Appendix 7

Noise Impact Assessment

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

Environmental Noise Impact Assessment

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AIMS

To assess noise impacts on the proposed residential development at DD110 on Kam Tin Road in Yuen Long.

To recommend noise mitigation measures for the proposed Development, if and when necessary; and to assess the suitability of the proposed building layout and the required noise mitigation measures according to relevant requirements set out in the Hong Kong Planning Standards & Guidelines (HKPSG).

SUMMARY

Noise assessments have been conducted to predict the noise impacts at the proposed Development.

For road traffic noise, the predicted maximum road traffic noise level of the residential flats will be 77dB(A), exceeding the stipulated 70dB(A) noise criterion. Therefore, noise mitigation measures are required.

With the provision of Acoustic Window (baffle type), the assessment results indicate that the predicted road traffic noise levels at all the residential flats (i.e. 100%) will comply with the 70dB(A) noise criterion.

For the fixed noise sources impact, the assessment results indicate that all the residential flats will be within the stipulated noise limits.

For the aircraft and helicopter noise, the measured noise levels on site were within the noise criterion in HKPSG.

1. INTRODUCTION

1.1 Westwood Hong & Associates Ltd (WHA) was commissioned to conduct an environmental noise impact assessment for the proposed residential development at Shek Kong, Yuen Long (the "proposed Development"). Figure 1 shows the location of the proposed Development.

1.2 This environmental noise impact assessment report supports the Rezoning Application for the proposed Development.

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

1.4 This report comprises the following assessments:-

- Road traffic noise affecting the proposed Development
- Fixed noise sources affecting the proposed Development
- Fixed noise sources from the proposed Development
- Aircraft and helicopter noise affecting the proposed Development

2. SITE LOCATION & BUILDING LAYOUT

Site Location

2.1 The development site is located to the north of Kam Tin Road. Shek Kong Barracks is located to the south across Kam Tin Road. The residential developments Seasons Villas and Seasons Monarch are located to the north-east and west respectively. The location of the development site is shown in Figure 1.

Development Layout

2.2 The proposed Development comprises 6 low-rise residential blocks with 5 storeys on top of carport and clubhouse. The carport and clubhouse are located at G/F. The building layouts are shown in Appendix 1. The development parameters are summarised in Table 2.1 below.

2.3 The clubhouse would be equipped with central air-conditioning and would not rely on opened windows for ventilation. The proposed Development will not give rise to an adverse noise impact on existing or planned NSRs.

Table 2.1 Development Parameters of the Proposed Development

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

3. NOISE CRITERIA

Road Traffic Noise Criterion

3.1 According to the HKPSG[1], road traffic noise criterion for domestic premises is 70dB(A) L10(1 hour) at the external facades for the hour having the peak traffic flow. The noise criterion applied to the domestic premises which rely on opened windows for ventilation.

Aircraft Noise Criteria

3.2 The recommended NEF25 contour of the Chek Lap Kok Airport in the HKPSG should not be exceeded for the proposed Development.

Helicopter Noise Criteria

3.3 According to the HKPSG, the criteria for helicopter noise is Lmax 85dB(A) for domestic premises during 0700 – 1900 hours. The standards apply to uses that rely on openable window for ventilation and the standards should be viewed as the maximum permissible noise levels assessed at 1m from the external façade.

Noise Criteria for Fixed Noise Sources

3.4 The proposed Development is located within a low density residential area, not being affected by an any Influencing Factor (IF). With reference to the "Technical Memorandum for the Assessment of Noise from Places other than Domestic Premises, Public Places or Construction Sites" (IND – TM)[2], an Area Sensitivity Rating (ASR) of "A" was assumed for the proposed Development. The Acceptable Noise Levels (ANLs) are shown in Table 3.1.

Table 3.1 ANLs for Day, Evening and Night-Time Periods

Time Period	**ANLs, ASR "A"** Leq (30 mins)
Day (0700 to 1900 hours) and evening (1900 to 2300 hours)	60dB(A)
Night (2300 to 0700 hours)	50dB(A)

Note: In any event, the ASR and the ANLs adopted in this report are only indicative and they are used for assessment only. It should be noted that the noise from fixed noise sources is controlled under section 13 of the Noise Control Ordinance. Therefore, the ASRs and ANLs determined in this report shall not prejudice the Noise Control Authority's discretion to determine noise impact due to fixed noise sources on the basis of prevailing legislation and practices being in force, and taking account of contemporary conditions/ situations of adjoining land uses. The assessment of noise impacts due to fixed noise sources in this report shall not bind the Noise Control Authority in the context of law enforcement against any of the noise from fixed noise sources being assessed.

3.5 The noise criteria for the design of noise sensitive developments near fixed noise sources shall refer to the IND – TM. Therefore, the assessment criteria for existing fixed noise sources in the vicinity of the proposed Development should refer to the ANLs in Table 3.1

3.6 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 façade of the nearest sensitive use should be at least 5dB(A) below the appropriate ANL shown in Table 2 of the IND – TM or, in the case of the background being 5dB(A) lower than the ANL, should not be higher than the background.

3.7 Site measurements were made at the nearby noise sensitive receivers on 18 March 2025, the prevailing background noise levels are summarised in Table 3.2 below. The measurement locations are provided in Figure 2a.

Table 3.2 Prevailing Background Noise Measurement Details and Results

Noise Sensitive Receiver	**Date**	**Personnel**	**Equipment**	**Weather**	**Field Observations**	**Measurement Results,** dB(A), L90 (1 hour)
Loc A, Village house at the western side of the development site	18 March 2025	Mr. Samuel Lee	Ono Sokki, LA-5111 (Serial No.: 14700785)	Sunny, calm	Mainly community noise	Daytime: 55 – 56 Night-time: 46 – 47 (Façade)

3.8 The prevailing background noise levels of the identified noise sensitive receivers were higher than ANL – 5dB(A). Therefore, the ANL – 5dB(A) are used as the criteria for noise from planned fixed sources (i.e. 55dB(A) for daytime, and 45dB(A) for night-time).

4. SITE SURVEYS

Dates and Time

4.1 Site surveys were conducted on the following dates:-

- 18 March 2025
- 10 April 2025
- 14 July 2025

Instrumentation

4.2 The instruments used by WHA for the surveys comply with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1). They are listed in Table 4.1 below.

Table 4.1 Instruments Used for the Noise Surveys

Manufacturer	Type
Ono Sokki	Precision Integrating Sound Level Meter (LA-5111)
Ono Sokki	Foam Windshield
Bruel and Kjaer	Noise Calibrator Type 4231

4.3 The sound level meter was calibrated before use and further checks on completion of the survey, and confirmed that the calibration levels from before and after the noise measurement agree to within 1.0dB.

4.4 The site measurements including measurement equipment, calibration procedure, measurement methodology and weather conditions were conducted in accordance with the IND – TM.

Fixed Noise Sources in the Vicinity

4.5 The study area for the fixed noise sources impact assessment is 300m. The photos of site surveys are provided in Appendix 2. The identified fixed noise sources are summairsed in Table 4.2 below and given in Figure 3. Detailed discussion on the noise impact from these fixed noise sources is given in Section 6. The photos of the identified fixed noise sources are provided in Appendix 6.

Table 4.2 Identified Potential Fixed Noise Sources

Source ID	Factory	Identified Industrial Activities	Location of Fixed Noise Sources	Operation Hours
F1	Sun Luen Tai Car Repairing Workshop	The staff advised that the car repairing workshop was mainly used for car component removal & replacement, and storage use. The operation including the removal of the valuable component and sell for it, or replace the damaged component of the old vehicle and sell it out. The major tool of the above operations is the pneumatic screwdriver. All the operations are conducted inside the temporary structure with steel cover. No grinding, sawing and hammering would be conducted in the repairing workshop. The staff also advised that operations of the repairing workshop involve the car component only, would not keep the car shell. The old car shell which were stacked up in the open area were many years ago which was only for storage use. The removed car component would be stored in the open area and will be delivered to the recycling plant by a lorry. Generally, the lorry would come about every 3 months. The material handling inside the repairing workshop and loading / unloading to the lorry would be by a forklift. The staffs are working in the temporary structural for most of the time, and only using the forklift for material handling once a day. The temporary structure is a semi-enclosure with opening facing away from the proposed Development. The noise measurements were conducted by placing with measurement equipment (i.e. the sound level meter mounted on a stand at 1.2m height) directly towards the noise source (i.e. noise of pneumatic screwdriver, from a distance of 10m). The detailed noise measurements are provided in Appendix 6.	Under the steel cover, on ground level	0900 – 1800 No night-time operation
F2	Wang Luen Car Trading Centre	It is a car trading shop with vehicle display only. No industrial noise was observed.	On ground level	1000 – 1800 No night-time operation
F3	Hing Luen Car Trading Centre	It is a car trading shop with vehicle display only. No industrial noise was observed.	On ground level	1000 – 1800 No night-time operation

Source ID	Factory	Identified Industrial Activities	Location of Fixed Noise Sources	Operation Hours
F4	Hop Shing Car Repairing Workshop	The gate was closed during all site surveys. Some cars parked inside. No industrial noise was observed.	On ground level	0900 – 1800 No night-time operation
F5	Luen Tak Car Repairing Workshop	Car repairing workshop with a temporary structure. Simply hand tools handling noise was observed. The noise measurements were conducted by placing with measurement equipment (i.e. the sound level meter mounted on a stand at 1.2m height) directly towards the noise source, from a distance of 5m). The detailed noise measurements are provided in Appendix 6.	On ground level	0900 – 1800 No night-time operation
F6	Tsat Sing Kong Substation	No industrial noise was observed.	On ground level	24 hours
F7	Concordia Tast Sing Kong Substation	Plant noise was observed from the substation. The noise measurements were conducted by placing with measurement equipment (i.e. the sound level meter mounted on a stand at 1.2m height) directly towards the louvre at a distance of 5m). The detailed noise measurements are provided in Appendix 6.	On ground level	24 hours
F8	Vacant Lot	The gate was closed during the site survey and the lot was empty. No industrial noise was observed.	On ground level	-
F9	Cai Niao Warehouse	Storage use only. No industrial noise was observed.	On ground level	0900 – 1800 No night-time operation
F10	Po Hong Warehouse	Storage use only. No industrial noise was observed.	On ground level	0900 – 1800 No night-time operation
F11	1st Street Car Repairing Workshop	The workshop comprises a temporary structure with steel cover and an open area. Noise of pneumatic screwdriver and air compressor were observed during site survey. The noise measurements were conducted by placing with measurement equipment (i.e. the sound level meter mounted on a stand at 1.2m height) directly towards the noise source from a distance of 10m). The detailed noise measurements are provided in Appendix 6.	On ground level	0900 – 1800 No night-time operation
F12	Vacant Lot	Temporary structure with the gate was closed. No industrial noise was observed.	On ground level	-

Source ID	Factory	Identified Industrial Activities	Location of Fixed Noise Sources	Operation Hours
F13	Wai Yuen Hing Car Repairing Workshop	The workshop comprises a temporary structure and an open area. Simply hand tools handling noise inside the temporary structure was observed. The noise measurements were conducted by placing with measurement equipment (i.e. the sound level meter mounted on a stand at 1.2m height) directly towards the noise source, from a distance of 8m). The detailed noise measurements are provided in Appendix 6.	On ground level	0900 – 1800 No night-time operation
F14	協力尾板	The workshop is providing service for repairing the tail lift of lorry, which comprises a temporary structure and an open area. Simply hand tools handling noise and pneumatic screwdriver noise were observed inside the temporary structure. The noise measurements were conducted by placing with measurement equipment (i.e. the sound level meter mounted on a stand at 1.2m height) directly towards the noise source, from a distance of 5m). The detailed noise measurements are provided in Appendix 6.	On ground level	0900 – 1800 No night-time operation
F15	Ko Kee Sand Yard	The sand yard comprises a steel structure and an open area. A few piles of sand were located at the open area. The operation of the sand yard including a lorry deliver the sand to the sand yard, and deliver out from the sand yard. The sand yard is used for storage. A lorry with crane was observed during site surveys. The noise measurements were conducted by placing with measurement equipment (i.e. the sound level meter mounted on a stand at 1.2m height) directly towards the noise source, from a distance of 10m). The detailed noise measurements are provided in Appendix 6.	On ground level	0900 – 1800 No night-time operation
F16	Bamboo workshop	The workshop is used as storage of bamboo. The operation of the workshop including a lorry deliver the bamboo to the workshop, and deliver out from the workshop. The staff advised that the workshop would be opened 2 – 3 times a week. A lorry with crane was observed during site surveys. The noise measurements were conducted by placing with measurement equipment (i.e. the sound level meter mounted on a stand at 1.2m height) directly towards the noise source, from a distance of 5m). The detailed noise measurements are provided in Appendix 6.	On ground level	0900 – 1800 No night-time operation

Noted:

[1] All the identified fixed noise sources in the above table were visited during each survey (i.e. 18 March, 10 April 2025 and 14 July 2025)

[2] The operation of the identified fixed noise sources were observed during site surveys and confirmed with the staffs.

[3] The operating hours of the identified fixed noise sources were advised from the staffs of each site and confirmed by night-time site survey.

4.6 Site surveys have confirmed that there is no significant noise was emitted from the other fixed noise sources apart from those listed in Table 4.2. All the significant fixed noise sources within the assessment area are identified and considered in the assessment.

Night-time Operation

4.7 The operation hours were advised by the staff of the workshops, as summarised in Table 4.2. The night-time survey also confirmed that all the workshops did not have night-time operations.

Fixed Noise Source Measurements

4.8 On-site noise measurements were carried out at the location of site boundary and far away from Kam Tin Road to determine the potential fixed noise impact. The locations B1 and B2 are the nearest location to the Sun Luen Tai Car Repairing Workshop, which can be accessed and would not be affected by the road traffic noise impact from Kam Tin Road. The details noise measurements are provided in Table 4.3 below and Figure 2c.

Table 4.3 Noise Measurements and Observations for Fixed Noise Sources

Date	**Location**	**Person-nel**	**Equipment**	**Weather**	**Observations**	**Measurement Results,** dB(A), Leq(30mins)
14 July 2025	Loc B1, northern site boundary	Mr Samuel Lee	Ono Sokki, LA-5111 (Serial No.: 14700785)	Sunny, calm	3 hours observations, no audible fixed noise was observed	Daytime 48 – 53
14 July 2025	Loc B2, northwestern site boundary	Mr Samuel Lee	Ono Sokki, LA-5111 (Serial No.: 14700785)	Sunny, calm	3 hours observations, no audible fixed noise was observed	Daytime 47 – 52

4.9 According to the on-site noise measurement results, the measured noise levels are well within the criteria for fixed noise stated in Section 3. In this regard, adverse noise impact on the proposed Development from fixed noise sources is not anticipated. The fixed noise impacts would be limited which can be adequately mitigated through proper design and implementation of mitigation measures by the development itself.

5. ROAD TRAFFIC NOISE IMPACT ASSESSMENT

5.1 The noise prediction was conducted by employing the WS Atkins RoadNoise 2000[3] computer software.

Traffic Forecast

5.2 The anticipated occupation year of the proposed Development is 2031, the maximum traffic in 15 years after occupation of the proposed Development (i.e. 2031+15=2046) has been adopted for the purpose of the road traffic noise assessment.

5.3 The traffic forecast for Year 2046 was provided by the Traffic Consultant (CTA Consultants Limited). The definition of heavy vehicles in the U.K. Department of Transport's "Calculation of Road Traffic Noise" (CRTN)[4] has been adopted. The traffic forecast is provided in Appendix 3 and the computer plot of the noise prediction model is provided in Figure 4. Review of the data indicates that the AM peak is in general higher than the PM peak. Therefore, the set of AM peak traffic data is employed for the assessment, representing the worst-case scenario.

Noise Assessment Points for Road Traffic Noise Assessment

5.4 All noise sensitive rooms (e.g. living and dining rooms, bedrooms / master bedrooms) are assigned with noise assessment point. The locations of assessment points are illustrated in Appendix 4. The clubhouse will be equipped with central air-conditioning and would not rely on opened windows for ventilation. No adverse noise impact is anticipated.

5.5 The assessment points are taken at the height of 1.2m above each residential floor and 1m away from the façade of openable windows of the noise sensitive rooms.

Methodology of Road Traffic Noise Impact Assessment

5.6 The study area of the road traffic noise assessment would be 300m from the site boundary. The roads within the study area are included in the assessment. In this assessment, all roads are assumed to be of impervious surface.

5.7 The road traffic noise levels at the proposed Development were assessed based on the predicted traffic flows in Year 2046 and in accordance with the procedures given in the CRTN. The predicted road traffic noise levels at the building facades include a 2.5dB(A) facade reflection and correction factors for gradient, distance, view angle, barriers and road surface material.

5.8 The widening of Kam Tin Road is considered in the road traffic noise assessment.

Predicted Road Traffic Noise Levels (Base Scenario)

5.9 The predicted road traffic noise levels are presented in Appendix 4 for all Noise Sensitive Receivers (NSRs) of the proposed Development. The predicted maximum road traffic noise level of the residential flats will be 77dB(A), exceeding the stipulated 70dB(A) noise criterion. Therefore, noise mitigation measures are required.

Predicted Road Traffic Noise Levels (With Noise Mitigation Measures)

5.10 With the provision of Acoustic Window (baffle type) (Figure 5), all residential units of the proposed Development can comply with the stipulated 70dB(A) noise limit (Appendix 5). The proposed noise mitigation measures are given in Section 7.

5.11 In order to achieve noise compliance, the residential units with noise exceedance will be provided with Acoustic Window (baffle type) (Figure 5). The Acoustic Window (baffle type) will be designed by making reference to ProPECC PN5/23 "Application of Innovative Noise Mitigation Designs in Planning Private Residential Developments against Road Traffic Noise Impact". The room size of the proposed Development would be different from the PN5/23, the calculation of the noise reduction correction is provided in Appendix 8. With the provision of these noise mitigation measures, all the flat units of the proposed Development can comply with the stipulated 70dB(A) noise limit.

6. NOISE IMPACT ASSESSMENT FOR FIXED NOISE SOURCES

6.1 The identified fixed noise sources in the vicinity are summarised in Table 4.2.

Noise Assessment Points for Fixed Noise Sources Assessment

6.2 With consideration the location of the identified fixed noise sources, representative assessment points of worst affected (with shortest distance to the fixed noise sources) are assigned for the fixed noise sources assessment. The location of the assessment points are illustrated in Figure A7-2 in Appendix 7.

6.3 The assessment points are taken at the height of 1.2m above each residential floor and 1m away from the façade of openable windows in the noise sensitive rooms.

Methodology of Noise Impact Assessment from Fixed Noise Sources

6.4 The location of the major fixed noise source (i.e. Source F1) are assumed at the noise emission point as observed during site survey. For other fixed noise sources, the noise emission points were assumed to be placed at the nearest site boundary to the proposed Development for conservatism.

6.5 Although it is unlikely that all the identified fixed noise sources will be in operation simultaneously, to be conservative, it has been assumed that all the identified fixed noise sources are in operation at the same time, which also represents a worst-case scenario. Fixed noise sources are assumed to operate continuously instead of occasionally as observed on-site and all fixed noise sources are regarded as point source.

6.6 According to the standard acoustic principle, a negative correction of 10dB(A) can be applied if the noise sources are totally screened by a substantial barrier such that none will be visible when viewed from any window, door or other opening in any façade of the NSR. For conservatism, barrier correction would not be considered in the assessment.

6.7 For the assessment of noise from fixed noise sources, the noise level at NSR was predicted using the standard acoustic principles:

Predicted Noise Level = Sound Power Level of fixed noise source – Distance Attenuation + Façade Correction

Where Distance Attenuation = 20 log D + 8 [where D is the distance in meters]
Façade Correction = 3dB(A)

SWL of Identified Fixed Noise Sources

6.8 For the identified fixed noise sources, on-site noise measurements were made. The Sound Pressure Levels (SPLs) obtained during survey were then converted to SWLs with reference to basic acoustic principle. The SPLs at NSRs were calculated based on the distance attenuation, tonality correction, impulsiveness correction, intermittency correction, barrier correction and façade correction. Tonal noise was not identified by on-site measurements and fluctuation of noise was not observed during the site surveys, also there was no night-time operation for the identified fixed noise sources. Hence, tonality correction, impulsiveness correction and intermittency correction are not required to be applied to the fixed noise sources based on site observation and measurements.

6.9 For some identified noise sources (i.e. trading centre, substation, etc), no industrial noise were observed during site surveys, and industrial noise is also not anticipated. Hence, these industrial sites will not be included in the assessment.

6.10 The summary of the SWLs adopted in the assessment are provided in Table 6.1 below.

Table 6.1 SWLs of Identified Fixed Noise Sources

Source ID	Name	Fixed Noise Sources	No.	SWL, dB(A)	Operation hours	Reference
F1	Sun Luen Tai car repairing workshop	Noise of pneumatic screwdriver	1	99	Day and evening time	Site measurements
		Noise of forklift	1	94	Day and evening time	Site measurements
F5	Luen Tak car repairing workshop	Noise of hand tools handling	1	90	Day and evening time	Site measurements
F7	Concordia Tast Sing Kong Substation	Plant noise	1	92	Day, evening and night time	Site measurements
F11	1st Street car repairing workshop	Noise of pneumatic screwdriver and air compressor	1	97	Day and evening time	Site measurements
F13	Wai Yuen Hing Car Repairing Workshop	Noise of pneumatic screwdriver assumed	1	93	Day and evening time	Site measurements
F14	協力尾板	Noise of hand tools handling and pneumatic screwdriver	1	90	Day and evening time	Site measurements

F15	Ko Kee sand yard	Lorry with crane for loading and unloading	1	97	Day and evening time	Site measurements
F16	Bamboo workshop	Lorry with crane for loading and unloading	1	90	Day and evening time	Site measurements

Predicted Noise Levels from Fixed Noise Sources (Base Scenario)

6.11 The predicted façade noise levels from fixed noise sources at the representative NSRs are in the range of 55 – 60dB(A) Leq(30min) during day and evening time periods, and in the range of 27 – 38dB(A) Leq(30min) during night-time period. These predicted noise levels are within the stipulated noise limits as mentioned in Section 3. The summary of the predicted noise levels is provided in Table 6.2. The summary of the predicted noise levels is given in Appendix 7.

Table 6.2 Predicted Façade Noise Level from Fixed Noise Sources

Representative NSRs	**Day and Evening Time Periods**		**Night-time Period**		**Compliance**
	Maximum Predicted Façade Noise Level, dB(A)	**Noise Criteria,** dB(A)	**Maximum Predicted Façade Noise Level,** dB(A)	**Noise Criteria,** dB(A)	
NSR 111	60	60	36	50	Yes
NSR 120	60	60	36	50	Yes
NSR 220	58	60	27	50	Yes
NSR 320	57	60	36	50	Yes
NSR 420	55	60	37	50	Yes
NSR 520	55	60	37	50	Yes
NSR 620	55	60	38	50	Yes

Fixed Noise Sources in the Proposed Development

6.12 The planned fixed noise sources such as the ventilating systems of the clubhouses, the noise impact would be in accordance with HKPSG standard (i.e. ANL – 5dB(A) as mentioned in Section 3).

6.13 As mentioned in Section 3.8, the prevailing background noise levels of the identified noise sensitive receivers were higher than ANL – 5dB(A). Therefore, the ANL – 5dB(A) are used as the criteria for noise from planned fixed sources (i.e. 55dB(A) for daytime, and 45dB(A) for nighttime)

6.14 The acoustic performance of the planned fixed noise sources would be reviewed during detailed design stage. In order to comply with the relevant noise requirements in the HKPSG, acoustic treatments such as provision of acoustic silencers and acoustic enclosures shall be proposed for the planned fixed noise sources, if necessary.

7. NOISE MITIGATION MEASURES

7.1 Practicable noise mitigation measures have been considered and some of those measures have been incorporated in the proposed Development, as mentioned in the following sections.

Acoustic Window (Baffle Type)

7.2 Acoustic window (baffle type) will be adopted for the proposed Development as noise mitigation measure. The Acoustic Window (baffle type) comprises of two layers of window. An additional window layer is introduced to the conventional side-hung window in a staggering position. The outer window is a conventional push-pull type window whilst the inner one is a half-size sliding window. By properly positioning the openings of inner window with the outer window, it can reduce noise entering indoor while allowing air flow into the room via the air gap between the two layers of windows.

7.3 The Acoustic Window (baffle type) will be designed by making reference to ProPECC PN5/23. The locations of acoustic window are illustrated in Figure 5. The project architect confirmed that the design of acoustic window (baffle type) could meet the natural ventilation requirement under Building Department. The configuration and acoustic performance of the acoustic window (baffle type) would be reviewed during detailed design stage.

8. AIRCRAFT AND HELICOPTER NOISE IMPACT ASSESSMENT

8.1 The proposed Development lies beyond the NEF25 contour of the Chek Lap Kok Airport. Hence, adverse aircraft noise impact on the proposed Development is not anticipated.

8.2 The Shek Kong Airfield is located at the southern side of the proposed Development. The runway of the Shek Kong Airfield is located at more than 300m south of the proposed Development. On-site noise measurements were carried out at the location of site boundary and far away from Kam Tin Road to determine the potential helicopter noise impact. The details noise measurements are provided in the Table 8.1 below.

Table 8.1 Noise Measurements and Observations for Helicopter Noise

Date	**Personnel**	**Equipment**	**Weather**	**Observations**	**Measurement Results,** dB(A)
18 March 2025	Mr Samuel Lee	Ono Sokki, LA-5111 (Serial No.: 14700785)	Sunny, calm	4 hours observations, no helicopter was observed.	Daytime 47 – 52dB(A) Leq 50 – 54dB(A) Lmax Night-time 46 – 51dB(A) Leq 48 – 52dB(A) Lmax
10 April 2025	Mr Samuel Lee	Ono Sokki, LA-5111 (Serial No.: 14700785)	Sunny, calm	3 hours observations, only 1 helicopter was observed.	Daytime 48 – 51dB(A) Leq 52 – 55dB(A) Lmax Night-time 47 – 50dB(A) Leq 50 – 54dB(A) Lmax

8.3 According to the on-site noise measurement results, the maximum measured helicopter noise level Lmax 55dB(A) within the development site is well within the criteria for helicopter noise stated in HKPSG, which is Lmax 85dB(A) for domestic premises. In this regard, adverse impact from helicopter noise to the proposed Development is not anticipated.

9. CONCLUSION

9.1 Noise assessments have been conducted to predict the noise impacts at the proposed Development.

9.2 For road traffic noise, the predicted maximum road traffic noise levels of the residential units will be 77dB(A), exceeding the stipulated noise levels. Hence, noise mitigation measures are required. With the provision of Acoustic Window (baffle type), all the residential units will be within the stipulated noise limits.

9.3 Site surveys were carried out to identify the fixed noise sources surrounding the proposed Development. Fixed noise sources assessment were conducted based on the site observation of the industrial sites in the vicinity, the results of the predicted levels have indicated that the present proposed scheme will comply with the noise limit set out in the HKPSG.

9.4 For the aircraft and helicopter noise, the measured noise levels on site were within the noise criterion in HKPSG.

9.5 All the planned fixed noise sources associated with the proposed Development would be designed with appropriate acoustic treatments to comply with the relevant noise standards in the HKPSG.

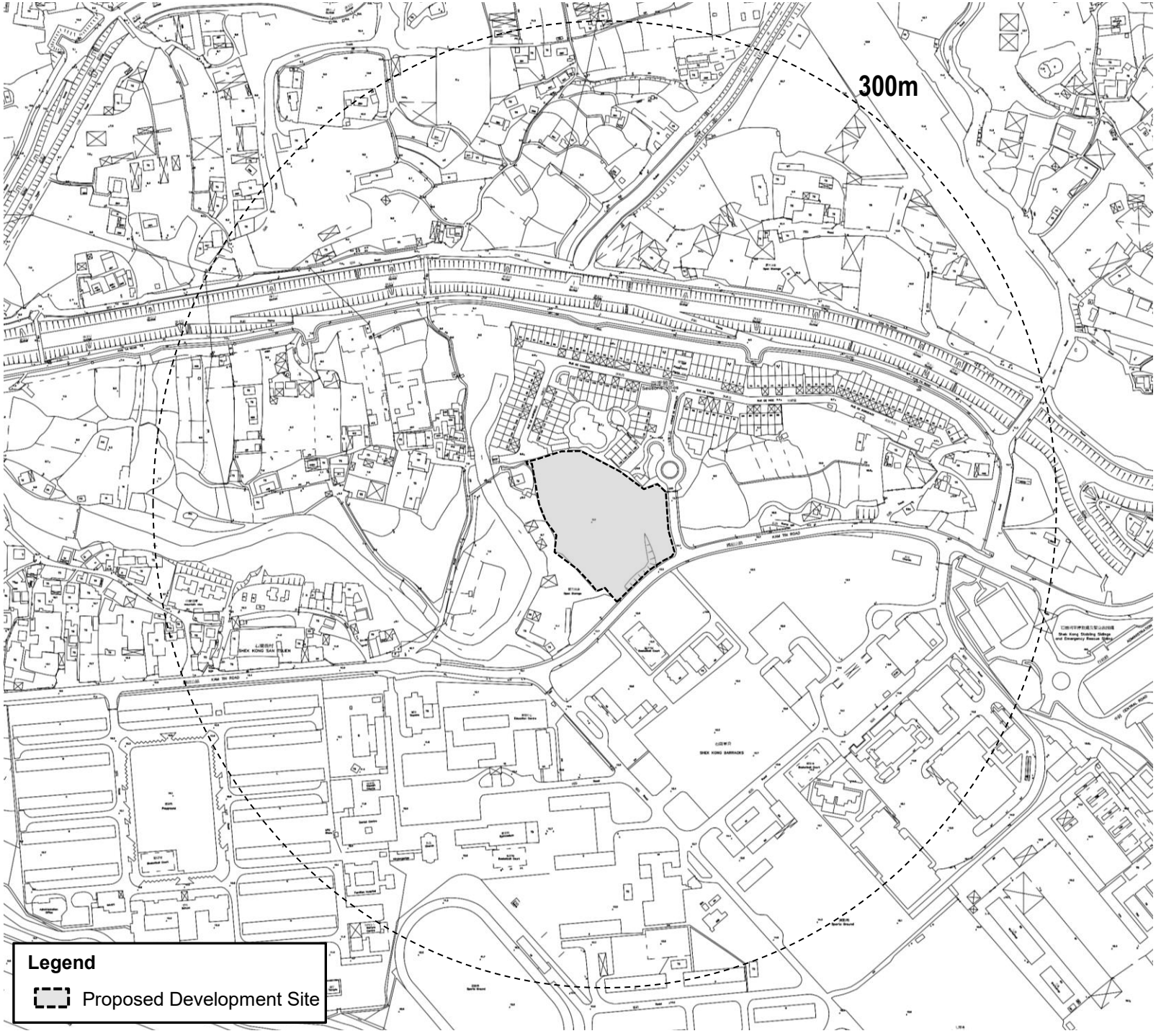
10. REFERENCES

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

[2] "Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Places or Construction Sites" (IND – TM) issued under the Noise Control Ordinance.

[3] "RoadNoise 2000" Computer Software of WS Atkins Noise and Vibration, England.

[4] "Calculation of Road Traffic Noise" of the Department of Transport, Welsh Office, UK.



Westwood Hong & Associates Ltd

PROJECT: 22605

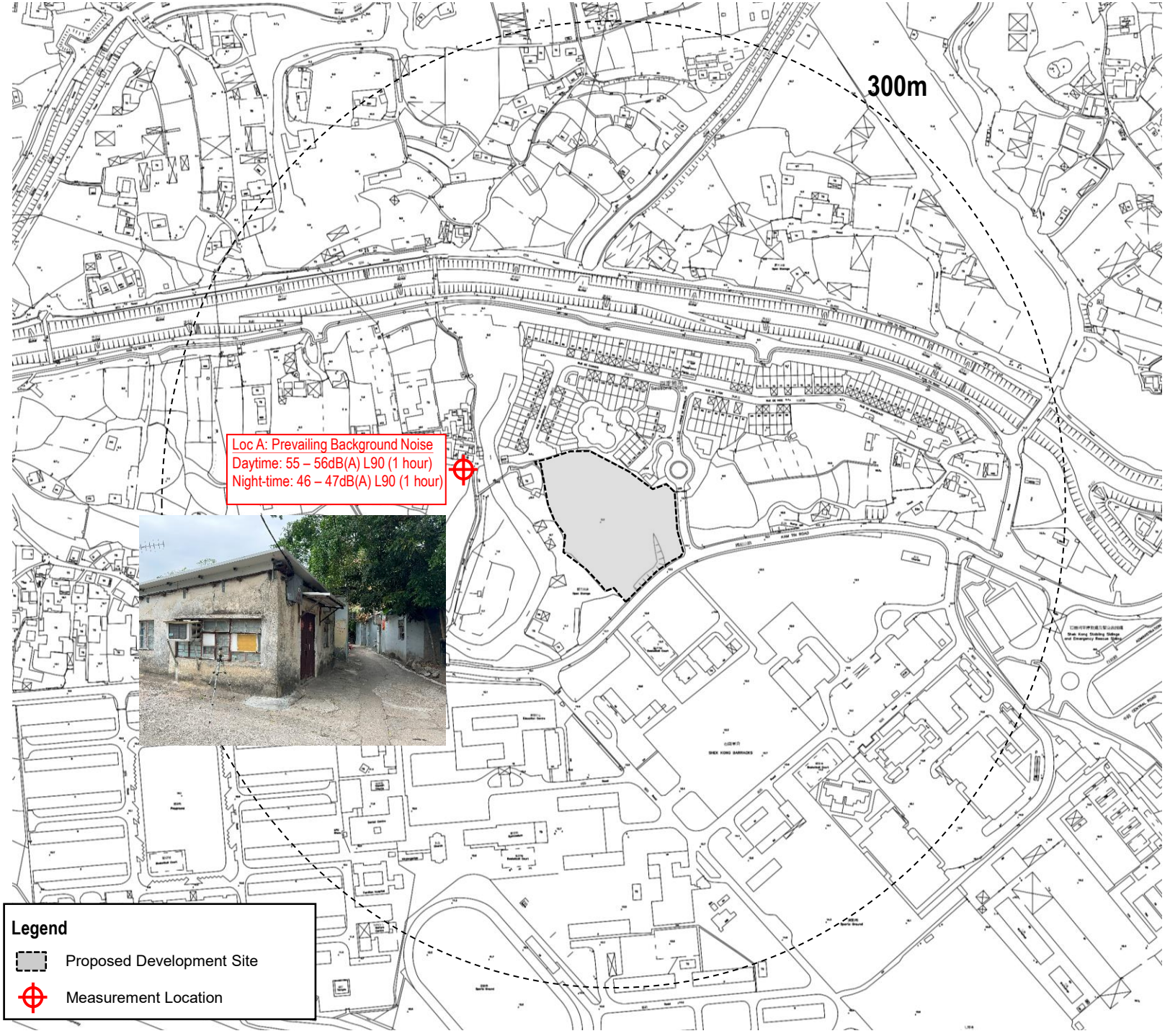
Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories

TITLE:

Site Location

FIGURE

1



Westwood Hong & Associates Ltd

PROJECT: 22605

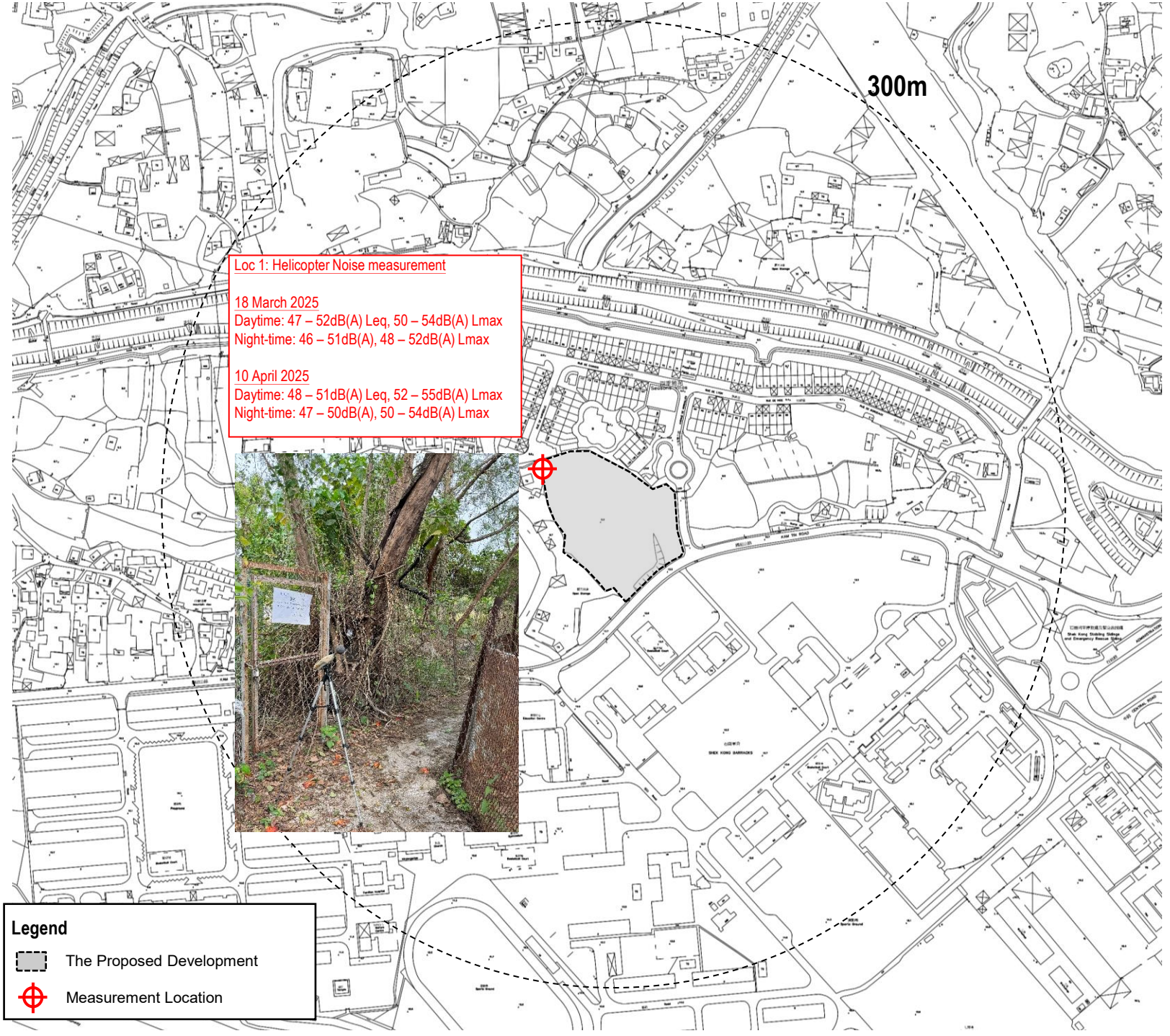
Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories

TITLE:

Background Noise Measurement

FIGURE

2a



Westwood Hong & Associates Ltd

PROJECT: 22605

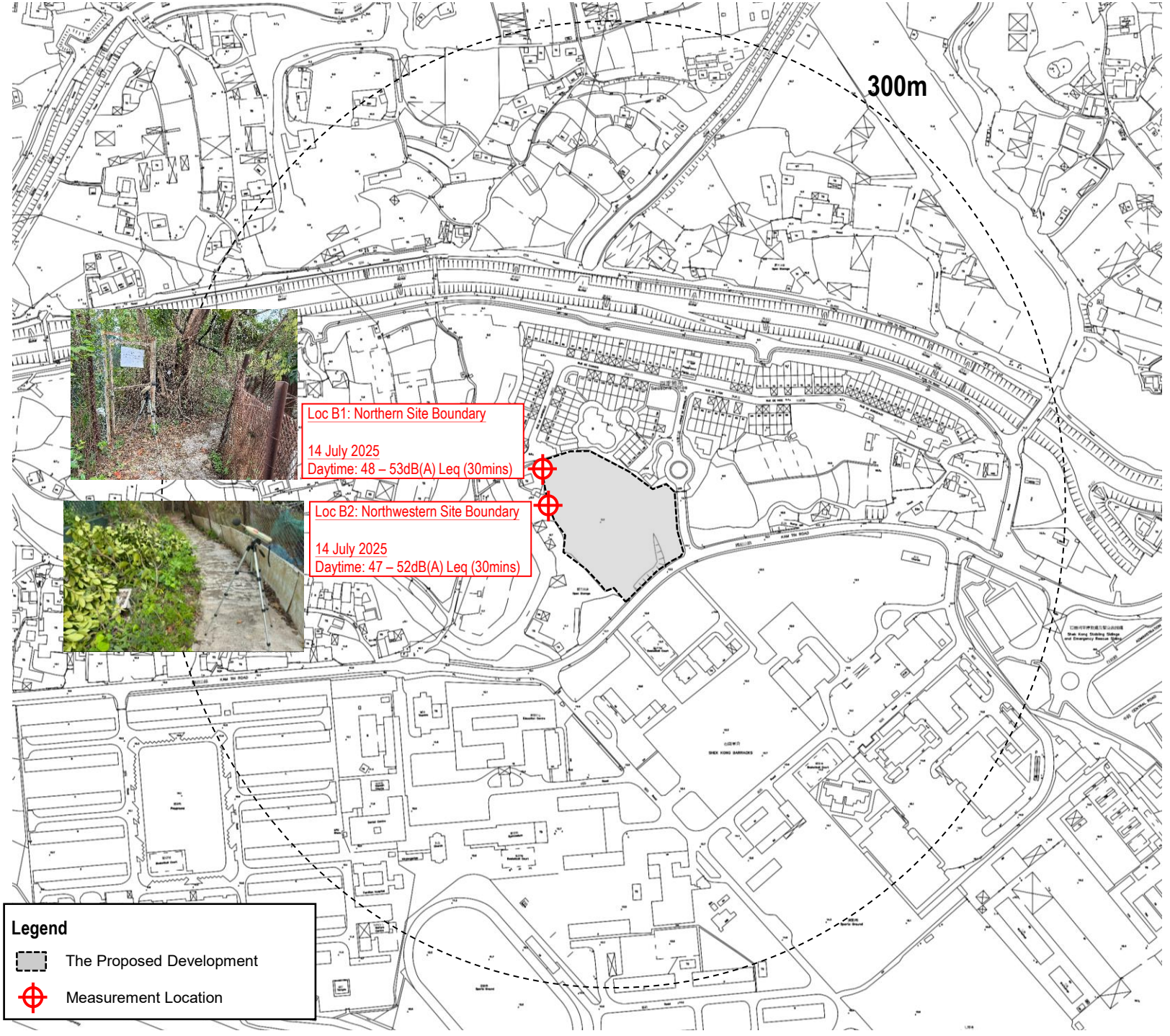
Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories

TITLE:

Helicopter Noise Measurement

FIGURE

2b



N

Westwood Hong & Associates Ltd

PROJECT: 22605

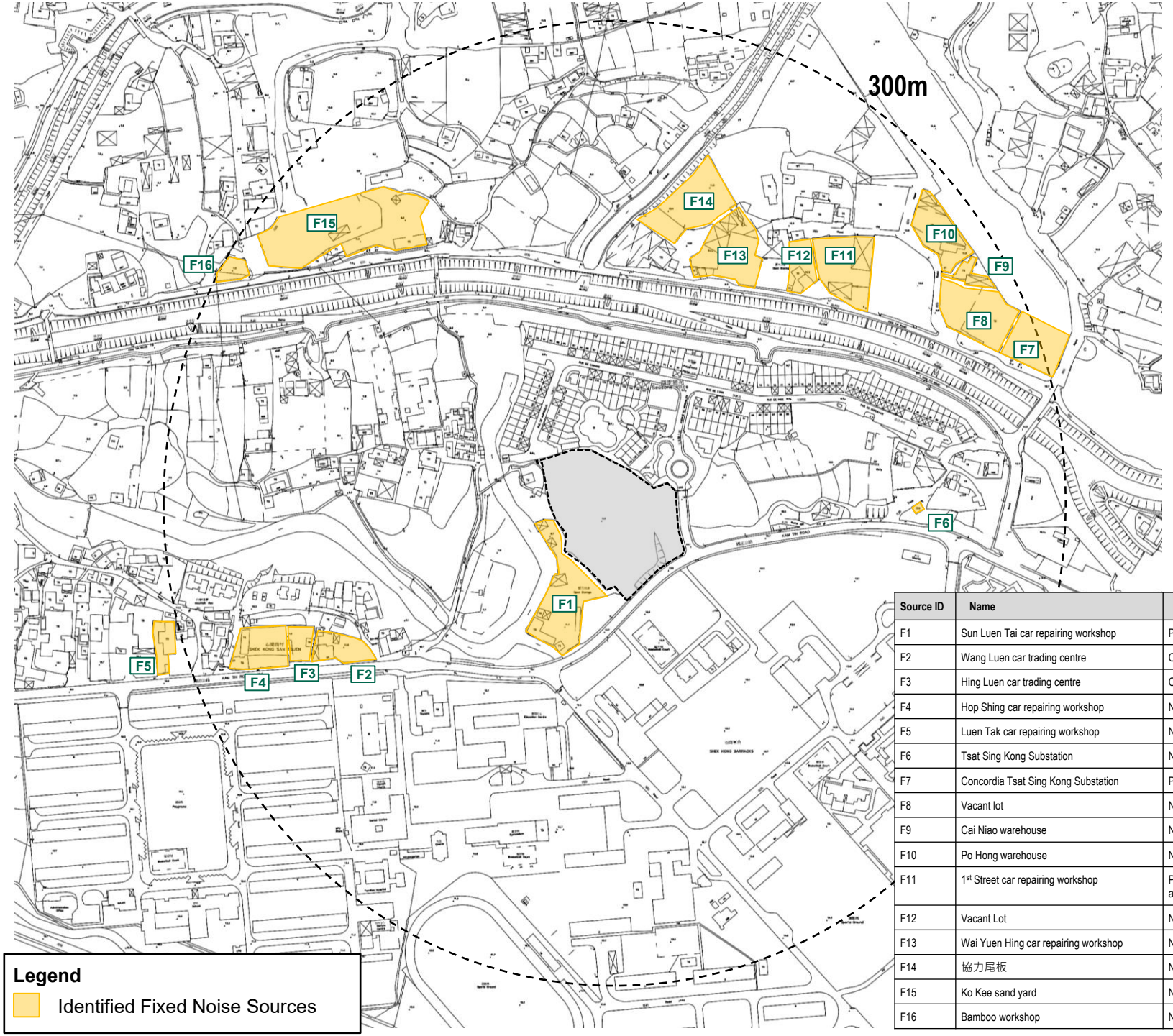
Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories

TITLE:

Fixed Noise Measurement

FIGURE

2c



Source ID	Name	Fixed Noise Sources
F1	Sun Luen Tai car repairing workshop	Pneumatic screwdriver
F2	Wang Luen car trading centre	Car trading centre
F3	Hing Luen car trading centre	Car trading centre
F4	Hop Shing car repairing workshop	No industrial noise
F5	Luen Tak car repairing workshop	No industrial noise
F6	Tsat Sing Kong Substation	No industrial noise
F7	Concordia Tsat Sing Kong Substation	Plant noise
F8	Vacant lot	No industrial noise
F9	Cai Niao warehouse	No industrial noise
F10	Po Hong warehouse	No industrial noise
F11	1st Street car repairing workshop	Pneumatic screwdriver and air compressor
F12	Vacant Lot	No industrial noise
F13	Wai Yuen Hing car repairing workshop	No industrial noise
F14	協力尾板	No industrial noise
F15	Ko Kee sand yard	No industrial noise
F16	Bamboo workshop	No industrial noise

Westwood Hong & Associates Ltd

PROJECT: 22605

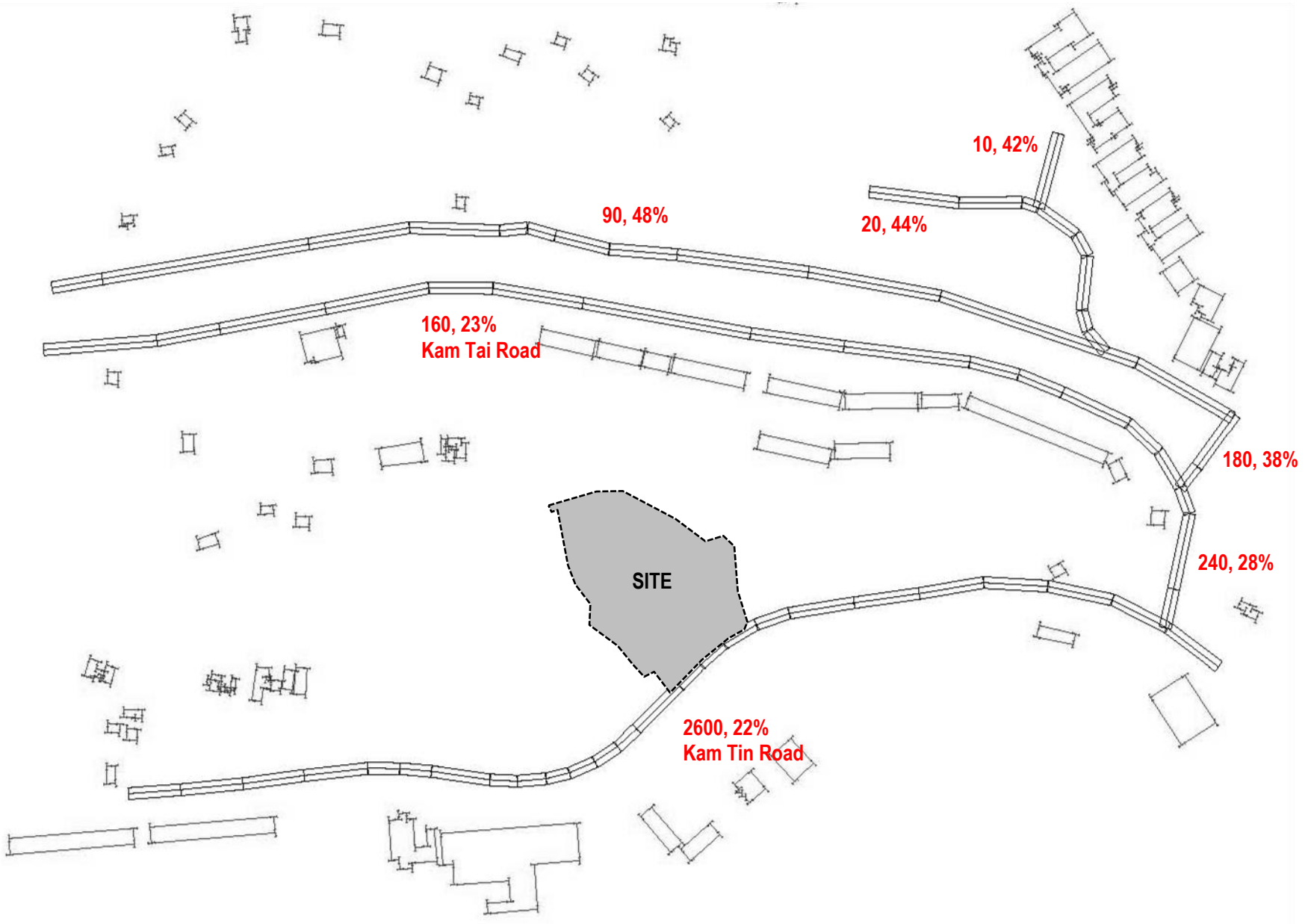
Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories

TITLE:

Identified Fixed Noise Sources

FIGURE

3



Legend

2590, 22% - 2590 vehicles per hour, 22% heavy goods vehicles

Westwood Hong & Associates Ltd

PROJECT: 22605

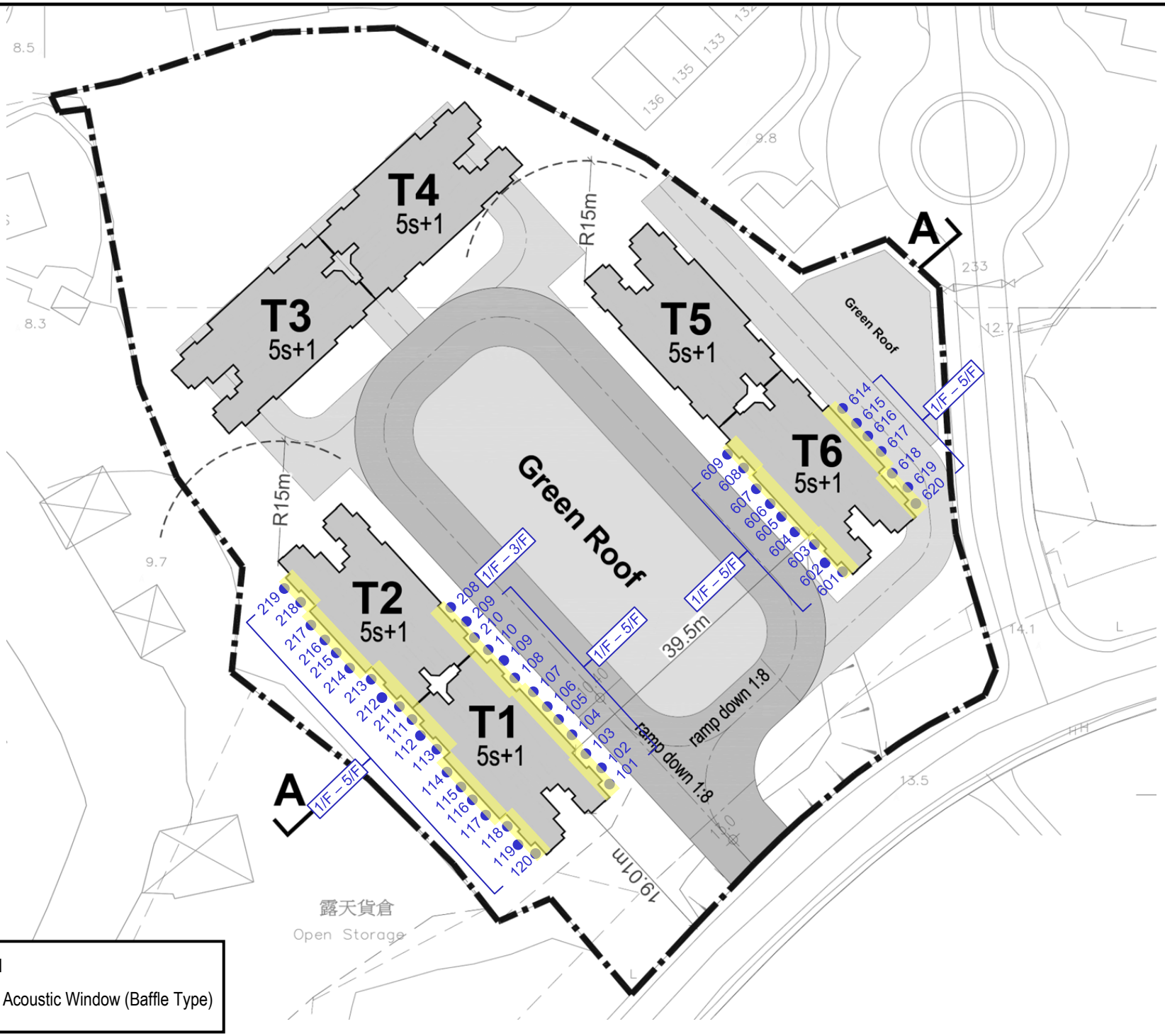
Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories

TITLE:

Computer Plot of Road Scheme (with Year 2046 traffic flow data shown, AM peak)

FIGURE

4



Westwood Hong & Associates Ltd

PROJECT: 22605

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

TITLE:

Location of Noise Mitigation Measures for Road Traffic Noise

FIGURE

5

APPENDIX 1

ARCHITECTURAL DRAWINGS

T4
5s+1

T3
5s+1

T5
5s+1

T6
5s+1

T2
5s+1

T1
5s+1

Green Roof

Green Roof

R15m

R15m

39.5m

10.40

ramp down 1:8

ramp down 1:8

19.01m

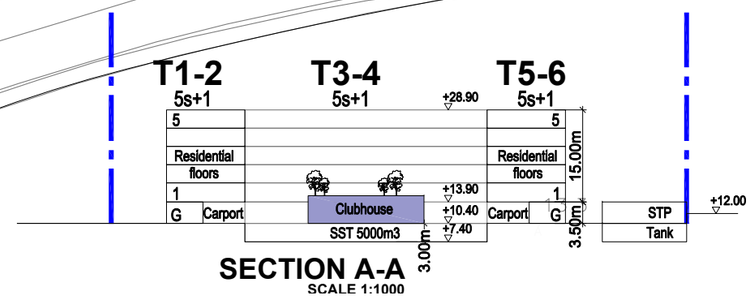
A

A

露天貨倉
Open Storage

錦田公路

斜路

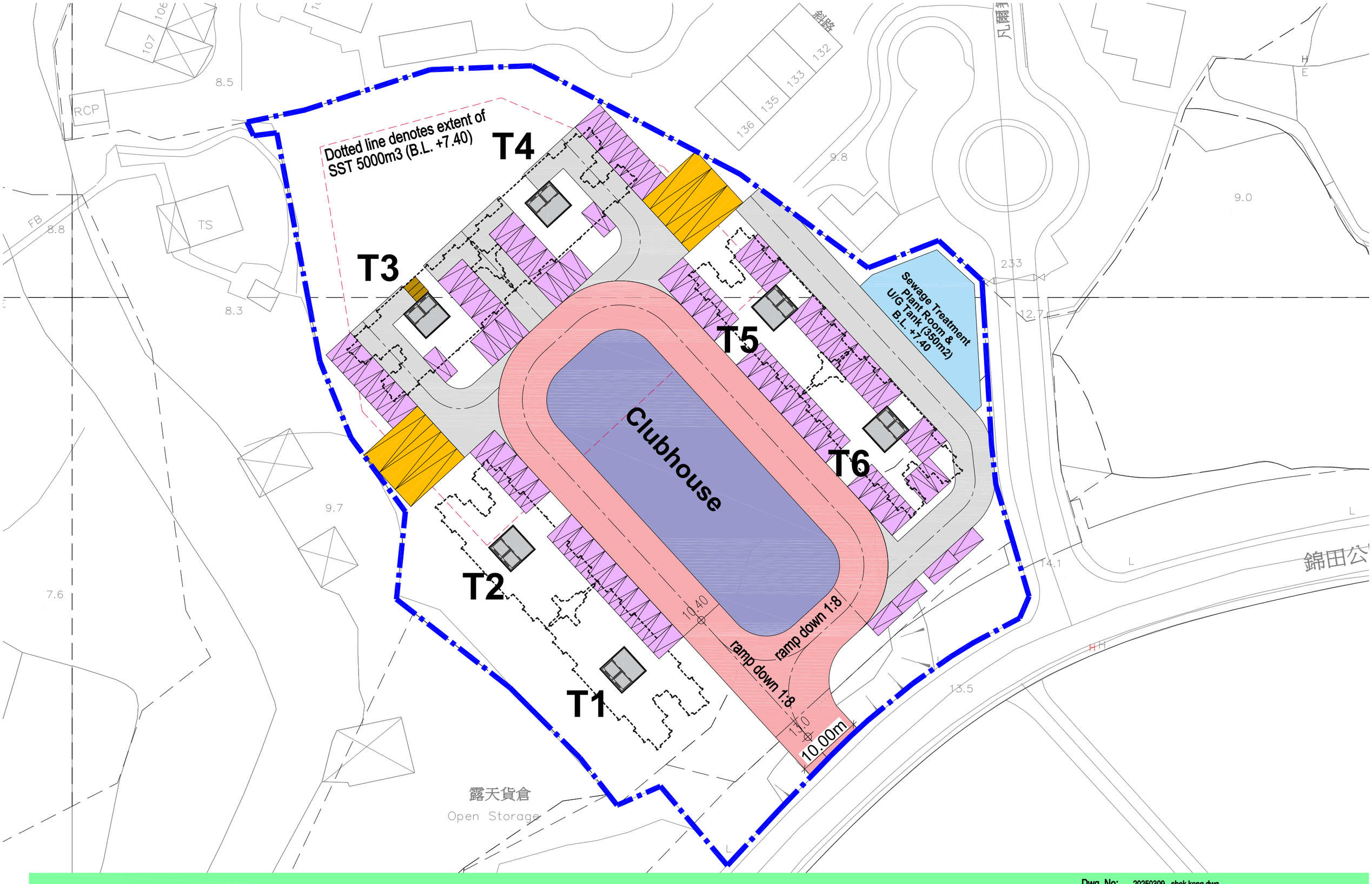


SECTION A-A
SCALE 1:1000

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

MASTER LAYOUT PLAN

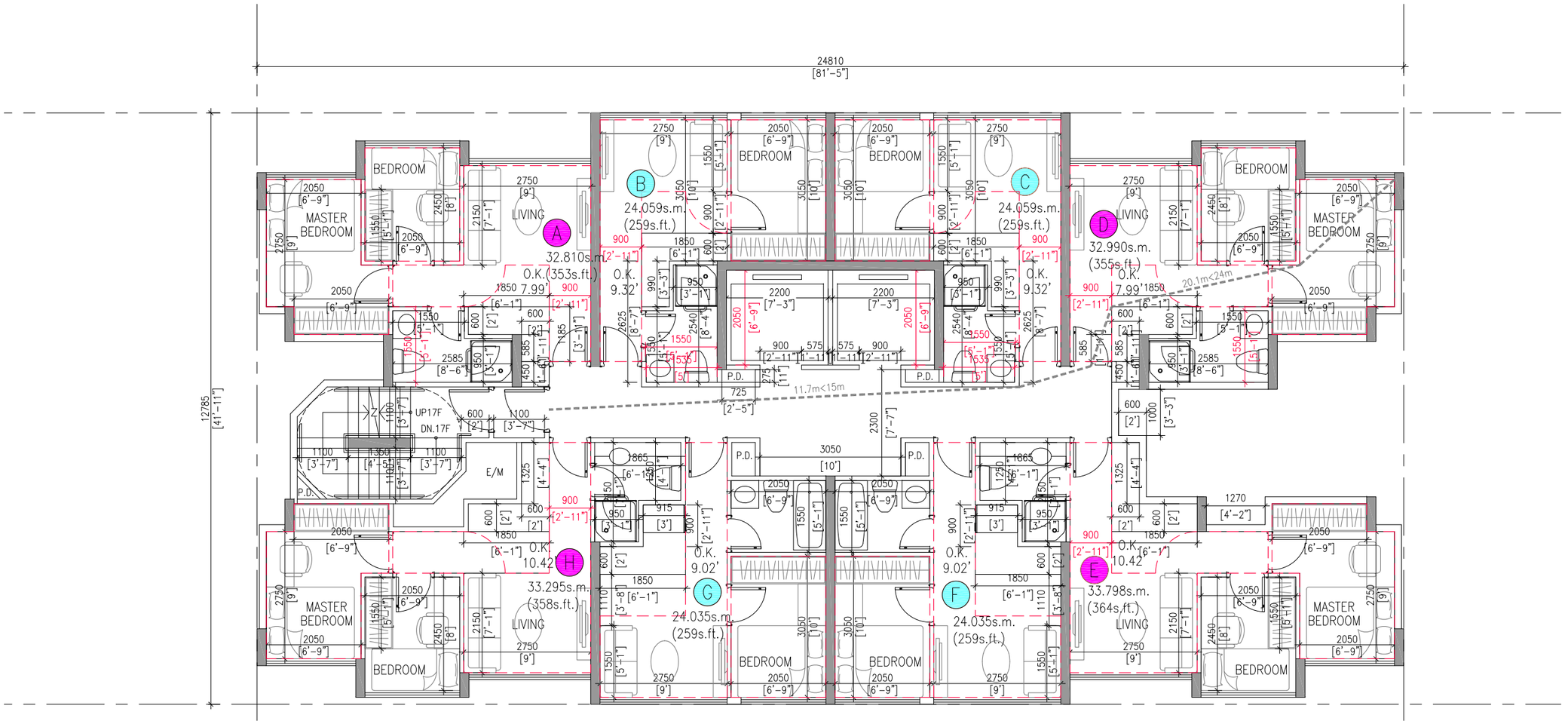
Dwg No: 20250309 - shek kong.dwg
Scale 1 : 500(A3)
Date: 24/04/2025
File Path: p:\dd110, shek kong, kam tin road, yuen long\g. scheme\2025_shek kong new alternative s12a



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

GROUND FLOOR PLAN

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



Note:
(1) Structure, Lighting and Ventilation requirement to be verified.

Prescribed window by Performance Based approach.

Dimension to be deviated from sketch paper layout.

1B Unit

2B Unit

Critical Dimension

Localized Dimension

UFA = 138.086 < 150 s.m.

TOTAL NFA	=	219.214	
COMMON AREA (BEFORE LIFT SHAFT EXEMPTION)	=	39.864	
TOTAL GFA (BEFORE LIFT SHAFT EXEMPTION)	=	259.078	
LIFT SHAFT AREA	=	9.020	
AREA OF LIFT SHAFT EXEMPTION	=	2.543	0.982 %
MAX. LIFT SHAFT EXEMPTED AREA (3.5% of Total GFA)	=	9.068	
COMMON AREA (AFTER LIFT SHAFT EXEMPTION)	=	37.321	
COMMON AREA (WITHOUT LIFT SHAFT AREA)	=	30.844	
TOTAL GFA (AFTER LIFT SHAFT EXEMPTION)	=	**256.535**	
EFFICIENCY RATE	=	85.452 %	
TOTAL SALEABLE AREA	=	**229.081**	
EFFICIENCY RATIO (TOTAL SALEABLE AREA / TOTAL GFA)	=	**89.298%**	

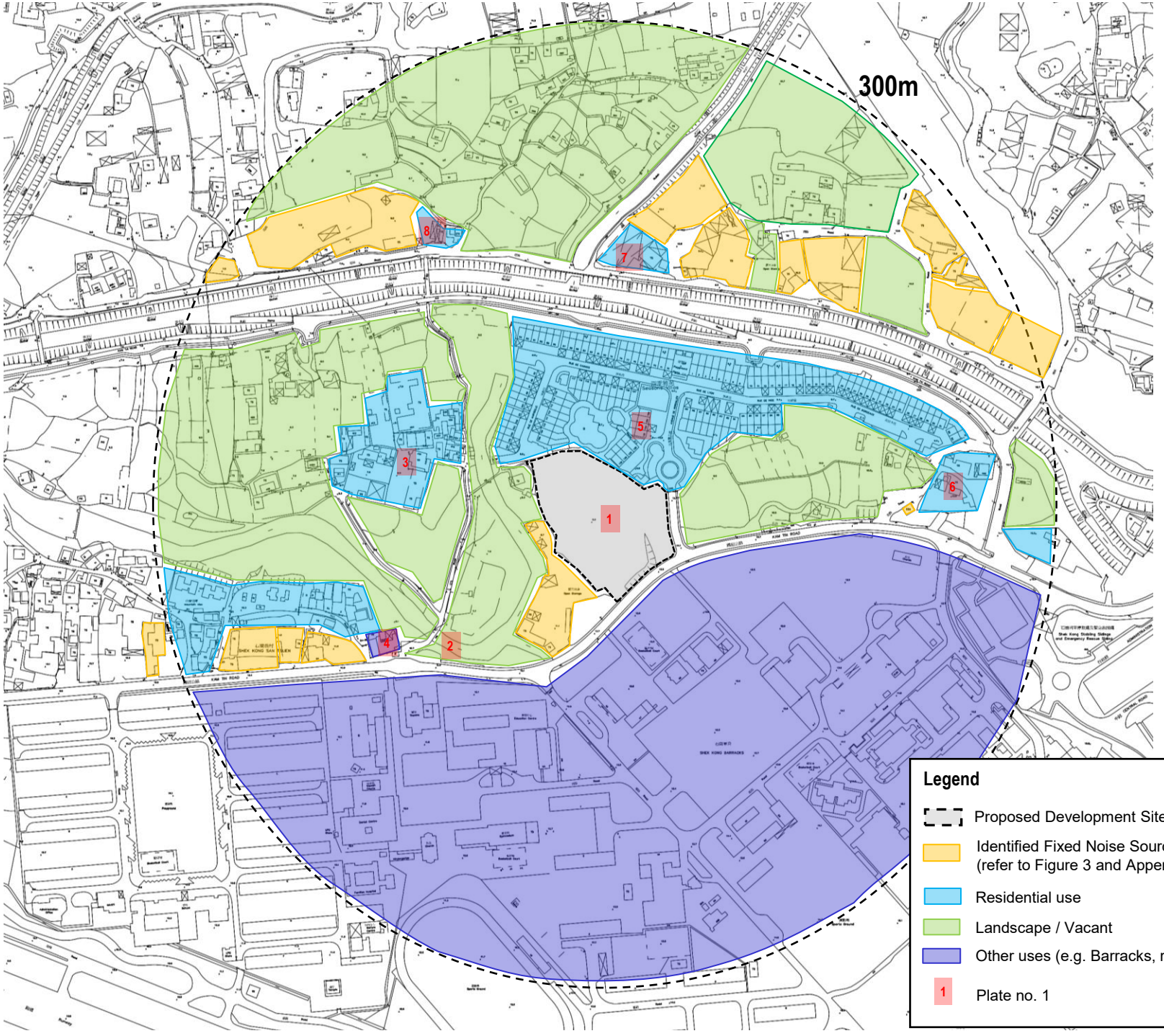
REZONING APPLICATION
AT DD110, SHEK KONG, KAM TIN ROAD,

TYPICAL PLAN - 8 Units [12 Bedroom-4x2B,4x1B]
(Not for Submission)

Dwg No: 20250309 - shek kong.dwg
1 : 100 (A3)
24/04/2025
File Path: p:\dd110, shek kong, kam tin road, yuen long\g. scheme\2025_shek kong new [illegible]\20250906_1400.dwg

APPENDIX 2

PHOTOS TAKEN ON SITE



Westwood Hong & Associates Ltd

PROJECT: 22605

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

TITLE:

Identified Fixed Noise Sources

FIGURE

A2-1

Plate 1: Development Site

Plate 2: Landscape area

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

Plate 3: Village house

Plate 4: Tailor shop

Westwood Hong & Associates Ltd	TITLE:	FIGURE
PROJECT: 22605 Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories	**Photographs taken on Site**	**A2-2**

Plate 5: Residential Development – Seasons Villas

Plate 6: Village house

Westwood Hong & Associates Ltd	TITLE:	FIGURE
PROJECT: 22605 Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories	**Photographs taken on Site**	**A2-3**

Plate 7: Village house

Plate 8: Village house

Westwood Hong & Associates Ltd	TITLE:	FIGURE
PROJECT: 22605 Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories	**Photographs taken on Site**	**A2-4**

APPENDIX 3

YEAR 2046 TRAFFIC FORECAST
(provided by CTA CONSULTANTS LTD)

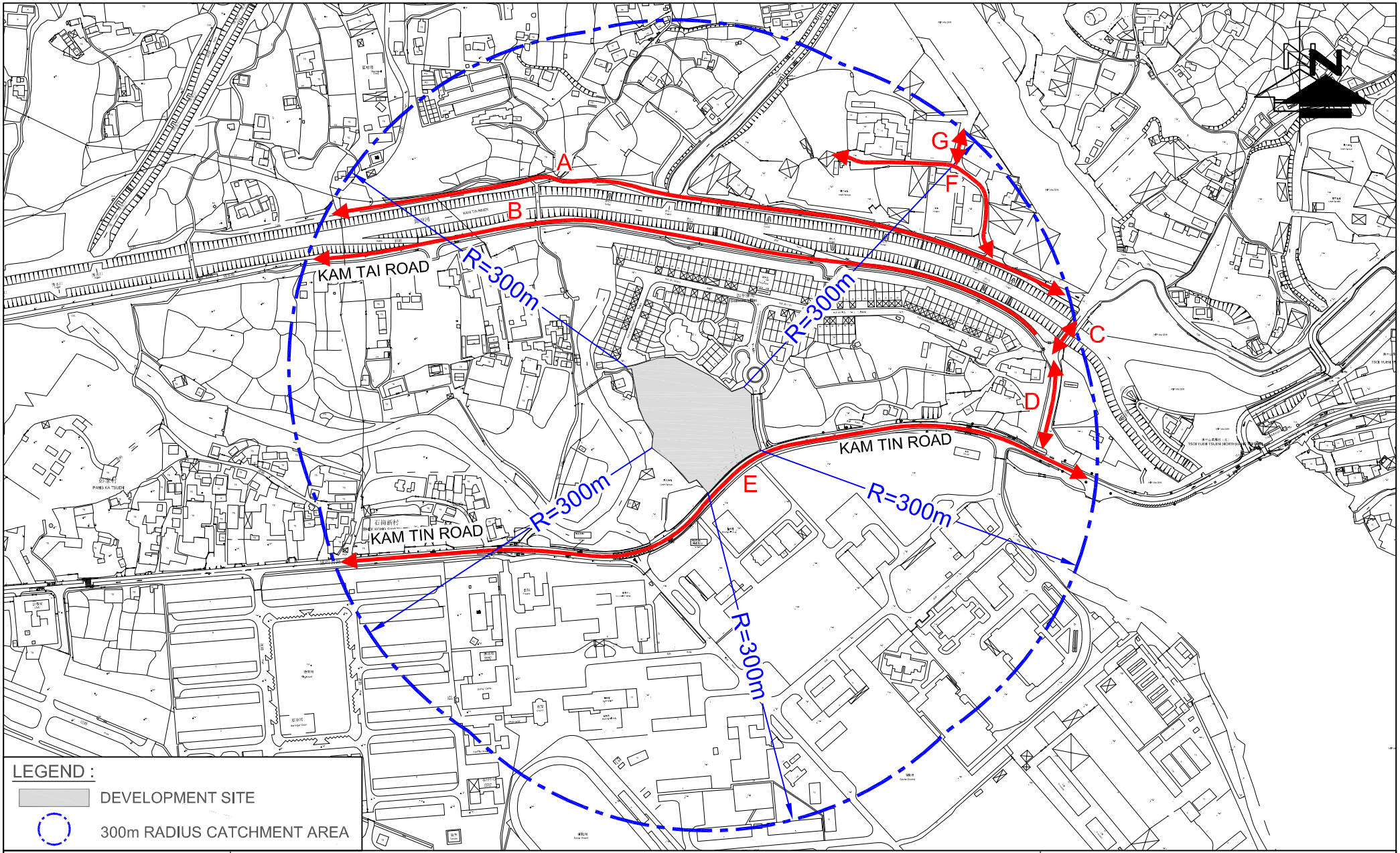


FIGURE NO.: 1	PROJECT TITLE: S12A Rezoning Application DD110, Kam Tin Road, Shek Kong, Yuen Long
PROJECT NO.: 25009HK	DRAWING TITLE: INDEX PLAN
SCALE: 1 : 4500 @A4	DATE: 06 OCT 2025

CTA Consultants Limited
志達顧問有限公司

25009HK

CTA Consultants Limited
志達顧問有限公司

Rezoning from "Residential (Group C)2" and "Open Space" zones to "Residential (Group C)4" zone for a Proposed Residential Development at Lot Nos. 519 RP and 520 RP in D.D. 110 and the Adjoining Government land, Shek Kong, Yuen Long, N.T.

TRAFFIC FORECAST FOR TRAFFIC NOISE IMPACT ASSESSMENT

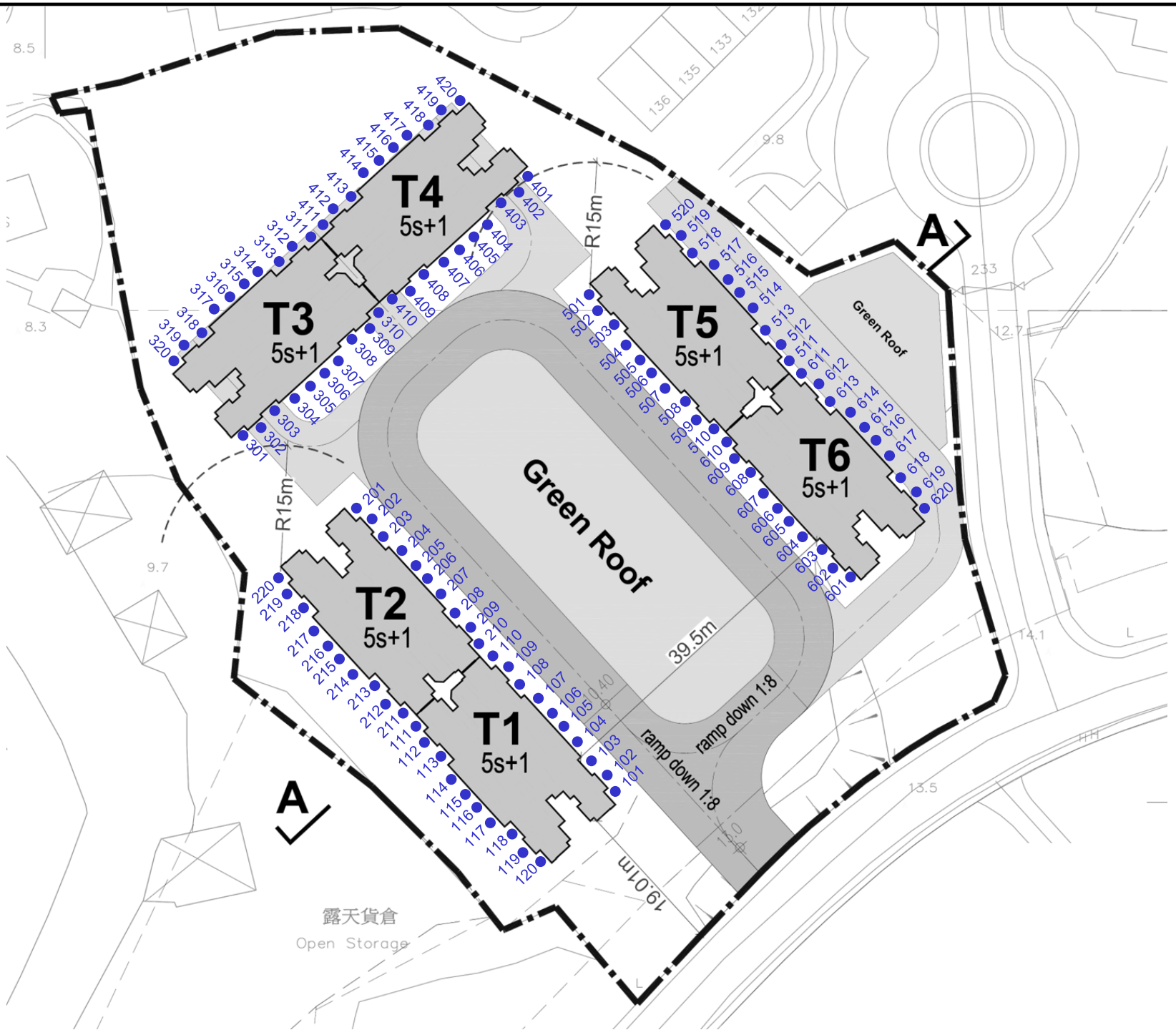
Link No.	Road Name	Speed (km/hr)	Direction	Year 2046			
				AM Peak		PM Peak	
				Traffic Flow (veh/hr)	HV%	Traffic Flow (veh/hr)	HV%
A	Local Road	50	2-way	90	48%	100	31%
B	Kam Tai Road	50	WB	160	23%	170	19%
C	Local Road	50	2-way	180	38%	170	26%
D	Kam Tai Road	50	2-way	240	28%	290	23%
E	Kam Tin Road	50	2-way	2600	22%	2380	21%
F	Local Road	50	2-way	20	44%	20	29%
G	Local Road	50	2-way	10	42%	10	28%

Notes : *(1) Please refer to the Location Plan (i.e. Figure 1) attached in Appendix A.*

(2) HV includes Light Van, Public Light Bus, Light Goods Vehicle, Medium Goods Vehicle, Heavy Goods Vehicle and Container/Tractor, Coach and Bus. Bus includes Coach and Bus

APPENDIX 4

PREDICTED FAÇADE NOISE LEVELS FOR ROAD TRAFFIC NOISE
(BASE SCENARIO)



Westwood Hong & Associates Ltd

PROJECT: 22605

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

TITLE:

Location of Noise Assessment Points for Road Traffic Noise Assessment

FIGURE

A4-1

Job No. : 22605
Job Title : Shek Kong
Scenario : Unmitigated, Year 2046 Traffic Forecast

Residential Floor	Level of Assessment Point (mPD)	Receiver																			
		T1																			
		101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1	15.1	**76.6**	**75.9**	**74.6**	**73.7**	**73.1**	**72.6**	**72.1**	**71.4**	**71.5**	**71.1**	**72.0**	**72.5**	**72.6**	**73.3**	**73.7**	**74.1**	**74.5**	**74.8**	**75.9**	**76.8**
2	18.1	**76.5**	**75.8**	**74.4**	**73.6**	**73.0**	**72.6**	**72.0**	**71.4**	**71.4**	**71.0**	**72.0**	**72.5**	**72.6**	**73.3**	**73.7**	**74.1**	**74.5**	**74.8**	**75.8**	**76.7**
3	21.1	**76.3**	**75.6**	**74.2**	**73.5**	**72.9**	**72.5**	**71.9**	**71.3**	**71.3**	**70.9**	**72.0**	**72.4**	**72.5**	**73.3**	**73.7**	**74.0**	**74.4**	**74.7**	**75.7**	**76.6**
4	24.0	**76.0**	**75.3**	**73.9**	**73.3**	**72.7**	**72.4**	**71.8**	**71.2**	**71.2**	**70.8**	**72.0**	**72.4**	**72.5**	**73.2**	**73.6**	**73.9**	**74.3**	**74.6**	**75.6**	**76.3**
5	27.0	**75.7**	**75.0**	**73.7**	**73.1**	**72.6**	**72.2**	**71.7**	**71.1**	**71.0**	**70.7**	**71.9**	**72.4**	**72.4**	**73.1**	**73.5**	**73.9**	**74.2**	**74.4**	**75.4**	**76.2**
	max	**76.6**	**75.9**	**74.6**	**73.7**	**73.1**	**72.6**	**72.1**	**71.4**	**71.5**	**71.1**	**72.0**	**72.5**	**72.6**	**73.3**	**73.7**	**74.1**	**74.5**	**74.8**	**75.9**	**76.8**

Residential Floor	Level of Assessment Point (mPD)	T2																		
		201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
1	15.1	67.0	67.4	67.8	68.3	68.7	69.2	69.8	**70.6**	**71.0**	**70.9**	**71.9**	**71.9**	**71.6**	**71.5**	**71.3**	**71.2**	**71.1**	**70.5**	**70.6**	70.3
2	18.1	67.0	67.3	67.8	68.3	68.7	69.2	69.8	**70.6**	**70.9**	**70.8**	**71.9**	**71.9**	**71.6**	**71.5**	**71.3**	**71.2**	**71.1**	**70.5**	**70.6**	70.3
3	21.1	67.0	67.3	67.7	68.2	68.7	69.1	69.7	**70.5**	**70.8**	**70.7**	**71.9**	**71.9**	**71.6**	**71.5**	**71.3**	**71.1**	**71.0**	**70.5**	**70.6**	70.3
4	24.0	66.9	67.3	67.7	68.2	68.6	69.1	69.6	70.4	**70.7**	**70.6**	**71.9**	**71.8**	**71.5**	**71.5**	**71.3**	**71.1**	**71.0**	**70.5**	**70.6**	70.2
5	27.0	66.9	67.3	67.7	68.2	68.6	69.0	69.5	70.2	**70.5**	**70.5**	**71.8**	**71.8**	**71.5**	**71.4**	**71.2**	**71.1**	**71.0**	**70.5**	**70.5**	70.2
	max	67.0	67.4	67.8	68.3	68.7	69.2	69.8	**70.6**	**71.0**	**70.9**	**71.9**	**71.9**	**71.6**	**71.5**	**71.3**	**71.2**	**71.1**	**70.5**	**70.6**	70.3

Residential Floor	Level of Assessment Point (mPD)	T3																			
		301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320
1	15.1	69.3	69.1	68.6	68.3	68.0	67.8	67.5	67.2	67.1	66.9	59.4	60.9	60.1	61.8	62.1	62.4	62.8	62.1	64.8	66.4
2	18.1	69.2	69.1	68.6	68.3	68.0	67.8	67.5	67.2	67.1	66.9	59.4	60.9	60.1	61.9	62.1	62.4	62.8	62.1	64.8	66.4
3	21.1	69.2	69.1	68.6	68.3	68.0	67.8	67.6	67.2	67.1	66.9	59.5	61.0	60.2	61.9	62.1	62.4	62.9	62.1	64.9	66.4
4	24.0	69.2	69.1	68.6	68.3	68.0	67.8	67.6	67.2	67.1	66.9	59.6	61.0	60.3	62.0	62.2	62.5	62.9	62.1	64.9	66.4
5	27.0	69.3	69.1	68.6	68.3	68.0	67.8	67.6	67.2	67.1	67.0	59.6	61.1	60.3	62.0	62.2	62.5	62.9	62.2	64.9	66.4
	max	69.3	69.1	68.6	68.3	68.0	67.8	67.6	67.2	67.1	67.0	59.6	61.1	60.3	62.0	62.2	62.5	62.9	62.2	64.9	66.4

Residential Floor	Level of Assessment Point (mPD)	T4																			
		401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420
1	15.1	66.8	66.2	65.9	66.2	66.3	66.4	66.5	66.6	66.8	66.8	59.8	60.6	60.2	60.7	60.6	60.5	60.5	59.6	60.1	58.9
2	18.1	66.8	66.2	65.9	66.2	66.3	66.4	66.5	66.6	66.8	66.8	59.9	60.7	60.3	60.7	60.6	60.6	60.5	59.7	60.2	58.9
3	21.1	66.8	66.2	66.0	66.2	66.3	66.4	66.5	66.6	66.8	66.8	59.9	60.7	60.3	60.8	60.6	60.6	60.6	59.8	60.3	59.0
4	24.0	66.8	66.2	66.0	66.3	66.4	66.4	66.6	66.6	66.9	66.8	60.1	60.8	60.4	60.8	60.7	60.7	60.7	59.8	60.3	59.1
5	27.0	66.8	66.3	66.1	66.3	66.4	66.5	66.6	66.7	66.9	66.9	60.4	61.0	60.5	60.9	60.8	60.8	60.7	59.9	60.4	59.2
	max	66.8	66.3	66.1	66.3	66.4	66.5	66.6	66.7	66.9	66.9	60.4	61.0	60.5	60.9	60.8	60.8	60.7	59.9	60.4	59.2

Residential Floor	Level of Assessment Point (mPD)	T5																			
		501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520
1	15.1	67.6	67.8	67.9	68.2	68.3	68.5	68.8	69.3	69.8	70.1	69.4	69.5	69.1	68.8	68.5	68.4	68.2	67.5	67.6	67.2
2	18.1	67.7	67.8	67.9	68.2	68.3	68.4	68.8	69.3	69.8	70.1	69.4	69.5	69.1	68.7	68.5	68.4	68.2	67.5	67.6	67.2
3	21.1	67.6	67.8	67.9	68.2	68.3	68.4	68.7	69.3	69.7	70.0	69.3	69.4	69.0	68.7	68.5	68.3	68.1	67.5	67.6	67.2
4	24.0	67.6	67.8	67.9	68.2	68.3	68.4	68.7	69.3	69.7	70.0	69.3	69.4	69.0	68.7	68.4	68.3	68.1	67.5	67.6	67.1
5	27.0	67.6	67.8	67.9	68.1	68.3	68.4	68.7	69.2	69.7	69.9	69.2	69.3	68.9	68.6	68.4	68.3	68.1	67.4	67.6	67.1
	max	67.7	67.8	67.9	68.2	68.3	68.5	68.8	69.3	69.8	70.1	69.4	69.5	69.1	68.8	68.5	68.4	68.2	67.5	67.6	67.2

Residential Floor	Level of Assessment Point (mPD)	T6																			
		601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620
1	15.1	**76.8**	**75.8**	**74.6**	**73.7**	**73.1**	**72.7**	**72.1**	**71.4**	**71.0**	70.4	69.5	70.1	69.9	**71.1**	**71.5**	**71.8**	**72.3**	**72.5**	**73.8**	**75.2**
2	18.1	**76.7**	**75.7**	**74.5**	**73.7**	**73.1**	**72.6**	**72.1**	**71.4**	**71.0**	70.4	69.5	70.1	69.9	**71.1**	**71.4**	**71.8**	**72.2**	**72.5**	**73.8**	**75.1**
3	21.1	**76.5**	**75.6**	**74.4**	**73.6**	**73.0**	**72.6**	**72.0**	**71.3**	**71.0**	70.3	69.4	70.1	69.8	**71.0**	**71.4**	**71.8**	**72.2**	**72.4**	**73.7**	**74.9**
4	24.0	**76.3**	**75.4**	**74.3**	**73.5**	**72.9**	**72.5**	**72.0**	**71.2**	**70.9**	70.3	69.4	70.0	69.7	**71.0**	**71.3**	**71.7**	**72.1**	**72.2**	**73.5**	**74.7**
5	27.0	**76.1**	**75.2**	**74.1**	**73.3**	**72.8**	**72.3**	**71.9**	**71.2**	**70.8**	70.2	69.3	69.9	69.6	**70.9**	**71.2**	**71.5**	**71.9**	**72.0**	**73.3**	**74.5**
	max	**76.8**	**75.8**	**74.6**	**73.7**	**73.1**	**72.7**	**72.1**	**71.4**	**71.0**	70.4	69.5	70.1	69.9	**71.1**	**71.5**	**71.8**	**72.3**	**72.5**	**73.8**	**75.2**

APPENDIX 5

PREDICTED FAÇADE NOISE LEVELS FOR ROAD TRAFFIC NOISE
(WITH ALL NOISE MITIGATION MEASURES)

Job No. : 22605

Job Title : Shek Kong

Scenario : Unmitigated, Year 2046 Traffic Forecast

Residential Floor	Level of Assessment Point (mPD)	Receiver																			
		T1																			
		101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1	15.1	70.2	70.4	69.8	68.9	67.6	67.1	67.3	66.6	66.0	64.7	65.6	67.0	67.8	68.5	68.2	68.6	69.7	70.0	70.4	70.4
2	18.1	70.1	70.3	69.6	68.8	67.5	67.1	67.2	66.6	65.9	64.6	65.6	67.0	67.8	68.5	68.2	68.6	69.7	70.0	70.3	70.3
3	21.1	69.9	70.1	69.4	68.7	67.4	67.0	67.1	66.5	65.8	64.5	65.6	66.9	67.7	68.5	68.2	68.5	69.6	69.9	70.2	70.2
4	24.0	69.6	69.8	69.1	68.5	67.2	66.9	67.0	66.4	65.7	64.4	65.6	66.9	67.7	68.4	68.1	68.4	69.5	69.8	70.1	69.9
5	27.0	69.3	69.5	68.9	68.3	67.1	66.7	66.9	66.3	65.5	64.3	65.5	66.9	67.6	68.3	68.0	68.4	69.4	69.6	69.9	69.8
	max	70.2	70.4	69.8	68.9	67.6	67.1	67.3	66.6	66.0	64.7	65.6	67.0	67.8	68.5	68.2	68.6	69.7	70.0	70.4	70.4

Remark:

- Acoustic Window (Baffle type) for bedroom, with SAM, -5.5dB(A) assumed (appendix 8)
- Acoustic Window (Baffle type) for master bedroom, with SAM, -6.4dB(A) assumed (appendix 8)
- Acoustic Window (Baffle type) for living room, without SAM, -4.8dB(A) assumed (appendix 8)
- The presented predicted noise level after adopting acoustic windows (baffle type) (i.e. mitigated noise level) does not necessarily represent the noise level at 1m away from the external façade, but the equivalent noise level at 1m from the external façade after accounting the reduction in noise levels inside the flat offered by the acoustic windows (baffle type).

Residential Floor	Level of Assessment Point (mPD)	T2																		
		201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
1	15.1	67.0	67.4	67.8	68.3	68.7	69.2	69.8	65.8	65.5	64.5	65.5	66.4	66.8	66.7	65.8	65.7	66.3	65.7	65.1	70.3
2	18.1	67.0	67.3	67.8	68.3	68.7	69.2	69.8	65.8	65.4	64.4	65.5	66.4	66.8	66.7	65.8	65.7	66.3	65.7	65.1	70.3
3	21.1	67.0	67.3	67.7	68.2	68.7	69.1	69.7	65.7	65.3	64.3	65.5	66.4	66.8	66.7	65.8	65.6	66.2	65.7	65.1	70.3
4	24.0	66.9	67.3	67.7	68.2	68.6	69.1	69.6	70.4	65.2	64.2	65.5	66.3	66.7	66.7	65.8	65.6	66.2	65.7	65.1	70.2
5	27.0	66.9	67.3	67.7	68.2	68.6	69.0	69.5	70.2	65.0	64.1	65.4	66.3	66.7	66.6	65.7	65.6	66.2	65.7	65.0	70.2
	max	67.0	67.4	67.8	68.3	68.7	69.2	69.8	70.4	65.5	64.5	65.5	66.4	66.8	66.7	65.8	65.7	66.3	65.7	65.1	70.3

Remark:

- Acoustic Window (Baffle type) for bedroom, with SAM, -5.5dB(A) assumed (appendix 8)
- Acoustic Window (Baffle type) for master bedroom, with SAM, -6.4dB(A) assumed (appendix 8)
- Acoustic Window (Baffle type) for living room, without SAM, -4.8dB(A) assumed (appendix 8)
- The presented predicted noise level after adopting acoustic windows (baffle type) (i.e. mitigated noise level) does not necessarily represent the noise level at 1m away from the external façade, but the equivalent noise level at 1m from the external façade after accounting the reduction in noise levels inside the flat offered by the acoustic windows (baffle type).

Residential Floor	Level of Assessment Point (mPD)	T3																			
		301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320
1	15.1	69.3	69.1	68.6	68.3	68.0	67.8	67.5	67.2	67.1	66.9	59.4	60.9	60.1	61.8	62.1	62.4	62.8	62.1	64.8	66.4
2	18.1	69.2	69.1	68.6	68.3	68.0	67.8	67.5	67.2	67.1	66.9	59.4	60.9	60.1	61.9	62.1	62.4	62.8	62.1	64.8	66.4
3	21.1	69.2	69.1	68.6	68.3	68.0	67.8	67.6	67.2	67.1	66.9	59.5	61.0	60.2	61.9	62.1	62.4	62.9	62.1	64.9	66.4
4	24.0	69.2	69.1	68.6	68.3	68.0	67.8	67.6	67.2	67.1	66.9	59.6	61.0	60.3	62.0	62.2	62.5	62.9	62.1	64.9	66.4
5	27.0	69.3	69.1	68.6	68.3	68.0	67.8	67.6	67.2	67.1	67.0	59.6	61.1	60.3	62.0	62.2	62.5	62.9	62.2	64.9	66.4
	max	69.3	69.1	68.6	68.3	68.0	67.8	67.6	67.2	67.1	67.0	59.6	61.1	60.3	62.0	62.2	62.5	62.9	62.2	64.9	66.4

Residential Floor	Level of Assessment Point (mPD)	T4																			
		401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420
1	15.1	66.8	66.2	65.9	66.2	66.3	66.4	66.5	66.6	66.8	66.8	59.8	60.6	60.2	60.7	60.6	60.5	60.5	59.6	60.1	58.9
2	18.1	66.8	66.2	65.9	66.2	66.3	66.4	66.5	66.6	66.8	66.8	59.9	60.7	60.3	60.7	60.6	60.6	60.5	59.7	60.2	58.9
3	21.1	66.8	66.2	66.0	66.2	66.3	66.4	66.5	66.6	66.8	66.8	59.9	60.7	60.3	60.8	60.6	60.6	60.6	59.8	60.3	59.0
4	24.0	66.8	66.2	66.0	66.3	66.4	66.4	66.6	66.6	66.9	66.8	60.1	60.8	60.4	60.8	60.7	60.7	60.7	59.8	60.3	59.1
5	27.0	66.8	66.3	66.1	66.3	66.4	66.5	66.6	66.7	66.9	66.9	60.4	61.0	60.5	60.9	60.8	60.8	60.7	59.9	60.4	59.2
	max	66.8	66.3	66.1	66.3	66.4	66.5	66.6	66.7	66.9	66.9	60.4	61.0	60.5	60.9	60.8	60.8	60.7	59.9	60.4	59.2

Residential Floor	Level of Assessment Point (mPD)	T5																			
		501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520
1	15.1	67.6	67.8	67.9	68.2	68.3	68.5	68.8	69.3	69.8	70.1	69.4	69.5	69.1	68.8	68.5	68.4	68.2	67.5	67.6	67.2
2	18.1	67.7	67.8	67.9	68.2	68.3	68.4	68.8	69.3	69.8	70.1	69.4	69.5	69.1	68.7	68.5	68.4	68.2	67.5	67.6	67.2
3	21.1	67.6	67.8	67.9	68.2	68.3	68.4	68.7	69.3	69.7	70.0	69.3	69.4	69.0	68.7	68.5	68.3	68.1	67.5	67.6	67.2
4	24.0	67.6	67.8	67.9	68.2	68.3	68.4	68.7	69.3	69.7	70.0	69.3	69.4	69.0	68.7	68.4	68.3	68.1	67.5	67.6	67.1
5	27.0	67.6	67.8	67.9	68.1	68.3	68.4	68.7	69.2	69.7	69.9	69.2	69.3	68.9	68.6	68.4	68.3	68.1	67.4	67.6	67.1
	max	67.7	67.8	67.9	68.2	68.3	68.5	68.8	69.3	69.8	70.1	69.4	69.5	69.1	68.8	68.5	68.4	68.2	67.5	67.6	67.2

Residential Floor	Level of Assessment Point (mPD)	T6																		
		601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620
1	15.1	70.4	70.3	69.8	68.9	67.6	67.2	67.3	66.6	65.5	70.4	69.5	70.1	69.9	66.3	66.0	66.3	67.5	67.7	68.3	68.8
2	18.1	70.3	70.2	69.7	68.9	67.6	67.1	67.3	66.6	65.5	70.4	69.5	70.1	69.9	66.3	65.9	66.3	67.4	67.7	68.3	68.7
3	21.1	70.1	70.1	69.6	68.8	67.5	67.1	67.2	66.5	65.5	70.3	69.4	70.1	69.8	66.2	65.9	66.3	67.4	67.6	68.2	68.5
4	24.0	69.9	69.9	69.5	68.7	67.4	67.0	67.2	66.4	65.4	70.3	69.4	70.0	69.7	66.2	65.8	66.2	67.3	67.4	68.0	68.3
5	27.0	69.7	69.7	69.3	68.5	67.3	66.8	67.1	66.4	65.3	70.2	69.3	69.9	69.6	66.1	65.7	66.0	67.1	67.2	67.8	68.1
	max	70.4	70.3	69.8	68.9	67.6	67.2	67.3	66.6	65.5	70.4	69.5	70.1	69.9	66.3	66.0	66.3	67.5	67.7	68.3	68.8

Remark:

- Acoustic Window (Baffle type) for bedroom, with SAM, -5.5dB(A) assumed (appendix 8)
- Acoustic Window (Baffle type) for master bedroom, with SAM, -6.4dB(A) assumed (appendix 8)
- Acoustic Window (Baffle type) for living room, without SAM, -4.8dB(A) assumed (appendix 8)
- The presented predicted noise level after adopting acoustic windows (baffle type) (i.e. mitigated noise level) does not necessarily represent the noise level at 1m away from the external façade, but the equivalent noise level at 1m from the external façade after accounting the reduction in noise levels inside the flat offered by the acoustic windows (baffle type).

APPENDIX 6

IDENTIFIED FIXED NOISE SOURCES AND
SWL CALCULATIONS

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

Job no.: **22605**

Table A6-1: Summary of Sound Power Levels of Fixed Noise Sources

Source ID	Building	Photo	Fixed Noise Sources	Date of Survey	SPL	Sound Power Level (SWL) of the Site with fixed noise source, dB(A)
F1	Sun Luen Tai Car Repairing Workshop	  	Minor operation of using pneumatic screwdriver inside temporary structure and a forklift for loading and unloading	18 March 2025, 10 April 2025, 14 July 2025	Operation inside Temporary Structure: 71dB(A) at 10m distance	99
					loading and unloading by Forklift : 66dB(A) at 10m distance	94
F2	Wang Luen Car Trading Centre	 	Vehicle display only, no industrial noise was observed	18 March 2025, 10 April 2025, 14 July 2025	-	-

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

Job no.: **22605**

Table A6-1: Summary of Sound Power Levels of Fixed Noise Sources

Source ID	Building	Photo	Fixed Noise Sources	Date of Survey	SPL	Sound Power Level (SWL) of the Site with fixed noise source, dB(A)
F3	Hing Luen Car Trading Centre	 	Vehicle display only, no industrial noise was observed		-	-
F4	Hop Shing Car Repairing Workshop		The gate was closed during all site surveys. No industrial noise was observed.	18 March 2025, 10 April 2025, 14 July 2025	-	-
F5	Luen Tak Car Repairing Workshop		Simply hand tools handling noise was observed.	18 March 2025, 10 April 2025, 14 July 2025	68dB(A) at 5m distance	90
F6	Tsat Sing Kong Substation		No industrial noise was observed during site survey.	18 March 2025, 10 April 2025, 14 July 2025	-	-

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

Job no.: **22605**

Table A6-1: Summary of Sound Power Levels of Fixed Noise Sources

Source ID	Building	Photo	Fixed Noise Sources	Date of Survey	SPL	Sound Power Level (SWL) of the Site with fixed noise source, dB(A)
F7	Concordia Tsat Sing Kong Substation		Plant noise was observed	18 March 2025, 10 April 2025, 14 July 2025	70dB(A) at 5m distance from the louvre	92
F8	Vacant Lot		The gate was closed during site survey. The lot was empty	18 March 2025, 10 April 2025, 14 July 2025	-	-
F9	Cai Niao Warehouse		Storage only, no industrial noise was observed	18 March 2025, 10 April 2025, 14 July 2025	-	-
F10	Po Hong Warehouse		Storage only, no industrial noise was observed	18 March 2025, 10 April 2025, 14 July 2025	-	-
F11	1st Street Car Repairing Workshop	 	Noise of pneumatic screwdriver and air compressor were observed	18 March 2025, 10 April 2025, 14 July 2025	69dB(A) at 10m distance	97

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

Job no.: **22605**

Table A6-1: Summary of Sound Power Levels of Fixed Noise Sources

Source ID	Building	Photo	Fixed Noise Sources	Date of Survey	SPL	Sound Power Level (SWL) of the Site with fixed noise source, dB(A)
F12	**Vacant Lot**		Temporary structures. The gate was closed during site survey.	18 March 2025, 10 April 2025, 14 July 2025	-	-
F13	**Wai Yuen Hing Car Repairing Workshop**		Simply hand tools handlling noise was observed.	18 March 2025, 10 April 2025, 14 July 2025	67dB(A) at 8m distance	93
F14	**協力尾板**		Simply hand tools handling noise and pneumatic screwdriver noise were observed.	18 March 2025, 10 April 2025, 14 July 2025	68dB(A) at 5m distance	90
F15	**Ko Kee Sand Yard**		lorry with crane for loading and unloading.	18 March 2025, 10 April 2025, 14 July 2025	69dB(A) at 10m distance	97

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

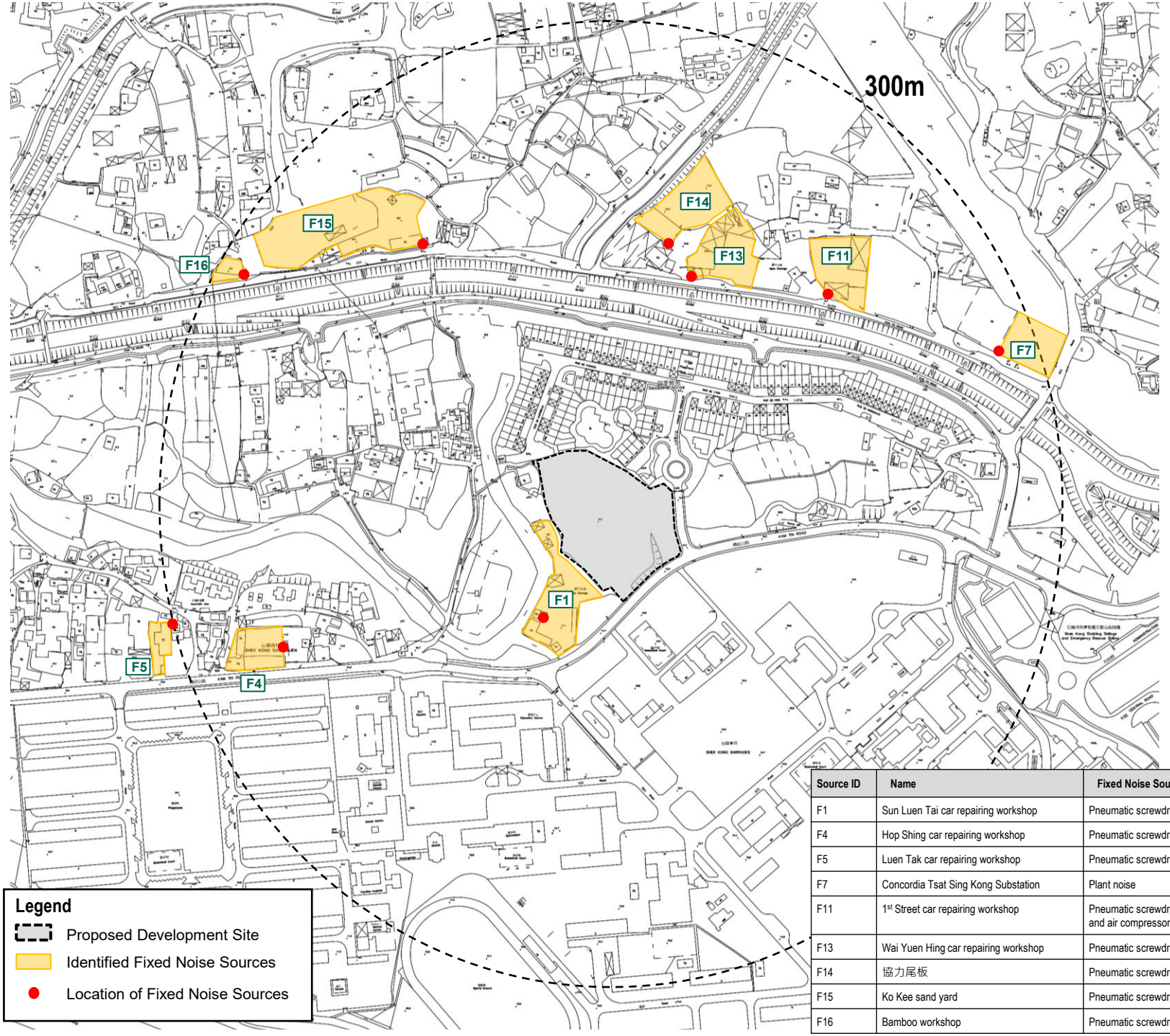
Job no.: **22605**

Table A6-1: Summary of Sound Power Levels of Fixed Noise Sources

Source ID	Building	Photo	Fixed Noise Sources	Date of Survey	SPL	Sound Power Level (SWL) of the Site with fixed noise source, dB(A)
F16	**Bamboo Workshop**		lorry with crane for loading and unloading.	18 March 2025, 10 April 2025, 14 July 2025	68dB(A) at 5m distance	90

APPENDIX 7

FIXED NOISE SOURCES ASSESSMENT FOR THE PROPOSED DEVELOPMENT



Source ID	Name	Fixed Noise Sources
F1	Sun Luen Tai car repairing workshop	Pneumatic screwdriver
F4	Hop Shing car repairing workshop	Pneumatic screwdriver assumed
F5	Luen Tak car repairing workshop	Pneumatic screwdriver assumed
F7	Concordia Tsat Sing Kong Substation	Plant noise
F11	1st Street car repairing workshop	Pneumatic screwdriver and air compressor
F13	Wai Yuen Hing car repairing workshop	Pneumatic screwdriver assumed
F14	協力尾板	Pneumatic screwdriver assumed
F15	Ko Kee sand yard	Pneumatic screwdriver assumed
F16	Bamboo workshop	Pneumatic screwdriver assumed

Westwood Hong & Associates Ltd

PROJECT: 22605

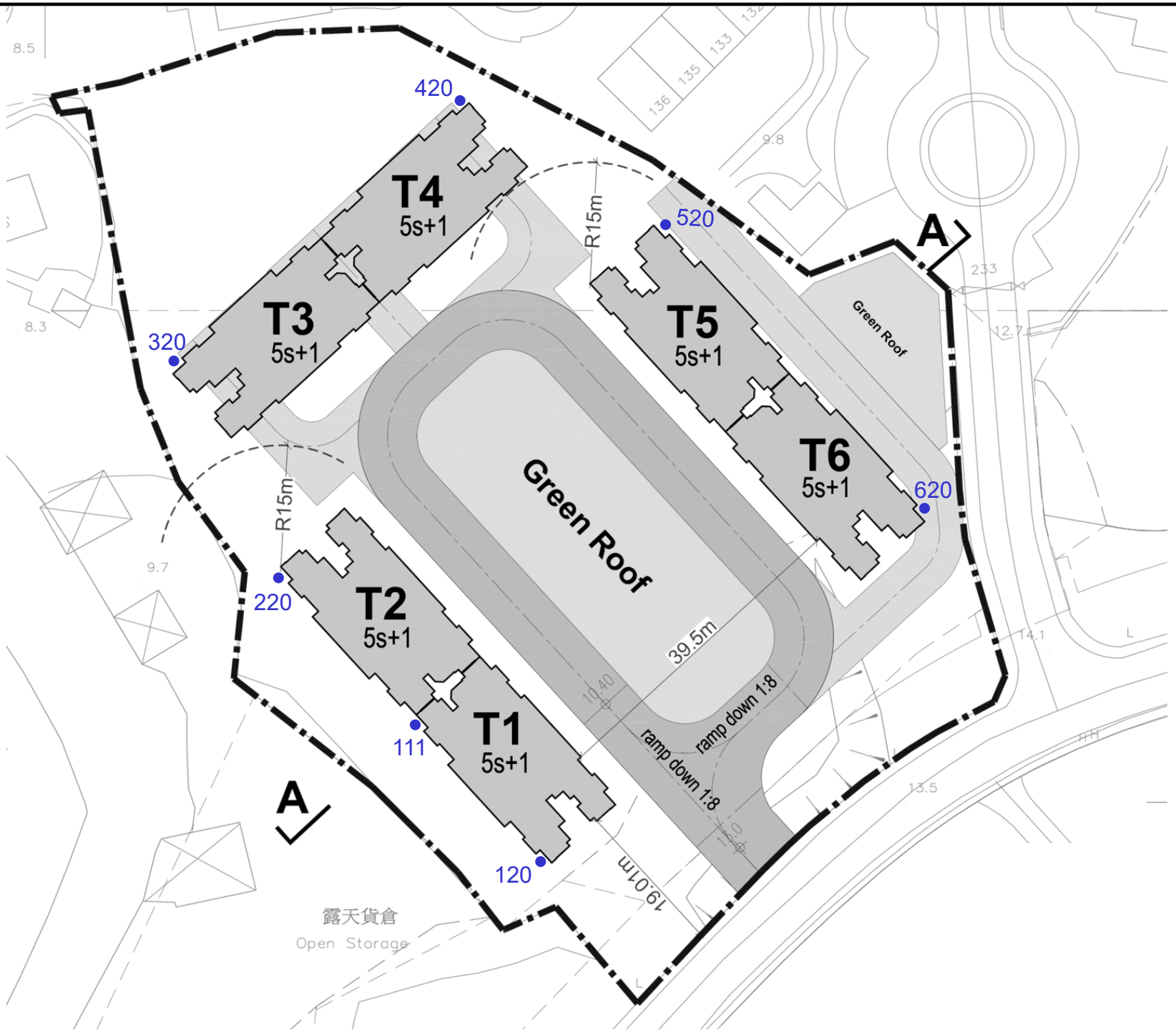
Proposed Residential Development at Lot Nos. 519 RP (Part) and 520 RP in D.D. 110 and the Adjoining Government Land, Shek Kong, Yuen Long, New Territories

TITLE:

Location of Fixed Noise Sources

FIGURE

A7-1



Westwood Hong & Associates Ltd

PROJECT: 22605

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

TITLE:

Location of Noise Assessment Points for Fixed Noise Sources Assessment

FIGURE

A7-2

Predicted Façade Noise Levels from Fixed Noise Sources during Day and Evening Time Periods (0700 - 2300)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/2025

Predicted Façade Noise Levels (dB(A), Leq (30mins)):

Floor	NSR 111	NSR 120	NSR 220	NSR 320	NSR 420	NSR 520	NSR 620
1/F	60.2	60.1	58.1	56.8	54.8	54.9	54.8
2/F	60.2	60.1	58.1	56.8	54.8	54.8	54.8
3/F	60.1	60.0	58.1	56.8	54.8	54.8	54.8
4/F	60.0	59.9	58.0	56.8	54.8	54.8	54.8
5/F	59.9	59.8	57.9	56.7	54.7	54.8	54.8
Max:	**60.2**	**60.1**	**58.1**	**56.8**	**54.8**	**54.9**	**54.8**
(ANL) Criterion	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Compliance	YES	YES	YES	YES	YES	YES	YES

Predicted Façade Noise Levels from Fixed Noise Sources during Night-time Period (2300 - 0700)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/2025

Predicted Façade Noise Levels (dB(A), Leq (30mins)):

Floor	NSR 111	NSR 120	NSR 220	NSR 320	NSR 420	NSR 520	NSR 620
1/F	35.9	36.0	26.6	35.6	36.7	37.2	37.6
2/F	35.9	36.0	26.6	35.6	36.7	37.2	37.6
3/F	35.9	36.0	26.6	35.6	36.7	37.2	37.6
4/F	35.9	36.0	26.6	35.6	36.7	37.2	37.6
5/F	35.9	36.0	26.6	35.6	36.7	37.2	37.6
Max:	**35.9**	**36.0**	**26.6**	**35.6**	**36.7**	**37.2**	**37.6**
(ANL) Criterion	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Compliance	YES	YES	YES	YES	YES	YES	YES

Calculation of Façade Noise Levels from Fixed Noise Sources (Day and Evening Time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR	NSR 111 1/F	Xr : 826321.8 Yr : 833548.5 Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	1	826286.0	833503.0	12.0	58.0	0	-43.3	0.0	0.0	3	58.7
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	1	826286.0	833503.0	12.0	58.0	0	-43.3	0.0	0.0	3	53.7
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	1	826005.0	833486.0	12.0	322.9	0	-58.2	0.0	0.0	3	34.8
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	364.5	0	-59.2	0.0	0.0	3	35.8
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	1	826507.0	833762.0	12.0	282.6	0	-57.0	0.0	0.0	3	43.0
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	1	826417.0	833774.0	12.0	244.8	0	-55.8	0.0	0.0	3	40.2
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	1	826387.0	833799.0	12.0	258.9	0	-56.3	0.0	0.0	3	36.7
F15	Ko Kee sand yard, lorry with crane	97	1	826190.0	833798.0	12.0	282.2	0	-57.0	0.0	0.0	3	43.0
F16	Bamboo workshop, lorry with crane	90	1	826011.0	833771.0	12.0	382.2	0	-59.6	0.0	0.0	3	33.4
												TOTAL	**60.2**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
LAeq	- the equivalent continuous noise level over a 30 minute period, dB(A)	CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Night-time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR	NSR 111 1/F	Xr : 826322 Yr : 833549 Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	0	826286.0	833503.0	12.0	58.0	0	-43.3	0.0	0.0	3	0.0
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	0	826286.0	833503.0	12.0	58.0	0	-43.3	0.0	0.0	3	0.0
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	0	826005.0	833486.0	12.0	322.9	0	-58.2	0.0	0.0	3	0.0
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	364.5	0	-59.2	0.0	0.0	3	35.8
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	0	826507.0	833762.0	12.0	282.6	0	-57.0	0.0	0.0	3	0.0
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	0	826417.0	833774.0	12.0	244.8	0	-55.8	0.0	0.0	3	0.0
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	0	826387.0	833799.0	12.0	258.9	0	-56.3	0.0	0.0	3	0.0
F15	Ko Kee sand yard, lorry with crane	97	0	826190.0	833798.0	12.0	282.2	0	-57.0	0.0	0.0	3	0.0
F16	Bamboo workshop, lorry with crane	90	0	826011.0	833771.0	12.0	382.2	0	-59.6	0.0	0.0	3	0.0
												TOTAL	**35.9**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
		CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Day and Evening Time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR: NSR 120, 1/F
Xr : 826337
Yr : 833531.8
Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	1	826286.0	833503.0	12.0	58.7	0	-43.4	0.0	0.0	3	58.6
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	1	826286.0	833503.0	12.0	58.7	0	-43.4	0.0	0.0	3	53.6
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	1	826005.0	833486.0	12.0	335.2	0	-58.5	0.0	0.0	3	34.5
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	359.2	0	-59.1	0.0	0.0	3	35.9
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	1	826507.0	833762.0	12.0	286.2	0	-57.1	0.0	0.0	3	42.9
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	1	826417.0	833774.0	12.0	255.1	0	-56.1	0.0	0.0	3	39.9
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	1	826387.0	833799.0	12.0	271.9	0	-56.7	0.0	0.0	3	36.3
F15	Ko Kee sand yard, lorry with crane	97	1	826190.0	833798.0	12.0	304.1	0	-57.7	0.0	0.0	3	42.3
F16	Bamboo workshop, lorry with crane	90	1	826011.0	833771.0	12.0	404.4	0	-60.1	0.0	0.0	3	32.9
												TOTAL	60.1

Definition of terms:

SWL - the sound power level of fixed source, dB(A)
LAeq - the equivalent continuous noise level over a 30 minute period, dB(A)
No. - the number of items of plant operating simultaneously
Xr, Yr, Hr - the coordinates of the NSR, m
Xs, Ys, Hs - the coordinates of the source, m
Lsr - the horizontal distance between the source and NSR, m

Cno - correction for no. of plant items
CLsr - the correction for slant distance between the source and the NSR, dB(A)
Cton - the correction of tonality / impulsiveness / intermittency, dB(A)
Cfac - the facade correction, dB(A)
Cbar - the noise reduction by a substantial barrier (other building envelope), dB(A)
CNL - the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Night-time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR	NSR 120 1/F	Xr : 826337 Yr : 833532 Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	0	826286.0	833503.0	12.0	58.7	0	-43.4	0.0	0.0	3	0.0
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	0	826286.0	833503.0	12.0	58.7	0	-43.4	0.0	0.0	3	0.0
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	0	826005.0	833486.0	12.0	335.2	0	-58.5	0.0	0.0	3	0.0
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	359.2	0	-59.1	0.0	0.0	3	35.9
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	0	826507.0	833762.0	12.0	286.2	0	-57.1	0.0	0.0	3	0.0
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	0	826417.0	833774.0	12.0	255.1	0	-56.1	0.0	0.0	3	0.0
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	0	826387.0	833799.0	12.0	271.9	0	-56.7	0.0	0.0	3	0.0
F15	Ko Kee sand yard, lorry with crane	97	0	826190.0	833798.0	12.0	304.1	0	-57.7	0.0	0.0	3	0.0
F16	Bamboo workshop, lorry with crane	90	0	826011.0	833771.0	12.0	404.4	0	-60.1	0.0	0.0	3	0.0
												TOTAL	**36.0**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
		CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Day and Evening Time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR	NSR 220 1/F	Xr : 826304.8 Yr : 833566.8 Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	1	826286.0	833503.0	12.0	66.6	0	-44.5	0.0	0.0	3	57.5
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	1	826286.0	833503.0	12.0	66.6	0	-44.5	0.0	-10.0	3	42.5
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	1	826005.0	833486.0	12.0	310.5	0	-57.8	0.0	-10.0	3	25.2
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	372.0	0	-59.4	0.0	-10.0	3	25.6
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	1	826507.0	833762.0	12.0	281.1	0	-57.0	0.0	0.0	3	43.0
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	1	826417.0	833774.0	12.0	235.6	0	-55.4	0.0	0.0	3	40.6
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	1	826387.0	833799.0	12.0	246.3	0	-55.8	0.0	0.0	3	37.2
F15	Ko Kee sand yard, lorry with crane	97	1	826190.0	833798.0	12.0	258.2	0	-56.2	0.0	0.0	3	43.8
F16	Bamboo workshop, lorry with crane	90	1	826011.0	833771.0	12.0	357.8	0	-59.1	0.0	0.0	3	33.9
												TOTAL	**58.1**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
LAeq	- the equivalent continuous noise level over a 30 minute period, dB(A)	CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Night-time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR	NSR 220 1/F	Xr : 826305 Yr : 833567 Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	0	826286.0	833503.0	12.0	66.6	0	-44.5	0.0	0.0	3	0.0
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	0	826286.0	833503.0	12.0	66.6	0	-44.5	0.0	-10.0	3	0.0
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	0	826005.0	833486.0	12.0	310.5	0	-57.8	0.0	-10.0	3	0.0
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	372.0	0	-59.4	0.0	-10.0	3	25.6
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	0	826507.0	833762.0	12.0	281.1	0	-57.0	0.0	0.0	3	0.0
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	0	826417.0	833774.0	12.0	235.6	0	-55.4	0.0	0.0	3	0.0
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	0	826387.0	833799.0	12.0	246.3	0	-55.8	0.0	0.0	3	0.0
F15	Ko Kee sand yard, lorry with crane	97	0	826190.0	833798.0	12.0	258.2	0	-56.2	0.0	0.0	3	0.0
F16	Bamboo workshop, lorry with crane	90	0	826011.0	833771.0	12.0	357.8	0	-59.1	0.0	0.0	3	0.0
												TOTAL	**26.6**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
		CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Day and Evening Time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR	NSR 320 1/F	Xr : 826291.3 Yr : 833593.6 Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	1	826286.0	833503.0	12.0	90.8	0	-47.2	0.0	0.0	3	54.8
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	1	826286.0	833503.0	12.0	90.8	0	-47.2	0.0	0.0	3	49.8
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	1	826005.0	833486.0	12.0	305.9	0	-57.7	0.0	0.0	3	35.3
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	374.9	0	-59.5	0.0	0.0	3	35.5
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	1	826507.0	833762.0	12.0	273.7	0	-56.7	0.0	0.0	3	43.3
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	1	826417.0	833774.0	12.0	219.9	0	-54.8	0.0	0.0	3	41.2
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	1	826387.0	833799.0	12.0	226.6	0	-55.1	0.0	0.0	3	37.9
F15	Ko Kee sand yard, lorry with crane	97	1	826190.0	833798.0	12.0	228.1	0	-55.2	0.0	0.0	3	44.8
F16	Bamboo workshop, lorry with crane	90	1	826011.0	833771.0	12.0	331.7	0	-58.4	0.0	0.0	3	34.6
												TOTAL	**56.8**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
LAeq	- the equivalent continuous noise level over a 30 minute period, dB(A)	CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Night-time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR	NSR 320 1/F	Xr : 826291 Yr : 833594 Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	0	826286.0	833503.0	12.0	90.8	0	-47.2	0.0	0.0	3	0.0
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	0	826286.0	833503.0	12.0	90.8	0	-47.2	0.0	0.0	3	0.0
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	0	826005.0	833486.0	12.0	305.9	0	-57.7	0.0	0.0	3	0.0
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	374.9	0	-59.5	0.0	0.0	3	35.5
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	0	826507.0	833762.0	12.0	273.7	0	-56.7	0.0	0.0	3	0.0
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	0	826417.0	833774.0	12.0	219.9	0	-54.8	0.0	0.0	3	0.0
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	0	826387.0	833799.0	12.0	226.6	0	-55.1	0.0	0.0	3	0.0
F15	Ko Kee sand yard, lorry with crane	97	0	826190.0	833798.0	12.0	228.1	0	-55.2	0.0	0.0	3	0.0
F16	Bamboo workshop, lorry with crane	90	0	826011.0	833771.0	12.0	331.7	0	-58.4	0.0	0.0	3	0.0
												TOTAL	**35.6**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
		CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Day and Evening Time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR	NSR 420 1/F	Xr : 826326.5 Yr : 833625.8 Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	1	826286.0	833503.0	12.0	129.3	0	-50.2	0.0	0.0	3	51.8
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	1	826286.0	833503.0	12.0	129.3	0	-50.2	0.0	0.0	3	46.8
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	1	826005.0	833486.0	12.0	350.6	0	-58.9	0.0	0.0	3	34.1
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	331.7	0	-58.4	0.0	0.0	3	36.6
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	1	826507.0	833762.0	12.0	226.1	0	-55.1	0.0	0.0	3	44.9
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	1	826417.0	833774.0	12.0	173.7	0	-52.8	0.0	0.0	3	43.2
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	1	826387.0	833799.0	12.0	183.5	0	-53.3	0.0	0.0	3	39.7
F15	Ko Kee sand yard, lorry with crane	97	1	826190.0	833798.0	12.0	219.8	0	-54.8	0.0	0.0	3	45.2
F16	Bamboo workshop, lorry with crane	90	1	826011.0	833771.0	12.0	347.3	0	-58.8	0.0	0.0	3	34.2
												TOTAL	**54.8**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
LAeq	- the equivalent continuous noise level over a 30 minute period, dB(A)	CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Night-time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR	NSR 420 1/F	Xr : 826327 Yr : 833626 Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	0	826286.0	833503.0	12.0	129.3	0	-50.2	0.0	0.0	3	0.0
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	0	826286.0	833503.0	12.0	129.3	0	-50.2	0.0	0.0	3	0.0
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	0	826005.0	833486.0	12.0	350.6	0	-58.9	0.0	0.0	3	0.0
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	331.7	0	-58.4	0.0	0.0	3	36.6
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	0	826507.0	833762.0	12.0	226.1	0	-55.1	0.0	0.0	3	0.0
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	0	826417.0	833774.0	12.0	173.7	0	-52.8	0.0	0.0	3	0.0
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	0	826387.0	833799.0	12.0	183.5	0	-53.3	0.0	0.0	3	0.0
F15	Ko Kee sand yard, lorry with crane	97	0	826190.0	833798.0	12.0	219.8	0	-54.8	0.0	0.0	3	0.0
F16	Bamboo workshop, lorry with crane	90	0	826011.0	833771.0	12.0	347.3	0	-58.8	0.0	0.0	3	0.0
												TOTAL	**36.7**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
		CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Day and Evening Time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR	NSR 520 1/F	Xr : 826352.3 Yr : 833610.5 Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	1	826286.0	833503.0	12.0	126.3	0	-50.0	0.0	0.0	3	52.0
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	1	826286.0	833503.0	12.0	126.3	0	-50.0	0.0	0.0	3	47.0
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	1	826005.0	833486.0	12.0	369.0	0	-59.3	0.0	0.0	3	33.7
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	311.8	0	-57.9	0.0	0.0	3	37.1
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	1	826507.0	833762.0	12.0	216.6	0	-54.7	0.0	0.0	3	45.3
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	1	826417.0	833774.0	12.0	175.9	0	-52.9	0.0	0.0	3	43.1
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	1	826387.0	833799.0	12.0	191.7	0	-53.7	0.0	0.0	3	39.3
F15	Ko Kee sand yard, lorry with crane	97	1	826190.0	833798.0	12.0	248.0	0	-55.9	0.0	0.0	3	44.1
F16	Bamboo workshop, lorry with crane	90	1	826011.0	833771.0	12.0	377.2	0	-59.5	0.0	0.0	3	33.5
												TOTAL	**54.9**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
LAeq	- the equivalent continuous noise level over a 30 minute period, dB(A)	CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Night-time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR: NSR 520, 1/F
Xr : 826352
Yr : 833611
Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	0	826286.0	833503.0	12.0	126.3	0	-50.0	0.0	0.0	3	0.0
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	0	826286.0	833503.0	12.0	126.3	0	-50.0	0.0	0.0	3	0.0
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	0	826005.0	833486.0	12.0	369.0	0	-59.3	0.0	0.0	3	0.0
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	311.8	0	-57.9	0.0	0.0	3	37.1
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	0	826507.0	833762.0	12.0	216.6	0	-54.7	0.0	0.0	3	0.0
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	0	826417.0	833774.0	12.0	175.9	0	-52.9	0.0	0.0	3	0.0
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	0	826387.0	833799.0	12.0	191.7	0	-53.7	0.0	0.0	3	0.0
F15	Ko Kee sand yard, lorry with crane	97	0	826190.0	833798.0	12.0	248.0	0	-55.9	0.0	0.0	3	0.0
F16	Bamboo workshop, lorry with crane	90	0	826011.0	833771.0	12.0	377.2	0	-59.5	0.0	0.0	3	0.0
												TOTAL	**37.2**

Definition of terms:

SWL - the sound power level of fixed source, dB(A)
No. - the number of items of plant operating simultaneously
Xr, Yr, Hr - the coordinates of the NSR, m
Xs, Ys, Hs - the coordinates of the source, m
Lsr - the horizontal distance between the source and NSR, m

Cno - correction for no. of plant items
CLsr - the correction for slant distance between the source and the NSR, dB(A)
Cton - the correction of tonality / impulsiveness / intermittency, dB(A)
Cfac - the facade correction, dB(A)
Cbar - the noise reduction by a substantial barrier (other building envelope), dB(A)
CNL - the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Day and Evening Time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR: NSR 620
1/F
Xr : 826384.5
Yr : 833575.5
Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	1	826286.0	833503.0	12.0	122.3	0	-49.8	0.0	0.0	3	52.2
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	1	826286.0	833503.0	12.0	122.3	0	-49.8	0.0	0.0	3	47.2
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	1	826005.0	833486.0	12.0	389.9	0	-59.8	0.0	0.0	3	33.2
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	296.4	0	-57.4	0.0	0.0	3	37.6
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	1	826507.0	833762.0	12.0	223.2	0	-55.0	0.0	0.0	3	45.0
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	1	826417.0	833774.0	12.0	201.2	0	-54.1	0.0	0.0	3	41.9
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	1	826387.0	833799.0	12.0	223.5	0	-55.0	0.0	0.0	3	38.0
F15	Ko Kee sand yard, lorry with crane	97	1	826190.0	833798.0	12.0	295.5	0	-57.4	0.0	0.0	3	42.6
F16	Bamboo workshop, lorry with crane	90	1	826011.0	833771.0	12.0	421.6	0	-60.5	0.0	0.0	3	32.5
												TOTAL	**54.8**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
LAeq	- the equivalent continuous noise level over a 30 minute period, dB(A)	CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

Calculation of Façade Noise Levels from Fixed Noise Sources (Night-time Period)

Job Title.: Shek Kong
Job No.: 22605
Date: 21/07/25

NSR	NSR 620 1/F	Xr : 826385 Yr : 833576 Hr : 15.1

Source ID	Fixed Noise Source	SWL, dB(A)	No.	Source location & distance				Corrections, dB(A)					CNL
				Xs	Ys	Hs	Lsr	Cno	CLsr	Cton	Cbar	Cfac	dB(A)
F1	Sun Luen Tai car repairing workshop, noise of pneumatic screwdriver	99	0	826286.0	833503.0	12.0	122.3	0	-49.8	0.0	0.0	3	0.0
F1	Sun Luen Tai car repairing workshop, noise of forklift	94	0	826286.0	833503.0	12.0	122.3	0	-49.8	0.0	0.0	3	0.0
F5	Luen Tak car repairing workshop, noise of hand tools handling	90	0	826005.0	833486.0	12.0	389.9	0	-59.8	0.0	0.0	3	0.0
F7	Concordia Tast Sing Kong Substation, plant noise	92	1	826646.0	833715.0	12.0	296.4	0	-57.4	0.0	0.0	3	37.6
F11	1st Street car repairing workshop, noise of pneumatic screwdriver and air compressor	97	0	826507.0	833762.0	12.0	223.2	0	-55.0	0.0	0.0	3	0.0
F13	Wai Yuen Hing car repairing workshop, noise of hand tools handling	93	0	826417.0	833774.0	12.0	201.2	0	-54.1	0.0	0.0	3	0.0
F14	協力尾板, noise of pneumatic screwdriver and hand tools handling	90	0	826387.0	833799.0	12.0	223.5	0	-55.0	0.0	0.0	3	0.0
F15	Ko Kee sand yard, lorry with crane	97	0	826190.0	833798.0	12.0	295.5	0	-57.4	0.0	0.0	3	0.0
F16	Bamboo workshop, lorry with crane	90	0	826011.0	833771.0	12.0	421.6	0	-60.5	0.0	0.0	3	0.0
												TOTAL	**37.6**

Definition of terms:

SWL	- the sound power level of fixed source, dB(A)	Cno	- correction for no. of plant items
		CLsr	- the correction for slant distance between the source and the NSR, dB(A)
No.	- the number of items of plant operating simultaneously	Cton	- the correction of tonality / impulsiveness / intermittency, dB(A)
Xr, Yr, Hr	- the coordinates of the NSR, m	Cfac	- the facade correction, dB(A)
Xs, Ys, Hs	- the coordinates of the source, m	Cbar	- the noise reduction by a substantial barrier (other building envelope), dB(A)
Lsr	- the horizontal distance between the source and NSR, m	CNL	- the corrected noise level, dB(A)(30 minutes)

APPENDIX 8

JUSTIFICATION OF NOISE REDUCTION FOR ACOUSTIC WINDOW (BAFFLE TYPE)

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

Justification of Noise Performance for Acoustic Window (Baffle Type), for Bedroom and Master Bedroom

Table A8a-1: Comparison of the Various Parameters of Acoustic Window

Key Parameters	Dimensions in Reference Case [1]	Bedroom in the Proposed Development	Master Bedroom in the Proposed Development
Room Size (m^2)	8	5.023	6.253
Outer Opening Area (m^2)	0.522	0.522	0.522
Gap Width (mm)	100	100	100
Overlapping Width (mm)	100	100	100
With Sound Absorptive Material (SAM) in plenum	Yes	Yes	Yes
Noise Reduction (dB(A))	**7.5**	**5.5**	**6.4**

Note:
[1] Reference to the ProPECC 5/23 "Application of Innovative Noise Mitigation Designs in Planning Private Residential Devleopments against Road Traffic Noise Impact" "

Table A8a-2: Correction for Room Size

	Bedroom in the Proposed Development	Bedroom in the Proposed Development
Room Size (ref) (m^2)	8	8
Room Size (m^2)	5.0	6.3
Room Size, dB(A) [1]	-2.0	-1.1

Note:
[1] Correction for room area is calculated by 10 log [Room Size / Room Size (ref)]

Table A8a-3: Corrected Noise Reduction

	Bedroom in the Proposed Development	Bedroom in the Proposed Development
Reduction Performance (ref) (dB(A)) (Table A8a-1)	7.5	7.5
Corrected Noise Reduction (dB(A)) [1]	**5.5**	**6.4**

Note:
[1] Corrected Noise Reduction = Reduction Performance (ref) in Table A8a-1 + Correction for Room Size in Table A8a-2

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

Justification of Noise Performance for Acoustic Window (Baffle Type), for Living Room

Table A8b-1: Comparison of the Various Parameters of Acoustic Window

Key Parameters	Dimensions in Reference Case [1]	Living Room in the Proposed Development
Room Size (m^2)	18	10.939
Outer Opening Area (m^2)	1.125	1.125
Gap Width (mm)	100	100
Overlapping Width (mm)	100	100
With Sound Absorptive Material (SAM) in plenum	No	No
Noise Reduction (dB(A))	**7**	**4.8**

Note:
[1] Reference to the ProPECC 5/23 "Application of Innovative Noise Mitigation Designs in Planning Private Residential Devleopments against Road Traffic Noise Impact" "

Table A8b-2: Correction for Room Size

	Living Room in the Proposed Development
Room Size (ref) (m^2)	18
Room Size (m^2)	10.9
Room Size, dB(A) [1]	-2.2

Note:
[1] Correction for room area is calculated by 10 log [Room Size / Room Size (ref)]

Table A8b-3: Corrected Noise Reduction

	Living Room in the Proposed Development
Reduction Performance (ref) (dB(A)) (Table A8b-1)	7.0
Corrected Noise Reduction (dB(A)) [1]	**4.8**

Note:
[1] Corrected Noise Reduction = Reduction Performance (ref) in Table A8b-1 + Correction for Room Size in Table A8b-2

Window for 8m^2 and 18m^2 habitable rooms (i.e. dining room, living room or bedroom) can be found in Annex A(I).

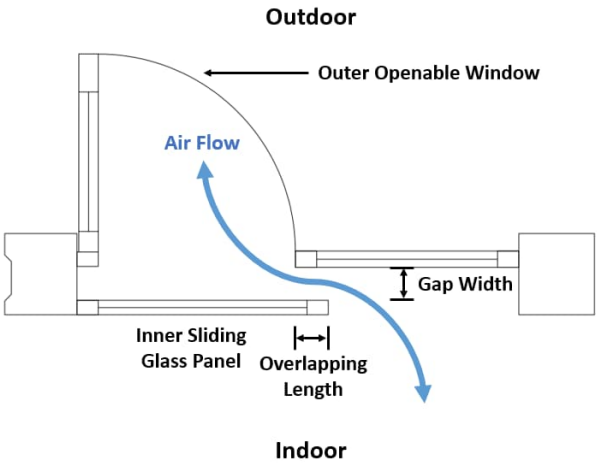


Figure 1 – A Plan on Acoustic Window (Baffle Type)

4. Typical acoustic balcony has a depth of more than 1000mm, solid parapet height of about 1200mm, and balcony ceiling lined with Sound Absorptive Material (SAM). "Enhanced Acoustic Balcony" is specially designed balcony which adopts a combination of mitigation features for the purpose of noise reduction (Figure 2), it incorporates more noise reduction features, e.g. full-height side wall(s), increased solid parapet height of not less than 1450mm, additional screen wall(s), Micro-perforated Absorber (MPA) and/or additional SAM on more surfaces. Possible designs of Enhanced Acoustic Balcony for 14m^2 and 18m^2 habitable rooms (i.e. dining room, living room or bedroom) can be found in Annex A(II).

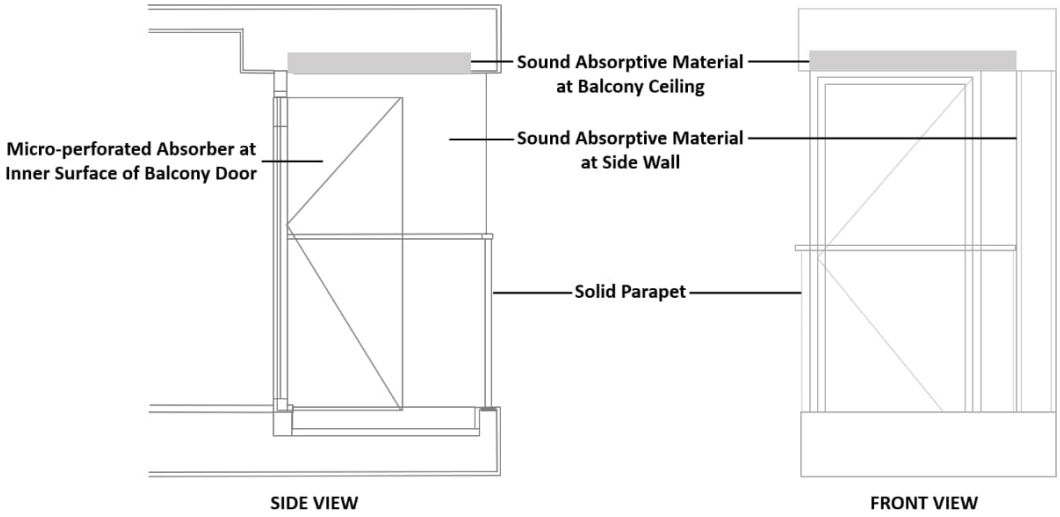


Figure 2 – Conceptual design of "Enhanced Acoustic Balcony"