Annex D

Environmental Assessment

ARUP

Section 12A Application for Amendment to the Approved Kam Tin South Outline Zoning Plan No. S/YL-KTS/15, to rezone the Application Site from "Comprehensive Development Area" to "Residential (Group A)" in Lot 2160 RP (Part) in D.D. 106, and Adjoining Government Land, Kam Sheung Road, Kam Tin, Yuen Long

Environmental Assessment
Issue 2 | October 2026

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 309160

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Executive Summary

This Environmental Assessment (EA) was prepared in support of the Planning Application under Section 12A of the Town Planning Ordinance (TPO) for proposed private residential development at Lot 2160 RP (Part) in D.D.106 and Adjoining Government Land, Kam Sheung Road, Kam Tin, Yuen Long, New Territories. The total area of the Application Site (Kam Sheung Road Site / Application Site) is about 7,166m^2.

Application Site is surrounded by Genuine Court to the north, Kam Sheung Road to the east, Tung Wui Road to the south and Kam Sheung Road Station to the west. Road traffic noise assessment for the planned NSRs has estimated that a total number of 135 flats will be exposed to noise levels in excess of the 70 dB(A) criterion under the base scenario (i.e. without mitigation). The maximum noise level is 77.4 dB(A) and the overall noise compliance rate is 66.3%. Various forms of noise mitigation measures have therefore been investigated. In order to alleviate potential road traffic noise impact, acoustic window (baffle type) and enhanced acoustic balcony (baffle type) are recommended to mitigate the affected residential units. With this mitigation measures in place, a 100% noise compliance rate could be achieved.

Tuen Ma Line (TML) is running on a viaduct at about to the west of the Application Site. Rail noise assessment indicates that the proposed residential development would comply with the relevant noise standards as stipulated in the HKPSG and hence adverse rail noise impact on planned noise sensitive receivers are not anticipated.

No major fixed noise sources are identified in the vicinity of Application Site except for the Kam Sheung Road Station. With reference to the approved EIA for Northern Link (AIEAR-259/2024), the predicted noise level at all representative NSRs within the proposed development would comply with the respective noise criteria and hence no mitigation measures are required.

The current scheme has allowed for sufficient setback distances from the nearby roads to meet the minimum requirement as stipulated in HKPSG. No existing chimney is identified within 500m of the study area. Hence, no adverse air quality impact on the proposed development is anticipated.

A preliminary land contamination site appraisal through desktop research and site survey has been conducted. Results showed that land contamination is not anticipated in the Application Site.

Waste management implications due to construction and operational phases are not anticipated provided good practices are in place.

Potential water pollution sources have been identified and mitigation measures have been recommended to mitigate any potential water quality impacts during the construction phase. With the implementation of good site practices and mitigation measures, adverse water quality impacts are not anticipated. Operational impacts associated with runoff and sewage from the development would be insignificant with proper management practices in place. The proposed development will be properly sewered and adverse water quality impact is not anticipated.

It is concluded that there are no adverse environmental impacts on the Application Site at Lot 2160 RP (Part) in D.D.106 and Adjoining Government Land, Kam Sheung Road, Kam Tin, Yuen Long, New Territories for the Application under Section 12A of the TPO.

1. Introduction

1.1 Background

1.1.1 This Environmental Assessment (EA) was prepared in support of the Planning Application under Section 12A of the Town Planning Ordinance (Cap. 131) for the Amendment of Plan for Proposed Residential Development at Lot 2160 RP (Part) in D.D. 106, and adjoining Government Land in Kam Sheung Road, Kam Tin, Yuen Long, New Territories (the Kam Sheung Road Site / Application Site).

1.1.2 The Applicant proposes amendment to the Approved Kam Tin South Outline Zoning Plan No. S/YL-KTS/15 (the OZP), i.e. to rezone the Application Site from "Comprehensive Development Area" ("CDA") zone to "Residential (Group A)" ("R(A)"), with a maximum PR of 3, a maximum BH of 69mPD to facilitate the proposed residential development at the Application Site.

1.1.3 The Application Site, with an area of about 7,166m^2, is located to the northwest of Tung Wui Road and to the west of the Kam Wui Road. Currently, the Application Site is occupied by a temporary transitional housing development, referred to as "The NAScenT".

1.2 Objective of the Report

1.2.1 This EA is conducted to evaluate the potential environmental impacts on the proposed development with respect to the guidance for environmental considerations provided in Chapter 9 – Environment of the Hong Kong Planning Standards & Guidelines (HKPSG). The major potential environmental impacts on the Application Site include:

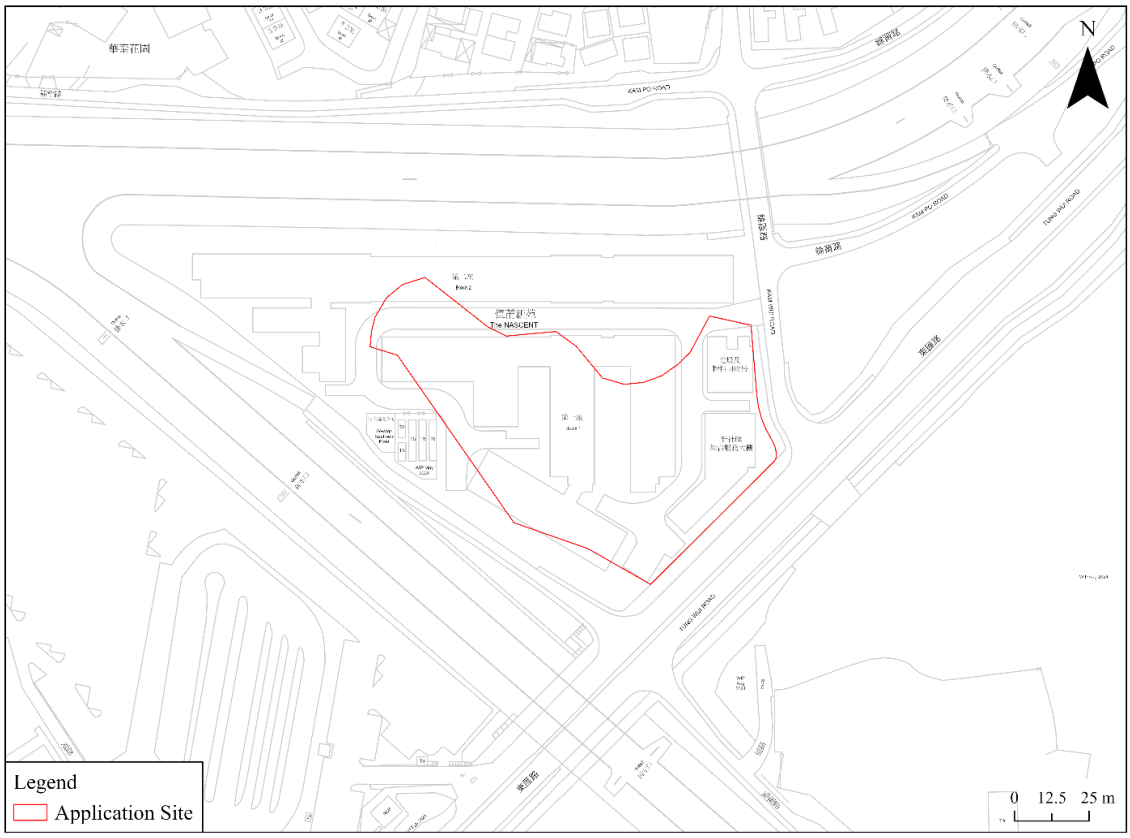
- traffic noise impact from the nearby road network;
- rail noise impact from nearby railway operations;
- fixed noise impact from nearby fixed noise sources; and
- air quality impact due to nearby road network and chimneys.

2. Site Location and Building Design

2.1 Site Location and Description

2.1.1 Application Site is currently occupied as transitional housing, named as The NAScenT. It is surrounded by Genuine Court to the north, Kam Sheung Road to the east, Tung Wui Road to the south and Kam Sheung Road Station to the west. The location of Application Site is illustrated in **Figure 2.1**.

Figure 2.1: Site Location



2.1.2 In accordance with the Approved Kam Tin South Outline Zoning Plan No. S/YL-KTS/15, Application Site is currently zoned as "Comprehensive Development Area" ("CDA"). The areas in the vicinity are mainly zoned as "Residential (Group A)", "Residential (Group D)", "Village Type Development" ("V"), "Other Specific Uses" ("OU") and "Agriculture" ("AGR").

2.2 Building and Site Design

2.2.1 The proposed development at Application Site consists of two 17 storeys (excluding basement) residential blocks with a total number of 416 residential units. A new Sewage Treatment Plant (STP) is planned at the north-western portion of Application Site for supporting the proposed development. The tentative population intake years of the proposed development at Application Site is Year 2035.

2.2.2 The latest indicative scheme, typical floor plans and schematic sections of the proposed development are illustrated in **Appendix 2.1**. The internal layout plans are yet to be available at this planning application stage. The key development parameters for Application Site are given in **Table 2.1**.

Table 2.1: Key domestic development parameters of Application Site

Development Parameters	Indicative Scheme
Application Site	About 7,166 m^2
Building Height (Main Roof)	63.7mPD
No. of Residential Towers	2
No. of Domestic Storeys (excluding basement)	16
First NSR level (mPD)	14.5
Total No. of Residential Units	416
Anticipated Total Population	1,044
Tentative Completion Intake Year	2035

2.3 EIAO Implication

2.3.1 The proposed Application Site is a residential development with site area less than 50ha, and hence it does not fall into any Schedule 3 of EIAO. The Application Site is currently served by the existing Kam Wui Road which will be widened for large vehicle manoeuvring in/out the proposed development. As confirmed by the Project Traffic Engineer, the widened Kam Wui Road will be classified as Local Distributor (LD). Therefore, it does not fall into the category of Item A.1 of Schedule 2 of EIAO and does not constitute a DP under EIAO. Besides, all works of the proposed development will not encroach in an existing or gazetted proposed country park or special area, a conservation area, an existing or gazetted proposed marine park or marine reserve, a site of cultural heritage, and a site of special scientific interest. Therefore, the proposed works for the site do not fall into the category of Item Q.1 of Schedule 2 of EIAO and do not constitute a DP under the EIAO.

3. Site Inspection

3.1.1 Site visits were carried out in July 2025 and January 2026. Photographs taken at the site and the neighbouring areas are given in **Photo 3.1** to **Photo 3.5** below.

3.1.2 The western part of Application Site (**Photo 3.1**) is currently occupied as transitional housing named "The NAScenT", while the eastern part is occupied as vehicle repairing workshop (**Photo 3.2**). The site is mainly bounded by Tung Wui Road (**Photo 3.3**) to the south and Kam Tin River (**Photo 3.4**) to the north and to the west. Carpark and bus terminus are located to the west of Application Site, separated by the tributary of Kam Tin River (**Photo 3.5**), while the construction site for proposed flat and house development is located to the south of Application Site. The site is surrounded by low-rise residential settlement and village houses to the north (i.e. Goodview Court and Genuine Court) and to the further north. Kam Sheung Road Station is located to further west of Application Site.

3.1.3 Based on site observation, the noise climate in the vicinity of the Application Site was dominated by road traffic noise from Tung Wui Road. No other significant noise was perceived at the Site.

Photo 3.1: Application Site ("The NAScenT")	**Photo 3.2: Vehicle repairing workshop**
	
Photo 3.3: Tung Wui Road	**Photo 3.4**: Kam Tin River
	

Photo 3.5: Carpark and bus terminus



4. Road Traffic Noise Impact Assessment

4.1 Concerned Road Sections and Noise Sensitive Receivers

4.1.1 As discussed in Section 3, the noise climate in the vicinity of the Application Site is currently dominated by road traffic noise from Tung Wui Road.

4.1.2 With reference to the HKPSG, Noise Sensitive Receivers (NSRs) shall include residential uses (all domestic premises including temporary housing accommodation), institutional uses (educational institutions including kindergarten, child care centres and all others where unaided voice communication is required), hotels, hostels, offices, places of public worship, courts of law, hospitals, clinics, convalescences, residential care homes for the elderly, amphitheatres, auditoria, libraries, performing arts centres and country parks. Based on the current development plan, the proposed residential blocks within the Application Site are regarded as NSRs.

4.2 Noise Criteria

4.2.1 In accordance with the HKPSG, the maximum permissible hourly road traffic noise levels at the external facades of different uses of NSRs for the proposed development are summarized in **Table 4.1**. These criteria apply to premises relying on opened windows as a primary means for ventilation.

Table 4.1: Summary of noise criteria for road traffic noise

Proposed/Developments Facilities	Noise Sensitive Room with Openable Windows for Ventilation [1]	Uses	Noise Standards for Road Traffic Noise, $L_{10(1\ hour)}$ dB(A)
Residential Block	Residential Units	Domestic	70

Note:

[1] The type of facilities and use of noise sensitive rooms are generally determined with respect to with reference to Table 4.1 of HKPSG, unless otherwise specified. All sensitive rooms which rely on opened windows for ventilation are identified.

4.3 Noise Assessment Points

4.3.1 Noise assessment points for the proposed residential block have been assigned to all openable windows of the NSRs for ventilation. The locations of the selected assessment points are illustrated in **Appendix 4.1**.

4.4 Assessment Methodology

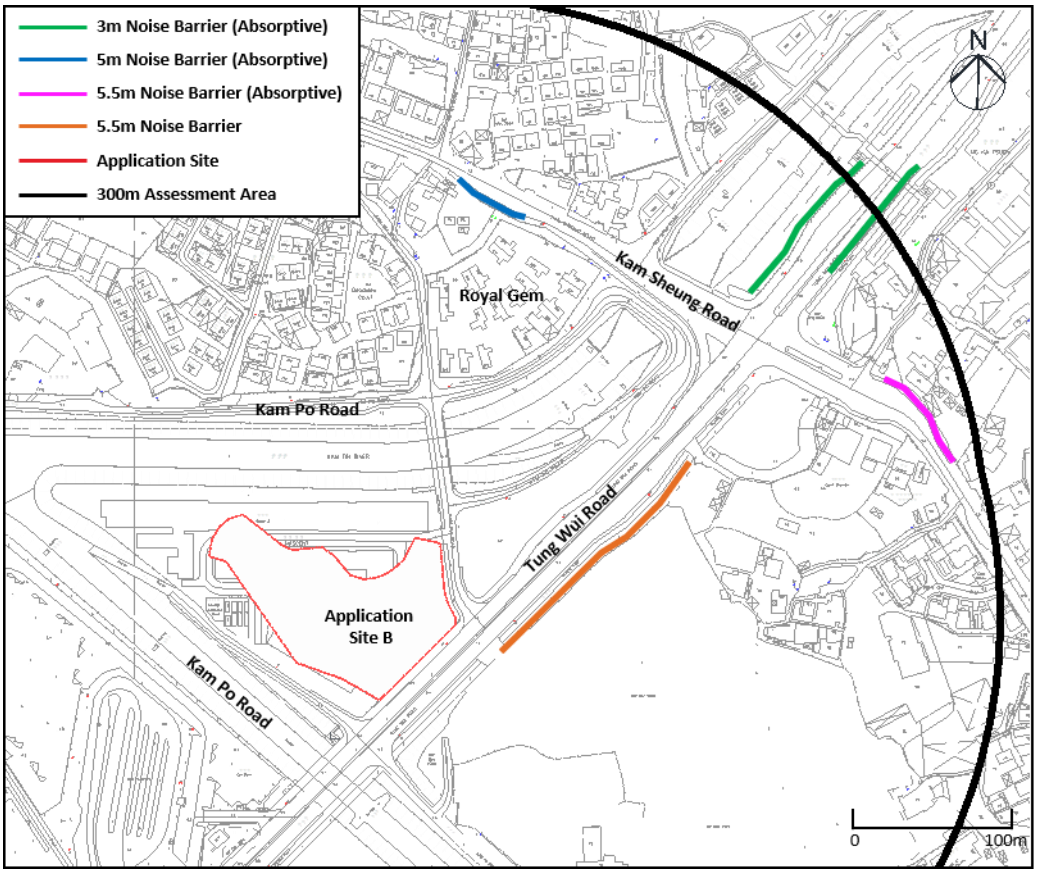
4.4.1 Traffic noise levels at the facades of the selected assessment points have been predicted. The prediction is based on the maximum traffic projection within 15 years upon the population intake of the development and calculation method in accordance with the UK Department of the Transport "Calculation of Road Traffic Noise" (CRTN).

4.5 Existing Noise Mitigation Measures

4.5.1 Based on desktop review, a number of roadside noise barriers have been installed in the vicinity of the Application Site. The measures in vicinity of the Application Site include the following (**Figure 4.1** and details in **Appendix 4.2**):

- A 5m vertical barrier (absorptive) of about 45m in length along a section of Kam Sheung Road;
- A 5.5m vertical barrier (absorptive) of about 55m in length along a section of Kam Sheung Road;
- Two 3m vertical barriers (absorptive) of about 100m and 50m in length respectively along a section of Tung Wui Road; and
- A 5.5m vertical barrier of about 150m in length along a section of Kam Sheung Road.

Figure 4.1: Existing road traffic noise mitigation measures in vicinity of the Application Site



4.5.2 The existing at-source noise mitigation measures as described above have been incorporated into the base case scenario in the assessment.

4.6 Traffic Flow Data for Assessment

4.6.1 As advised by the Traffic Consultant, the maximum traffic flow within 15 years upon population intake of the Proposed Development will occur in Year 2050. Traffic Impact Assessment (TIA) including the methodology on the traffic forecast for the EA has been submitted to Transport Department (TD) for endorsement. Reply from TD is yet to be provided at the time of preparing this report and will be supplemented in later stage. The

traffic consultant had checked and confirmed the validity of the traffic data, which was derived based on the traffic forecast methodology submitted to TD.

4.6.2 The traffic flow data for the major roads surrounding the Application Site have been reviewed and identified PM peak traffic data represented the worst-case scenario. They are presented in **Table 4.2** and **Figure 4.2**. Details are given in **Appendix 4.3**.

Table 4.2: Predicted peak hourly traffic flow on nearby roads

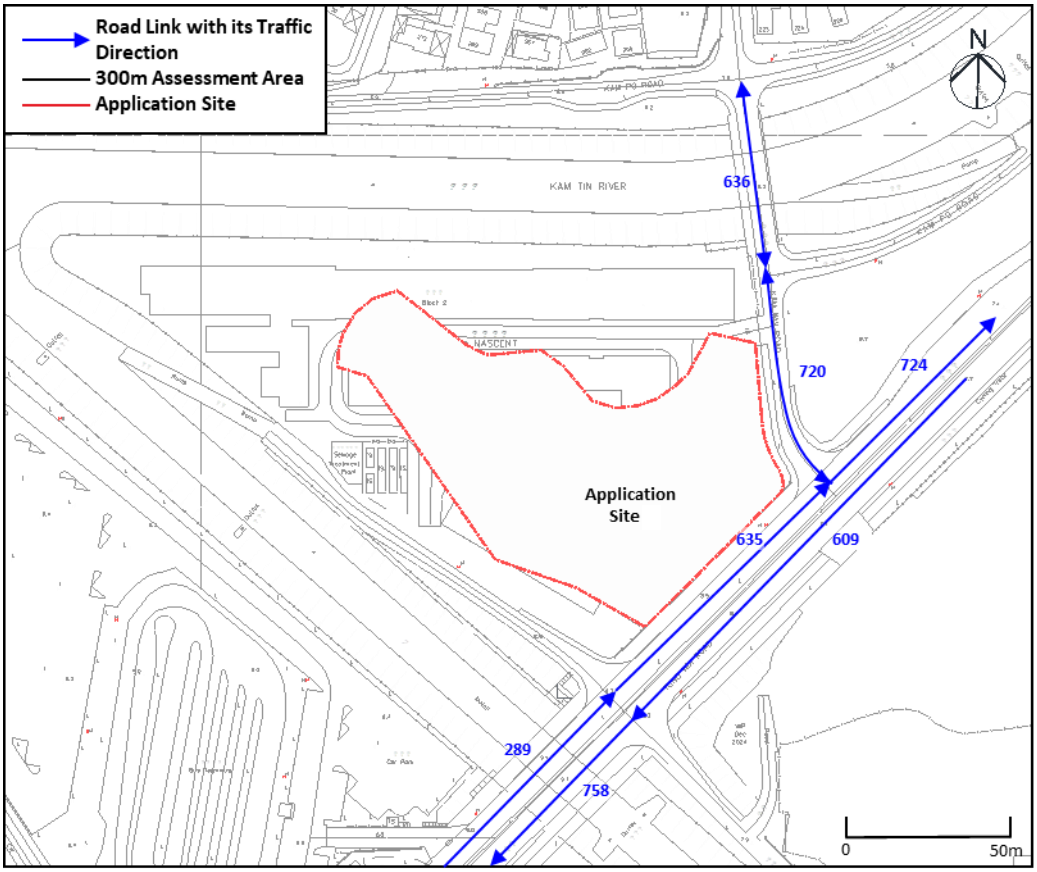
Road ID [1]	Road Description [2]	Speed Limit (km/hr)	Year 2050	
			Traffic Flow (veh/hr)	% of Heavy Vehicles
289	Tung Wui Road (NB)	50	495	48.3
609	Tung Wui Road (SB)	50	412	42.0
635	Tung Wui Road (NB)	50	495	48.3
636	Kam Wui Road	50	14	14.3
720	Kam Wui Road	50	85	23.5
724	Tung Wui Road (NB)	50	479	49.3
758	Tung Wui Road (SB)	50	344	43.3

Note:

[1] Only nearby roads are shown in the table above. Hence, the Road ID is not in sequential order.

[2] NB = North bound, SB = South bound.

Figure 4.2: Roads in the vicinity of Application Site



4.7 Optimized Building Design

4.7.1 Optimized building design and orientation have already been incorporated into the current layout scheme for the base scenario, as described below:

Building Block Design, Layout and Orientation

4.7.2 The current scheme is found to be the optimal option from the perspective of development efficiency, flat production, noise performance, scenery and angle of view, etc.

Building Setback

4.7.3 The Application Site has limited space available for building setback to reduce the noise impact effectively. Nonetheless, the building blocks of Application Site have been deposited with optimised setback distance from major roads (i.e. Tung Wui Road) as far as practicable to minimize the traffic noise impact.

4.8 Assessment Results

4.8.1 With the above optimised design, it is estimated that a total number of 135 flats will be exposed to the noise level in excess of the 70 dB(A) criterion and the overall compliance rate is 66.3%. Results of the road traffic noise assessments for the proposed residential development are summarised in **Table 4.3**. Details are presented in **Appendix 4.4**.

Table 4.3: Road noise assessment results (Base Case Scenario)

Scenario	Total No. of Flats	No. of Flats Exceeding the Noise Criteria	Max. Predicted Noise Levels, dB(A)	Compliance Rate
Base Case	400	135	77.4	66.3%

4.8.2 Results indicate that the predicted exceedances are located on the facades facing directly to Tung Wui Road. The locations of exceedances are shown in **Figures 4.3** and **4.4** below.

Figure 4.3: Location of predicted exceedances in residential block (Tower 1)

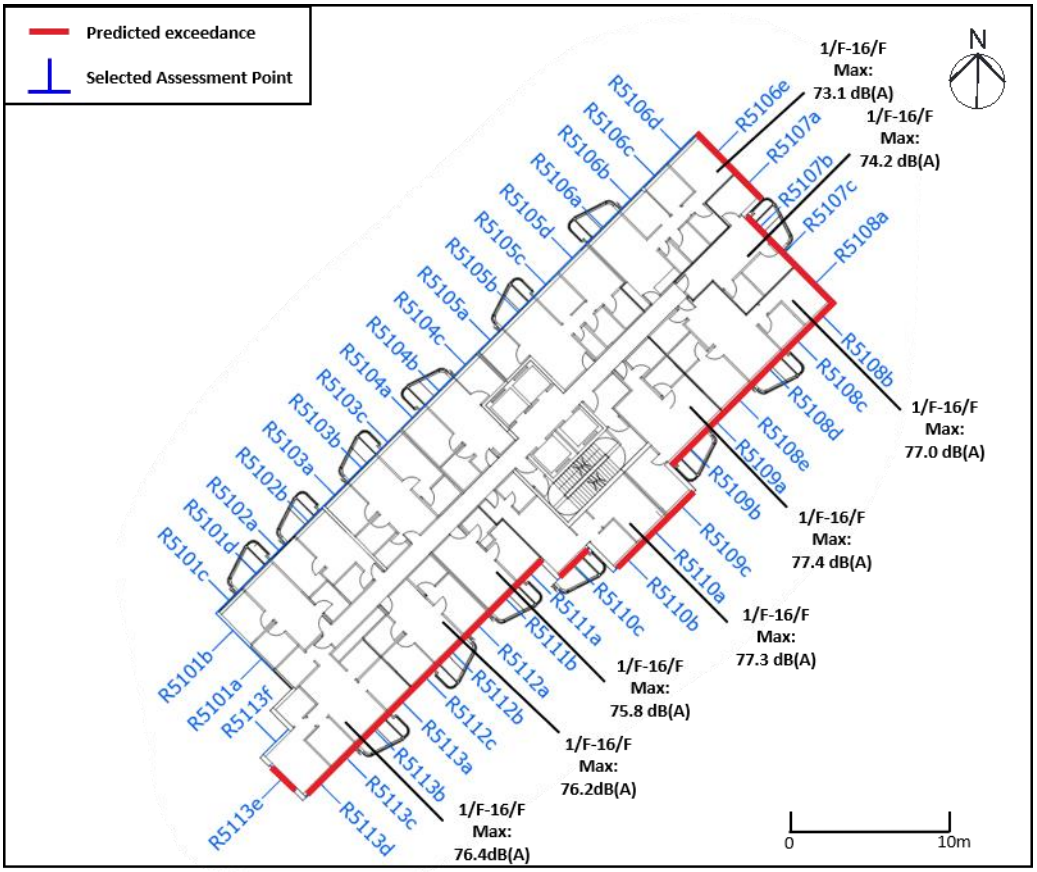
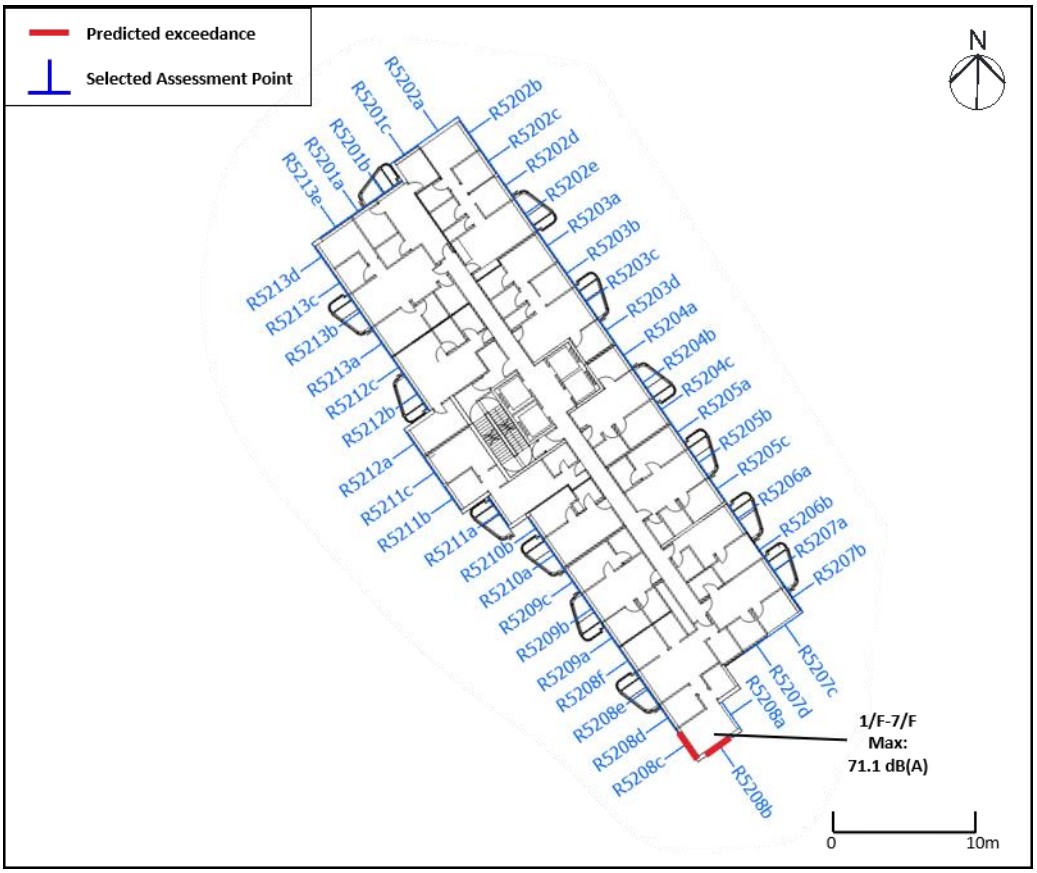


Figure 4.4: Location of predicted exceedances in residential block (Tower 2)



4.9 Noise Mitigation Measures for Residential Block

4.9.1 Optimised building design has been adopted in the current scheme as described in the above sections. Other practicable noise mitigation measures have also been investigated and the findings are discussed as follows:

Acoustic Window Design (Baffle Design)

4.9.2 Based on the assessment results of base case scenario, acoustic window (baffle type) is proposed as mitigation measure. The acoustic window is designed with two layers of window including push open window at outer layer and sliding window at inner layer. The opening and gap between the two layers of window allows sufficient air flow to satisfy ventilation requirement; while at the same time, direct transmitted noise to the room is obstructed by inner slide window and hence noise reduction could be achieved. In order to achieve the intended noise reduction, the sliding window should be behind the opened side-hung window while the fixed glazing should be kept close. Special locking device (e.g. allen key) would be installed to the fixed glazing at the outer layer for keeping them in the above setting. The fixed glazing at the outer layer needs not to be opened for ventilation. The schematic and sectional drawing of the proposed acoustic window (baffle type) is extracted from EPD's Practice Note on Application of Innovative Noise Mitigation Designs in Planning Private Residential Developments against Road Traffic Noise Impact (PN 5/23) and shown in **Figure 4.5**. The locations of the proposed acoustic window (baffle type) are summarised in **Table 4.4** and indicated in **Figure 4.6** and **Figure 4.7**. On referencing to EPD's PN 5/23, noise attenuation by the acoustic window (baffle type) without sound absorptive materials (SAM) and added with SAM are taken as 6 dB(A) and 7.5dB (A) respectively for this assessment considering the proposed acoustic window will be parallel to dominant line source (i.e. Tung Wui Road).

Figure 4.5: Schematic and sectional drawing of acoustic window

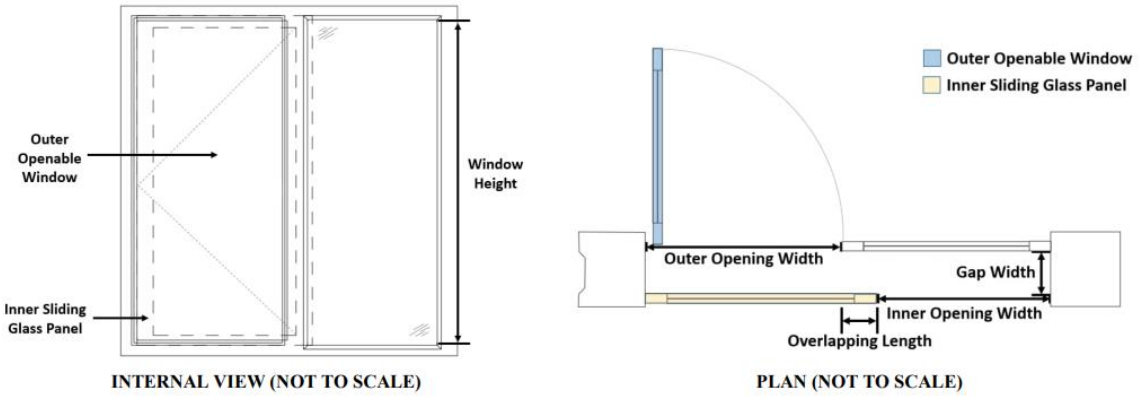


Table 4.4: Proposed locations of acoustic windows as mitigation measure for road traffic noise

Acoustic Window at NSR	Floor Requiring Acoustic Window
R5106e	1/F – 16/F
R5107a	1/F – 16/F
R5107c	1/F – 16/F
R5108a	1/F – 16/F
R5108b	1/F – 16/F
R5108c	1/F – 16/F
R5108e	1/F – 16/F
R5109a	1/F – 16/F

Acoustic Window at NSR	Floor Requiring Acoustic Window
R5109c	1/F – 16/F
R5110a	1/F – 16/F
R5110b	1/F – 16/F
R5111a	1/F – 16/F
R5112a	1/F – 16/F
R5112c	1/F – 16/F
R5113a	1/F – 16/F
R5113c	1/F – 16/F
R5113d	1/F – 16/F
R5113e	1/F – 14/F
R5208b	1/F – 7/F
R5208c	1/F

Figure 4.6: Proposed locations of acoustic window (Tower 1)

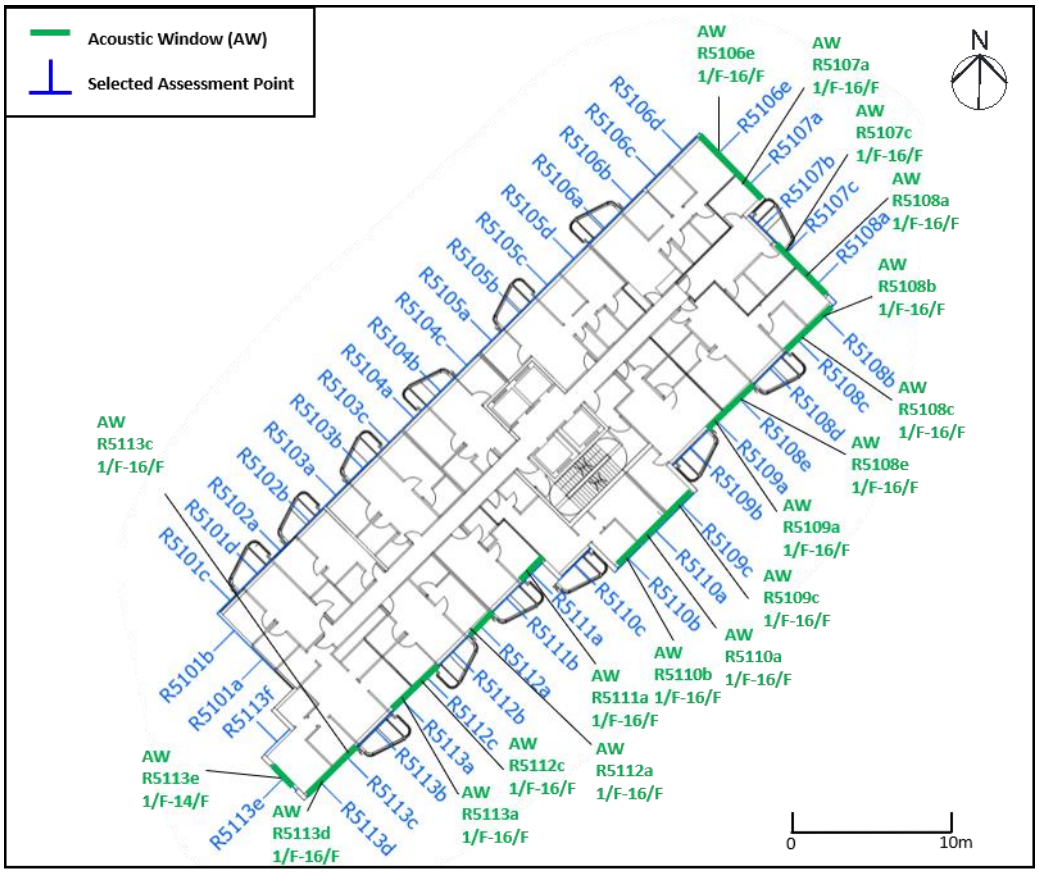
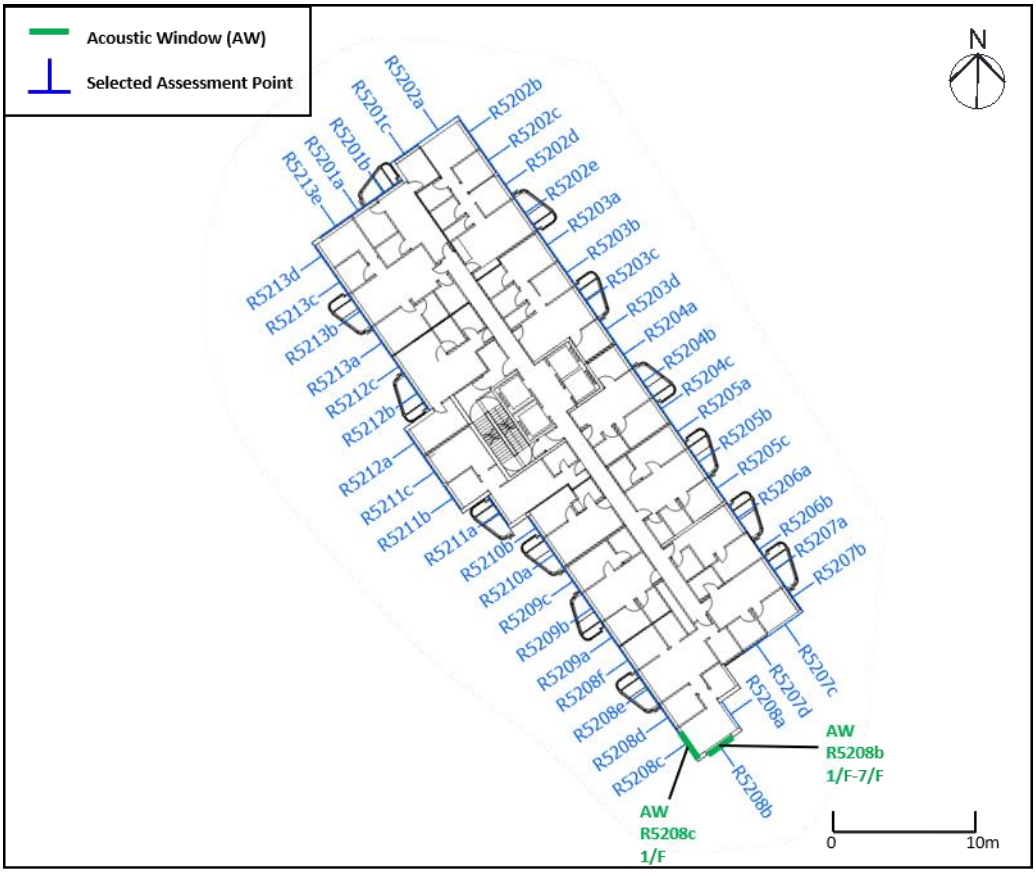


Figure 4.7: Proposed locations of acoustic window (Tower 2)



4.9.3 According to the PN 5/23, while the noise attenuation of acoustic window (baffle type) would vary with room sizes and window opening size, the following ranges of variations would not affect the Relative Noise Reduction (RNR) of acoustic window (baffle type):

- Variations of room size within ±10%;
- Variations of floor-to-ceiling height within ±5%; and
- Variations of window opening size ±5%.

4.9.4 Should there be any variation on the room size, window opening size and configurations of acoustic window such as overlapping length or gap width, justifications with technical documents such as corrections, laboratory testing reports, in-situ measurement reports, etc. should be submitted to EPD for consideration. The principal and set-up of the laboratory and in-situ measurements should be agreed with EPD.

Enhanced Acoustic Balcony Design (Baffle Design)

4.9.5 In the base scenario, the noise screening effect from balcony was not considered. Based on the assessment results of base case scenario, enhanced acoustic balcony (baffle type) is also proposed as a mitigation measure for mitigating the traffic noise impact. Sound absorptive material will be applied on the ceiling and the inner side of the side wall. The enhanced balcony will be provided with an acoustic door. The acoustic door will have a

similar design to that of an acoustic window, which has been commonly adopted as a mitigation measure for road traffic noise impact.

4.9.6 Acoustic door will consist of two layers of doors. The outer layer of door includes push open door/sliding door and fixed glazing window. The inner layer includes a sliding door. Absorptive material will be applied on the frame in between the two layers of doors. The opening and gap between the two layers of doors will allow sufficient air flow to satisfy ventilation requirement, whilst noise transmission to the room will be obstructed by the inner sliding door. The schematic and sectional drawing of the proposed enhanced acoustic balcony (baffle type) is extracted from EPD's PN 5/23 and shown in **Figure 4.8**. The locations of the proposed enhanced acoustic balconies are summarised in **Table 4.5** and indicated in **Figure 4.9**. On reference to EPD's PN 5/23, noise attenuation by the Enhanced Acoustic Balcony (Baffle Type) is taken as 8 dB(A) for this assessment considering the proposed enhanced acoustic balcony will be parallel to dominant line source (i.e. Tung Wui Road and Kam Sheung Road).

Figure 4.8: Schematic and sectional drawing of enhanced acoustic balcony

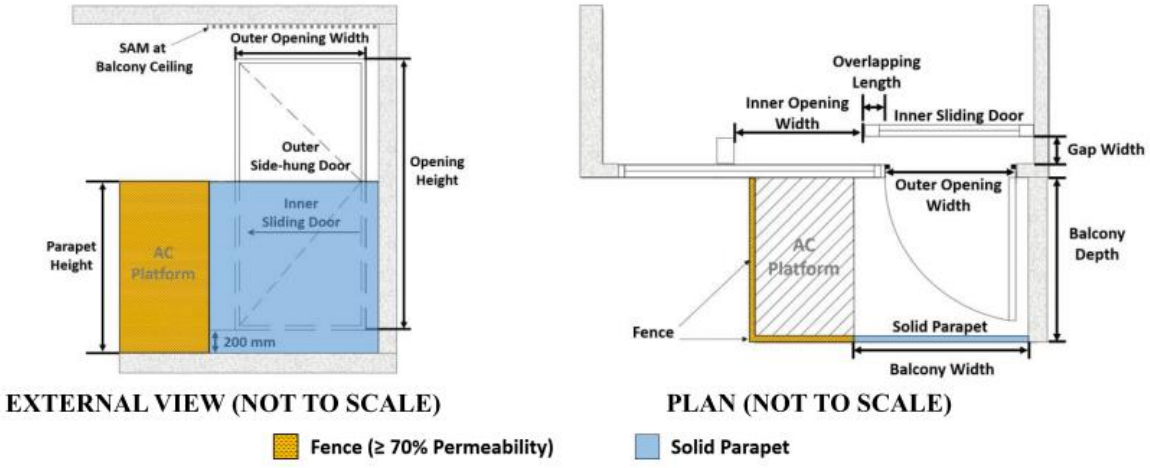
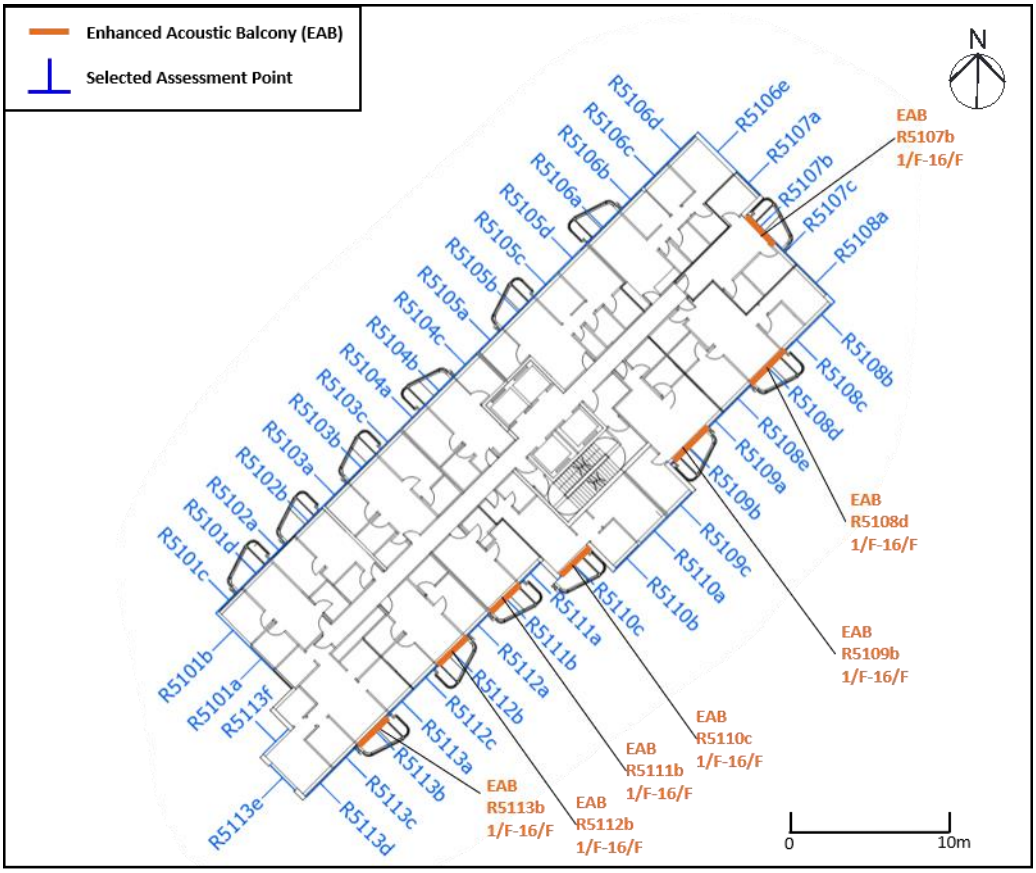


Table 4.5: Proposed locations of enhanced acoustic balcony as mitigation measure for road traffic noise

Enhanced Acoustic Balcony at NSR	Floors Requiring Enhanced Acoustic Balcony
R5107b	1/F – 16/F
R5108d	1/F – 16/F
R5109b	1/F – 16/F
R5110c	1/F – 16/F
R5111b	1/F – 16/F
R5112b	1/F – 16/F
R5113b	1/F – 16/F

Figure 4.9: Proposed locations of enhanced acoustic balcony (Tower 1)



4.10 Assessment Results for Mitigated Scenario

4.10.1 With the provision of the acoustic windows and enhanced acoustic balconies, all residential flats will comply with the criterion of 70 dB(A) and a compliance rate of 100% could be achieved. Therefore, adverse road traffic noise impact is not anticipated. Detailed results are attached in **Appendix 4.5**. A summary of combined mitigation measures recommended in the current scheme is also illustrated in **Figure 4.10** and **Figure 4.11**.

Figure 4.10: Location of proposed mitigation measures for road traffic noise (Tower 1)

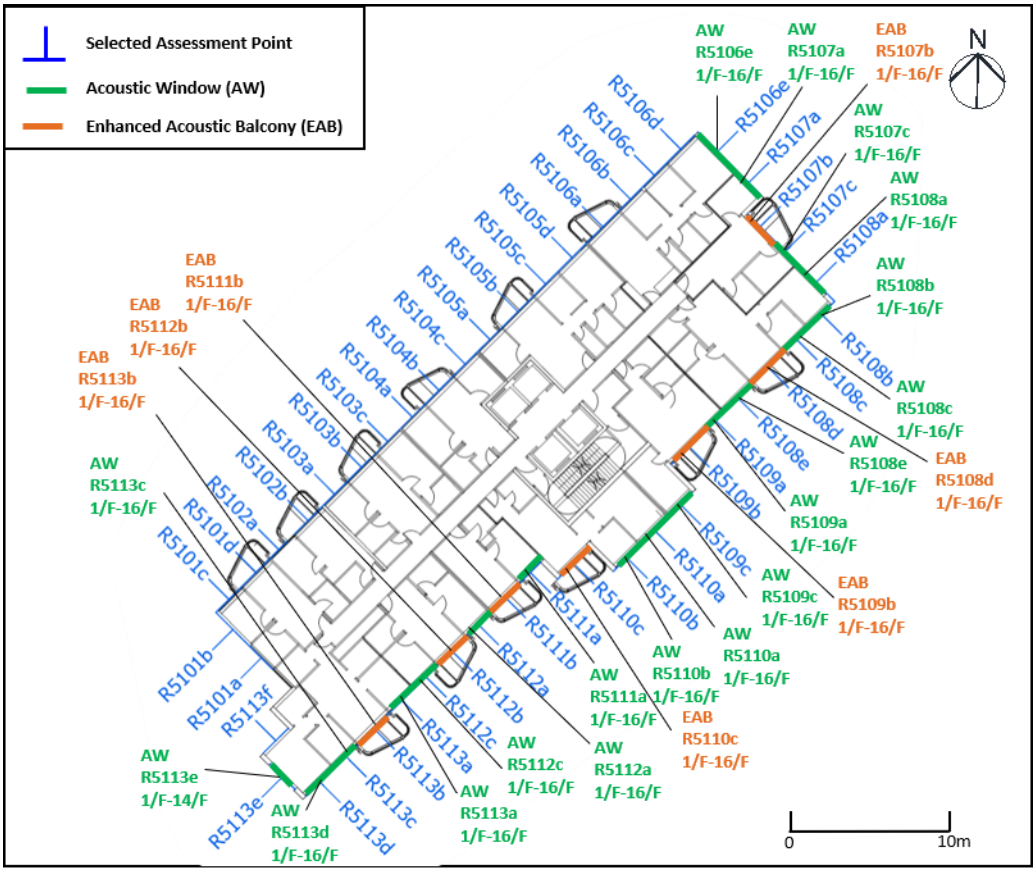
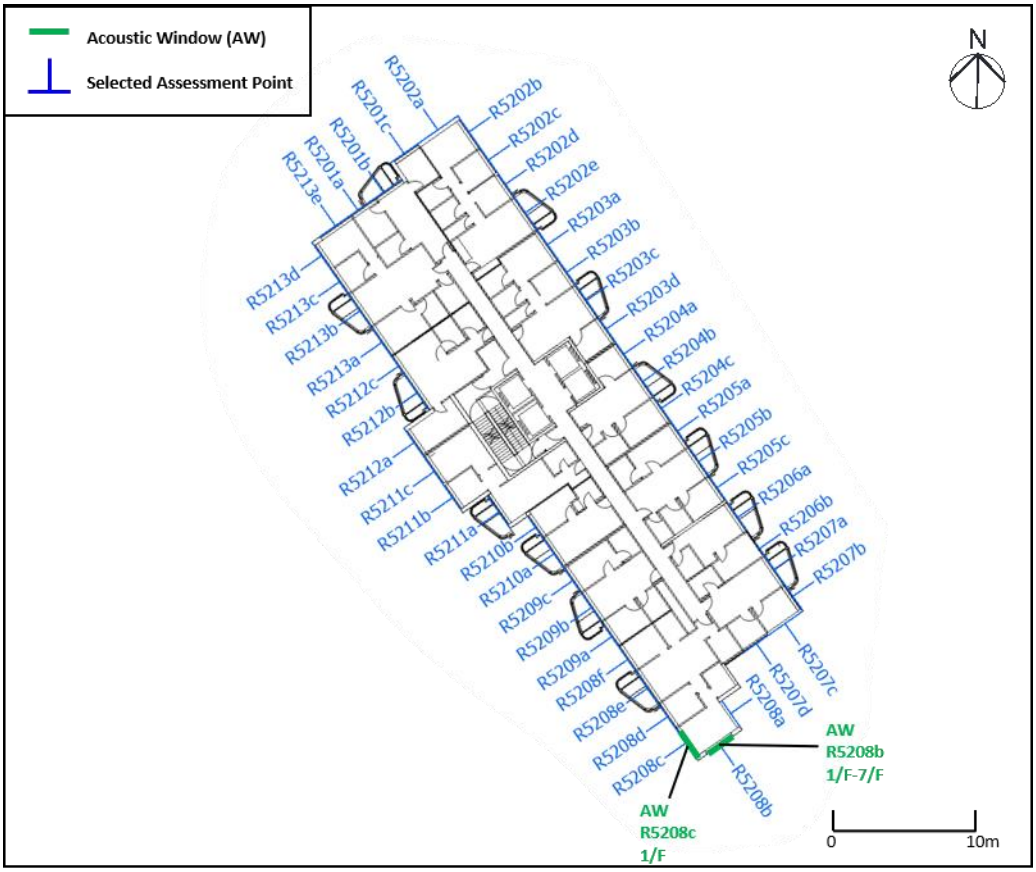


Figure 4.11: Location of proposed mitigation measures for road traffic noise (Tower 2)



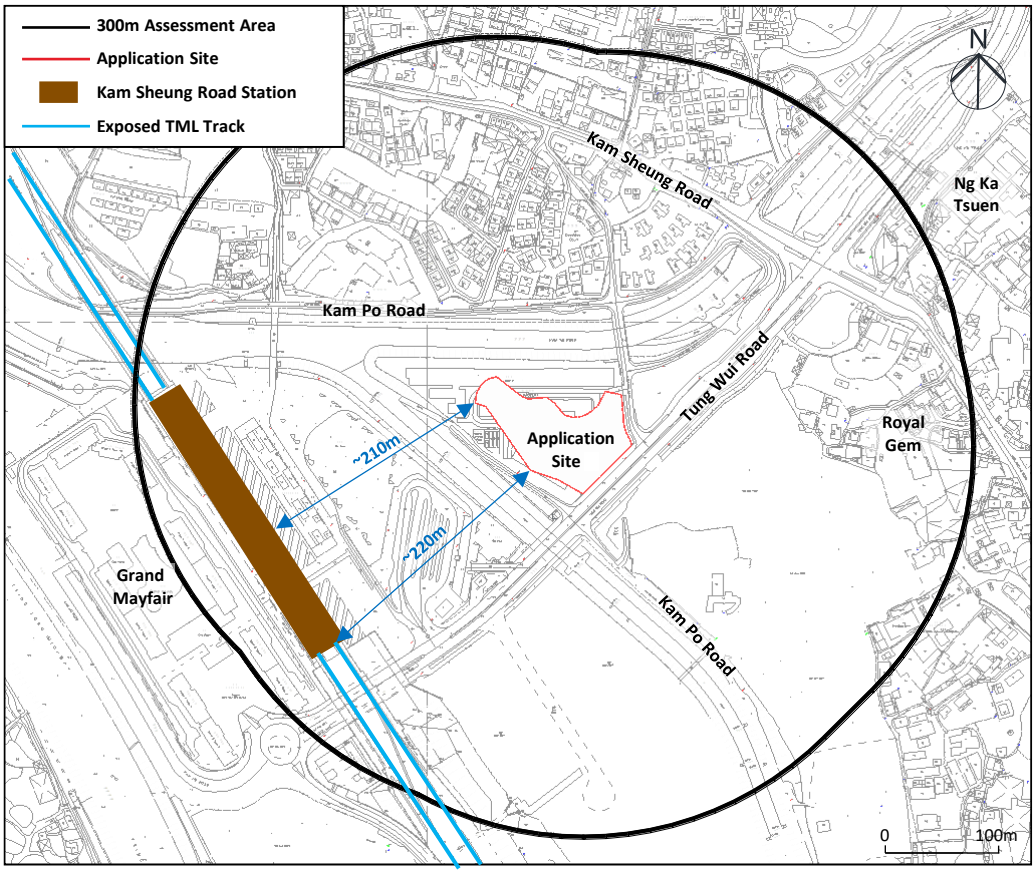
4.10.2 During the detailed design stage, the future developer of the Application Site shall submit a Noise Impact Assessment (NIA) based on the latest building plan(s) under a control mechanism (e.g. land lease condition) to review, exploration, demonstration and implementation of appropriate at-receivers noise mitigation measures to ensure full compliance with the road traffic noise criterion under HKPSG for the operational phase of the proposed development.

5. Rail Noise Assessment

5.1 Concerned Rail Sections

5.1.1 The Tuen Ma Line (TML) is running on viaduct at approximately 220m from Application Site (**Figure 5.1**), which complies with the minimum horizontal separation distance as recommended in the HKPSG. Kam Sheung Road Station is also located at approximately 210m from Application Site.

Figure 5.1: Rail sections within assessment area



5.2 Rail Noise Criteria

5.2.1 Noise planning standards for rail noise have been specified in Table 4.1 of the HKPSG Chapter 9, i.e. $L_{eq\ (24hour)}$ of 65 dB(A) and $L_{max\ (2300\text{-}0700\ hours)}$ of 85 dB(A). Besides, Acceptable Noise Levels (ANLs) are also stipulated in the Technical Memorandum for Assessment of Noise from Places other than Domestic Premises, Public Places or Construction Sites (IND-TM) issued under the Noise Control Ordinance as shown in **Table 5.1**. Rail noise impact is assessed according to the recommendation of the HKPSG, which includes compliance with the relevant requirement of the NCO. These criteria apply to premises relying on opened windows as primary means for ventilation.

Table 5.1: Noise criteria for rail noise assessment

Area Sensitivity Rating	Time Period [1]	Acceptable Noise Levels, $L_{eq\ (30min)}$, dB(A) under IND-TM	Maximum A-weighted SPL, $L_{max\ (2300\text{-}0700hours)}$, dB(A) under HKPSG	24 hours Equivalent SPL, $L_{eq\ (24hour)}$, dB(A) under HKPSG
A	Daytime & Evening	60	85	65
	Night-time	50		
B	Daytime & Evening	65		
	Night-time	55		
C	Daytime & Evening	70		
	Night-time	60		

Note:

[1] Daytime: 0700 to 1900 hours, Evening: 1900 to 2300 hours, Night-time: 2300 to 0700 hours

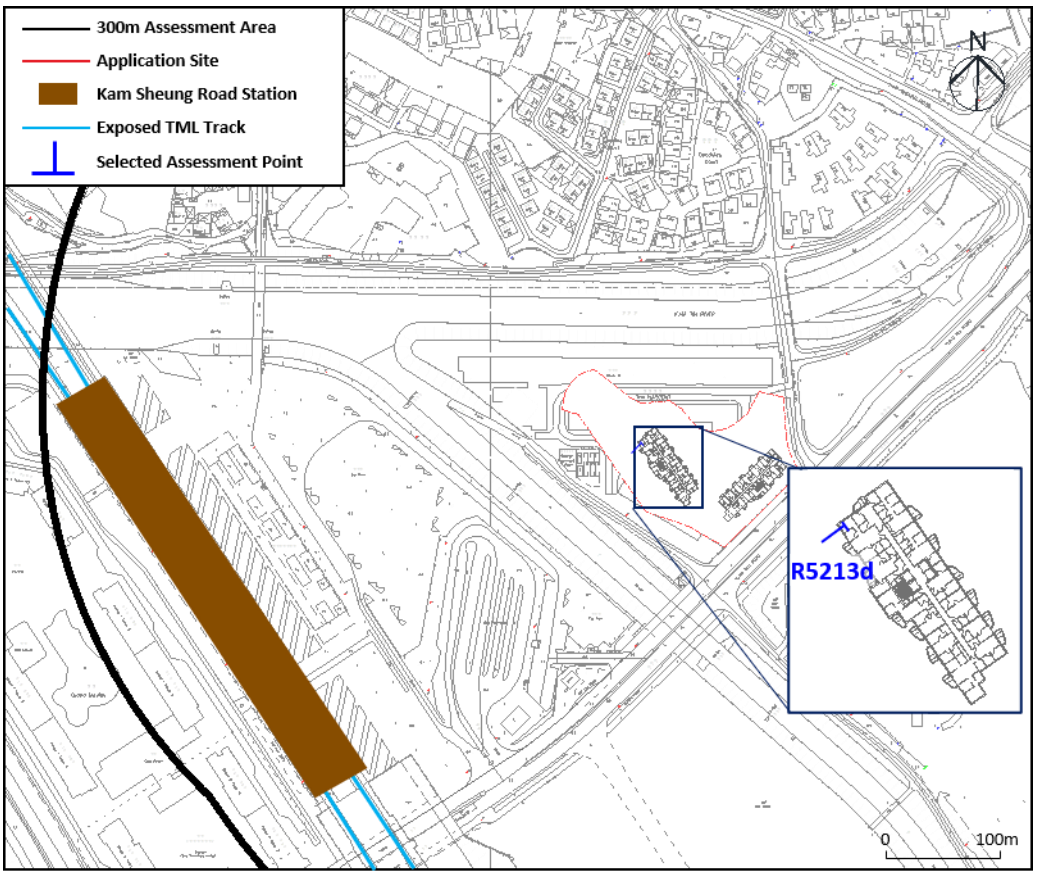
5.2.2 In consideration of the type of area within which the NSRs are located, the future context of the environs should also be taken into account. The Application Site is planned for high rise residential development. The site is surrounded by various high-rise residential developments to the north, to the west and to the east. The types of area (i) rural area, (ii) low density residential area consisting of low-rise or isolated high-rise developments; and (iii) urban area according to IND-TM cannot reflect the future environs of the subject site and are all not applicable. Thus, the whole site shall fall into type (iv) “Area other than those above" according to IND-TM.

5.2.3 No Influencing Factor (IF) under the IND-TM is identified in the assessment area. The NSRs of Application Site are considered not affected by IF and hence an ASR of B is assigned. The Acceptable Noise Level (ANL) for ASR of “B” should be 65 dB(A) for daytime & evening and 55 dB(A) for night-time. The ASR assigned in this report is for assessment purpose only and shall not prejudice the Authority's decision on enforcement based on contemporary conditions.

5.3 Representative Assessment Points

5.3.1 Representative NSR of the proposed development at Application Site has been selected for the assessment. Taking into account the development layout design, representative worst affected NSR at the residential block with line of sight to the rail is selected for the assessment. The location of the selected representative NSR is illustrated in **Figure 5.2**.

Figure 5.2: Representative NSR for rail noise impact assessment



5.4 Assessment Methodology

5.4.1 According to approved EIA for Tuen Mun South Extension (AEIAR-236/2022), the current peak train frequency for TML is 14 trains/30 mins/direction for daytime & evening time, and 10 trains/30 mins/direction for night-time. The 8-cars train is currently in operation for TML. Sound Exposure Level (SEL) of 8-cars train at 130 kph at 25m for down track (to Hung Hom) and up track (to Tuen Mun) are 81.4 dB(A) and 80.7dB(A), respectively. As a conservative approach, SEL of 81.4 dB(A) is adopted for the assessment.

5.4.2 Sound Pressure Levels ($L_{eq(30min)}$) at receivers are predicted based on the SEL at 130kph with the corrections for rail deterioration, distance, angle of view, time, train frequency, air absorption and façade effect applied. The predicted L_{max} at the selected receivers are determined from the L_{max} of 74 dB(A) at 25m for 8-cars train at 130kph at 25m with reference to the approved EIA for Tuen Mun South Extension (AEIAR-236/2022); and the calculation has taken into account of rail deterioration, distance, air absorption and façade effect. The assessment methodology generally follows the UK Department of the Transport "Calculation of Rail Noise" (CRN) and the assumptions adopted for the assessment are detailed in **Appendix 5.1**.

5.5 Assessment Results

5.5.1 The predicted rail noise level ($L_{eq\ (30min)}$) at the selected representative worst affected NSR has been assessed and the results are summarised in **Table 5.2** for daytime & evening (from 0700 to 2300 hours) and **Table 5.3** for night-time (from 2300 to 0700 hours). Detailed calculations are given in **Appendix 5.2**. Results indicate that the predicted noise

levels at the representative worst affected NSRs would comply both the daytime & evening and night-time noise criteria.

Table 5.2: Daytime & evening rail noise impact assessment results – residential block

Representative NSR ID	Proposed ASR	Predicted Noise Level, $L_{eq\ (30min)}$ dB(A) [1]	Daytime & Evening Noise Criterion, dB(A)	Comply [Y/N]
R5213d	B	57	65	Y

Note:

[1] Only the predicted noise levels for the worst floor are presented. Details shall be referred to **Appendix 5.2**.

Table 5.3: Night-time rail noise impact assessment results – residential block

Representative NSR ID	Proposed ASR	Predicted Noise Level, $L_{eq\ (30min)}$ dB(A) [1]	Night-time Noise Criterion, dB(A)	Comply [Y/N]
R5213d	B	55	55	Y

Note:

[1] Only the predicted noise levels for the worst floor are presented. Details shall be referred to **Appendix 5.2**.

5.5.2 According to MTRC's train schedule, the first and last TML train operating from the nearest Kam Sheung Road Station are from 0601 to 0054 hours. The predicted $L_{eq\ (24hour)}$ is therefore calculated based on the assumptions of 16 hours (i.e. 0700 to 2300 hours) with daytime & evening $L_{eq\ (30min)}$, 3 hours (i.e. 0600 to 0700 and 2300 to 0100 hours) with night-time $L_{eq\ (30min)}$ and 5 non-service hours (i.e. 0100 to 0600 hours). The predicted $L_{eq\ (24hour)}$ at the representative worst affected NSRs are summarised in **Table 5.4** below and detailed calculations are given in **Appendix 5.3**. Results indicate that the predicted $L_{eq\ (24hour)}$ at the representative worst affected NSRs would comply with the noise criterion of 65 dB(A).

Table 5.4: Predicted $L_{eq\ (24\ hour)}$ at the representative NSRs – residential block

Representative NSR ID	Predicted $L_{eq\ (24hour)}$, dB(A) [1][2]	$L_{eq\ (24hour)}$ Criterion, dB(A)	Comply [Y/N]
R5213d	55	65	Y

Notes:

[1] $L_{eq\ (24hour)} = 10 \log_{10} 1/24 [16 \times 10^{(\text{Daytime \& evening Leq(30mins)/10})} + 3 \times 10^{(\text{Night-time Leq(30mins)/10})}]$

[2] Only the predicted $L_{eq\ (24hour)}$ for the worst floors are presented. Details shall be referred to **Appendix 5.3**.

5.5.3 The predicted night-time maximum rail noise level $L_{max\ (2300\text{-}0700hours)}$ at the representative worst affected NSR is summarised in **Table 5.5** and detailed calculation is given in **Appendix 5.4**. Result indicates that the predicted $L_{max\ (2300\text{-}0700hours)}$ at the representative worst affected NSR would comply with the noise criterion of 85 dB(A).

Table 5.5: Predicted $L_{max\ (2300\text{-}0700hours)}$ at the representative NSRs – residential block

Representative NSR ID	Predicted $L_{max\ (2300\text{-}0700hours)}$, dB(A) [1]	$L_{max\ (2300\text{-}0700hours)}$ Criterion, dB(A)	Comply [Y/N]
R5213d	58	85	Y

Note:

[1] Only the predicted $L_{max\ (2300\text{-}0700hours)}$ for the worst floors are presented. Details shall be referred to **Appendix 5.4**.

5.5.4 It can be concluded that the predicted rail noise levels for the proposed development at Application Site would comply with the rail noise criteria and hence no mitigation measure is required.

5.6 Review of Potential Rail Noise Impact Arising from planned Kam Sheung Road Section of Northern Link

5.6.1 According to the approved EIA for Northern Link (AIEAR-259/2024) (NOL EIA), the NOL alignment at Kam Sheung Road area would be located underground, airborne rail noise impact to the proposed development is therefore not anticipated.

5.6.2 Groundborne rail noise impact assessment has also been carried out in the approved NOL EIA for the planned NSRs in vicinity, including the future Kam Sheung Road Package 2 Property Development (i.e. KSR-PG04), which is located immediately adjacent to Kam Sheung Road Station, separating Kam Sheung Road Station and the proposed development. The predicted groundborne rail noise level at the planned NSR is 35dB(A) and 33dB(A) for day/evening and night-time periods respectively, which are well below the respective groundborne rail noise criteria of 55dB(A) and 45dB(A) for ASR B. Given that the proposed development is farther away from the NOL alignment than KSR-PG04, groundborne rail noise impact at the proposed development is also not anticipated.

5.6.3 The future developer of the Application Site will submit a Noise Impact Assessment (NIA) based on the latest building plan(s) under a control mechanism (e.g. land lease condition) to review, exploration, demonstration and implementation of appropriate at-receivers noise mitigation measures to ensure full compliance with the rail noise criteria under NCO and HKPSG for the operational phase of the proposed development.

6. Fixed Noise Assessment

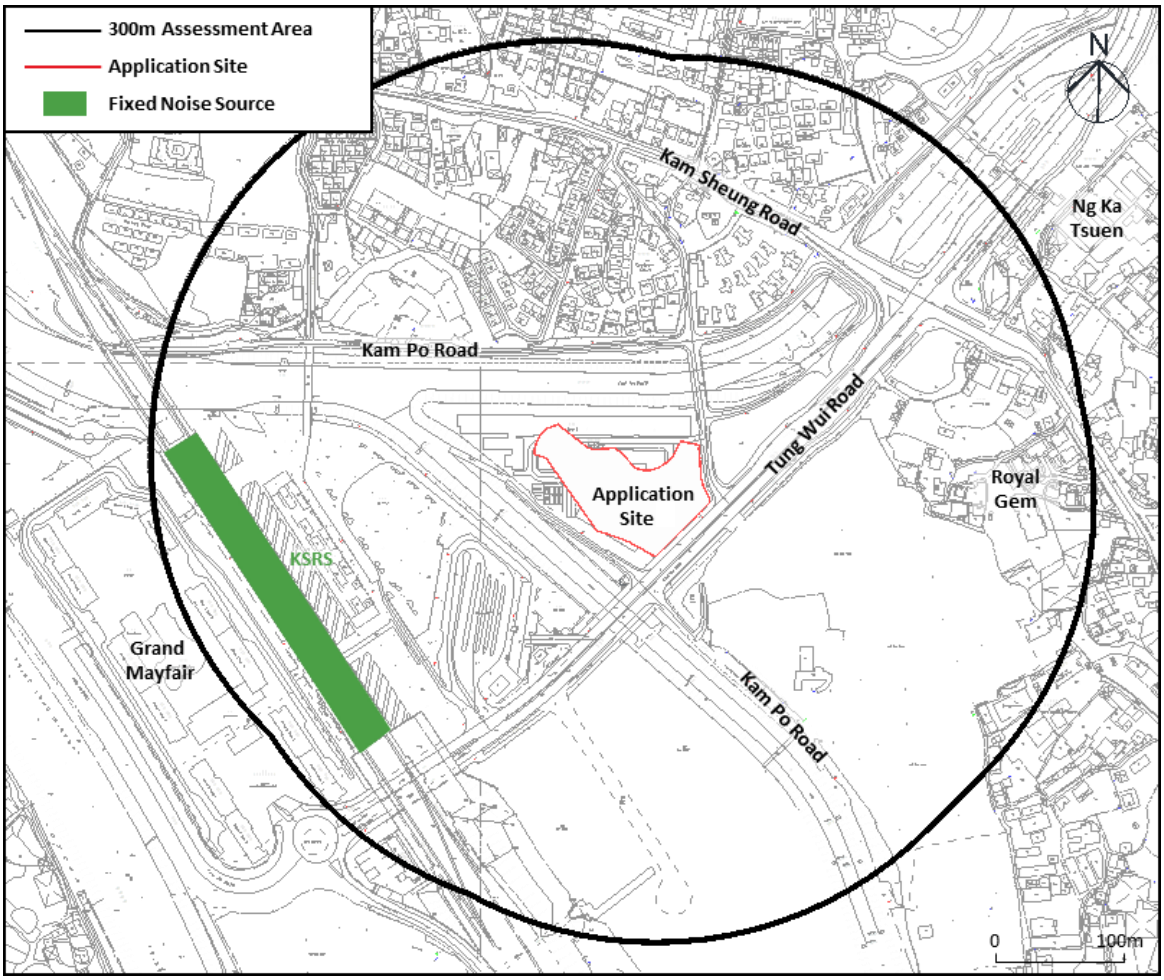
6.1 Existing Fixed Noise Sources

6.1.1 Desktop study and site survey have been carried out in July 2025 and January 2026 to identify any potential fixed noise sources within 300m assessment area of the Application Site. No major fixed noise sources are identified in the vicinity of Application Site except for the Kam Sheung Road Station. **Figure 6.1** indicates the locations of the Kam Sheung Road Station. All major and significant fixed noise sources which may have potential noise impact on the planned NSRs of the Proposed Development have been identified and summarized in **Table 6.1** and **Appendix 6.1**.

Table 6.1: Summary of identified potential fixed noise sources

Source ID	Location of Fixed Noise Source	Source
KSRS	Kam Sheung Road Station	• It is located to the west of Application Site. Site access is not allowed. Based on site inspection, ventilation louvres at the northeast façade of the station and chiller operation at the rooftop of the station were observed.

Figure 6.1: Locations of potential fixed noise sources in the vicinity of Application Site



6.1.2 The existing Kam Sheung Road Station Public Transport Interchange (PTI) is located about 70m to the south of the Application Site. According to the Legislative Council Brief for NOL (Ref: TLB 102-002-001-P002), it is noted that the PTI site will be redeveloped into a private housing development by the MTRC. Hence, potential fixed noise impact due to the Kam Sheung Road Station PTI is not anticipated.

6.1.3 An open storage at Kam Sheung Road is also found located about 190m to the east of the Application Site, no significant noise activity is observed during site survey and potential fixed noise impact on the proposed development is also not anticipated.

6.2 Fixed Noise Criteria

6.2.1 According to Section 4.2.13 in Chapter 9 of the HKPSG, noise assessments for industrial noise source would normally be conducted in accordance with the Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Places or Construction Sites (TM-Places) under the Noise Control Ordinance (Cap. 400). The TM-Places lays down statutory Acceptable Noise Levels (ANLs). The HKPSG also states that in order to plan for a better environment, all planned fixed noise sources should be so located and designed that when assessed in accordance with the TM, the level of the intruding noise at the facade of the nearest sensitive use should be at least 5dB(A) below the appropriate ANL shown in Table 3 of the TM-Places or, in the case of the background being 5dB(A) lower than the ANL, should not be higher than the background.

6.2.2 The Application Site is planned for high-rise residential development. It is surrounded by high rise residential developments to the south and low-rise residential buildings scattered around the rest of the Site. The types of area (i) rural area; (ii) low density residential area consisting of low-rise or isolated high-rise developments; and (iii) urban area according to TM-Places cannot reflect the future environment of the subject site and are all not applicable. Thus, the whole site shall fall into type (iv) “Area other than those above" according to TM-Places.

6.2.3 There is no Influencing Factor (IF) under the TM-Places that affects the Application Site. Therefore, an Area Sensitivity Rating (ASR) of “B” shall be applied to all the NSRs of the proposed residential blocks. The ANL for ASR of “B” should be 65dB(A) and 55dB(A) for daytime and evening time period, and night-time period, respectively.

6.3 Review of Fixed Noise Impact on Application Site

6.3.1 The Kam Sheung Road Station is located about 210m from Application Site. With reference to the approved NOL EIA, fixed noise impact assessment has been carried out for the planned NSRs at the future Kam Sheung Road Package 2 Property Development (i.e. KSR-PF01) which is located adjacent to the Kam Sheung Road Station, separating Kam Sheung Road Station and the proposed development.

6.3.2 According to the approved NOL EIA, the maximum predicted fixed noise levels at the future Kam Sheung Road Package 2 Property Development (i.e. KSR-PF01a), which considered the cumulative fixed noise impact from both existing and planned Kam Sheung Road Station, are 59 dB(A) for daytime & evening and 54 dB(A) for night-time. These noise levels comply with the relevant noise criteria. While the future Kam Sheung Road Package 2 Property Development is only about 10m from the planned fixed noise sources at Kam Sheung Road Station, Application Site is located even farther from Kam Sheung

Road Station (i.e. with minimum separation distance of about 190m). In view of the larger separation distance from Kam Sheung Road Station and there are no other major fixed noise sources in vicinity, the fixed noise impact on the proposed development at Application Site is expected to be even lower. Therefore, adverse fixed noise impact on the proposed development is not anticipated.

6.4 Review of Potential Fixed Plant Noise Impact Arising from the Proposed Developments

6.4.1 The proposed sewage treatment plant (STP) and any other planned fixed noise sources, such as MVAC system and pumping system, in the proposed development should be designed to comply with the requirements under the HKPSG in detailed design stage. Noise mitigation measures such as enclosing pumps and noisy plants inside a building structure, proper selection of quiet plant aiming to reduce the tonality at NSRs, installation of silencer / acoustic enclosure / acoustic louvre for the exhaust of ventilation system and locating all openings of ventilation systems facing away from NSRs shall be considered in the design as far as practicable. The Contractor is required to carry out a noise commissioning test for the fixed plant sources before the operation of the proposed development to ensure that the operational noise levels are in compliance with the relevant noise criteria stipulated in HKPSG and NCO. With appropriate noise mitigation measures, adverse noise impact from the planned fixed plant noise sources due to the operation of the proposed development is not anticipated.

6.4.2 During the detailed design stage, the future developer of the Application Site shall submit a Noise Impact Assessment (NIA) based on the latest building plan(s) under a control mechanism (e.g. land lease condition) to review, exploration, demonstration and implementation of appropriate at-receivers noise mitigation measures to ensure full compliance with the fixed noise criteria under NCO and HKPSG for the operational phase of the proposed development.

7. Review of Air Quality Impact

7.1 Description of the Environment

Existing Ambient Air Quality

7.1.1 Currently, there are 18 Air Quality Monitoring Stations (AQMS) in Hong Kong, including 15 General Monitoring Stations and 3 Roadside Monitoring Stations, operated by EPD to monitor the air quality in Hong Kong.

7.1.2 The nearest AQMS operated by EPD to the project is located at Yuen Long AQMS, which is approximate 4.5km away from the Project Site. The latest air quality monitoring data in the recent 5 years of various air pollutants monitored at Yuen Long AQMS is presented in **Table 7.1** and compared with the Air Quality Objectives (AQOs).

Table 7.1: Air Quality Monitoring Data (Yuen Long AQMS, 2020 - 2024)

Pollutant	Parameter	Concentrations (µg/m^3)					AQOs (µg/m^3)
		2020	2021	2022	2023	2024	
RSP	10th highest 24-hour	**77**	73	56	59	61	75 (9)
	Annual	30	30	25	26	25	30
FSP	19th highest 24-hour	33	36	**38**	34	**38**	37.5 (18)
	Annual	**16**	**17**	**16**	**16**	**17**	15
NO_2	19th highest 1-hour	135	148	122	130	125	200 (18)
	10th highest 24-hour	64	78	68	67	66	120 (9)
	Annual	32	40	37	37	35	40
SO_2	4th highest 10-min	26	24	21	20	14	500 (3)
	4th highest 24-hour	10	14	7	10	5	40 (3)
O_3	10th highest 8-hour	154	**178**	**194**	155	**168**	160 (9)
	Peak season	86	84	95	84	92	100
CO	Maximum 1-hour	1,530	2,090	1,700	1,580	1,920	30,000
	Maximum 8- hour	1,279	1,591	1,519	1,273	1,778	10,000
	Maximum 24-hour	1,182	1,183	1,159	1,047	1,342	4,000

Notes:

[1] Number of exceedance allowed under the AQO is shown in ( ). The 5-year mean is the average of the yearly values.

[2] Monitoring results exceeding the AQO are bolded and underlined.

7.1.3 It can be seen from **Table 7.1** that the monitoring records of 10th highest daily and annual RSP concentrations ranged from 56 µg/m^3 to 77 µg/m^3, and from 25 µg/m^3 to 30 µg/m^3 respectively in the past 5 years. These concentrations are well within the AQOs except the 10th highest daily RSP concentrations in Year 2020 exceeded the AQO of 75 µg/m^3.

7.1.4 The 19th highest daily and annual FSP concentrations recorded were in the range of 33 µg/m^3 to 38 µg/m^3 and 16 µg/m^3 to 17 µg/m^3. The 19th highest daily concentrations in

Year 2022 and 2024 exceeded the AQO of 37.5 μg/m^3. The annual FSP concentrations in the past 5 years exceeded the AQO of 15 μg/m^3.

7.1.5 The 19th highest 1-hour NO_2 ranged from 122 μg/m³ to 148 μg/m³. The 10th highest 24-hour NO_2 ranged from 64 μg/m³ to 78 μg/m³. The annual NO_2 concentration ranged from 32 μg/m^3 to 40 μg/m^3. These concentrations are well within the AQOs.

7.1.6 The 4th highest 10-minute and 4th highest 24-hour SO_2 ranged from 14 μg/m^3 to 26 μg/m^3 and from 5 μg/m^3 to 14 μg/m^3 respectively in the past 5 years. These concentrations are well within the AQOs.

7.1.7 The 10th highest 8-hour averaged O_3 concentrations ranged from 154 μg/m^3 to 194 μg/m^3. The concentrations in Year 2021, 2022 and 2024 exceeded the AQO of 160 μg/m^3. The peak season O_3 ranged from 84 μg/m^3 to 95 μg/m^3 and these concentrations are well within the AQOs. It should be noted that O_3 is not a pollutant directly emitted from pollution sources but formed by photochemical reactions between NOx and VOCs under sunlight. As it takes several hours for these photochemical reactions to take place, O_3 recorded in one place could be attributed to NOx and VOCs emissions from place afar. High ozone background is a regional air quality problem within the Pearl River Delta Region**.**

7.1.8 The maximum 1-hour, 8-hour and 24-hour CO concentrations ranged from 1,530 μg/m^3 to 2,090 μg/m^3, from 1,273 μg/m^3 to 1,778 μg/m^3 and from 1,047 μg/m^3 to 1,342 μg/m^3. These concentrations are well within the AQOs.

Future Ambient Air Quality

7.1.9 In order to predict the future ambient air quality taking into account the emission reduction plan for Pearl River Delta (PRD) region, PATH v3.0 (Pollutants in the Atmosphere and their Transport over Hong Kong), a regional air quality model, has been developed by EPD to simulate air quality over Hong Kong against the PRD as background. The proposed development would tentatively operate by Year 2035. The pollutant concentrations predicted by PATH v3.0 for Year for 2035 the concerned PATH grids are summarised in **Table 7.2**. The locations of the relevant PATH grids are also shown in **Figure 7.1**. The concentrations predicted by PATH v3.0 for Years 2035 for Level 1 (0-17m) provided in EPD's Smart Air Modelling Platform (SAMP) v2.1 are summarised in the below table. It is predicted all AQO parameters would be below the AQOs, except for O_3 which is a regional air pollutant not directly emitted from any pollution source as discussed in **Section 7.1.7**.

Table 7.2: Summary of Year 2035 background from PATH v3.0

Pollutant	Parameter	Concentrations in various PATH grids (μg/m^3) [1]				AQOs[2] (μg/m^3)
		29_45	29_46	30_45	30_46	
RSP	10th highest 24-hour	52	53	51	50	75 (9)
	Annual	20	20	20	19	30
FSP	19th highest 24-hour	31	31	31	29	37.5 (18)
	Annual	12	13	12	12	15
NO_2	19th highest 1-hour	51	54	49	49	200 (18)
	10th highest 24-hour	20	21	18	19	120 (9)
	Annual	11	11	10	10	40
SO_2	4th highest 10-min	24	24	24	24	500 (3)
	4th highest 24-hour	6	6	6	6	40 (3)
O_3	10th highest 8-hour	**183**	**185**	**183**	**188**	160 (9)
	Peak Season	**121**	**122**	**121**	**123**	100

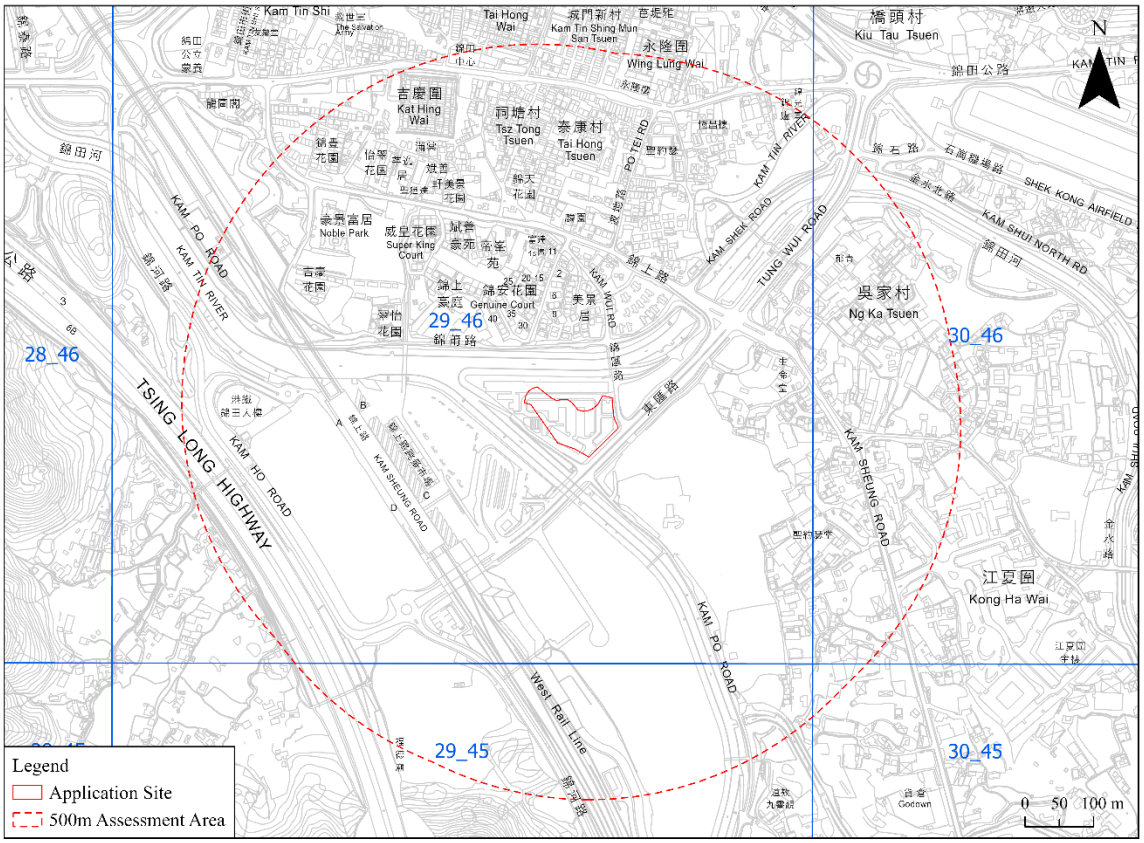
Pollutant	Parameter	Concentrations in various PATH grids (μg/m³) [1]				AQOs[2] (μg/m³)
		29_45	29_46	30_45	30_46	
CO	Max. 1-hour	517	517	513	514	30,000
	Max. 8-hour	481	484	480	482	10,000
	Max. 24-hour	449	450	448	449	4,000

Note:

[1] Concentration in PATH grid exceeding the AQO are bolded and underlined.

[2] Values in ( ) indicate numbers of exceedances allowed per calendar year under the AQOs.

Figure 7.1: Location of relevant PATH grids



7.2 Identification of Representative Air Sensitive Receivers

7.2.1 In accordance with Annex 12 of the EIAO-TM, Air Sensitive Receivers (ASRs) include any domestic premises, hotel, hostel, hospital, clinic, nursery, temporary housing accommodation, school, educational institution, office, factory, shop, shopping centre, place of public worship, library, court of law, sports stadium or performing arts centre. Any other premises or places with which, in terms of duration or number of people affected, have a similar sensitivity to the air pollutant as the aforelisted premises and places would also be considered as a sensitive receiver.

7.2.2 Existing ASRs are identified by means of reviewing topographic maps, aerial photos, land status plans and supplemented by site inspections, whilst planned/ committed ASRs are

reviewed by making reference to relevant Outline Zoning Plans (OZP), Outline Development Plans, Layout Plans and other published plans in the vicinity of the site.

7.2.3 Representative ASRs have been reviewed. Details of the identified ASRs are summarised in **Table 7.3**. and its corresponding location is illustrated in **Figure 7.2**.

Figure 7.2: Location of Representative ASRs Nearby

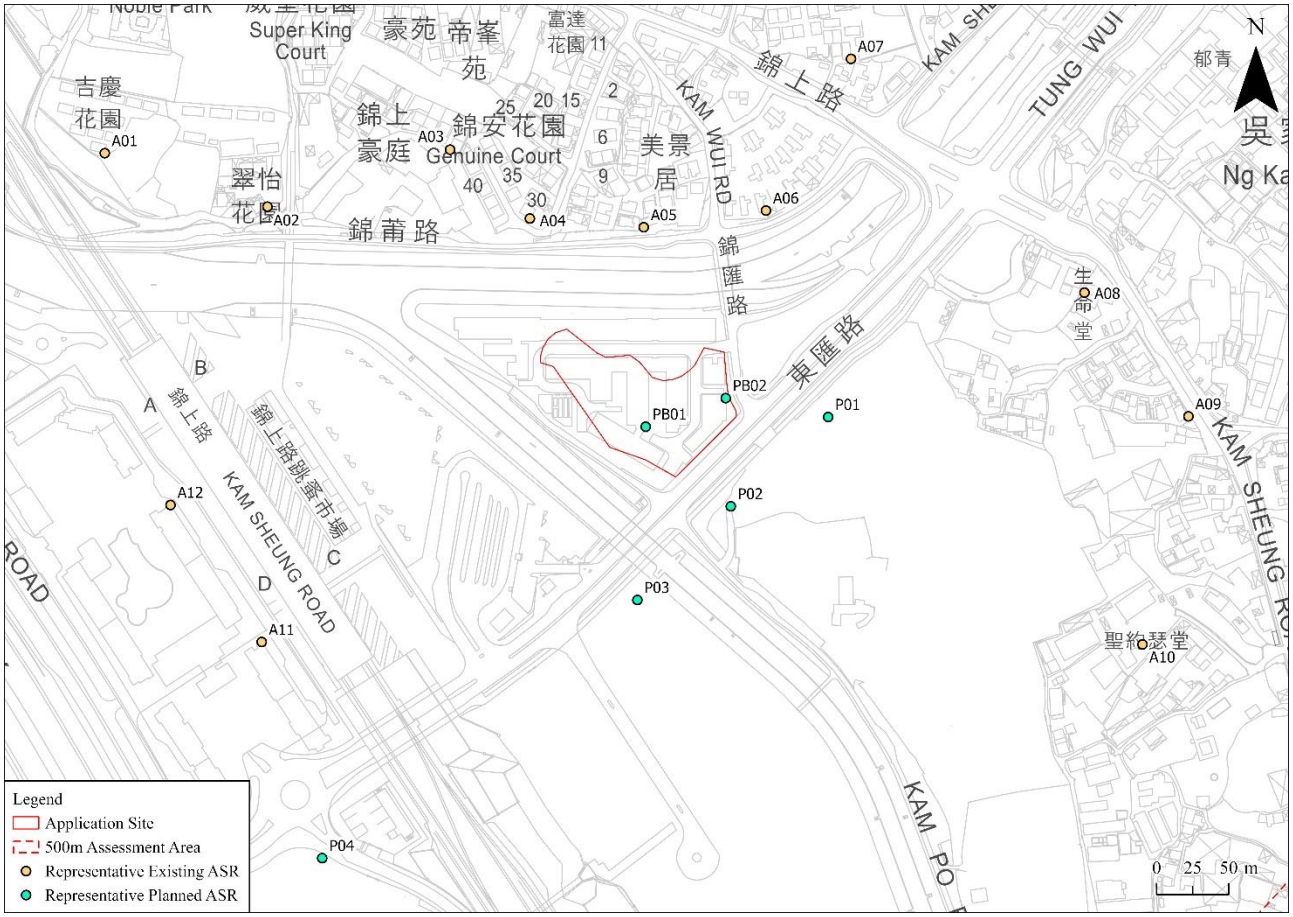


Table 7.3: Representative ASR within 500m study area

ASR ID	Location	Land Use	Approx. Distance from Site (m)	Assessment Height (mAG) [1]	ASR for Construction Phase	ASR for Operational Phase
Existing ASR						
A01	Kat Hing Garden	Residential	240	1.5 - 10	✓	×
A02	Greenview Garden	Residential	125	1.5 - 10	✓	×
A03	Kam's Terrace	Residential	105	1.5 - 10	✓	×
A04	Genuine Court	Residential	60	1.5 - 10	✓	×
A05	Goodview Court	Residential	55	1.5 - 10	✓	×
A06	Hyde Park	Residential	55	1.5 - 10	✓	×
A07	Wing Ling San Tsuen	Residential	95	1.5 - 10	✓	×
A08	Kam Sheung Life Lutheran Church	Worship	250	1.5 - 10	✓	×
A09	Royal Gem	Residential	310	1.5 - 10	✓	×

ASR ID	Location	Land Use	Approx. Distance from Site (m)	Assessment Height (mAG) [1]	ASR for Construction Phase	ASR for Operational Phase
A10	S.K.H. St. Joseph's Church Kindergarten	Educational	320	1.5 - 10	✓	×
A11	Grand Mayfair	Residential	275	1.5 - 65	✓	×
A12	Grand Mayfair	Residential	270	1.5 - 65	✓	×
Planned ASR						
P01	Kam Sheung Road Planned Public Housing Site 4a	Residential	35	1.5 - 65	✓	×
P02	Kam Sheung Road Planned Public Housing Site 4a	Residential	35	1.5 - 65	✓	×
P03	Kam Sheung Road Planned Public Housing Site 1	Residential	85	1.5 - 60	✓	×
P04	Kam Sheung Road Planned Public Housing Site 6	Residential	345	1.5 - 65	✓	×
PB01	Proposed Residential Development (Application Site)	Residential	Within the site	1.5 - 65	×	✓
PB02				1.5 - 65	×	✓

Note:

[1] Upper limit of the assessment height is rounded up to the nearest 5m.

7.3 Evaluation of Construction Phase Impact

Identification and Evaluation of Impact

7.3.1 The key sources of potential air quality impact during construction phase would be the dust emission generated from the construction activities associated with the Project, including site clearance, demolition, piling works, soil excavation for basement and superstructure, loading and unloading dusty material, and wind erosion of open sites. Based on the latest available information at the time of preparing this Report, the amount of excavated materials would be about 23,800 m^3. The nearest ASR identified is A05 and A06 located at about 55m from Application Site. Nevertheless, given the proper implementation of control requirements as stipulated in Air Pollution Control (Construction Dust) Regulation together with recommended goods site practices, any potential construction dust impact will be controlled.

7.3.2 Fuel combustion from the use of Powered Mechanical Equipment (PME) during construction works could be a source of particulate matter (PM), NO_2, SO_2 and CO. Information regarding the number of machinery anticipated on site during construction stage is unavailable at the time of preparing this Report. Nevertheless, in order to improve air quality and protect public health, EPD has introduced the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, which came in effect on 1 June 2015, to regulate emissions from machines and non-road vehicles. Starting from 1 December 2015, only approved or exempted non-road mobile machinery are allowed to be used in construction sites. Hence, the emissions from PMEs will be controlled and are not

anticipated to cause adverse air quality impact to nearby ASRs with the effect of the Regulation.

7.3.3 Based on review on EIA and other planning applications available in public domain, concurrent project is identified within the 500m assessment area of the Application Site. The identified concurrent project is shown in the table below.

Table 7.4: Potential Cumulative Impacts of Concurrent Projects

Concurrent Project	Anticipated Completion Year	Assessment of Potential Cumulative Environmental Impact
Kam Sheung Road Site 1	2027/2028	There is no overlap of construction period. Therefore, cumulative impact during construction phase is not anticipated.
Kam Sheung Road Site 4a	2030/2031	Cumulative impact during construction phase is anticipated.
Kam Sheung Road Site 6	2027/2028	There is no overlap of construction period. Therefore, cumulative impact during construction phase is not anticipated.
Grand Mayfair	Phase 1A & 1B: 2024/2025 (Completed) Phase2: 2026	
KSRS Phase Two Property Development	N/A	There may be potential cumulative impacts. However, details of construction information is not available at the time of preparation of this EA.

7.3.4 For Kam Sheung Road Site 4a, as the construction will be completed by Year 2030/2031, there would be a short overlapping period with the Project. It is anticipated that the interface with the concurrent project would be limited, and only superstructure works with limited dust emissions would overlap with the program of the Project. Close liaison between the contractors of the Application and the concurrent project would be maintained to minimise dusty activities to be conducted concurrently as far as practicable. On this basis, adverse cumulative dust impacts are not anticipated.

Control Measures

7.3.5 The Contractor is recommended to follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation. It stipulates the construction dust control requirements for both Notifiable and Regulatory Works to be carried out by the Contractor. The following dust suppression measures should be incorporated by the Contractor to monitor and control the dust nuisance throughout the construction phase:

- Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading;
- Any dusty material remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;
- A stockpile of dusty material should not extend beyond the pedestrian barriers, fencing or traffic cones;
- The load of dusty materials on vehicles leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle;
- Where practicable, vehicles washing facilities including a high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle

washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores;

- When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period;
- The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials;
- Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation take place should be sprayed with water or a dust suppression chemical continuously;
- Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet;
- For any wall of the building to be demolished that abuts or fronts upon a street, service lane or other open area accessible to the public, impervious dust screens or sheeting shall be used to enclose the whole wall to a height of at least 1 m higher than the highest level of the structure being demolished;
- Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding;
- Any skip hoist for material transport should be totally enclosed by impervious sheeting;
- Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the three sides;
- Immediately before leaving a construction site, all vehicles shall be washed to remove any dusty materials from its body and wheels;
- Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed; and
- Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies.
- An EM&A program, e.g. weekly site audit, should be implemented to monitor the dust impacts arising from the construction activities associated with the Proposed Development.

7.3.6 Fuel combustion from the use of PME during construction works would be a source of air emission. Ultra-low sulphur diesel (ULSD) with a sulphur content of not more than 0.001% by weight and a viscosity of not more than 6 centistokes at 40^{o}C will be used to minimise SO_2 emissions in accordance with Air Pollution Control (Fuel Restriction) Regulations. Under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, NRMMs, except those exempted, are required to comply with the prescribed emission standards. All regulated machines sold or leased for use in Hong Kong must be approved or exempted with a proper label in a prescribed format issued by EPD. Only approved or

exempted NRMMs with a proper label are allowed to be used in specified activities and locations including construction sites.

7.3.7 To further control and reduce the emission from the use of NRMM from the Project, the following good site practices are recommended:

- Regulated machines shall be used and exempted NRMMs should be avoided;
- Use cleaner fuel such as ultra-low sulphur diesel in diesel-operated construction plant to reduce sulphur dioxide emission;
- Zero emission or clean fuels shall be considered as far as practicable for transportation activities;
- Use of electric PMEs where practicable;
- Connect construction plant and equipment to main electricity supply and avoid use of diesel generators and diesel-powered equipment as far as practicable;
- Switch off the engine of PMEs when idling;
- Implement regular and proper maintenance for plant and equipment; and
- Employ plant and equipment of adequate size and power output and avoid overloading of the plant.

7.3.8 Given that some ASRs (i.e. Kam Sheung Road Planned Public Housing Site 4a) are located close to the Application Site, the following measures shall be considered near those ASRs during construction phase to further minimize the air quality impact:

- Adopt site hoarding at sufficient height (i.e. not less than 2.4m) close to those concerned ASRs;
- Locate the haul road away from those concerned ASRs;
- Avoid dusty works or placing stockpiles near to those concerned ASRs;
- Positioning of PME away from the concerned ASRs as far as practicable; and
- Minimization of unpaved, exposed earth by immediate covering/ permanent paving as soon as the works have been completed.

7.3.9 Furthermore, guidelines stipulated in EPD's Recommended Pollution Control Clauses for Construction Contracts should also be incorporated in the contract documents to abate air quality impacts. The clauses include:

- The Contractor shall observe and comply with the Air Pollution Control Ordinance and its subsidiary regulations, particularly the Air Pollution Control (Open Burning) Regulation, Air Pollution Control (Construction Dust) Regulation, Air Pollution Control (Non-road Mobile Machinery)(Emission) Regulation , Air Pollution Control (Fuel Restriction) Regulations and Air Pollution Control (Smoke) Regulation;
- The Contractor shall undertake at all times to prevent dust nuisance and smoke as a result of his activities, and minimise the emission of air pollutants from construction plant and equipment;
- The Contractor shall ensure that there will be adequate water supply/storage for dust suppression;

- The Contractor shall devise, arrange methods of working and carrying out the works in such a manner so as to minimise dust impacts on the surrounding environment, and shall provide experienced personnel with suitable training to ensure that these methods are implemented;
- For better smoke control, the Contractor shall not use diesel hammer for percussive piling; and
- Before the commencement of any work, the Engineer may require the methods of working, plant, equipment and air pollution control system to be used on the site to be made available for inspection and approval to ensure that they are suitable for the project.

7.3.10 With the implementation of these good practice and measures, adverse construction air quality impacts on the ASRs are not anticipated. Construction dust impacts are therefore not insurmountable.

7.4 Evaluation of Operational Phase Impact

Vehicular Emission

7.4.1 Hong Kong Planning Standards and Guidelines (HKPSG) provides environmental guidance for residential developments on air quality. The guidelines recommend the minimum buffer distance required for active and passive recreational uses.

7.4.2 The buffer distances between the air sensitive uses of the Application Site and the surrounding roads are summarized in the table below and illustrated in **Figure 7.3** below.

Table 7.5: Separation Distances Between Sensitive Uses and Nearby Roads

Name of Road	Type of Road[1]	HKPSG Recommended Setback Distance	Shortest Horizontal Setback Distance from the Nearest Air Sensitive Uses to Road Kerb
Tung Wui Road	RR	>5m[2]	~10m
Kam Wui Road	LD[3]	>5m[2]	~7m

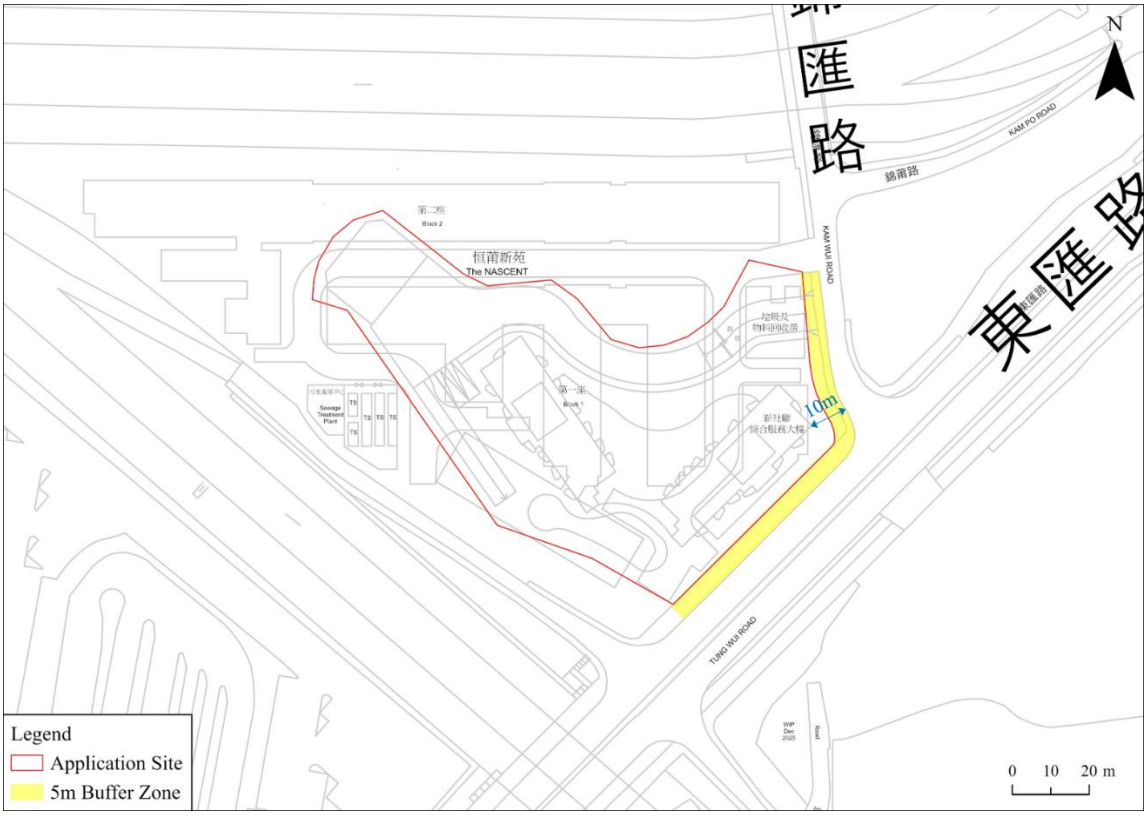
Note:

[1] In accordance with Annual Traffic Census (ATC) 2024: LD – Local Distributor, RR – Rural Road.

[2] As there is no buffer distance for RR, minimum buffer distance (i.e. 5m) has been assumed for conservative purpose.

[3] In accordance with AADT 2024, Kam Wui Road are not classified. Kam Wui Road is considered as LD based on its characteristics.

Figure 7.3: Separation Distances Between Air Sensitive Uses and Nearby Roads



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

7.4.3 The current scheme can satisfy the setback distance requirements as stipulated in the HKPSG. No air sensitive uses of the Application Site have been planned within the recommended buffer zone of 5m setback from road kerb of Tung Wui Road. Besides, no air-sensitive use including openable window, fresh air intake and recreational use in open space shall be located within the buffer zone has been planned within the recommended buffer zone. Adverse air quality impact due to vehicular emissions on the proposed residential development are therefore not anticipated.

7.4.4 A basement carpark has been planned within the Application Site. If mechanical ventilation system is provided, it shall satisfy the requirements, including design, maintenance and operation of the ventilation systems, as stipulated in the ProPECC PN 2/96 - Control of Air Pollution in Car Park. Any exhaust(s) of the proposed car park shall be located and directed away from nearby ASRs as far as practicable.

7.4.5 A chimney survey was conducted on a walk-over basis within the 500m of the boundary of the Application site where site access was allowed and practicable in July 2025. No existing chimneys were found within 500m assessment area of the subject site. Besides, there will be no chimneys for the proposed development. Air quality impacts from chimney emissions are therefore not anticipated.

7.4.6 No odour was perceived during site survey carried out in July 2025 along Kam Tin River, nullahs and the Application Site boundary. No existing odour source such as livestock farm was identified within 500m assessment area of the Application Site.

7.5 Potential Odour Emission Impact from the proposed Sewage Treatment Plant (STP)

7.5.1 The proposed development has proposed a STP to support the development. According to the current design, the proposed STP would have a designed capacity of 400m^3/day ADWF. The major process equipment (including screen and grit removal, and the associated washing facilities) of the proposed STP would be the odour sources to the nearby ASRs during operational phase.

7.5.2 Mitigation measures including covering up of the major odour source, providing adequate ventilation, use of active carbon at exhaust and odour removal system, fully enclosure of trucks transporting the sludge, would be provided during operation. The following mitigation measures will also be implemented where applicable:

- Full enclosure of all odourous facilities within concrete structure of the proposed STP;
- Provision of deodourising units of at least 99.5% odour removal efficiency at the exhaust vent for all odour arising from the proposed STP;
- Locating the exhaust vent as far away from sensitive receivers as possible;
- All odour sources from the proposed STP will be maintained under negative pressure to prevent foul air from flowing out;
- Inhibit the generation of odour compound in liquid phase or removal of the odour compound formed in liquid phase by elevating the pH or providing oxygen source;
- Good housekeeping in the sewerage collection systems to prevent the development of anaerobic conditions;
- Positioning of exhaust outlet away from the concerned ASRs as far as practicable; and
- Design modifications such as maximizing the sewerage flow velocity in sewers.

7.5.3 To assess the potential odour impact arised from the proposed STP, a desktop review of the approved EIA of Sha Tau Kok Sewage Treatment Works (STKSTW) (AEIAR-207/2017) has been undertaken for comparison. STKSTW has a significantly larger design capacity of 10,000 m^3/day ADWF and adopts an odour removal efficiency of 99.5%. The separation distance from the nearest ASE (i.e. A8) is 20m from the nearest site boundary with a maximum 5-second odour concentration of 0.13 OU/m^3 (10.5m above ground), which is well below the EIAO-TM criterion of 5 OU/m^3. Moreover, the corresponding odour contour plots also indicate that the highest predicted odour concentrations for both 1.5m and 10.5 above ground are well below 1 OU/m^3.

7.5.4 The design capacity of the proposed on-site STP is around 400 m3/day ADWF with the same odour removal efficiency of 99.5%. The nearest ASR is located around 25m from the proposed STP boundary. TGiven that STKSTW has a significantly larger capacity than the proposed STP, and the 5-sec averaged odour concentrations of STKSTW are well below 1 OU/m3, it is anticipated that the proposed STP would not give rise to adverse odour impacts at any nearby ASRs.

8. Land Contamination Appraisal

8.1 Site Description

8.1.1 The Application Sites are situated in Kam Tin, Yuen Long, New Territories. The western part of Application Site is used as transitional housing and the eastern part is occupied as vehicles repair workshop. Surrounding Application Site is Genuine Court to the north, Kam Sheung Road to the east.

8.2 Review of Aerial Photographs and Historical Land Uses

8.2.1 Selected historical aerial photographs between 1963 to 2024 have been reviewed to identify any past land uses which may have the potential for causing land contamination. The historical aerial photographs are given in **Appendix 8.1**. The key findings are summarised in **Table 8.1** below.

Table 8.1: Description of historical land uses

Year	Description
1963	• Application Site was used as village house and fish pond. • Kam Sheung Road was observed to the west of Application Site. • Ng Ka Tsuen was observed to the east of Application Site.
1973	• No other significant change in historical land use was observed as compared with that in Year 1963.
1982	• No other significant change in historical land use was observed as compared with that in Year 1973.
1992	• The fish pond in Application Site was replaced by vegetation. • No other significant change in historical land use was observed as compared with that in Year 1982.
2002	• The village house in Application Site was replaced by vegetation. • Kam Sheung Road Station was observed under construction to the southwest of Application Site. • No other significant change in historical land use was observed as compared with that in Year 1992.
2013	• The vegetation in Application Site was replaced by open storage area. • Kam Sheung Road Station was observed completed. • No other significant change in historical land use was observed as compared with that in Year 2002.
2024	• The vegetation and open storage area in the west and middle of Application Site were replaced by the NAScenT. • No other significant change in historical land use was observed as compared with that in Year 2013.

8.3 Site Survey Findings

8.3.1 Site survey was conducted in July 2025 to identify any existing land uses within the Application Site and the adjoining sites which may have potential for causing land

contamination. Photo record of the site survey is given in **Appendix 8.2**. The transitional housing named "The NAScenT" was observed in western part of Application Site (**Photo 1, Photo 2**), while a vehicle repair workshop (**Photo 3**) was observed to the east of Kam Wui Road. No potential land contamination issue was observed during the site visits.

8.4 Relevant Information Request

Fire Services Department

8.4.1 Information request on any Dangerous Goods (DGs) license registered, and any record of DGs spillage/leakage incidents within the Application Site have been sent to Fire Services Department (FSD). The correspondence with FSD is attached in **Appendix 8.3**.

8.4.2 Based on the reply from FSD, there are no records of Dangerous Goods license issued and a total of 3 incident records were found in Application Site in the past three years. Fire incidents mainly include No.1 alarm fire, vegetation fire and rubbish fire which will not cause land contamination issue.

Environmental Protection Department

8.4.3 Information request on any Chemical Waste Producer (CWP) registered, and any record of chemical spillage/leakage incidents within the Application Site were made to Environmental Protection Department (EPD). The correspondence with EPD is attached in **Appendix 8.4**.

8.4.4 Based on the reply from EPD, there was no record of reported accident spillage or leakage of chemicals in the past 3 years. Summary of the received records are shown in **Table 8.2**. Chemical waste producer record was also reviewed at the EPD's Territory Control Office. CWPR No.1 has been identified as construction sites which chemical waste would be generated during construction works. Considering that any chemical storage at the area should be handled according to the Waste Disposal (Chemical Waste) (General) Regulation potential spillage/leakage of chemicals is not anticipated.

Table 8.2: Summary of Chemical Waste Producer Registration Records

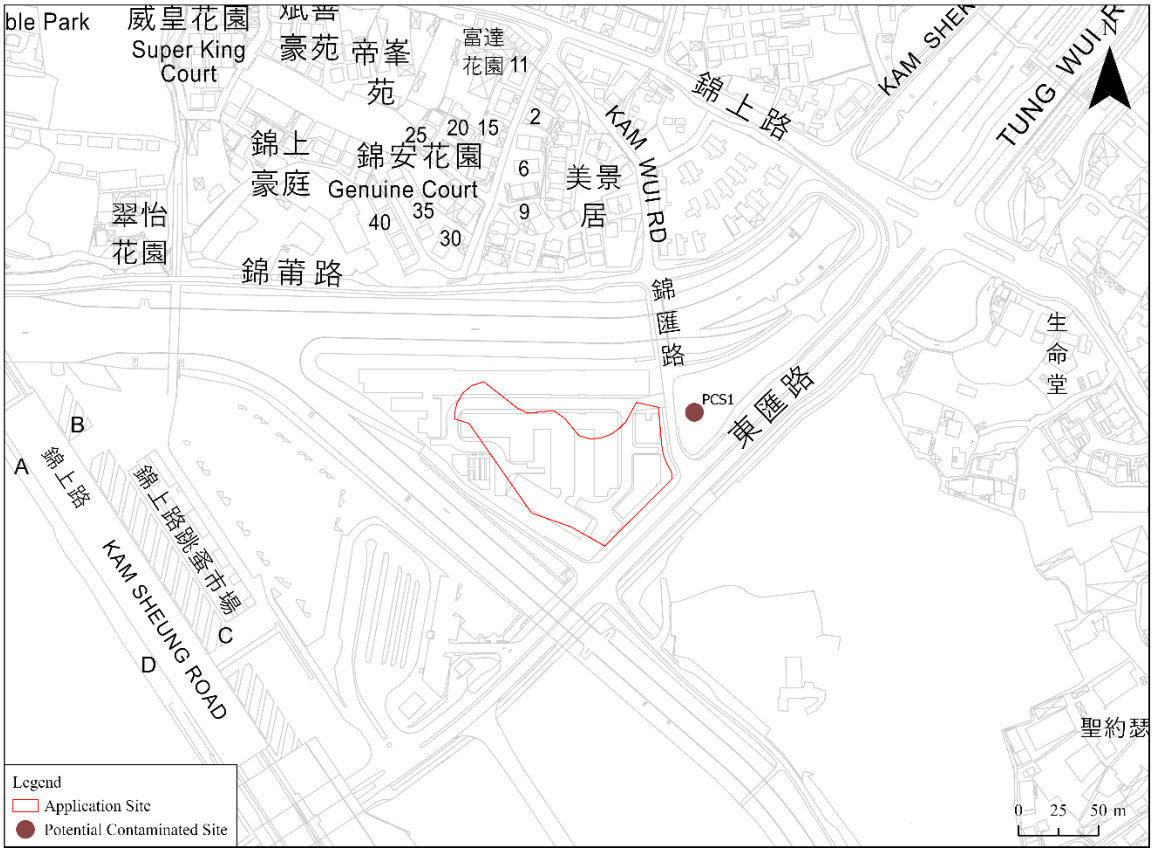
No.	Name of Applicant	Premises Address holding the CWPR	Nature of Business	Validity
1	Ginca Construction Machinery Limited	DD106 Lot 2160RP, Kam Po Road, Yuen Long NT	Foundation Works	Valid

8.5 Identification of Potentially Contaminated Site

8.5.1 Review of desktop data and site visits have been conducted. One potential contamination site was observed in the vicinity of Application Site as shown in **Figure 8.1**. The potential contamination site PCS1 was used as vehicles repair workshop. For Application Site, it is mostly used for residential buildings and greening with no land contamination activity

identified. As Application Site and PCS1 are separated by Kam Wui Road, it is therefore concluded that land contamination is not anticipated in Application Site.

Figure 8.1: Potential Contamination Site



9. Waste Management

9.1 Relevant Legislation, Standard and Guidelines

9.1.1 The relevant legislation, standards and guidelines applicable to the present study for the assessment of waste management implications include:

- Waste Disposal Ordinance (WDO) (Cap. 354) and subsidiary Regulations;
- Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N);
- Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C);
- Land (Miscellaneous Provisions) Ordinance (Cap. 28); and
- Public Health and Municipal Services Ordinance (Cap. 132) - Public Cleansing and Prevention of Nuisances Regulation.

9.2 Evaluation of Constructional Phase Impact

Identification and Evaluation of Impact

9.2.1 During the construction phase, key construction activities which would potentially result in the generation of waste include minor site clearance including any temporary structure, piling works, soil excavation for basement and superstructure, etc. within the site area. These activities would result in the generation of wastes including both inert and non-inert construction and demolition (C&D) materials, chemical wastes and general refuse from on-site workforce.

9.2.2 However, in general, the handling and disposal of these materials and wastes will require proper management in order not to cause environmental impacts and nuisance. It is anticipated that there would not be any insurmountable impacts provided good site practices and other appropriate mitigation measures are implemented.

C&D Materials

9.2.3 Based on the preliminary design, it is estimated that about 27,900 m^3 of inert soft C&D materials (e.g. excavated soil, demolition C&D materials) and 3,100 m^3 non-inert C&D materials will be generated during the construction phase of the site clearance and site formation works. All C&D materials arising from the construction will be sorted on–site to recover the inert C&D materials as well as the reusable and recyclable materials.

9.2.4 Any surplus C&D materials will become the property of the Contractor once they are removed from the site. The Contractor will be responsible for devising a system to work for on–site sorting of C&D materials and to promptly remove all sorted and processed material arising from the construction activities to optimise temporary stockpiling on–site. It is recommended that the system should include the identification of the source of generation, estimated quantity, arrangement for on–site sorting and/or collection, temporary storage areas, and frequency of collection by recycling contractors or frequency of removal off–site.

9.2.5 Disposal of C&D materials can be minimized through careful planning during the detailed design stage and with good site practice during construction. This includes the use of non–

timber formwork and temporary works and on–site sorting of the C&D materials for reuse and recycling as far as practicable. Any remaining non-inert C&D waste will be disposed to public landfills. For the inert C&D materials, it would be reused on–site as far as possible or else it would be delivered to public fill reception facilities. The opportunity of reusing excavated C&D materials would be investigated in the Waste Management Plan, which will be derived in later detailed design stage.

9.2.6 With the proper implementation of good construction site practice and recommended mitigation measures, the on-site handling, reuse, transportation and disposal of C&D materials would not cause adverse environmental impacts.

Chemical Waste

9.2.7 Chemical wastes likely to be generated from the construction activities and associated facilities may include:

- scrap batteries or spent acid/alkali from their maintenance;
- used paint, engine oils, hydraulic fluids and waste fuel;
- spent mineral oils/cleansing fluids from mechanical machinery; and
- spent solvents/solutions, some of which may be halogenated, from equipment cleansing activities.

9.2.8 Chemical wastes may pose environmental, health and safety hazards if not stored and disposed of in an appropriate manner as outlined in the Waste Disposal (Chemical Waste) (General) Regulation and the Code of Practice on the Packaging, Labelling and Storage of Chemical Waste. These hazards may include:

- toxic effects to workers;
- adverse effects on air, water and land from spills; and
- fire hazards.

9.2.9 It is difficult to quantify the amount of chemical waste as it will be highly dependent on the contractor's on–site maintenance practice the number of plant and vehicles utilized. Nevertheless, it is anticipated that the quantity of chemical wastes would be small and in the order of few hundred kilograms/ few hundred litres per month. The estimated amount of chemical waste to be generated during construction phase is summarized in **Table 9.1**.

Table 9.1: Summary of chemical waste during construction phase

Waste type	Total amount generated
Scrap batteries	A few hundred kilograms per month
Spend hydraulic oil and waste fuel	A few hundred litres per month
Spent lubrication oil and cleaning fluids	
Spend solvent	

9.2.10 Suitable arrangements for the storage, handling, transport and disposal of chemical wastes shall be made in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Waste and Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). Wherever possible opportunities should be taken to reuse and recycle materials. Given that the quantity of chemical wastes would be small and that the

regulations as stipulated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Waste and Cap. 354C would be strictly followed, adverse impacts brought by the generation of chemical waste is not anticipated.

General Refuse

9.2.11 The general refuse generated by the construction workforces mainly consists of food waste, aluminium cans and wastepaper. These general refuses will require off–site disposal. The number of workforce (clerical and workers) to be employed for the Proposed Development is not available at this stage, but is anticipated not to be over 50 staffs. Based on the generation rate of 0.65kg/person/day, the total refuse generated per day would be less than 33kg/day. Therefore, it is estimated that around 47 tonnes of general refuse would be generated during construction phase. The breakdown of estimated amount of general refuse to be generated during construction phase is summarised in Table 9.2 below.

Table 9.2: Summary of general refuse during construction phase

Activities	Period	Daily Waste Generation (kg/day)	Total Amount Generated (tonne) during the entire construction period [1][2]
Construction phase	Approx. 5 years	< 33	< 47

Note:

[1] tpd: tonne per day

[2] 24 working days per month is assumed.

9.2.12 Effective collection of site waste will be required to prevent waste materials being blown around by wind, flushed or leached into the marine environment, or creating an odour nuisance or pest and vermin problem. Waste storage areas shall be well maintained and cleaned regularly. In addition, disposal of waste at sites other than approved waste transfer or disposal facilities shall be prohibited.

9.2.13 With the implementation of good waste management practices at the site, adverse environmental impacts are not expected to arise from the storage handling and transportation of general refuse generated from the site.

9.3 Recommended Practices for Construction Phase

9.3.1 Good site practice to avoid or reduce potential adverse environmental impacts associated with handling, collection and disposal of waste are proposed. These recommendations are based on the waste management hierarchy principles. The waste management options considered to be most preferable have the least environmental impacts and are more sustainable in the long term. The hierarchy is as follows (the priority follows descending order):

- avoidance and minimization,
- separation of inert C&D materials, reusable and recyclable materials from other wastes,
- reuse of materials,
- recovery and recycling, and
- treatment and disposal.

9.3.2 Prior to the commencement of the construction works, the contractors should incorporate these recommendations into a Waste Management Plan to provide an overall framework for waste management and reduction. Recommended good site practice, waste reduction measures as well as the waste transportation, storage and collection are as follows:

Good Site Practices

9.3.3 Adverse waste management implications are not expected, provided that good site practices are strictly implemented. The following good site practices are recommended throughout the construction phase of the Proposed Development:

9.3.4 Nomination of an approved personnel to be responsible for the implementation of good site practices, arrangements for collection and effective disposal to an appropriate facility of all wastes generated at the site;

- training of site personnel in proper waste management and chemical handling procedures;
- provision of sufficient waste disposal points and regular collection for disposal;
- separation of chemical wastes for special handling and appropriate treatment at the Chemical Waste Treatment Centre;
- regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;
- implementation of a recording system for the amount of wastes generated/recycled and disposal sites. and
- Waste Management Plan (WMP) should be prepared and implemented by the Contractor. The WMP will be submitted to the Architect/Engineer for approval.

Waste Reduction Measures

9.3.5 The amount of waste generated can be significantly reduced through good management and control. Waste reduction is best achieved at the site planning and design phase, as well as by ensuring the implementation of good site practices when the works are in progress. Recommendations for achieving waste reduction include:

- on–site reuse of any material excavated as far as practicable;
- segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of material and their proper disposal;
- collection of aluminium cans and waste paper by individual collectors during construction should be encouraged. Separately labelled recycling bins should also be provided to segregate these wastes from other general refuse by the workforce;
- recycling of any unused chemicals and those with remaining functional capacity as far as possible;
- prevention of potential damage or contamination to the construction materials through proper storage and good site practices;
- planning and stocking of construction materials should be made carefully to minimise amount of waste generated and to avoid unnecessary generation of waste; and
- training on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling should be provided to workers.

Storage, Collection and Transportation of Waste

9.3.6 Storage of waste on site may induce adverse environmental implications if not properly managed. The following recommendations should be implemented to minimise the impacts:

- waste such as soil should be handled and stored well to ensure secure containment;
- stockpiling area should be provided with covers and water spraying system to prevent materials from being washed away and to reduce wind–blown litter
- different locations should be designated to stockpile each material to enhance reuse.

9.3.7 With respect to the collection and transportation of waste from the construction works area to respective disposal sites, the following recommendations should be implemented to minimise the potential adverse environmental impacts:

- remove waste in timely manner;
- employ trucks with cover or enclosed containers for waste transportations;
- obtain relevant waste disposal permits from the appropriate authorities; and
- disposal of waste should be done at licensed waste disposal facilities.

9.3.8 In addition to the above measures, other specific mitigation measures on handling other specific waste generated from construction phase are recommended in the following subsections:

C&D Materials

9.3.9 Wherever practicable, C&D materials should be segregated from other wastes to avoid contamination and ensure acceptability at public fill reception facilities or reclamation sites. The following mitigation measures should be implemented in handling the waste:

- maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement;
- carry out on–site sorting;
- make provisions in the contract documents to allow and promote the use of recycled aggregates where appropriate; and
- implement a trip–ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified.

9.3.10 In addition, disposal of the C&D materials onto any sensitive location such as agricultural land, etc. should be avoided. Disposal of C&D materials or any other wastes at unauthorized locations and sites other than approved waste transfer or disposal facilities shall be prohibited. To prevent fly-tipping, utilizing dump trucks equipped with real-time tracking and monitoring devices could be considered. Non-inert C&D waste will be disposed of to public landfills; while inert C&D materials would be disposed of at Public Fill Reception Facilities, if necessary, for beneficial reuse in other projects.

9.3.11 Standard formwork or pre–fabrication should be used as far as practicable in order to minimise the arising of C&D materials. The use of more durable formwork or plastic facing for the construction works should be considered. Metal hoarding should be used to

enhance the possibility of recycling. The purchasing of construction materials should be carefully planned in order to avoid over ordering and wastage.

9.3.12 The contractor should recycle as much of the C&D materials as possible on–site. Public fill and C&D waste should be segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal. Where practicable, concrete and masonry can be crushed and used as fill. Steel reinforcement bar can be used by scrap steel mills. Different areas of the construction site should be considered for such segregation and storage.

Chemical Waste

9.3.13 For those processes that generate chemical wastes, the contractor shall identify any alternatives that generate reduced quantities or even no chemical wastes, or less dangerous types of chemical wastes.

9.3.14 If chemical wastes are produced at the construction site, the contractors should register with EPD as chemical waste producers. Chemical wastes should be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes. Containers used for storage of chemical wastes should:

- be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed;
- have a capacity of less than 450 L unless the specification has been approved by EPD; and
- display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Regulations.

9.3.15 The storage area for chemical wastes should:

- be clearly labelled and used solely for the storage of chemical wastes;
- be enclosed on at least 3 sides;
- has an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical wastes stored in the area, whichever is greatest;
- have adequate ventilation;
- be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical wastes, if necessary); and
- be arranged so that incompatible materials are adequately separated.

9.3.16 Disposal of chemical wastes should:

- be via a licensed waste collector; and
- be to a facility licensed to receive chemical wastes, such as the Chemical Waste Treatment Centre (CWTC) which also offers a chemical waste collection service and can supply the necessary storage containers; or
- be to a re–user of the waste, upon approval granted by EPD.

General Refuse

9.3.17 General refuse generated on–site should be stored in enclosed bins or compaction units separated from construction and chemical wastes. Recycling bins should also be provided to encourage recycling. A reputable waste collector should be employed by the contractor to remove general refuse from the site on a daily basis to separate from the construction and chemical wastes. General refuse collected each day shall only be carried away and disposed of at approved waste transfer or disposal facilities. Burning of refuse on construction sites or fly tipping is prohibited by law.

9.4 Evaluation of Operational Phase Impact

Identification and Evaluation of Impact

9.4.1 The operational phase of the Proposed Development would generate municipal solid waste. With reference to the latest data from "Monitoring of Solid Waste in Hong Kong 2024" by EPD, the MSW disposal rate was 1.40 kg/person/day in Year 2024 (Plate 2.7), and the recovery rate for recycling was 34% of the MSW generation (Plate 3.2). By calculation, the MSW generation rate, disposal rate and recycled rate were 2.12 kg/person/day, 1.40 kg/person/day and 0.72 kg/person/day in 2024 respectively. The estimated MSW based on planned residential and employment populations respectively is summarized in **Table 9.3**.

Table 9.3: Estimated quantities of MSW from planned Residential and Employment Population during operation phase

Estimated MSW from Residential Population (tpd)[1]			
Residential Population	**Generated[2]**	**Required Disposal[2]**	**Recycled[2]**
1,044	2.213	1.461	0.752

Note:

[1] tpd: tonne per day

[2] MSW disposal rate was 1.40 kg/person/day and 66% of the MSW generation according to "Monitoring of Solid Waste in Hong Kong 2024" by EPD. By calculation, the MSW generation rate was 2.12kg/person/day. MSW recovery rate for recycling was 34% of the MSW generation. By calculation, the MSW recycling rate was 0.72kg/person/day.

9.4.2 A reputable waste collector should be employed to provide routine cleaning of the Proposed Development to minimize odour, pest and litter impacts associated with the generation of general refuse. Recycling bins should also be provided to encourage recycling.

9.4.3 Screening and grits and dewater sludge will be generated from the operation of the on-site STP. It is estimated that insignificant amount of screening and grits and dewatered sludge would be generated during the operation phase of the Proposed Development. Screening and grits generated will be transferred to closed containers before transportation and disposal at designated landfill sites. The collected dewater sludge shall be transported to the nearby public sewage treatment plants where anaerobic digestion systems are in place

for energy recovery and waste reduction by designated sewage tankers for disposal. Disposal in landfills should be considered as a last resort.

9.4.4 With the implementation of the recommended mitigation measures for the handling, transportation and disposal of the identified waste, adverse residual waste management implications are not anticipated for the operational phase.

9.5 Recommended Practices for Operational Phase

Waste Collection and Disposal

9.5.1 An effective and efficient waste handling system is essential in order to minimize potential adverse environmental impacts during waste storage, collection and transport, such impacts may include odour if waste is not collected frequently; water quality if waste enters storm water drains; aesthetics and vermin problems if the waste storage area is not well maintained and cleaned regularly. The waste handling system may also facilitate materials recovery and recycling.

9.5.2 A refuse collection room would be installed at the ground floor for localized refuse collection and the waste would be transported to a refuse transfer station (RFS). To avoid potential odour nuisance during transport of waste, enclosed waste collection trucks should be used and the collection route and time should be properly planned. At least daily collection should be arranged by the waste collector.

Waste Recycling

9.5.3 In order to facilitate recycling, a 4-bin recycling system for paper, metals, plastics and glass should be adopted together with a general refuse bin. They should be placed in prominent places to promote waste separation at source. All recyclable materials should be collected by recyclers. In addition, the feasibility of recycling other types of waste, such as fluorescent lamps & tubes, rechargeable batteries, food waste, etc. shall be explored.

10. Water Quality Impact

10.1 Description of the Environment

10.1.1 The Application Site fall within Deep Bay WCZ. The Application Site is located inland, therefore water quality impact to coastal water is not anticipated. This section presents the assessment of potential water quality impact associated with the construction and operation phases of the Proposed Development. Recommendations for mitigation measures have been made, where necessary, to minimize the potential water quality impacts.

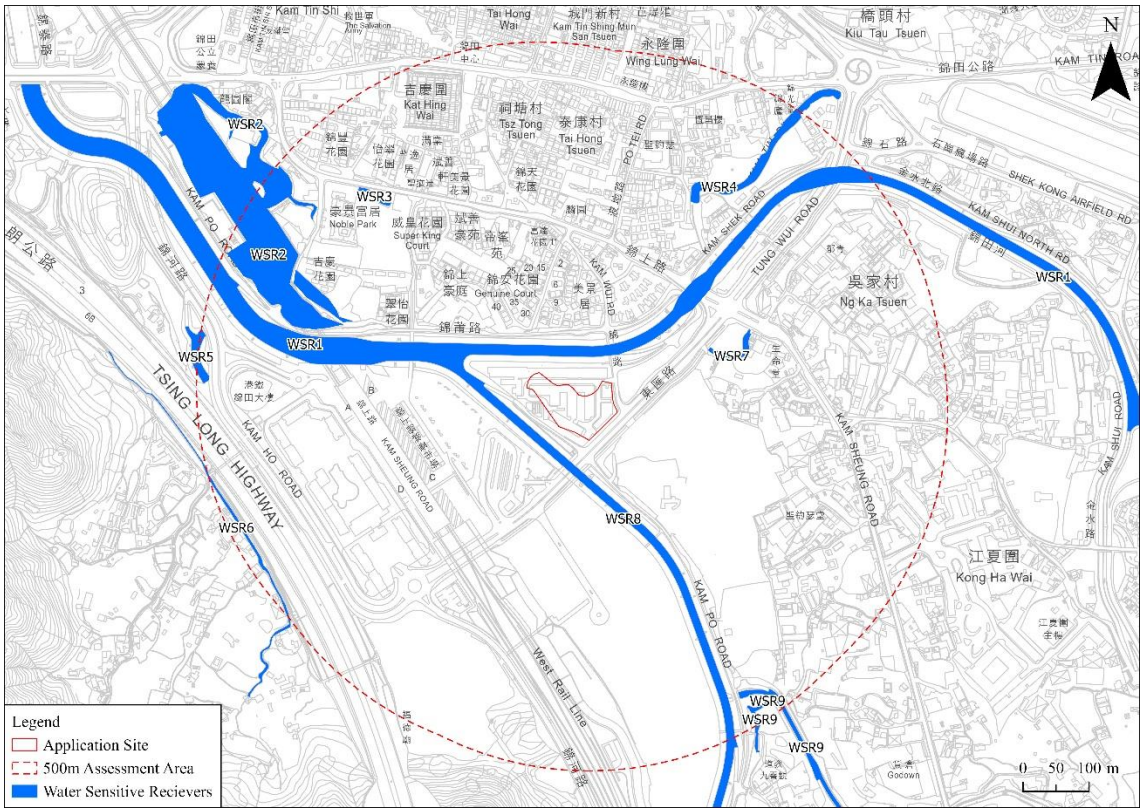
10.2 Water Sensitive Receivers

10.2.1 There are several Water Sensitive Receivers (WSRs) identified within 500m from the Application Site. These WSRs are listed in **Table 10.1** and presented in **Figure 10.1**.

Table 10.1: Water sensitive receivers

ID	WSRs	Approx. Nearest Distance of WSR to the Application Site
WSR1	Kam Tin River	~25m
WSR2	West Rail Line Compensatory Woodland	~280m
WSR3	Modified watercourse near Kam Sheung Road	~335m
WSR4	Modified watercourse near Kam Shek Road	~300m
WSR5	Nullah at Kam Ho Road	~480m
WSR6	Modified watercourse passing through along farmland west of Tsing Long Highway	~480m
WSR7	Modified watercourse near Kam Sheung Road	~150m
WSR8	Ho Pui Channel	~25m
WSR9	Modified watercourse east of Ho Pui Channel	~440m

Figure 10.1: Locations of Water Sensitive Receivers



10.3 Construction Phase Impact Evaluation

Construction Site Runoff

10.3.1 During rainstorm events, construction site runoff would come from all over the works site. The surface runoff might be polluted by:

- Runoff and erosion from site surfaces, earth working areas and stockpiles;
- Wash water from dust suppression sprays and wheel washing facilities; and
- Chemicals spillage such as fuel, oil, solvents and lubricants from maintenance of construction machinery and equipment.

10.3.2 Construction runoff may cause physical, biological and chemical effects. The physical effects include potential blockage of drainage channels and increase of suspended solid levels in the receiving water bodies. Runoff containing significant amounts of concrete and cement–derived material may cause primary chemical effects such as increasing turbidity and discoloration, elevation in pH, and accretion of solids. A number of secondary effects may also result in toxic effects to water biota due to elevated pH values, and reduced decay rates of faecal microorganisms and photosynthetic rate due to the decreased light penetration.

10.3.3 Construction site runoff could be carefully controlled and mitigated through the recommended mitigation measures outlined in **Section 10.4**. Construction site runoff

impacts would therefore be reduced to satisfactory levels before discharges such that adverse water quality impact would not be anticipated.

Sewage from Workforce

10.3.4 Sewage effluents will arise from the sanitary facilities provided for the on–site construction workforce. The sewage is characterized by high levels of biochemical oxygen demand (BOD), ammonia, E. coli and oil / grease.

10.3.5 The sewage generated should be properly managed to minimize the adverse impact of odour and potential health risks to the workers by attracting pests and other disease vectors.

10.3.6 Adequate portable chemical toilets should be provided to ensure all sewage is properly collected. It is anticipated that no adverse environmental implications would arise if the chemical toilets are properly maintained and licensed collectors are employed for the collection and disposal of sewage on a regular basis.

Accidental Spillage of Chemicals

10.3.7 Chemicals used during construction, such as fuel, oil, solvents, and lubricants from the maintenance of construction machinery and equipment, may cause pollution and trigger physicochemical effects in the nearby waterbodies if accidental spillage occurs. To avoid adverse impacts of chemical spillage, best practices of chemical storage practices such as storage under covered area, provision of secondary containment, and material safety data sheets are recommended. Spill kits are also recommended to handle spillage and the workforce should be trained for handling spillage.

10.4 Recommended Mitigation Measures for Construction Phase

Construction Site Runoff

10.4.1 In accordance with the Practice Note for Professional Persons on Construction Site Drainage (ProPECC PN 2/24) and the Technical Circular of Protection of Natural Streams/Rivers from Adverse Impacts Arising from Construction Works (ETWB TC(Works) No.5/2005), the proposed construction phase mitigation measures is given below.

- At the start of site establishment, perimeter cut–off drains to direct off–site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on–site drainage system will be undertaken by the contractor prior to the commencement of construction.
- Diversion of natural storm water should be provided as far as possible. The design of temporary on–site drainage should prevent runoff going through site surface, construction machinery and equipment in order to avoid or minimize polluted runoff. Sedimentation tanks with sufficient capacity, constructed from pre–formed individual cells of approximately 6 to 8m^3 capacities, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity shall be flexible and able to handle multiple inputs from a variety of sources and suited to applications where the influent is pumped.

- The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/sediment trap. The silt/sediment traps should be incorporated in the permanent drainage channels to enhance deposition rates.
- The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 2/24. The detailed design of the sand/silt traps should be undertaken by the contractor prior to the commencement of construction.
- Construction works should be programmed to minimize surface excavation works during the rainy seasons (April to September). All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means.
- All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas.
- Measures should be taken to minimise the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, it should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.
- All open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than $50m^3$ should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.
- Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.
- Precautions should be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 2/24. Particular attention should be paid to the control of silty surface runoff during storm events.
- All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facilities should be provided at every construction site exit where practicable. Wash–water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel–wash bay to the public road should be paved with sufficient back fall toward the wheel–wash bay to prevent vehicle tracking of soil and silty water to public roads and drains.
- Oil interceptors should be provided in the drainage system downstream of any oil/fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain.
- Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts.
- All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby.
- Temporary sewerage system should be designed and installed to collect wastewater and prevent it from entering rivers and streams.

- Proper locations well away from rivers/streams for temporary storage of materials (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction debris and spoil should be identified before commencement of the works.
- Stockpiling of construction materials, if necessary, should be properly covered and located away from any natural stream/river.
- Construction debris and spoil should be covered up and/or properly disposed of as soon as possible to avoid being washed into nearby rivers/streams by rain.
- Construction effluent, site run-off and sewage should be properly collected and/or treated. Wastewater from a construction site should be managed with the following approach in descending order: (i) minimisation of wastewater generation; (ii) reuse and recycle; (iii) treatment. Proper locations for discharge outlets of wastewater treatment facilities well away from the natural streams/rivers should be identified.
- Supervisory staff should be assigned to station on site to closely supervise and monitor the works.

10.4.2 By adopting the above mitigation measures with best management practices, it is anticipated that the impacts of construction site runoff from the construction site will be reduced to satisfactory levels before discharges. The details of best management practices will be highly dependent to actual site condition and the Contractor shall apply for a discharge license under WPCO.

Sewage from Workforce

10.4.3 Sufficient portable chemical toilets and sewage holding tanks should be provided for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets to cater employed populations and be responsible for appropriate disposal and maintenance.

10.4.4 Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase. Regular environmental audit on the construction site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site.

Accidental Spillage of Chemicals

10.4.5 To reduce the potential water quality impact due to accidental spillage of chemicals, the Contractor should properly store and contain the chemicals used during construction, such as fuel, oil, solvents and lubricants in a designated area with secondary containment to prevent spillage and contamination of the nearby water environment. The Contractor shall register as a chemical waste producer and employ a licensed collector for the collection of

chemical waste from the construction site. Any chemical waste generated shall be managed in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.

10.5 Operational Phase Impact Evaluation and Recommended Mitigation Measures

Runoff from the Development

10.5.1 The Proposed Developments will lead to an increase in area of impermeable surfaces and hence the peak surface runoff rates. Besides, vehicle dust, tyre scraps and oils might be washed away from the road surface to the nearby water courses by surface runoff or road surface cleaning. Subject to detailed design and requirement of relevant government departments, the capacities of road drainage system shall cater the runoff from 50 year-return-period rainstorm. Proper drainage systems with silt traps and oil interceptors should be installed and connected to the existing drainage system. The design of road gullies with silt traps should be incorporated in the detailed design stage.

10.5.2 Runoff will be controlled by best management practice. Runoff will be intercepted by properly designed and managed silt traps at appropriate spacings so that common roadside debris, refuse and fallen leaves etc. can be captured before allowing the runoff to drain into watercourses. At the outlets to watercourses, the Project Proponent or the delegated operation parties should manage the road/open area cleaning prior to the occurrence of a storm. Moreover, it is recommended each of the cleaning events should be carried out during low traffic flow period, preferably using either manual methods or mechanical means such as vacuum sweeper/truck equipped with side broom to sweep road sludge and debris into the suction nozzle to increase the removal efficiency of pollutants. The collected pollutants will be tankered away for off-site disposal at landfill sites. After the removal of the pollutants, the pollution levels from stormwater would be much reduced.

10.5.3 The Professional Persons Environmental Consultative Committee Practice Note 1/23 Drainage Plans subject to Comment by the Environmental Protection Department (ProPECC PN 1/23), also provides guidelines and practices for handling, treatment and disposal of various effluent discharges to stormwater drains and foul sewers. The design of site drainage and disposal of site effluents generated within the Proposed Developments' area should follow the relevant guidelines and practices as given in the ProPECC PN 1/23.

Sewage from the Development

10.5.4 As there is no existing sewerage system in the vicinity of and planned for Application Site, all sewage generated from Application Site is proposed to be treated at the proposed on-site STP and discharged to Kam Tin River. A separate Sewerage Impact Assessment has been conducted to assess the impact of sewage generation as a result of the Proposed Development. According to the current design, the proposed onsite STP would have a designed capacity of around 400 m^3/day ADWF. The proposed STP shall follow the "Guidelines for the Design of Small Sewage Treatment Plants" published by the EPD and discharge license under Water Pollution Control Ordinance would be obtained for the discharge of the treated effluent. Details of mitigation measures, if necessary, shall be

referred to the Sewerage Impact Assessment. Details of mitigation measures, if necessary, shall be referred to the Sewerage Impact Assessment (SIA) Report.

10.5.5 Sewage generated from the Application Site will be conveyed by the internal sewerage system to the onsite STP with treatment level reaching the secondary level plus disinfection for treatment. Subject to the subsequent detailed design by specialist contractor, package Membrane Bioreactor (MBR) sewage treatment plant with UV disinfection or equivalent could be utilised. The on-site STP will be located at the north-western portion of Application Site. The treated effluents will be discharged to Kam Tin River via the stormwater drain. Standards of treated effluent discharge should follow the "Standards for Effluents Discharged into Inland Waters" in the "Technical Memorandum Standards for Effluent Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters". The contingency arrangement in the event of operation failure of the STP will include tankering away of untreated sewage. Hence, no adverse water quality impact is anticipated during normal operations.

10.5.6 Sewage effluent generated from the operation of the clubhouse facilities, including filter backwashing of the swimming pool has been estimated in the SIA and included in the above estimated ADWF. The backwash volume of the swimming pool will also be collected by the internal sewerage network. Swimming pool drain-down water shall be discharged to the underground stormwater detention tank. Prior to drain down, the swimming pool water shall be held within the pool for several days to allow natural decay of any remaining residual chlorine, which prevents release of residual chlorine into the surrounding environment.

10.5.7 Contingency measures including standby power supply, alarms, storage tank and tankering away of untreated sewage shall be allowed to prevent discharge of treated or untreated sewage effluent in emergency situation (e.g. pump failure, electricity cut off, pipe bursting, etc). Contingency measures shall be documented in a contingency plan to be prepared by the operator of the STP. The contingency plan shall cover situations when the STP is out of service, and shall be implemented throughout operation of the onsite STP.

11. Ecological Review

11.1 Description of the Environment

11.1.1 Application Site covers mainly the NAScenT[1] on the western side, plus a piece of open storage/developed land and a small piece of vegetated area on the eastern side. The NAScenT is separated from the remaining part of Application Site by a short section of public road.

11.1.2 Under the Approved Kam Tin South Outline Zoning Plan No. S/YL-KTS/15, Application Site is currently zoned as "Comprehensive Development Area" ("CDA").

11.1.3 Application Site is proposed to build 2 residential blocks (17 storeys) to accommodate a population of approximately 1,044.

11.2 Review Methodology

11.2.1 This Ecological Review was based on literature review and a site walkover in July 2025 to confirm the habitat conditions within the Application Site. Application Site has been covered by previous ecological surveys conducted under the below EIA:

- AEIAR-222/2020 – Upgrading of Remaining Sections of Kam Tin Road and Lam Kam Road: ecological survey was conducted in Sep 2018 – May 2019;
- AEIAR-229/2021– Drainage Improvement Works Near Four Villages in Yuen Long - Sung Shan New Village, Tai Wo, Lin Fa Tei and Ha Che: ecological survey was conducted in Jan – Jul 2015; and
- AEIAR-259/2024 – Northern Link: ecological survey was conducted in Feb 2021 – Jan 2022.

11.3 Review Findings

11.3.1 Given the developed nature of NAScenT and the adjacent developed areas, the majority of Application Site has negligible ecological value. The remaining vegetated areas within the Application Site were further reviewed. The vegetated area in Application Site was covered by both Upgrading of Remaining Sections of Kam Tin Road and Lam Kam Road EIA (AEIAR-222/2020 & AEIAR-259/2024).

11.3.2 The vegetated area in Application Site was covered by AEIAR-222/2020 and AEIAR-259/2024. The survey for AEIAR-222/2020 was conducted in Sep 2018 – May 2019, before the construction of NAScenT. The vegetated area within Application Site already existed at that time with reference to historic aerial photo. It was identified as developed area in AEIAR-222/2020. The survey for AEIAR-259/2024 was conducted between Feb 2021 and Jan 2022, finished before the construction of the NAScenT. The piece of vegetated area was also identified as developed area. From site walk conducted in July 2025, the vegetated area consisted of some locally common species and typical pioneer trees/shrubs including native and non-native species e.g., *Macaranga tanarius*, *Bridelia*

[1] The NAScenT was built between July 2022 and January 2024. Population intake was in February 2024, and it was planned to operate for not less than 5 years. Source: https://www.hb.gov.hk/eng/policy/housing/policy/transitionalhousing/details_71.html

tomentosa, *Leucaena leucocephala* and *Bombax ceiba* etc. The vegetation was observed to be disturbed by nearby human activities and traffic. No species of conservation importance were recorded.

11.3.3 The vegetated areas within Application Site consisted of locally common pioneer trees and shrubs which are typical in disturbed lands. Some areas were even dominated by invasive species i.e., *L. leucocephala*. The assessment in previously approved EIAs classified the areas as developed areas. The recent site walkover observed that the vegetated areas within the Application Site were subject to disturbance from the nearby traffic and human activities and there is no significant change in the site condition since the previous EIAs. These indicated that the vegetated areas are of low ecological value and hence the ecological impact of direct loss due to the proposed development would be minor.

Table 11.1: Representative Photos of the Application Site

	
The NAScenT	Developed area other than the NAScenT
	
Vegetated area	

11.4 Recommended Mitigation Measures

11.4.1 Minor ecological impacts are identified and hence no mitigation measures are required.

12. Conclusion

12.1.1 An Environmental Assessment Study has been conducted to support the Section 12A Planning Application for Proposed Development at Lot 2160 RP (Part) in D.D.106 and Adjoining Government Land, Kam Sheung Road, Kam Tin, Yuen Long, New Territories.

12.1.2 With the implementation of the recommended acoustic window (baffle type) and enhanced acoustic balcony, all residential units will not be exposed to road traffic noise levels in excess of 70dB(A), as stipulated in the HKPSG. Adverse road traffic noise impact is not anticipated.

12.1.3 Tuen Ma Line (TML) is running on a viaduct at about 220m to the west of Application Site. Rail noise assessment indicates that the predicted noise levels for the proposed residential development would comply with the ANL and the HKPSG's criteria. Adverse rail noise impact on the proposed residential development is not anticipated.

12.1.4 No major fixed noise sources are identified in the vicinity of Application Site except for the Kam Sheung Road Station. With reference to the approved NOL EIA (AIEAR-259/2024), the predicted noise level at all representative NSRs within the proposed development would comply with the respective noise criteria and hence no mitigation measures are required.

12.1.5 The current development scheme has allowed sufficient setbacks from the surrounding roads to meet the minimum requirement as stipulated in the HKPSG. Hence, potential vehicular emission impact is not anticipated.

12.1.6 No chimneys are identified within 500m of the Application Site. No plume or other emissions were observed during the survey. Adverse air quality impact due to chimney emission is not anticipated.

12.1.7 A preliminary land contamination site appraisal through desktop review and site survey has been conducted to review any past and existing land uses within and adjoining the Application Site. Aerial photos revealed that the historical land use of the Application Site is mainly vegetation zone, village houses, open storage area and the NAScent. A vehicles repair workshop has been identified as potentially contaminated site but it is separated by Kam Wui Road. Therefore, it is concluded that land contamination is not anticipated in the Application Site.

12.1.8 For waste management, adverse implications due to construction and operational phases are not anticipated provided good practices are in place.

12.1.9 Potential water pollution sources have been identified, and mitigation measures have been recommended to mitigate any potential water quality impacts during the construction phase. With the implementation of good site practices and mitigation measures, adverse water quality impacts are not anticipated. Operational impacts associated with runoff and sewage from the development would be insignificant with proper management practices

in place. The proposed development will be properly sewered and adverse water quality impact is not anticipated.

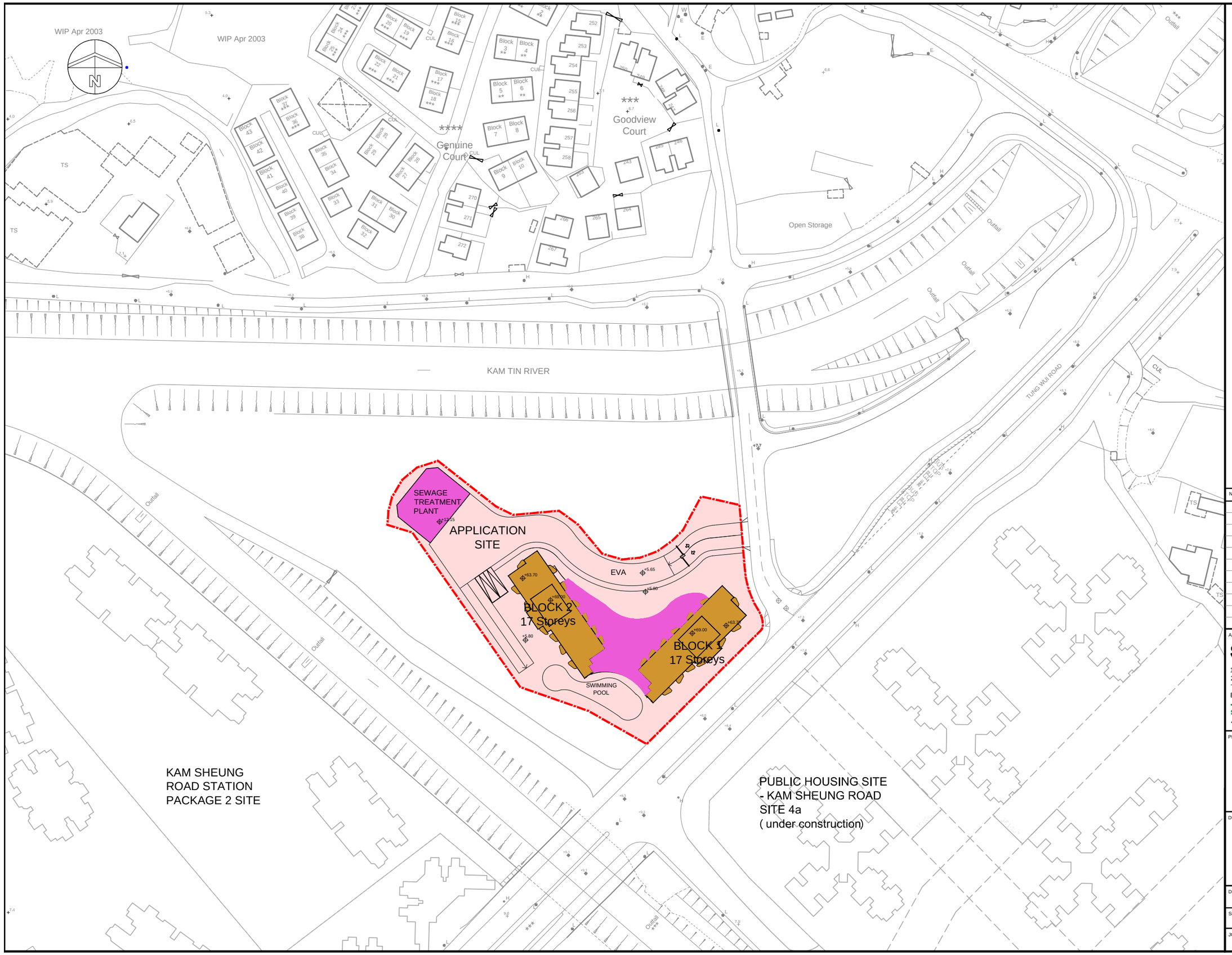
12.1.10 Majority of Application Site is developed, with negligible ecological value, including the NAScenT and other disturbed land. Minor vegetated areas consist of very common, disturbance-tolerant and/or invasive species especially *Leucaena leucocephala* which are of low ecological value. No ecological impact is anticipated for the construction and operation of the proposed development

12.1.11 It is concluded that there are no insurmountable environmental impacts on the proposed private residential developments at Lot 2160 RP (Part) in D.D.106 and Adjoining Government Land, Kam Sheung Road, Kam Tin, Yuen Long, New Territories.

Appendix

Appendix 2.1

Architectural Drawings for the Indicative Scheme at the Application Site



NOTES:

DO NOT SCALE DRAWINGS.

LAYOUT LEGEND:

APPLICATION SITE

NO	DATE	DESCRIPTION

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PROJECT NAME

PROPOSED RESIDENTIAL DEVELOPMENT AT LOT 2160 R.P. (PART) IN D.D. 106 AND ADJOINING GOVERNMENT LAND, KAM SHEUNG ROAD, KAM TIN, YUEN LONG, NEW TERRITORIES

DRAWING TITLE

MASTER LAYOUT PLAN

DRAWN BY: CC	CHECKED BY: RC
SCALE: 1:1250	DATE: 2026.10.09
JOB No.: 2526	DRAWING No.: A-03

Appendix 4.1

Location of Noise Sensitive Receivers

Location of NSRs

N

R5202a
R5201c
R5201b
R5201a
R5213e
R5213d
R5213c
R5213b
R5213a
R5212c
R5212b
R5212a
R5211c
R5211b
R5211a
R5210b
R5210a
R5209c
R5209b
R5209a
R5208f
R5208e
R5208d
R5208c
R5208b
R5208a
R5207d
R5207c
R5207b
R5207a
R5206b
R5206a
R5205c
R5205b
R5205a
R5204c
R5204b
R5204a
R5203d
R5203c
R5203b
R5203a
R5202e
R5202d
R5202c
R5202b

R5106d
R5106c
R5106b
R5106a
R5105d
R5105c
R5105b
R5105a
R5104c
R5104b
R5104a
R5103c
R5103b
R5103a
R5102b
R5102a
R5101d
R5101c
R5101b
R5101a
R5113f
R5113e
R5113d
R5113c
R5113b
R5113a
R5112c
R5112b
R5112a
R5111b
R5111a
R5110c
R5110b
R5110a
R5109c
R5109b
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R5108d
R5108c
R5108b
R5107c
R5107b
R5107a
R5106e

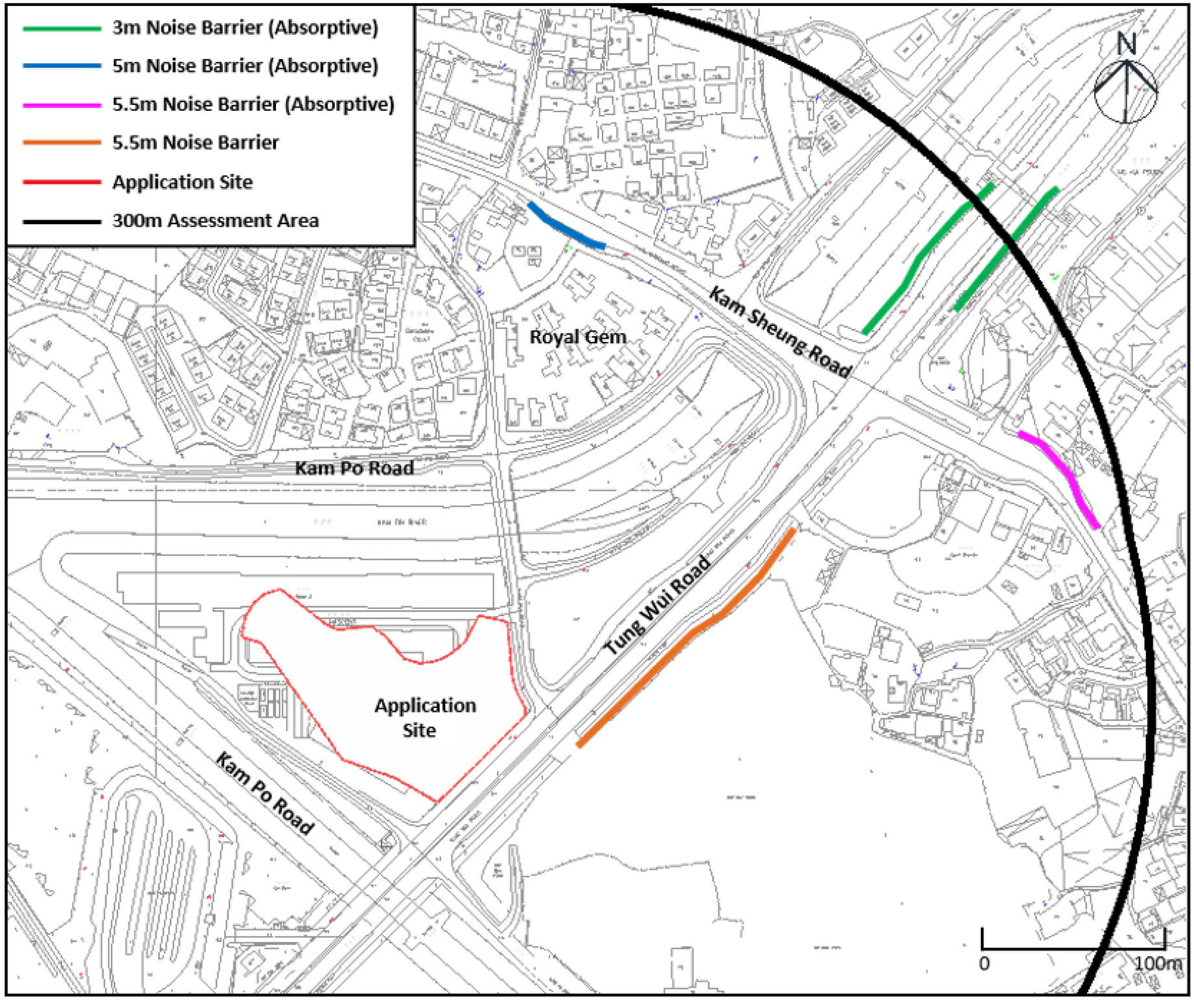
300m Assessment Area
Application Site

0 2.5 5 10 15 20
Meters

Appendix 4.2

Existing Noise Mitigation Measures

Existing Noise Mitigation Measures in vicinity of the Application Site



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GENERAL NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NO. DD600/21/C17/001 & 003.

AS-CONSTRUCTED DRAWING
- 9 APR 2004
ENGINEER'S REPRESENTATIVE DATE: 8 APR 2004
CONSULTANT'S REPRESENTATIVE DATE:

METRES 0 5 10 15 20 25

REV	DATE	BY	SUB	APP	DESCRIPTION
2	28JAN2004	JJ	DSWL	LL	AS CONSTRUCTED
1	03JUN2002	SKL	DSWL	LL	NOISE BARRIER SETTING OUT REVISED
0	26NOV2001	LCLC	RN	LL	ISSUE FOR CONSTRUCTION

DESIGNED BY CMY
DRAWN BY LL
CHECKED BY RN
IN CHARGE LL
DATE 26NOV2001

KCR 九廣鐵路 西鐵 West Rail

Parsons Brinckerhoff (Asia) Ltd.

Supported by : Maunsell, RMJM, Dennis Lau & Ng Chun Man, Det Norske Veritas, MVA, ACLA, Enviros, Townland, Taywood, BUEDRI, DCL

WEST RAIL DEPOT AND STATION
CC609 EASTERN ACCESS ROAD

NOISE BARRIER LAYOUT PLAN

CADD FILE NO	CADD DATE
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SCALE	1 : 500
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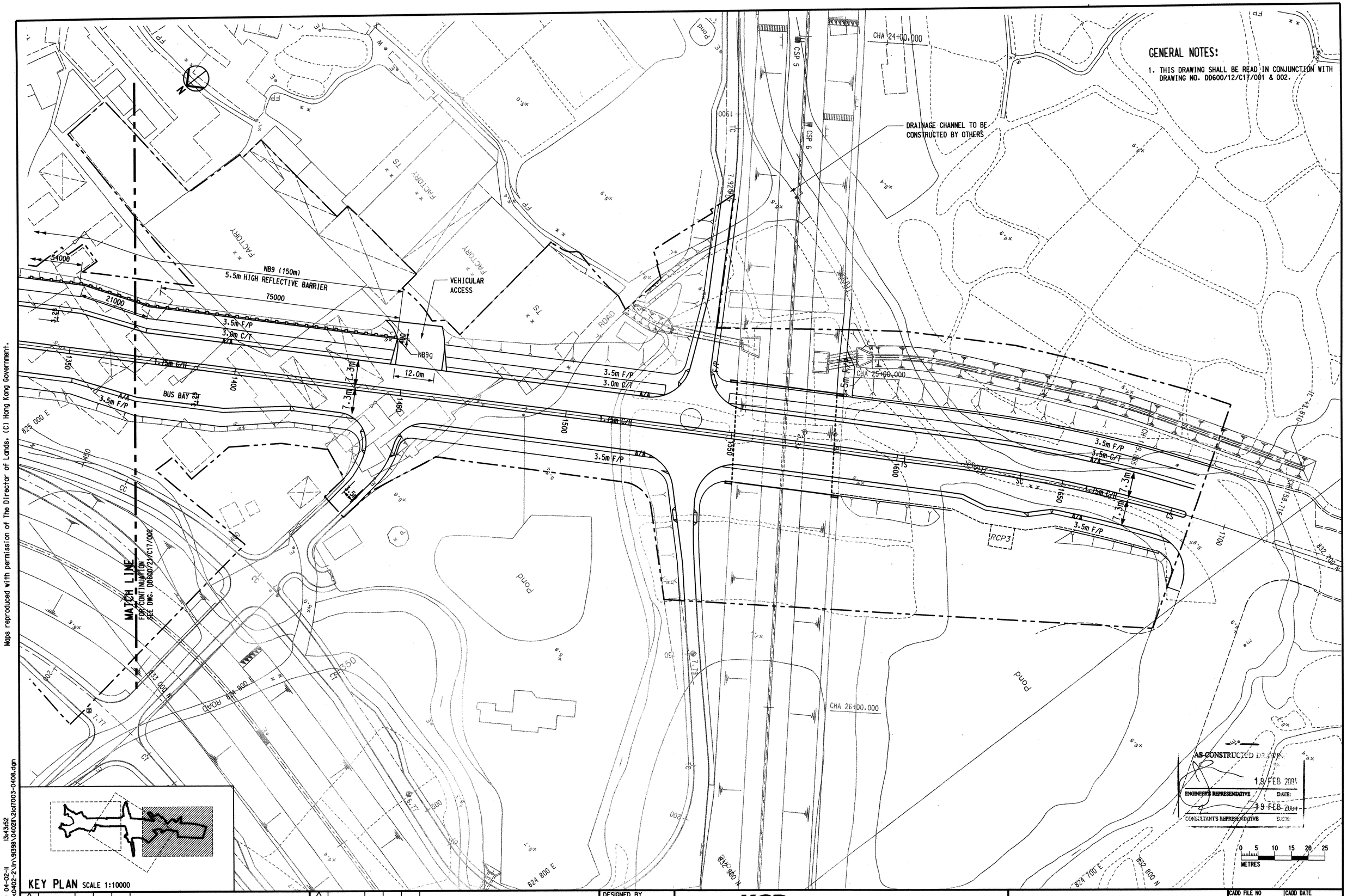
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KEY PLAN SCALE 1:10000

REV	DATE	BY	SUB	APP	DESCRIPTION
2	28JAN2004	JJ	DSWL	LL	AS CONSTRUCTED
1	03JUN202	SKL	DSWL	LL	NOISE BARRIER SETTING OUT REVISED
0	26NOV2001	LCLC	RN	LL	ISSUED FOR CONSTRUCTION

DESIGNED BY CMY
DRAWN BY HJP
CHECKED BY HJP
IN CHARGE LL
DATE 26NOV2001

KCR 九廣鐵路 西鐵 West Rail

Parsons Brinckerhoff (Asia) Ltd.

Supported by : Maunsell, RMJM, Dennis Lau & Ng Chun Man, Det Norske Veritas, MVA, ACLA, Enviros, Townland, Taywood, BUEDRI, DCL

WEST RAIL DEPOT AND STATION CC609 ESTERN ACCESS ROAD

NOISE BARRIER LAYOUT PLAN

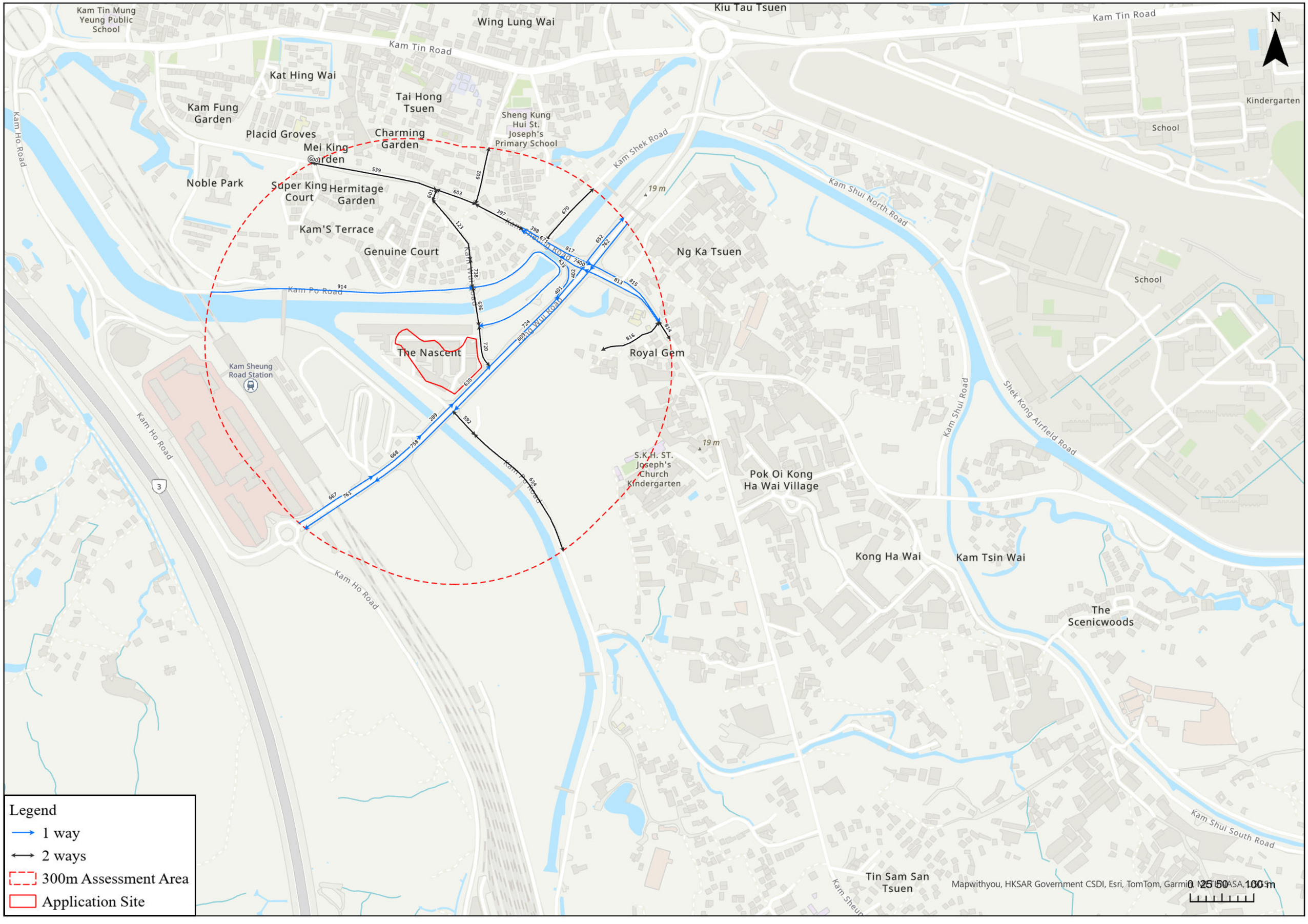
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FULL SIZE A1

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Appendix 4.3

Traffic Forecast


Kam Tin Mung Yeung Public School
Wing Lung Wai
Kiu Tau Tsuen
Kam Tin Road
Kat Hing Wai
Tai Hong Tsuen
Kam Fung Garden
Placid Groves
Charming Garden
Sheng Kung Hui St. Joseph's Primary School
Mei King Garden
Noble Park
Super King Court
Hermitage Garden
Kam'S Terrace
Genuine Court
Kam Shek Road
Kam Shui North Road
Ng Ka Tsuen
Kindergarten
School
School
Kam Ho Road
Kam Po Road
Kam Wui Road
The Nascent
Royal Gem
Kam Sheung Road Station
Kam Shui Road
Shek Kong Airfield Road
S.K.H. ST. Joseph's Church Kindergarten
Pok Oi Kong Ha Wai Village
Kong Ha Wai
Kam Tsin Wai
The Scenicwoods
Kam Shui South Road
Tin Sam San Tsuen
19 m
N
Legend
1 way
2 ways
300m Assessment Area
Application Site
0 25 50 100 m
Mapwithyou, HKSAR Government CSDI, Esri, TomTom, Garmin, NASA, USGS

Year 2050 Traffic Flow (PM Peak)

Road ID	Street [1]	Speed Limit (km/h)	Year 2050	
			Traffic Flow (Veh/hr)	% of Heavy Vehicles
123	Kam Wui Road	50	10	10.0
289	Tung Wui Road (NB)	50	495	48.3
397	Kam Sheung Road	70	907	23.3
398	Kam Sheung Road (EB)	70	530	20.2
399	Access Road (EB)	50	67	20.9
401	Tung Wui Road (NB)	50	379	49.6
402	Tung Wui Road	50	99	48.5
521	Kam Sheung Road	70	826	34.6
538	Kam Sheung Road	70	1050	23.0
539	Kam Sheung Road	70	1050	23.0
592	Kam Po Road	50	189	29.1
600	Kam Sheung Road	70	1050	23.0
601	Kam Wui Road	50	10	10.0
602	Po Tei Road	50	24	16.7
603	Kam Sheung Road	70	1043	23.2
609	Tung Wui Road (SB)	50	412	42.0
633	Kam Po Road	50	0	0.0
634	Kam Po Road	50	189	29.1
635	Tung Wui Road (NB)	50	495	48.3
636	Kam Wui Road	50	14	14.3
652	Tung Wui Road (NB)	50	386	45.9
667	Tung Wui Road (NB)	50	576	44.4
668	Tung Wui Road (NB)	50	576	44.4
670	Kam Shek Road	50	34	14.7
671	Kam Sheung Road (WB)	70	489	26.8
720	Kam Wui Road	50	85	23.5
724	Tung Wui Road (NB)	50	479	49.3
738	Kam Wui Road	50	10	10.0
758	Tung Wui Road (SB)	50	344	43.3
761	Tung Wui Road (SB)	50	360	43.3
762	Tung Wui Road (SB)	50	369	37.1
813	Kam Sheung Road (WB)	70	532	34.4
814	Kam Sheung Road	70	1007	33.2
815	Kam Sheung Road (EB)	70	593	30.2
816	Wing Hing Road	50	2	0.0
817	Kam Sheung Road (EB)	70	499	20.4
914	Kam Po Road	50	9	11.1
7400	Kam Sheung Road (WB)	70	388	21.1

Note:

[1] NB = North bound, SB = South bound, EB = East bound, WB = West bound.

Appendix 4.4

Road Traffic Noise Assessment (Base Case Scenario)

Floor	R5101a	R5101b	R5101c	R5101d	R5102a	R5102b	R5103a	R5103b	R5103c	R5104a	R5104b	R5104c	R5105a	R5105b	R5105c	R5105d	R5106a	R5106b	R5106c	R5106d	R5106e	R5107a	R5107b	R5107c	R5108a	R5108b	R5108c	R5108d	R5108e
16	66.1	67.2	65.7	62.8	61.8	61.2	60.9	60.8	60.7	60.6	60.6	60.7	60.8	60.9	61.0	61.1	61.6	62.1	63.2	66.6	**70.6**	**70.8**	**70.6**	**70.8**	**71.4**	**72.6**	**72.5**	**72.4**	**72.3**
15	66.2	67.3	65.8	62.9	61.8	61.1	60.8	60.7	60.6	60.5	60.5	60.6	60.7	60.8	60.9	61.1	61.6	62.1	63.3	66.7	**70.8**	**71.0**	**70.7**	**71.0**	**71.6**	**72.8**	**72.7**	**72.6**	**72.5**
14	66.4	67.5	65.9	62.9	61.8	61.1	60.8	60.7	60.6	60.4	60.4	60.5	60.6	60.7	60.9	61.0	61.5	62.0	63.3	66.7	**70.9**	**71.2**	**70.9**	**71.2**	**71.8**	**73.0**	**72.9**	**72.8**	**72.7**
13	66.6	67.7	66.0	62.9	61.7	61.0	60.7	60.5	60.5	60.3	60.3	60.4	60.5	60.6	60.7	60.9	61.4	62.0	63.3	66.8	**71.1**	**71.3**	**71.1**	**71.4**	**72.0**	**73.3**	**73.2**	**73.1**	**73.0**
12	66.8	67.8	66.1	62.9	61.6	60.9	60.6	60.4	60.4	60.2	60.2	60.3	60.4	60.5	60.6	60.8	61.3	62.0	63.2	66.9	**71.3**	**71.5**	**71.3**	**71.6**	**72.2**	**73.5**	**73.4**	**73.4**	**73.2**
11	67.0	68.0	66.2	62.9	61.6	60.8	60.4	60.3	60.2	60.0	60.0	60.2	60.3	60.4	60.5	60.7	61.2	61.9	63.2	67.0	**71.4**	**71.7**	**71.5**	**71.8**	**72.5**	**73.8**	**73.7**	**73.6**	**73.5**
10	67.3	68.2	66.3	62.8	61.4	60.6	60.2	60.1	60.0	59.8	59.8	59.9	60.1	60.2	60.3	60.5	61.1	61.8	63.2	67.1	**71.6**	**71.9**	**71.7**	**72.0**	**72.7**	**74.1**	**74.0**	**73.9**	**73.8**
9	67.5	68.4	66.4	62.8	61.4	60.5	60.1	59.9	59.8	59.6	59.6	59.7	59.8	60.0	60.1	60.4	60.9	61.7	63.1	67.2	**71.8**	**72.1**	**71.9**	**72.3**	**73.0**	**74.3**	**74.2**	**74.2**	**74.1**
8	67.7	68.6	66.5	62.8	61.2	60.3	59.9	59.7	59.6	59.4	59.4	59.5	59.7	59.8	60.0	60.2	60.8	61.5	63.1	67.3	**71.9**	**72.3**	**72.2**	**72.5**	**73.2**	**74.6**	**74.6**	**74.5**	**74.4**
7	67.9	68.7	66.6	62.8	61.1	60.2	59.7	59.6	59.4	59.2	59.2	59.3	59.5	59.6	59.8	60.1	60.7	61.5	63.1	67.3	**72.2**	**72.5**	**72.4**	**72.7**	**73.5**	**75.0**	**74.9**	**74.8**	**74.7**
6	68.1	68.9	66.7	62.8	61.1	60.1	59.6	59.4	59.3	59.0	59.0	59.2	59.3	59.5	59.7	59.9	60.6	61.4	63.1	67.4	**72.3**	**72.7**	**72.6**	**73.0**	**73.8**	**75.3**	**75.2**	**75.2**	**75.0**
5	68.3	69.1	66.9	62.8	61.0	60.0	59.5	59.3	59.2	58.9	58.9	59.1	59.2	59.4	59.6	59.8	60.6	61.4	63.1	67.5	**72.5**	**72.9**	**72.8**	**73.3**	**74.1**	**75.7**	**75.6**	**75.5**	**75.4**
4	68.5	69.2	67.0	62.8	61.0	59.9	59.4	59.2	59.1	58.8	58.8	59.0	59.2	59.3	59.5	59.8	60.6	61.4	63.2	67.6	**72.7**	**73.1**	**73.1**	**73.5**	**74.4**	**76.0**	**75.9**	**75.9**	**75.8**
3	68.6	69.4	67.1	62.9	61.0	59.9	59.4	59.2	59.1	58.8	58.8	58.9	59.1	59.3	59.5	59.8	60.6	61.4	63.2	67.7	**72.9**	**73.3**	**73.3**	**73.7**	**74.7**	**76.4**	**76.3**	**76.2**	**76.1**
2	68.8	69.5	67.1	62.9	61.0	59.9	59.4	59.2	59.0	58.8	58.7	58.9	59.1	59.3	59.5	59.8	60.6	61.4	63.3	67.8	**73.0**	**73.5**	**73.5**	**74.0**	**75.0**	**76.7**	**76.7**	**76.6**	**76.4**
1	68.9	69.6	67.1	62.8	60.8	59.6	59.1	58.9	58.8	58.6	58.6	58.8	59.0	59.2	59.5	59.8	60.6	61.4	63.3	67.9	**73.1**	**73.6**	**73.7**	**74.2**	**75.2**	**77.0**	**76.9**	**76.9**	**76.8**
Max	68.9	69.6	67.1	62.9	61.8	61.2	60.9	60.8	60.7	60.6	60.6	60.7	60.8	60.9	61.0	61.1	61.6	62.1	63.3	67.9	**73.1**	**73.6**	**73.7**	**74.2**	**75.2**	**77.0**	**76.9**	**76.9**	**76.8**
Min	66.1	67.2	65.7	62.8	60.8	59.6	59.1	58.9	58.8	58.6	58.6	58.8	59.0	59.2	59.5	59.8	60.6	61.4	63.1	66.6	**70.6**	**70.8**	**70.6**	**70.8**	**71.4**	**72.6**	**72.5**	**72.4**	**72.3**

# Total Flats	400
Exceedances	135
Compliance Rate	66.3%

Noise sensitive receivers with exceedance (>=70.5 dB(A))

Floor	R5109a	R5109b	R5109c	R5110a	R5110b	R5110c	R5111a	R5111b	R5112a	R5112b	R5112c	R5113a	R5113b	R5113c	R5113d	R5113e	R5113f	R5201a	R5201b	R5201c	R5202a	R5202b	R5202c	R5202d	R5202e	R5203a	R5203b	R5203c	R5203d
16	72.2	71.5	72.5	72.5	72.5	71.0	71.1	71.5	71.8	71.9	72.0	72.1	72.1	72.2	72.2	70.1	64.5	59.2	58.8	61.6	64.3	66.1	66.0	66.0	66.0	65.9	65.9	65.8	65.7
15	72.4	71.8	72.7	72.7	72.7	71.3	71.3	71.7	72.0	72.2	72.3	72.3	72.3	72.4	72.4	70.3	64.7	59.2	58.6	61.6	64.2	66.1	66.1	66.1	66.0	66.0	65.9	65.9	65.8
14	72.6	72.0	72.9	72.9	72.9	71.5	71.5	71.9	72.2	72.4	72.5	72.5	72.5	72.6	72.6	70.5	64.8	59.0	58.5	61.5	64.2	66.1	66.1	66.1	66.0	66.0	65.9	65.9	65.8
13	72.8	72.2	73.2	73.2	73.2	71.7	71.8	72.2	72.5	72.6	72.7	72.8	72.8	72.8	72.8	70.8	65.0	58.8	58.3	61.4	64.2	66.1	66.1	66.1	66.0	66.0	65.9	65.9	65.8
12	73.1	72.5	73.4	73.4	73.4	72.0	72.0	72.5	72.7	72.9	73.0	73.1	73.1	73.1	73.1	71.0	65.2	58.5	58.1	61.2	64.2	66.1	66.1	66.1	66.0	66.0	65.9	65.9	65.8
11	73.4	72.7	73.7	73.7	73.7	72.3	72.3	72.7	73.0	73.1	73.2	73.3	73.3	73.4	73.4	71.3	65.4	58.2	57.7	61.1	64.1	66.1	66.0	66.0	66.0	66.0	65.9	65.9	65.8
10	73.6	73.0	74.0	74.0	74.0	72.6	72.6	73.0	73.3	73.4	73.5	73.6	73.6	73.6	73.7	71.5	65.6	57.8	57.2	60.9	64.0	66.0	66.0	66.0	66.0	65.9	65.9	65.8	65.8
9	73.9	73.3	74.3	74.3	74.3	72.9	72.9	73.3	73.5	73.7	73.8	73.9	73.9	73.9	74.0	71.8	65.8	57.3	56.6	60.6	63.9	66.0	66.0	66.0	65.9	65.9	65.8	65.8	65.7
8	74.2	73.6	74.6	74.6	74.6	73.2	73.2	73.6	73.9	74.0	74.1	74.2	74.2	74.2	74.3	72.1	66.1	56.6	55.8	60.2	63.7	65.9	65.9	65.9	65.8	65.8	65.8	65.8	65.7
7	74.6	73.9	75.0	75.0	75.0	73.5	73.5	73.9	74.2	74.3	74.4	74.5	74.5	74.5	74.6	72.4	66.3	55.8	54.8	59.9	63.6	65.8	65.8	65.8	65.8	65.8	65.8	65.7	65.6
6	74.9	74.3	75.4	75.4	75.4	73.9	73.8	74.2	74.5	74.6	74.7	74.8	74.8	74.9	74.9	72.6	66.5	55.0	53.7	59.5	63.4	65.8	65.8	65.8	65.7	65.7	65.7	65.7	65.6
5	75.3	74.7	75.7	75.7	75.8	74.2	74.1	74.6	74.8	75.0	75.1	75.2	75.2	75.2	75.2	72.9	66.7	54.3	52.7	59.3	63.3	65.7	65.7	65.7	65.7	65.7	65.7	65.6	65.5
4	75.6	75.0	76.2	76.2	76.2	74.6	74.5	74.9	75.2	75.3	75.4	75.5	75.5	75.5	75.6	73.2	66.9	53.5	51.6	59.0	63.2	65.7	65.6	65.6	65.6	65.6	65.6	65.6	65.5
3	76.0	75.4	76.6	76.6	76.6	74.9	74.8	75.2	75.5	75.6	75.7	75.8	75.8	75.9	75.9	73.5	67.1	53.0	50.8	58.8	63.1	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.5
2	76.3	75.7	77.0	77.0	77.0	75.3	75.1	75.5	75.8	75.9	76.0	76.1	76.1	76.1	76.2	73.7	67.3	52.5	49.9	58.7	63.0	65.6	65.6	65.6	65.6	65.6	65.6	65.5	65.4
1	76.6	76.0	77.4	77.3	77.3	75.6	75.4	75.8	76.0	76.2	76.2	76.3	76.3	76.4	76.4	73.9	67.3	52.0	49.0	58.6	63.0	65.5	65.5	65.5	65.5	65.5	65.5	65.4	65.4
Max	76.6	76.0	77.4	77.3	77.3	75.6	75.4	75.8	76.0	76.2	76.2	76.3	76.3	76.4	76.4	73.9	67.3	59.2	58.8	61.6	64.3	66.1	66.1	66.1	66.0	66.0	65.9	65.9	65.8
Min	72.2	71.5	72.5	72.5	72.5	71.0	71.1	71.5	71.8	71.9	72.0	72.1	72.1	72.2	72.2	70.1	64.5	52.0	49.0	58.6	63.0	65.5	65.5	65.5	65.5	65.5	65.5	65.4	65.4

Floor	R5204a	R5204b	R5204c	R5205a	R5205b	R5205c	R5206a	R5206b	R5207a	R5207b	R5207c	R5207d	R5208a	R5208b	R5208c	R5208d	R5208e	R5208f	R5209a	R5209b	R5209c	R5210a	R5210b	R5211a	R5211b	R5211c	R5212a	R5212b	R5212c
16	65.7	65.6	65.5	65.4	65.3	65.2	65.2	65.3	65.6	67.0	68.0	67.5	67.2	69.3	68.7	67.9	67.4	67.2	67.1	66.9	66.7	66.5	66.4	66.5	66.6	66.4	66.3	62.1	64.0
15	65.7	65.6	65.5	65.4	65.3	65.3	65.2	65.3	65.7	67.1	68.1	67.7	67.3	69.4	68.9	68.0	67.6	67.3	67.2	67.0	66.8	66.6	66.5	66.6	66.7	66.5	66.4	62.1	64.1
14	65.7	65.6	65.5	65.4	65.3	65.3	65.2	65.4	65.7	67.2	68.3	67.9	67.5	69.6	69.0	68.2	67.7	67.4	67.3	67.1	66.9	66.7	66.6	66.7	66.7	66.6	66.4	62.2	64.1
13	65.7	65.7	65.5	65.5	65.4	65.3	65.3	65.4	65.8	67.3	68.4	68.0	67.6	69.7	69.2	68.3	67.8	67.6	67.4	67.2	67.0	66.8	66.6	66.8	66.8	66.6	66.5	62.3	64.2
12	65.7	65.7	65.6	65.5	65.4	65.3	65.3	65.4	65.8	67.4	68.5	68.1	67.7	69.9	69.3	68.4	67.9	67.7	67.5	67.3	67.1	66.9	66.7	66.9	66.9	66.7	66.6	62.3	64.2
11	65.7	65.6	65.6	65.5	65.4	65.3	65.3	65.5	65.9	67.4	68.7	68.3	67.8	70.0	69.4	68.5	68.1	67.8	67.6	67.4	67.2	67.0	66.8	67.0	67.0	66.8	66.6	62.4	64.3
10	65.7	65.6	65.5	65.5	65.4	65.3	65.3	65.5	65.9	67.5	68.8	68.4	68.0	70.2	69.6	68.7	68.2	67.9	67.7	67.5	67.3	67.1	66.9	67.0	67.1	66.9	66.7	62.4	64.4
9	65.7	65.6	65.5	65.4	65.4	65.3	65.3	65.5	65.9	67.6	68.9	68.5	68.1	70.3	69.7	68.8	68.3	68.0	67.9	67.6	67.4	67.1	67.0	67.1	67.1	66.9	66.7	62.5	64.4
8	65.6	65.5	65.5	65.4	65.3	65.3	65.3	65.5	66.0	67.6	69.0	68.6	68.3	70.4	69.8	68.9	68.4	68.1	67.9	67.7	67.5	67.2	67.1	67.2	67.2	67.0	66.8	62.5	64.4
7	65.6	65.5	65.4	65.3	65.3	65.3	65.3	65.5	65.9	67.7	69.1	68.7	68.4	**70.6**	70.0	69.1	68.5	68.2	68.0	67.8	67.5	67.3	67.2	67.2	67.3	67.1	66.9	62.5	64.5
6	65.5	65.5	65.4	65.3	65.3	65.3	65.2	65.5	66.0	67.7	69.3	68.8	68.5	**70.7**	70.1	69.2	68.6	68.3	68.1	67.9	67.6	67.4	67.2	67.3	67.3	67.1	66.9	62.6	64.5
5	65.5	65.4	65.4	65.3	65.2	65.2	65.2	65.5	66.0	67.8	69.4	69.0	68.6	**70.8**	70.2	69.2	68.7	68.4	68.2	67.9	67.7	67.5	67.3	67.4	67.4	67.2	66.9	62.6	64.6
4	65.5	65.4	65.3	65.3	65.2	65.2	65.2	65.5	66.0	67.9	69.4	69.1	68.7	**70.9**	70.3	69.3	68.8	68.5	68.3	68.0	67.7	67.5	67.3	67.4	67.4	67.2	67.0	62.6	64.6
3	65.4	65.4	65.3	65.3	65.2	65.2	65.2	65.5	66.0	67.9	69.5	69.1	68.8	**71.0**	70.4	69.4	68.9	68.5	68.3	68.0	67.8	67.6	67.4	67.5	67.4	67.3	67.0	62.6	64.6
2	65.4	65.4	65.3	65.2	65.2	65.2	65.2	65.5	66.1	68.0	69.6	69.2	68.9	**71.0**	70.4	69.4	68.9	68.6	68.4	68.1	67.8	67.6	67.4	67.5	67.5	67.3	67.1	62.7	64.6
1	65.3	65.3	65.2	65.1	65.1	65.0	65.0	65.3	65.9	67.8	69.6	69.2	68.8	**71.1**	**70.5**	69.5	68.9	68.6	68.4	68.1	67.9	67.6	67.4	67.5	67.5	67.3	67.1	62.7	64.6
Max	65.7	65.7	65.6	65.5	65.4	65.3	65.3	65.5	66.1	68.0	69.6	69.2	68.9	**71.1**	**70.5**	69.5	68.9	68.6	68.4	68.1	67.9	67.6	67.4	67.5	67.5	67.3	67.1	62.7	64.6
Min	65.3	65.3	65.2	65.1	65.1	65.0	65.0	65.3	65.6	67.0	68.0	67.5	67.2	69.3	68.7	67.9	67.4	67.2	67.1	66.9	66.7	66.5	66.4	66.5	66.6	66.4	66.3	62.1	64.0

Floor	R5213a	R5213b	R5213c	R5213d	R5213e
16	64.4	64.5	64.7	65.0	60.1
15	64.5	64.6	64.8	65.1	60.0
14	64.6	64.6	64.8	65.1	59.9
13	64.6	64.7	64.9	65.1	59.7
12	64.7	64.8	64.9	65.1	59.5
11	64.7	64.8	64.9	65.1	59.3
10	64.8	64.9	65.0	65.1	59.0
9	64.8	64.9	65.0	65.1	58.6
8	64.8	64.9	65.0	65.1	58.1
7	64.9	65.0	65.0	65.1	57.6
6	64.9	65.0	65.1	65.1	57.1
5	65.0	65.0	65.1	65.1	56.7
4	65.0	65.1	65.1	65.1	56.2
3	65.0	65.1	65.1	65.1	56.0
2	65.0	65.1	65.1	65.1	55.7
1	65.0	65.1	65.1	65.1	55.5
Max	65.0	65.1	65.1	65.1	60.1
Min	64.4	64.5	64.7	65.0	55.5

Appendix 4.5

Road Traffic Noise Assessment (Mitigated Scenario)

Floor	R5101a	R5101b	R5101c	R5101d	R5102a	R5102b	R5103a	R5103b	R5103c	R5104a	R5104b	R5104c	R5105a	R5105b	R5105c	R5105d	R5106a	R5106b	R5106c	R5106d	R5106e	R5107a	R5107b	R5107c	R5108a	R5108b	R5108c	R5108d	R5108e
16	66.1	67.2	65.7	62.8	61.8	61.2	60.9	60.8	60.7	60.6	60.6	60.7	60.8	60.9	61.0	61.1	61.6	62.1	63.2	66.6	64.6	64.8	62.6	64.8	65.4	66.6	66.5	64.4	66.3
15	66.2	67.3	65.8	62.9	61.8	61.1	60.8	60.7	60.6	60.5	60.5	60.6	60.7	60.8	60.9	61.1	61.6	62.1	63.3	66.7	64.8	65.0	62.7	65.0	65.6	66.8	66.7	64.6	66.5
14	66.4	67.5	65.9	62.9	61.8	61.1	60.8	60.7	60.6	60.4	60.4	60.5	60.6	60.7	60.9	61.0	61.5	62.0	63.3	66.7	64.9	65.2	62.9	65.2	65.8	67.0	66.9	64.8	66.7
13	66.6	67.7	66.0	62.9	61.7	61.0	60.7	60.5	60.5	60.3	60.3	60.4	60.5	60.6	60.7	60.9	61.4	62.0	63.3	66.8	65.1	65.3	63.1	65.4	66.0	67.3	67.2	65.1	67.0
12	66.8	67.8	66.1	62.9	61.6	60.9	60.6	60.4	60.4	60.2	60.2	60.3	60.4	60.5	60.6	60.8	61.3	62.0	63.2	66.9	65.3	65.5	63.3	65.6	66.2	67.5	67.4	65.4	67.2
11	67.0	68.0	66.2	62.9	61.6	60.8	60.4	60.3	60.2	60.0	60.0	60.2	60.3	60.4	60.5	60.7	61.2	61.9	63.2	67.0	65.4	65.7	63.5	65.8	66.5	67.8	67.7	65.6	67.5
10	67.3	68.2	66.3	62.8	61.4	60.6	60.2	60.1	60.0	59.8	59.8	59.9	60.1	60.2	60.3	60.5	61.1	61.8	63.2	67.1	65.6	65.9	63.7	66.0	66.7	68.1	68.0	65.9	67.8
9	67.5	68.4	66.4	62.8	61.4	60.5	60.1	59.9	59.8	59.6	59.6	59.7	59.8	60.0	60.1	60.4	60.9	61.7	63.1	67.2	65.8	66.1	63.9	66.3	67.0	68.3	68.2	66.2	68.1
8	67.7	68.6	66.5	62.8	61.2	60.3	59.9	59.7	59.6	59.4	59.4	59.5	59.7	59.8	60.0	60.2	60.8	61.5	63.1	67.3	65.9	66.3	64.2	66.5	67.2	68.6	68.6	66.5	68.4
7	67.9	68.7	66.6	62.8	61.1	60.2	59.7	59.6	59.4	59.2	59.2	59.3	59.5	59.6	59.8	60.1	60.7	61.5	63.1	67.3	66.2	66.5	64.4	66.7	67.5	69.0	68.9	66.8	68.7
6	68.1	68.9	66.7	62.8	61.1	60.1	59.6	59.4	59.3	59.0	59.0	59.2	59.3	59.5	59.7	59.9	60.6	61.4	63.1	67.4	66.3	66.7	64.6	67.0	67.8	69.3	69.2	67.2	69.0
5	68.3	69.1	66.9	62.8	61.0	60.0	59.5	59.3	59.2	58.9	58.9	59.1	59.2	59.4	59.6	59.8	60.6	61.4	63.1	67.5	66.5	66.9	64.8	67.3	68.1	69.7	69.6	67.5	69.4
4	68.5	69.2	67.0	62.8	61.0	59.9	59.4	59.2	59.1	58.8	58.8	59.0	59.2	59.3	59.5	59.8	60.6	61.4	63.2	67.6	66.7	67.1	65.1	67.5	68.4	70.0	69.9	67.9	69.8
3	68.6	69.4	67.1	62.9	61.0	59.9	59.4	59.2	59.1	58.8	58.8	58.9	59.1	59.3	59.5	59.8	60.6	61.4	63.2	67.7	66.9	67.3	65.3	67.7	68.7	70.4	70.3	68.2	70.1
2	68.8	69.5	67.1	62.9	61.0	59.9	59.4	59.2	59.0	58.8	58.7	58.9	59.1	59.3	59.5	59.8	60.6	61.4	63.3	67.8	67.0	67.5	65.5	68.0	69.0	69.2	69.2	68.6	70.4
1	68.9	69.6	67.1	62.8	60.8	59.6	59.1	58.9	58.8	58.6	58.6	58.8	59.0	59.2	59.5	59.8	60.6	61.4	63.3	67.9	67.1	67.6	65.7	68.2	69.2	69.5	69.4	68.9	69.3
Max	68.9	69.6	67.1	62.9	61.8	61.2	60.9	60.8	60.7	60.6	60.6	60.7	60.8	60.9	61.0	61.1	61.6	62.1	63.3	67.9	67.1	67.6	65.7	68.2	69.2	70.4	70.3	68.9	70.4
Min	66.1	67.2	65.7	62.8	60.8	59.6	59.1	58.9	58.8	58.6	58.6	58.8	59.0	59.2	59.5	59.8	60.6	61.4	63.1	66.6	64.6	64.8	62.6	64.8	65.4	66.6	66.5	64.4	66.3

# Total Flats	400
Exceedances	0
Compliance Rate	100.0%

Noise sensitive receivers applied with acoustic window (non-absorptive)

Noise sensitive receivers applied with acoustic window (absorptive)

Noise sensitive receivers applied with enhanced acoustic balcony

Floor	R5109a	R5109b	R5109c	R5110a	R5110b	R5110c	R5111a	R5111b	R5112a	R5112b	R5112c	R5113a	R5113b	R5113c	R5113d	R5113e	R5113f	R5201a	R5201b	R5201c	R5202a	R5202b	R5202c	R5202d	R5202e	R5203a	R5203b	R5203c	R5203d
16	66.2	63.5	66.5	66.5	66.5	63.0	65.1	63.5	65.8	63.9	66.0	66.1	64.1	66.2	66.2	70.1	64.5	59.2	58.8	61.6	64.3	66.1	66.0	66.0	66.0	65.9	65.9	65.8	65.7
15	66.4	63.8	66.7	66.7	66.7	63.3	65.3	63.7	66.0	64.2	66.3	66.3	64.3	66.4	66.4	70.3	64.7	59.2	58.6	61.6	64.2	66.1	66.1	66.1	66.0	66.0	65.9	65.9	65.8
14	66.6	64.0	66.9	66.9	66.9	63.5	65.5	63.9	66.2	64.4	66.5	66.5	64.5	66.6	66.6	64.5	64.8	59.0	58.5	61.5	64.2	66.1	66.1	66.1	66.0	66.0	65.9	65.9	65.8
13	66.8	64.2	67.2	67.2	67.2	63.7	65.8	64.2	66.5	64.6	66.7	66.8	64.8	66.8	66.8	64.8	65.0	58.8	58.3	61.4	64.2	66.1	66.1	66.1	66.0	66.0	65.9	65.9	65.8
12	67.1	64.5	67.4	67.4	67.4	64.0	66.0	64.5	66.7	64.9	67.0	67.1	65.1	67.1	67.1	65.0	65.2	58.5	58.1	61.2	64.2	66.1	66.1	66.1	66.0	66.0	65.9	65.9	65.8
11	67.4	64.7	67.7	67.7	67.7	64.3	66.3	64.7	67.0	65.1	67.2	67.3	65.3	67.4	67.4	65.3	65.4	58.2	57.7	61.1	64.1	66.1	66.0	66.0	66.0	66.0	65.9	65.9	65.8
10	67.6	65.0	68.0	68.0	68.0	64.6	66.6	65.0	67.3	65.4	67.5	67.6	65.6	67.6	67.7	65.5	65.6	57.8	57.2	60.9	64.0	66.0	66.0	66.0	66.0	65.9	65.9	65.8	65.8
9	67.9	65.3	68.3	68.3	68.3	64.9	66.9	65.3	67.5	65.7	67.8	67.9	65.9	67.9	68.0	65.8	65.8	57.3	56.6	60.6	63.9	66.0	66.0	66.0	65.9	65.9	65.8	65.8	65.7
8	68.2	65.6	68.6	68.6	68.6	65.2	67.2	65.6	67.9	66.0	68.1	68.2	66.2	68.2	68.3	66.1	66.1	56.6	55.8	60.2	63.7	65.9	65.9	65.9	65.8	65.8	65.8	65.8	65.7
7	68.6	65.9	69.0	69.0	69.0	65.5	67.5	65.9	68.2	66.3	68.4	68.5	66.5	68.5	68.6	66.4	66.3	55.8	54.8	59.9	63.6	65.8	65.8	65.8	65.8	65.8	65.8	65.7	65.6
6	68.9	66.3	69.4	69.4	69.4	65.9	67.8	66.2	68.5	66.6	68.7	68.8	66.8	68.9	68.9	66.6	66.5	55.0	53.7	59.5	63.4	65.8	65.8	65.8	65.7	65.7	65.7	65.7	65.6
5	69.3	66.7	69.7	69.7	69.8	66.2	68.1	66.6	68.8	67.0	69.1	69.2	67.2	69.2	69.2	66.9	66.7	54.3	52.7	59.3	63.3	65.7	65.7	65.7	65.7	65.7	65.7	65.6	65.5
4	69.6	67.0	70.2	70.2	70.2	66.6	68.5	66.9	69.2	67.3	69.4	69.5	67.5	69.5	69.6	67.2	66.9	53.5	51.6	59.0	63.2	65.7	65.6	65.6	65.6	65.6	65.6	65.6	65.5
3	70.0	67.4	69.1	69.1	69.1	66.9	68.8	67.2	69.5	67.6	69.7	69.8	67.8	69.9	69.9	67.5	67.1	53.0	50.8	58.8	63.1	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.5
2	70.3	67.7	69.5	69.5	69.5	67.3	69.1	67.5	69.8	67.9	70.0	70.1	68.1	70.1	70.2	67.7	67.3	52.5	49.9	58.7	63.0	65.6	65.6	65.6	65.6	65.6	65.6	65.5	65.4
1	69.1	68.0	69.9	69.8	69.8	67.6	69.4	67.8	70.0	68.2	70.2	70.3	68.3	70.4	70.4	67.9	67.3	52.0	49.0	58.6	63.0	65.5	65.5	65.5	65.5	65.5	65.5	65.4	65.4
Max	70.3	68.0	70.2	70.2	70.2	67.6	69.4	67.8	70.0	68.2	70.2	70.3	68.3	70.4	70.4	70.3	67.3	59.2	58.8	61.6	64.3	66.1	66.1	66.1	66.0	66.0	65.9	65.9	65.8
Min	66.2	63.5	66.5	66.5	66.5	63.0	65.1	63.5	65.8	63.9	66.0	66.1	64.1	66.2	66.2	64.5	64.5	52.0	49.0	58.6	63.0	65.5	65.5	65.5	65.5	65.5	65.5	65.4	65.4

Noise sensitive receivers applied with acoustic window (non-absorptive)

Noise sensitive receivers applied with acoustic window (absorptive)

Noise sensitive receivers applied with enhanced acoustic balcony

Floor	R5204a	R5204b	R5204c	R5205a	R5205b	R5205c	R5206a	R5206b	R5207a	R5207b	R5207c	R5207d	R5208a	R5208b	R5208c	R5208d	R5208e	R5208f	R5209a	R5209b	R5209c	R5210a	R5210b	R5211a	R5211b	R5211c	R5212a	R5212b	R5212c
16	65.7	65.6	65.5	65.4	65.3	65.2	65.2	65.3	65.6	67.0	68.0	67.5	67.2	69.3	68.7	67.9	67.4	67.2	67.1	66.9	66.7	66.5	66.4	66.5	66.6	66.4	66.3	62.1	64.0
15	65.7	65.6	65.5	65.4	65.3	65.3	65.2	65.3	65.7	67.1	68.1	67.7	67.3	69.4	68.9	68.0	67.6	67.3	67.2	67.0	66.8	66.6	66.5	66.6	66.7	66.5	66.4	62.1	64.1
14	65.7	65.6	65.5	65.4	65.3	65.3	65.2	65.4	65.7	67.2	68.3	67.9	67.5	69.6	69.0	68.2	67.7	67.4	67.3	67.1	66.9	66.7	66.6	66.7	66.7	66.6	66.4	62.2	64.1
13	65.7	65.7	65.5	65.5	65.4	65.3	65.3	65.4	65.8	67.3	68.4	68.0	67.6	69.7	69.2	68.3	67.8	67.6	67.4	67.2	67.0	66.8	66.6	66.8	66.8	66.6	66.5	62.3	64.2
12	65.7	65.7	65.6	65.5	65.4	65.3	65.3	65.4	65.8	67.4	68.5	68.1	67.7	69.9	69.3	68.4	67.9	67.7	67.5	67.3	67.1	66.9	66.7	66.9	66.9	66.7	66.6	62.3	64.2
11	65.7	65.6	65.6	65.5	65.4	65.3	65.3	65.5	65.9	67.4	68.7	68.3	67.8	70.0	69.4	68.5	68.1	67.8	67.6	67.4	67.2	67.0	66.8	67.0	67.0	66.8	66.6	62.4	64.3
10	65.7	65.6	65.5	65.5	65.4	65.3	65.3	65.5	65.9	67.5	68.8	68.4	68.0	70.2	69.6	68.7	68.2	67.9	67.7	67.5	67.3	67.1	66.9	67.0	67.1	66.9	66.7	62.4	64.4
9	65.7	65.6	65.5	65.4	65.4	65.3	65.3	65.5	65.9	67.6	68.9	68.5	68.1	70.3	69.7	68.8	68.3	68.0	67.9	67.6	67.4	67.1	67.0	67.1	67.1	66.9	66.7	62.5	64.4
8	65.6	65.5	65.5	65.4	65.3	65.3	65.3	65.5	66.0	67.6	69.0	68.6	68.3	70.4	69.8	68.9	68.4	68.1	67.9	67.7	67.5	67.2	67.1	67.2	67.2	67.0	66.8	62.5	64.4
7	65.6	65.5	65.4	65.3	65.3	65.3	65.3	65.5	65.9	67.7	69.1	68.7	68.4	64.6	70.0	69.1	68.5	68.2	68.0	67.8	67.5	67.3	67.2	67.2	67.3	67.1	66.9	62.5	64.5
6	65.5	65.5	65.4	65.3	65.3	65.3	65.2	65.5	66.0	67.7	69.3	68.8	68.5	64.7	70.1	69.2	68.6	68.3	68.1	67.9	67.6	67.4	67.2	67.3	67.3	67.1	66.9	62.6	64.5
5	65.5	65.4	65.4	65.3	65.2	65.2	65.2	65.5	66.0	67.8	69.4	69.0	68.6	64.8	70.2	69.2	68.7	68.4	68.2	67.9	67.7	67.5	67.3	67.4	67.4	67.2	66.9	62.6	64.6
4	65.5	65.4	65.3	65.3	65.2	65.2	65.2	65.5	66.0	67.9	69.4	69.1	68.7	64.9	70.3	69.3	68.8	68.5	68.3	68.0	67.7	67.5	67.3	67.4	67.4	67.2	67.0	62.6	64.6
3	65.4	65.4	65.3	65.3	65.2	65.2	65.2	65.5	66.0	67.9	69.5	69.1	68.8	65.0	70.4	69.4	68.9	68.5	68.3	68.0	67.8	67.6	67.4	67.5	67.4	67.3	67.0	62.6	64.6
2	65.4	65.4	65.3	65.2	65.2	65.2	65.2	65.5	66.1	68.0	69.6	69.2	68.9	65.0	70.4	69.4	68.9	68.6	68.4	68.1	67.8	67.6	67.4	67.5	67.5	67.3	67.1	62.7	64.6
1	65.3	65.3	65.2	65.1	65.1	65.0	65.0	65.3	65.9	67.8	69.6	69.2	68.8	65.1	64.5	69.5	68.9	68.6	68.4	68.1	67.9	67.6	67.4	67.5	67.5	67.3	67.1	62.7	64.6
Max	65.7	65.7	65.6	65.5	65.4	65.3	65.3	65.5	66.1	68.0	69.6	69.2	68.9	70.4	70.4	69.5	68.9	68.6	68.4	68.1	67.9	67.6	67.4	67.5	67.5	67.3	67.1	62.7	64.6
Min	65.3	65.3	65.2	65.1	65.1	65.0	65.0	65.3	65.6	67.0	68.0	67.5	67.2	64.6	64.5	67.9	67.4	67.2	67.1	66.9	66.7	66.5	66.4	66.5	66.6	66.4	66.3	62.1	64.0

Noise sensitive receivers applied with acoustic window (non-absorptive)
Noise sensitive receivers applied with acoustic window (absorptive)
Noise sensitive receivers applied with enhanced acoustic balcony

Floor	R5213a	R5213b	R5213c	R5213d	R5213e
16	64.4	64.5	64.7	65.0	60.1
15	64.5	64.6	64.8	65.1	60.0
14	64.6	64.6	64.8	65.1	59.9
13	64.6	64.7	64.9	65.1	59.7
12	64.7	64.8	64.9	65.1	59.5
11	64.7	64.8	64.9	65.1	59.3
10	64.8	64.9	65.0	65.1	59.0
9	64.8	64.9	65.0	65.1	58.6
8	64.8	64.9	65.0	65.1	58.1
7	64.9	65.0	65.0	65.1	57.6
6	64.9	65.0	65.1	65.1	57.1
5	65.0	65.0	65.1	65.1	56.7
4	65.0	65.1	65.1	65.1	56.2
3	65.0	65.1	65.1	65.1	56.0
2	65.0	65.1	65.1	65.1	55.7
1	65.0	65.1	65.1	65.1	55.5
Max	65.0	65.1	65.1	65.1	60.1
Min	64.4	64.5	64.7	65.0	55.5

Appendix 5.1

Parameters and Assumptions for Rail Noise

Parameters and assumptions for $L_{eq\ (30min)}$ calculation

Parameters	Assumptions	Remarks
Rail Deterioration	+3 dB(A)	A +3 dB(A) rail deterioration correction has been included for conservative assessment.
Distance	Change of SEL with distance = 10 log (d_1 / 25) dB(A)	d_1 is the distance between track and receiver
View Angle	10 log ($\pi\theta$/180-cos2α sinθ) – 5 dB(A)	α is the acute angle between a line drawn through the receiver point, parallel to the track and the line bisecting the angle view θ θ is the view angle
Time correction to 30 minutes for $L_{eq\ (30min)}$	10 log(1 / 1800)	-
Air absorption	0.2 – 0.008*d* dB(A)	*d* is the distance (m)
Train Frequency [1]	10log(N_1)	N_1 is the train frequency in 30 minutes Frequency (trains / direction / 30 minutes)
Façade Effect	+2.5 dB(A)	According to the Calculation of Railway Noise (CRN)

Note:
[1] According to approved EIA report for Tuen Mun South Extension (AEIAR-236/2022), the maximum train frequency for Tuen Ma Line is 28 trains per hour per direction (tphpd) for daytime/evening and 10 tphpd for night-time respectively.

Parameters and assumptions for L_{max} calculation

Parameters	Assumptions	Remarks
Rail Deterioration	+3 dB(A)	A +3 dB(A) rail deterioration correction has been included for conservative assessment.
Distance	- 20 log (d_1 / 25) dB(A)	d_1 is the distance between track and receiver
Air absorption	0.2 – 0.008*d* dB(A)	*d* is the distance (m)
Façade Effect	+2.5 dB(A)	According to the Calculation of Railway Noise (CRN)

Appendix 5.2

Detailed Calculations of $L_{eq(30min)}$ at Representative Noise Sensitive Receivers

Project no: 309160
Project name: Section 12A Application for Amendment to the Approved Kam Tin South Outline Zoning Plan No. S/YL-KTS/15, to rezone the Application Site from “Comprehensive Development Area” to “Residential (Group A)” in Lot 2160 RP (Part) in D.D. 106, and Adjoining Government Land, Kam Sheung Road, Kam Tin, Yuen Long
Title: Detailed Calculations of Leq(30min) at Representative NSRs
NSR: R5213d
First NSR Level: 14.5mPD
No. of Storeys: 16 (1/F-16/F)
Uses: Residential

																					Daytime Result		Night-time Result	
Floor	Area Sensitivity Rating	Rail Headway	Segment	Daytime/Evening Operation Frequency (headway/30 min) [1]	Night-time Operation Frequency (headway/30 min) [1]	SEL, dB(A) @25m [2]	NSR Details					Height of Railhead (mPD) [3]	Corrections, dB(A)								Predicted Daytime/ Evening $L_{eq\ 30min}$, dB(A)	Predicted Overall Daytime/Evening Noise Level $L_{eq\ 30min}$ at Assessment Point, dB(A)	Predicted Night-time $L_{eq\ 30min}$, dB(A)	Predicted Overall Night-time Noise Level $L_{eq\ 30min}$ at Assessment Point, dB(A)
							Horizontal Distance from Source Line (m)	Height (mPD)	Nearest Distance from the Track (d')	View Angle (Θ), deg	Acute Angle (alpha), deg		Distance Correction [4]	View Angle Correction	Facade Correction	Time Correction (30 min)	Rail Deterioration Correction	Air absorption Correction	Daytime/Evening Operation Frequency Correction (headway/30min)	Night-time Operation Frequency Correction (headway/30min)				
1	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	14.5	257.4	101.2	85.0	15.4	-10.1	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.2	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	14.5	234.7	109.8	86.8	15.4	-9.7	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	54.0		52.5	
2	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	17.7	257.4	101.2	85.0	15.4	-10.1	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.2	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	17.7	234.7	109.8	86.8	15.4	-9.7	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	54.0		52.5	
3	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	20.8	257.5	101.2	85.0	15.4	-10.1	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.2	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	20.8	234.8	109.8	86.8	15.4	-9.7	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	54.0		52.5	
4	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	24.0	257.5	101.2	85.0	15.4	-10.1	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.2	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	24.0	234.9	109.8	86.8	15.4	-9.7	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	54.0		52.5	
5	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	27.1	257.7	101.2	85.0	15.4	-10.1	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.2	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	27.1	235.0	109.8	86.8	15.4	-9.7	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.9		52.5	
6	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	30.3	257.8	101.2	85.0	15.4	-10.1	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.2	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	30.3	235.2	109.8	86.8	15.4	-9.7	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.9		52.5	
7	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	33.4	258.0	101.2	85.0	15.4	-10.1	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.2	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	33.4	235.4	109.8	86.8	15.4	-9.7	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.9		52.5	
8	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	36.6	258.3	101.2	85.0	15.4	-10.1	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.2	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	36.6	235.7	109.8	86.8	15.4	-9.7	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.9		52.5	
9	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	39.7	258.5	101.2	85.0	15.4	-10.1	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.2	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	39.7	236.0	109.8	86.8	15.4	-9.7	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.9		52.5	
10	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	42.9	258.9	101.2	85.0	15.4	-10.2	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.2	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	42.9	236.3	109.8	86.8	15.4	-9.8	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.9		52.5	
11	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	46.0	259.2	101.2	85.0	15.4	-10.2	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.1	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	46.0	236.7	109.8	86.8	15.4	-9.8	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.9		52.4	
12	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	49.2	259.6	101.2	85.0	15.4	-10.2	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.1	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	49.2	237.1	109.8	86.8	15.4	-9.8	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.9		52.4	
13	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	52.3	260.0	101.2	85.0	15.4	-10.2	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.1	57	51.7	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	52.3	237.6	109.8	86.8	15.4	-9.8	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.9		52.4	
14	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	55.5	260.5	101.2	85.0	15.4	-10.2	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.1	57	51.6	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	55.5	238.1	109.8	86.8	15.4	-9.8	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.9		52.4	
15	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	58.6	261.0	101.2	85.0	15.4	-10.2	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.1	57	51.6	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	58.6	238.6	109.8	86.8	15.4	-9.8	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.9		52.4	
16	B	Tuen Ma Line to Wu Kai Sha	1	14	10	81.4	257.4	61.8	261.5	101.2	85.0	15.4	-10.2	-0.6	2.5	-32.6	3.0	-1.9	11.5	10.0	53.1	56	51.6	55
		Tuen Ma Line to Tuen Mun		14	10	81.4	234.7	61.8	239.2	109.8	86.8	15.4	-9.8	-0.4	2.5	-32.6	3.0	-1.7	11.5	10.0	53.8		52.4	
																					Max. Leq	57	**Max. Leq**	55
																					Criterion	65	**Criterion**	55
																					Comply	Y	**Comply**	Y

Notes:
[1] According to the Approved EIA Report for Tuen Mun South Extension (AEIAR-236/2022), the maximum train frequency for Tuen Ma Line is 28 trains per hour per direction (tphpd) for daytime/evening and 20 tphpd for night-time respectively.
[2] With reference to the Approved EIA Report for Tuen Mun South Extension (AEIAR-236/2022), the up track SEL of 81.4dB(A) is adopted for conservative assessment.
[3] The highest railhead (i.e. 15.4mPD) is adopted for all rail segments for conservative assessment.
[4] Distance correction is calculated based on 25m reference distance.

Appendix 5.3

Detailed Calculations of $L_{eq(24hr)}$ at Representative Noise Sensitive Receivers

Project no: 309160
Project name: Section 12A Application for Amendment to the Approved Kam Tin South Outline Zoning Plan No. S/YL-KTS/15, to rezone the Application Site from “Comprehensive Development Area” to “Residential (Group A)” in Lot 2160 RP (Part) in D.D. 106, and Adjoining Government Land, Kam Sheung Road, Kam Tin, Yuen Long

Title: Detailed Calculations of Leq(24hr) at Representative NSRs

NSRs	Daytime & evening Operating Hours [1]	Night-time Operating Hours [1]	Max. Daytime/Evening $L_{eq(30min)}$, dB(A) [2]	Max. Night-time $L_{eq(30min)}$, dB(A) [2]	$L_{eq(24hour)}$, dB(A) [3]	$L_{eq(24hour)}$ Criteria, dB(A) [4]	$L_{eq(24hour)}$ Compliance (Y/N)
R5213d	16	3	57	55	55	65	Y
				Max. Leq(24hour), dB(A)	**55**	**65**	**Y**

Notes:
[1] According to MTRC website, the first and last TML trains operating from the nearest Kam Sheung Road Station are 6:01am and 00:54am, resulting in 16 daytime & evening operating hours and 3 night-time operating hours.
[2] The maximum daytime/evening and night-time Leq(30min) at each representative NSR are applied for this calculation.
[3] Leq(24 hour) = 10 log 1/24 [Daytime/Evening operating hours x 10^(Leq 30min (daytime/evening)/10) + Night-time operating hours x 10^(Leq 30min (night-time)/10)]
[4] Criteria as stipulated in Hong Kong Planning Standards and Guidelines (HKPSG).

Appendix 5.4

Detailed Calculations of L_{max} at Representative Noise Sensitive Receivers

Project no: 309160
Project name: Section 12A Application for Amendment to the Approved Kam Tin South Outline Zoning Plan No. S/YL-KTS/15, to rezone the Application Site from "Comprehensive Development Area" to "Residential (Group A)" in Lot 2160 RP (Part) in D.D. 106, and Adjoining Government Land, Kam Sheung Road, Kam
Title: Detailed Calculations of Lmax at Representative NSRs
Nearest NSR: R5213d

Tracks	Maximum L_{max} @ d_{ref} [1]	Reference Condition	NSR	Correction, dB(A)				L_{max} @ receiver, dB(A) [5]
		Distance to track (d_{ref}), m [2]	Nearest Horizontal Distance to Track (d), m [3]	Distance [4]	Rail Deterioration	Air Absorption	Façade	
Tuen Ma Line (To Tuen Mun)	74	25	235	-19.5	3	-1.7	2.5	58
Tuen Ma Line (To Wu Kai Sha)	74	25	257	-20.3	3	-1.9	2.5	57
						Max L_{max}, dB(A)		58
						HKPSG L_{max} Criterion, dB(A)		85
						Compliance		Y

Notes:
[1] According to the approved EIA Report for Tuen Mun South Extension (AEIAR-236/2022), the Lmax of 74dB(A) at 25m for 8-car train at 130kph is adopted for the assessment.
[2] Reference distance from the track (@25m)
[3] Nearest distance from the track to receiver.
[4] A distance correction of -20 x log (d_{ref}/d) is applied.

Appendix 6.1

Site Survey Record

Identified Fixed Noise Source for Assessment

Fixed Noise Source ID: KSRS

Name	Date of observation	Type of landuse	Noisy activities /sources based on site observation and/or employees information	Site record and/or information provided by operators / employees
Kam Sheung Road Station	14 July 2025 03 January 2026	MTR Station	• Ventilation louvres, cooling towers, AC outdoor units	• Night-time operation was observed.



Appendix 8.1

Historical Aerial Photographs

APPENDIX 8.1
HISTORICAL AERIAL PHOTOGRAPHS (YEAR 1963)



Printed by : 8/17/2026
Filename : G:\env\project\30916O\13 Drawing Deliverables\report\01 EAS\01 Draft\Appendix 8.1 - Historical Aerial Photographs - Site B (Year 1963).dgn

APPENDIX 8.1
HISTORICAL AERIAL PHOTOGRAPHS (YEAR 1973)



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APPENDIX 8.1
HISTORICAL AERIAL PHOTOGRAPHS (YEAR 1982)



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Filename : C:\env\project\309160\13 Drawing Deliverables\report\01 EAS\01 Draft\Appendix 8.1 - Historical Aerial Photographs - Site B (Year 1982).dgn

APPENDIX 8.1
HISTORICAL AERIAL PHOTOGRAPHS (YEAR 1992)



Printed by : 8/17/2026
Filename : G:\env\project\309160\13 Drawing Deliverables\report\01 EAS\01 Draft\Appendix 8.1 - Historical Aerial Photographs - Site B (Year 1992).dgn

APPENDIX 8.1
HISTORICAL AERIAL PHOTOGRAPHS (YEAR 2002)



Printed by : 8/17/2026
Filename : G:\env\project\309160\13 Drawing Deliverables\report\01 EAS\01 Draft\Appendix 8.1 - Historical Aerial Photographs - Site B (Year 2002).dgn

APPENDIX 8.1
HISTORICAL AERIAL PHOTOGRAPHS (YEAR 2013)



Printed by : 8/17/2026
Filename : G:\env\project\309160\13 Drawing Deliverables\report\01 EAS\01 Draft\Appendix 8.1 - Historical Aerial Photographs - Site B (Year 2013).dgn

APPENDIX 8.1
HISTORICAL AERIAL PHOTOGRAPHS (YEAR 2024)



Printed by : 8/17/2026
Filename : G:\env\project\309160\13 Drawing Deliverables\report\01 EAS\01 Draft\Appendix 8.1 - Historical Aerial Photographs - Site B (Year 2024).dgn

Appendix 8.2

Photo Record of the Site Survey

Photo Locations of Application Site

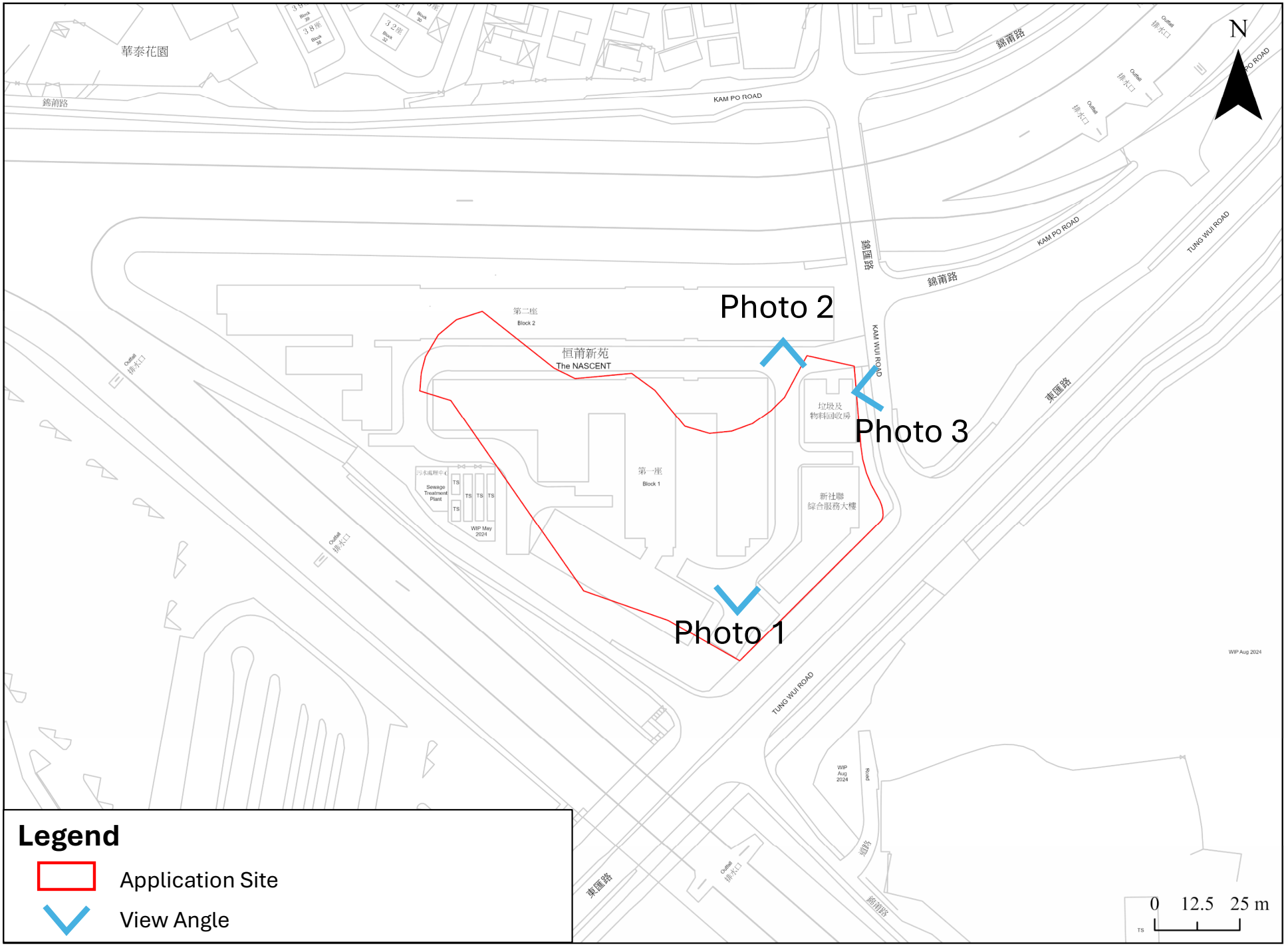


	
Photo 1	Photo 2
	
Photo 3	

Appendix 8.3

Correspondence with FSD

Charlotte Zhang

From: yin_hei_chow@hkfsd.gov.hk on behalf of ado_lea_cs@hkfsd.gov.hk
Sent: Monday, June 23, 2025 6:56 PM
To: Christy Chung
Cc: OE8 CS/FSD
Subject: Re: KT2160&KHW - Request for Information of Dangerous Goods and Incident Records (Letter ref: KT2160&KHW/L002/JS/cc)
Attachments: (8)_Pt.59_ reply_MC-incident_appendix A.pdf

You don't often get email from ado_lea_cs@hkfsd.gov.hk. Learn why this is important

Our reference: (8) in FSD GR 6-5/4 R Pt. 59
Your reference:KT2160&KHW/L002/JS/cc

Dear Ms. CHUNG,

Environmental Assessment Study for Application of Amendment of Plan (Approved Kam Tin Outline Zoning Plan No. S/YL-KTS/15) under Section 12A of the Town Planning Ordinance (Cap. 131) at Various Lots in D.D. 106 and Adjoining Government Land, Kam Tin, New Territories
Request for Information of Dangerous Goods & Incident Records

I refer to your email dated 6.6.2025 regarding the captioned request and reply below in response to your questions:-

1. No Dangerous Goods Licence was issued in respect of the captioned address.

2. A total of 19 incident records were found at the subject location. Please refer to Appendix A for details.
(File-Checksum-00000001)

If you have further questions, please feel free to contact the undersigned.

Best regards,

CHOW Yin-hei
Assistant Divisional Officer (Legal Affairs)
Corporate Services Division
Fire Services Department

Tel.: 2733 7896

Remark:
Lift incidents are excluded unless otherwise required.

Disclaimer:
**Fire Services Department uses its best endeavor to ensure the accuracy and reliability of the information provided, but cannot guarantee its accuracy and reliability and accepts no liability of any nature for any loss or damage arising from any inaccuracies or omissions that may from the information provided.*

From: yin_hei CHOW <yin_hei_chow@hkfsd.gov.hk> on behalf of ADO LEA CS <ado_lea_cs@hkfsd.gov.hk>
Sent: Friday, June 6, 2025 12:17
To: Christy Chung
Cc: OE8 CS/FSD; Johnny So
Subject: Re: Fw: KT2160&KHW - Request for Information of Dangerous Goods and Incident Records (Letter ref: KT2160&KHW/L002/JS/cc)

Our reference: (8) in FSD GR 6-5/4 R Pt. 59
Your reference:KT2160&KHW/L002/JS/cc

Dear Ms. CHUNG,

Environmental Assessment Study for Application of Amendment of Plan (Approved Kam Tin Outline Zoning Plan No. S/YL-KTS/15) under Section 12A of the Town Planning Ordinance (Cap. 131) at Various Lots in D.D. 106 and Adjoining Government Land, Kam Tin, New Territories
Request for Information of Dangerous Goods & Incident Records

I refer to your email dated 6.6.2025 regarding the captioned subject.

Your case is being handled, and a reply will be furnished to you as soon as possible. Please be advised that due to time lapse, this Department can only provide the following information for your requested information:

(i) Dangerous Goods Licence Record: from the year of 1990 to present moment.

(ii) Incident Record: Past three years of fire and special services incidents. Lift incidents will be excluded unless otherwise required.

Should you have further questions, please feel free to contact the undersigned.

Best regards,

CHOW Yin-hei
Assistant Divisional Officer (Legal Affairs)
Corporate Services Division
Fire Services Department

Tel.: 2733 7896

----- Forwarded by FSD Enquiry/FSD/HKSARG on 05/06/2025 14:43 -----

From: "Christy Chung" [redacted]
To: "hkfsdenq@hkfsd.gov.hk" <hkfsdenq@hkfsd.gov.hk>, "ado_lea_cs@hkfsd.gov.hk" <ado_lea_cs@hkfsd.gov.hk>
Cc: "Johnny So" [redacted]
Date: 05/06/2025 14:34
Subject: KT2160&KHW - Request for Information of Dangerous Goods and Incident Records (Letter ref: KT2160&KHW/L002/JS/cc)

Dear Sir/Madam,

We, Ove Arup & Partners Hong Kong Ltd. has been appointed by Tradeway Development Limited and

Super Asset Development Limited to conduct an Environmental Assessment Study (EAS) for the captioned project. The appointment letter is shown in **Attachment A**.

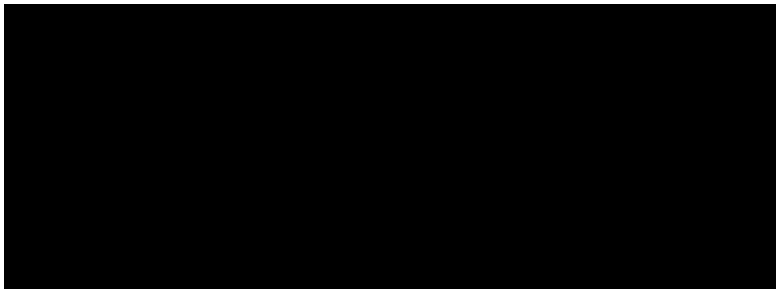
As part of the EAS, we are required to review the historical and present land use around the area, and evaluate any potential land contamination issues within the Site Boundary as shown in **Attachment B**. We would like to request the following information for our land contamination assessment:

- The records of Dangerous Goods License issued within the Site Boundary;
- Any past and present information related to the use, storage, spillage/leakage of dangerous goods within the Site Boundary; and
- Past and present incident records within the Site Boundary.

We would be grateful if you could provide the requested information at your earliest convenience and before **30 June 2025**.

If you require any further information, please do not hesitate to contact the undersigned or Johnny So at [redacted].
Thank you.

Regards,
Christy Chung
Assistant Consultant | Consulting



Electronic mail messages entering and leaving Arup business systems are scanned for viruses and acceptability of content. [attachment "Attachment A - Appointment Letter.pdf" deleted by yin_hei CHOW/FSD/HKSARG] [attachment "Attachment B - Site Location Plan.pdf" deleted by yin_hei CHOW/FSD/HKSARG] [attachment "(8)_Pt.59_ reply_MC-incident_appendix A.pdf" deleted by yin_hei CHOW/FSD/HKSARG]

Environmental Assessment Study for Application of Amendment of Plan (Approved Kam Tin Outline Zoning Plan No. S/YL-KTS/15) under Section 12A of the Town Planning Ordinance (Cap. 131) at Various Lots in D.D. 106 and Adjoining Government Land, Kam Tin, New Territories

Request for Information of Dangerous Goods & Incident Records

No.	Date	Type of Incident	Address
1	25/5/2025	No. 1 Alarm Fire	Block 1, 18 Kam Wui Road, The Nascent
2	21/4/2025	Lock-in Case	Block 1, Kong Har Wai
3	12/3/2025	No. 1 Alarm Fire	Block 2, Pok Oi Kong Ha Wai Village
4	9/2/2025	Lock-in Case	Block 7, Pok Oi Kong Ha Wai Village
5	22/12/2024	Lock-in Case	Block 6, Pok Oi Kong Ha Wai Village, Transitional Housing Development
6	12/12/2024	No. 1 Alarm Fire	Amenity Block, 18 Kam Wui Road, The Nascent
7	11/12/2024	Animal Rescue	Block 5, Pok Oi Kong Ha Wai Village
8	18/10/2024	Rubbish Fire	Openground Outside Block 5, Pok Oi Kong Ha Wai Village
9	18/6/2024	Lock-in Case	Block 1, 18 Kam Wui Road, The Nascent
10	6/6/2024	No. 1 Alarm Fire	Block 3, Pok Oi Kong Ha Wai Village, Transitional Housing Development
11	2/5/2024	No. 1 Alarm Fire	Block 2, Pok Oi Kong Ha Wai Village, Transitional Housing Development
12	24/1/2024	No. 1 Alarm Fire	Roadside Near Lamppost GD3637, Kong Ha Wai
13	5/1/2024	Rubbish Fire	\LT DD106 Lot 471, Near Kam Sheung Road
14	27/12/2023	Lock-in Case	Block 9, Pok Oi Kong Ha Wai Village
15	24/9/2023	No. 1 Alarm Fire	Block 1, Pok Oi Kong Ha Wai Village
16	16/8/2023	Vegetation Fire	Outside Block 8, Pok Oi Kong Ha Wai Village
17	23/7/2023	Lock-in Case	Block 9, Pok Oi Kong Ha Wai Village
18	3/5/2023	Lock-in Case	Block 8, Pok Oi Kong Ha Wai Village, Transitional Housing Development
19	22/7/2022	Rubbish Fire	Outside Block 2, Transitional Housing, Kong Ha Wai

Our ref KT2160&KHW/L002/JS/cc

ARUP

[redacted]

By Post, Fax (2739 5879)
and Email (aio_fsd@hkfsd.gov.hk)

Access to Information Officer
Management Group
9/F, Fire Services Headquarters Building
1 Hong Chong Road
Tsim Sha Tsui East, Kowloon

6 June 2025

Dear Sir/Madam,

Environmental Assessment Study for Application of Amendment of Plan (Approved Kam Tin Outline Zoning Plan No. S/YL-KTS/15) under Section 12A of the Town Planning Ordinance (Cap.131) at Various Lots in D.D. 106 and Adjoining Government Land, Kam Tin, New Territories

Request for Information of Dangerous Goods and Incident Records

Ove Arup & Partners Hong Kong Ltd. has been appointed by Tradeway Development Limited and Super Asset Development Limited to conduct an Environmental Assessment Study (EAS) for the captioned project. The appointment letter is shown in **Attachment A**.

As part of the EAS, we are required to review the historical and present land use around the area, and evaluate any potential land contamination issues within the Site Boundary as shown in **Attachment B**. We would like to request the following information for our land contamination assessment:

- The records of Dangerous Goods License issued within the Site Boundary;
- Any past and present information related to the use, storage, spillage/leakage of dangerous goods within the Site Boundary; and
- Past and present incident records within the Site Boundary.

We would be grateful if you could provide the requested information at your earliest convenience and before 30 June 2025.

If you require any further information, please do not hesitate to contact the undersigned.

Yours sincerely,

Johnny So
Senior Consultant

Encl. Attachment A – Appointment Letter
Attachment B – Site Location Plan

[redacted]

Attachment A

TRADEWAY DEVELOPMENT LIMITED

72-76/F, Two International Finance Centre, 8 Finance Street, Central

Our Ref:

30 May 2025

To Whom It May Concern

Dear Sir/ Madam,

Appointment Letter – Application for Amendment of Plan (Approved Kam Tin Outline Zoning Plan No. S/YL-KTS/15) Under Section 12A of the Town Planning Ordinance (Cap. 131) at Various Lots in D.D. 106 and Adjoining Government Lan, Kam Tin, New Territories

---

We hereby authorize Arup Hong Kong Limited to act as our authorized agent on the submission of the captioned application and to deal with the related matters.

Yours faithfully,

For and on behalf of
Tradeway Development Limited

For and on behalf of
勤成發展有限公司
TRADEWAY DEVELOPMENT LIMITED

Authorized Signature(s)

S.K. Leung

SUPER ASSET DEVELOPMENT LIMITED

72-76/F, Two International Finance Centre, 8 Finance Street, Central

Our Ref:

30 May 2025

To Whom It May Concern

Dear Sir/ Madam,

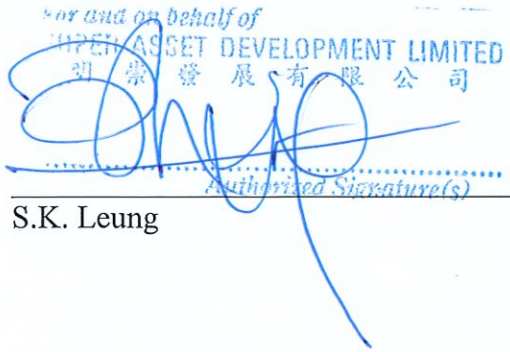
Appointment Letter – Application for Amendment of Plan (Approved Kam Tin Outline Zoning Plan No. S/YL-KTS/15) Under Section 12A of the Town Planning Ordinance (Cap. 131) at Various Lots in D.D. 106 and Adjoining Government Lan, Kam Tin, New Territories

---

We hereby authorize Arup Hong Kong Limited to act as our authorized agent on the submission of the captioned application and to deal with the related matters.

Yours faithfully,

For and on behalf of
Super Asset Development Limited



S.K. Leung

Attachment B

N

露天貨倉
豪景富居
美景花園
錦上路
麟園
PO TEI RD
KAM SHEK ROAD
錦田河
TUNG WUI ROAD
錦石路
金水北路
KAM TIN RIVER
SHEK KONG AIRFIELD RD
KAM SHUI NORTH RD
帝峰苑
威皇花園
滅善豪苑
錦上豪庭
Kam's Terrace
露天貨倉
吉慶花園
錦安花園
錦匯路
KAM SHEUNG ROAD
貨匯路
翠怡花園
KAM PO ROAD
錦青路
錦田河
KAM TIN RIVER
吳家村
Ng Ka Tsuen
污水處理廠
KAM SHUI RD
KAM PO ROAD
TUNG WUI ROAD
露天貨倉
Open Storage
金水路
石崗機場路
SHEK KONG AIRFIELD
東匯路
博愛江夏圍村
Pak Oi Kong Ha Wai Village
露天貨倉
Open Storage
江夏圍
Kong Ha Wai
金錢圍
Kam Tsin Wai
錦上路
露天貨倉
金水南路
TSING LONG HIGHWAY
錦青路
錦河路
KAM HO ROAD
車輛存放場
KAM SHEUNG ROAD
KAM SHUI SOUTH ROAD
萬昌藤
Man Chong
港鐵（西鐵綫）
康翠園藝

Legend
Application Site

0 25 50 100 m

Appendix 8.4

Correspondence with EPD

本署檔案
OUR REF : ( ) EP910/E6/1
來函檔案
YOUR REF : KT2160&KHW/L001/JS/cc
電 話
TEL NO : 2158 5852
圖文傳真
FAX NO : 2650 6033
網 址
HOMEPAGE : http://www.epd.gov.hk/

Environmental Protection Department
Environmental Compliance Division
Regional Office (North)
10/F., Shatin Government Offices,
1 Sheung Wo Che Road,
Shatin, N.T.

環境保護署
環保法規管理科
區域辦事處(北)
新界沙田上禾輋路 1 號
沙田政府合署 10 樓

By Post & Fax (2268 3380)

24 Jun 2025

ARUP
Level 5, Festival Walk,
80 Tat Chee Avenue,
Kowloon Tong, Kowloon
(Attn.: Johnny SO)

Dear Sir/Madam,

Environmental Assessment Study for Application of Amendment of Plan (Approved Kam Tin Outline Zoning Plan No. S/YL-KTS/15) under Section 12A of the Town Planning Ordinance (Cap.131) at Various Lots in D.D. 106 and Adjoining Government Land, Kam Tin, New Territories

Request for Information of Chemical Waste Producers Registration and Chemical Spillage Accident Records

We refer to your above letter under reference dated 5 Jun 2025, requesting for chemical waste producer and spillage / leakage record. Given no particular time period was mentioned in the letter, to avoid unnecessary wastage of resources, a search of 3 year records may be a reasonable choice.

This Regional Office has no record of chemical spillage / leakage incident at the concerned location in the past 3 years. Nonetheless, you may also need to check with other relevant parties / departments for such information as appropriate.

For the records of Chemical Waste Producer Registration, a registry of chemical waste producers is available in our Territory Control Office. Should you like to view the records, you may approach Mr. Gordon KWAN at 2835 1027 for making an appointment to view the records.

Yours faithfully,

(LUI Dominic)
for Director of Environmental Protection

Our ref KT2160&KHW/L001/JS/cc

ARUP

[redacted]

BY FAX (2685 1155) AND BY POST

Environmental Protection Department
Environmental Compliance Division
Regional Office (North)
10/F., Shatin Government Offices,
No.1 Sheung Wo Che Road, Sha Tin,
New Territories.

5 June 2025

Dear Sir/Madam,

Environmental Assessment Study for Application of Amendment of Plan (Approved Kam Tin Outline Zoning Plan No. S/YL-KTS/15) under Section 12A of the Town Planning Ordinance (Cap.131) at Various Lots in D.D. 106 and Adjoining Government Land, Kam Tin, New Territories

Request for Information of Chemical Waste Producers Registration and Chemical Spillage Accident Records

Ove Arup & Partners Hong Kong Ltd. has been commissioned by Tradeway Development Limited and Super Asset Development Limited to carry out an Environmental Assessment Study (EAS) for the captioned project. The appointment letter is shown in **Attachment A**.

As part of the EAS, we are required to review the historical and present land use around the area, and evaluate any potential land contamination issues within the Site Boundary as shown in **Attachment B**. We would like to request the following information for our land contamination assessment:

- The records of Chemical Waste Producers Registration of the area within the Site Boundary; and
- Past and present chemical spillage / leakage records of the area within the Site Boundary.

We would be grateful if you could provide the requested information at your earliest convenience and before 30 June 2025.

If you require any further information, please do not hesitate to contact the undersigned.

Yours faithfully,

Johnny So
Senior Consultant

Encl. Attachment A – Appointment Letter
Attachment B – Site Location Plan

[redacted]

Attachment A

TRADEWAY DEVELOPMENT LIMITED

72-76/F, Two International Finance Centre, 8 Finance Street, Central

Our Ref:

30 May 2025

To Whom It May Concern

Dear Sir/ Madam,

Appointment Letter – Application for Amendment of Plan (Approved Kam Tin Outline Zoning Plan No. S/YL-KTS/15) Under Section 12A of the Town Planning Ordinance (Cap. 131) at Various Lots in D.D. 106 and Adjoining Government Lan, Kam Tin, New Territories

---

We hereby authorize Arup Hong Kong Limited to act as our authorized agent on the submission of the captioned application and to deal with the related matters.

Yours faithfully,

For and on behalf of
Tradeway Development Limited

For and on behalf of
興達發展有限公司
TRADEWAY DEVELOPMENT LIMITED

Authorized Signature(s)

S.K. Leung

SUPER ASSET DEVELOPMENT LIMITED

72-76/F, Two International Finance Centre, 8 Finance Street, Central

Our Ref:

30 May 2025

To Whom It May Concern

Dear Sir/ Madam,

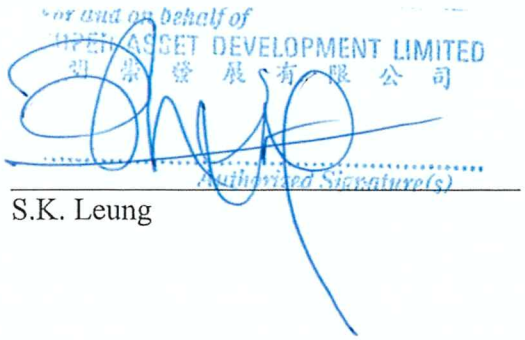
Appointment Letter – Application for Amendment of Plan (Approved Kam Tin Outline Zoning Plan No. S/YL-KTS/15) Under Section 12A of the Town Planning Ordinance (Cap. 131) at Various Lots in D.D. 106 and Adjoining Government Lan, Kam Tin, New Territories

---

We hereby authorize Arup Hong Kong Limited to act as our authorized agent on the submission of the captioned application and to deal with the related matters.

Yours faithfully,

For and on behalf of
Super Asset Development Limited



S.K. Leung

Attachment B

N

露天貨倉
豪景富居
美景花園
錦上路
麟園
PO TEI RD
KAM SHEK ROAD
錦田河
TUNG WUI ROAD
錦石路
金水北路
KAM TIN RIVER
SHEK KONG AIRFIELD RD
KAM SHUI NORTH RD
帝峰苑
威皇花園
滅善豪苑
錦上豪庭
Kam's Terrace
露天貨倉
吉慶花園
錦安花園
錦匯路
KAM SHEUNG ROAD
貨匯路
翠怡花園
KAM PO ROAD
錦青路
錦田河
KAM TIN RIVER
吳家村
Ng Ka Tsuen
污水處理廠
KAM SHUI RD
KAM PO ROAD
TUNG WUI ROAD
露天貨倉
Open Storage
金水路
石崗機場路
SHEK KONG AIRFIELD
東匯路
博愛江夏圍村
Pak Oi Kong Ha Wai Village
露天貨倉
Open Storage
江夏圍
Kong Ha Wai
金錢圍
Kam Tsin Wai
錦上路
露天貨倉
金水南路
TSING LONG HIGHWAY
錦青路
錦河路
KAM HO ROAD
車輛存放場
KAM SHEUNG ROAD
KAM SHUI SOUTH ROAD
萬昌藤
Man Chong
港鐵（西鐵綫）
康翠園藝

Legend
Application Site

0 25 50 100 m