62	62	62
Max. Noise Level		63	63	64	65	64	64	64	63	63	63	63	63	63	63	63	63	63	63	62	62	62
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 11

Floor	mPD	T11-01	T11-02	T11-03	T11-04	T11-05	T11-06	T11-07	T11-08	T11-09	T11-10	T11-11	T11-12	T11-13	T11-14	T11-15	T11-16	T11-17	T11-18	T11-19	T11-20	T11-21	T11-22	T11-23	T11-24	T11-25
G/F	6.6	63	63	63	63	62	61	60	58	58	57	57	57	57	57	57	57	57	57	57	57	56	56	57	56	55
1/F	13.1	63	63	63	64	63	61	60	58	58	58	58	58	58	58	58	58	57	57	57	57	57	57	57	57	55
2/F	16.2	64	64	64	64	64	62	61	59	59	59	58	58	58	58	58	58	58	58	58	58	57	57	57	57	56
3/F	19.4	64	64	64	64	64	63	62	59	59	59	59	59	59	59	59	59	58	58	58	58	58	58	58	58	56
5/F	22.5	65	65	65	65	65	63	63	60	60	60	60	59	59	59	60	59	59	59	59	59	58	58	59	58	56
6/F	25.7	65	65	65	65	65	64	63	61	61	61	60	60	60	60	60	60	60	59	59	59	59	59	59	59	57
7/F	28.8	65	65	65	66	66	64	64	61	61	61	61	61	61	61	61	61	60	60	60	60	60	59	60	59	58
8/F	32.0	66	66	66	66	66	65	64	62	62	62	62	61	61	61	61	61	61	61	61	60	60	60	60	60	58
9/F	35.1	66	66	66	67	66	65	65	62	62	62	62	62	62	62	62	62	61	61	61	61	61	61	61	61	59
10/F	38.3	66	66	66	67	67	66	65	63	63	62	62	62	62	62	62	62	61	61	61	61	61	61	61	61	59
11/F	41.4	66	66	66	67	67	66	65	63	63	63	63	62	62	62	62	62	62	62	62	62	61	61	61	61	60
12/F	44.6	66	66	67	67	67	66	65	63	63	63	63	63	63	62	63	63	62	62	62	62	62	61	62	62	60
13/F	47.7	67	67	67	68	67	66	65	63	63	63	63	63	63	63	63	63	62	62	62	62	62	62	62	62	60
15/F	50.9	67	67	67	68	67	66	66	63	63	63	63	63	63	63	63	63	62	62	62	62	62	62	62	62	60
16/F	54.0	67	67	67	68	68	66	66	63	63	63	63	63	63	63	63	63	62	62	62	62	62	62	62	62	60
17/F	57.5	67	67	67	68	68	67	66	64	63	63	63	63	63	63	63	63	62	62	62	62	62	62	62	62	61
Max. Noise Level		67	67	67	68	68	67	66	64	63	63	63	63	63	63	63	63	62	62	62	62	62	62	62	62	61
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T11-26	T11-27	T11-28	T11-29	T11-30	T11-31	T11-32	T11-33	T11-34	T11-35	T11-36	T11-37	T11-38	T11-39	T11-40	T11-41	T11-42	T11-43	T11-44	T11-45	T11-46	T11-47
G/F	6.6	52	55	55	55	54	54	57	57	57	57	57	57	57	57	57	58	58	58	58	59	59	60
1/F	13.1	53	55	55	55	54	54	58	57	57	57	57	57	57	57	58	58	58	58	59	59	60	60
2/F	16.2	53	56	55	55	54	54	58	58	58	58	58	58	58	58	58	58	59	59	59	59	60	61
3/F	19.4	53	56	56	56	55	55	59	58	58	58	58	58	58	58	59	59	59	59	59	60	61	61
5/F	22.5	54	57	56	56	55	56	59	59	59	59	59	59	59	59	59	60	60	60	60	61	61	62
6/F	25.7	55	57	57	57	56	57	60	60	60	60	60	60	60	60	60	60	60	61	61	61	61	62
7/F	28.8	55	58	58	58	57	57	61	61	60	60	60	60	60	60	61	61	61	61	61	61	62	62
8/F	32.0	56	58	58	58	58	58	61	61	61	61	61	61	61	61	61	61	61	61	61	62	62	63
9/F	35.1	57	59	59	59	58	59	62	61	61	61	61	61	61	61	61	61	61	62	62	62	62	63
10/F	38.3	57	60	59	60	59	60	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	63
11/F	41.4	58	60	60	60	60	60	63	63	62	62	62	62	62	62	62	62	62	62	62	62	63	63
12/F	44.6	58	60	60	61	60	61	63	63	63	63	63	63	63	62	62	62	62	62	62	63	63	63
13/F	47.7	58	61	61	61	61	62	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
15/F	50.9	58	61	61	62	61	62	64	64	63	63	63	63	63	63	63	63	63	63	63	63	63	64
16/F	54.0	59	61	62	62	61	62	64	64	64	64	63	63	63	63	63	63	63	63	63	63	64	64
17/F	57.5	59	62	62	62	61	62	64	64	64	64	64	64	64	64	64	63	63	63	63	64	64	64
Max. Noise Level		59	62	62	62	61	62	64	64	64	64	64	64	64	64	64	63	63	63	63	64	64	64
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Environmental Assessment for Proposed Residential Development at Various Lots in D.D. 104, Yuen Long, N.T.
Appendix 3-3 Road Traffic Noise Impact Assessment - unmitigated scenario (PM Peak Hour)

Tower 1

Floor	mPD	T1-01	T1-02	T1-03	T1-04	T1-05	T1-06	T1-07	T1-08	T1-09	T1-10	T1-11	T1-12	T1-13	T1-14	T1-15	T1-16	T1-17	T1-18	T1-19	T1-20
G/F	6.6	45	45	44	43	35	34	33	33	33	34	34	34	43	43	43	35	36	39	50	55
1/F	13.1	45	45	45	43	36	35	33	33	34	35	35	35	43	43	43	35	36	40	50	55
2/F	16.2	46	45	45	43	36	36	34	34	35	35	36	36	43	43	43	35	36	40	50	56
3/F	19.4	46	45	45	43	37	37	35	35	35	36	37	37	43	43	43	35	37	40	50	56
5/F	22.5	46	46	45	43	38	37	36	35	36	37	37	37	43	43	43	35	37	40	50	56
6/F	25.7	47	46	45	44	39	38	37	36	36	37	37	37	43	43	43	35	38	40	50	56
7/F	28.8	48	47	45	44	40	39	38	36	36	37	37	37	43	43	43	35	38	40	50	56
8/F	32.0	48	47	46	44	41	40	38	36	36	37	37	37	43	43	43	35	38	40	49	57
9/F	35.1	49	48	46	45	42	41	39	36	36	37	37	37	43	43	43	35	38	40	49	57
10/F	38.3	49	48	46	45	42	41	39	36	36	37	37	37	43	43	43	35	38	40	49	57
11/F	41.4	50	48	46	45	42	41	39	36	36	37	37	38	43	43	43	35	38	40	49	57
12/F	44.6	50	48	46	45	42	42	39	37	37	37	37	38	43	43	43	35	38	40	49	57
13/F	47.7	50	48	46	45	43	42	39	37	37	38	38	38	43	43	43	36	38	40	49	57
15/F	50.9	50	48	46	45	43	42	40	39	38	39	39	39	44	44	44	38	39	41	49	57
16/F	54.4	51	49	47	46	44	43	42	41	41	41	41	41	44	44	44	40	41	43	49	57
Max. Noise Level		51	49	47	46	44	43	42	41	41	41	41	41	44	44	44	40	41	43	50	57
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T1-21	T1-22	T1-23	T1-24	T1-25	T1-26	T1-27	T1-28	T1-29	T1-30	T1-31	T1-32	T1-33	T1-34	T1-35	T1-36	T1-37	T1-38	T1-39	T1-40	T1-41	T1-42
G/F	6.6	56	56	56	55	55	55	55	54	54	53	52	52	52	52	52	53	54	54	54	55	56	56
1/F	13.1	56	56	56	56	55	55	55	54	54	54	53	53	53	53	53	54	54	55	55	56	56	56
2/F	16.2	56	57	56	56	56	56	55	55	55	54	54	54	55	55	55	55	55	56	56	57	57	57
3/F	19.4	56	57	57	57	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	57	57	57
5/F	22.5	57	58	58	58	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	58	58	58
6/F	25.7	57	59	59	59	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
7/F	28.8	57	60	59	59	59	59	59	59	59	59	59	59	59	59	59	58	58	58	58	59	59	59
8/F	32.0	57	60	60	60	60	60	60	60	60	60	60	60	60	60	59	59	59	59	59	59	59	59
9/F	35.1	57	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10/F	38.3	57	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
11/F	41.4	57	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
12/F	44.6	57	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
13/F	47.7	57	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
15/F	50.9	57	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
16/F	54.4	57	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Max. Noise Level		57	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 2

Floor	mPD	T2-01	T2-02	T2-03	T2-04	T2-05	T2-06	T2-07	T2-08	T2-09	T2-10	T2-11	T2-12	T2-13	T2-14	T2-15	T2-16	T2-17	T2-18	T2-19	T2-20	T2-21	T2-22
G/F	6.6	47	39	39	38	38	39	41	41	42	43	44	44	45	45	46	46	46	47	47	48	54	54
1/F	13.1	47	40	40	39	39	40	41	42	43	44	44	45	45	46	46	46	47	47	47	48	54	54
2/F	16.2	48	41	41	40	40	41	42	42	43	44	44	45	45	46	46	47	47	47	47	49	54	54
3/F	19.4	48	42	42	41	41	41	42	43	43	44	45	45	46	46	46	47	47	47	47	49	54	54
5/F	22.5	49	43	43	42	42	42	43	43	44	44	45	45	46	46	46	47	47	47	47	49	54	54
6/F	25.7	50	44	43	42	42	42	43	43	44	44	45	45	46	46	46	47	47	47	48	49	54	54
7/F	28.8	50	46	44	43	43	43	43	44	44	45	45	45	46	46	46	47	47	47	48	49	54	54
8/F	32.0	51	47	45	44	44	44	44	44	44	45	45	45	46	46	47	47	47	48	48	49	54	54
9/F	35.1	52	48	46	45	45	44	44	45	45	45	45	46	46	46	47	47	47	48	48	49	54	54
10/F	38.3	52	49	47	46	45	45	45	45	45	45	46	46	46	47	47	47	48	48	49	50	54	54
11/F	41.4	52	49	47	46	46	46	46	46	46	46	46	46	46	47	47	48	48	48	49	50	54	54
12/F	44.6	52	49	47	47	46	46	46	46	46	46	46	46	47	47	47	48	48	48	49	50	54	54
13/F	47.7	52	49	47	47	46	46	46	46	46	46	46	46	47	47	47	48	48	48	49	50	54	54
15/F	50.9	52	49	48	47	47	46	47	47	47	46	46	47	47	47	47	48	48	48	49	50	54	54
16/F	54.4	52	50	48	47	47	47	47	47	47	47	47	47	47	47	48	48	48	49	49	50	54	54
Max. Noise Level		52	50	48	47	47	47	47	47	47	47	47	47	47	47	48	48	48	49	49	50	54	54
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T2-23	T2-24	T2-25	T2-26	T2-27	T2-28	T2-29	T2-30	T2-31	T2-32	T2-33	T2-34	T2-35	T2-36	T2-37	T2-38	T2-39	T2-40	T2-41	T2-42
G/F	6.6	54	54	55	55	55	55	55	56	56	56	56	56	56	56	57	57	57	57	56	52
1/F	13.1	54	55	55	55	55	55	55	56	56	56	56	56	56	56	57	57	57	57	57	52
2/F	16.2	54	55	55	55	55	55	55	56	56	56	56	56	56	56	57	57	57	57	57	53
3/F	19.4	54	55	55	55	55	55	55	56	56	56	56	56	56	56	57	57	58	57	57	53
5/F	22.5	54	55	55	55	55	55	55	56	56	56	56	56	56	56	57	57	58	57	57	54
6/F	25.7	54	55	55	55	55	55	55	56	56	56	56	56	56	56	57	58	58	58	57	54
7/F	28.8	54	55	55	55	55	55	55	56	56	56	56	56	56	56	57	58	58	58	58	54
8/F	32.0	54	55	55	55	55	55	55	56	56	56	56	56	56	56	57	58	58	58	58	55
9/F	35.1	54	55	55	55	55	55	55	56	56	56	56	56	56	56	57	58	58	58	58	55
10/F	38.3	54	54	55	55	55	55	55	56	56	56	56	56	56	55	57	58	59	58	58	55
11/F	41.4	54	54	55	55	55	55	55	56	56	56	56	56	56	55	57	58	59	58	58	55
12/F	44.6	54	54	55	55	55	55	55	56	56	56	56	56	56	55	57	58	59	58	58	55
13/F	47.7	54	54	55	55	55	55	55	55	56	56	56	56	56	55	57	58	59	58	58	55
15/F	50.9	54	54	55	55	55	55	55	56	56	56	56	56	56	55	57	58	59	58	58	55
16/F	54.4	54	54	55	55	55	55	55	55	56	56	56	56	56	55	57	58	59	58	58	55
Max. Noise Level		54	55	55	55	55	55	55	56	56	56	56	56	56	56	57	58	59	58	58	55
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 3

Floor	mPD	T3-01	T3-02	T3-03	T3-04	T3-05	T3-06	T3-07	T3-08	T3-09	T3-10	T3-11	T3-12	T3-13	T3-14	T3-15	T3-16	T3-17	T3-18	T3-19	T3-20	T3-21
G/F	6.6	43	42	42	42	42	42	44	48	47	46	44	42	43	44	45	46	47	47	47	47	55
1/F	13.1	49	48	48	49	49	49	49	49	48	48	46	45	45	46	46	47	47	47	47	49	55
2/F	16.2	49	49	49	50	50	50	49	49	49	49	47	47	47	47	47	47	47	47	47	49	56
3/F	19.4	50	50	50	50	50	50	50	49	49	49	48	47	47	47	47	47	47	47	47	49	56
5/F	22.5	50	50	50	50	50	50	50	50	49	49	48	47	47	47	47	47	47	47	48	49	56
6/F	25.7	50	50	50	50	50	50	50	50	49	49	48	47	47	47	47	47	47	47	48	49	56
7/F	28.8	50	50	50	50	50	50	50	50	50	49	48	47	47	47	47	48	48	48	48	49	56
8/F	32.0	50	50	50	50	50	50	50	50	50	49	48	48	48	48	48	48	48	48	48	49	56
9/F	35.1	50	50	50	50	50	50	50	50	50	49	48	48	48	48	48	48	48	48	48	49	56
10/F	38.3	50	50	50	50	50	50	50	50	50	49	48	48	48	48	48	48	48	48	48	49	56
11/F	41.4	50	50	50	50	50	50	50	50	50	49	48	48	48	48	48	48	48	48	48	49	56
12/F	44.6	50	50	50	50	50	50	50	50	50	49	48	48	48	48	48	48	48	48	48	49	56
13/F	47.7	50	50	50	50	50	50	50	50	50	49	48	48	48	48	48	48	48	48	48	49	55
15/F	51.2	50	50	50	50	50	50	50	50	50	49	49	48	48	48	48	48	48	48	48	49	55
Max. Noise Level		50	50	50	50	50	50	50	50	50	49	49	48	48	48	48	48	48	48	48	49	56
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T3-22	T3-23	T3-24	T3-25	T3-26	T3-27	T3-28	T3-29	T3-30	T3-31	T3-32	T3-33	T3-34	T3-35	T3-36	T3-37	T3-38	T3-39	T3-40	T3-41	T3-42
G/F	6.6	53	56	57	57	57	56	56	56	56	56	56	56	55	55	55	55	55	55	55	55	54
1/F	13.1	53	57	57	57	57	56	56	56	56	56	56	56	55	55	55	55	55	55	55	55	54
2/F	16.2	54	57	57	57	57	56	56	56	56	56	56	56	55	55	55	55	55	55	55	55	54
3/F	19.4	54	57	57	57	57	57	56	56	56	56	56	56	55	55	55	55	55	55	55	55	54
5/F	22.5	54	57	57	57	57	57	56	56	56	56	56	56	55	55	55	55	55	55	55	55	54
6/F	25.7	54	57	57	57	57	57	56	56	56	56	56	56	55	55	55	55	55	55	55	55	54
7/F	28.8	54	57	57	57	57	57	56	56	56	56	56	56	55	55	55	55	55	55	55	55	54
8/F	32.0	54	57	57	57	57	57	56	56	56	56	56	56	55	55	55	55	55	55	55	55	54
9/F	35.1	54	57	57	57	57	56	56	56	56	56	56	56	55	55	55	55	55	55	55	54	54
10/F	38.3	54	57	57	57	57	56	56	56	56	56	56	56	55	55	55	55	55	55	55	54	54
11/F	41.4	54	57	57	57	57	56	56	56	56	56	56	56	55	55	55	55	55	55	55	54	54
12/F	44.6	54	57	57	57	57	56	56	56	56	56	56	56	55	55	55	55	55	55	55	54	54
13/F	47.7	54	57	57	57	57	56	56	56	56	56	56	56	55	55	55	55	55	55	55	54	54
15/F	51.2	54	57	57	57	57	56	56	56	56	56	56	56	55	55	55	55	55	55	55	54	54
Max. Noise Level		54	57	57	57	57	57	56	56	56	56	56	56	55	55	55	55	55	55	55	55	54
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 5

Floor	mPD	T5-01	T5-02	T5-03	T5-04	T5-05	T5-06	T5-07	T5-08	T5-09	T5-10	T5-11	T5-12	T5-13	T5-14	T5-15	T5-16	T5-17	T5-18	T5-19	T5-20	T5-21	T5-22	T5-23	T5-24
G/F	6.6	55	53	52	51	51	51	50	50	50	50	50	51	51	51	51	51	51	50	50	50	52	52	54	59
1/F	13.1	55	53	53	51	51	51	50	50	50	50	50	51	51	51	51	51	51	51	50	50	52	52	54	59
2/F	16.2	55	53	52	51	51	51	50	50	50	50	50	51	51	51	51	51	51	51	50	51	52	52	54	59
3/F	19.4	55	53	52	51	51	51	50	50	50	50	50	51	51	51	51	51	51	51	50	51	52	52	54	59
5/F	22.5	55	53	52	51	51	51	50	50	50	50	50	51	51	51	51	51	51	51	50	51	52	52	54	59
6/F	25.7	54	53	52	51	51	51	50	50	50	50	50	51	51	51	51	51	51	51	50	51	52	52	54	59
7/F	28.8	54	53	52	51	51	51	50	49	50	50	50	51	51	50	50	51	51	51	50	51	52	52	54	59
8/F	32.0	54	53	52	51	51	51	50	49	50	49	50	51	50	50	50	50	51	51	50	51	52	52	54	59
9/F	35.1	54	53	52	51	51	51	50	49	50	49	50	50	50	50	50	50	51	51	50	51	52	52	54	59
10/F	38.3	54	53	52	51	51	51	50	49	50	49	50	50	50	50	50	50	51	51	50	51	52	52	53	59
11/F	41.4	54	53	52	51	51	51	50	49	50	49	50	50	50	50	50	50	51	51	50	51	52	52	53	59
12/F	44.6	54	53	52	51	51	51	49	49	50	49	50	50	50	50	50	50	51	51	50	51	52	52	53	59
13/F	47.7	54	53	52	51	51	51	49	49	50	49	50	50	50	50	50	50	51	51	50	51	52	52	53	59
15/F	51.2	54	53	52	51	51	51	50	49	50	49	50	50	50	50	50	50	51	51	50	51	52	52	53	59
Max. Noise Level		55	53	53	51	51	51	50	50	50	50	50	51	51	51	51	51	51	51	50	51	52	52	54	59
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T5-25	T5-26	T5-27	T5-28	T5-29	T5-30	T5-31	T5-32	T5-33	T5-34	T5-35	T5-36	T5-37	T5-38	T5-39	T5-40	T5-41	T5-42	T5-43	T5-44	T5-45	T5-46	T5-47	T5-48
G/F	6.6	58	58	56	57	58	57	58	58	57	57	57	57	57	57	57	57	57	57	57	57	58	57	56	56
1/F	13.1	58	58	56	57	58	58	58	58	58	57	57	57	57	57	57	57	57	57	58	58	58	57	57	56
2/F	16.2	58	58	56	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	58	57	56
3/F	19.4	58	58	57	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
5/F	22.5	58	58	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
6/F	25.7	59	58	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
7/F	28.8	59	58	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
8/F	32.0	59	58	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
9/F	35.1	59	58	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
10/F	38.3	58	58	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
11/F	41.4	58	58	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
12/F	44.6	58	58	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
13/F	47.7	58	58	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
15/F	51.2	58	58	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
Max. Noise Level		59	58	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	58	57	57
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 6

Floor	mPD	T6-01	T6-02	T6-03	T6-04	T6-05	T6-06	T6-07	T6-08	T6-09	T6-10	T6-11	T6-12	T6-13	T6-14	T6-15	T6-16	T6-17	T6-18	T6-19	T6-20	T6-21
G/F	6.6	58	58	60	59	58	58	58	58	57	57	58	57	57	57	57	57	56	56	55	54	41
1/F	13.1	58	58	60	59	58	58	58	58	57	57	58	58	58	58	58	58	58	58	58	58	57
2/F	16.2	58	58	60	59	58	59	58	58	57	57	58	58	58	58	58	58	58	58	58	58	58
3/F	19.4	58	58	60	59	58	59	58	58	57	57	58	58	58	58	58	58	58	58	58	58	58
5/F	22.5	58	58	60	59	58	58	58	58	57	57	58	58	58	58	58	58	58	58	58	58	58
6/F	25.7	58	58	60	59	58	58	58	58	57	57	58	58	58	58	58	58	58	58	58	58	58
7/F	28.8	58	59	60	59	58	58	58	58	57	57	58	58	58	58	58	58	58	58	58	58	58
8/F	32.0	58	59	60	59	58	58	58	58	57	57	58	58	58	58	58	58	58	58	58	58	58
9/F	35.1	58	59	60	59	58	58	58	58	57	57	58	58	58	58	58	58	58	58	58	58	58
10/F	38.3	58	59	59	59	58	58	58	58	57	57	58	58	58	58	58	58	58	58	58	58	57
11/F	41.4	58	59	59	59	58	58	58	58	57	57	58	58	58	58	58	58	58	58	58	58	57
12/F	44.6	58	59	59	59	58	58	58	58	57	57	58	58	58	58	58	58	58	58	58	58	57
13/F	47.7	58	59	59	59	58	58	58	58	56	56	57	57	57	58	58	57	57	58	58	57	57
15/F	50.9	58	59	59	59	57	57	57	57	56	56	57	57	57	58	58	57	57	57	57	57	57
16/F	54.0	58	59	59	59	57	57	57	57	56	56	57	57	57	57	57	57	57	57	57	57	57
17/F	57.5	58	59	59	59	57	57	57	57	56	56	57	57	57	57	57	57	57	57	57	57	57
Max. Noise Level		58	59	60	59	58	59	58	58	57	57	58	58	58	58	58	58	58	58	58	58	58
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T6-22	T6-23	T6-24	T6-25	T6-26	T6-27	T6-28	T6-29	T6-30	T6-31	T6-32	T6-33	T6-34	T6-35	T6-36	T6-37	T6-38	T6-39	T6-40	T6-41	T6-42	T6-43	T6-44	T6-45
G/F	6.6	42	42	41	41	37	36	36	35	35	40	41	41	41	42	42	42	43	43	43	42	40	37	38	42
1/F	13.1	58	58	58	58	53	50	48	47	46	46	45	45	45	45	45	44	44	44	44	43	42	40	40	43
2/F	16.2	58	58	58	59	53	50	48	47	47	46	46	46	46	46	46	45	45	45	45	44	43	41	41	44
3/F	19.4	58	58	58	58	53	50	48	47	47	47	46	46	46	46	46	46	46	46	45	45	43	42	42	44
5/F	22.5	58	58	58	58	53	50	48	48	47	47	46	46	46	46	46	46	46	46	46	45	44	42	42	44
6/F	25.7	58	58	58	58	53	50	48	48	47	47	46	46	46	46	46	46	46	46	46	45	44	42	42	44
7/F	28.8	58	58	58	58	53	50	48	48	47	47	46	46	46	46	46	46	46	46	46	45	44	43	43	44
8/F	32.0	58	58	58	58	53	50	48	48	47	47	46	46	46	46	46	46	46	46	46	45	44	43	43	44
9/F	35.1	58	58	58	58	53	50	48	48	47	47	46	46	46	46	46	46	46	46	46	45	44	43	43	44
10/F	38.3	58	58	58	58	53	50	48	48	47	47	47	46	46	46	46	46	46	46	46	45	44	43	43	44
11/F	41.4	58	58	58	58	53	50	48	48	47	47	47	46	47	46	46	46	46	46	46	45	44	43	43	44
12/F	44.6	57	58	58	58	53	50	48	48	47	47	47	46	47	47	46	46	46	46	46	45	44	43	43	44
13/F	47.7	57	58	58	58	53	50	49	48	47	47	47	46	47	47	46	46	46	46	46	45	44	43	43	44
15/F	50.9	57	58	58	58	53	50	49	48	47	47	47	47	47	47	47	46	46	46	46	45	44	43	43	44
16/F	54.0	57	57	58	58	53	50	49	48	47	47	47	47	47	47	47	47	46	46	46	45	44	43	43	45
17/F	57.5	57	57	58	58	53	50	49	48	48	48	47	47	47	47	47	47	47	47	46	46	45	44	44	45
Max. Noise Level		58	58	58	59	53	50	49	48	48	48	47	47	47	47	47	47	47	47	46	46	45	44	44	45
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 7

Floor	mPD	T7-01	T7-02	T7-03	T7-04	T7-05	T7-06	T7-07	T7-08	T7-09	T7-10	T7-11	T7-12	T7-13	T7-14	T7-15	T7-16	T7-17	T7-18	T7-19	T7-20	T7-21	T7-22	T7-23	T7-24
G/F	6.6	54	54	54	55	55	55	56	56	56	56	56	56	56	57	58	57	56	58	58	59	59	59	60	59
1/F	13.1	54	54	55	55	55	56	56	56	56	56	56	56	57	57	58	57	56	58	58	59	59	59	60	59
2/F	16.2	54	55	55	55	56	56	56	56	56	56	56	57	57	57	58	58	56	58	59	59	59	59	60	59
3/F	19.4	54	55	55	55	56	56	56	56	56	57	57	57	57	57	58	58	56	58	59	59	59	60	60	59
5/F	22.5	54	55	55	56	56	56	56	56	57	57	57	57	57	57	58	58	56	59	59	59	59	60	60	59
6/F	25.7	54	55	55	56	56	56	56	57	57	57	57	57	57	57	58	58	57	59	59	59	59	60	60	59
7/F	28.8	54	55	55	56	56	57	57	57	57	57	57	57	58	58	59	58	57	59	59	59	59	60	60	59
8/F	32.0	54	55	56	56	56	57	57	57	57	58	58	58	58	58	59	59	57	59	59	59	59	60	61	59
9/F	35.1	54	56	56	56	57	57	57	57	58	58	58	58	58	58	59	59	58	59	59	60	60	60	61	59
10/F	38.3	54	56	56	56	57	57	57	57	58	58	58	58	58	58	59	59	58	60	60	60	60	60	61	59
11/F	41.4	54	56	56	57	57	57	57	58	58	58	58	58	58	59	59	59	58	60	60	60	60	61	61	59
12/F	44.6	54	56	56	57	57	57	58	58	58	58	58	58	58	59	60	59	58	60	60	60	60	61	61	60
13/F	47.7	54	56	56	57	57	57	58	58	58	58	58	59	59	59	60	59	58	60	60	60	60	61	61	60
15/F	50.9	54	56	56	57	57	58	58	58	58	59	59	59	59	59	60	60	58	60	60	60	60	61	61	60
16/F	54.0	54	56	56	57	57	58	58	58	59	59	59	59	59	59	60	60	59	60	60	60	60	61	61	60
17/F	57.5	54	56	56	57	57	58	58	58	59	59	59	59	59	59	60	60	59	60	60	60	60	61	61	60
Max. Noise Level		54	56	56	57	57	58	58	58	59	59	59	59	59	59	60	60	59	60	60	60	60	61	61	60
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T7-25	T7-26	T7-27	T7-28	T7-29	T7-30	T7-31	T7-32	T7-33	T7-34	T7-35	T7-36	T7-37	T7-38	T7-39	T7-40	T7-41	T7-42	T7-43	T7-44	T7-45	T7-46	T7-47
G/F	6.6	58	44	40	41	41	41	42	42	44	45	46	47	47	48	48	48	49	49	49	49	49	50	51
1/F	13.1	58	45	43	43	44	44	45	45	46	46	47	48	48	48	49	49	49	49	49	49	49	50	51
2/F	16.2	58	47	44	45	46	46	47	47	47	48	48	49	49	49	49	49	50	50	50	50	50	51	51
3/F	19.4	58	47	45	46	47	47	47	48	48	48	49	49	49	49	50	50	50	50	50	50	50	51	51
5/F	22.5	58	47	45	46	47	47	48	48	48	49	49	49	49	50	50	50	50	50	50	50	50	51	51
6/F	25.7	58	47	45	46	47	47	48	48	48	49	49	49	49	50	50	50	50	50	50	50	50	51	51
7/F	28.8	58	48	45	46	47	47	48	48	48	49	49	49	49	50	50	50	50	50	50	50	50	51	51
8/F	32.0	58	48	45	46	47	47	48	48	48	49	49	49	49	50	50	50	50	50	50	50	50	51	51
9/F	35.1	58	48	45	46	47	47	47	48	48	49	49	49	49	50	50	50	50	50	50	50	50	51	51
10/F	38.3	58	48	45	46	47	47	47	48	48	49	49	49	49	50	50	50	50	50	50	50	50	51	51
11/F	41.4	58	48	45	46	47	47	47	48	48	49	49	49	49	50	50	50	50	50	50	50	50	51	51
12/F	44.6	58	48	45	46	47	47	47	48	48	49	49	49	49	50	50	50	50	50	50	50	50	51	51
13/F	47.7	58	48	45	46	47	47	47	48	48	49	49	49	49	49	50	50	50	50	50	50	50	51	51
15/F	50.9	58	48	45	46	47	47	47	48	48	49	49	49	49	49	50	50	50	50	50	50	50	51	51
16/F	54.0	58	48	46	46	47	47	48	48	48	49	49	49	49	49	50	50	50	50	50	50	50	51	51
17/F	57.5	58	48	46	46	47	47	48	48	48	49	49	49	49	50	50	50	50	50	50	50	50	51	51
Max. Noise Level		58	48	46	46	47	47	48	48	48	49	49	49	49	50	50	50	50	50	50	50	50	51	51
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 8

Floor	mPD	T8-01	T8-02	T8-03	T8-04	T8-05	T8-06	T8-07	T8-08	T8-09	T8-10	T8-11	T8-12	T8-13	T8-14	T8-15	T8-16	T8-17	T8-18	T8-19	T8-20	T8-21	T8-22	T8-23	T8-24
G/F	6.6	60	59	59	58	58	58	57	57	57	57	57	57	57	57	57	57	57	55	55	55	55	55	54	50
1/F	13.1	60	59	59	59	58	58	58	58	58	58	58	57	57	57	57	57	57	56	56	55	55	55	54	50
2/F	16.2	61	59	59	59	59	59	58	58	58	58	58	57	57	57	57	57	57	56	56	55	55	55	54	51
3/F	19.4	61	60	60	59	59	59	58	58	58	58	58	57	57	57	57	57	57	56	56	56	55	55	54	51
5/F	22.5	62	60	60	60	59	59	58	58	58	58	58	58	58	58	58	58	57	56	56	56	56	55	54	51
6/F	25.7	62	61	61	60	60	60	58	58	58	58	58	58	58	58	58	58	58	56	56	56	56	55	55	51
7/F	28.8	63	61	61	60	60	60	59	59	59	59	59	58	58	58	58	58	58	57	57	56	56	55	55	51
8/F	32.0	63	62	61	61	61	61	59	59	59	59	59	59	59	59	59	58	58	57	57	57	57	56	55	51
9/F	35.1	64	62	62	61	61	61	59	59	59	59	59	59	59	59	59	59	59	57	57	57	57	56	55	51
10/F	38.3	64	62	62	62	61	61	60	60	60	59	59	59	59	59	59	59	59	58	58	57	57	56	56	51
11/F	41.4	64	63	62	62	62	62	60	60	60	60	60	59	59	59	59	59	59	58	58	58	57	56	56	51
12/F	44.6	65	63	63	62	62	62	60	60	60	60	60	59	59	59	59	59	59	58	58	58	58	57	56	51
13/F	47.7	65	63	63	62	62	62	60	60	60	60	60	60	60	59	60	59	59	58	58	58	58	57	56	51
15/F	50.9	65	63	63	63	62	62	60	60	60	60	60	60	60	60	60	60	60	58	58	58	58	57	56	51
16/F	54.0	65	63	63	63	62	62	60	60	60	60	60	60	60	60	60	60	60	59	59	58	58	57	56	51
17/F	57.5	65	63	63	63	62	62	60	60	60	60	60	60	60	60	60	60	60	59	59	58	58	57	56	52
Max. Noise Level		65	63	63	63	62	62	60	60	60	60	60	60	60	60	60	60	60	59	59	58	58	57	56	52
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T8-25	T8-26	T8-27	T8-28	T8-29	T8-30	T8-31	T8-32	T8-33	T8-34	T8-35	T8-36	T8-37	T8-38	T8-39	T8-40	T8-41	T8-42	T8-43	T8-44	T8-45	T8-46	T8-47	T8-48	T8-49
G/F	6.6	48	47	46	46	45	45	45	45	45	44	44	44	44	44	44	44	44	45	45	44	46	47	58	59	59
1/F	13.1	48	47	47	47	46	46	46	46	46	46	45	45	45	45	45	45	45	45	45	45	46	47	58	59	60
2/F	16.2	49	48	48	47	47	47	47	47	47	47	46	46	46	46	46	46	46	46	46	45	46	47	59	60	60
3/F	19.4	49	49	48	48	48	48	48	48	48	48	47	47	47	47	47	47	47	47	47	46	46	47	59	60	60
5/F	22.5	49	49	49	49	49	49	48	48	48	48	48	48	48	48	48	48	48	48	47	46	47	48	60	60	61
6/F	25.7	49	49	49	49	49	49	49	49	49	49	48	48	48	48	48	48	48	48	48	47	47	48	60	61	61
7/F	28.8	49	49	49	49	49	49	49	49	49	49	49	49	49	49	48	48	49	49	48	47	47	48	61	61	62
8/F	32.0	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	48	47	47	48	61	62	62
9/F	35.1	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	48	47	47	48	62	62	62
10/F	38.3	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	48	47	47	48	62	63	63
11/F	41.4	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	48	47	47	48	62	63	63
12/F	44.6	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	48	47	47	48	62	63	63
13/F	47.7	50	49	49	49	49	49	49	50	50	50	49	49	49	49	49	49	49	49	48	48	47	48	63	63	63
15/F	50.9	50	49	49	49	50	49	49	50	50	50	50	49	49	49	49	49	49	49	49	48	48	48	63	63	64
16/F	54.0	50	50	49	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	49	48	48	49	63	63	64
17/F	57.5	50	50	50	50	50	50	50	50	50	51	51	51	51	51	51	51	51	51	50	50	50	51	63	64	64
Max. Noise Level		50	50	50	50	50	50	50	50	50	51	51	51	51	51	51	51	51	51	50	50	50	51	63	64	64
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 9

Floor	mPD	T9-01	T9-02	T9-03	T9-04	T9-05	T9-06	T9-07	T9-08	T9-09	T9-10	T9-11	T9-12	T9-13	T9-14	T9-15	T9-16	T9-17	T9-18	T9-19	T9-20	T9-21	T9-22	T9-23	T9-24
G/F	6.6	54	55	56	56	57	58	58	58	58	58	58	58	58	58	58	59	59	59	59	59	59	60	58	57
1/F	13.1	55	55	56	56	57	58	58	58	59	59	59	59	59	59	59	59	59	59	59	60	60	60	58	58
2/F	16.2	55	56	57	57	58	59	59	59	59	59	59	59	59	59	59	59	59	60	60	60	60	60	59	58
3/F	19.4	56	56	57	57	58	59	59	59	59	59	60	59	59	59	59	60	60	60	60	61	61	61	59	59
5/F	22.5	57	57	57	58	58	59	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	61	60	59
6/F	25.7	57	57	58	58	59	60	60	60	60	60	60	60	60	60	60	61	61	61	61	62	62	62	60	60
7/F	28.8	58	58	58	58	59	60	60	61	61	61	61	61	61	61	61	61	61	61	61	62	62	62	61	60
8/F	32.0	58	58	59	59	60	61	61	61	61	61	61	61	61	61	61	62	62	62	62	63	63	63	61	61
9/F	35.1	59	59	59	59	60	61	61	62	62	62	62	62	62	62	62	62	62	62	62	63	63	63	62	61
10/F	38.3	59	59	59	59	60	62	62	62	62	62	62	62	62	62	62	62	62	63	63	63	63	64	62	62
11/F	41.4	59	59	60	59	60	62	62	62	62	62	62	62	62	62	62	63	63	63	63	64	64	64	62	62
12/F	44.6	59	60	60	60	61	62	62	62	62	63	63	63	62	63	63	63	63	63	63	64	64	64	63	62
13/F	47.7	60	60	60	60	61	62	62	62	63	63	63	63	63	63	63	63	63	63	63	64	64	64	63	62
15/F	50.9	60	60	60	60	61	62	62	63	63	63	63	63	63	63	63	63	63	63	63	64	64	64	63	63
16/F	54.0	60	60	60	60	61	62	63	63	63	63	63	63	63	63	63	63	63	63	63	64	64	65	63	63
17/F	57.5	60	60	60	60	61	63	63	63	63	63	63	63	63	63	63	63	63	63	64	65	65	65	63	63
Max. Noise Level		60	60	60	60	61	63	63	63	63	63	63	63	63	63	63	63	63	63	64	65	65	65	63	63
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T9-25	T9-26	T9-27	T9-28	T9-29	T9-30	T9-31	T9-32	T9-33	T9-34	T9-35	T9-36	T9-37	T9-38	T9-39	T9-40	T9-41	T9-42	T9-43	T9-44	T9-45	T9-46	T9-47
G/F	6.6	50	42	42	42	42	43	43	44	44	43	43	43	37	37	37	37	37	37	38	39	42	44	46
1/F	13.1	50	43	43	43	43	43	44	44	45	45	45	45	45	45	45	45	45	45	47	47	47	48	49
2/F	16.2	50	43	43	43	44	44	45	45	45	46	46	46	46	47	47	46	46	47	50	50	50	51	51
3/F	19.4	51	44	44	44	44	45	45	45	46	46	46	47	47	47	48	47	47	48	51	51	51	52	52
5/F	22.5	51	44	44	44	44	45	45	46	46	47	47	47	47	48	48	47	48	49	51	51	51	52	52
6/F	25.7	51	44	44	44	45	45	46	46	46	47	47	47	48	48	48	48	48	49	51	52	52	52	53
7/F	28.8	51	44	44	45	45	45	46	46	46	47	47	47	48	48	49	48	48	49	51	52	52	53	53
8/F	32.0	51	44	45	45	45	45	46	46	46	47	47	47	48	48	49	48	48	49	51	52	52	53	53
9/F	35.1	52	45	45	45	45	45	46	46	46	47	47	47	48	48	49	48	48	49	51	52	52	53	54
10/F	38.3	52	45	45	45	45	45	46	46	47	47	47	48	48	48	49	48	48	49	52	52	53	53	54
11/F	41.4	52	45	45	45	45	46	46	46	47	47	47	48	48	48	49	48	49	49	52	52	53	54	54
12/F	44.6	52	45	45	45	45	46	46	47	47	47	48	48	48	48	49	48	49	49	52	52	53	54	54
13/F	47.7	53	45	45	45	46	46	46	47	47	47	48	48	48	49	49	48	49	50	52	52	53	54	54
15/F	50.9	53	46	46	46	46	46	47	47	47	48	48	48	48	49	49	49	49	50	52	52	53	54	54
16/F	54.0	53	47	47	47	47	47	47	48	48	48	48	48	49	49	50	49	49	50	52	53	53	54	54
17/F	57.5	54	49	49	49	49	49	49	49	49	50	50	50	50	50	50	50	50	51	52	53	54	54	55
Max. Noise Level		54	49	49	49	49	49	49	49	49	50	50	50	50	50	50	50	50	51	52	53	54	54	55
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 10

Floor	mPD	T10-01	T10-02	T10-03	T10-04	T10-05	T10-06	T10-07	T10-08	T10-09	T10-10	T10-11	T10-12	T10-13	T10-14	T10-15	T10-16	T10-17	T10-18	T10-19	T10-20	T10-21	T10-22	T10-23
G/F	6.6	54	51	53	53	54	54	54	54	53	53	53	52	52	52	51	51	51	51	50	50	53	54	54
1/F	13.1	54	51	53	54	54	54	54	54	53	53	53	53	53	52	52	52	52	51	51	51	53	54	55
2/F	16.2	54	52	53	54	54	54	54	54	53	53	53	53	53	53	52	52	52	52	52	52	54	55	56
3/F	19.4	54	52	53	54	54	54	54	54	53	53	53	53	53	53	53	52	52	52	52	52	54	56	56
5/F	22.5	55	52	54	54	54	55	55	54	54	53	53	53	53	53	53	53	52	52	52	52	55	56	57
6/F	25.7	55	53	54	55	55	55	55	54	54	54	54	53	53	53	53	53	53	53	53	53	55	57	58
7/F	28.8	55	53	55	55	55	55	55	55	54	54	54	54	54	53	53	53	53	53	53	53	56	57	58
8/F	32.0	56	54	56	55	55	55	55	55	54	54	54	54	54	54	54	53	53	53	54	54	56	58	59
9/F	35.1	56	54	56	56	56	56	56	55	54	54	54	54	54	54	54	54	54	54	54	54	57	59	59
10/F	38.3	57	54	57	56	56	56	56	55	54	54	54	54	54	54	54	54	54	54	54	54	57	59	60
11/F	41.4	57	55	57	57	57	57	56	55	55	54	54	54	54	54	54	54	54	54	54	55	57	60	60
12/F	44.6	57	56	58	58	57	57	57	56	55	55	55	55	55	54	54	54	54	54	54	55	57	60	60
13/F	47.7	58	56	58	58	58	58	57	56	55	55	55	55	55	55	55	54	54	55	55	55	58	60	61
15/F	50.9	58	57	59	59	58	58	58	56	56	55	55	55	55	55	55	55	55	55	55	55	58	60	61
16/F	54.0	59	57	59	59	59	59	58	57	56	56	55	56	55	55	55	55	55	55	55	55	58	60	61
17/F	57.5	59	58	60	59	59	59	59	57	56	56	56	56	56	56	56	55	55	55	55	56	58	61	61
Max. Noise Level		59	58	60	59	59	59	59	57	56	56	56	56	56	56	56	55	55	55	55	56	58	61	61
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T10-24	T10-25	T10-26	T10-27	T10-28	T10-29	T10-30	T10-31	T10-32	T10-33	T10-34	T10-35	T10-36	T10-37	T10-38	T10-39	T10-40	T10-41	T10-42	T10-43	T10-44
G/F	6.6	55	56	58	59	59	58	58	58	58	58	58	58	58	58	58	57	57	57	56	56	55
1/F	13.1	56	57	59	59	59	59	59	58	58	58	58	58	58	58	58	58	58	57	57	56	55
2/F	16.2	56	57	59	60	59	59	59	59	59	59	59	58	58	58	58	58	58	58	57	57	56
3/F	19.4	57	58	59	60	60	60	59	59	59	59	59	59	59	59	59	58	58	58	58	57	56
5/F	22.5	58	58	60	61	60	60	60	60	60	59	59	59	59	59	59	59	59	58	58	58	57
6/F	25.7	59	59	61	61	61	61	60	60	60	60	60	60	60	60	59	59	59	59	59	58	57
7/F	28.8	59	60	61	62	61	61	61	61	60	60	60	60	60	60	60	60	60	60	59	59	58
8/F	32.0	60	60	62	62	62	62	61	61	61	61	61	61	61	61	61	60	60	60	60	59	58
9/F	35.1	60	61	62	63	62	62	62	61	61	61	61	61	61	61	61	61	61	61	60	60	59
10/F	38.3	61	61	63	63	63	63	62	62	62	62	61	61	61	61	61	61	61	61	60	60	59
11/F	41.4	61	62	63	63	63	63	62	62	62	62	62	62	62	62	62	61	61	61	61	61	59
12/F	44.6	61	62	63	63	63	63	62	62	62	62	62	62	62	62	62	62	61	61	61	61	60
13/F	47.7	62	62	63	64	63	63	62	62	62	62	62	62	62	62	62	62	62	62	61	61	60
15/F	50.9	62	62	63	64	64	63	63	63	62	62	62	62	62	62	62	62	62	62	61	61	60
16/F	54.0	62	62	64	64	64	63	63	63	63	62	62	62	62	62	62	62	62	62	61	61	60
17/F	57.5	62	62	64	64	64	64	63	63	63	62	62	62	62	62	62	62	62	62	62	62	60
Max. Noise Level		62	62	64	64	64	64	63	63	63	62	62	62	62	62	62	62	62	62	62	62	60
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tower 11

Floor	mPD	T11-01	T11-02	T11-03	T11-04	T11-05	T11-06	T11-07	T11-08	T11-09	T11-10	T11-11	T11-12	T11-13	T11-14	T11-15	T11-16	T11-17	T11-18	T11-19	T11-20	T11-21	T11-22	T11-23	T11-24	T11-25
G/F	6.6	62	62	62	62	62	60	59	57	57	56	56	56	56	56	56	56	56	56	56	56	55	55	56	55	53
1/F	13.1	62	62	62	63	62	61	60	57	57	57	57	57	57	57	57	57	56	56	56	56	56	56	56	56	53
2/F	16.2	63	63	63	63	63	61	60	58	58	58	57	57	57	57	57	57	57	57	57	57	56	56	56	56	54
3/F	19.4	63	63	63	64	63	62	61	59	58	58	58	58	58	58	58	58	57	57	57	57	57	57	57	57	54
5/F	22.5	64	64	64	64	64	63	62	59	59	59	59	59	58	58	59	59	58	58	58	58	57	57	58	57	55
6/F	25.7	64	64	64	65	65	63	63	60	60	60	60	59	59	59	59	59	59	58	58	58	58	58	58	58	55
7/F	28.8	65	65	65	65	65	64	63	61	60	60	60	60	60	60	60	60	59	59	59	59	59	58	59	58	56
8/F	32.0	65	65	65	66	65	64	64	61	61	61	61	61	60	60	61	60	60	60	60	60	59	59	59	59	57
9/F	35.1	65	65	65	66	66	65	64	62	61	61	61	61	61	61	61	61	60	60	60	60	60	60	60	60	57
10/F	38.3	65	65	66	66	66	65	64	62	62	62	62	61	61	61	61	61	61	61	60	60	60	60	60	60	58
11/F	41.4	66	66	66	67	66	65	65	62	62	62	62	62	62	62	62	62	61	61	61	61	60	60	61	60	58
12/F	44.6	66	66	66	67	67	66	65	62	62	62	62	62	62	62	62	62	61	61	61	61	61	61	61	61	58
13/F	47.7	66	66	66	67	67	66	65	62	62	62	62	62	62	62	62	62	61	61	61	61	61	61	61	61	59
15/F	50.9	66	66	66	67	67	66	65	63	63	62	62	62	62	62	62	62	61	61	61	61	61	61	61	61	59
16/F	54.0	66	66	66	67	67	66	65	63	63	63	63	62	62	62	62	62	61	61	61	61	61	61	61	61	59
17/F	57.5	66	66	66	67	67	66	65	63	63	63	63	63	62	62	63	62	62	62	62	61	61	61	61	61	59
Max. Noise Level		66	66	66	67	67	66	65	63	63	63	63	63	62	62	63	62	62	62	62	61	61	61	61	61	59
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Floor	mPD	T11-26	T11-27	T11-28	T11-29	T11-30	T11-31	T11-32	T11-33	T11-34	T11-35	T11-36	T11-37	T11-38	T11-39	T11-40	T11-41	T11-42	T11-43	T11-44	T11-45	T11-46	T11-47
G/F	6.6	51	53	53	53	51	51	56	56	56	56	56	56	56	56	56	57	57	57	57	58	58	59
1/F	13.1	51	53	53	53	52	52	56	56	56	56	56	56	56	56	57	57	57	57	58	58	59	59
2/F	16.2	51	54	53	53	52	52	57	57	56	56	57	57	57	57	57	57	58	58	58	58	59	60
3/F	19.4	52	54	54	54	52	53	57	57	57	57	57	57	57	57	58	58	58	58	58	59	59	60
5/F	22.5	52	55	54	54	53	53	58	58	58	58	58	58	58	58	58	58	59	59	59	59	60	60
6/F	25.7	53	55	55	55	54	54	58	58	58	58	58	58	58	58	59	59	59	59	59	60	60	61
7/F	28.8	54	56	56	56	55	55	59	59	59	59	59	59	59	59	59	59	60	60	60	60	60	61
8/F	32.0	54	57	56	56	55	56	59	59	59	59	59	59	59	59	60	60	60	60	60	60	61	61
9/F	35.1	55	57	57	57	56	57	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61
10/F	38.3	56	58	58	58	57	58	61	60	60	60	60	60	60	60	60	60	60	60	60	61	61	62
11/F	41.4	56	58	58	58	58	58	61	61	61	61	61	61	61	60	61	61	61	61	61	61	61	62
12/F	44.6	56	59	59	59	58	59	62	62	61	61	61	61	61	61	61	61	61	61	61	61	61	62
13/F	47.7	57	59	59	59	59	60	62	62	62	62	62	62	61	61	61	61	61	61	61	61	62	62
15/F	50.9	57	60	60	60	59	60	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
16/F	54.0	57	60	60	60	59	60	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	63
17/F	57.5	57	60	60	60	60	60	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	63
Max. Noise Level		57	60	60	60	60	60	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	63
No. of exceedance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Environmental Assessment for Proposed Residential Development at Various Lots in D.D. 104, Yuen Long, N.T.
Appendix 3-3 Road Traffic Noise Impact Assessment - unmitigated scenario (AM Peak Hour)

Kindergarten

Floor	mPD	GIC-GF-01	GIC-GF-02	GIC-GF-03	GIC-GF-04	GIC-GF-05	GIC-GF-06	GIC-GF-07	GIC-GF-08	GIC-GF-09
G/F	6.6	70	69	69	69	68	68	65	62	61

Remarks:
(1) GIC-GF-07 is the location of sickbay, it adopts a noise standard for domestic premise as it does not involve any clinical or diagnostical activity nor educational use.
(2) NAPs assigned at the corridor and entrance at G/F such as GIC-GF-01, GIC-GF-08 and GIC-GF-09. These are not NSRs according to current layout and the results of these NAPs are for reference only.

NEC

Floor	mPD	GIC-1F-01	GIC-1F-02	GIC-1F-03	GIC-1F-04	GIC-1F-05	GIC-1F-06	GIC-1F-07	GIC-1F-08	GIC-1F-09	GIC-1F-10
1/F	11.6	69	69	69	69	70	70	67	66	63	62

Remark: mPD refers to 1.2m above floor level.

Environmental Assessment for Proposed Residential Development at Various Lots in D.D. 104, Yuen Long, N.T.
Appendix 3-3 Road Traffic Noise Impact Assessment - unmitigated scenario (PM Peak Hour)

Kindergarten

Floor	mPD	GIC-GF-01	GIC-GF-02	GIC-GF-03	GIC-GF-04	GIC-GF-05	GIC-GF-06	GIC-GF-07	GIC-GF-08	GIC-GF-09
G/F	6.6	69	69	68	68	68	67	64	61	61

Remarks:
(1) GIC-GF-07 is the location of sickbay, it adopts a noise standard for domestic premise as it does not involve any clinical or diagnostical activity nor educational use.
(2) NAPs assigned at the corridor and entrance at G/F such as GIC-GF-01, GIC-GF-08 and GIC-GF-09. These are not NSRs according to current layout and the results of these NAPs are for reference only.

NEC

Floor	mPD	GIC-1F-01	GIC-1F-02	GIC-1F-03	GIC-1F-04	GIC-1F-05	GIC-1F-06	GIC-1F-07	GIC-1F-08	GIC-1F-09	GIC-1F-10
1/F	11.6	68	68	67	68	68	69	66	65	63	62

Remark: mPD refers to 1.2m above floor level.

Appendix 3–4

Mitigated Road Traffic Noise Assessment Results

Environmental Assessment for Proposed Residential Development at Various Lots in D.D. 104, Yuen Long, N.T.
Appendix 3-4 Road Traffic Noise Impact Assessment - mitigated scenario (AM Peak Hour)

Kindergarten (With a 3m Fence Wall)

Floor	mPD	GIC-GF-01	GIC-GF-02	GIC-GF-03	GIC-GF-04	GIC-GF-05	GIC-GF-06	GIC-GF-07	GIC-GF-08	GIC-GF-09
G/F	6.6	59	59	59	59	59	59	65	56	56

Remarks:

(1) GIC-GF-07 is the location of sickbay, it adopts a noise standard for domestic premise as it does not involve any clinical or diagnostical activity nor educational use.

(2) the current presented predicted noise results at NAP GIC-GF-07, is based on the unmitigated result given that there is no noise exceedance

(3) NAPs assigned at the corridor and entrance at G/F such as GIC-GF-01, GIC-GF-08 and GIC-GF-09. These are not NSRs according to current layout and the results of these NAPs are for reference only.

NEC (With a 3m Fence Wall)

Floor	mPD	GIC-1F-01	GIC-1F-02	GIC-1F-03	GIC-1F-04	GIC-1F-05	GIC-1F-06	GIC-1F-07	GIC-1F-08	GIC-1F-09	GIC-1F-10
1/F	11.6	69	69	69	69	70	70	67	66	63	62

Remark: mPD refers to 1.2m above floor level.

Environmental Assessment for Proposed Residential Development at Various Lots in D.D. 104, Yuen Long, N.T.
Appendix 3-4 Road Traffic Noise Impact Assessment - mitigated scenario (PM Peak Hour)

Kindergarten (With a 3m Fence Wall)

Floor	mPD	GIC-GF-01	GIC-GF-02	GIC-GF-03	GIC-GF-04	GIC-GF-05	GIC-GF-06	GIC-GF-07	GIC-GF-08	GIC-GF-09
G/F	6.6	59	59	58	58	58	58	64	56	56

Remarks:

(1) GIC-GF-07 is the location of sickbay, it adopts a noise standard for domestic premise as it does not involve any clinical or diagnostical activity nor educational use.

(2) the current presented predicted noise results at NAP GIC-GF-07, is based on the unmitigated result given that there is no noise exceedance

(3) NAPs assigned at the corridor and entrance at G/F such as GIC-GF-01, GIC-GF-08 and GIC-GF-09. These are not NSRs according to current layout and the results of these NAPs are for reference only.

NEC (With a 3m Fence Wall)

Floor	mPD	GIC-1F-01	GIC-1F-02	GIC-1F-03	GIC-1F-04	GIC-1F-05	GIC-1F-06	GIC-1F-07	GIC-1F-08	GIC-1F-09	GIC-1F-10
1/F	11.6	68	68	67	68	68	69	66	65	63	62

Remark: mPD refers to 1.2m above floor level.

Appendix 4–1

Field Visit Record

Appendix 4-1A Recent Field Visit Records of Industrial Activities

Date	Observation/ Remark
26 Feb., 2009 (Thur.)	Identification of industrial site locations.
30 Mar., 2009 (Mon.)	Identification of industrial site locations.
10 Jul., 2009 (Fri.)	No specific noisy operations at the industrial sites.
21 Jul., 2009 (Tue.)	No specific noisy operations at the industrial sites except at S9, where a lorry was leaving the site. Industrial sites were found to be closed around 7:00pm.
30 Jul., 2009 (Thur.)	No specific noisy operations at the industrial sites.
21 Aug., 2009 (Fri.)	Industrial sites were found to be closed around 07:00pm.
03 Nov., 2009 (Tue.)	No specific noisy operations at identified industrial sites during the site visit.
23 Dec., 2009 (Wed.)	Fan Keung Kee - General operation of the workshop, loading of forklift, lifting activity by a mobile crane, and movement of a lorry. Enclosed godown - Loading and unloading using forklift and movement of lorry.
05 March 2010 (Fri.)	No specific noisy operations at the industrial sites.
26 May 2010 (Wed.)	Operation activities observed were same as those identified in the previous site visits. Industrial sites were found to be closed around 7:00pm.
12 Jul., 2010 (Mon.)	Site visit in the afternoon. No specific noisy operations at the industrial sites.
26 Aug., 2010 (Thur.)	Site visit was conducted during night-time (23:00 on 26 Aug 2010 to 03:00 on the following day). All identified industrial sites were found to be closed and there was no night-time operation at these industrial sites.
29 Oct., 2010 (Fri.)	Operation activities observed were same as those identified in the previous site visits
10 Dec., 2010 (Fri.)	Operation activities observed were same as those identified in the previous site visits.
05 Mar., 2011	No specific noisy operations at the industrial sites.
25 May, 2011	Industrial sites were found to be closed around 7:00pm. Operation activities observed were same as those identified in the previous site visits.
28 Jul., 2011	Operation activities observed were same as those identified in the previous site visits.
21 Sept., 2011	Operation activities observed were same as those identified in the previous site visits.
12 Oct., 2011	Operation activities observed were same as those identified in the previous site visits

Date	Observation/ Remark
31 Jan., 2012	Operation activities observed were same as those identified in the previous site visits.
09 Aug., 2012	Operation activities observed were same as those identified in the previous site visits. Industrial sites were found to be closed around 7:00pm.
16 Aug., 2012	Operation activities observed were same as those identified in the previous site visits.
24 Aug., 2012	Operation activities observed were same as those identified in the previous site visits
07 Sept., 2012	Operation activities observed were same as those identified in the previous site visits
14 Nov., 2012	Operation activities observed were same as those identified in the previous site visits.
07 Feb., 2013	Operation activities observed were same as those identified in the previous site visits. Industrial sites were found to be closed around 7:00pm.
08 Feb., 2013	No specific noisy operations at the industrial sites.
22 Feb., 2013	Operation activities observed were same as those identified in the previous site visits. Site visit was conducted during night-time (23:00 on 22 Feb., 2013 to 03:00 on the following day). All identified industrial sites were found to be closed and there was no night-time operation at these industrial sites.
15 Apr., 2013	Operation activities observed were same as those identified in the previous site visits. Industrial sites were found to be closed around 7:00pm.
24 Apr., 2013	Operation activities observed were same as those identified in the previous site visits.
06 May, 2013	Operation activities observed were same as those identified in the previous site visits.
31 May, 2013	Site visit was conducted during night-time (23:00 on 31 May, 2013). The identified industrial sites were found to be closed and there was no night-time operation at the industrial sites.
18 Oct., 2013	Operation activities observed were same as those identified in the previous site visits. Industrial sites were found to be closed around 7:00pm.
24 Oct., 2013	Operation activities observed were same as those identified in the previous site visits.
26 Feb., 2014	Operation activities observed were same as those identified in the previous site visits. Industrial sites were found to be closed around 7:00pm.
04 Aug., 2014	Operation activities observed were same as those identified in the previous site visits.
26 Sep., 2014	Operation activities observed were same as those identified in the previous site visits. Industrial sites were found to be closed around 7:00pm.
17 Apr., 2015	Operation activities observed were same as those identified in the previous site visits.
07 Jan., 2019	S9 no longer existed while other Operation activities observed were same as those identified in the previous site visits
15 Jan., 2019	Operation activities observed were same as those identified in the previous site visits.
22 Jan., 2019	Operation activities observed were same as those identified in the previous site visits.
16 Jul., 2019	Operation activities observed were same as those identified in the previous site visits.

Date	Observation/ Remark
21 Aug., 2019	Operation activities observed were same as those identified in the previous site visits.
27 Aug., 2019	Operation activities observed were same as those identified in the previous site visits.
26 Mar., 2020	Operation activities observed were same as those identified in the previous site visits.
11 May, 2021	Operation activities observed were same as those identified in the previous site visits.
16 Jun., 2021	Operation activities observed were same as those identified in the previous site visits.
09 Jul., 2021	Operation activities observed were same as those identified in the previous site visits. Open storage sites were found to be closed and no night-time operation.
8 Aug., 2022	Operation activities observed were same as those identified in the previous site visits.
26 Sep., 2023	No particular noisy operation at the open storage sites. Operation activities observed were same as those identified in the previous site visits.
3 Sep., 2024	No particular noisy operation at the open storage sites. Operation activities observed were same as those identified in the previous site visit.

Photographs of Identified Industrial Noise Sources for Industrial Noise Impact Assessment	
	
S1-1 and S1-2	**S2-1 and S2-2**
	
S3	**S4**
	
S6	**S7**

	
S8	**S9**
	
S10-1 and S10-2	

Appendix 4–2

Calculation of Fixed Noise Sources

Appedix 4-2A Fixed Noise Sources and Noise Strength Adopted in Fixed Noise Impact Assessment

Noise Source	Description *	Observed Activities/ Equipment *	Max. No. of Equipment Observed *	Measured Noise Ledvel, dB(A)	Measurement Distance, m	Distance correction, dB(A)	SWL, dB(A)	Remark
S1-1	Fan Keung Kee (sheltered warehouse)	Operating noise of the workshop	1	66	10	28	**94**	*
S1-2	Fan Keung Kee (open storage).	Loading and unloading using forklift	1	69	5	22	**91**	*
S2-1	Fan Keung Kee (for open storage of precast units)	Movement of Lorry	2	73	8	26	**99**	*
S2-2	Fan Keung Kee (for open storage of precast units)	Lifting of container by a mobile crane	1	69	10	28	**97**	*
S10-1	Totally enclosed godown	Loading and unloading using forklift	2	63	10	28	**91**	*
S10-2	Totally enclosed godown	Movement of Lorry	3	74	7	25	**99**	*
S3	Open storage site for container offices	Loading and Unloading of container office by lorry	1	57	93	47	**104**	**
S4	Open storage site for storage of scrap metals	Operation and movement of machine within the storage site	1	57	34	39	**96**	**
S6	Storage area for construction materials	Loading and unloading using forklift	1	55	29	37	**93**	**
S7	Open storage for vehicles	Movement of Vehicles	1	53	81	46	**99**	**
S8	A totally enclosed godown	Uploading/ unloading using a lorry at the entrance of the godown	1	56	81	46	**102**	**

Remark:

Please refer to Figure 4-2 for the location of fixed noise sources.

* Reported noise measurement and calculated Sound Power Level (SWL) for noise sources S1-1, S2-1, S2-2, S2-3, S10-1, and S10-2 as per the submitted EA Report under the Planning Application No. A/YL-MP/6 for the Application Site, which are reproduced from the approved EIA report of "Proposed Low-rise and Low-density Residential Development at Various Lots and their Adjoining Government Land in D.D. 104, East of Kam Pok Road, Mai Po, Yuen Long. N.T." (AEIAR-205/2017).

** Reported noise measurement and calculated Sound Power Level for noise sources S3 to S9, which are directly reproduced from the submitted EA report (R2838 V3.F) under the previous approved planning application no. A/YL-MP/205 for the Application Site.

With regards to the above, noise measurement (30-min.) was conducted near the identified industrial site during its operation. Sound Power Level (SWL) of the identified industrial noise source was determined based on the site measurement and general acoustic principal, which are also used for the noise calculation. The measurement was taken using Brüel & Kjaer (B&K) Precision Integration Sound Level Meter Type 2250, which complies with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1). Noise measurement was conducted during operation of the industrial noise source and the noise source had no particular tonality, impulsiveness, or intermittency identified. The weather conditions were good with calm wind condition during measurement, which satisfies the required criteria. The equipment was properly calibrated immediately prior to and following each measurement by a B&K Sound Level Calibrator Type 4321. The noise levels before and after measurement agrees to within 1.0dB.

Appendix 4-2B - Noise Impact Assessment for Proposed Scheme Due to Fixed Noise Sources (Day-time)

NSR	Noise Source ID	Industrial Activities	Sound Power Level (SWL), dB(A) #	No. of PMEs/ Unit #	Total SWL, dB(A) # (A)	Horizontal Distance from Source to Receiver, m	Dist. Corr., dB(A) (B)	Façade Corr. dB(A) (C)	Calculated Noise level, dB(A) = A + B + C	Noise Criteria	Compliance
Ni-02	S1-1	Operating noise of the workshop	94	1	94	318	-58	3	**39**	60	Yes
	S1-2	Loading and unloading using forklift	91	1	91	318	-58	3	**36**	60	Yes
	S2-1	Movement of Lorry	99	2	102	318	-58	3	**47**	60	Yes
	S2-2	Lifting of container by a mobile crane	97	1	97	318	-58	3	**42**	60	Yes
	S3	Loading and Unloading of container office by lorry	104	1	104	293	-57	3	**50**	60	Yes
	S10-1	Loading and unloading using forklift	91	2	94	248	-56	3	**41**	60	Yes
	S10-2	Movement of Lorry	99	3	104	248	-56	3	**51**	60	Yes
								Cumulative Total @:	**55**	60	**Yes**

The above noise assessment has been based on 300m radius. Only those noise sources that are within 300m radius from the respective NSR are considered in the noise calculation. Please refer to Figure 3-5 for the NSR locations.

The above noise calculation was based on the 1/F level at the residential buildings in order to represent the worst case scenario. There are existing village houses located between the Subject Site and the fixed noise sources, no particular noise shielding effect was considered in the above noise calculation.

Sound Power Level and no. of equipment are extracted from Previous EA Report. Please refer to Annex 4-2A.

@ The cumulative noise level at the receiver point due to simultaneous operation at all the concerned industrial sites. Calculated based on general acoustic principle, and the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respecitve noise level at the recevier due to individual noise source.

Appendix 4-2B - Noise Impact Assessment for Proposed Scheme Due to Fixed Noise Sources (Day-time)

NSR	Noise Source ID	Industrial Activities	Sound Power Level (SWL), dB(A) #	No. of PMEs/ Unit #	Total SWL, dB(A) # (A)	Horizontal Distance from Source to Receiver, m	Dist. Corr., dB(A) (B)	Façade Corr. dB(A) (C)	Calculated Noise level, dB(A) = A + B + C	Noise Criteria	Compliance
Ni-03	S3	Loading and Unloading of container office by lorry	104	1	104	304	-58	3	**49**	60	Yes
	S4	Operation and movement of machine within the storage site	96	1	96	316	-58	3	**41**	60	Yes
	S10-1	Loading and unloading using forklift	91	2	94	303	-58	3	**39**	60	Yes
	S10-2	Movement of Lorry	99	3	104	303	-58	3	**49**	60	Yes
								Cumulative Total @:	**52**	60	**Yes**

The above noise assessment has been based on 300m radius. Only those noise sources that are within 300m radius from the respective NSR are considered in the noise calculation. Please refer to Figure 3-5 for the NSR locations.

The above noise calculation was based on the 1/F level at the residential buildings in order to represent the worst case scenario. There are existing village houses located between the Subject Site and the fixed noise sources, no particular noise shielding effect was considered in the above noise calculation.

Sound Power Level and no. of equipment are extracted from Previous EA Report. Please refer to Annex 4-2A.

@ The cumulative noise level at the receiver point due to simultaneous operation at all the concerned industrial sites. Calculated based on general acoustic principle, and the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respecitve noise level at the recevier due to individual noise source.

Appendix 4-2B - Noise Impact Assessment for Proposed Scheme Due to Fixed Noise Sources (Day-time)

NSR	Noise Source ID	Industrial Activities	Sound Power Level (SWL), dB(A) #	No. of PMEs/ Unit #	Total SWL, dB(A) # (A)	Horizontal Distance from Source to Receiver, m	Dist. Corr., dB(A) (B)	Façade Corr. dB(A) (C)	Calculated Noise level, dB(A) = A + B + C	Noise Criteria	Compliance
Ni-04	S3	Loading and Unloading of container office by lorry	104	1	104	299	-57	3	**50**	60	Yes
	S4	Operation and movement of machine within the storage site	96	1	96	274	-57	3	**42**	60	Yes
	S6	Loading and unloading using forklift	93	1	93	278	-57	3	**39**	60	Yes
	S7	Movement of Vehicles	99	1	99	277	-57	3	**45**	60	Yes
								Cumulative Total @:	**52**	60	**Yes**

The above noise assessment has been based on 300m radius. Only those noise sources that are within 300m radius from the respective NSR are considered in the noise calculation. Please refer to Figure 3-5 for the NSR locations.

The above noise calculation was based on the 1/F level at the residential buildings in order to represent the worst case scenario. There are existing village houses located between the Subject Site and the fixed noise sources, no particular noise shielding effect was considered in the above noise calculation.

Sound Power Level and no. of equipment are extracted from Previous EA Report. Please refer to Annex 4-2A.

@ The cumulative noise level at the receiver point due to simultaneous operation at all the concerned industrial sites. Calculated based on general acoustic principle, and the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respecitve noise level at the recevier due to individual noise source.

Appendix 4-2B - Noise Impact Assessment for Proposed Scheme Due to Fixed Noise Sources (Day-time)

NSR	Noise Source ID	Industrial Activities	Sound Power Level (SWL), dB(A) #	No. of PMEs/ Unit #	Total SWL, dB(A) # (A)	Horizontal Distance from Source to Receiver, m	Dist. Corr., dB(A) (B)	Façade Corr. dB(A) (C)	Calculated Noise level, dB(A) = A + B + C	Noise Criteria	Compliance
Ni-05	S4	Operation and movement of machine within the storage site	96	1	96	282	-57	3	**42**	60	Yes
	S6	Loading and unloading using forklift	93	1	93	259	-56	3	**40**	60	Yes
	S7	Movement of Vehicles	99	1	99	237	-55	3	**47**	60	Yes
	S8	Uploading/ unloading using a lorry at the entrance of the godown	102	1	102	293	-57	3	**48**	60	Yes
								Cumulative Total @:	**51**	60	**Yes**

The above noise assessment has been based on 300m radius. Only those noise sources that are within 300m radius from the respective NSR are considered in the noise calculation. Please refer to Figure 3-5 for the NSR locations.

The above noise calculation was based on the 1/F level at the residential buildings in order to represent the worst case scenario. There are existing village houses located between the Subject Site and the fixed noise sources, no particular noise shielding effect was considered in the above noise calculation.

Sound Power Level and no. of equipment are extracted from Previous EA Report. Please refer to Annex 4-2A.

@ The cumulative noise level at the receiver point due to simultaneous operation at all the concerned industrial sites. Calculated based on general acoustic principle, and the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respecitve noise level at the recevier due to individual noise source.

Appendix 4-2B - Noise Impact Assessment for Proposed Scheme Due to Fixed Noise Sources (Day-time)

NSR	Noise Source ID	Industrial Activities	Sound Power Level (SWL), dB(A) #	No. of PMEs/ Unit #	Total SWL, dB(A) # (A)	Horizontal Distance from Source to Receiver, m	Dist. Corr., dB(A) (B)	Façade Corr. dB(A) (C)	Calculated Noise level, dB(A) = A + B + C	Noise Criteria	Compliance
Ni-06	S4	Operation and movement of machine within the storage site	96	1	96	301	-58	3	**41**	60	Yes
	S6	Loading and unloading using forklift	93	1	93	247	-56	3	**40**	60	Yes
	S7	Movement of Vehicles	99	1	99	196	-54	3	**48**	60	Yes
	S8	Uploading/ unloading using a lorry at the entrance of the godown	102	1	102	252	-56	3	**49**	60	Yes
								Cumulative Total @:	**52**	60	**Yes**

The above noise assessment has been based on 300m radius. Only those noise sources that are within 300m radius from the respective NSR are considered in the noise calculation. Please refer to Figure 3-5 for the NSR locations.

The above noise calculation was based on the 1/F level at the residential buildings in order to represent the worst case scenario. There are existing village houses located between the Subject Site and the fixed noise sources, no particular noise shielding effect was considered in the above noise calculation.

Sound Power Level and no. of equipment are extracted from Previous EA Report. Please refer to Annex 4-2A.

@ The cumulative noise level at the receiver point due to simultaneous operation at all the concerned industrial sites. Calculated based on general acoustic principle, and the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respecitve noise level at the recevier due to individual noise source.

Appendix 4-2B - Noise Impact Assessment for Proposed Scheme Due to Fixed Noise Sources (Day-time)

NSR	Noise Source ID	Industrial Activities	Sound Power Level (SWL), dB(A) #	No. of PMEs/ Unit #	Total SWL, dB(A) # (A)	Horizontal Distance from Source to Receiver, m	Dist. Corr., dB(A) (B)	Façade Corr. dB(A) (C)	Calculated Noise level, dB(A) = A + B + C	Noise Criteria	Compliance
Ni-07	S4	Operation and movement of machine within the storage site	96	1	96	330	-58	3	**41**	60	Yes
	S6	Loading and unloading using forklift	93	1	93	250	-56	3	**40**	60	Yes
	S7	Movement of Vehicles	99	1	99	175	-53	3	**49**	60	Yes
	S8	Uploading/ unloading using a lorry at the entrance of the godown	102	1	102	225	-55	3	**50**	60	Yes
								Cumulative Total @:	**53**	60	**Yes**

The above noise assessment has been based on 300m radius. Only those noise sources that are within 300m radius from the respective NSR are considered in the noise calculation. Please refer to Figure 3-5 for the NSR locations.

The above noise calculation was based on the 1/F level at the residential buildings in order to represent the worst case scenario. There are existing village houses located between the Subject Site and the fixed noise sources, no particular noise shielding effect was considered in the above noise calculation.

Sound Power Level and no. of equipment are extracted from Previous EA Report. Please refer to Annex 4-2A.

@ The cumulative noise level at the receiver point due to simultaneous operation at all the concerned industrial sites. Calculated based on general acoustic principle, and the equation = 10 x log ((L1/10)+(L2/10)+(L3/10)…+(Ln/10)); where, L1, L2, L3, Ln are the respecitve noise level at the recevier due to individual noise source.

Appendix 5-1

Historic River Water Quality Monitoring Station Data

River Water Quality Recorded at Fairview Park Nullah Monitoring Station (FVR1)

Parameter	Unit	Year 2023 Fairview Park Nullah FVR1	Year 2022 Fairview Park Nullah FVR1	Year 2021 Fairview Park Nullah FVR1
Dissolved Oxygen	mg/L	6.4 (3.3 - 10.4)	5.4 (3.7 - 11.7)	7.5 (4.4 - 11.0)
pH		7.4 (6.9 - 8.6)	7.4 (7.1 - 8.5)	7.6 (7.2 - 8.4)
Suspended Solids	mg/L	19.0 (1.2 - 83.0)	11.5 (6.8 - 22.0)	29.0 (12.0 - 77.0)
5-Day Biochemical Oxygen Demand	mg/L	10.0 (5.5 - 16.0)	6.9 (3.0 - 13.0)	8.6 (5.2 - 12.0)
Chemical Oxygen Demand	mg/L	29 (23 - 66)	30 (9 - 70)	28 (21 - 44)
Oil & Grease	mg/L	<0.5 (<0.5 - 0.7)	<0.5 (<0.5 - <0.5)	<0.5 (<0.5 - <0.5)
E. coli	counts/ 100 mL	51 000 (5 900 - 1 100 000)	25 146 (2 900 - 120 000)	33 000 (1 700 - 580 000)
Faecal Coliforms	counts/ 100 mL	120 000 (17 000 - 1 400 000)	71 882 (14 000 - 440 000)	120 000 (18 000 - 1 100 000)
Ammonia-Nitrogen	mg/L	1.100 (0.320 - 2.900)	1.450 (0.450 - 2.800)	1.400 (0.610 - 2.900)
Nitrate-Nitrogen	mg/L	0.470 (0.095 - 1.500)	0.760 (0.340 - 1.200)	0.430 (0.230 - 1.000)
Total Kjeldahl Nitrogen	mg/L	3.00 (2.00 - 4.50)	2.40 (0.92 - 4.00)	3.30 (3.20 - 5.40)
Orthophosphate Phosphorus	mg/L	0.260 (0.130 - 0.470)	0.275 (0.095 - 0.530)	0.350 (0.220 - 0.590)
Total Phosphorus	mg/L	0.55 (0.35 - 0.71)	0.45 (0.12 - 0.73)	0.60 (0.44 - 0.92)
Sulphide	mg/L	<0.02 (<0.02 - 0.04)	<0.02 (<0.02 - 0.04)	0.02 (<0.02 - 0.04)
Aluminium	µg/L	<50 (<50 - <50)	<50 (<50 - <50)	<50 (<50 - <50)
Cadmium	µg/L	<0.1 (<0.1 - <0.1)	<0.1 (<0.1 - <0.1)	<0.1 (<0.1 - <0.1)
Chromium	µg/L	<1 (<1 - 1)	<1 (<1 - 1)	<1 (<1 - 2)
Copper	µg/L	2 (<1 - 2)	2 (<1 - 2)	2 (<1 - 3)
Lead	µg/L	<1 (<1 - <1)	<1 (<1 - <1)	<1 (<1 - <1)
Zinc	µg/L	11 (<10 - 20)	10 (<10 - 20)	<10 (<10 - 20)
Flow	m^3/s	NM	NM	NM

Remark: Above values are directly extracted from River Water Quality in Hng Kong (varies years), published by EPD