Attachment 5 –

Revised Noise Impact Assessment

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT, INSTITUTIONAL OR COMMUNITY" (G/IC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

NOISE IMPACT ASSESSMENT

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Project:	PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT, INSTITUTIONAL OR COMMUNITY" (G/IC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG NOISE IMPACT ASSESSMENT
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1.1. BACKGROUND

1.1.1. The Joint Great Properties Limited (the Project Proponent) is proposed to develop a composite social welfare facility for residential care home for the elderly (RCHE) and residential institution for senior hostel at Lot Nos. 257 (Part), 258 RP (Part) and adjoining government land in D.D. 122, Ping Shan, Yuen Long (hereafter refer to the Proposed Development).

1.1.2. BeeXergy Consulting Limited (BXG) was commissioned by DeSpace (International) Limited (Project's Planner) to conduct a Noise Impact Assessment for the Proposed Development to support the application under Section 16 of the Town Planning Ordinance. Latest architectural drawings of the Proposed Development and technical information of the Project Site were largely provided by the Project's Planner.

1.2. PROJECT SITE AND ITS ENVIRONS

1.2.1. The Application Site is approximately 3,300m^2 while the Project Site is approximately 2114m^2. The Project Site is located at Ping Shan North, bounded by warehouse to the North, East, South and natural terrain approximately +30mPD to the West. **Figure 1.1** shows the location of Application Site, Project Site and its environs. 300m Assessment Area for noise impact assessment is also shown in **Figure 1.1**.

1.2.2. The Project Site is currently zoned as "Government, Institution or Community" and surrounded by "Green Belt" and "Village Type Development" under the Approved Ping Shan Outline Zoning Plan (OZP) No. S/YL-PS/20.

1.2.3. The Proposed Development is an 8-storey building consists of senior hostel, dormitory, rehabilitation area, activity rooms, offices, kitchen, laundry and carpark.

1.2.4. The construction of Proposed Development is targeted to commence in 2029 and tentatively to operate in 2029. Based on the latest development scheme, maximum 420 bed spaces of RCHE and 9 units of Senior Hostel can be provided in the Proposed Development. The Master Layout Plan provided by Project's Planner is enclosed in **Appendix 1.1**.

1.3. STRUCTURE OF THE REPORT

1.3.1. The scope of works for this assessment will cover the following:

- Section 2 Fixed Plant Noise Assessment
- Section 3 Road Traffic Noise Assessment
- Section 4 Railway Noise Assessment
- Section 5 Conclusion

2. FIXED NOISE ASSESSMENT

2.1. INTRODUCTION

2.1.1. This section identifies potential fixed noise impact from existing fixed noise sources nearby and planned fixed noise sources during operation of the Proposed Development. Practicable noise mitigation measures would be recommended to ensure the noise level would comply with relevant noise standard.

2.2. LEGISLATION AND STANDARDS

Noise Control Ordinance (NCO)

2.2.1. Fixed noise is controlled under the NCO and shall comply with the Acceptable Noise Levels (ANLs) as stated in Table 1 and 2 of the *Technical Memorandum for the Assessment of Noise from Places other than Domestic Premises, Public Places or Construction Sites* (IND-TM). The Area Sensitive Ratings and ANLs stated in IND-TM are listed in **Table 2.1** and **Table 2.2**.

Table 2.1 Area Sensitivity Ratings stated in IND-TM

	Not Affected	Indirectly Affected	Directly Affected
Rural area, including country parks or village type developments	A	B	B
Low density residential area consisting of low-rise or isolated high-rise developments	A	B	C
Urban Area	B	C	C
Area other than those above	B	B	C

Table 2.2 ANLs stated in IND-TM

Area Sensitivity Rating	A	B	C
Day (0700 to 1900 hours)	60	65	70
Evening (1900 to 2300 hours)			
Night (2300 to 0700 hours)	50	55	60

2.2.2. The Project Site is located at rural area with Long Tin Road (Primary Distributor with daily traffic flow over 30,000 vehicles according to the Annual Traffic Census 2022 published by Transportation Department) at approximately 60m to the East. In view of the Proposed Development will be directly affected by the Influencing Factors (IFs), Area Sensitivity Rating of "B" will be adopted for the existing and future NSRs. The ANLs adopted for the existing and future NSRs are listed in **Table 2.3** below.

Table 2.3 ANLs Adopted for Existing and Future NSRs

Time Period	$L_{Aeq, 30min}$
Day and Evening Time (0700-2300)	65dB(A)
Night Time (2300-0700)	55dB(A)

Hong Kong Planning Standards and Guidelines (HKPSG)

2.2.3. As mentioned in Section 4.2.13 in HKPSG Chapter 9, in order to plan for a better environment, the noise level of fixed noise source(s) at the façade of the nearby noise sensitive receiver(s) should be at least 5 dB(A) below the appropriate ANLs shown in **Table 2.3** or, in the case of the background being 5 dB(A) lower than the ANL, should not be higher than the background.

2.2.4. Background noise monitoring at BGN1 was conducted on 7 and 14 September 2023, covering both daytime, evening and night-time period. The location of background noise monitoring is shown in **Figure 2.1**. The background noise level is summarized in **Table 2.4** and noise standard established for fixed noise impact assessment is shown in **Table 2.5** below. Detail of background noise monitoring results is enclosed in **Appendix 2.1**.

Table 2.4 Background Noise Monitoring Results at BGN1

Location ID	Description	Background Noise Level (L_{90})		
		Daytime	Evening Time	Night Time
BGN1	Ping Shan No. 310 to 318	49.9dB(A)	49.7dB(A)	46.9dB(A)

Table 2.5 Noise Standard Established for Fixed Plant Noise Impact Assessment

Time Period	Noise Standard ($L_{Aeq, 30min}$)	
	Existing Fixed Noise Source	Planned Noise Source
Day and Evening Time (0700-2300)	65dB(A)	49.7dB(A)
Night Time (2300-0700)	55dB(A)	46.9dB(A)

Notes:

[i] The above standards apply to uses which rely on opened windows for ventilation.

[ii] The above standards shall be viewed as the maximum permissible noise levels assessed at 1m from the external facade.

[iii] Noise standards for planned noise source are established based on ANL-5 or background noise level whichever is lower.

2.3. IDENTIFICATION OF FIXED NOISE SOURCES

Existing Fixed Noise Sources

2.3.1. Site Survey on existing potential fixed noise sources has been conducted on 15 August 2023 during daytime and nighttime period. The Project Site is currently occupied by a warehouse (VANPAC Group Asia) for shop and wholesale of building material. As advised by Project Proponent, the warehouse located within the Project Site will be partially demolished and remain in operation. Based on the site observation, all the wholesale and loading/unloading activities are located inside the building structures (**Photo 1** of **Appendix 2.2** refers). The building structures are enclosed and direct line of sight from the Project Site to fixed noise sources are not identified. No audible noise from the wholesale and loading/unloading activities is observed during the daytime period and night-time period. The only audible noise from the warehouse is the fixed noise generated from ventilation fans and emitted from louvers installed at 2/F of the warehouse (**Photo 2** of **Appendix 2.2** refers). As such, quantitative fixed noised impact assessment will be conducted for the above-mentioned fixed noise sources. Noise measurement has been conducted during the operation of the concerned louvers and the results are summarized in **Table 2.6**.

2.3.2. Another warehouse (Hung Kit Transportation Limited, Lai Sun Warehousing & Logistics Limited and Dongguan Xuhong International Logistics Co. Ltd) for shop and wholesale of building material is located approximately 13m to the East of the Project Site. Based on the site observation, all the wholesale and loading/unloading activities are located inside the building structures (**Photo 3** of **Appendix 2.2** refers). The building structures are enclosed and direct line of sight from the Project Site to fixed noise sources are not identified. No audible noise from the wholesale and loading/unloading activities is observed during the daytime period and night-time period. Louvers are observed at 2/F of the warehouse but ventilation fans are not in operation during the site survey period (**Photo 4** of **Appendix 2.2** refers). However, as a conservative approach, quantitative fixed noised impact assessment will be conducted for the above-mentioned fixed noise sources. In view of the similar business nature, the noise measurement results from the warehouse (VANPAC Group Asia) will be adopted for quantitative fixed noise impact assessment.

2.3.3. An auto retail store (AUTOBEE ASM & VOLTEX HK DEALER) is located approximately 2m to the South of the Project Site. As advised by Project Proponent, the auto retail store located within the Project Site will be partially demolished and remain in operation. Based on site observation, no fixed noise source (i.e., transformer, louvers, chiller and ventilation system) is identified. All the retail activities are observed located inside the building structures (**Photo 5** of **Appendix 2.2** refers).

The building structures are enclosed and direct line of sight from the Project Site to fixed noise sources are not identified. No audible noise from the auto retail store is observed during the daytime period and night-time period. In this connection, fixed noise impact assessment is considered not necessary for the auto retail store retail activities.

2.3.4. An auto trading store (KOBE Motors Trading Ltd.) is located approximately 12m to the North East of the Project Site. Based on site observation, vehicle cleaning operating with the use of vacuum cleaner is observed and conducted at outdoor area during daytime period (**Photo 6** of **Appendix 2.2** refers). No cleaning operation is observed during night-time period. As such, quantitative fixed noised impact assessment will be conducted for the above-mentioned fixed noise source. Noise measurement is conducted during the cleaning operation and the results are summarized in **Table 2.6**.

2.3.5. Tin Shui Wai West Rail Substation is located approximately 100m to the North of the Project Site (**Photo 7** of **Appendix 2.2** refers). It was observed that transformers and its associated equipment are operating within the substation with audible noise during daytime and night-time period. As such, quantitative fixed noise impact assessment will be conducted for the above-mentioned fixed noise sources. Noise measurement is conducted during the operation of transformers and its associated equipment. The results are summarized in **Table 2.6**.

2.3.6. Tin Shui Wai Light Rail Substation is located approximately 170m to the North East of the Project Site (**Photo 8** of **Appendix 2.2** refers). The fixed noise impact for the substation has been assessed and presented in the approved Environmental Impact Assessment (EIA) AEIAR-026/1999 - Tin Shui Wai Phase 4 Rail Extension. According to Appendix 9 – Fixed Plant Noise Assessment in the approved AEIAR-026/1999, the predicted noise impact at noise sensitive receiver (N18 – Village House) located at 120m away from the substation will be within the specified noise limit without any screening correction and noise mitigation measures. In view of the Project Site is located at 170m away from the Tin Shui Wai Light Rail Substation, fixed noise impact from the substation is not anticipated and fixed noise impact assessment is considered not necessary. Extracted page of Appendix 9 of approved AEIAR-026/1999 is enclosed in **Appendix 2.3**.

2.3.7. Feiliks Logistic (Asia) Limited, A Hartrodt Hong Kong Limited and Bandai Logipal (H.K.) Ltd warehouses are located approximately 142m, 283m, and 292m to the North East of the Project Site respectively while Dextra Group warehouse is located approximately 227m to the East of the Project Site. Access to the above-mentioned warehouses is restricted due to private ownership of the site (**Photo 9** of **Appendix 2.2** refers). Based on the site observation outside of the warehouses, any fixed noise sources will be blocked and screened by the building structures (**Photo 10** and **Photo**

11 of **Appendix 2.2** refers). No audible noise from the operation of warehouses is observed during daytime and night time period. In this connection, fixed noise impact assessment is considered not necessary for the above-mentioned warehouses.

2.3.8. An auto detailing workshop (Tsui Sing Auto Detailing) is located approximately 252m to the South West of the Project Site. The auto detailing activity is observed located inside the building structures and enclosed (**Photo 12** of **Appendix 2.2** refers). The direct line of sight from the auto detailing activity is blocked by natural terrain to the South West of the Project Site. In this connection, fixed noise impact assessment is considered not necessary for the auto detailing workshop.

2.3.9. The above-mentioned fixed noise sources are shown in **Figure 2.2**. Detail site survey record of the surrounding area is enclosed in **Appendix 2.2**. Detail of fixed noise monitoring results is enclosed in **Appendix 2.4**.

Table 2.6 SWL of Fixed Noise Sources Identified

Identified Fixed Noise Source	SWL
Louvers operation noise from Warehouse (VANPAC Group Asia)	82dB(A)
Louvers operation noise from Warehouse (Hung Kit Transportation Limited, Lai Sun Warehousing & Logistics Limited and Dongguan Xuhong International Logistics Co. Ltd)	82dB(A)
Vehicle cleaning operation noise from Auto trading store (KOBE Motors Trading LTD)	85dB(A)
Transformers and its associated equipment from Tin Shui Wai West Rail Substation	84dB(A)

Notes:

[i] SWLs are calculated based on on-site measured sound pressure level of fixed noise sources.

[ii] Louvers are observed at 2/F of warehouse (Hung Kit Transportation Limited, Lai Sun Warehousing & Logistics Limited and Dongguan Xuhong International Logistics Co. Ltd) but not in operation during the site survey period. However, as a conservative approach, the SWL from the louvers of warehouse (VANPAC Group Asia) will be adopted for quantitative fixed noise impact assessment.

Planned Fixed Noise Sources

2.3.10. Based on the latest development scheme, the Electrical and Mechanical (E&M) equipment such as transformers, emergency generators and water pumps will be enclosed and / or installed within the building structure. It is anticipated that the noise impacts from these noise sources will be insignificant.

2.3.11. Split-type air conditioners and / or window-type air conditioners will be installed at the Proposed Development as far as practicable. The noise from the above-mentioned types of air conditioners is considered to be minimal.

2.3.12. Quieter equipment should be selected during procurement. Should any E&M

equipment, cooling tower or any other fixed noise sources required to be installed at open space, the noise standard summarized in **Table 2.5** shall be followed to meet the HKPSG and NCO recommendation. Noise mitigation measures (e.g., acoustic louver and noise enclosure) shall be implemented to the fixed noise sources if deem to be necessary.

2.4. IDENTIFICATION OF NOISE SENSITIVE RECEIVERS

2.4.1. Noise Sensitive Receivers (NSRs) likely to be subject to the highest fixed noise impacts within the Proposed Development are selected for the fixed noise impact assessment.

2.4.2. The selected NSRs for fixed noise impact assessment is summarized in **Table 2.7** and shown in **Figure 2.3**.

Table 2.7 List of Selected NSRs for Fixed Noise Impact Assessment

NSR ID	Description	Assessment Floor
FNIA_1F_01	Dormitory	1/F
FNIA_1F_02	Dormitory	1/F

2.5. ASSESSMENT METHODOLOGY

2.5.1. The methodology used for the quantitative fixed noise impact assessment is in accordance with the procedures outlined in the IND-TM and is presented below:

- Identify the types of fixed noise source;
- Assign SWLs to the identified fixed noise sources;
- Identify representative NSR that may be affected by fixed noise sources;
- Calculate the distance correction factors, using a conservative approach, based on the horizontal distance between the NSR and the noise sources;
- Calculate the corrected noise levels after taking into account other corrections such as potential screening effects, if any, by adopting standard acoustics principles;
- A 6dB(A) correction for tonality has been applied to all equipment as a conservative approach; and
- Present the results in terms of $L_{Aeq,\ 30min}$ dB(A), as specified in the IND-TM.

2.5.2. The SWLs in **Table 2.6** will be adopted in the quantitative fixed noise impact assessment. However, to demonstrate the worst-case scenario, SWL of 94dB(A) will be adopted for vehicle cleaning operation at the Auto trading store (KOBE Motors Trading LTD) with reference to the similar fixed noise source (Car washing workshop) in Appendix 5.5 of approved AEIAR-227/202 - Development at San Hing Road and Hong Po Road, Tuen Mun[1].

2.6. ASSESSMENT RESULTS

2.6.1. Assessment results for each NSRs at day & evening-time and night-time periods are summarized in **Table 2.8**. Detailed calculations are shown in **Appendix 2.3**.

Table 2.8 Fixed Noise Impact Assessment Results

NSR ID	Daytime & Evening-time		Nighttime	
	Predicted Noise Level	Noise Standard	Predicted Noise Level	Noise Standard
FNIA_1F_01	60dB(A)	65dB(A)	45dB(A)	55dB(A)
FNIA_1F_02	60dB(A)	65dB(A)	45dB(A)	55dB(A)

[1] Appendix 5.5 of AEIAR-227/202: https://www.epd.gov.hk/eia/register/report/eiareport/eia_2632020/EIA/04%20APPENDICES/App5.5_0.pdf

2.6.2. Based on the results of fixed noise impact assessment, the predicted $L_{Aeq, 30min}$ are below the ANL under NCO and HKPSG for all representative NSRs. Hence, adverse fixed noise impact is not anticipated.

3. TRAFFIC NOISE ASSESSMENT

3.1. INTRODUCTION

3.1.1. This section presents the results of traffic noise impact assessment during operation of the Proposed Development. Practicable noise mitigation measures would be recommended to ensure the noise level would comply with relevant noise standard.

3.2. LEGISLATION AND STANDARDS

3.2.1. Table 4.1 in HKPSG Chapter 9 listed the road traffic noise standard for planned developments and summarized in **Table 3.1** below:

Table 3.1 Road Traffic Noise Standard in HKPSG

Landuse	**$L_{10\ (1hr)}$, dB(A)**
All domestic premises including temporary housing accommodation	70
Hotels and hostels	
Office	
Educational institutions including kindergartens, child care centres and all others where unaided voice communication is required	65
Places of public worship and courts of law	
Hospitals, clinics, convalescences and residential care homes for the elderly (diagnostic rooms and wards)	55
Notes: [i] The above standards apply to uses which rely on opened windows for ventilation. [ii] The above standards shall be viewed as the maximum permissible noise levels assessed at 1m from the external facade.	

3.2.2. The main purpose of the Proposed Development will be residential care home for the elderly for residential purpose. Rooms including dormitory, rehabilitation area, small group activities room, dinning/multi-purpose area, sick room/isolation room, end of life care room, and sleep-in room are used as domestic purpose while nurse station, conference room, general office, superintendent's office, and assistant

superintendent's office are used as office purpose. In addition, room with same/similar nature to diagnostic room and ward are not provided. As such, the noise standard of $L_{10\ (1hr)}$ 70dB(A) will be adopted for traffic noise impact assessment.

3.3. IDENTIFICATION OF NOISE SENSITIVE RECEIVERS

3.3.1. NSRs likely to be subject to highest traffic noise impacts within the Proposed Development are selected for the traffic noise impact assessment. As confirmed with Project Planner, all assessment points were taken at 1.2m above the floor and 1m away from the facade of openable windows for ventilation purpose. A total of 119 NSRs are selected for traffic noise impact assessment. The selected NSRs for traffic noise impact assessment are shown in **Figure 3.1**.

3.4. ASSESSMENT METHODOLOGY

3.4.1. The Proposed Development will subject to noise impact from the surrounding traffic. Road traffic noise prediction is carried out, following the procedures stipulated in the *"Calculation of Road Traffic Noise (CRTN)" published by Department of Transport, UK* and with reference to *"Road Traffic Noise Impact Assessment under the Environmental Impact Assessment Ordinance EIAO Guidance Note No. 12/2010 (GN12)"*.

3.4.2. Traffic noise is predicted based on the maximum traffic flow within 15 years upon commencement of operation of the Proposed Development. Road segments within 300m Assessment Area, road surfacing and all relevant structures / features that could have noise screening or reflective effects have been taken into consideration in the traffic noise impact assessment. The characteristics of the road segments including the road width, surface type and traffic flow have also been considered in the assessment.

3.4.3. The Proposed Development will tentatively operate in 2029 and as confirmed by the Traffic Consultant, Year 2044 has the maximum traffic projection within 15 years (from Year 2029 to 2044) upon commencement of operation of the Proposed Development. The peak hour traffic flow data and endorsement from Transport Department in Year 2044 is enclosed in **Appendix 3.1**.

3.5. ASSESSMENT RESULTS

3.5.1. Based on the traffic noise impact assessment results for un-mitigated scenario, the predicted traffic noise levels ranged from 44dB(A) to 72dB(A) during AM period and 43dB(A) to 72dB(A) during PM period. Summary of traffic noise impact assessment results for un-mitigated scenario is shown in **Table 3.2** and detail is enclosed in **Appendix 3.2**.

Table 3.2 Summary of Predicted Traffic Noise Impact (Un-mitigated Scenario)

	AM Period	PM Period
Total number of NSRs	119	119
Number of NSRs exceed the limit level	12	9
Compliance Rate	90%	92%

3.5.2. In view of the predicted traffic noise level exceeded noise standard, mitigation measures are required to ensure the noise level would be comply with relevant noise standard.

3.5.3. With reference to two precedent cases on adoption of acoustic window (baffle type), three types of acoustic window (baffle type) with sound absorptive materials (SAM) are proposed to be installed at the affected NSRs. The locations of the proposed acoustic window (baffle type) are shown in **Figure 3.2**.

3.5.4. The proposed reference cases can provide noise reduction from 4.0dB(A) to 8.1dB(A) based on their corresponding room size. The noise reductions in the reference cases are adjusted to Relative Noise Reduction based on the actual room size of the affected NSRs.

3.5.5. With the room size correction, the Relative Noise Reduction for Type 1 Acoustic Windows (Baffle Type) will be 3.3dB(A) and proposed to adopt as noise reduction level.

3.5.6. Despite the Relative Noise Reductions can achieve maximum 7.7dB(A) for Type 2 Acoustic Windows (Baffle Type) and 8.1dB(A) for Type 3 Acoustic Windows (Baffle Type) after room size correction, the noise reduction for above-mentioned acoustic windows (baffle type) will be proposed as 3.3dB(A) as conservative approach.

3.5.7. Schedule of traffic noise mitigation measures is shown in **Table 3.3** and detail of proposed acoustic window (baffle type) is enclosed in **Appendix 3.3**.

Table 3.3 Schedule of Traffic Noise Mitigation Measures

Proposed Noise Mitigation Measures	Floor Level	Room	Location
Type 1 Acoustic Windows (Baffle Type)	4/F	Dormitory	TNIA_4F_01 TNIA_4F_02
Type 1 Acoustic Windows (Baffle Type)	5/F	Dormitory	TNIA_5F_01 TNIA_5F_02 TNIA_5F_03

Type 1 Acoustic Windows (Baffle Type)	6/F	Dormitory	TNIA_6F_01 TNIA_6F_02 TNIA_6F_03
Type 2 Acoustic Windows (Baffle Type)	7/F	Conference Room (1) Conference Room (2)	TNIA_7F_01 TNIA_7F_02
Type 3 Acoustic Windows (Baffle Type)	7/F	Superintendent's Office Assistant Superintendent's Office	TNIA_7F_03 TNIA_7F_04
Notes: [i] Detail of Proposed Acoustic Window (Baffle Type) refer to **Appendix 3.3**.			

3.5.8. With the implementation of proposed types of acoustic window (baffle type), the predicted traffic noise level at all NSRs will comply with the noise standard of $L_{10\ (1hr)}$ 70dB(A) and adverse traffic noise impact is not anticipated. Detail of traffic noise impact assessment results for mitigated scenario is enclosed in **Appendix 3.4**.

4. RAILWAY NOISE IMPACT ASSESSMENT

4.1. INTRODUCTION

4.1.1. This section identifies potential noise impact from railway during operation of the Proposed Development.

4.1.2. Tuen Ma Line (TML, previously known as West Rail Line) and Light Rail Transit (LRT) are located within 300m noise impact Assessment Area of the Proposed Development. The location of concerned TML and LRT is shown in **Figure 4.1**.

4.1.3. TML with a twin viaduct (TML_NB_1 to 5 and TML_SB_1 to 5 in **Figure 4.1**) is located approximately 185m to the North of the Project Site. The length of twin viaduct within the Assessment Area is approximately 580m with average elevation of +24.0mPD (Ranged from +23.5mPD to +24.4mPD). The twin viaduct is connected from / to the elevated Tin Shui Wai Station.

4.1.4. LRT is located approximately 220m to the Northwest of the Project Site. The LRT within in the Assessment Area are comprised of a section of viaduct (LRT_NB_1 to 2 and LRT_SB_1 to 2 in **Figure 4.1**) approximately 130m with average elevation of +11.9mPD (Ranged from +9.8mPD to +13.0mPD) crossing over Tin Fuk Road and a section of at-grade track (LRT_NB_3 and LRT_SB_3 in **Figure 4.1**) approximately 100m with elevation of +7.9mPD connected from / to Tin Shui Wai Stop underneath the Tin Shui Wai Station.

4.2. LEGISLATION AND STANDARDS

NCO

4.2.1. The operation of railway is subject to control under NCO and the ANLs as stated in Table 1 and 2 IND-TM shall be followed. As mentioned in **Section 2.2.2**, the Project Site is located at rural area and will be directly affected by the IFs, Area Sensitivity Rating of “B” will be adopted for the railway noise impact assessment. The ANLs adopted with reference to IND-TM are listed in **Table 4.1** below.

Table 4.1 ANLs for Railway Noise Impact Assessment under NCO

Time Period	$L_{Aeq,\ 30min}$
Day and Evening Time (0700-2300)	65dB(A)
Night Time (2300-0700)	55dB(A)

HKPSG

4.2.2. Table 4.1 in HKPSG Chapter 9 listed the railway noise standard for planned developments. The railway noise standard for in terms of L_{Max} and $L_{Aeq,\ 24hr}$ are

summarized in **Table 4.2** below:

Table 4.2 Noise Standard for Railway Noise Impact Assessment under HKPSG

Parameter	Noise Standard
$L_{Max, 2300-0700}$	85dB(A)
$L_{Aeq, 24hr}$	65dB(A)
Notes: [i] The above standards apply to uses which rely on opened windows for ventilation. [ii] The above standards shall be viewed as the maximum permissible noise levels assessed at 1m from the external facade.	

EIA-149/BC – West Rail

4.2.3. The railway noise impact associated with the operation of concerned TML is documented in approved EIA-149/BC – West Rail[2] and governed by Further Environmental Permit FEP-24/004/1998/K - West Rail, Phase I [3].

4.2.4. Under FEP-24/004/1998/K General Condition 2.21 (e) and 3.14 (e), the train length of TML shall reduce from 12 cars to 9 cars with increase in train frequency from 30 to 40 trains per hour during 0600 to 0700.

4.2.5. Under FEP-24/004/1998/K General Condition 5.3, the Permit Holder shall illustrate that the 9-car disc braked Electric Multiple Unit would meet the specification of maximum level (L_{Max}) not exceeding 82.5dB(A) at 130kph measured at 25m from the at-grade ballasted tracks prior to the operation of the Project.

4.2.6. Under FEP-24/004/1998/K General Condition 5.14 and Table A of Schedule 1, a serious of alternative noise mitigation measures shall be implemented. For the concerned TML, trackside panels and windshields (Figure 7 of FEP-24/004/1998/K) shall be installed along the parapet walls along viaducts while cranked noise barrier and plenum enhancement (Figure 9 and 10 of FEP-24/004/1998/K) shall be installed at the area of Tin Shui Wai Station.

4.2.7. Under FEP-24/004/1998/K General Condition 2.21 (f), 3.14 (f) and 6.1, the maximum train speed of TML shall be 130km/hr except for train speed between Tin Shui Wai and Siu Hong which shall reduce to 100km/h.

4.2.8. Extracted pages of FEP-24/004/1998/K are enclosed in **Appendix 4.1**.

[2] EIA-149/BC: https://www.epd.gov.hk/eia/register/report-bc/eia149/eiar.pdf

[3] FEP-24/004/1998/K: https://www.epd.gov.hk/eia/register/permit/latest/vep6222022.htm

AEIAR-026/1999 - Tin Shui Wai Phase 4 Rail Extension

4.2.9. The railway noise impact associated with the operation of concerned LRT is documented in approved AEIAR-026/1999 - Tin Shui Wai Phase 4 Rail Extension [4] and governed by Further Environmental Permit FEP-02/041/2000/B [5].

4.2.10. Under FEP-02/041/2000/B General Condition 2.3 (a), the re-radiated noise from viaduct structure shall at least 10dB(A) below the noise criteria of 65dB(A) L_{max} at 25m, at 50km/h during operation.

4.2.11. Extracted pages of FEP-02/041/2000/B are enclosed in **Appendix 4.2**.

4.3. IDENTIFICATION OF NOISE SENSITIVE RECEIVERS

4.3.1. NSRs likely to be subject to the highest railway noise impacts within the Proposed Development are selected for the railway noise impact assessment.

4.3.2. In general, the façade facing South will not selected as NSRs for railway noise impact assessment as they will not have direct line of sight to the concerned TML and LRT.

4.3.3. All assessment points are taken at 1.2m above the floor and 1m away from the facade of openable windows for ventilation purpose.

4.3.4. Railway noise impact from TML will be assessed for all NSRs while railway noise impact from LRT will not assessed for NSRs to the at the East Side of Proposed Development as they will not have direct line to the LRT.

4.3.5. The selected NSRs are shown in **Figure 4.2** and scope of assessment is summarized in **Table 4.3**.

Table 4.3 List of Selected NSRs for Railway Noise Impact Assessment

NSR ID	Description	Assessment Floor	Scope of Assessment
RNIA_1F_01	Dormitory	1/F	TML only
RNIA_1F_02	Dormitory		
RNIA_1F_03	Dormitory		
RNIA_1F_04	End of Life Care Room		TML and LRT
RNIA_1F_05	Dormitory		
RNIA_1F_06	Dormitory		

[4] AEIAR-026/1999: https://www.epd.gov.hk/eia/register/report/eiareport/eia_03099/index1.htm

[5] FEP-02/041/2000/B: https://www.epd.gov.hk/eia/register/permit/latest/fep0842007.htm

RNIA_1F_07	Dormitory		
RNIA_2F-6F_01	Dormitory	2/F-6/F	TML only
RNIA_2F-6F_02	Dormitory		
RNIA_2F-6F_03	Dormitory		
RNIA_2F-6F_04	Dormitory		TML and LRT
RNIA_2F-6F_05	Dormitory		
RNIA_2F-6F_06	Dormitory		
RNIA_2F-6F_07	Dormitory		
RNIA_2F-6F_08	Dormitory		
RNIA_2F-6F_09	Dormitory		
RNIA_2F-6F_10	Dormitory		
RNIA_7F_01	Conference Room (1)	7/F	TML only
RNIA_7F_02	Conference Room (2)		
RNIA_7F_03	Superintendent's Office		
RNIA_7F_04	Assistant Superintendent's Office		

4.4. ASSESSMENT METHODOLOGY, ASSUMPTIONS AND APPROACH

Assessment Methodology

4.4.1. The railway noise impact is predicted using the equations in "*Calculation of Railway Noise (1995)*" (CRN) and "*Transportation Noise Reference Book*" (TNRB). The reference Sound Exposures Level (SEL_{Ref}) for TML and LRT are referenced from approved EIA AEIAR-203/2016 - Hung Shui Kiu New Development Area and AEIAR-026/1999 - Tin Shui Wai Phase 4 Rail Extension. The railway noise impact assessment methodologies are summarized in **Table 4.4** below.

Table 4.4 Summary of Railway Noise Assessment Methodology

Parameter	Assessment Methodology	
	TML	**LRT**
SEL	Northbound: 81.4dB(A) Southbound: 80.7dB(A) Measured at 25m for 8 cars, 130km/hr (1)	Both Northbound and Southbound: 70.9dB(A) (2) Calculated from L_{Max}
L_{Max}	Not exceed 82.5dB(A) measured at 25m for train speed at 130km/hr (3)	65dB(A) measured at 25m for 2-car trains (40m) at 50km/hr with ballast track in well maintained condition (4)
Correction for number of cars (5)	$10log\frac{n_{Act}}{n_{Ref}}$ Where n_{Act} = Actual number of cars, n_{ref} = Reference number of cars during measurement	
Correction for train speed (5)	$20log\frac{V_{Act}}{V_{Ref}}$ Where V_{Act} = Actual Speed, V_{ref} = Reference speed during measurement	
Distance Correction (5)	$10log\frac{D_{Act}}{D_{Ref}}$ Where D_{Act} = Actual Distance, D_{ref} = Reference distance during measurement	
Correction for train frequency (5)	$10log(N)$ Where N = Number of trains in 30 minutes	
Time Correction (5)	$10log\frac{1}{T}$ Where T = Seconds in 30 minutes (1800s)	
Barrier Correction (5)	Refer to equation in Chart 6 CRTN	
View angle Correction (5)	$10log\left[\frac{(\pi\theta)}{180} - \cos 2\alpha \sin\theta\right] - 5$ Where θ = View angle, α = Acute angle	
Track Deterioration Correction (5)	+3.0	

Façade Correction (5)	+2.5
Air Absorption (5)	$0.2 - 0.008d'$ Where *d'* = distance (m)

Remark:

1. Referenced from Table 4.35 of AEIAR-203/2016 - Hung Shui Kiu New Development Area.
2. Calculated using equation in TNRB:

$$SEL = L_{Max} + 10\log\left(\frac{L}{V}\right) + 10.5 - 10\log\left\{\left(\frac{4D}{4D^2+1}\right) + 2\tan^{-1}\left(\frac{1}{2D}\right)\right\}$$

Where *L* = Train Length (m), *V* = Train Speed (km/hr), *d* = Distance from track (m) and *D* = *d/L*

3. L_{Max} of TML is governed by General Condition 5.3 of FEP-24/004/1998/K.
4. Referenced from Table 6.6 of AEIAR-026/1999 - Tin Shui Wai Phase 4 Rail Extension.
5. Referenced from equation in CRN.

Assessment Assumptions

4.4.2. To demonstrate there will be no adverse railway noise impact during future operation of Proposed Development, the worst-case scenario with reference to approved EIAs, FEP conditions and latest information provided by Mass Transit Railway (MTR) as attached in **Appendix 4.1** is assumed to predict the railway noise impacts to the selected NSRs. The assumptions for worst-case scenario is summarized in **Table 4.5** below.

Table 4.5 Summary of Assumption for Worst-case Scenario

Parameter	**Worst-case Scenario (1)**	
	TML	**LRT**
Number of cars	9 (2)	2 (3)
Train Frequency	40 trains per hour (4) (20 trains per 30 minutes)	19 trains per hour (5) (10 trains per 30 minutes)
Train Speed (5)	130km/hr (6)	70km/hr (7)
Barrier Correction (8)	Viaduct Section 1.2m height parapets located 1.2m away from the track at both sides of viaduct At-grade Section (For LRT only) No Parapet	

Remark:

1. The worst-case scenario will be adopted during both day time and night time period.
2. According to General Condition 2.21 (e), 3.14 (e) of FEP-24/004/1998/K, maximum 9 number of cars will be adopted to demonstrate the worst-case scenario.
3. According to information provided by MTR, maximum 2 number of cars will be adopted to demonstrate the worst-case scenario.
4. Despite information provided by MTR suggested that the future ultimate daily peak operation frequency of 0700-2300 is about 28 trans per hour, Condition 2.21 (e) and 3.14 (e) of FEP-24/004/1998/K allowed the train frequency increase from 30 to 40 trains per hour during 0600 to 0700. In view of the above, maximum train frequency of 40 trains per hour (20 trains per 30 minutes) will be adopted to demonstrate the worst-case scenario.
5. According to information provided by MTR, maximum train frequency of 19 trains per hour (10 trains per 30 minutes) will be adopted to demonstrate the worst-case scenario.
6. To demonstrate the worst-case scenario, the train speed will be assumed to be consistent at maximum speed (130km/hr for TML and 70km/hr for LRT) across the concerned railway section.
7. To demonstrate the worst-case scenario, it is assumed that the parapets along viaduct section of TML and LRT will be the only barriers screening the rolling noise from the concerned railways while no parapets will be considered for at-grade section of LRT.

Assessment Approach

4.4.3. The predicted rail noise level $L_{Aeq,\ 30min}$ will be compare with the most stringent standard of $L_{Aeq,\ 30min,\ 2300-0700}$ 55dB(A) to demonstrate the Proposed Development will not be affected by the railway noise generated from TML and LRT.

4.4.4. In view of the worst-case scenario will be adopted both day time and night time period to compare the most stringent standard of $L_{Aeq,\ 30min}$, quantitative assessment for $L_{Aeq,\ 24hr}$ will not be required in this railway noise impact assessment.

4.4.5. The L_{Max} of TML is governed by FEP-24/004/1998/K which limited the L_{Max} shall not exceed 82.5dB(A) at 130km/hr from 25m away while the measured L_{Max} of LRT is 65dB(A) at 50km/hr from 25m away according to AEIAR-026/1999. Given that the buffer distance of approximate 220m and 185m to the TML and LRT are allowed, the L_{Max} at the selected NSRs are expected to be lower than $L_{Max,\ 2300-0700}$ standard, 85dB(A) established under HKPSG. Hence, no quantitative assessment will be required for L_{Max} in this railway noise impact assessment.

4.5. ASSESSMENT RESULTS

4.5.1. Based on the detail of predicted railway noise level in **Appendix 4.4**, the predicted $L_{Aeq,\ 30min}$ under the worst-case scenario is ranged from 44dB(A) to 46dB(A) which are well below the most stringent standard of ANL for Railway Noise under NCO and HKPSG (i.e., 55dB(A)).

4.5.2. Nonetheless, factors likely to further minimize the railway noise impact below are not taken into consideration in the prediction of railway noise level:

- Alternative noise mitigation measures as mentioned in **Section 4.2.6** for TML;

- Reduction of speed when trains approaching station / stop; and
- Natural terrain located at West of Project Site which will block the line of sight of at-grade section of LRT.

In view of the above, the railway noise level from TML and LRT in actual condition is expected to be lower than the predicted railway noise level. Hence, adverse railway noise impact is not anticipated.

5. CONCLUSION

5.1.1. The Project Proponent is proposed to develop a composite social welfare facility for RCHE and residential institution for senior hostel has been proposed at Lot Nos. 257 (Part), 258 RP (Part) and adjoining government land in D.D. 122, Ping Shan, Yuen Long.

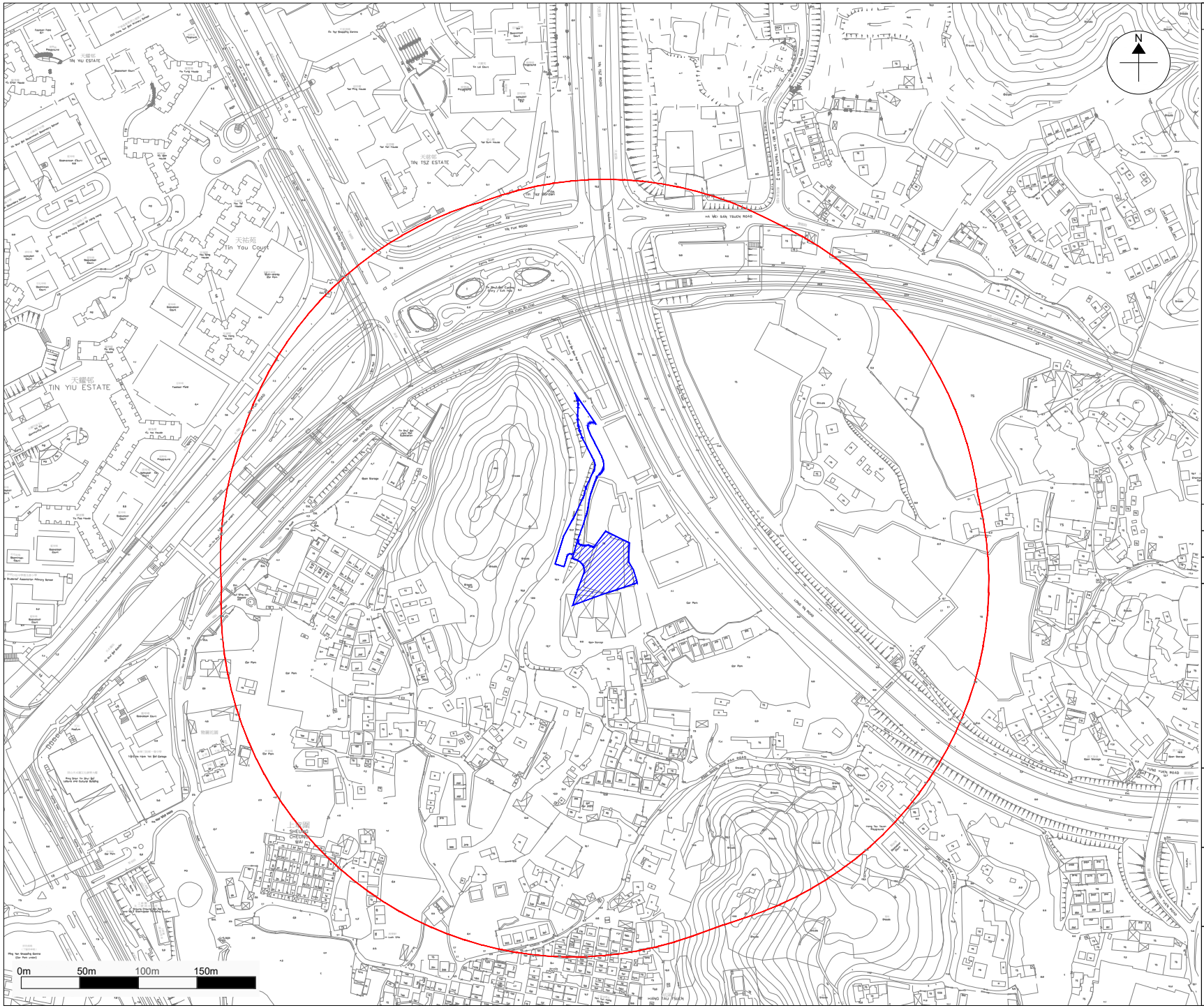
5.1.2. Fixed noise impact has been identified and assessed in this noise impact assessment. No adverse fixed noise impact is anticipated.

5.1.3. Traffic noise impact has been identified and assessed based on the maximum traffic flow within 15 years upon commencement of operation of the Proposed Development. With the implementation of noise mitigation measures (i.e., Acoustic Windows (Baffle Type)), no adverse traffic noise impact is anticipated.

5.1.4. Railway noise impact has been identified and assessed based on the information in approved EIA, enforced EP and information provided by MTR. No adverse railway noise impact is anticipated.

FIGURE 1.1

LOCATION OF PROJECT SITE AND ITS ENVIRONS WITH 300M ASSESSMENT AREA



LEGEND:

- APPLICATION SITE
- PROJECT SITE
- 300M ASSESSMENT AREA

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20230906	20230906	20230906

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Location of Project Site and Its Environs with 300m Assessment Area

Figure No.	Rev.
Figure 1.1	0

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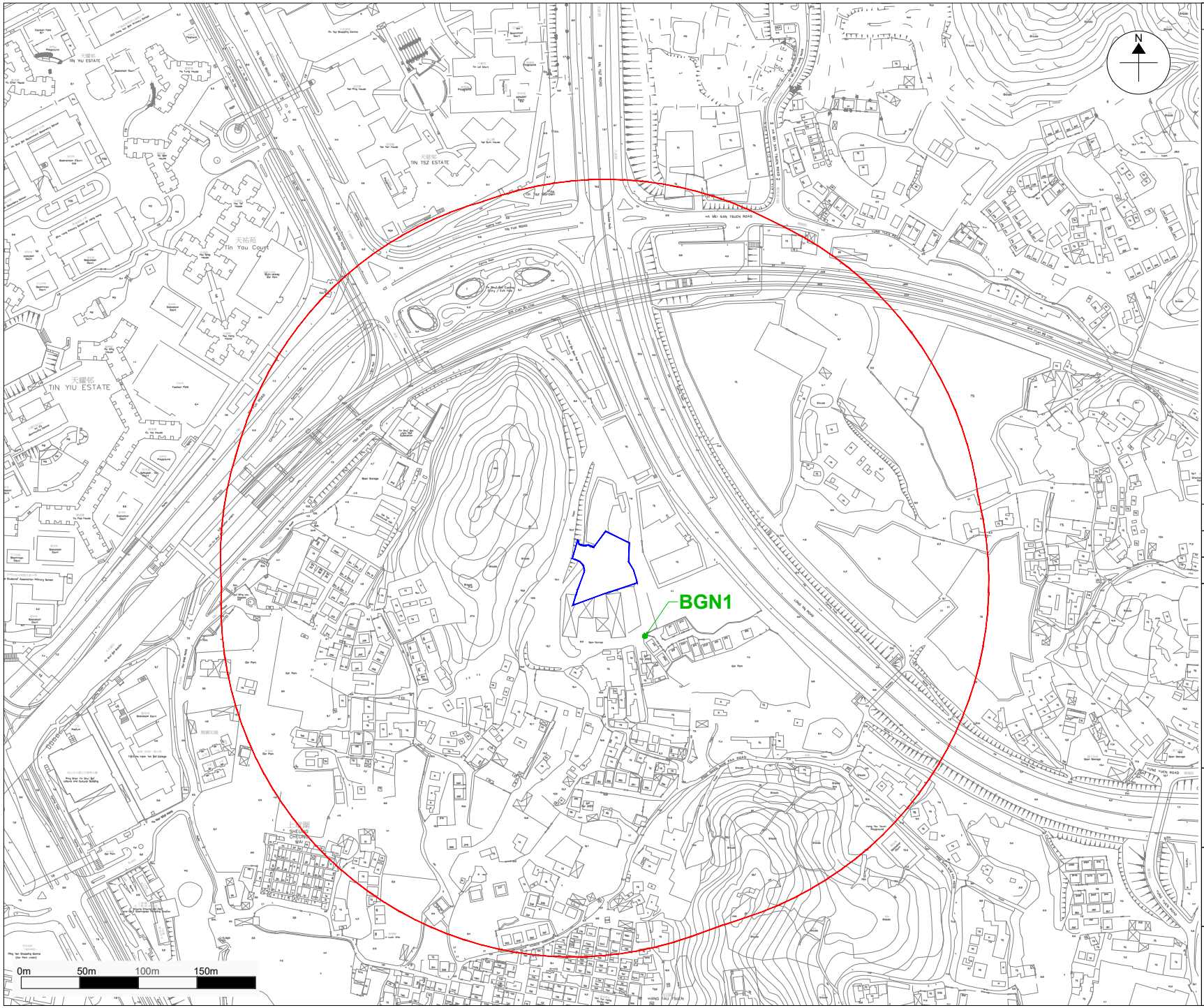
FIGURE 2.1
LOCATION OF BACKGROUND NOISE MONITORING STATION



LEGEND:

- PROJECT SITE
- 300M ASSESSMENT AREA
- BACKGROUND NOISE MONITORING STATION — BGN1

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20230906	20230906	20230906

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Background Noise Monitoring Station

Figure No.	Rev.
Figure 2.1	0

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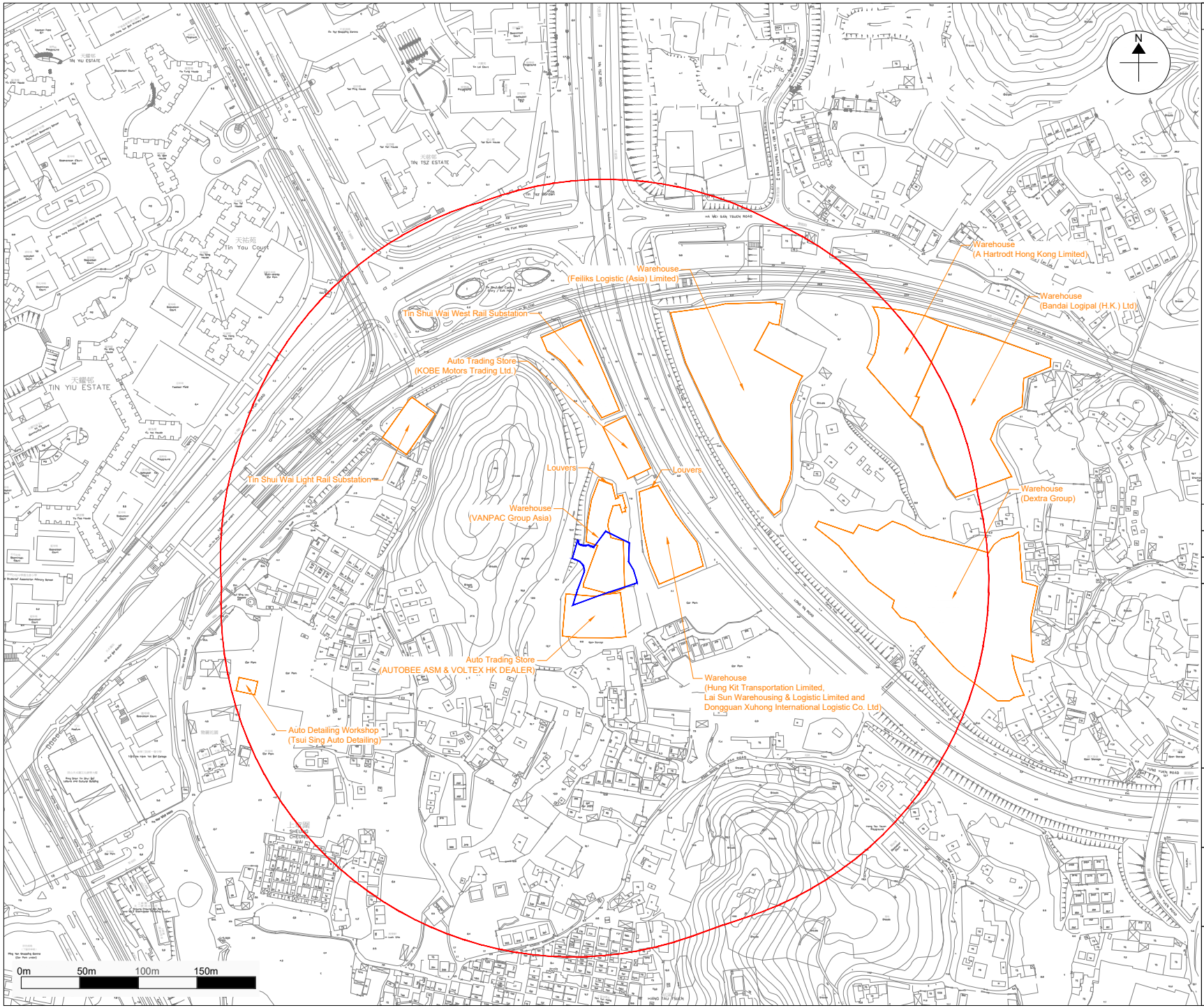
FIGURE 2.2
LOCATION OF IDENTIFIED FIXED NOISE SOURCES



LEGEND:

- PROJECT SITE
- 300M ASSESSMENT AREA
- IDENTIFIED FIXED NOISE SOURCE

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Identified Fixed Noise Sources

Figure No.	Rev.
Figure 2.2	1

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FIGURE 2.3
SELECTED NSRS FOR FIXED NOISE IMPACT ASSESSMENT

LEGEND:

PROJECT SITE

FNIA_1F_01 SELECTED NSRS FOR FIXED NOISE IMPACT ASSESSMENT

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Selected NSRs for Fixed Noise Impact Assessment (1/F)

Figure No.	Rev.
Figure 2.3	1

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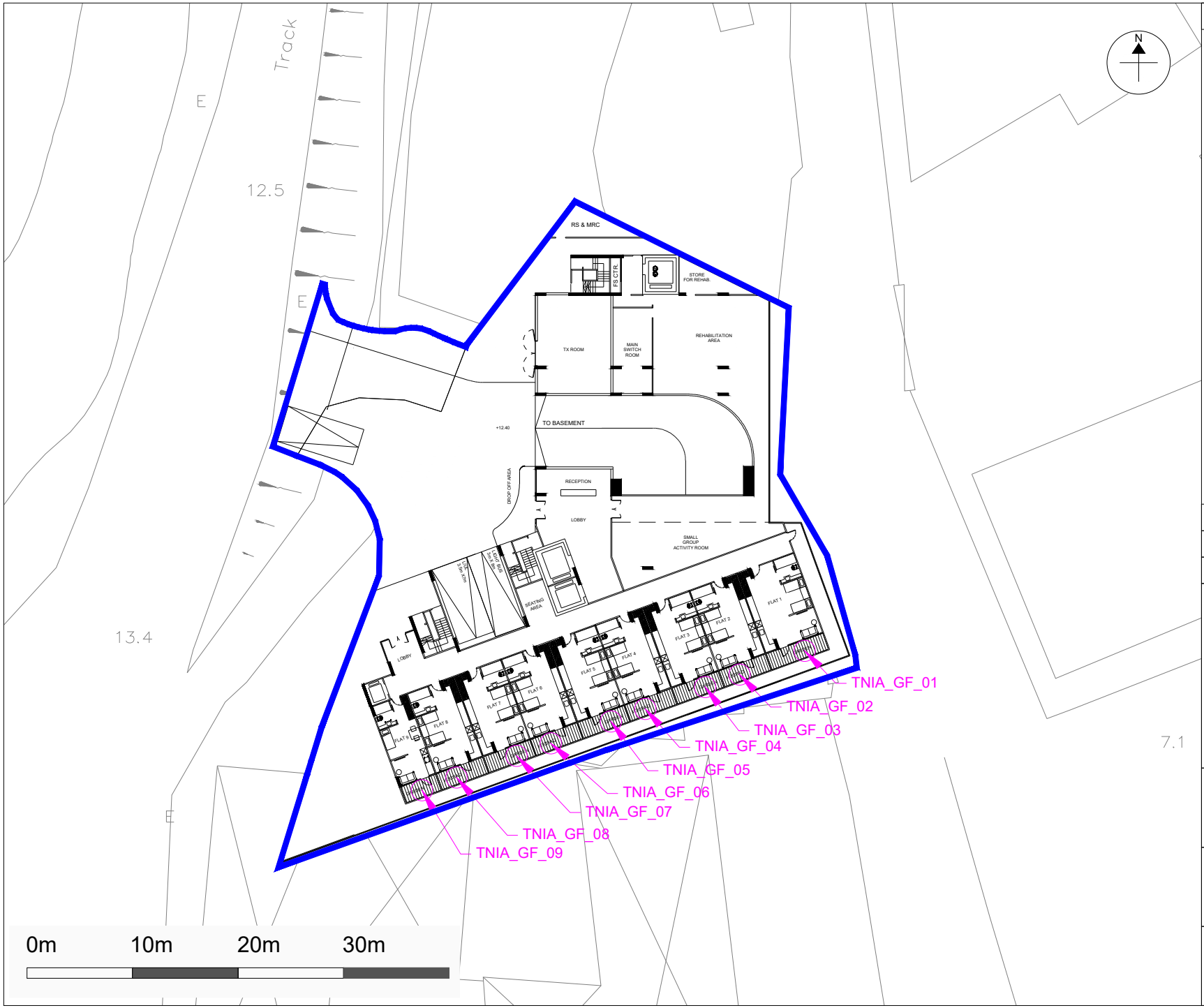
FIGURE 3.1
SELECTED NSRS FOR TRAFFIC NOISE IMPACT ASSESSMENT



LEGEND:

PROJECT SITE

TNIA_GF_01 SELECTED NSRS FOR TRAFFIC NOISE IMPACT ASSESSMENT

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Selected NSRs for Traffic Noise Impact Assessment (G/F)

Figure No.	Rev.
Figure 3.1a	1

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LEGEND:

PROJECT SITE

TNIA_GF_01 SELECTED NSRS FOR TRAFFIC NOISE IMPACT ASSESSMENT

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Selected NSRs for Traffic Noise Impact Assessment (1/F)

Figure No.	Rev.
Figure 3.1b	1

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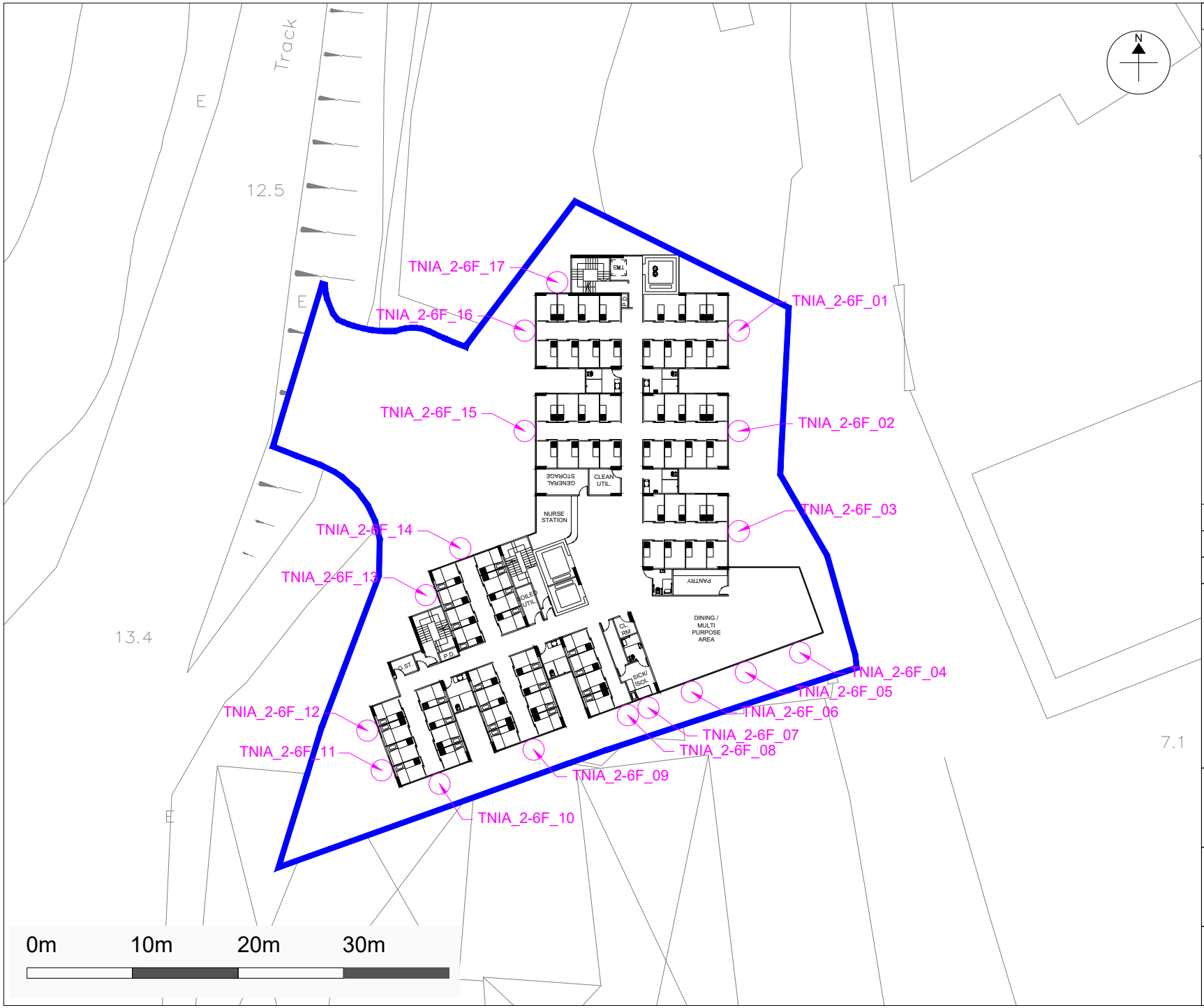

LEGEND:

PROJECT SITE

TNIA_GF_01 SELECTED NSRS FOR TRAFFIC NOISE IMPACT ASSESSMENT

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Selected NSRs for Traffic Noise Impact Assessment (2/F-6/F)

Figure No.	Rev.
Figure 3.1c	1

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LEGEND:

PROJECT SITE

SELECTED NSRS FOR TRAFFIC NOISE IMPACT ASSESSMENT

TNIA_GF_01

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Selected NSRs for Traffic Noise Impact Assessment (7/F)

Figure No.	Rev.
Figure 3.1d	1

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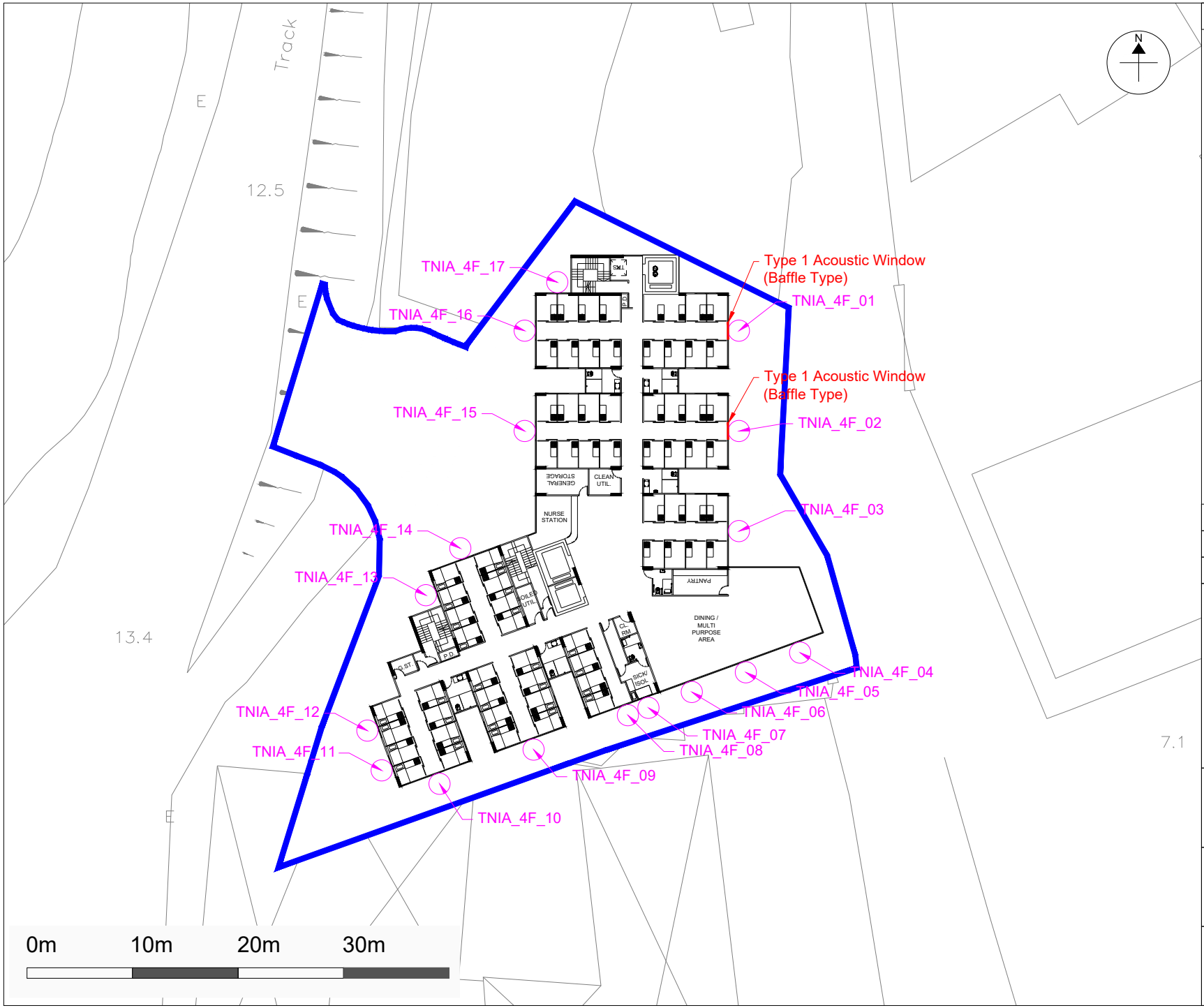
FIGURE 3.2
PROPOSED ACOUSTIC WINDOW (BAFFLE TYPE)



LEGEND:

PROJECT SITE

TNIA_GF_01 SELECTED NSRS FOR TRAFFIC NOISE IMPACT ASSESSMENT

TYPE 1 ACOUSTIC WINDOW (BAFFLE TYPE)

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Proposed Acoustic Windows (Baffle Type) at 4/F

Figure No.	Rev.
Figure 3.2a	1

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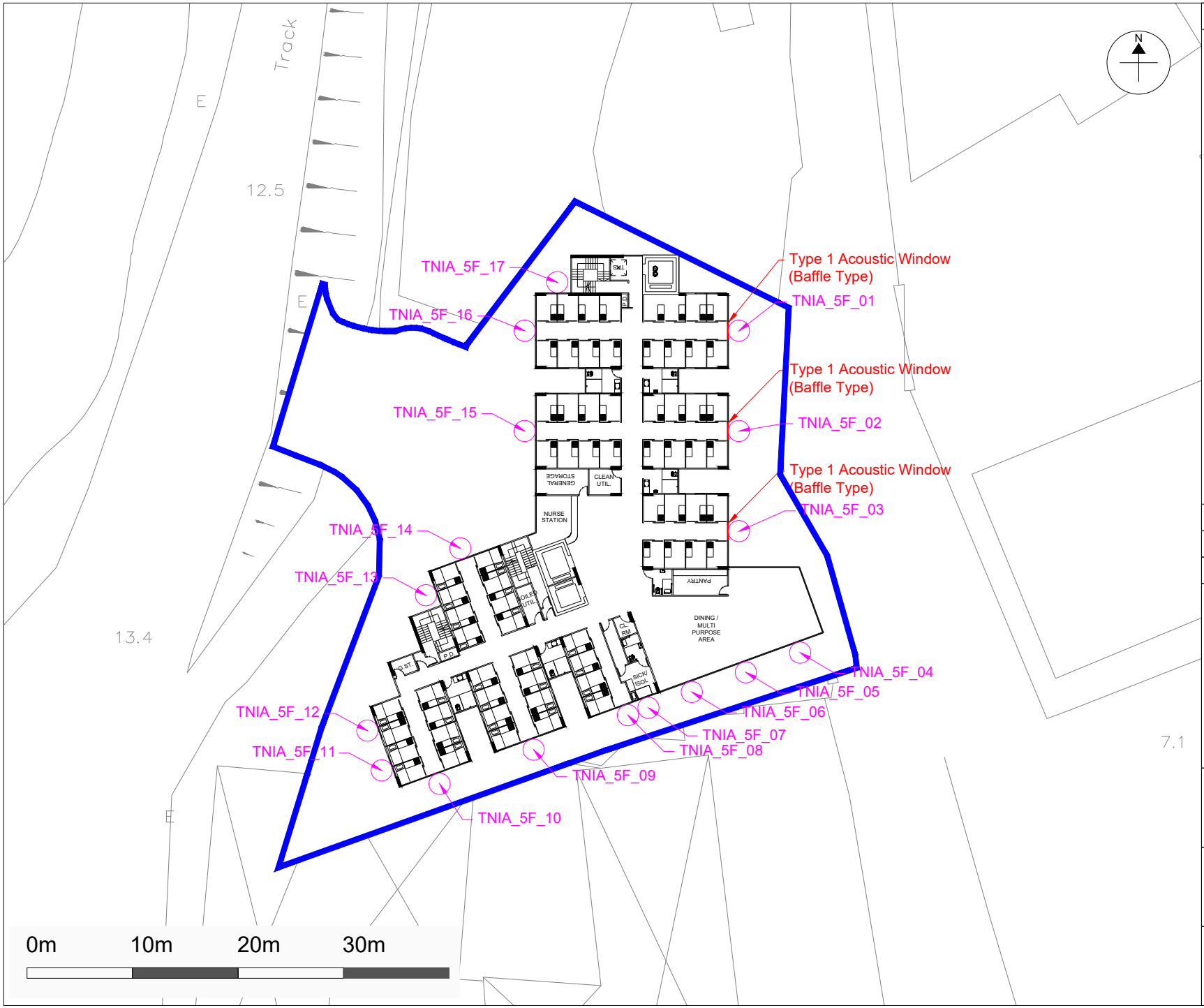

LEGEND:

PROJECT SITE

TNIA_GF_01 SELECTED NSRS FOR TRAFFIC NOISE IMPACT ASSESSMENT

TYPE 1 ACOUSTIC WINDOW (BAFFLE TYPE)

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Proposed Acoustic Windows (Baffle Type) at 5/F

Figure No.	Rev.
Figure 3.2b	1

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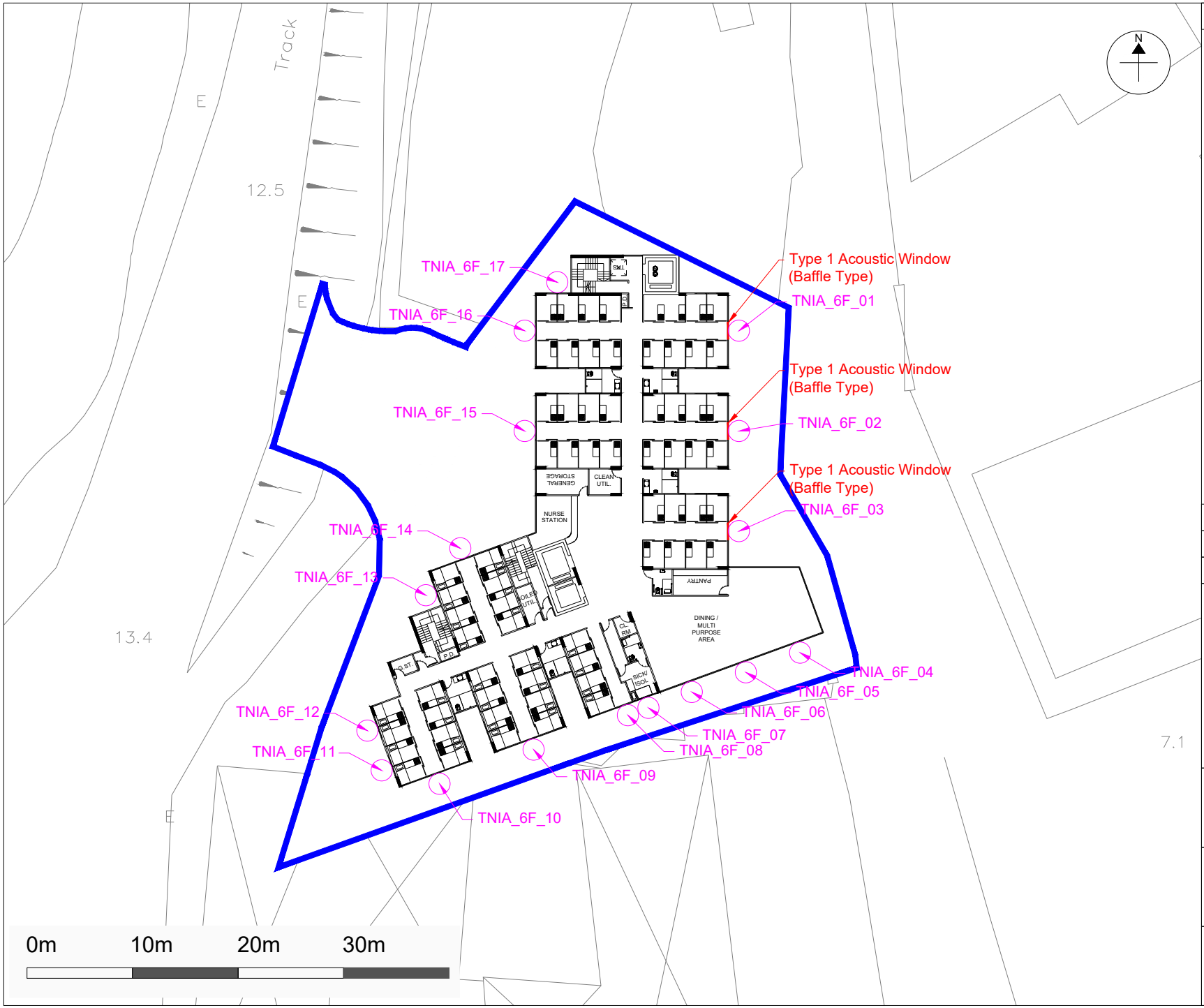

LEGEND:

PROJECT SITE

TNIA_GF_01 SELECTED NSRS FOR TRAFFIC NOISE IMPACT ASSESSMENT

TYPE 1 ACOUSTIC WINDOW (BAFFLE TYPE)

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Proposed Acoustic Windows (Baffle Type) at 6/F

Figure No.	Rev.
Figure 3.2c	1

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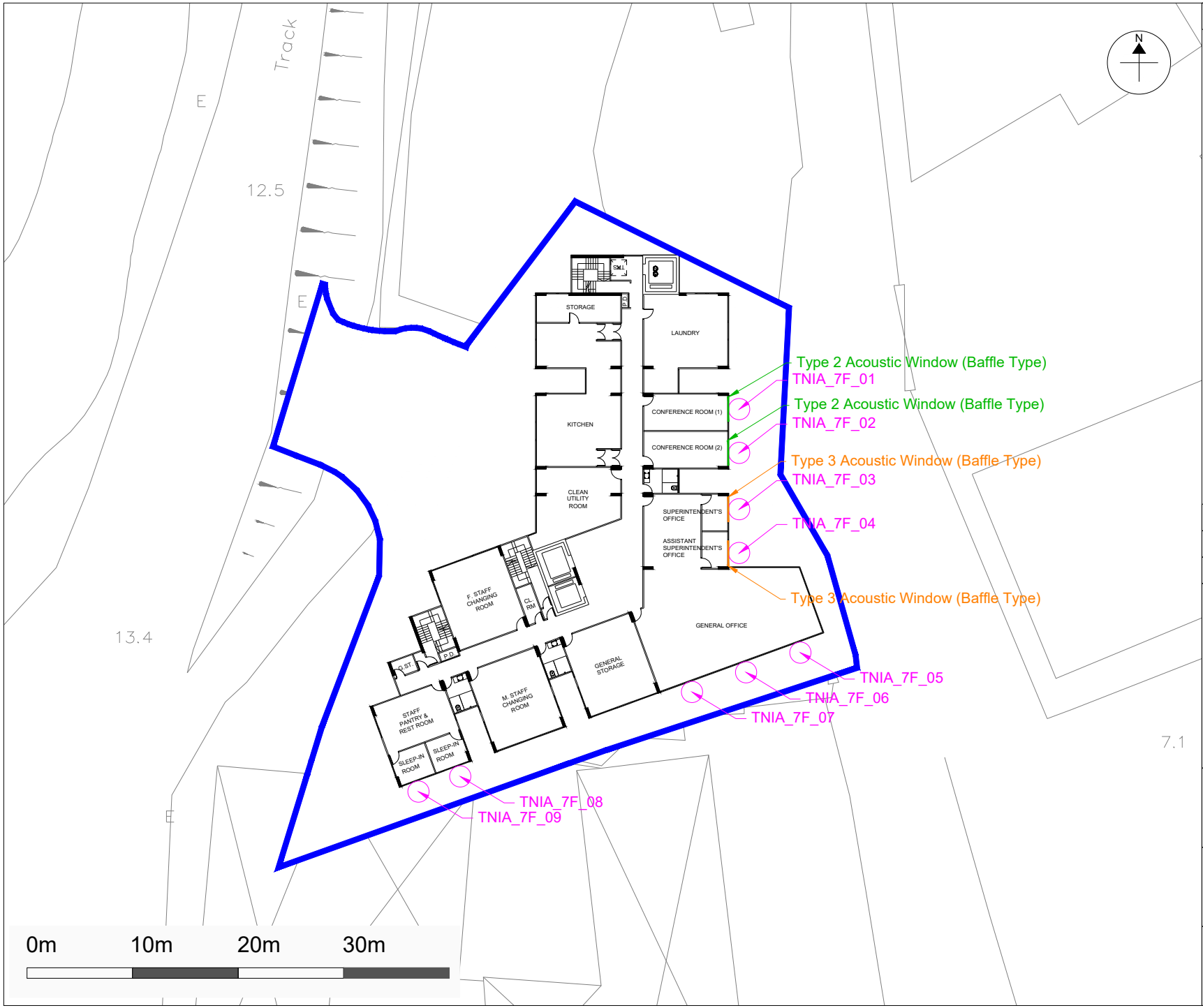


LEGEND:

- PROJECT SITE
- SELECTED NSRS FOR TRAFFIC NOISE IMPACT ASSESSMENT (TNIA_GF_01)
- TYPE 2 ACOUSTIC WINDOW (BAFFLE TYPE)
- TYPE 3 ACOUSTIC WINDOW (BAFFLE TYPE)

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

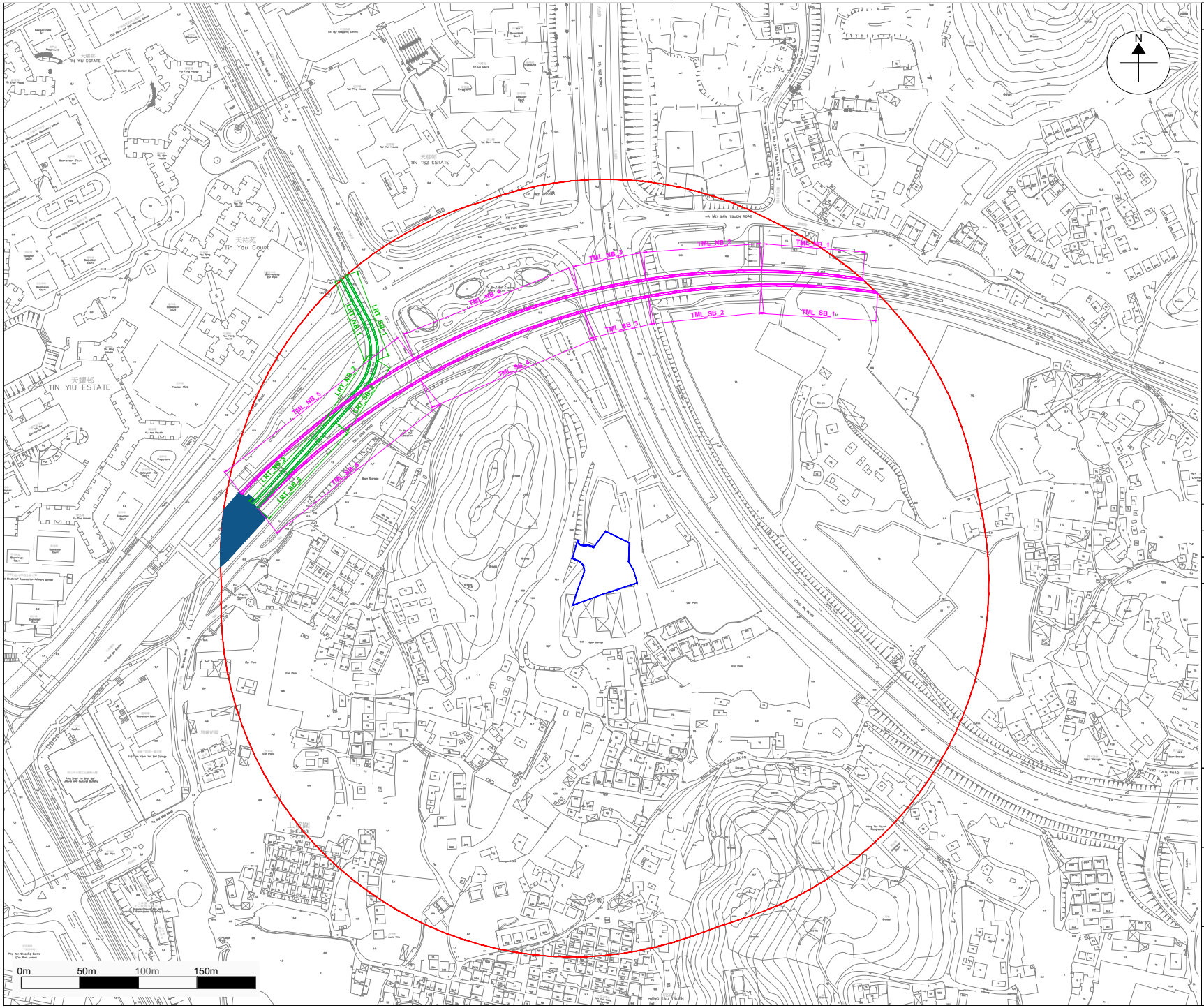
Proposed Acoustic Windows (Baffle Type) at 7/F

Figure No.	Rev.
Figure 3.2d	1

BeeXergy Consulting Limited

\\BEEXERGY_NAS\Proj.Work\23_Work\DeSpace - NIA for RCHE Development at Tin Shui Wai (W23042)\PREP\NIA Report\RT23042-NIA-01_v1\Figure\All Figures.dwg

FIGURE 4.1
LOCATION OF CONCERNED TML AND LRT



LEGEND:

- PROJECT SITE
- 300M ASSESSMENT AREA
- TML
- LRT
- TIN SHUI WAI STATION

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20230911	20230911	20230911

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Location of Concerned TML and LRT

Figure No.	Rev.
Figure 4.1	0

BXG

BeeXergy Consulting Limited

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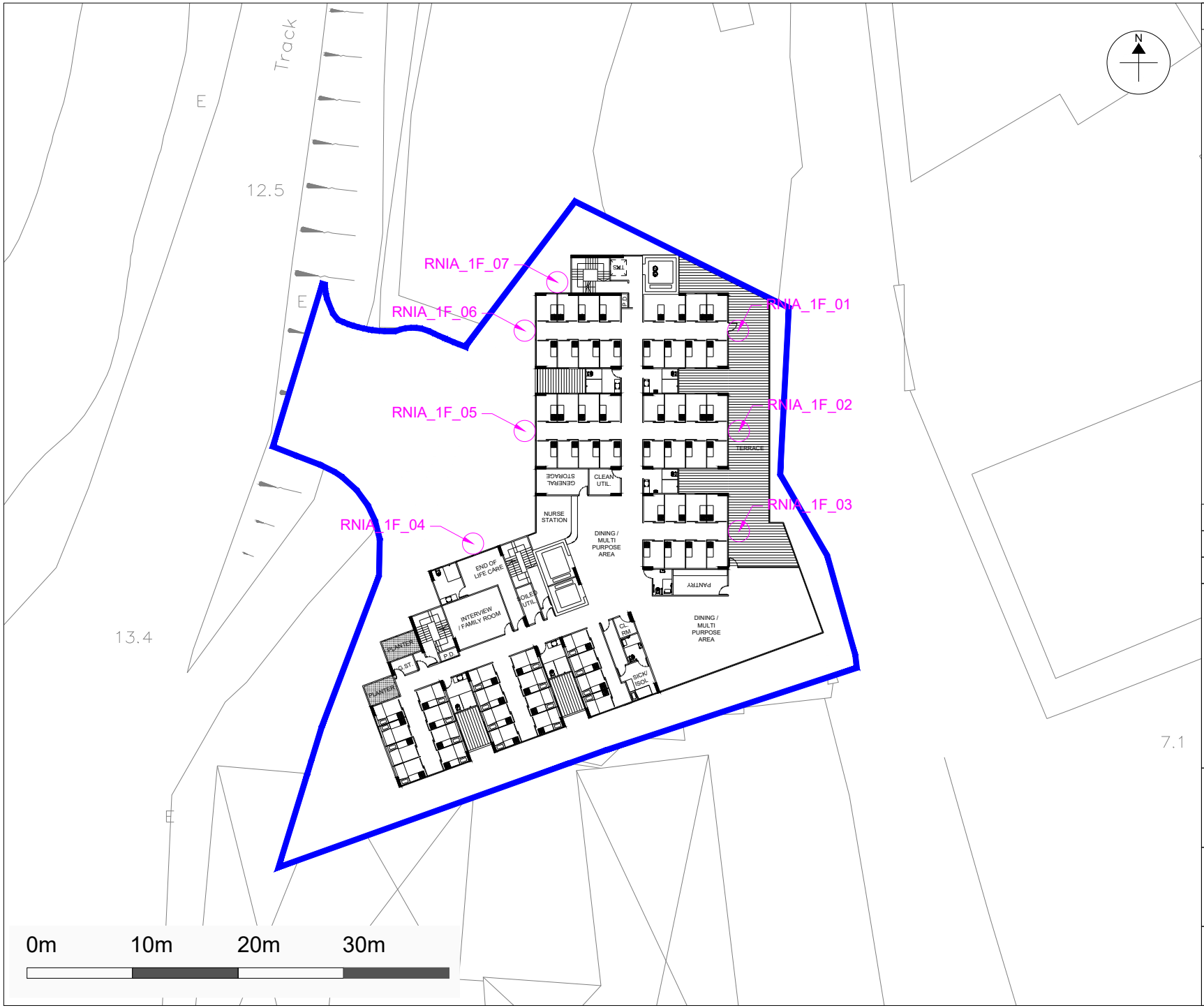
FIGURE 4.2
LOCATION OF SELECTED NSRS FOR RAILWAY NOISE IMPACT ASSESSMENT



LEGEND:

PROJECT SITE

RNIA_1F_01 SELECTED NSRS FOR RAILWAY NOISE IMPACT ASSESSMENT

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

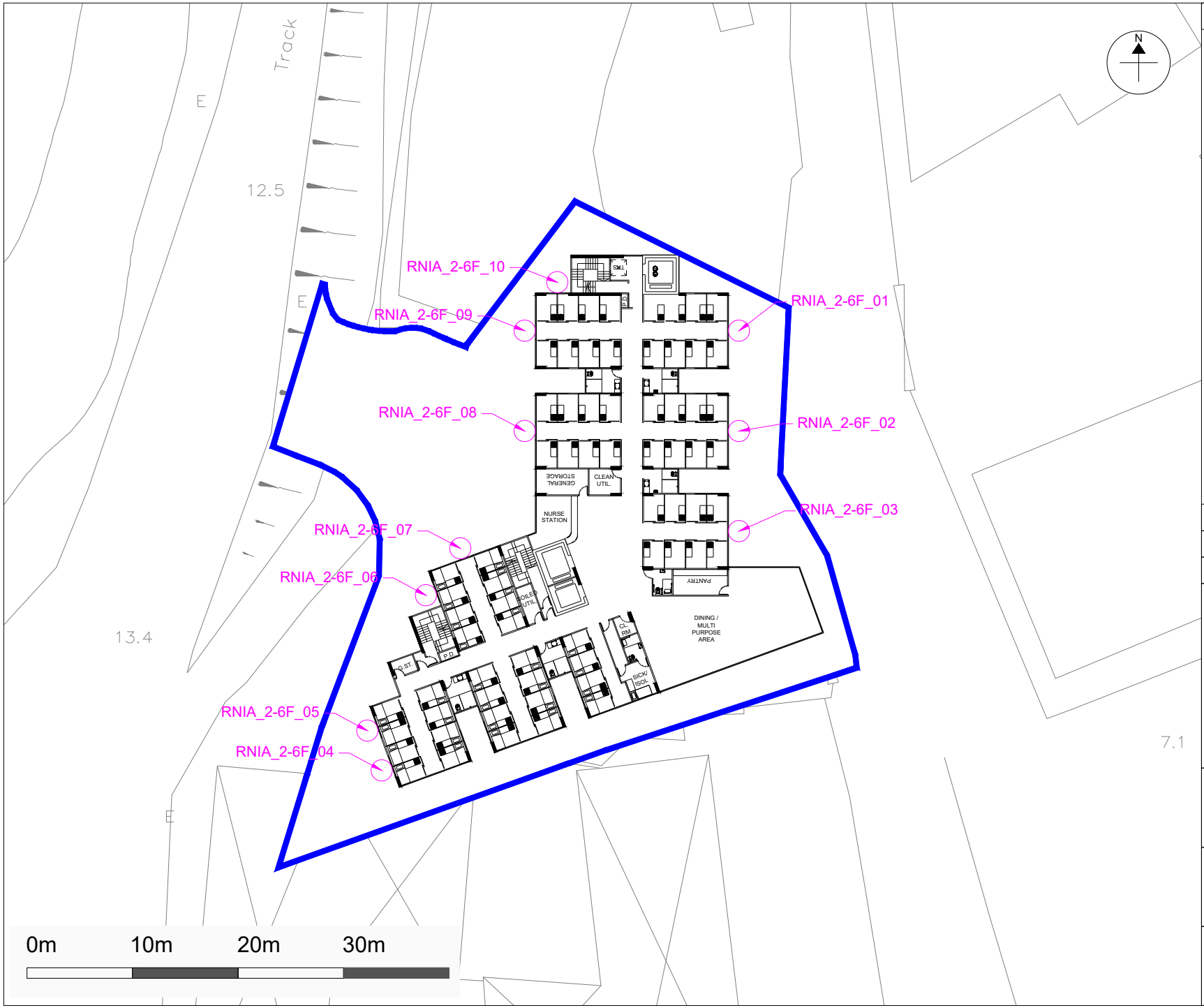
Figure Title

Selected NSRs for Railway Noise Impact Assessment (1/F)

Figure No.	Rev.
Figure 4.2a	1

BeeXergy Consulting Limited

\\BEEXERGY_NAS\Proj.Work\23_Work\DeSpace - NIA for RCHE Development at Tin Shui Wai (W23042)\PREP\NIA Report\RT23042-NIA-01_v1\Figure\All Figures.dwg



LEGEND:

PROJECT SITE

RNIA_1F_01 SELECTED NSRS FOR RAILWAY NOISE IMPACT ASSESSMENT

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Selected NSRs for Railway Noise Impact Assessment (2/F-6/F)

Figure No.	Rev.
Figure 4.2b	1

BeeXergy Consulting Limited

\\BEEXERGY_NAS\Proj.Work\23_Work\DeSpace - NIA for RCHE Development at Tin Shui Wai (W23042)\PREP\NIA Report\RT23042-NIA-01_v1\Figure\All Figures.dwg

LEGEND:

PROJECT SITE

RNIA_1F_01 SELECTED NSRS FOR RAILWAY NOISE IMPACT ASSESSMENT

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240202	20240202	20240202

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Figure Title

Selected NSRs for Railway Noise Impact Assessment (7/F)

Figure No.	Rev.
Figure 4.2c	1

BeeXergy Consulting Limited

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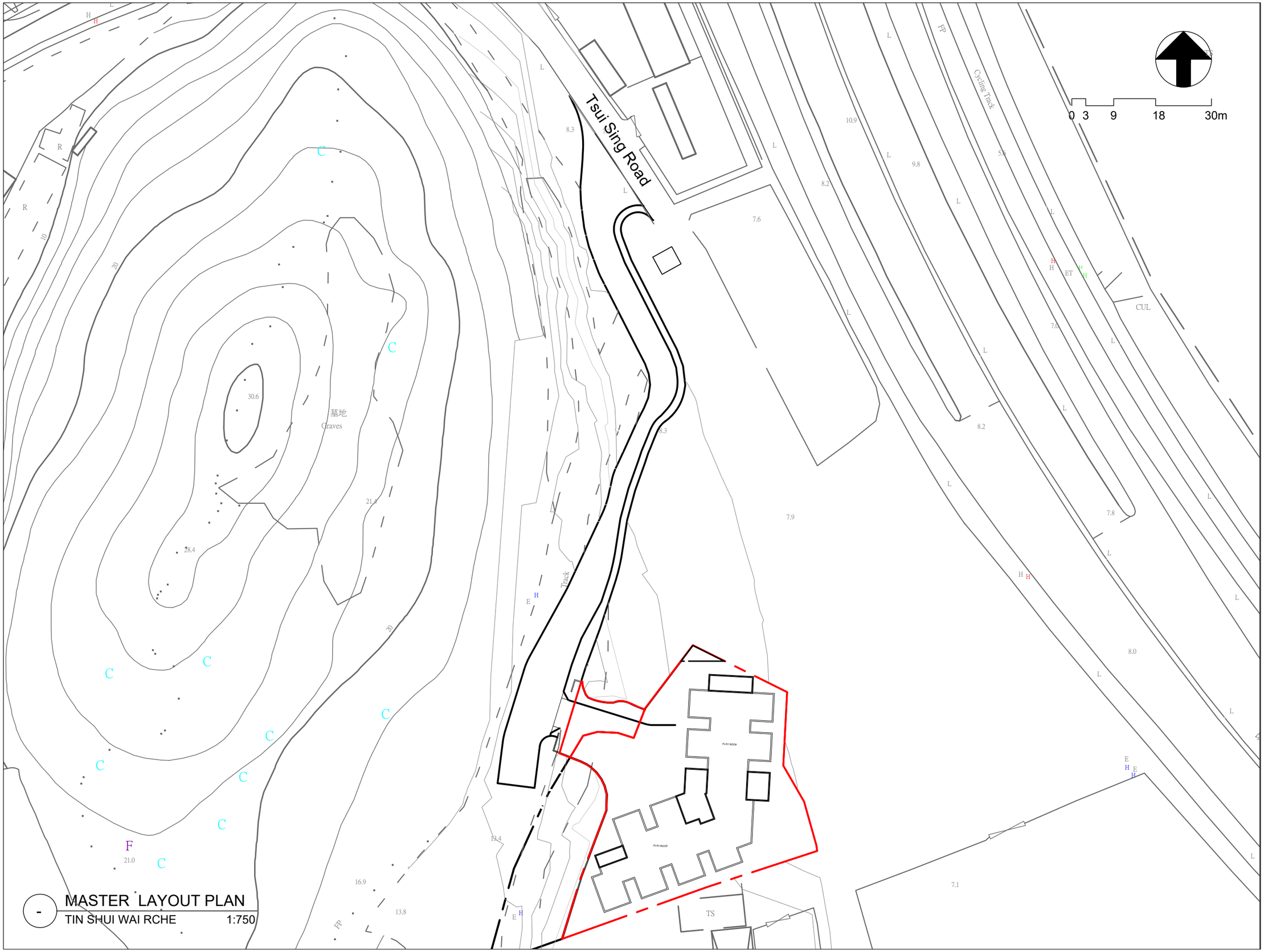
APPENDIX 1.1
MASTER LAYOUT PLAN



- MASTER LAYOUT PLAN
TIN SHUI WAI RCHE 1:750

PROJECT NO. 項目編號 : HK-A22001

- Do not scale drawings: figured dimensions are to be taken in preference.
不可縮放圖紙；如有標示尺寸，須以標示尺寸為準。
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- This drawing should not be used as construction drawings without approval.
除有批核外，此圖不可作為施工用。

AMENDMENT PARTICULARS
更改細節 :

Revision 修正版	Description 內容	Date 日期
A	DESIGN	20220317
B	DESIGN	20220320
C	DESIGN	20220402
D	DESIGN	20220406
E	SUBMISSION	20221012
F	DESIGN	20230702
G	DESIGN	20230720
H	DESIGN	20230809
I	DESIGN	20230818

TOWN PLANNER & SURVEYOR
城市規劃師及測量師 :

DeSPACE (International) Limited

- E-mail 電郵 : despaceinternational@gmail.com
- Tel 電話 : 2493 3626

ARCHITECT 建築師 :

MINOR 細
CREATIVE 作室

- E-mail 電郵 : info@minorcreative.com

PROJECT NAME
項目名稱 :

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT, INSTITUTIONAL OR COMMUNITY" (G/IC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

DRAWING TITLE
圖紙名稱 :

MASTER LAYOUT PLAN

DESIGN IN CHARGE
設計負責人 :
KL

DWG NO.
圖紙編號 :
P-000

SCALE
比例 : 1:750@A3

DATE
日期 : 20230818

GFA of CARPARK = 1468.5sq.m.

0 1 6 10m

- B/F LAYOUT PLAN
TIN SHUI WAI RCHE 1:250

PROJECT NO. 項目編號 : HK-A22001

- Do not scale drawings: figured dimensions are to be taken in preference.
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DRAWING TITLE
圖紙名稱 :

B/F LAYOUT PLAN

DESIGN IN CHARGE
設計負責人 :
KL

DWG NO.
圖紙編號 :
P-100

SCALE
比例 : 1:250@A3

DATE
日期 : 20230818

No. of FLATS IN SENIOR HOUSING = 9
GFA of SENIOR HOSUING = 480.9 sq.m.
GFA of G/F for RCHE = 424.0 sq.m.
GFA of CARPARK = 196.2 sq.m.

0 1 6 10m

RS & MRC
STORE FOR REHAB.
FS CTR.
TX ROOM
MAIN SWITCH ROOM
REHABILITATION AREA
TO BASEMENT
+12.40
RECEPTION
DROP OFF AREA
LOBBY
SMALL GROUP ACTIVITY ROOM
SEATING AREA
LIGHT BUS 3m X 9m
L/UL 3.5m X7m
LOBBY
FLAT 1
FLAT 2
FLAT 3
FLAT 4
FLAT 5
FLAT 6
FLAT 7
FLAT 8
FLAT 9
GARDEN
BOUNDARY OF OZP (GIC ZONE)
13.4
E
H
TS

G/F LAYOUT PLAN
TIN SHUI WAI RCHE 1:250

PROJECT NO. 項目編號 : HK-A22001

- Do not scale drawings: figured dimensions are to be taken in preference.
不可縮放圖紙；如有標示尺寸，須以標示尺寸為準。
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AMENDMENT PARTICULARS
更改細節 :

Revision 修正版	Description 內容	Date 日期
A	DESIGN	20221221
B	DESIGN	20230702
C	DESIGN	20230809
D	DESIGN	20230818
E		
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G		
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PROJECT NAME
項目名稱 :

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DRAWING TITLE
圖紙名稱 :

G/F LAYOUT PLAN

DESIGN IN CHARGE
設計負責人 : KL

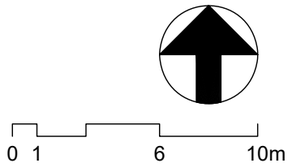
DWG NO.
圖紙編號 : P-101

SCALE
比例 : 1:250@A3

DATE
日期 : 20230809

No. of Beds = 60

GFA of 1/F for RCHE = 1002.8 sq.m.



- 1/F LAYOUT PLAN

TIN SHUI WAI RCHE 1:250

PROJECT NO. 項目編號： HK-A22001

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C	DESIGN	20230720
D	DESIGN	20230809
E	DESIGN	20230818
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H		
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DRAWING TITLE
圖紙名稱：

1/F LAYOUT PLAN

DESIGN IN CHARGE
設計負責人：
KL

DWG NO.
圖紙編號：
P-102

SCALE
比例： 1:250@A3

DATE
日期： 20230809

No. of Beds = 68

Total No. of Beds = 340

GFA of 2/F-6/F for RCHE = 1002.8 sq.m.

0 1 6 10m

- 2/F-6/F LAYOUT PLAN

TIN SHUI WAI RCHE 1:250

PROJECT NO. 項目編號 : HK-A22001

- Do not scale drawings: figured dimensions are to be taken in preference. 不可縮放圖紙；如有標示尺寸，須以標示尺寸為準。
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Revision 修正版	Description 內容	Date 日期
A	DESIGN	20221221
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TOWN PLANNER & SURVEYOR 城市規劃師及測量師 :

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PROJECT NAME 項目名稱 :

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DRAWING TITLE 圖紙名稱 :

2/F-6/F LAYOUT PLAN

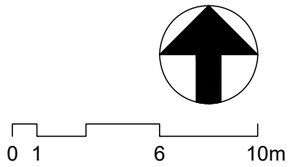
DESIGN IN CHARGE 設計負責人 : KL

DWG NO. 圖紙編號 : P-103

SCALE 比例 : 1:250@A3

DATE 日期 : 20230818

GFA of 7/F for RCHE = 1002.8 sq.m.



- 7/F LAYOUT PLAN
TIN SHUI WAI RCHE 1:250

PROJECT NO.
項目編號： HK-A22001

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DRAWING TITLE
圖紙名稱：

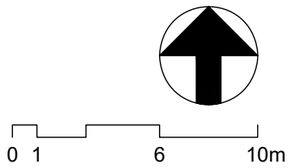
7/F LAYOUT PLAN

DESIGN IN CHARGE
設計負責人：
KL

DWG NO.
圖紙編號：
P-104

SCALE
比例： 1:250@A3

DATE
日期： 20230718



- R/F LAYOUT PLAN
TIN SHUI WAI RCHE 1:250

PROJECT NO. 項目編號 : HK-A22001

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A	DESIGN	20221221
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C	DESIGN	20230720
D	DESIGN	20230809
E	DESIGN	20230818
F		
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TOWN PLANNER & SURVEYOR
城市規劃師及測量師 :

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PROJECT NAME
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DRAWING TITLE
圖紙名稱 :

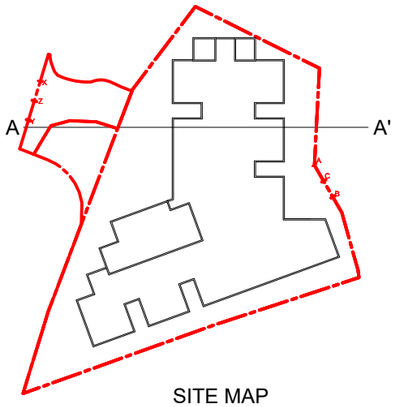
R/F LAYOUT PLAN

DESIGN IN CHARGE
設計負責人 :
KL

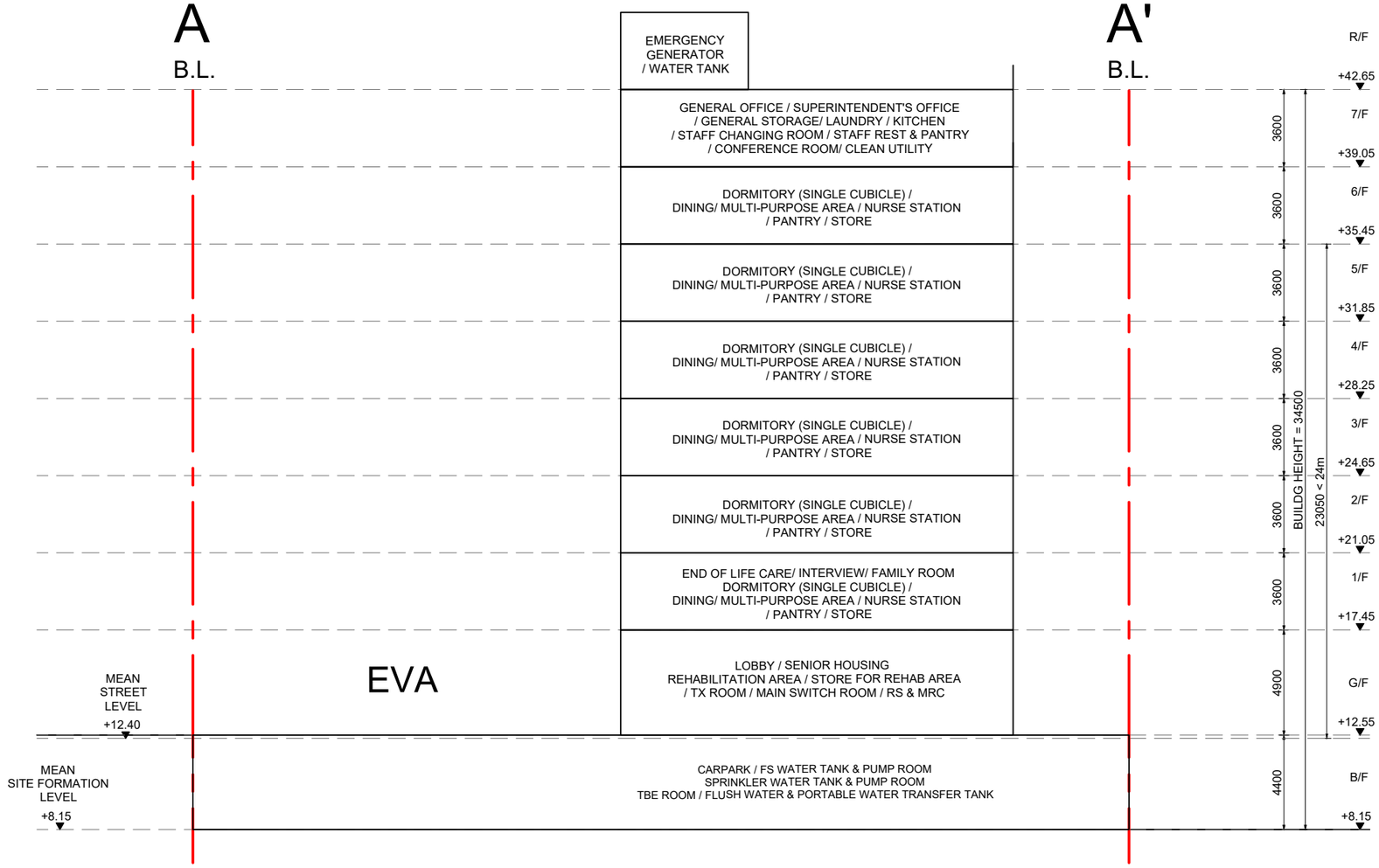
DWG NO.
圖紙編號 :
P-105

SCALE
比例 : 1:250@A3

DATE
日期 : 20230818



SITE MAP



- SCHEMATIC SECTION AA'
TIN SHUI WAI RCHE 1:250

PROJECT NO.
項目編號 : HK-A22001

- Do not scale drawings: figured dimensions are to be taken in preference.
不可縮放圖紙；如有標示尺寸，須以標示尺寸為準。
- All dimensions should be checked and verify on site before commencing any work: discrepancies found in this drawing shall be reported to the designer.
所有於圖紙上標示的尺寸，須於現場覆核和修正。如在地盤發現有任何與圖紙不符之處，須盡快通知設計師。
- This drawing should not be used as construction drawings without approval.
除有批核外，此圖不可作為施工用。

AMENDMENT PARTICULARS
更改細節 :

Revision 修正版	Description 內容	Date 日期
A	DESIGN	20221221
B	DESIGN	20230702
C	DESIGN	20230720
D	DESIGN	20230809
E	DESIGN	20230818
F		
G		
H		
I		

TOWN PLANNER & SURVEYOR
城市規劃師及測量師 :
DeSPACE (International) Limited
E-mail 電郵 : despaceinternational@gmail.com
Tel 電話 : 2493 3626

ARCHITECT 建築師 :
MINOR 細 CREATIVE 作室
E-mail 電郵 : info@minorcreative.com

PROJECT NAME
項目名稱 :

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT, INSTITUTIONAL OR COMMUNITY" (G/IC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

DRAWING TITLE
圖紙名稱 :
SCHEMATIC SECTION AA'

DESIGN IN CHARGE
設計負責人 : KL

DWG NO.
圖紙編號 : S-101

SCALE
比例 : 1:250@A3

DATE
日期 : 20230818

APPENDIX 2.1
DETAIL OF BACKGROUND NOISE MONITORING RESULTS

Location ID	BGN1		
Description	Ping Shan No. 310 to 318		
Monitoring Date	7 September 2023		
Monitoring Period	Daytime		
Monitoring Time	16:40 – 17:10		
Monitoring Condition	1m away from the façade		
Weather Condition	Cloudy		
Equipment	Cirrus CR171B / 188216		
Calibration Date	24 February 2023		
Calibrator	Svantek SV35A / 58708		
Calibration Date	13 June 2023		
Calibration Results	**Before**	**After**	
	94.0dB(A)	94.1dB(A)	
Monitoring Results (Sound Power Level)	**L_{Aeq}**	**L_{10}**	**L_{90}**
	61.4	66.1	49.7
Photo Record			
Site Observation	N/A		
Remark	N/A		

Measured By: Hins Wong **Date:** 7 September 2023

Checked By: KC Chan **Date:** 8 September 2023

Location ID	BGN1		
Description	Ping Shan No. 310 to 318		
Monitoring Date	7 September 2023		
Monitoring Period	Evening Time		
Monitoring Time	20:45 – 21:15		
Monitoring Condition	1m away from the façade		
Weather Condition	Cloudy		
Sound Level Meter	Cirrus CR171B / 188216		
Calibration Date	24 February 2023		
Calibrator	Svantek SV35A / 58708		
Calibration Date	13 June 2023		
Calibration Results	**Before**	**After**	
	94.0dB(A)	94.0dB(A)	
Monitoring Results (Sound Power Level)	**L_{Aeq}**	**L_{10}**	**L_{90}**
	59.7	61.7	49.9
Photo Record			
Site Observation	N/A		
Remark	N/A		

Measured By: Hins Wong **Date:** 7 September 2023

Checked By: KC Chan **Date:** 8 September 2023

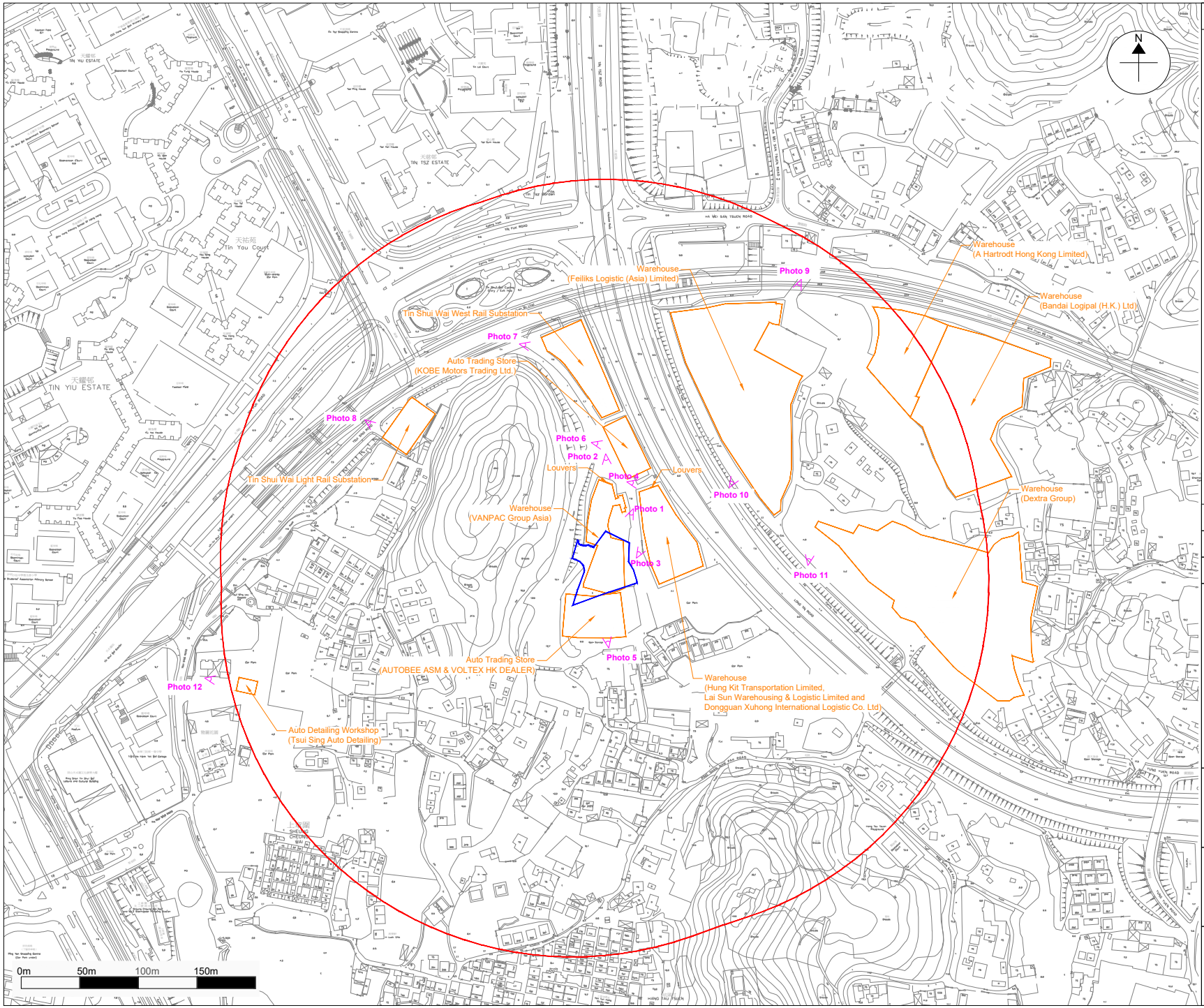
Location ID	BGN1		
Description	Ping Shan No. 310 to 318		
Monitoring Date	14 September 2023		
Monitoring Period	Night Time		
Monitoring Time	23:05 – 23:35		
Monitoring Condition	1m away from the façade		
Weather Condition	Cloudy		
Sound Level Meter	Cirrus CR171B / 188216		
Calibration Date	24 February 2023		
Calibrator	Svantek SV35A / 58708		
Calibration Date	13 June 2023		
Calibration Results	**Before**	**After**	
	94.0dB(A)	94.0dB(A)	
Monitoring Results (Sound Power Level)	**L_{Aeq}**	**L_{10}**	**L_{90}**
	50.3	51.4	46.9
Photo Record			
Site Observation	N/A		
Remark	N/A		

Measured By: Hins Wong **Date:** 14 September 2023

Checked By: KC Chan **Date:** 15 September 2023

APPENDIX 2.2

SITE SURVEY RECORD ON FIXED NOISE SOURCES



LEGEND:

- PROJECT SITE
- 300M ASSESSMENT AREA
- IDENTIFIED FIXED NOISE SOURCE
- Photo Viewpoint

	Prepared	Checked	Approved
Initial	KCC	ZC	HM
Date	20240108	20240108	20240108

Project Title

PROPOSED COMPOSITE "SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR THE ELDERLY)" (RCHE) AND "RESIDENTIAL INSTITUTION" (SENIOR HOSTEL) DEVELOPMENT ON A SITE CURRENTLY ZONED AS "GOVERNMENT,INSTITUTIONAL OR COMMUNITY" (GIC) IN LOT NOS. 257 (PART), 258 RP (PART) AND ADJOINING GOVERNMENT LAND IN D.D. 122, PING SHAN, YUEN LONG

Appendix Title

Site Survey Record

Appendix No.	Rev.
Appendix 2.2	1

BeeXergy Consulting Limited

\\BEEXERGY_NAS\Proj.Work\23_Work\DeSpace - NIA for RCHE Development at Tin Shui Wai (W23042)\PREP\NIA Report\RT23042-NIA-01_v1\Figure\All Figures.dwg

Photo 1: Warehouse (VANPAC Group Asia)

Photo 2: Louvers at Warehouse (VANPAC Group Asia)

Photo 3: Warehouse (Hung Kit Transportation Limited, Lai Sun Warehousing & Logistics Limited and Dongguan Xuhong International Logistics Co. Ltd

Photo 4: Louvers of Warehouse (Hung Kit Transportation Limited, Lai Sun Warehousing & Logistics Limited and Dongguan Xuhong International Logistics Co. Ltd

	
Photo 5: Auto retail store (AUTOBEE ASM & VOLTEX HK DEALER)	Photo 6: Vehicle cleaning operation at auto trading store (KOBE Motors Trading Ltd.)
	
Photo 7: Tin Shui Wai West Rail Substation	Photo 8: Tin Shui Wai Light Rail Substation

	
Photo 9: Access restriction at warehouse to the North East of the Project Site	Photo 10: Building structure of warehouse to the North East of the Project Site
	
Photo 11: Building structure of warehouse to the North East of the Project Site	Photo 12: Auto detailing workshop (Tsui Sing Auto Detailing)

APPENDIX 2.3
EXTRACTED PAGES OF AEIAR-026/1999
APPENDIX 9

APPENDIX 9 – Fixed Plant Noise Assessment

Project : LRT Alteration EIA
Title : Assessment of Fixed Plant Noise Impacts
Date : 09-Sep-99

Prediction of Transformer Noise Impacts - LRT Phase 4 Extensions

Measured Data			NSR	Dist	No of TX	Correction					SPL
SPL dB(A)	Dist m	No of TX		m		Dist dB(A)	No of TX dB(A)	Tonality dB(A)	Screening dB(A)	Façade dB(A)	dB(A)
66	2	2	N10	140	4	-37	3	3	0	3	38
66	2	2	N18	120	4	-36	3	3	0	3	39

Noise source - Recetifier Station R14
N10 - Yau Hong House (see dwg GSA021/03/D02/002)
N18 - Village house (see dwg GSA021/03/D01/002)

APPENDIX 2.4
DETAIL OF FIXED NOISE MONITORING RESULTS

Fixed Noise Source	Louvers operation of Warehouse (VANPAC Group Asia)		
Monitoring Date	15 August 2023		
Monitoring Time	16:45		
Monitoring Condition	Free-field		
Weather Condition	Cloudy		
Sound Level Meter	Cirrus CR171B / G304235		
Calibration Date	14 February 2023		
Calibrator	Svantek SV35A / 58708		
Calibration Date	13 June 2023		
Calibration Results	**Before**	**After**	
	94.0dB(A)	94.1dB(A)	
Monitoring Results (Sound Pressure Level)	**L_{Aeq}**	**L_{10}**	**L_{90}**
	58.5	60.1	57.6
Photo Record			
Site Observation	Two louvers are operated simultaneously.		
Remark	Sound Pressure Level is monitored at approximately 6m away from the fixed noise sources		

*+3dB(A) has been made to the monitoring results for the free-field condition.

Measured By:	Leo Yu	**Date:**	15 August 2023
Checked By:	KC Chan	**Date:**	15 August 2023

Fixed Noise Source	Vehicle cleaning operation from the auto trading store (KOBE Motors Trading Ltd.)		
Monitoring Date	15 August 2023		
Monitoring Time	15:50		
Monitoring Condition	Free-field		
Weather Condition	Cloudy		
Sound Level Meter	Cirrus CR171B / G304235		
Calibration Date	14 February 2023		
Calibrator	Svantek SV35A / 58708		
Calibration Date	13 June 2023		
Calibration Results	**Before**	**After**	
	94.0dB(A)	94.1dB(A)	
Monitoring Results (Sound Pressure Level)	**L_{Aeq}**	**L_{10}**	**L_{90}**
	58.3	61.5	56.3
Photo Record			
Site Observation	-		
Remark	Sound Pressure Level is monitored at approximately 8m away from the fixed noise sources		

*+3dB(A) has been made to the monitoring results for the free-field condition.

Measured By: Leo Yu **Date:** 15 August 2023

Checked By: KC Chan **Date:** 15 August 2023

Fixed Noise Source	Transformers and its associated equipment from Tin Shui Wai West Rail Substation		
Monitoring Date	15 August 2023		
Monitoring Time	16:15		
Monitoring Condition	Free-field		
Weather Condition	Cloudy		
Sound Level Meter	Cirrus CR171B / G304235		
Calibration Date	14 February 2023		
Calibrator	Svantek SV35A / 58708		
Calibration Date	13 June 2023		
Calibration Results	**Before**	**After**	
	94.0dB(A)	94.1dB(A)	
Monitoring Results (Sound Pressure Level)	**L_{Aeq}**	**L_{10}**	**L_{90}**
	58.3	63.2	56.8
Photo Record			
Site Observation	-		
Remark	Sound Pressure Level is monitored at approximately 8m away from the fixed noise sources		

*+3dB(A) has been made to the monitoring results for the free-field condition.

Measured By:	Leo Yu	**Date:**	15 August 2023
Checked By:	KC Chan	**Date:**	15 August 2023

APPENDIX 2.5

DETAILED CALCULATION FOR FIXED NOISE IMPACT ASSESSMENT

Appendix 2.5 - Detailed Calculation for Fixed Noise Impact Assessment

Title:	Assessment of Existing Fixed Plant Noise Impacts
NSR ID:	FNIA_1F_01
NSR floor (/F)	1
ASR	B

Noise Source ID	Description	Operation		SWL, dB(A)	Horizontal Distance, m	Correction, dB(A)				Predicted Daytime SPL, dB(A)	Predicted Night-time SPL, dB(A)	Remark
		Daytime	Night-time			Distance	Directivity	Tonality	Façade			
1	Warehouse (VANPAC Group Asia)	Y	N	82	54	-43	-10	6	3	38	-	Louver facing opposite to NSR
2	Warehouse (Hung Kit Transportation Limited, Lai Sun Warehousing & Logistics Limited and Dongguan Xuhong International Logistics Co. Ltd)	Y	N	82	55	-43	-10	6	3	38	-	1. Louver facing opposite to NSR 2. SWL reference to Warehouse (VANPAC Group Asia)
3	Auto trading store (KOBE Motors Trading LTD)	Y	N	94	56	-43	-	6	3	60	-	To demonstrate the worst-case scenario, SWL of 94dB(A) will be adopted with reference to the similar fixed noise source in Appendix 5.5 of approved AEIAR-227/202 - Development at San Hing Road and Hong Po Road, Tuen Mun.
4	Tin Shui Wai West Rail Substation	Y	Y	84	102	-48	-	6	3	45	45	
							Total SPL			60	45	
							Criteria ANL			65	55	
							Exceedance			-	-	

Remarks:
[1] SWLs are calculated based on on-site measured sound pressure level of fixed noise sources using Type 1 sound level meter. Measurement equipment used: Cirrus CR171B Sound Level Meter.
[2] The maximum measured SPL was adopted for conservative assessment and no correction for background noise level was conducted.
[3] For conservative approach, distance correction was calculated based on the shortest horizontal distance between the NSR and the noise sources.
[4] To demonstrate the worst-case scenario, SWL of 94dB(A) will be adopted for vehicle cleaning operation at the Auto trading store (KOBE Motors Trading LTD) with reference to the similar fixed noise source in Appendix 5.5 of approved AEIAR-227/202 - Development at San Hing Road and Hong Po Road, Tuen Mun.
[5] A -10dB directivity correction has been applied to NSR with no direct line of sight to the source/opening which is located on the other side of the building or completely blocked by other building(s).
[6] A +6dB(A) correction for tonality has been applied to all equipment as a conservative approach.

Appendix 2.5 - Detailed Calculation for Fixed Noise Impact Assessment

Title:	Assessment of Existing Fixed Plant Noise Impacts
NSR ID:	FNIA_1F_02
NSR floor (/F)	1
ASR	B

Noise Source ID	Description	Operation		SWL, dB(A)	Horizontal Distance, m	Correction, dB(A)				Predicted Daytime SPL, dB(A)	Predicted Night-time SPL, dB(A)	Remark
		Daytime	Night-time			Distance	Directivity	Tonality	Façade			
1	Warehouse (VANPAC Group Asia)	Y	N	82	53	-42	-10	6	3	39	-	Louver facing opposite to NSR
2	Warehouse (Hung Kit Transportation Limited, Lai Sun Warehousing & Logistics Limited and Dongguan Xuhong International Logistics Co. Ltd)	Y	N	82	66	-44	-10	6	3	37	-	1. Louver facing opposite to NSR 2. SWL reference to Warehouse (VANPAC Group Asia)
3	Auto trading store (KOBE Motors Trading LTD)	Y	N	94	57	-43	-	6	3	60	-	To demonstrate the worst-case scenario, SWL of 94dB(A) will be adopted with reference to the similar fixed noise source in Appendix 5.5 of approved AEIAR-227/202 - Development at San Hing Road and Hong Po Road, Tuen Mun.
4	Tin Shui Wai West Rail Substation	Y	Y	84	103	-48	-	6	3	45	45	
							Total SPL			60	45	
							Criteria ANL			65	55	
							Exceedance			-	-	

Remarks:
[1] SWLs are calculated based on on-site measured sound pressure level of fixed noise sources using Type 1 sound level meter. Measurement equipment used: Cirrus CR171B Sound Level Meter.
[2] The maximum measured SPL was adopted for conservative assessment and no correction for background noise level was conducted.
[3] For conservative approach, distance correction was calculated based on the shortest horizontal distance between the NSR and the noise sources.
[4] To demonstrate the worst-case scenario, SWL of 94dB(A) will be adopted for vehicle cleaning operation at the Auto trading store (KOBE Motors Trading LTD) with reference to the similar fixed noise source in Appendix 5.5 of approved AEIAR-227/202 - Development at San Hing Road and Hong Po Road, Tuen Mun.
[5] A -10dB directivity correction has been applied to NSR with no direct line of sight to the source/opening which is located on the other side of the building or completely blocked by other building(s).
[6] A +6dB(A) correction for tonality has been applied to all equipment as a conservative approach.

APPENDIX 3.1

TRANSPORTATION DEPARTMENT ENDORSED TRAFFIC DATA

23061HK

RCHE Scenior Hostel in GIC in Ping Shan Tin Shui Wai Yuen Long

TRAFFIC FORECAST FOR TRAFFIC NOISE IMPACT ASSESSMENT

CTA Consultants Limited 志達顧問有限公司

Link No.	Road Name	Speed	Direction	Year 2044			
				AM Peak		PM Peak	
				Traffic Flow (veh/hr)	HV%	Traffic Flow (veh/hr)	HV%
1	Tin Tsz Road	50	EB	80	12%	30	23%
2	Ha Mei San Tsuen Road	50	EB	420	17%	360	23%
3	Ha Mei San Tsuen Road	50	WB	180	30%	120	12%
4	Tin Tsz Road	50	SB	520	10%	220	11%
5	Long Tin Road	70	SB	860	30%	580	19%
6	Long Tin Road	70	SB	1130	16%	770	10%
7	Long Tin Road	70	SB	1990	22%	1350	10%
8	Long Tin Road	70	NB	690	17%	1160	10%
9	Tin Tsz Road	70	NB	140	10%	80	10%
10	Long Tin Road	70	NB	920	20%	1120	23%
11	Long Tin Road	70	NB	1610	18%	2280	15%
12	Tin Fuk Road	50	EB	1000	28%	670	18%
13	Tin Fuk Road	50	WB	1280	18%	1140	21%
14	Tin Shing Road	50	EB	490	24%	350	19%
15	Tin Shing Road	50	SB	740	25%	490	18%
16	Tin Shing Road	50	NB	640	14%	510	15%
17	Tin Shing Road	50	SB	160	11%	240	14%
18	Tin Shing Road	50	NB	250	15%	160	10%
19	Tin Fuk Road	50	EB	420	36%	340	27%
20	Tin Fuk Road	50	WB	850	11%	690	14%
21	Tsui Sing Road	50	SB	50	30%	90	30%
22	Tsui Sing Road	50	WB	110	22%	50	10%
23	Tsui Sing Road	50	EB	140	13%	110	10%
24	Tsui Sing Road	50	WB	110	27%	150	10%
25	Ping Shan Heritage Trial	50	2-way	50	10%	50	10%
26	Tsui Sing Road	50	EB	50	10%	50	10%
27	Tsui Sing Road	50	WB	50	10%	50	10%
28	Ping Shan Heritage Trial	50	SB	50	10%	50	10%
29	Ping Shan Heritage Trial	50	NB	50	10%	50	10%
30	Ping Shan Nam Pak Road	50	2-way	50	10%	50	10%
31	Long Tin Road	70	WB	710	21%	880	23%
32	Long Tin Road	70	EB	210	12%	240	29%
33	Tin Fuk Road	50	EB	520	36%	430	27%
34	Tin Fuk Road	50	EB	100	27%	90	30%

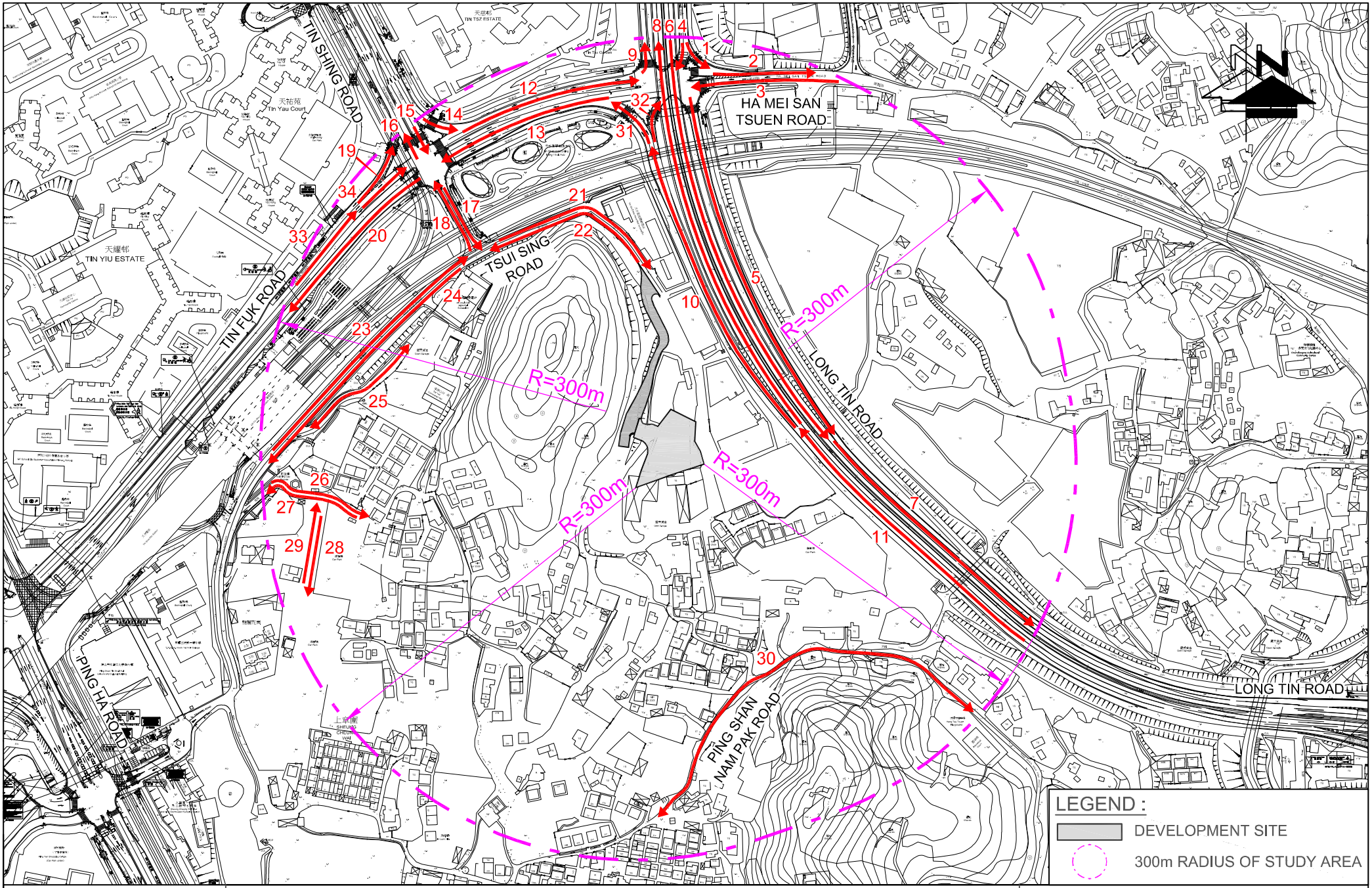


FIGURE NO.: 1	PROJECT TITLE: RCHE and Senior Hostel in GIC in Ping Shan, Tin Shui Wai, Yuen Long	CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 23061HK	DRAWING TITLE: INDEX PLAN FOR TNIA (300m)	
SCALE: 1 : 4000 @A4 / DATE: 11 SEP 2023		

APPENDIX 3.2

DETAIL OF TRAFFIC NOISE IMPACT ASSESSMENT RESULTS (UN-MITIGATED SCENARIO)

Appendix 3.2 - Detail of Traffic Noise Impact Assessment Results (Un-mitigated Scenario)

NSR ID	Coordinates		Assessment Level	Assessment Floor	Description	Limit Level	Un-mitigated Scenario			
							AM Period		PM Period	
	X	Y	mPD			L10, 1hr dB(A)	L10, 1hr dB(A)	Noise Mitigation Required	L10, 1hr dB(A)	Noise Mitigation Required
TNIA_GF_01	819016.4	834398.2	13.8	G/F	Senior Housing Flat 1	70	62	No	61	No
TNIA_GF_02	819010.2	834395.9	13.8	G/F	Senior Housing Flat 2	70	62	No	61	No
TNIA_GF_03	819007.0	834394.7	13.8	G/F	Senior Housing Flat 3	70	62	No	61	No
TNIA_GF_04	819001.3	834392.7	13.8	G/F	Senior Housing Flat 4	70	62	No	61	No
TNIA_GF_05	818998.0	834391.5	13.8	G/F	Senior Housing Flat 5	70	62	No	61	No
TNIA_GF_06	818992.3	834389.4	13.8	G/F	Senior Housing Flat 6	70	61	No	60	No
TNIA_GF_07	818989.1	834388.2	13.8	G/F	Senior Housing Flat 7	70	61	No	60	No
TNIA_GF_08	818983.4	834386.2	13.8	G/F	Senior Housing Flat 8	70	61	No	60	No
TNIA_GF_09	818980.1	834385.0	13.8	G/F	Senior Housing Flat 9	70	61	No	60	No
TNIA_1F_01	819010.1	834428.5	18.6	1/F	Dormitory	70	67	No	66	No
TNIA_1F_02	819010.2	834419.0	18.6	1/F	Dormitory	70	66	No	65	No
TNIA_1F_03	819010.2	834409.5	18.6	1/F	Dormitory	70	66	No	65	No
TNIA_1F_04	819016.0	834398.0	18.6	1/F	Dining/Multi-purpose Area	70	65	No	64	No
TNIA_1F_05	819010.8	834396.2	18.6	1/F	Dining/Multi-purpose Area	70	64	No	63	No
TNIA_1F_06	819005.7	834394.3	18.6	1/F	Dining/Multi-purpose Area	70	64	No	63	No
TNIA_1F_07	819001.6	834392.8	18.6	1/F	Sick/Isolation Room	70	63	No	63	No
TNIA_1F_08	818999.6	834392.1	18.6	1/F	Dormitory	70	63	No	62	No
TNIA_1F_09	818990.7	834388.8	18.6	1/F	Dormitory	70	63	No	62	No
TNIA_1F_10	818981.8	834385.6	18.6	1/F	Dormitory	70	62	No	61	No
TNIA_1F_11	818976.3	834386.9	18.6	1/F	Dormitory	70	48	No	48	No
TNIA_1F_12	818974.9	834390.6	18.6	1/F	Dormitory	70	55	No	55	No
TNIA_1F_13	818985.0	834408.3	18.6	1/F	End of Life Care Room	70	58	No	57	No
TNIA_1F_14	818989.9	834419.0	18.6	1/F	Dormitory	70	58	No	57	No
TNIA_1F_15	818989.9	834428.5	18.6	1/F	Dormitory	70	60	No	59	No
TNIA_1F_16	818992.9	834433.1	18.6	1/F	Dormitory	70	61	No	60	No
TNIA_2F_01	819010.2	834428.5	22.2	2/F	Dormitory	70	69	No	68	No
TNIA_2F_02	819010.2	834419.0	22.2	2/F	Dormitory	70	69	No	68	No
TNIA_2F_03	819010.2	834409.5	22.2	2/F	Dormitory	70	68	No	67	No
TNIA_2F_04	819016.0	834398.0	22.2	2/F	Dining/Multi-purpose Area	70	67	No	66	No
TNIA_2F_05	819010.8	834396.2	22.2	2/F	Dining/Multi-purpose Area	70	66	No	65	No
TNIA_2F_06	819005.7	834394.3	22.2	2/F	Dining/Multi-purpose Area	70	65	No	64	No
TNIA_2F_07	819001.6	834392.8	22.2	2/F	Sick/Isolation Room	70	65	No	64	No
TNIA_2F_08	818999.6	834392.1	22.2	2/F	Dormitory	70	65	No	64	No
TNIA_2F_09	818990.7	834388.8	22.2	2/F	Dormitory	70	64	No	63	No
TNIA_2F_10	818981.8	834385.6	22.2	2/F	Dormitory	70	63	No	62	No
TNIA_2F_11	818976.3	834386.9	22.2	2/F	Dormitory	70	49	No	48	No
TNIA_2F_12	818974.9	834390.6	22.2	2/F	Dormitory	70	56	No	56	No
TNIA_2F_13	818980.5	834403.4	22.2	2/F	Dormitory	70	56	No	56	No
TNIA_2F_14	818983.8	834407.9	22.2	2/F	Dormitory	70	60	No	59	No
TNIA_2F_15	818989.9	834419.0	22.2	2/F	Dormitory	70	60	No	59	No
TNIA_2F_16	818989.9	834428.5	22.2	2/F	Dormitory	70	62	No	61	No
TNIA_2F_17	818992.9	834433.1	22.2	2/F	Dormitory	70	63	No	62	No
TNIA_3F_01	819010.2	834428.5	25.8	3/F	Dormitory	70	70	No	70	No
TNIA_3F_02	819010.2	834419.0	25.8	3/F	Dormitory	70	70	No	69	No
TNIA_3F_03	819010.2	834409.5	25.8	3/F	Dormitory	70	69	No	69	No
TNIA_3F_04	819016.0	834398.0	25.8	3/F	Dining/Multi-purpose Area	70	68	No	67	No
TNIA_3F_05	819010.8	834396.2	25.8	3/F	Dining/Multi-purpose Area	70	67	No	66	No
TNIA_3F_06	819005.7	834394.3	25.8	3/F	Dining/Multi-purpose Area	70	66	No	65	No
TNIA_3F_07	819001.6	834392.8	25.8	3/F	Sick/Isolation Room	70	66	No	65	No
TNIA_3F_08	818999.6	834392.1	25.8	3/F	Dormitory	70	66	No	65	No
TNIA_3F_09	818990.7	834388.8	25.8	3/F	Dormitory	70	65	No	64	No
TNIA_3F_10	818981.8	834385.6	25.8	3/F	Dormitory	70	64	No	63	No
TNIA_3F_11	818976.3	834386.9	25.8	3/F	Dormitory	70	50	No	49	No
TNIA_3F_12	818974.9	834390.6	25.8	3/F	Dormitory	70	58	No	57	No
TNIA_3F_13	818980.5	834403.4	25.8	3/F	Dormitory	70	58	No	57	No
TNIA_3F_14	818983.8	834407.9	25.8	3/F	Dormitory	70	61	No	61	No
TNIA_3F_15	818989.9	834419.0	25.8	3/F	Dormitory	70	61	No	60	No
TNIA_3F_16	818989.9	834428.5	25.8	3/F	Dormitory	70	63	No	62	No
TNIA_3F_17	818992.9	834433.1	25.8	3/F	Dormitory	70	64	No	63	No
TNIA_4F_01	819010.2	834428.5	29.4	4/F	Dormitory	70	71	Yes	71	Yes
TNIA_4F_02	819010.2	834419.0	29.4	4/F	Dormitory	70	71	Yes	70	No
TNIA_4F_03	819010.2	834409.5	29.4	4/F	Dormitory	70	70	No	69	No
TNIA_4F_04	819016.0	834398.0	29.4	4/F	Dining/Multi-purpose Area	70	69	No	68	No
TNIA_4F_05	819010.8	834396.2	29.4	4/F	Dining/Multi-purpose Area	70	68	No	67	No
TNIA_4F_06	819005.7	834394.3	29.4	4/F	Dining/Multi-purpose Area	70	67	No	66	No
TNIA_4F_07	819001.6	834392.8	29.4	4/F	Sick/Isolation Room	70	67	No	66	No
TNIA_4F_08	818999.6	834392.1	29.4	4/F	Dormitory	70	67	No	66	No
TNIA_4F_09	818990.7	834388.8	29.4	4/F	Dormitory	70	66	No	65	No
TNIA_4F_10	818981.8	834385.6	29.4	4/F	Dormitory	70	65	No	64	No
TNIA_4F_11	818976.3	834386.9	29.4	4/F	Dormitory	70	51	No	50	No

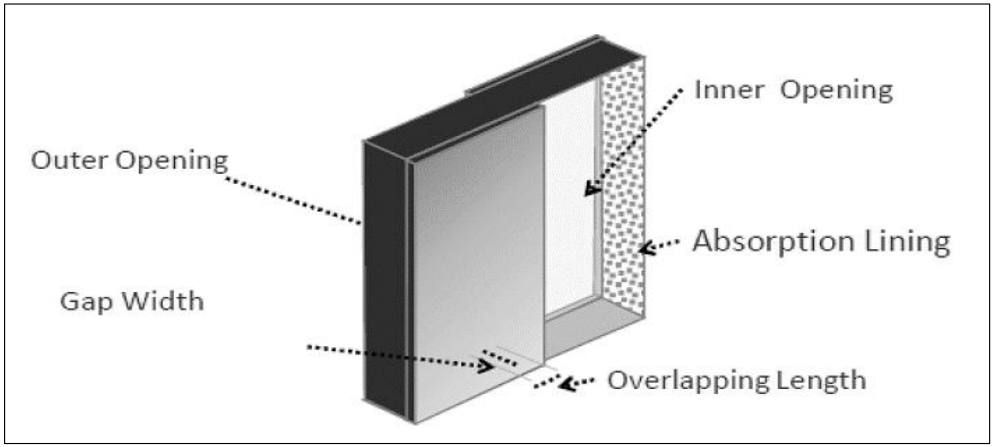
Appendix 3.2 - Detail of Traffic Noise Impact Assessment Results (Un-mitigated Scenario)

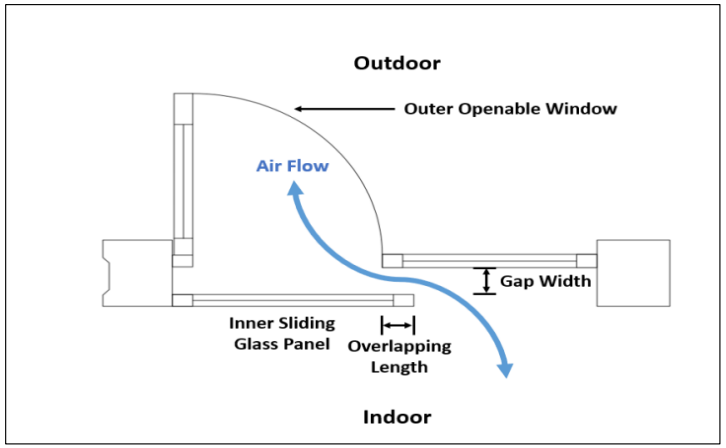
NSR ID	Coordinates		Assessment Level	Assessment Floor	Description	Limit Level	Un-mitigated Scenario			
							AM Period		PM Period	
	X	Y	mPD			L10, 1hr dB(A)	L10, 1hr dB(A)	Noise Mitigation Required	L10, 1hr dB(A)	Noise Mitigation Required
TNIA_4F_12	818974.9	834390.6	29.4	4/F	Dormitory	70	59	No	58	No
TNIA_4F_13	818980.5	834403.4	29.4	4/F	Dormitory	70	59	No	58	No
TNIA_4F_14	818983.8	834407.9	29.4	4/F	Dormitory	70	62	No	62	No
TNIA_4F_15	818989.9	834419.0	29.4	4/F	Dormitory	70	61	No	61	No
TNIA_4F_16	818989.9	834428.5	29.4	4/F	Dormitory	70	64	No	63	No
TNIA_4F_17	818992.9	834433.1	29.4	4/F	Dormitory	70	65	No	64	No
TNIA_5F_01	819010.2	834428.5	33.0	5/F	Dormitory	70	72	Yes	71	Yes
TNIA_5F_02	819010.2	834419.0	33.0	5/F	Dormitory	70	71	Yes	71	Yes
TNIA_5F_03	819010.2	834409.5	33.0	5/F	Dormitory	70	71	Yes	70	No
TNIA_5F_04	819016.0	834398.0	33.0	5/F	Dining/Multi-purpose Area	70	69	No	68	No
TNIA_5F_05	819010.8	834396.2	33.0	5/F	Dining/Multi-purpose Area	70	68	No	67	No
TNIA_5F_06	819005.7	834394.3	33.0	5/F	Dining/Multi-purpose Area	70	67	No	67	No
TNIA_5F_07	819001.6	834392.8	33.0	5/F	Sick/Isolation Room	70	67	No	66	No
TNIA_5F_08	818999.6	834392.1	33.0	5/F	Dormitory	70	67	No	66	No
TNIA_5F_09	818990.7	834388.8	33.0	5/F	Dormitory	70	66	No	65	No
TNIA_5F_10	818981.8	834385.6	33.0	5/F	Dormitory	70	66	No	65	No
TNIA_5F_11	818976.3	834386.9	33.0	5/F	Dormitory	70	51	No	50	No
TNIA_5F_12	818974.9	834390.6	33.0	5/F	Dormitory	70	59	No	59	No
TNIA_5F_13	818980.5	834403.4	33.0	5/F	Dormitory	70	59	No	59	No
TNIA_5F_14	818983.8	834407.9	33.0	5/F	Dormitory	70	63	No	62	No
TNIA_5F_15	818989.9	834419.0	33.0	5/F	Dormitory	70	62	No	61	No
TNIA_5F_16	818989.9	834428.5	33.0	5/F	Dormitory	70	64	No	64	No
TNIA_5F_17	818992.9	834433.1	33.0	5/F	Dormitory	70	65	No	65	No
TNIA_6F_01	819010.2	834428.5	36.6	6/F	Dormitory	70	72	Yes	72	Yes
TNIA_6F_02	819010.2	834419.0	36.6	6/F	Dormitory	70	72	Yes	71	Yes
TNIA_6F_03	819010.2	834409.5	36.6	6/F	Dormitory	70	71	Yes	71	Yes
TNIA_6F_04	819016.0	834398.0	36.6	6/F	Dining/Multi-purpose Area	70	69	No	68	No
TNIA_6F_05	819010.8	834396.2	36.6	6/F	Dining/Multi-purpose Area	70	68	No	67	No
TNIA_6F_06	819005.7	834394.3	36.6	6/F	Dining/Multi-purpose Area	70	68	No	67	No
TNIA_6F_07	819001.6	834392.8	36.6	6/F	Sick/Isolation Room	70	67	No	66	No
TNIA_6F_08	818999.6	834392.1	36.6	6/F	Dormitory	70	67	No	66	No
TNIA_6F_09	818990.7	834388.8	36.6	6/F	Dormitory	70	67	No	66	No
TNIA_6F_10	818981.8	834385.6	36.6	6/F	Dormitory	70	66	No	65	No
TNIA_6F_11	818976.3	834386.9	36.6	6/F	Dormitory	70	53	No	51	No
TNIA_6F_12	818974.9	834390.6	36.6	6/F	Dormitory	70	60	No	59	No
TNIA_6F_13	818980.5	834403.4	36.6	6/F	Dormitory	70	60	No	60	No
TNIA_6F_14	818983.8	834407.9	36.6	6/F	Dormitory	70	63	No	63	No
TNIA_6F_15	818989.9	834419.0	36.6	6/F	Dormitory	70	62	No	62	No
TNIA_6F_16	818989.9	834428.5	36.6	6/F	Dormitory	70	65	No	64	No
TNIA_6F_17	818992.9	834433.1	36.6	6/F	Dormitory	70	66	No	65	No
TNIA_7F_1	819010.2	834421.1	40.2	7/F	Conference Room (1)	70	72	Yes	72	Yes
TNIA_7F_2	819010.2	834416.9	40.2	7/F	Conference Room (2)	70	72	Yes	71	Yes
TNIA_7F_3	819010.2	834411.6	40.2	7/F	Superintendent's Office	70	72	Yes	71	Yes
TNIA_7F_4	819010.2	834407.4	40.2	7/F	Assistant Superintendent's Office	70	71	Yes	70	No
TNIA_7F_5	819016.0	834398.0	40.2	7/F	General Office	70	70	No	69	No
TNIA_7F_6	819010.8	834396.2	40.2	7/F	General Office	70	69	No	68	No
TNIA_7F_7	819005.7	834394.3	40.2	7/F	General Office	70	68	No	67	No
TNIA_7F_8	818983.7	834386.3	40.2	7/F	Sleep-in Room	70	67	No	66	No
TNIA_7F_9	818979.8	834384.9	40.2	7/F	Sleep-in Room	70	66	No	65	No

Summary of Overall Results	Un-mitigated Scenario	
	AM Period	PM Period
Total Number of NSRs	119	119
Number of NSRs exceed Limit Level	12	9
Compliance Rate	90%	92%

APPENDIX 3.3
DETAIL OF PROPOSED ACOUSTIC WINDOW (BAFFLE TYPE)

Appendix 3.3 - Detail of Proposed Acoustic Window (Baffle Type)





Proposed Noise Mitigation Measures [a], [b], [c]	Reference Case Room Size [c]	Outer Opening	Gap Width	Overlapping Length	With SAM Lining	Reference Case Noise Reduction[3]	NSR ID	Room Size	Relative Noise Reduction	Proposed Noise Reduction [d]
	m^2	m^2	mm	mm	-	dB(A)		m^2	dB(A)	dB(A)
Type 1 Acoustic Windows (Baffle Type)	60.1 to 68.2	5.3	100	250	Yes	4.0	TNIA_4F_01	57.7	3.3	3.3
Type 1 Acoustic Windows (Baffle Type)	60.1 to 68.2	5.3	100	250	Yes	4.0	TNIA_4F_02	57.7	3.3	3.3
Type 1 Acoustic Windows (Baffle Type)	60.1 to 68.2	5.3	100	250	Yes	4.0	TNIA_5F_01	57.7	3.3	3.3
Type 1 Acoustic Windows (Baffle Type)	60.1 to 68.2	5.3	100	250	Yes	4.0	TNIA_5F_02	57.7	3.3	3.3
Type 1 Acoustic Windows (Baffle Type)	60.1 to 68.2	5.3	100	250	Yes	4.0	TNIA_5F_03	57.7	3.3	3.3
Type 1 Acoustic Windows (Baffle Type)	60.1 to 68.2	5.3	100	250	Yes	4.0	TNIA_6F_01	57.7	3.3	3.3
Type 1 Acoustic Windows (Baffle Type)	60.1 to 68.2	5.3	100	250	Yes	4.0	TNIA_6F_02	57.7	3.3	3.3
Type 1 Acoustic Windows (Baffle Type)	60.1 to 68.2	5.3	100	250	Yes	4.0	TNIA_6F_03	57.7	3.3	3.3
Type 2 Acoustic Windows (Baffle Type)	23.3	1.4	175	340	Yes	8.1	TNIA_7F_1	29.3	8.1	3.3
Type 2 Acoustic Windows (Baffle Type)	23.3	1.4	175	340	Yes	8.1	TNIA_7F_2	29.3	8.1	3.3
Type 3 Acoustic Windows (Baffle Type)	9.8	1.2	175	340	Yes	7.1	TNIA_7F_3	9.5	7.0	3.3
Type 3 Acoustic Windows (Baffle Type)	9.8	1.2	175	340	Yes	7.1	TNIA_7F_4	9.5	7.0	3.3

Note:
(a) Type 1 Acoustic Window (Baffle Type) refers to precedent case of residential development at Lung Kui Road, Beacon Hill.
(b) Type 2 and 3 Acoustic Window (Baffle Type) refers to precedent case of San Po Kong Public Housing.
(c) For conservative approach, Maximun Room Size in Reference Case will be adopted to calulcate the Relative Noise Reduction.
(d) For conservative approach, the proposed noise reduction for all acoustic window (baffle type) will be 3.3dB(A) only.

APPENDIX 3.4

DETAIL OF TRAFFIC NOISE IMPACT ASSESSMENT RESULTS (MITIGATED SCENARIO)

Appendix 3.4 - Detail of Traffic Noise Impact Assessment Results (Mitigated Scenario)

NSR ID	Coordinates		Assessment Level	Assessment Floor	Description	Limit Level	Mitigated Scenario					
							AM Period			PM Period		
	X	Y	mPD			L10, 1hr dB(A)	Acoustic Windows (Baffle Type)	L10, 1hr dB(A)	Exceedance of Limit Level	Acoustic Windows (Baffle Type)	L10, 1hr dB(A)	Exceedance of Limit Level
TNIA_GF_01	819016.4	834398.2	13.8	G/F	Senior Housing Flat 1	70	-	62	No	-	61	No
TNIA_GF_02	819010.2	834395.9	13.8	G/F	Senior Housing Flat 2	70	-	62	No	-	61	No
TNIA_GF_03	819007.0	834394.7	13.8	G/F	Senior Housing Flat 3	70	-	62	No	-	61	No
TNIA_GF_04	819001.3	834392.7	13.8	G/F	Senior Housing Flat 4	70	-	62	No	-	61	No
TNIA_GF_05	818998.0	834391.5	13.8	G/F	Senior Housing Flat 5	70	-	62	No	-	61	No
TNIA_GF_06	818992.3	834389.4	13.8	G/F	Senior Housing Flat 6	70	-	61	No	-	60	No
TNIA_GF_07	818989.1	834388.2	13.8	G/F	Senior Housing Flat 7	70	-	61	No	-	60	No
TNIA_GF_08	818983.4	834386.2	13.8	G/F	Senior Housing Flat 8	70	-	61	No	-	60	No
TNIA_GF_09	818980.1	834385.0	13.8	G/F	Senior Housing Flat 9	70	-	61	No	-	60	No
TNIA_1F_01	819010.1	834428.5	18.6	1/F	Dormitory	70	-	67	No	-	66	No
TNIA_1F_02	819010.2	834419.0	18.6	1/F	Dormitory	70	-	66	No	-	65	No
TNIA_1F_03	819010.2	834409.5	18.6	1/F	Dormitory	70	-	66	No	-	65	No
TNIA_1F_04	819016.0	834398.0	18.6	1/F	Dining/Multi-purpose Area	70	-	65	No	-	64	No
TNIA_1F_05	819010.8	834396.2	18.6	1/F	Dining/Multi-purpose Area	70	-	64	No	-	63	No
TNIA_1F_06	819005.7	834394.3	18.6	1/F	Dining/Multi-purpose Area	70	-	64	No	-	63	No
TNIA_1F_07	819001.6	834392.8	18.6	1/F	Sick/Isolation Room	70	-	63	No	-	63	No
TNIA_1F_08	818999.6	834392.1	18.6	1/F	Dormitory	70	-	63	No	-	62	No
TNIA_1F_09	818990.7	834388.8	18.6	1/F	Dormitory	70	-	63	No	-	62	No
TNIA_1F_10	818981.8	834385.6	18.6	1/F	Dormitory	70	-	62	No	-	61	No
TNIA_1F_11	818976.3	834386.9	18.6	1/F	Dormitory	70	-	48	No	-	48	No
TNIA_1F_12	818974.9	834390.6	18.6	1/F	Dormitory	70	-	55	No	-	55	No
TNIA_1F_13	818985.0	834408.3	18.6	1/F	End of Life Care Room	70	-	58	No	-	57	No
TNIA_1F_14	818989.9	834419.0	18.6	1/F	Dormitory	70	-	58	No	-	57	No
TNIA_1F_15	818989.9	834428.5	18.6	1/F	Dormitory	70	-	60	No	-	59	No
TNIA_1F_16	818992.9	834433.1	18.6	1/F	Dormitory	70	-	61	No	-	60	No
TNIA_2F_01	819010.2	834428.5	22.2	2/F	Dormitory	70	-	69	No	-	68	No
TNIA_2F_02	819010.2	834419.0	22.2	2/F	Dormitory	70	-	69	No	-	68	No
TNIA_2F_03	819010.2	834409.5	22.2	2/F	Dormitory	70	-	68	No	-	67	No
TNIA_2F_04	819016.0	834398.0	22.2	2/F	Dining/Multi-purpose Area	70	-	67	No	-	66	No
TNIA_2F_05	819010.8	834396.2	22.2	2/F	Dining/Multi-purpose Area	70	-	66	No	-	65	No
TNIA_2F_06	819005.7	834394.3	22.2	2/F	Dining/Multi-purpose Area	70	-	65	No	-	64	No
TNIA_2F_07	819001.6	834392.8	22.2	2/F	Sick/Isolation Room	70	-	65	No	-	64	No
TNIA_2F_08	818999.6	834392.1	22.2	2/F	Dormitory	70	-	65	No	-	64	No
TNIA_2F_09	818990.7	834388.8	22.2	2/F	Dormitory	70	-	64	No	-	63	No
TNIA_2F_10	818981.8	834385.6	22.2	2/F	Dormitory	70	-	63	No	-	62	No
TNIA_2F_11	818976.3	834386.9	22.2	2/F	Dormitory	70	-	49	No	-	48	No
TNIA_2F_12	818974.9	834390.6	22.2	2/F	Dormitory	70	-	56	No	-	56	No
TNIA_2F_13	818980.5	834403.4	22.2	2/F	Dormitory	70	-	56	No	-	56	No
TNIA_2F_14	818983.8	834407.9	22.2	2/F	Dormitory	70	-	60	No	-	59	No
TNIA_2F_15	818989.9	834419.0	22.2	2/F	Dormitory	70	-	60	No	-	59	No
TNIA_2F_16	818989.9	834428.5	22.2	2/F	Dormitory	70	-	62	No	-	61	No
TNIA_2F_17	818992.9	834433.1	22.2	2/F	Dormitory	70	-	63	No	-	62	No
TNIA_3F_01	819010.2	834428.5	25.8	3/F	Dormitory	70	-	70	No	-	70	No
TNIA_3F_02	819010.2	834419.0	25.8	3/F	Dormitory	70	-	70	No	-	69	No
TNIA_3F_03	819010.2	834409.5	25.8	3/F	Dormitory	70	-	69	No	-	69	No
TNIA_3F_04	819016.0	834398.0	25.8	3/F	Dining/Multi-purpose Area	70	-	68	No	-	67	No
TNIA_3F_05	819010.8	834396.2	25.8	3/F	Dining/Multi-purpose Area	70	-	67	No	-	66	No
TNIA_3F_06	819005.7	834394.3	25.8	3/F	Dining/Multi-purpose Area	70	-	66	No	-	65	No
TNIA_3F_07	819001.6	834392.8	25.8	3/F	Sick/Isolation Room	70	-	66	No	-	65	No
TNIA_3F_08	818999.6	834392.1	25.8	3/F	Dormitory	70	-	66	No	-	65	No
TNIA_3F_09	818990.7	834388.8	25.8	3/F	Dormitory	70	-	65	No	-	64	No
TNIA_3F_10	818981.8	834385.6	25.8	3/F	Dormitory	70	-	64	No	-	63	No
TNIA_3F_11	818976.3	834386.9	25.8	3/F	Dormitory	70	-	50	No	-	49	No
TNIA_3F_12	818974.9	834390.6	25.8	3/F	Dormitory	70	-	58	No	-	57	No
TNIA_3F_13	818980.5	834403.4	25.8	3/F	Dormitory	70	-	58	No	-	57	No
TNIA_3F_14	818983.8	834407.9	25.8	3/F	Dormitory	70	-	61	No	-	61	No
TNIA_3F_15	818989.9	834419.0	25.8	3/F	Dormitory	70	-	61	No	-	60	No
TNIA_3F_16	818989.9	834428.5	25.8	3/F	Dormitory	70	-	63	No	-	62	No
TNIA_3F_17	818992.9	834433.1	25.8	3/F	Dormitory	70	-	64	No	-	63	No
TNIA_4F_01	819010.2	834428.5	29.4	4/F	Dormitory	70	Type 1	68	No	Type 1	67	No
TNIA_4F_02	819010.2	834419.0	29.4	4/F	Dormitory	70	Type 1	67	No	Type 1	67	No
TNIA_4F_03	819010.2	834409.5	29.4	4/F	Dormitory	70	-	70	No	-	69	No
TNIA_4F_04	819016.0	834398.0	29.4	4/F	Dining/Multi-purpose Area	70	-	69	No	-	68	No
TNIA_4F_05	819010.8	834396.2	29.4	4/F	Dining/Multi-purpose Area	70	-	68	No	-	67	No
TNIA_4F_06	819005.7	834394.3	29.4	4/F	Dining/Multi-purpose Area	70	-	67	No	-	66	No
TNIA_4F_07	819001.6	834392.8	29.4	4/F	Sick/Isolation Room	70	-	67	No	-	66	No
TNIA_4F_08	818999.6	834392.1	29.4	4/F	Dormitory	70	-	67	No	-	66	No
TNIA_4F_09	818990.7	834388.8	29.4	4/F	Dormitory	70	-	66	No	-	65	No
TNIA_4F_10	818981.8	834385.6	29.4	4/F	Dormitory	70	-	65	No	-	64	No
TNIA_4F_11	818976.3	834386.9	29.4	4/F	Dormitory	70	-	51	No	-	50	No
TNIA_4F_12	818974.9	834390.6	29.4	4/F	Dormitory	70	-	59	No	-	58	No
TNIA_4F_13	818980.5	834403.4	29.4	4/F	Dormitory	70	-	59	No	-	58	No
TNIA_4F_14	818983.8	834407.9	29.4	4/F	Dormitory	70	-	62	No	-	62	No
TNIA_4F_15	818989.9	834419.0	29.4	4/F	Dormitory	70	-	61	No	-	61	No
TNIA_4F_16	818989.9	834428.5	29.4	4/F	Dormitory	70	-	64	No	-	63	No
TNIA_4F_17	818992.9	834433.1	29.4	4/F	Dormitory	70	-	65	No	-	64	No
TNIA_5F_01	819010.2	834428.5	33.0	5/F	Dormitory	70	Type 1	69	No	Type 1	68	No
TNIA_5F_02	819010.2	834419.0	33.0	5/F	Dormitory	70	Type 1	68	No	Type 1	67	No
TNIA_5F_03	819010.2	834409.5	33.0	5/F	Dormitory	70	Type 1	68	No	Type 1	67	No
TNIA_5F_04	819016.0	834398.0	33.0	5/F	Dining/Multi-purpose Area	70	-	69	No	-	68	No

Appendix 3.4 - Detail of Traffic Noise Impact Assessment Results (Mitigated Scenario)

NSR ID	Coordinates		Assessment Level	Assessment Floor	Description	Limit Level	Mitigated Scenario					
							AM Period			PM Period		
	X	Y	mPD			L10, 1hr dB(A)	Acoustic Windows (Baffle Type)	L10, 1hr dB(A)	Exceedance of Limit Level	Acoustic Windows (Baffle Type)	L10, 1hr dB(A)	Exceedance of Limit Level
TNIA_5F_05	819010.8	834396.2	33.0	5/F	Dining/Multi-purpose Area	70	-	68	No	-	67	No
TNIA_5F_06	819005.7	834394.3	33.0	5/F	Dining/Multi-purpose Area	70	-	67	No	-	67	No
TNIA_5F_07	819001.6	834392.8	33.0	5/F	Sick/Isolation Room	70	-	67	No	-	66	No
TNIA_5F_08	818999.6	834392.1	33.0	5/F	Dormitory	70	-	67	No	-	66	No
TNIA_5F_09	818990.7	834388.8	33.0	5/F	Dormitory	70	-	66	No	-	65	No
TNIA_5F_10	818981.8	834385.6	33.0	5/F	Dormitory	70	-	66	No	-	65	No
TNIA_5F_11	818976.3	834386.9	33.0	5/F	Dormitory	70	-	51	No	-	50	No
TNIA_5F_12	818974.9	834390.6	33.0	5/F	Dormitory	70	-	59	No	-	59	No
TNIA_5F_13	818980.5	834403.4	33.0	5/F	Dormitory	70	-	59	No	-	59	No
TNIA_5F_14	818983.8	834407.9	33.0	5/F	Dormitory	70	-	63	No	-	62	No
TNIA_5F_15	818989.9	834419.0	33.0	5/F	Dormitory	70	-	62	No	-	61	No
TNIA_5F_16	818989.9	834428.5	33.0	5/F	Dormitory	70	-	64	No	-	64	No
TNIA_5F_17	818992.9	834433.1	33.0	5/F	Dormitory	70	-	65	No	-	65	No
TNIA_6F_01	819010.2	834428.5	36.6	6/F	Dormitory	70	Type 1	69	No	Type 1	68	No
TNIA_6F_02	819010.2	834419.0	36.6	6/F	Dormitory	70	Type 1	69	No	Type 1	68	No
TNIA_6F_03	819010.2	834409.5	36.6	6/F	Dormitory	70	Type 1	68	No	Type 1	67	No
TNIA_6F_04	819016.0	834398.0	36.6	6/F	Dining/Multi-purpose Area	70	-	69	No	-	68	No
TNIA_6F_05	819010.8	834396.2	36.6	6/F	Dining/Multi-purpose Area	70	-	68	No	-	67	No
TNIA_6F_06	819005.7	834394.3	36.6	6/F	Dining/Multi-purpose Area	70	-	68	No	-	67	No
TNIA_6F_07	819001.6	834392.8	36.6	6/F	Sick/Isolation Room	70	-	67	No	-	66	No
TNIA_6F_08	818999.6	834392.1	36.6	6/F	Dormitory	70	-	67	No	-	66	No
TNIA_6F_09	818990.7	834388.8	36.6	6/F	Dormitory	70	-	67	No	-	66	No
TNIA_6F_10	818981.8	834385.6	36.6	6/F	Dormitory	70	-	66	No	-	65	No
TNIA_6F_11	818976.3	834386.9	36.6	6/F	Dormitory	70	-	53	No	-	51	No
TNIA_6F_12	818974.9	834390.6	36.6	6/F	Dormitory	70	-	60	No	-	59	No
TNIA_6F_13	818980.5	834403.4	36.6	6/F	Dormitory	70	-	60	No	-	60	No
TNIA_6F_14	818983.8	834407.9	36.6	6/F	Dormitory	70	-	63	No	-	63	No
TNIA_6F_15	818989.9	834419.0	36.6	6/F	Dormitory	70	-	62	No	-	62	No
TNIA_6F_16	818989.9	834428.5	36.6	6/F	Dormitory	70	-	65	No	-	64	No
TNIA_6F_17	818992.9	834433.1	36.6	6/F	Dormitory	70	-	66	No	-	65	No
TNIA_7F_1	819010.2	834421.1	40.2	7/F	Conference Room (1)	70	Type 2	69	No	Type 2	68	No
TNIA_7F_2	819010.2	834416.9	40.2	7/F	Conference Room (2)	70	Type 2	69	No	Type 2	68	No
TNIA_7F_3	819010.2	834411.6	40.2	7/F	Superintendent's Office	70	Type 3	69	No	Type 3	68	No
TNIA_7F_4	819010.2	834407.4	40.2	7/F	Assistant Superintendent's Office	70	Type 3	67	No	Type 3	67	No
TNIA_7F_5	819016.0	834398.0	40.2	7/F	General Office	70	-	70	No	-	69	No
TNIA_7F_6	819010.8	834396.2	40.2	7/F	General Office	70	-	69	No	-	68	No
TNIA_7F_7	819005.7	834394.3	40.2	7/F	General Office	70	-	68	No	-	67	No
TNIA_7F_8	818983.7	834386.3	40.2	7/F	Sleep-in Room	70	-	67	No	-	66	No
TNIA_7F_9	818979.8	834384.9	40.2	7/F	Sleep-in Room	70	-	66	No	-	65	No

Summary of Overall Results	Un-mitigated Scenario	
	AM Period	PM Period
Total Number of NSRs	119	119
Number of NSRs exceed Limit Level	0	0
Compliance Rate	100%	100%

APPENDIX 4.1
EXTRACTED PAGES OF FEP-24/004/1998/K

ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE
(CHAPTER 499)
SECTIONS 10 AND 13
環境影響評估條例
(第499章)
第**10**條 及**13**條

FURTHER ENVIRONMENTAL PERMIT TO CONSTRUCT AND OPERATE A DESIGNATED PROJECT
建造及營辦指定工程項目的新的環境許可證

PART A (MAIN PERMIT)
A部 **(**許可證主要部分**)**

Pursuant to Sections 10 and 12 of the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection (the Director) granted the Further Environmental Permit (No. FEP-24/004/1998/J) to the MTR Corporation Limited (hereinafter referred to as the "Permit Holder") on 21 October 2013. Pursuant to Section 13 of the EIAO, the Director amends the Further Environmental Permit (No. FEP-24/004/1998/J) based on the Application No. VEP-622/2022. The amendments, described below, are incorporated into this Further Environmental Permit (No. FEP-24/004/1998/K). This Further Environmental Permit as amended is for the construction and operation of the designated project described in Part B subject to the conditions specified in Part C. The issue of this Further Environmental Permit is based on the documents, approvals or permissions described below:

根據《環境影響評估條例》(環評條例) 第10條及12條的規定，環境保護署署長(署長)於2013年10月21日將新的環境許可證 (編號：FEP-24/004/1998/J) 批予香港鐵路有限公司 (下稱"許可證持有人")。根據環評條例第13條的規定，署長因應更改環境許可證的申請編號：VEP-622/2022修訂環境許可證(編號：FEP-24/004/1998/J)。以下修訂已包含在本新的環境許可證內 (編號：FEP-24/004/1998/K)。本經修訂的新的環境許可證作為建造及營辦B部 所說明的指定工程項目，但須遵守C部 所列明的條件。本新的環境許可證的發出，乃以下表所列的文件、批准或許可作為根據:

Application No. 申請書編號**:**	VEP-622/2022
Documents in the Register : 登記冊上的文件**:**	(a) West Rail - Final Assessment Report West Kowloon to Tuen Mun Centre - Environmental Impact Assessment, its Technical Annexes, and Final Landscape Design Strategy, Report Vol.1 (Register No. EIA-149/1998) [Hereafter referred to as the EIA report] (b) Application documents submitted by Permit Holder including all attachments on 19 August 1998 (Application No. AEP-004/1998) (c) Environmental Permit issued on 16 September 1998 (Permit No. EP- 004/1998) (d) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 21 July 2000. (Application No. VEP-020/2000) (e) Environmental Permit issued on 18 August 2000 (Permit No. VEP- 020/2000/A/EP-004)

(II)The Application for Variation No. VEP-078/2002 with respect to

更改環境許可證申請書編號 VEP-078/2002就

(b) revision of location of noise barriers at West Rail Depot;

更改位於西鐵車廠的隔音屏障的位置；

(III)The Application for Variation No. VEP-067/2002 with respect to

更改環境許可證申請書編號 VEP-067/2002就

(c) revision of the 86m long full noise enclosure at Tuen Mun Station to semi-noise enclosure; and provide additional enclosure on the north of this enclosure;

位於屯門站86米長全密封的隔音罩修改至半密封的隔音罩；及在隔音罩北面提供額外的隔音罩；

(IV)The Application for Variation No. VEP-062/2002 with respect to

更改環境許可證申請書編號 VEP-062/2002就

(d) increase in the elevation of viaduct by approximately 8m at Yick Yuen;

增加位於亦園的高架鐵路的高度約8米；

(V) The Application for Variation No. VEP-045/2001 with respect to

更改環境許可證申請書編號 VEP-045/2001就

(e) reduction of train length from 12 cars to 9 cars with increase in train frequency from 30 to 40 trains per hour during 0600 to 0700;

時期間增加列車班次，由每小時 30 班增至每小時 40 班；

(f) reduction of train speed between Tin Shui Wai and Siu Hong from 130km/h to 100km/h;

減低天水圍至兆康一段的車速，由每小時 130公里減至每小時100 公里；

(g) revised locations of noise enclosure and additional height noise barriers at the north of Kam Sheung Road Station, near Pok Oi Hospital, the west of Long Ping Station, the west of Tin Shui Wai Station, Tin Sam Tsuen to Lam Tei and Tuen Mun;

在錦上路站北面近博愛醫院、朗屏站西面、天水圍站西面、田心村至藍地和屯門更改隔音罩的位置，並加高隔音屏障；

(VI) The Application for Variation No. VEP-020/2000

更改環境許可證申請書編號 VEP-020/2000就

(h) the construction method for the Tsing Tsuen Tunnel;

青荃隧道的建造方法；

(i) the revised alignment in Tsuen Wan;

(II) The Application for Variation No. VEP-078/2002 with respect to

更改環境許可證申請書編號 VEP-078/2002就

(b) revision of location of noise barriers at West Rail Depot;

更改位於西鐵車廠的隔音屏障的位置；

(III) The Application for Variation No. VEP-067/2002 with respect to

更改環境許可證申請書編號 VEP-067/2002就

(c) revision of the 86m long full noise enclosure at Tuen Mun Station to semi-noise enclosure; and provide additional enclosure on the north of this enclosure;

位於屯門站86米長全密封的 隔音罩修改至半 密封的 隔音罩；及 在 隔音罩北面提 供 額 外 的 隔音罩；

(IV) The Application for Variation No. VEP-062/2002 with respect to

更改環境許可證申請書編號VEP-062/2002就

(d) increase in the elevation of viaduct by approximately 8m at Yick Yuen;

增加位於亦園的高架鐵路的高度約8米；

(V) The Application for Variation No. VEP-045/2001 with respect to

更改環境許可證申請書編號 VEP-045/2001就

(e) reduction of train length from 12 cars to 9 cars with increase in train frequency from 30 to 40 trains per hour during 0600 to 0700;

縮減火車的長度，由12節車廂減至9節車廂，並在上午6時至7時期間增加列車班次，由每小時30班增至每小時40班；

(f) reduction of train speed between Tin Shui Wai and Siu Hong from 130km/h to 100km/h;

減低天水圍至兆康一段的車速，由每小時130公里減至每小時100公里；

(g) revised locations of noise enclosure and additional height noise barriers at the north of Kam Sheung Road Station, near Pok Oi Hospital, the west of Long Ping Station, the west of Tin Shui Wai Station, Tin Sam Tsuen to Lam Tei and Tuen Mun;

在錦上路站北面近博愛醫院、朗屏站西面、天水圍站西面、田心村至藍地和屯門更改隔音罩的位置，並加高隔音屏障；

(VI) The Application for Variation No. VEP-020/2000

更改環境許可證申請書編號 VEP-020/2000就

(h) the construction method for the Tsing Tsuen Tunnel;

青荃隧道的建造方法；

按照上述第 2及第 3條，經批准的提交文件或存放的提交文件內說明的各項設計或營運措施，必須完全執行。

5.2 In accordance with the information and recommendations contained in the EIA Report [ref: register no EIA 149/1998], the information contained in the Application for Variation No. VEP-020/2000, Environmental Permit No. VEP-020/2000/A/EP-004, Application for Variation No. VEP-045/2001, Environmental Permit No. EP-004/1998/B, Application for Variation No. VEP-062/2002, Environmental Permit No. EP-004/1998/C, Application for Variation No. VEP-067/2002, Environmental Permit No. EP-004/1998/D, Application for Variation No. VEP-078/2002, Environmental Permit No. EP- 004/1998/E, Application for Variation No. VEP-084/2003, Environmental Permit No. EP-004/1998/F, Application for Variation No. VEP-122/2003 and any approved supplementary information arising therefrom, the Permit Holder shall submit an Operational Environmental Monitoring and Audit (EM&A) Manual for the approval by the Director prior to the commissioning of the project. The Operational EM&A Manual shall satisfy the requirements as prescribed in section 10, SCHEDULE 4 of the Environmental Impact Assessment Ordinance and Annex 21 of the Technical Memorandum on Environmental Impact Assessment Process. The Operational EM&A Manual shall be certified by the Environmental Manager and verified by the Independent Environmental Checker before submission to the Director. In particular, the requirements on landfill gas hazard monitoring, maintenance, precautionary and emergency measures, with reference to Annex E, shall be included. (See Note 6).

依據環評報告 [登記冊檔案 :EIA 149/1998] 所載的資料及建議，編號 VEP-020/2000之更改環境許可證申請書，環境許可證編號 VEP-020/2000/A/EP-004 ，編號 VEP-045/2001之更改環境許可證申請書，環境許可證編號 EP-004/1998/B ，編號 VEP-062/2002之更改環境許可證申請書，環境許可證編號 EP-004/1998/C ，編號 VEP-067/2002之更改環境許可證申請書，環境許可證編號EP-004/1998/D ，編號 VEP-078/2002之更改環境許可證申請書 , 環境許可證編號EP-004/1998/E ，編號 VEP-084/2003之更改環境許可證申請書 , 環境許可證編號 EP-004/1998/F ，編號 VEP- 0122/2003之更改環境許可證申請書的資料和任何已批核的附加資料所載資料及建議，許可證持有人須在工程項目投入運作前，向署長提交營運的環境監察及審核手冊，以待批准。該手冊須符合環境評估條例附表 4第 10條載列的規定，以及環境影響評估程序的技術備忘錄附件 21的規定。該手冊在提交署長前，須由環境經理證明，並由獨立環境查核人核證。該手冊尤須包括參照附件E而就堆填區沼氣危險監測、保養、預防及緊急應變措施所訂定的規定。 (見註 6)

5.3 Prior to the operation of the Project, the Permit Holder shall submit to the satisfaction of the Director a proposal for performance test(s) to illustrate that the 9-car disc braked Electric Multiple Unit train would meet the specification of maximum level (Lmax) not exceeding 82.5dB(A) at 130kph measured at 25m from the at-grade ballasted tracks. The performance test proposal shall be certified by the Environmental Manager and verified by the Independent Environmental Checker.

許可證持有人在營辦工程項目前，須向署長提交令其滿意的效能測試建議，以說明當 9 卡碟形制動電氣化列車在地面上的鋪道碴路軌上以時速 130公里行駛時，在 25米距離，測量所得的噪音量會符合不超逾 82.5分貝 (A) 的最高聲級規格。該效能測試建議須由環境經理證明，並由獨立環境查核人核證。

5.4 Prior to the operation of the Project, the Permit Holder shall submit to the satisfaction of the Director a report on performance test of the disc braked Electric Multiple Unit train on the basis of condition 5.3. The performance test report shall be certified by the Environmental Manager and verified by the Independent Environmental Checker.

許可證持有人在營辦工程項目前，須向署長提交以第 5.3項條件為基礎關於碟形制動電氣化列車效能測試的報告，並令署長滿意。效能測試報告須由環境經理證明，並由獨立環境查核人核證。

5.5 For the Southern Section, the railway shall be fully contained in a box structure and covered by a landscaped earth mound in accordance with the information and recommendations contained in the EIA Report [ref: register no EIA 149/1998].

南段的鐵路須依據環評報告 [登記冊檔案 :EIA 149/1998]所載的資料及建議，完全藏於箱形構築物內，再以景觀美化的土墩覆蓋。

5.10 Ventilation intakes for Kam Tin Station and the shops and offices there should be located at as high a level as reasonably practicable and should be substantially enclosed.

錦田站及該處店舖和寫字樓的通風入口，應在合理可行的情況下盡量設於較高位置，並應盡量圍封。

5.11 Before operation of the Project, the Permit Holder shall carry out an audit to confirm that all the agreed environmental measures for the Project's operation have been fully implemented. The audit shall cover all measures recommended in the EIA Report [ref: register no EIA 149/1998], described in submissions approved, or deposited with the Director under section 2, section 3, and section 5 of this Permit. The result of the audit shall be documented in an Audit Report and submitted to the Director prior to operation of the Project. The audit Report shall be certified by the Environmental Manager and verified by the Independent Environmental Checker as conforming to the findings and recommendations of the EIA Report [ref: register no EIA 149/1998], the information contained in the Application for Variation No. VEP-020/2000, Environmental Permit No. VEP-020/2000/A/EP-004, Application for Variation No. VEP- 045/2001, Environmental Permit No. EP-004/1998/B, Application for Variation No. VEP-062/2002, Environmental Permit No. EP-004/1998/C, Application for Variation No. VEP-067/2002, Environmental Permit No. EP-004/1998/D, Application for Variation No. VEP-078/2002, Environmental Permit No. EP-004/1998/E, Application for Variation No. VEP-084/2003 and any submissions approved or deposited with the Director. (See Note 6).

許可證持有人須在營辦工程項目前進行審核，以確定已完全執行各項為營辦工程項目而同意的環境措施。審核須包括環評報告 [登記冊檔案 :EIA 149/1998]建議的各項措施，以及按照本許可證第 2、 3及 5條經批准提交的文件或向署長存放的文件所載明的各項措施。審核結果須記錄於審核報告內，並在營辦工程項目前提交給署長。審核報告須由環境經理證明，並由獨立環境查核人核證，以確定符合環評報告 [登記冊檔案 :EIA 149/1998]，編號 VEP-020/2000之更改環境許可證申請書的資料，環境許可證編號 VEP-020/2000/A/EP-004 ，編號 VEP-045/2001之更改環境許可證申請書，環境許可證編號 EP-004/1998/B ，編號 VEP-062/2002之更改環境許可證申請書，環境許可證編號 EP-004/1998/C ，編號 VEP-067/2002之更改環境許可證申請書，環境許可證編號 EP-004/1998/D ，編號 VEP-078/2002之更改環境許可證申請書 , 環境許可證編號 EP-004/1998/E ，編號 VEP-084/2003之更改環境許可證申請書的資料和任何已批核的附加資料的結果及建議。

5.12 All finalised submissions, as required under this part of the Permit, shall be released to the public by depositing copies in the Environmental Impact Assessment Ordinance Register Office or any other places or by any other means as specified by the Director for public inspection. For this purpose, the Permit Holder shall provide sufficient copies of submissions.

所有按本許可證本部規定提交的文件定稿，須公開給公眾人士知道，方法是將有關文件副本存放於環境影響評估條例登記冊辦事處或署長所指定的任何地方或任何方法，以供公眾查閱。因此，許可證持有人須提交足夠數量的文件副本。

5.13 Five sets of as-built drawings of scale 1 to 1000 with an explanatory statement showing the alignment and mitigation measures covered by this Permit, shall be deposited to the Director within three months after the completion of construction of each of the Southern, Central, Northern and Western sections.

須於南段、中段、北段及西段每項建造工程竣工 3個月內，向署長存放 5套 1:1000比例的竣工圖連同解釋說明，示明本許可證涵蓋的路線及緩解措施。

5.14 All measures specified in Table A of Schedule 1 shall be implemented in accordance with the information contained in the Application for Variation No. VEP-122/2003, and the details and the time frame specified in the Schedule 1 of this Permit.

附表1表A列明的各項措施，須按照更改環境許可證申請書編號VEP-122/2003內載的資料及本許可證附表1列明的詳情及時間表執行。

5.15 All measures specified in Schedule 2 shall be implemented in accordance with the information contained in the Application for Variation No. VEP-622/2022, and the details and the time frame specified in the Schedule 2 of this Permit.

附表2列明的各項措施，須按照更改環境許可證申請書編號VEP-622/2022內載的資料及本許可證附表2列明的詳情及時間表執行。

6. Environmental Mitigation Measures during Operation Period
營辦期間的環境緩解措施

6.1 The maximum train speed shall be 130km/hr except for train speed between Tin Shui Wai and Siu Hong which is reduced to 100km/hr. Prior to any increase in train frequency, train length and speed with respect to the initial start-up, a noise assessment report shall be submitted and obtain approval from the Director. The noise assessment is to evaluate the adequacy of noise mitigation measures and develop enhancement programmes. Before its submission to the Director, the noise assessment report shall be certified by the Environmental Manager and verified by the Independent Environmental Checker. All measures recommended in the approved noise assessment report Plan shall be fully implemented in accordance with the requirements and time schedules set out in the report.

列車的最高時速為130公里。如以最初通車的情況作基準擬增加列車班次、列車長度或速度，之前須向署長提交噪音評估報告，以待批准。噪音評估作用是評估噪音緩解措施是否足夠，並制訂改善計劃。噪音評估報告提交予署長前，須由環境經理證明，並由獨立環境查核人核證。經批准的噪音評估報告計劃所列舉的各項建議措施，須完全按報告載列的規定及時間表執行。

6.2 In line with the commitment made by the Permit Holder, the multi-plenum system should be designed to provide the flexibility for future enhancement so that edge wall barrier heights can be incrementally extended for increased noise attenuation from 1.2 m upto full enclosure. This is to provide greater flexibility in the long term land use planning of areas through which the Project passes and will facilitate, as yet uncommitted, developments, to be considered in much closer proximity to the railway than would otherwise be the case.

為符合許可證持有人作出的承諾，多重充氣空間系統的設計應該具備彈性，可供將來增大，使圍牆屏障的高度可以由 1.2米逐步提高，以至全面圍封，從而提高消減噪音的效能。這樣可為工程項目所經過的地區的長遠土地用途規劃，提供較大的彈性，並使未承諾的發展項目有較大可能獲考慮在較貼近鐵路的地方興建。

6.3 In accordance with the information and recommendations contained in the EIA Report [ref: register no EIA 149/1998] and Annex F, measures to mitigate the water quality impact during operation shall be implemented.

營辦期間水質影響的緩解措施，須按照環評報告 [登記冊檔案 :EIA 149/1998]及附件F的資料及建議執行。

6.4 Before public sewerage becomes available in Hung Shui Kiu and Kam Tin, waste water and sewage arising from the proposed HSK Station, Kam Tin Station, KCRC Head Quarter and West Rail Depot (WRD) shall be collected at holding tanks and transported to Yuen Long Sewage Treatment Works or any sewage treatment facilities as agreed with Drainage Services Department by road tanker for off-site treatment. Once public sewerage is available in Hung Shui Kiu and Kam Tin, waste water and sewage arising from the proposed HSK Station, Kam Tin Station, KCRC Head Quarter Building and WRD shall be redirected to discharge directly to the public sewer. Waste water and sewage arising from uses other than the four above, including stations, railway premises, depots and ancillary uses, shall be conveyed to public sewer after any pre-treatment.

在洪水橋及錦田提供公共排污設備前，建議中的洪水橋站、錦田站、九廣鐵路總部及西鐵車廠所排出的廢水及污水，須收集在貯存池，再以車輛運往元朗污水處理廠或其他渠務署同意的污水處理設施作場外處理。洪水橋及錦田設有公共排污設備後，建議中的洪水橋站、錦田站、九廣鐵路總部大樓及西鐵車廠所排出的廢水及污水，須改道直接排入公共污水渠。除上述4處以外，其他用地 (包括車站、鐵路範圍、車廠及輔助用途)所排出的廢水及污水，須經預處理後引入公共污水渠。

6.5 The Permit Holder shall fully implement the EM&A requirements as set out in the Operational Manual approved under condition 5.2. Any changes to the EM&A arrangement shall be justified by the

設置衞生設備及排水系統時，須參考有關須經由環境保護署評論的排水渠圖則事宜的《專業人士環保事務諮詢委員會專業守則 5/93》。

Schedule 1. Alternative Noise Mitigation Measures at Different Locations of the Project

附表**1.** 工程項目各處地點的替代消減噪音措施

Table A

The Permit Holder shall complete the measures specified in the following table to a large extent before the operation of the Project. Any outstanding details shall be completed no later than 2 weeks after the operation of the Project.

Locations	Alternatives
Kam Sheung Road Station	(a) Windshields shall be extended above the top of the parapet walls as shown in Figure 7; and (b) Trackside panels shall be installed above the parapet walls as shown in Figure 7
Yuen Long Station	Down track (track from Tuen Mun to Kowloon) (a) All rail/track sections within the station to be fully enclosed Up track (track from Kowloon to Tuen Mun) (a) Windshields shall be extended above the top of the parapet walls as shown in Figure 5; (b) Trackside panels shall be installed with the lower part incorporated with the absorptive lining as shown in Figure 5; and (c) Acoustic louvers to be implemented for all openings on the outboard side at the location as shown in Figure 6
Long Ping Station	(a) Windshields shall be extended above the top of the parapet walls as shown in Figure 7; (b) Trackside panels shall be installed above the parapet walls as shown in Figure 7; (c) Uptrack section to be fully enclosed at the location as shown in Figure 8, except the vertical gap between the enclosure and the plant room at the back of the station; (d) 2m high barrier above the top of the parapet walls extending from the noise enclosure to be implemented at the location as shown in Figure 8; and (e) Plenum enhancement along the up and down tracks to be implemented as shown in Figure 9 and at the location as shown in Figure 8
Tin Shui Wai Station	(a) Windshields shall be extended above the top of the parapet walls as shown in Figure 7; (b) Trackside panels shall be installed above the parapet walls as shown in Figure 7; and (c) Plenum enhancement along the down track to be implemented as shown in Figure 9 and at the location as shown in Figure 10
Siu Hong Station	(a) All rail/track sections within the staiton to be fully enclosed
Tuen Mun Station	(a) All rail/track sections within the station to be fully enclosed

Viaduct Section	(a) Plenum enhancement along the up and down tracks at the locations as shown in Figure 11 and Figure 12

表A

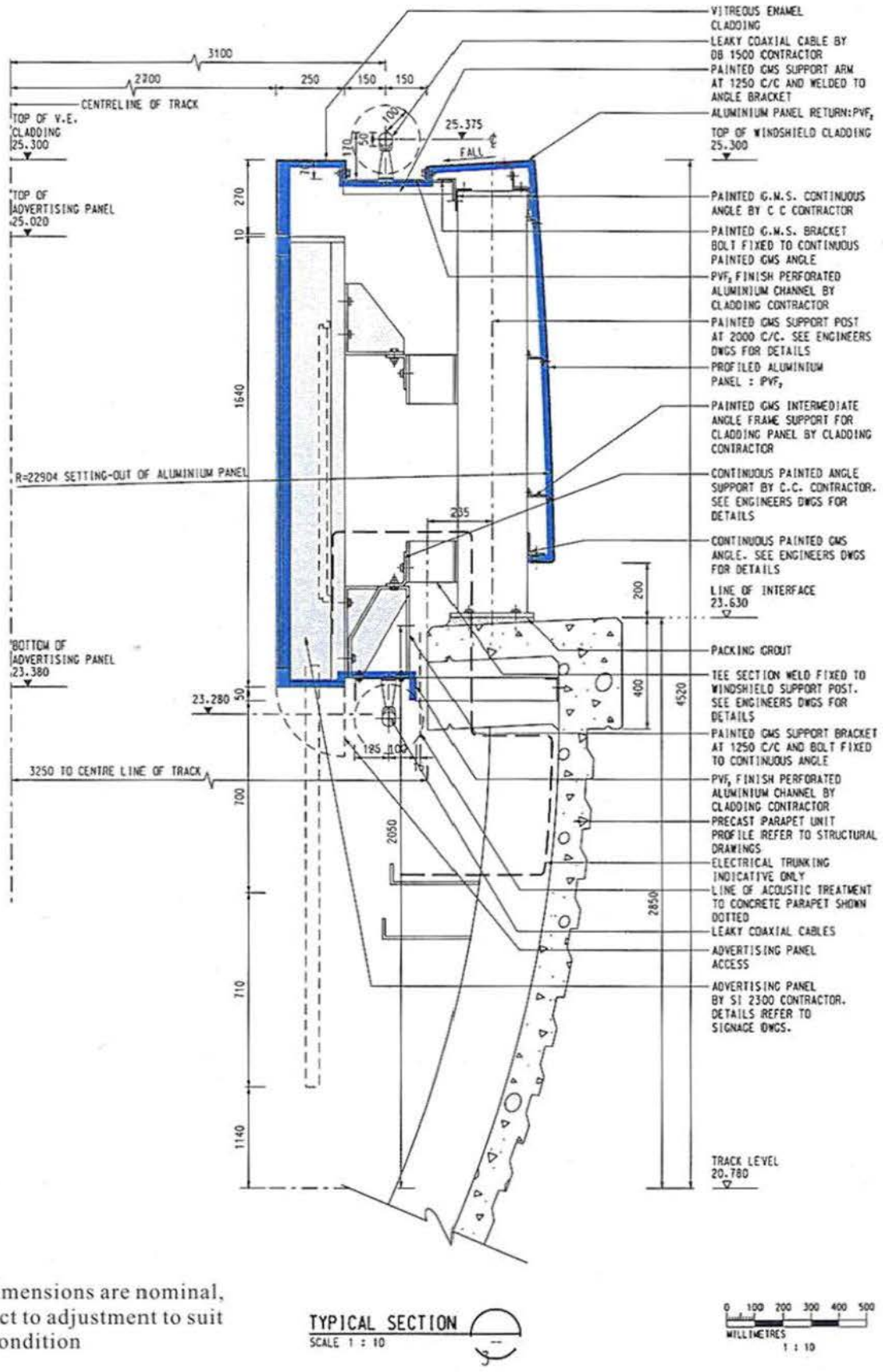
許可證持有人須在營辦工程項目前，在很大程度上完成下表訂明的措施，並須在營辦工程項目後2個星期內完成餘下部分。

地點	替代措施
錦上路站	(a) 風擋須延伸至圖7所示的護牆頂上；以及 (b) 須在圖7所示的護牆上安裝路軌旁板
元朗站	下行路軌 (屯門至九龍) (a) 車站內的全部鐵路 / 路軌均須完全密封 上行路軌 (九龍至屯門) (a) 風擋須延伸至圖5所示的護牆頂上； (b) 須按圖5所示安裝路軌旁板，而旁板的下部分須設有吸音墊；以及 (c) 須在圖6所示位置外側的所有孔口安裝隔音百葉板窗
朗屏站	(a) 風擋須延伸至圖7所示的護牆頂上； (b) 須在圖7所示的護牆上安裝路軌旁板； (c) 圖8所示位置的上行路段須完全密封，車站後面隔音罩與機房之 間的垂直縫隙則除外； (d) 按圖8所示位置，由隔音罩開始在護牆頂上設置2米高的隔音屏 障；以及 (e) 按圖9所示及在圖8所示位置，沿上下行路軌進行隔音氣室改善 工程
天水圍站	(a) 風擋須延伸至圖7所示的護牆頂上； (b) 須在圖7所示的護牆上安裝路軌旁板；以及 (c) 按圖9所示及在圖10所示位置，沿下行路軌進行隔音氣室改善工程
兆康站	(a) 車站內的全部鐵路 / 路軌均須完全密封
屯門站	(a) 車站內的全部鐵路 / 路軌均須完全密封
高架路段	(a) 在圖11及12所示位置，沿上下行路軌進行隔音氣室改善工程

Table B

The Permit Holder shall fully implement the measure specified in the following table within 6 months after the operation of the Project.

Locations	Alternatives
Tin Shui Wai Station	2m high cranked noise barrier above the top of the parapet walls at the down track section to be implemented at the location as shown in Figure 10 and Figure 15



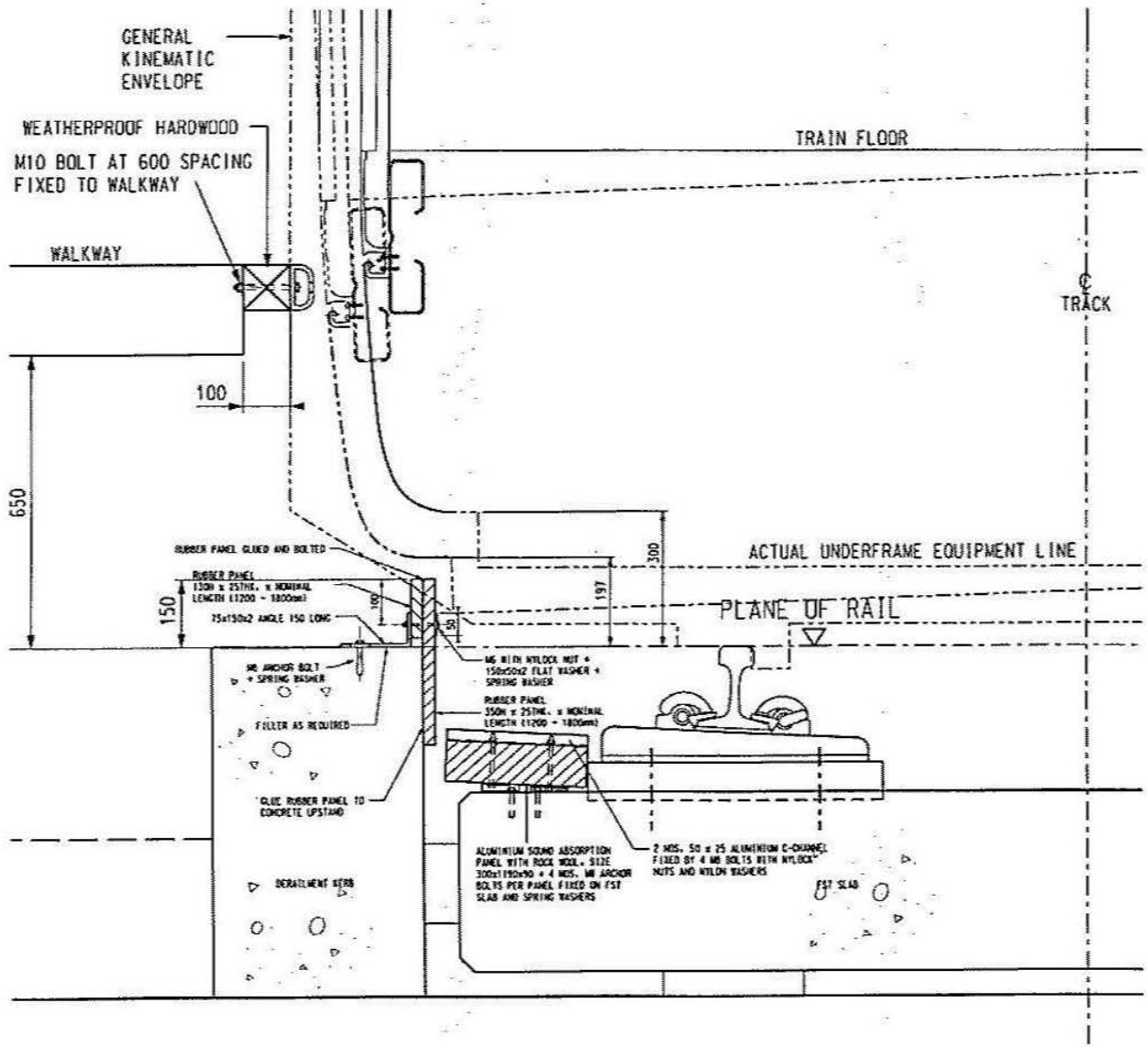
* All dimensions are nominal, subject to adjustment to suit site condition

TYPICAL SECTION
SCALE 1 : 10

0 100 200 300 400 500
MILLIMETRES
1 : 10

Figure 7 - Trackside Panels and Windshields at the Kam Sheung Road Station, Long Ping Station and Tin Shui Wai Station

圖七—錦上路站，朗屏站及天水圍站的路軌旁板及風擋



* Plenum enhancement shall be implemented at both sides under the train

* ALL DIMENSIONS ARE NOMINAL, SUBJECT TO ADJUSTMENT TO SUIT SITE CONDITIONS

LATERAL STATIC MOVEMENT	
RUNNING CLEARANCE + FLANGE WEAR:	15
CARBODY TOLERANCE:	5
RAIL SIDE WEAR:	5
GAUGE TOLERANCE:	5
ALIGNMENT TOLERANCE:	10
TOTAL:	40

1. SKIRT LEVEL(STATIC CONDITION):	300
2. VEHICLE DOWNWARD MOVEMENT	
VERTICAL ALIGNMENT:	10
RAIL HEAD WEAR:	15
WHEEL TREAD WEAR:	10
PRIMARY SUSPENSION MOVEMENT:	15
AIR SUSPENSION MOVEMENT:	10
CARBODY ROLL:	43
SUB-TOTAL:	103
3. MAX. ALLOWABLE SPACE FOR BRACKET:	197

Figure 9 - Additional Noise Mitigation Measure on the Viaducts

圖九—高架橋的附加噪音緩減設施

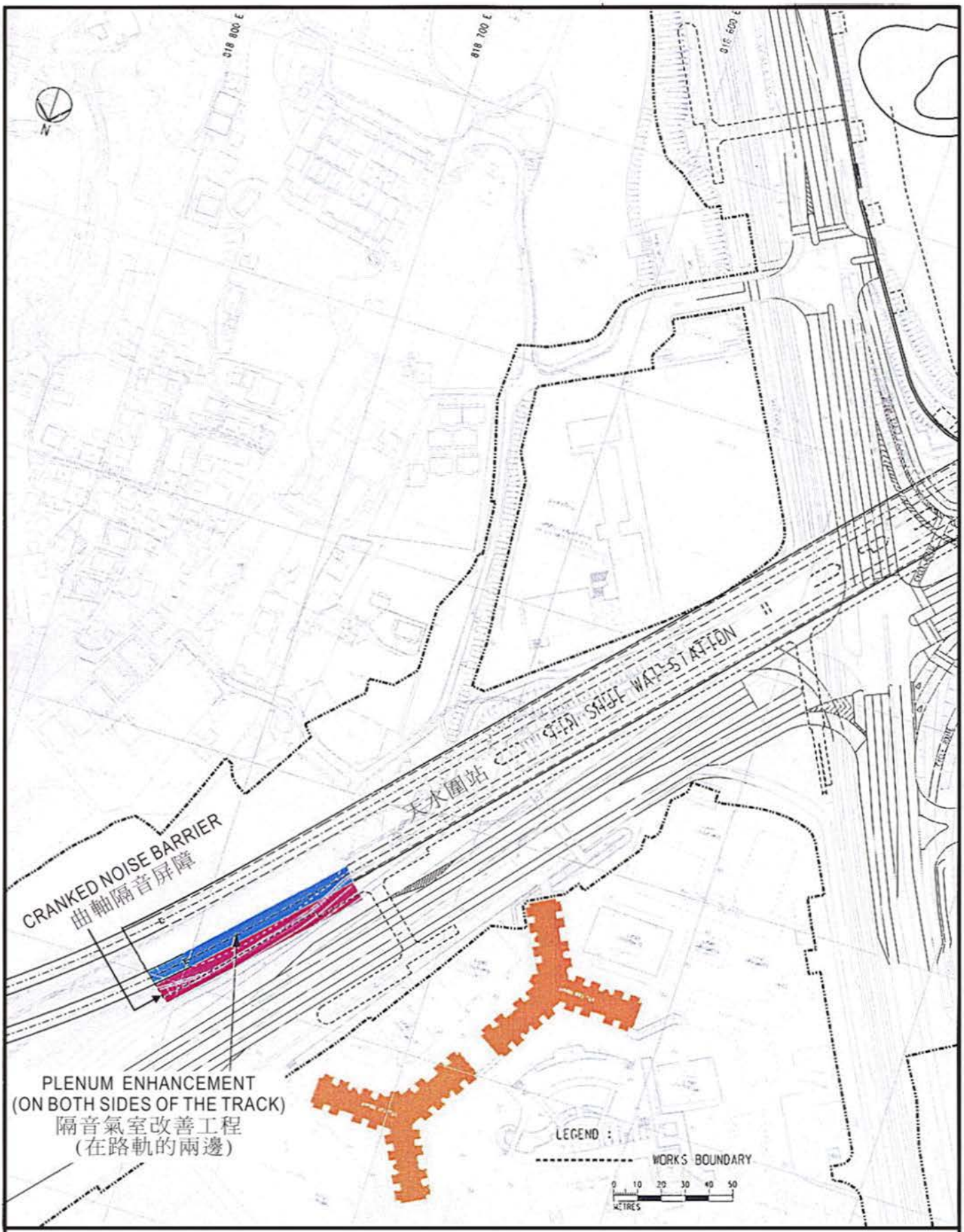


Figure 10 - Cranked Noise Barrier and Plenum Enhancement at the Tin Shui Wai Station

圖十—天水圍站的曲軸隔音屏障及隔音氣室的改善工程

APPENDIX 4.2
EXTRACTED PAGES OF FEP-02/041/2000/B

Environmental Permit No. FEP-02/041/2000/B
環境許可證編號FEP-02/041/2000/B

ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE
(CHAPTER 499)
SECTION 10 & 12
環境影響評估條例
(第**499**章**)**
第**10** 及**12**條

ENVIRONMENTAL PERMIT TO OPERATE A DESIGNATED PROJECT
營辦指定工程項目的環境許可證

PART A (MAIN PERMIT)
A部 **(**許可證主要部分**)**

Pursuant to Sections 10 and 12 of the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection (the Director) grants this environmental permit to the MTR Corporation Limited (hereinafter referred to as the "Permit Holder") to operate the designated project described in Part B subject to the conditions specified in Part C. The issue of this environmental permit is based on the documents, approvals or permissions described below :

根據《環境影響評估條例》(環評條例)第10及12條的規定，環境保護署署長(署長)將本環境許可證批予香港鐵路有限公司(下稱 "許可證持有人")以營辦B部所說明的指定工程項目，但須遵守C部所列明的條件。本環境許可證是依據下列文件、批准或許可而簽發：

The issue of this Further Environmental Permit is based on the documents, approvals or permissions described below:

本新的環境許可證的發出，乃以下表所列的文件、批准或許可作為根據：-

Application No. 申請書編號	FEP-084/2007
Document in the Register : 登記冊上的文件：	(1) Tin Shui Wai Phase 4 Rail Extension: Ÿ Final Environmental Impact Assessment Report (November 1999) Ÿ Final Environmental Impact Assessment Report – Appendices (November 1999) Ÿ Executive Summary (November 1999) Ÿ Final Environmental Monitoring and Audit Manual (EM&A Manual) (November 1999) (Register No. AEIAR-026/1999) [hereinafter referred to as the "EIA Report"] (2) The Director's letter of approval of the EIA Report dated 6 January 2000 (ref: (13) in Annex (16) to EP2/N6/A/06 Pt.3) (3) Application for Environmental Permit submitted on 23 September 1999 (Application No. AEP-038/1999)

	(4) Environmental Permit No. EP-041/2000 issued on 21 January 2000. (5) Application documents for Variation of Environmental Permit submitted on 9 September 2002 (Application No. VEP-074/2002) (6) Environmental Permit No. EP-041/2000/A issued on 4 October 2002 (7) Application document for Variation of Environmental Permit submitted on 23 October 2003 (Application No. VEP-118/2003) (8) Environmental Permit No. EP-041/2000/B issued on 3 November 2003 (9) Application document for Further Environmental Permit submitted on 28 November 2007 (Application No. FEP-084/2007) (1) 天水圍第四期輕鐵支線: Ÿ 最終環境影響評估報告(1999年11月) Ÿ 最終環境影響評估報告 - 附錄(1999年11月) Ÿ 行政摘要(1999年11月)及 Ÿ 最終環境監察及審核手冊(1999年11月) (登記冊編號 : AEIAR-026/1999) [下稱“環評報告”] (2) 署長於2000年1月6日發出該環評報告的批准信 (檔案編號 (13) in Annex (16) to EP2/N6/A/06 Pt.3) (3) 於1999年9月23日提交的環境許可證申請文件(申請書編號 AEP-038/1999) (4) 於2000年1月21日簽發的環境許可證編號 EP-041/2000 (5) 於2002年9月9日提交的更改環境許可證申請文件(申請編號VEP-074/2002) (6) 於2002年10月4日簽發的環境許可證編號EP-041/2000/A (7) 於2003年10月23日提交的更改環境許可證申請文件(申請書編號VEP-118/2003) (8) 於2003年11月3日簽發的環境許可證編號EP-041/2000/B (9) 於2007年11月18日提交的新的環境許可證申請文件(申請書編號FEP-084/2007)

21 December 2007
Date
日期

(WONG Hon-meng)
Principal Environmental Protection Officer (Strategic Assessment)
for Director of Environmental Protection
環境保護署署長
(首席環境保護主任(策略評估) 黃漢明 代行)

PART B (DESCRIPTIONS OF DESIGNATED PROJECT)
B部 **(**指定工程項目的說明**)**

Hereunder is the description of the designated project mentioned in Part A of this environmental permit:

下列為本環境許可證A部所提及的指定工程項目的說明:

Title of Designated Project 指定工程項目的名稱	Tin Shui Wai Phase 4 Rail Extension [This designated project is hereinafter referred to as "the Project"] 天水圍第四期輕鐵支線 [這指定工程項目下稱"工程項目"]
Nature of Designated Project 指定工程項目的性質	Railway and its associated stops 鐵路及其相聯車站
Location of Designated Project 指定工程項目的地點	The location of the Project is in Tin Shui Wai as shown in Figure 1 of this Environmental Permit. 工程項目的地點位於天水圍如環境許可證的圖一所示
Scale and Scope of Designated Project(s) 指定工程項目的規模和範圍	Operation of a 1.5km at-grade light rail extension and 5 associated stops 營運1.5公里之地面輕鐵支線及5個相聯車站

PART C (PERMIT CONDITIONS)
C部（許可證條件）

1. General Conditions
一般條件

1.1 The Permit Holder shall ensure full compliance with all conditions of this environmental permit (the Permit). Any non-compliance may constitute a contravention of the Environmental Impact Assessment Ordinance (Cap.499) and shall be definite ground for enforcement action or permit cancellation where applicable.
許可證持有人必須確保完全符合本環境許可證（下稱許可證）規定的全部條件。如有不符合本許可證的情況，可能構成違反「環境影響評估條例（第499章）」的規定，並可按適用情況作為採取執法行動或取銷其許可證的確切理由。

2.3 The operation of the Project shall meet the following specifications

本工程項目的營辦須滿足下列規定：

(a) re-radiated noise from viaduct structure is at least 10dB(A) below the noise criteria of 65dB(A) L_{max} at 25m, at 50kph; and
高架結構的再輻射噪音最少比25m，50kph條件下65dB(A)L_{max}噪音標準低10dB(A)；以及

(b) noise level at 2m from the transformer bays in the rectifier will be less than 66dB(A).
整流站內距變壓器位2米處的噪音水平少於66dB(A)。

2.4 Measures described in Appendix A to mitigate environmental impacts from run-off and drainage shall be implemented throughout the operation period.
許可證持有人須實施附錄A規定的措施，以減輕營運期間，徑流及排水的影響。

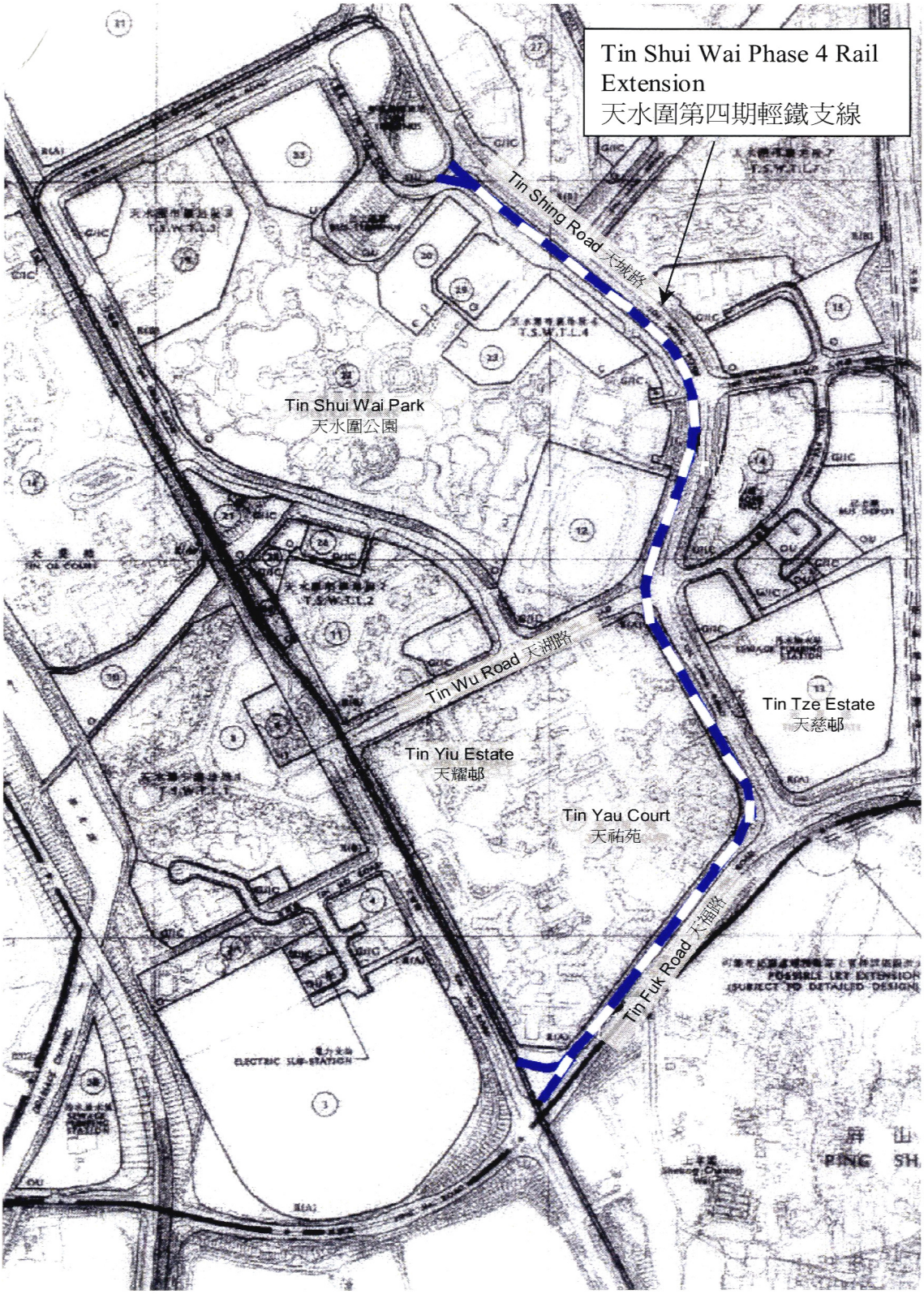
2.5 Any change to the design or measures relevant to the operation of the Project shall be justified and certified by the IEC with at least 7 years experience in environmental monitoring and auditing or environmental management before submission to the Director for approval.
對於有關工程項目運作期間的設計或措施所作的任何變更應在提交署長申請審批前，須由具有七年環境監察與審核或環境管理經驗的獨立環境查核人提出具充分理由，並由獨立環境查核人認證。

Notes:
註 ：

1. This Permit consists of three parts, namely, Part A (Main Permit), Part B (Description of Designated Project) and Part C (Permit Conditions). Any person relying on this permit should obtain independent legal advice on the legal implications under the Ordinance, and the following notes are for general information only.
本許可證共有3部，即A部(許可證主要部分)；B部(指定工程項目的說明)及C部(許可證條件)。任何援引本許可證的人士須就條例的法律含意徵詢獨立法律意見，下述註解只供一般參考之用。

2. If there is a breach of any conditions of this Permit, the Director or his authorized officer may, with the consent of the Secretary for the Environment, order the cessation of associated work until the remedial action is taken in respect of the resultant environmental damage, and in that case the Permit Holder shall not carry out any associated works without the permission of the Director or his authorized officer.
如違反本許可證的任何條件，署長或獲授權人員在徵得環境局局長的同意後，可勒令停止相關工程，直至許可證持有人為所造成的環境損害採取補救行動為止。在此情況下，許可證持有人在未經署長或獲其授權人員同意，不得進行任何相關工程。

3. The Permit Holder may apply under Section 13 of the Environmental Impact Assessment Ordinance (the "Ordinance") to the Director for a variation of the conditions of this Permit. The Permit Holder shall replace the original permit displayed on the Project site by the amended permit.



Project Title - Tin Shui Wai Phase 4 Rail Extension 工程名稱 - 天水圍第四期輕鐵支線	Environmental Permit No. : FEP-02/041/2000/B 環境許可證編號： FEP-02/041/2000/B
Figure 1 - Location Plan 圖 1 - 地點圖	

APPENDIX 4.3
INFORMATION PROVIEDED BY MTR

MTR Corporation Limited
香港鐵路有限公司
www.mtr.com.hk

MTR

BeeXergy Consulting Limited,
Unit 2001-05, APEC Plaza,
49 Hoi Yuen Road,
Kwun Tong, Kowloon, Hong Kong

Our ref: T&ESD/E&IC/ES/EnvE/L1199

Date: 21 AUG 2023

Attention: Ms. Zoe Chan

By Post and Fax
(Fax no.: 3568 4704)

Dear Ms. Chan,

Re: Proposed Composite "Social Welfare Facility (Residential Care Home For The Elderly" (RCHE) And "Residential Institution" (Senior Hostel) Development On A Site Currently Zoned As "Government, Institutional Or Community" (GIC) In Lot Nos. 257 (Part), 258 RP (Part) And Adjoining Government Land In D.D. 122, Ping Shan, Yuen Long

We refer to your letter (ref.: W23042_20230720_L_0001a) dated 20 July 2023 requesting operational information regarding Tuen Ma Line (TML) and Light Rail (LRT).

Operating Hours
The daily operating hours for TML and LRT at the concerned section are from approximately 05:30 to 01:15 hours and 05:11 to 01:30 hours respectively.

Number of Car
There are currently 8 cars per train for the operation condition of TML. However, according to the latest Environmental Permit (EP) for West Rail, the ultimate maximum train cars would be 9 cars.

For LRT, the arrangement of single or coupled-set vehicles will vary depending on the traffic needs and is subject to change without prior notification. For environmental assessment purposes, you may wish to work on the assumption that all vehicles are in couple-set where appropriate.

Operational Information for TML (between Tin Shui Wai Station and Long Ping Station)

- The future ultimate daily peak operating train frequency during the period of 07:00-23:00 hours is about 28 trains per hour per direction.
- For the future ultimate daily peak operating train frequency during the period of 23:00-07:00 hours, please refer to the latest EP for West Rail available via EPD website.
- There are currently about 260 train trips per direction in one-day operation for TML, including non-passenger trains.

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Kowloon, Hong Kong. GPO Box 9916, Hong Kong
Tel (852) 2993 2111 Fax (852) 2798 8822

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MTR Corporation Limited
香港鐵路有限公司
www.mtr.com.hk

Our ref: T&ESD/E&IC/ES/EnvE/L1199
Date : 21 AUG 2023

Operational Information for LRT (between Tin Shui Wai Stop and Tin Tsz Stop - Route 705, 706 and 751)

- The current peak train frequency during the period of 07:00-23:00 and 23:00-07:00 hours is about 19 trains per hour per direction and 16 trains per hour per direction respectively.
- The current train frequency for both directions in one-day operation is about 617 trains, including non-passenger trains.

Please note that the Light Rail service frequencies are subject to change without prior notification due to future patronage growth. As such, please consider allowing a buffer on the assessment assumptions when estimating future possible environmental impacts.

Speed Profile

For track section between Tin Shui Wai Station (TIS) and Long Ping Station (LOP) of TML, the current maximum train speed is about 95 km/h for up track (i.e. from LOP to TIS) and about 100 km/h for down track (i.e. from TIS to LOP). However, please note that the latest EP for West Rail has considered a maximum operating speed of 130 km/hr to cater for potential speed increment in the future.

For LRT, the current maximum train speed for the track section between Tin Shui Wai Stop and Tin Tsz Stop is about 70 km/h.

Please be reminded that any information that may come to your knowledge or come into your possession from MTR Corporation Limited shall only be used solely as reference for this captioned project. Further distribution and/or publication of the above information for purposes not connected with the captioned project are strictly prohibited without the prior consent of MTR Corporation Limited. Please also note that any such information is subject to change without prior notification.

Should you have any additional enquiries, please feel free to contact our Lead Environmental Manager, Ms. Catherine Leung at 2993 4127.

Yours sincerely,

HK Chan
Chief of Operations Engineering Service & Innovation

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Kowloon, Hong Kong. GPO Box 9916, Hong Kong
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APPENDIX 4.4
DETAIL OF PREDICT RAILWAY NOISE LEVEL

Appendix 4.4 - Detail of Predicted Railway Noise Level (Summary)

NSR ID	Description	X	Y	Assessment Level		ANL	Limit Level					Adopted Limit Level	Predicted Noise Level	Exceedance of
							IND-TM			HKPSG				
							$L_{Aeq,\ 30min}$		L_{Max}	$L_{Aeq,\ 24hr}$	L_{Max}	$L_{Aeq,\ 30min}$	$L_{Aeq,\ 30min}$	$L_{Aeq,\ 30min}$
				Floor	mPD		Day & Evening Time	Night Time	Night Time	Whole Day	Night Time	Worst Case Scenario	Worst Case Scenario	
RNIA_1F_01	Dormitory	819010.1	834428.5	1/F	+18.65	B	65	55	85	65	85	55	44	No
RNIA_1F_02	Dormitory	819010.2	834419.0	1/F	+18.65	B	65	55	85	65	85	55	44	No
RNIA_1F_03	Dormitory	819010.2	834409.5	1/F	+18.65	B	65	55	85	65	85	55	44	No
RNIA_1F_04	End of Life Care Room	818985.0	834408.3	1/F	+18.65	B	65	55	85	65	85	55	45	No
RNIA_1F_05	Dormitory	818989.9	834419.0	1/F	+18.65	B	65	55	85	65	85	55	45	No
RNIA_1F_06	Dormitory	818989.9	834428.5	1/F	+18.65	B	65	55	85	65	85	55	46	No
RNIA_1F_07	Dormitory	818992.9	834433.1	1/F	+18.65	B	65	55	85	65	85	55	46	No
RNIA_2F_01	Dormitory	819010.2	834428.5	2/F	+22.25	B	65	55	85	65	85	55	44	No
RNIA_2F_02	Dormitory	819010.2	834419.0	2/F	+22.25	B	65	55	85	65	85	55	44	No
RNIA_2F_03	Dormitory	819010.2	834409.5	2/F	+22.25	B	65	55	85	65	85	55	44	No
RNIA_2F_04	Dormitory	818976.3	834386.9	2/F	+22.25	B	65	55	85	65	85	55	45	No
RNIA_2F_05	Dormitory	818974.9	834390.6	2/F	+22.25	B	65	55	85	65	85	55	45	No
RNIA_2F_06	Dormitory	818980.5	834403.4	2/F	+22.25	B	65	55	85	65	85	55	45	No
RNIA_2F_07	Dormitory	818983.8	834407.9	2/F	+22.25	B	65	55	85	65	85	55	45	No
RNIA_2F_08	Dormitory	818989.9	834419.0	2/F	+22.25	B	65	55	85	65	85	55	46	No
RNIA_2F_09	Dormitory	818989.9	834428.5	2/F	+22.25	B	65	55	85	65	85	55	46	No
RNIA_2F_10	Dormitory	818992.9	834433.1	2/F	+22.25	B	65	55	85	65	85	55	46	No
RNIA_3F_01	Dormitory	819010.2	834428.5	3/F	+25.85	B	65	55	85	65	85	55	44	No
RNIA_3F_02	Dormitory	819010.2	834419.0	3/F	+25.85	B	65	55	85	65	85	55	44	No
RNIA_3F_03	Dormitory	819010.2	834409.5	3/F	+25.85	B	65	55	85	65	85	55	44	No
RNIA_3F_04	Dormitory	818976.3	834386.9	3/F	+25.85	B	65	55	85	65	85	55	45	No
RNIA_3F_05	Dormitory	818974.9	834390.6	3/F	+25.85	B	65	55	85	65	85	55	45	No
RNIA_3F_06	Dormitory	818980.5	834403.4	3/F	+25.85	B	65	55	85	65	85	55	45	No
RNIA_3F_07	Dormitory	818983.8	834407.9	3/F	+25.85	B	65	55	85	65	85	55	46	No
RNIA_3F_08	Dormitory	818989.9	834419.0	3/F	+25.85	B	65	55	85	65	85	55	46	No
RNIA_3F_09	Dormitory	818989.9	834428.5	3/F	+25.85	B	65	55	85	65	85	55	46	No
RNIA_3F_10	Dormitory	818992.9	834433.1	3/F	+25.85	B	65	55	85	65	85	55	46	No
RNIA_4F_01	Dormitory	819010.2	834428.5	4/F	+29.45	B	65	55	85	65	85	55	44	No
RNIA_4F_02	Dormitory	819010.2	834419.0	4/F	+29.45	B	65	55	85	65	85	55	44	No
RNIA_4F_03	Dormitory	819010.2	834409.5	4/F	+29.45	B	65	55	85	65	85	55	44	No
RNIA_4F_04	Dormitory	818976.3	834386.9	4/F	+29.45	B	65	55	85	65	85	55	45	No
RNIA_4F_05	Dormitory	818974.9	834390.6	4/F	+29.45	B	65	55	85	65	85	55	45	No
RNIA_4F_06	Dormitory	818980.5	834403.4	4/F	+29.45	B	65	55	85	65	85	55	46	No
RNIA_4F_07	Dormitory	818983.8	834407.9	4/F	+29.45	B	65	55	85	65	85	55	46	No
RNIA_4F_08	Dormitory	818989.9	834419.0	4/F	+29.45	B	65	55	85	65	85	55	46	No
RNIA_4F_09	Dormitory	818989.9	834428.5	4/F	+29.45	B	65	55	85	65	85	55	46	No
RNIA_4F_10	Dormitory	818992.9	834433.1	4/F	+29.45	B	65	55	85	65	85	55	46	No
RNIA_5F_01	Dormitory	819010.2	834428.5	5/F	+33.05	B	65	55	85	65	85	55	45	No
RNIA_5F_02	Dormitory	819010.2	834419.0	5/F	+33.05	B	65	55	85	65	85	55	44	No
RNIA_5F_03	Dormitory	819010.2	834409.5	5/F	+33.05	B	65	55	85	65	85	55	44	No
RNIA_5F_04	Dormitory	818976.3	834386.9	5/F	+33.05	B	65	55	85	65	85	55	45	No
RNIA_5F_05	Dormitory	818974.9	834390.6	5/F	+33.05	B	65	55	85	65	85	55	46	No
RNIA_5F_06	Dormitory	818980.5	834403.4	5/F	+33.05	B	65	55	85	65	85	55	46	No
RNIA_5F_07	Dormitory	818983.8	834407.9	5/F	+33.05	B	65	55	85	65	85	55	46	No
RNIA_5F_08	Dormitory	818989.9	834419.0	5/F	+33.05	B	65	55	85	65	85	55	46	No
RNIA_5F_09	Dormitory	818989.9	834428.5	5/F	+33.05	B	65	55	85	65	85	55	46	No
RNIA_5F_10	Dormitory	818992.9	834433.1	5/F	+33.05	B	65	55	85	65	85	55	46	No
RNIA_6F_01	Dormitory	819010.2	834428.5	6/F	+36.65	B	65	55	85	65	85	55	45	No
RNIA_6F_02	Dormitory	819010.2	834419.0	6/F	+36.65	B	65	55	85	65	85	55	44	No
RNIA_6F_03	Dormitory	819010.2	834409.5	6/F	+36.65	B	65	55	85	65	85	55	44	No
RNIA_6F_04	Dormitory	818976.3	834386.9	6/F	+36.65	B	65	55	85	65	85	55	45	No
RNIA_6F_05	Dormitory	818974.9	834390.6	6/F	+36.65	B	65	55	85	65	85	55	46	No
RNIA_6F_06	Dormitory	818980.5	834403.4	6/F	+36.65	B	65	55	85	65	85	55	46	No
RNIA_6F_07	Dormitory	818983.8	834407.9	6/F	+36.65	B	65	55	85	65	85	55	46	No
RNIA_6F_08	Dormitory	818989.9	834419.0	6/F	+36.65	B	65	55	85	65	85	55	46	No
RNIA_6F_09	Dormitory	818989.9	834428.5	6/F	+36.65	B	65	55	85	65	85	55	46	No
RNIA_6F_10	Dormitory	818992.9	834433.1	6/F	+36.65	B	65	55	85	65	85	55	46	No
RNIA_7F_01	Conference Room (1)	819010.2	834421.1	7/F	+40.25	B	65	55	85	65	85	55	45	No
RNIA_7F_02	Conference Room (2)	819010.2	834416.9	7/F	+40.25	B	65	55	85	65	85	55	44	No
RNIA_7F_03	Superintedent's Office	819010.2	834411.6	7/F	+40.25	B	65	55	85	65	85	55	44	No
RNIA_7F_04	Assistant Superintedent's Office	819010.2	834407.4	7/F	+40.25	B	65	55	85	65	85	55	44	No

Remark:

1. Location of concerned railway refers to Figure 4.1 of Noise Impact Assessment.
2. Scope of assessment for representative NSRs refers to Table 4.3 of Noise Impact Assessment.
3. Assessment methodology, assumptions and approach refers to Section 4.4 of Noise Impact Assessment.

Result Summary of Railway Noise Impact Assessment Results

Maximum of Predicted LAeq, 30min	46 dB(A)
Minimum of Predicted LAeq, 30min	44 dB(A)
Total Number of NSRs	61 Number
Number of NSRs exceeded the Adopted LAeq, 30min	0 Number
Compliance Rate	100 %

Appendix 4.4 - Detail of Predicted Railway Noise Level at 1/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,T}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_1F_01									
Description	Dormitory									
Assessment Floor	1/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9
Distance Correction	-10.5	-9.8	-9.5	-9.4	-10.4	-10.4	-9.6	-9.2	-9.0	-10.1
Air Absorption	-2.0	-1.7	-1.6	-1.5	-2.0	-2.0	-1.6	-1.5	-1.4	-1.9
View Angle Correction	-9.1	-6.7	-8.0	-4.0	-5.4	-8.9	-6.9	-7.8	-3.7	-5.6
$L_{eq,30min}$	30.4	33.7	32.9	37.1	34.2	30.0	33.2	32.8	37.1	33.7
Rolling Noise Overall ($L_{eq,30min}$)	44									

NSR ID	RNIA_1F_02									
Description	Dormitory									
Assessment Floor	1/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9
Distance Correction	-10.6	-10.0	-9.6	-9.5	-10.4	-10.5	-9.8	-9.4	-9.2	-10.2
Air Absorption	-2.1	-1.8	-1.6	-1.6	-2.0	-2.1	-1.7	-1.5	-1.5	-1.9
View Angle Correction	-9.1	-6.8	-8.2	-4.1	-5.3	-8.8	-7.0	-8.0	-3.8	-5.4
$L_{eq,30min}$	30.2	33.4	32.5	36.7	34.3	29.9	32.8	32.3	36.8	33.8
Rolling Noise Overall ($L_{eq,30min}$)	44									

NSR ID	RNIA_1F_03									
Description	Dormitory									
Assessment Floor	1/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9
Distance Correction	-10.7	-10.1	-9.8	-9.7	-10.5	-10.6	-9.9	-9.5	-9.4	-10.2
Air Absorption	-2.2	-1.9	-1.7	-1.7	-2.0	-2.1	-1.8	-1.6	-1.5	-1.9
View Angle Correction	-9.1	-7.0	-8.3	-4.2	-5.2	-8.8	-7.1	-8.2	-3.9	-5.3
$L_{eq,30min}$	30.1	33.0	32.1	36.4	34.3	29.8	32.5	31.9	36.4	33.8
Rolling Noise Overall ($L_{eq,30min}$)	44									

NSR ID	RNIA_1F_04															
Description	End of Life Care Room															
Assessment Floor	1/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.8	-15.9	-15.9	-15.9	-15.9	-15.8	-15.9	-15.9	-15.9	-15.9	-15.5	-15.5	0.0	-15.5	-15.5	0.0
Distance Correction	-11.0	-10.3	-9.8	-9.5	-10.1	-10.9	-10.1	-9.6	-9.2	-9.9	-10.7	-10.1	-10.4	-10.7	-10.1	-10.3
Air Absorption	-2.3	-1.9	-1.7	-1.6	-1.9	-2.2	-1.8	-1.6	-1.5	-1.7	-2.2	-1.9	-2.0	-2.1	-1.8	-2.0
View Angle Correction	-9.8	-7.5	-8.7	-4.0	-4.6	-9.6	-7.8	-8.6	-3.7	-4.7	-19.9	-8.3	-7.5	-20.1	-8.0	-7.5
$L_{eq,30min}$	29.0	32.2	31.7	36.9	35.4	28.6	31.6	31.5	36.9	35.0	8.5	20.9	36.9	8.3	21.3	37.0
Rolling Noise Overall ($L_{eq,30min}$)	45															

NSR ID	RNIA_1F_05															
Description	Dormitory															
Assessment Floor	1/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.5	-15.5	0.0	-15.5	-15.5	0.0
Distance Correction	-10.8	-10.1	-9.6	-9.4	-10.1	-10.7	-9.9	-9.4	-9.0	-9.9	-10.6	-10.1	-10.4	-10.6	-10.0	-10.3
Air Absorption	-2.2	-1.8	-1.6	-1.5	-1.9	-2.2	-1.8	-1.5	-1.4	-1.7	-2.1	-1.9	-2.0	-2.1	-1.8	-2.0
View Angle Correction	-9.7	-7.3	-8.4	-3.9	-4.8	-9.5	-7.5	-8.3	-3.6	-4.9	-18.8	-8.3	-7.7	-18.9	-8.0	-7.7
$L_{eq,30min}$	29.4	32.7	32.3	37.2	35.2	29.0	32.1	32.0	37.3	34.8	9.7	21.0	36.6	9.6	21.4	36.7
Rolling Noise Overall ($L_{eq,30min}$)	45															

NSR ID	RNIA_1F_06															
Description	Dormitory															
Assessment Floor	1/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.5	-15.5	0.0	-15.5	-15.5	0.0
Distance Correction	-10.7	-9.9	-9.5	-9.2	-10.1	-10.6	-9.7	-9.2	-8.8	-9.8	-10.5	-10.0	-10.4	-10.5	-9.9	-10.3
Air Absorption	-2.1	-1.8	-1.6	-1.5	-1.8	-2.1	-1.7	-1.5	-1.3	-1.7	-2.1	-1.8	-2.0	-2.0	-1.8	-1.9
View Angle Correction	-9.7	-7.2	-8.3	-3.7	-4.9	-9.5	-7.5	-8.1	-3.4	-5.1	-18.0	-8.2	-7.9	-18.1	-7.9	-7.9
$L_{eq,30min}$	29.5	33.0	32.7	37.6	35.2	29.1	32.4	32.5	37.7	34.7	10.6	21.2	36.5	10.5	21.6	36.6
Rolling Noise Overall ($L_{eq,30min}$)	46															

NSR ID	RNIA_1F_07															
Description	Dormitory															
Assessment Floor	1/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.9	-15.5	-15.5	0.0	-15.5	-15.5	0.0
Distance Correction	-10.6	-9.8	-9.4	-9.1	-10.1	-10.5	-9.6	-9.1	-8.7	-9.8	-10.5	-10.0	-10.4	-10.5	-9.9	-10.3
Air Absorption	-2.1	-1.7	-1.5	-1.4	-1.8	-2.1	-1.6	-1.4	-1.3	-1.7	-2.1	-1.8	-2.0	-2.0	-1.8	-2.0
View Angle Correction	-9.6	-7.1	-8.1	-3.7	-5.1	-9.5	-7.3	-8.0	-3.4	-5.2	-17.5	-8.2	-8.0	-17.6	-7.9	-8.0
$L_{eq,30min}$	29.7	33.3	33.0	37.7	35.0	29.3	32.7	32.8	37.8	34.5	11.1	21.2	36.3	11.0	21.6	36.4
Rolling Noise Overall ($L_{eq,30min}$)	46															

Appendix 4.4 - Detail of Predicted Railway Noise Level at 2/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,30min}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_2F_01									
Description	Dormitory									
Assessment Floor	2/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8
Distance Correction	-10.5	-9.8	-9.5	-9.4	-10.4	-10.4	-9.6	-9.2	-9.0	-10.1
Air Absorption	-2.0	-1.7	-1.6	-1.5	-2.0	-2.0	-1.6	-1.5	-1.4	-1.9
View Angle Correction	-9.1	-6.7	-8.0	-4.0	-5.4	-8.9	-6.9	-7.8	-3.7	-5.6
$L_{eq,30min}$	30.5	33.8	33.1	37.2	34.3	30.1	33.3	32.9	37.3	33.8
Rolling Noise Overall ($L_{eq,30min}$)	44									

NSR ID	RNIA_2F_02									
Description	Dormitory									
Assessment Floor	2/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8
Distance Correction	-10.6	-10.0	-9.6	-9.5	-10.4	-10.5	-9.8	-9.4	-9.2	-10.2
Air Absorption	-2.1	-1.8	-1.6	-1.6	-2.0	-2.1	-1.7	-1.5	-1.5	-1.9
View Angle Correction	-9.1	-6.8	-8.2	-4.1	-5.3	-8.8	-7.0	-8.0	-3.8	-5.4
$L_{eq,30min}$	30.3	33.5	32.6	36.9	34.4	30.0	32.9	32.5	36.9	33.9
Rolling Noise Overall ($L_{eq,30min}$)	44									

NSR ID	RNIA_2F_03									
Description	Dormitory									
Assessment Floor	2/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8
Distance Correction	-10.7	-10.1	-9.8	-9.7	-10.5	-10.6	-9.9	-9.5	-9.4	-10.2
Air Absorption	-2.2	-1.9	-1.7	-1.7	-2.0	-2.1	-1.8	-1.6	-1.5	-1.9
View Angle Correction	-9.1	-7.0	-8.3	-4.2	-5.2	-8.8	-7.1	-8.2	-3.9	-5.3
$L_{eq,30min}$	30.1	33.1	32.2	36.5	34.4	29.9	32.6	32.0	36.6	33.9
Rolling Noise Overall ($L_{eq,30min}$)	44									

NSR ID	RNIA_2F_04															
Description	Dormitory															
Assessment Floor	2/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.4	-15.4	0.0	-15.4	-15.4	0.0
Distance Correction	-11.3	-10.7	-10.2	-9.8	-10.2	-11.2	-10.5	-10.0	-9.5	-9.9	-10.9	-10.3	-10.4	-10.8	-10.2	-10.3
Air Absorption	-2.5	-2.1	-1.9	-1.7	-1.9	-2.4	-2.0	-1.8	-1.6	-1.8	-2.2	-1.9	-2.0	-2.2	-1.9	-2.0
View Angle Correction	-9.9	-7.9	-9.1	-4.3	-4.3	-9.7	-8.1	-9.1	-4.0	-4.3	-22.3	-8.5	-7.1	-22.6	-8.2	-7.1
$L_{eq,30min}$	28.5	31.4	30.8	36.2	35.7	28.1	30.8	30.5	36.2	35.4	5.9	20.6	37.2	5.6	21.0	37.4
Rolling Noise Overall ($L_{eq,30min}$)	45															

NSR ID	RNIA_2F_05															
Description	Dormitory															
Assessment Floor	2/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.4	-15.4	0.0	-15.4	-15.4	0.0
Distance Correction	-11.2	-10.6	-10.2	-9.8	-10.1	-10.4	-10.4	-9.9	-9.4	-9.9	-10.8	-10.2	-10.4	-10.8	-10.1	-10.3
Air Absorption	-2.5	-2.1	-1.9	-1.7	-1.9	-2.0	-2.0	-1.8	-1.6	-1.7	-2.2	-1.9	-2.0	-2.2	-1.9	-1.9
View Angle Correction	-10.0	-7.9	-9.1	-4.2	-4.3	-9.8	-8.2	-9.1	-4.0	-4.3	-22.1	-8.5	-7.1	-22.4	-8.2	-7.1
$L_{eq,30min}$	28.5	31.5	31.0	36.4	35.8	29.2	30.8	30.6	36.4	35.5	6.2	20.8	37.3	5.9	21.2	37.5
Rolling Noise Overall ($L_{eq,30min}$)	45															

NSR ID	RNIA_2F_06															
Description	Dormitory															
Assessment Floor	2/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.4	-15.4	0.0	-15.4	-15.4	0.0
Distance Correction	-11.0	-10.4	-9.9	-9.6	-10.1	-11.0	-10.2	-9.7	-9.2	-9.8	-10.4	-10.1	-10.4	-10.7	-10.1	-10.3
Air Absorption	-2.3	-2.0	-1.8	-1.6	-1.9	-2.3	-1.9	-1.7	-1.5	-1.7	-2.0	-1.9	-2.0	-2.1	-1.8	-1.9
View Angle Correction	-9.9	-7.7	-8.8	-4.0	-4.5	-9.7	-7.9	-8.8	-3.8	-4.5	-20.6	-8.3	-7.3	-20.8	-8.0	-7.3
$L_{eq,30min}$	28.9	32.0	31.6	36.9	35.6	28.5	31.4	31.3	36.9	35.3	8.4	21.0	37.1	7.7	21.4	37.2
Rolling Noise Overall ($L_{eq,30min}$)	45															

NSR ID	RNIA_2F_07															
Description	Dormitory															
Assessment Floor	2/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.4	-15.4	0.0	-15.4	-15.4	0.0
Distance Correction	-11.0	-10.3	-9.9	-9.5	-10.1	-10.9	-10.1	-9.6	-9.2	-9.8	-10.7	-10.1	-10.4	-10.7	-10.1	-10.3
Air Absorption	-2.3	-1.9	-1.7	-1.6	-1.9	-2.3	-1.9	-1.6	-1.5	-1.7	-2.1	-1.9	-2.0	-2.1	-1.8	-1.9
View Angle Correction	-9.8	-7.6	-8.7	-4.0	-4.6	-9.6	-7.8	-8.6	-3.7	-4.7	-20.0	-8.3	-7.5	-20.2	-8.0	-7.4
$L_{eq,30min}$	29.1	32.3	31.8	37.0	35.5	28.7	31.6	31.5	37.1	35.2	8.5	21.0	36.9	8.3	21.4	37.1
Rolling Noise Overall ($L_{eq,30min}$)	45															

Appendix 4.4 - Detail of Predicted Railway Noise Level at 2/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,T}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_2F_08																
Description	Dormitory																
Assessment Floor	2/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.4	-15.4	0.0	-15.4	-15.4	0.0
Distance Correction	dB(A)	-10.8	-10.1	-9.6	-9.4	-10.1	-10.7	-9.9	-9.4	-9.0	-9.9	-10.6	-10.1	-10.4	-10.6	-10.0	-10.4
Air Absorption	dB(A)	-2.2	-1.8	-1.6	-1.5	-1.9	-2.2	-1.8	-1.5	-1.4	-1.7	-2.1	-1.9	-2.0	-2.1	-1.8	-2.0
View Angle Correction	dB(A)	-9.7	-7.3	-8.4	-3.9	-4.8	-9.5	-7.5	-8.3	-3.6	-4.9	-18.8	-8.3	-7.7	-18.9	-8.0	-7.7
$L_{eq,1,30min}$	dB(A)	29.5	32.8	32.4	37.3	35.3	29.1	32.2	32.2	37.4	34.9	9.8	21.1	36.6	9.7	21.5	36.7
Rolling Noise Overall ($L_{eq,\ 30min}$)	dB(A)	46															

NSR ID	RNIA_2F_09																
Description	Dormitory																
Assessment Floor	2/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.4	-15.4	0.0	-15.4	-15.4	0.0
Distance Correction	dB(A)	-10.7	-9.9	-9.5	-9.2	-10.1	-10.6	-9.7	-9.2	-8.8	-9.8	-10.5	-10.0	-10.4	-10.5	-9.9	-10.3
Air Absorption	dB(A)	-2.1	-1.8	-1.6	-1.5	-1.8	-2.1	-1.7	-1.5	-1.3	-1.7	-2.1	-1.8	-2.0	-2.0	-1.8	-1.9
View Angle Correction	dB(A)	-9.7	-7.2	-8.2	-3.7	-4.9	-9.5	-7.5	-8.1	-3.4	-5.1	-18.0	-8.2	-7.9	-18.1	-7.9	-7.9
$L_{eq,1,30min}$	dB(A)	29.6	33.1	32.8	37.7	35.3	29.2	32.5	32.6	37.8	34.8	10.7	21.3	36.5	10.6	21.8	36.6
Rolling Noise Overall ($L_{eq,\ 30min}$)	dB(A)	46															

NSR ID	RNIA_2F_10																
Description	Dormitory																
Assessment Floor	2/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.8	-15.4	-15.4	0.0	-15.4	-15.4	0.0
Distance Correction	dB(A)	-10.6	-9.8	-9.4	-9.1	-10.1	-10.5	-9.6	-9.1	-8.7	-9.8	-10.5	-10.0	-10.4	-10.5	-9.9	-10.3
Air Absorption	dB(A)	-2.1	-1.7	-1.5	-1.4	-1.8	-2.1	-1.6	-1.4	-1.3	-1.7	-2.1	-1.8	-2.0	-2.0	-1.8	-2.0
View Angle Correction	dB(A)	-9.6	-7.1	-8.1	-3.7	-5.1	-9.5	-7.3	-8.0	-3.4	-5.2	-17.5	-8.2	-8.0	-17.6	-7.9	-8.0
$L_{eq,1,30min}$	dB(A)	29.8	33.4	33.1	37.8	35.1	29.4	32.8	32.9	37.9	34.6	11.2	21.3	36.3	11.1	21.7	36.4
Rolling Noise Overall ($L_{eq,\ 30min}$)	dB(A)	46															

Appendix 4.4 - Detail of Predicted Railway Noise Level at 3/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,30min}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_3F_01									
Description	Dormitory									
Assessment Floor	3/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.6	-15.7
Distance Correction	-10.5	-9.8	-9.5	-9.4	-10.4	-10.4	-9.6	-9.2	-9.0	-10.1
Air Absorption	-2.0	-1.7	-1.6	-1.5	-2.0	-2.0	-1.6	-1.5	-1.4	-1.9
View Angle Correction	-9.1	-6.7	-8.0	-4.0	-5.4	-8.9	-6.9	-7.8	-3.7	-5.6
$L_{eq,30min}$	30.6	33.9	33.2	37.3	34.4	30.2	33.4	33.1	37.4	33.9
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	44								

NSR ID	RNIA_3F_02									
Description	Dormitory									
Assessment Floor	3/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7
Distance Correction	-10.6	-10.0	-9.6	-9.5	-10.4	-10.5	-9.8	-9.4	-9.2	-10.2
Air Absorption	-2.1	-1.8	-1.6	-1.6	-2.0	-2.1	-1.7	-1.5	-1.5	-1.9
View Angle Correction	-9.1	-6.8	-8.2	-4.1	-5.3	-8.8	-7.0	-8.0	-3.8	-5.4
$L_{eq,30min}$	30.4	33.6	32.8	37.0	34.5	30.1	33.1	32.6	37.0	34.0
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	44								

NSR ID	RNIA_3F_03									
Description	Dormitory									
Assessment Floor	3/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7
Distance Correction	-10.7	-10.1	-9.8	-9.7	-10.5	-10.6	-9.9	-9.5	-9.4	-10.2
Air Absorption	-2.2	-1.9	-1.7	-1.7	-2.0	-2.1	-1.8	-1.6	-1.5	-1.9
View Angle Correction	-9.1	-7.0	-8.3	-4.2	-5.2	-8.8	-7.1	-8.2	-3.9	-5.3
$L_{eq,30min}$	30.2	33.2	32.3	36.7	34.5	30.0	32.7	32.1	36.7	34.0
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	44								

NSR ID	RNIA_3F_04															
Description	Dormitory															
Assessment Floor	3/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.3	-15.3	0.0	-15.3	-15.3	0.0
Distance Correction	-11.3	-10.7	-10.2	-9.8	-10.2	-11.2	-10.5	-10.0	-9.5	-9.9	-10.9	-10.3	-10.4	-10.8	-10.2	-10.3
Air Absorption	-2.5	-2.1	-1.9	-1.7	-1.9	-2.4	-2.0	-1.8	-1.6	-1.8	-2.2	-1.9	-2.0	-2.2	-1.9	-2.0
View Angle Correction	-9.9	-7.9	-9.1	-4.3	-4.3	-9.7	-8.1	-9.1	-4.0	-4.3	-22.3	-8.5	-7.1	-22.6	-8.2	-7.1
$L_{eq,30min}$	28.5	31.5	30.9	36.4	35.8	28.2	30.9	30.6	36.4	35.5	6.0	20.7	37.2	5.7	21.1	37.4
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	45														

NSR ID	RNIA_3F_05															
Description	Dormitory															
Assessment Floor	3/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.3	-15.3	0.0	-15.3	-15.3	0.0
Distance Correction	-11.2	-10.6	-10.2	-9.8	-10.1	-10.4	-10.4	-9.9	-9.4	-9.9	-10.8	-10.2	-10.4	-10.8	-10.1	-10.3
Air Absorption	-2.5	-2.1	-1.9	-1.7	-1.9	-2.0	-2.0	-1.8	-1.6	-1.7	-2.2	-1.9	-2.0	-2.2	-1.9	-1.9
View Angle Correction	-10.0	-7.9	-9.1	-4.2	-4.3	-9.8	-8.2	-9.1	-4.0	-4.3	-22.1	-8.5	-7.1	-22.4	-8.2	-7.1
$L_{eq,30min}$	28.5	31.6	31.1	36.5	35.9	29.3	30.9	30.7	36.6	35.6	6.3	20.9	37.3	6.0	21.3	37.5
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	45														

NSR ID	RNIA_3F_06															
Description	Dormitory															
Assessment Floor	3/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.3	-15.3	0.0	-15.3	-15.3	0.0
Distance Correction	-11.0	-10.4	-9.9	-9.6	-10.1	-11.0	-10.2	-9.7	-9.2	-9.8	-10.4	-10.1	-10.4	-10.7	-10.1	-10.3
Air Absorption	-2.3	-2.0	-1.8	-1.6	-1.9	-2.3	-1.9	-1.7	-1.5	-1.7	-2.0	-1.9	-2.0	-2.1	-1.8	-1.9
View Angle Correction	-9.9	-7.7	-8.8	-4.0	-4.5	-9.7	-7.9	-8.8	-3.8	-4.5	-20.6	-8.3	-7.3	-20.8	-8.0	-7.3
$L_{eq,30min}$	28.9	32.1	31.7	37.0	35.8	28.6	31.5	31.4	37.0	35.4	8.5	21.1	37.1	7.8	21.5	37.2
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	45														

NSR ID	RNIA_3F_07															
Description	Dormitory															
Assessment Floor	3/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.3	-15.3	0.0	-15.3	-15.3	0.0
Distance Correction	-11.0	-10.3	-9.9	-9.5	-10.1	-10.9	-10.1	-9.6	-9.2	-9.8	-10.7	-10.1	-10.4	-10.7	-10.1	-10.3
Air Absorption	-2.3	-1.9	-1.7	-1.6	-1.9	-2.3	-1.9	-1.6	-1.5	-1.7	-2.2	-1.9	-2.0	-2.1	-1.8	-2.0
View Angle Correction	-9.8	-7.6	-8.7	-4.0	-4.6	-9.6	-7.8	-8.6	-3.7	-4.7	-20.0	-8.3	-7.5	-20.2	-8.0	-7.4
$L_{eq,30min}$	29.1	32.4	31.9	37.1	35.6	28.8	31.7	31.7	37.2	35.3	8.6	21.1	36.9	8.4	21.6	37.0
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	46														

Appendix 4.4 - Detail of Predicted Railway Noise Level at 3/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_3F_08															
Description	Dormitory															
Assessment Floor	3/F															
Track	TML											LRT				
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.6	-15.7	-15.3	-15.3	0.0	-15.3	-15.3	0.0
Distance Correction	dB(A)	-10.8	-10.1	-9.6	-9.4	-10.1	-10.7	-9.9	-9.4	-9.0	-9.9	-10.6	-10.1	-10.4	-10.6	-10.0	-10.4
Air Absorption	dB(A)	-2.2	-1.8	-1.6	-1.5	-1.9	-2.2	-1.8	-1.5	-1.4	-1.7	-2.1	-1.9	-2.0	-2.1	-1.8	-2.0
View Angle Correction	dB(A)	-9.7	-7.3	-8.4	-3.9	-4.8	-9.5	-7.5	-8.3	-3.6	-4.9	-18.8	-8.3	-7.7	-18.9	-8.0	-7.7
$L_{eq,\ 30min}$	dB(A)	29.6	32.9	32.5	37.5	35.4	29.2	32.3	32.3	37.6	35.0	9.9	21.2	36.6	9.8	21.6	36.7
Rolling Noise Overall ($L_{eq,\ 30min}$)	dB(A)	46															

NSR ID	RNIA_3F_09															
Description	Dormitory															
Assessment Floor	3/F															
Track	TML											LRT				
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.6	-15.7	-15.3	-15.3	0.0	-15.3	-15.3	0.0
Distance Correction	dB(A)	-10.7	-9.9	-9.5	-9.2	-10.1	-10.6	-9.7	-9.2	-8.8	-9.8	-10.5	-10.0	-10.4	-10.5	-9.9	-10.3
Air Absorption	dB(A)	-2.1	-1.8	-1.6	-1.5	-1.8	-2.1	-1.7	-1.5	-1.3	-1.7	-2.1	-1.8	-2.0	-2.0	-1.8	-1.9
View Angle Correction	dB(A)	-9.7	-7.2	-8.2	-3.7	-4.9	-9.5	-7.5	-8.1	-3.4	-5.1	-18.0	-8.2	-7.9	-18.1	-7.9	-7.9
$L_{eq,\ 30min}$	dB(A)	29.7	33.3	33.0	37.9	35.4	29.3	32.6	32.7	38.0	34.9	10.8	21.4	36.5	10.7	21.9	36.6
Rolling Noise Overall ($L_{eq,\ 30min}$)	dB(A)	46															

NSR ID	RNIA_3F_10															
Description	Dormitory															
Assessment Floor	3/F															
Track	TML											LRT				
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7	-15.6	-15.7	-15.3	-15.3	0.0	-15.3	-15.3	0.0
Distance Correction	dB(A)	-10.6	-9.8	-9.4	-9.1	-10.1	-10.5	-9.6	-9.1	-8.7	-9.8	-10.5	-10.0	-10.4	-10.5	-9.9	-10.3
Air Absorption	dB(A)	-2.1	-1.7	-1.5	-1.4	-1.8	-2.1	-1.6	-1.4	-1.3	-1.7	-2.1	-1.8	-2.0	-2.0	-1.8	-2.0
View Angle Correction	dB(A)	-9.6	-7.1	-8.1	-3.7	-5.1	-9.5	-7.3	-8.0	-3.4	-5.2	-17.5	-8.2	-8.0	-17.6	-7.9	-8.0
$L_{eq,\ 30min}$	dB(A)	29.9	33.5	33.2	38.0	35.2	29.5	32.9	33.0	38.1	34.8	11.3	21.4	36.3	11.2	21.8	36.4
Rolling Noise Overall ($L_{eq,\ 30min}$)	dB(A)	46															

Appendix 4.4 - Detail of Predicted Railway Noise Level at 4/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,30min}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_4F_01									
Description	Dormitory									
Assessment Floor	4/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.6	-15.5	-15.5	-15.5	-15.6	-15.6	-15.5	-15.5	-15.5	-15.6
Distance Correction	-10.5	-9.8	-9.5	-9.4	-10.4	-10.4	-9.6	-9.2	-9.0	-10.1
Air Absorption	-2.0	-1.7	-1.6	-1.5	-2.0	-2.0	-1.6	-1.5	-1.4	-1.9
View Angle Correction	-9.1	-6.7	-8.0	-4.0	-5.4	-8.9	-6.9	-7.8	-3.7	-5.6
$L_{eq,30min}$	30.7	34.0	33.3	37.5	34.5	30.3	33.5	33.2	37.5	34.0
Rolling Noise Overall ($L_{eq,30min}$)	44									

NSR ID	RNIA_4F_02									
Description	Dormitory									
Assessment Floor	4/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.6	-15.5	-15.5	-15.5	-15.6	-15.6	-15.5	-15.5	-15.5	-15.6
Distance Correction	-10.6	-10.0	-9.6	-9.5	-10.4	-10.5	-9.8	-9.4	-9.2	-10.2
Air Absorption	-2.1	-1.8	-1.6	-1.6	-2.0	-2.1	-1.7	-1.5	-1.5	-1.9
View Angle Correction	-9.1	-6.8	-8.2	-4.1	-5.3	-8.8	-7.0	-8.0	-3.8	-5.4
$L_{eq,30min}$	30.5	33.7	32.9	37.1	34.6	30.2	33.2	32.7	37.2	34.1
Rolling Noise Overall ($L_{eq,30min}$)	44									

NSR ID	RNIA_4F_03									
Description	Dormitory									
Assessment Floor	4/F									
Track	TML									
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.6	-15.6	-15.5	-15.5	-15.6	-15.6	-15.5	-15.5	-15.5	-15.6
Distance Correction	-10.7	-10.1	-9.8	-9.7	-10.5	-10.6	-9.9	-9.5	-9.4	-10.2
Air Absorption	-2.2	-1.9	-1.7	-1.7	-2.0	-2.1	-1.8	-1.6	-1.5	-1.9
View Angle Correction	-9.1	-7.0	-8.3	-4.2	-5.2	-8.8	-7.1	-8.2	-3.9	-5.3
$L_{eq,30min}$	30.3	33.3	32.4	36.8	34.6	30.1	32.8	32.3	36.8	34.1
Rolling Noise Overall ($L_{eq,30min}$)	44									

NSR ID	RNIA_4F_04															
Description	Dormitory															
Assessment Floor	4/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.6	-15.6	-15.6	-15.5	-15.6	-15.6	-15.6	-15.5	-15.5	-15.5	-15.3	-15.2	0.0	-15.2	-15.2	0.0
Distance Correction	-11.3	-10.7	-10.2	-9.8	-10.2	-11.2	-10.5	-10.0	-9.5	-9.9	-10.9	-10.3	-10.4	-10.8	-10.2	-10.3
Air Absorption	-2.5	-2.1	-1.9	-1.7	-1.9	-2.4	-2.0	-1.8	-1.6	-1.8	-2.2	-1.9	-2.0	-2.2	-1.9	-2.0
View Angle Correction	-9.9	-7.9	-9.1	-4.3	-4.3	-9.7	-8.1	-9.1	-4.0	-4.3	-22.3	-8.5	-7.1	-22.6	-8.2	-7.1
$L_{eq,30min}$	28.6	31.6	31.0	36.5	35.9	28.3	31.0	30.7	36.5	35.6	6.1	20.8	37.2	5.8	21.2	37.4
Rolling Noise Overall ($L_{eq,30min}$)	45															

NSR ID	RNIA_4F_05															
Description	Dormitory															
Assessment Floor	4/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.6	-15.6	-15.6	-15.5	-15.6	-15.6	-15.6	-15.5	-15.5	-15.5	-15.2	-15.2	0.0	-15.2	-15.2	0.0
Distance Correction	-11.2	-10.6	-10.2	-9.8	-10.1	-10.4	-10.4	-9.9	-9.4	-9.9	-10.8	-10.2	-10.4	-10.8	-10.1	-10.3
Air Absorption	-2.5	-2.1	-1.9	-1.7	-1.9	-2.0	-2.0	-1.8	-1.6	-1.7	-2.2	-1.9	-2.0	-2.2	-1.9	-1.9
View Angle Correction	-10.0	-7.9	-9.1	-4.2	-4.3	-9.8	-8.2	-9.1	-4.0	-4.3	-22.1	-8.5	-7.1	-22.4	-8.2	-7.1
$L_{eq,30min}$	28.6	31.7	31.2	36.6	36.0	29.4	31.0	30.8	36.7	35.7	6.4	21.0	37.3	6.1	21.4	37.5
Rolling Noise Overall ($L_{eq,30min}$)	45															

NSR ID	RNIA_4F_06															
Description	Dormitory															
Assessment Floor	4/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.6	-15.6	-15.5	-15.5	-15.6	-15.6	-15.6	-15.5	-15.5	-15.5	-15.2	-15.2	0.0	-15.2	-15.2	0.0
Distance Correction	-11.0	-10.4	-9.9	-9.6	-10.1	-11.0	-10.2	-9.7	-9.2	-9.8	-10.4	-10.1	-10.4	-10.7	-10.1	-10.3
Air Absorption	-2.3	-2.0	-1.8	-1.6	-1.9	-2.3	-1.9	-1.7	-1.5	-1.7	-2.0	-1.9	-2.0	-2.1	-1.8	-1.9
View Angle Correction	-9.9	-7.7	-8.8	-4.0	-4.5	-9.7	-7.9	-8.8	-3.8	-4.5	-20.6	-8.3	-7.3	-20.8	-8.0	-7.3
$L_{eq,30min}$	29.0	32.2	31.8	37.1	35.9	28.7	31.6	31.5	37.2	35.5	8.6	21.2	37.1	7.9	21.6	37.2
Rolling Noise Overall ($L_{eq,30min}$)	46															

NSR ID	RNIA_4F_07															
Description	Dormitory															
Assessment Floor	4/F															
Track	TML										LRT					
Track ID	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	-15.6	-15.6	-15.5	-15.5	-15.6	-15.6	-15.6	-15.5	-15.5	-15.5	-15.2	-15.2	0.0	-15.2	-15.2	0.0
Distance Correction	-11.0	-10.3	-9.9	-9.5	-10.1	-10.9	-10.1	-9.6	-9.2	-9.8	-10.7	-10.1	-10.4	-10.7	-10.1	-10.3
Air Absorption	-2.3	-1.9	-1.7	-1.6	-1.9	-2.3	-1.9	-1.6	-1.5	-1.7	-2.2	-1.9	-2.0	-2.1	-1.8	-2.0
View Angle Correction	-9.8	-7.6	-8.7	-4.0	-4.6	-9.6	-7.8	-8.6	-3.7	-4.7	-20.0	-8.3	-7.5	-20.2	-8.0	-7.4
$L_{eq,30min}$	29.2	32.5	32.1	37.3	35.7	28.9	31.9	31.8	37.3	35.4	8.7	21.2	36.9	8.5	21.7	37.0
Rolling Noise Overall ($L_{eq,30min}$)	46															

Appendix 4.4 - Detail of Predicted Railway Noise Level at 4/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,T}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_4F_08																
Description	Dormitory																
Assessment Floor	4/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.6	-15.5	-15.5	-15.5	-15.6	-15.6	-15.5	-15.5	-15.5	-15.5	-15.2	-15.2	0.0	-15.2	-15.2	0.0
Distance Correction	dB(A)	-10.8	-10.1	-9.6	-9.4	-10.1	-10.7	-9.9	-9.4	-9.0	-9.9	-10.7	-10.1	-10.4	-10.6	-10.0	-10.4
Air Absorption	dB(A)	-2.2	-1.8	-1.6	-1.5	-1.9	-2.2	-1.8	-1.5	-1.4	-1.7	-2.1	-1.9	-2.0	-2.1	-1.8	-2.0
View Angle Correction	dB(A)	-9.7	-7.3	-8.4	-3.9	-4.8	-9.5	-7.5	-8.3	-3.6	-4.9	-18.8	-8.3	-7.7	-18.9	-8.0	-7.7
$L_{eq,T,30min}$	dB(A)	29.7	33.1	32.6	37.6	35.5	29.3	32.4	32.4	37.7	35.1	10.0	21.3	36.6	9.9	21.8	36.7
Rolling Noise Overall ($L_{eq,T,30min}$)	dB(A)	46															

NSR ID	RNIA_4F_09																
Description	Dormitory																
Assessment Floor	4/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.6	-15.5	-15.5	-15.5	-15.5	-15.6	-15.5	-15.5	-15.5	-15.5	-15.2	-15.2	0.0	-15.2	-15.1	0.0
Distance Correction	dB(A)	-10.7	-9.9	-9.5	-9.2	-10.1	-10.6	-9.7	-9.2	-8.8	-9.8	-10.6	-10.0	-10.4	-10.5	-9.9	-10.3
Air Absorption	dB(A)	-2.1	-1.8	-1.6	-1.5	-1.8	-2.1	-1.7	-1.5	-1.3	-1.7	-2.1	-1.8	-2.0	-2.1	-1.8	-2.0
View Angle Correction	dB(A)	-9.7	-7.2	-8.2	-3.7	-4.9	-9.5	-7.5	-8.1	-3.4	-5.1	-18.0	-8.2	-7.9	-18.1	-7.9	-7.9
$L_{eq,T,30min}$	dB(A)	29.8	33.4	33.1	38.0	35.5	29.4	32.7	32.9	38.1	35.1	10.9	21.6	36.5	10.8	22.0	36.6
Rolling Noise Overall ($L_{eq,T,30min}$)	dB(A)	46															

NSR ID	RNIA_4F_10																
Description	Dormitory																
Assessment Floor	4/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.6	-15.5	-15.5	-15.5	-15.5	-15.6	-15.5	-15.5	-15.5	-15.5	-15.2	-15.2	0.0	-15.2	-15.1	0.0
Distance Correction	dB(A)	-10.6	-9.8	-9.4	-9.1	-10.1	-10.5	-9.6	-9.1	-8.7	-9.8	-10.5	-10.0	-10.4	-10.5	-9.9	-10.3
Air Absorption	dB(A)	-2.1	-1.7	-1.5	-1.4	-1.8	-2.1	-1.6	-1.4	-1.3	-1.7	-2.1	-1.8	-2.0	-2.0	-1.8	-2.0
View Angle Correction	dB(A)	-9.6	-7.1	-8.1	-3.7	-5.1	-9.5	-7.3	-8.0	-3.4	-5.2	-17.5	-8.2	-8.0	-17.6	-7.9	-8.0
$L_{eq,T,30min}$	dB(A)	30.0	33.6	33.4	38.1	35.3	29.6	33.0	33.2	38.2	34.9	11.4	21.5	36.3	11.3	22.0	36.4
Rolling Noise Overall ($L_{eq,T,30min}$)	dB(A)	46															

Appendix 4.4 - Detail of Predicted Railway Noise Level at 5/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,30min}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_SF_01									
Description	Dormitory									
Assessment Floor	5/F									
Track	TML									
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.5	-15.4	-15.4	-15.4	-15.5	-15.5	-15.4	-15.4	-15.4	-15.4
Distance Correction	dB(A)	-10.5	-9.8	-9.5	-9.4	-10.4	-10.4	-9.6	-9.2	-9.0	-10.1
Air Absorption	dB(A)	-2.0	-1.7	-1.6	-1.5	-2.0	-2.0	-1.6	-1.5	-1.4	-1.9
View Angle Correction	dB(A)	-9.1	-6.7	-8.0	-4.0	-5.4	-8.9	-6.9	-7.8	-3.7	-5.6
$L_{eq,30min}$	dB(A)	30.8	34.2	33.5	37.6	34.7	30.5	33.7	33.3	37.7	34.2
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	45									

NSR ID	RNIA_SF_02									
Description	Dormitory									
Assessment Floor	5/F									
Track	TML									
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.5	-15.4	-15.4	-15.4	-15.5	-15.5	-15.4	-15.4	-15.4	-15.4
Distance Correction	dB(A)	-10.6	-10.0	-9.7	-9.5	-10.4	-10.5	-9.8	-9.4	-9.2	-10.2
Air Absorption	dB(A)	-2.1	-1.8	-1.6	-1.6	-2.0	-2.1	-1.7	-1.5	-1.5	-1.9
View Angle Correction	dB(A)	-9.1	-6.8	-8.2	-4.1	-5.3	-8.8	-7.0	-8.0	-3.8	-5.4
$L_{eq,30min}$	dB(A)	30.6	33.8	33.0	37.2	34.7	30.3	33.3	32.9	37.3	34.2
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	44									

NSR ID	RNIA_SF_03									
Description	Dormitory									
Assessment Floor	5/F									
Track	TML									
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.5	-15.4	-15.4	-15.4	-15.5	-15.5	-15.4	-15.4	-15.4	-15.4
Distance Correction	dB(A)	-10.7	-10.1	-9.8	-9.7	-10.5	-10.6	-9.9	-9.6	-9.4	-10.3
Air Absorption	dB(A)	-2.2	-1.9	-1.7	-1.7	-2.0	-2.1	-1.8	-1.6	-1.5	-1.9
View Angle Correction	dB(A)	-9.1	-7.0	-8.3	-4.2	-5.2	-8.8	-7.1	-8.2	-3.9	-5.3
$L_{eq,30min}$	dB(A)	30.4	33.5	32.6	36.9	34.7	30.1	32.9	32.4	36.9	34.3
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	44									

NSR ID	RNIA_SF_04																
Description	Dormitory																
Assessment Floor	5/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.5	-15.5	-15.4	-15.4	-15.4	-15.5	-15.5	-15.4	-15.4	-15.4	-15.2	-15.1	0.0	-15.1	-15.1	0.0
Distance Correction	dB(A)	-11.3	-10.7	-10.2	-9.8	-10.2	-11.2	-10.5	-10.0	-9.5	-9.9	-10.9	-10.3	-10.4	-10.8	-10.2	-10.3
Air Absorption	dB(A)	-2.5	-2.1	-1.9	-1.7	-1.9	-2.4	-2.0	-1.8	-1.6	-1.8	-2.2	-1.9	-2.0	-2.2	-1.9	-2.0
View Angle Correction	dB(A)	-9.9	-7.9	-9.1	-4.3	-4.3	-9.7	-8.1	-9.1	-4.0	-4.3	-22.3	-8.5	-7.1	-22.6	-8.2	-7.1
$L_{eq,30min}$	dB(A)	28.7	31.7	31.2	36.6	36.0	28.4	31.1	30.8	36.6	35.7	6.2	20.9	37.2	5.9	21.4	37.4
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	45															

NSR ID	RNIA_SF_05																
Description	Dormitory																
Assessment Floor	5/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.5	-15.5	-15.4	-15.4	-15.4	-15.5	-15.5	-15.4	-15.4	-15.4	-15.1	-15.1	0.0	-15.1	-15.0	0.0
Distance Correction	dB(A)	-11.2	-10.6	-10.2	-9.8	-10.1	-10.4	-10.4	-9.9	-9.4	-9.9	-10.8	-10.2	-10.4	-10.8	-10.1	-10.3
Air Absorption	dB(A)	-2.5	-2.1	-1.9	-1.7	-1.9	-2.0	-2.0	-1.8	-1.6	-1.7	-2.2	-1.9	-2.0	-2.2	-1.9	-1.9
View Angle Correction	dB(A)	-10.0	-7.9	-9.1	-4.2	-4.3	-9.8	-8.2	-9.1	-4.0	-4.3	-22.1	-8.5	-7.1	-22.4	-8.2	-7.1
$L_{eq,30min}$	dB(A)	28.7	31.8	31.3	36.8	36.1	29.5	31.1	30.9	36.8	35.8	6.5	21.1	37.3	6.2	21.5	37.4
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	46															

NSR ID	RNIA_SF_06																
Description	Dormitory																
Assessment Floor	5/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.5	-15.5	-15.4	-15.4	-15.4	-15.5	-15.4	-15.4	-15.4	-15.4	-15.1	-15.1	0.0	-15.1	-15.0	0.0
Distance Correction	dB(A)	-11.0	-10.4	-9.9	-9.6	-10.1	-11.0	-10.2	-9.7	-9.2	-9.8	-10.4	-10.2	-10.4	-10.7	-10.1	-10.3
Air Absorption	dB(A)	-2.3	-2.0	-1.8	-1.6	-1.9	-2.3	-1.9	-1.7	-1.5	-1.7	-2.0	-1.9	-2.0	-2.1	-1.8	-1.9
View Angle Correction	dB(A)	-9.9	-7.7	-8.8	-4.0	-4.5	-9.7	-7.9	-8.8	-3.8	-4.5	-20.6	-8.3	-7.3	-20.8	-8.0	-7.3
$L_{eq,30min}$	dB(A)	29.1	32.3	31.9	37.2	36.0	28.7	31.7	31.7	37.3	35.7	8.7	21.3	37.0	7.9	21.8	37.2
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	46															

NSR ID	RNIA_SF_07																
Description	Dormitory																
Assessment Floor	5/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.5	-15.4	-15.4	-15.4	-15.4	-15.5	-15.4	-15.4	-15.4	-15.4	-15.1	-15.0	0.0	-15.1	-15.0	0.0
Distance Correction	dB(A)	-11.0	-10.3	-9.9	-9.5	-10.1	-10.9	-10.1	-9.6	-9.2	-9.9	-10.7	-10.2	-10.4	-10.7	-10.1	-10.3
Air Absorption	dB(A)	-2.3	-1.9	-1.7	-1.6	-1.9	-2.3	-1.9	-1.6	-1.5	-1.7	-2.2	-1.9	-2.0	-2.1	-1.8	-2.0
View Angle Correction	dB(A)	-9.8	-7.6	-8.7	-4.0	-4.6	-9.6	-7.8	-8.6	-3.7	-4.7	-20.0	-8.3	-7.5	-20.2	-8.0	-7.4
$L_{eq,30min}$	dB(A)	29.3	32.6	32.2	37.4	35.9	28.9	32.0	31.9	37.5	35.5	8.8	21.4	36.9	8.6	21.8	37.0
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	46															

Appendix 4.4 - Detail of Predicted Railway Noise Level at 5/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_5F_08																
Description	Dormitory																
Assessment Floor	5/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.5	-15.4	-15.4	-15.4	-15.4	-15.5	-15.4	-15.4	-15.4	-15.4	-15.1	-15.0	0.0	-15.1	-15.0	0.0
Distance Correction	dB(A)	-10.8	-10.1	-9.7	-9.4	-10.1	-10.7	-9.9	-9.4	-9.0	-9.9	-10.7	-10.1	-10.4	-10.6	-10.0	-10.4
Air Absorption	dB(A)	-2.2	-1.8	-1.6	-1.5	-1.9	-2.2	-1.8	-1.5	-1.4	-1.7	-2.1	-1.9	-2.0	-2.1	-1.8	-2.0
View Angle Correction	dB(A)	-9.7	-7.3	-8.4	-3.9	-4.8	-9.5	-7.5	-8.3	-3.6	-4.9	-18.8	-8.3	-7.7	-18.9	-8.0	-7.7
$L_{eq,\ 30min}$	dB(A)	29.7	33.2	32.8	37.7	35.6	29.4	32.6	32.5	37.8	35.2	10.1	21.4	36.6	10.0	21.9	36.7
Rolling Noise Overall ($L_{eq,\ 30min}$)	dB(A)	46															

NSR ID	RNIA_5F_09																
Description	Dormitory																
Assessment Floor	5/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.5	-15.4	-15.4	-15.4	-15.4	-15.5	-15.4	-15.4	-15.3	-15.4	-15.1	-15.0	0.0	-15.1	-15.0	0.0
Distance Correction	dB(A)	-10.7	-9.9	-9.5	-9.2	-10.1	-10.6	-9.7	-9.2	-8.8	-9.8	-10.6	-10.0	-10.4	-10.5	-9.9	-10.3
Air Absorption	dB(A)	-2.1	-1.8	-1.6	-1.5	-1.8	-2.1	-1.7	-1.5	-1.3	-1.7	-2.1	-1.8	-2.0	-2.1	-1.8	-2.0
View Angle Correction	dB(A)	-9.7	-7.2	-8.2	-3.7	-4.9	-9.5	-7.5	-8.1	-3.4	-5.1	-18.0	-8.2	-7.9	-18.1	-7.9	-7.9
$L_{eq,\ 30min}$	dB(A)	29.9	33.5	33.2	38.1	35.6	29.5	32.9	33.0	38.3	35.2	11.0	21.7	36.5	10.9	22.1	36.6
Rolling Noise Overall ($L_{eq,\ 30min}$)	dB(A)	46															

NSR ID	RNIA_5F_10																
Description	Dormitory																
Assessment Floor	5/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.5	-15.4	-15.4	-15.4	-15.4	-15.5	-15.4	-15.4	-15.3	-15.4	-15.1	-15.0	0.0	-15.1	-15.0	0.0
Distance Correction	dB(A)	-10.6	-9.8	-9.4	-9.1	-10.1	-10.5	-9.6	-9.1	-8.8	-9.8	-10.5	-10.0	-10.4	-10.5	-10.0	-10.4
Air Absorption	dB(A)	-2.1	-1.7	-1.5	-1.4	-1.8	-2.1	-1.6	-1.4	-1.3	-1.7	-2.1	-1.8	-2.0	-2.0	-1.8	-2.0
View Angle Correction	dB(A)	-9.6	-7.1	-8.1	-3.7	-5.1	-9.5	-7.3	-8.0	-3.4	-5.2	-17.5	-8.2	-8.0	-17.6	-7.9	-8.0
$L_{eq,\ 30min}$	dB(A)	30.1	33.7	33.5	38.3	35.4	29.7	33.1	33.3	38.4	35.0	11.5	21.7	36.3	11.5	22.1	36.4
Rolling Noise Overall ($L_{eq,\ 30min}$)	dB(A)	46															

Appendix 4.4 - Detail of Predicted Railway Noise Level at 6/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,5m}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_6F_01									
Description	Dormitory									
Assessment Floor	6/F									
Track	TML									
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.4	-15.3	-15.3	-15.3	-15.3	-15.3	-15.3	-15.2	-15.2	-15.3
Distance Correction	dB(A)	-10.5	-9.8	-9.5	-9.4	-10.4	-10.4	-9.6	-9.2	-9.0	-10.1
Air Absorption	dB(A)	-2.0	-1.7	-1.6	-1.5	-2.0	-2.0	-1.6	-1.5	-1.4	-1.9
View Angle Correction	dB(A)	-9.1	-6.7	-8.0	-4.0	-5.4	-8.9	-6.9	-7.8	-3.7	-5.6
$L_{eq,30min}$	dB(A)	30.9	34.3	33.6	37.7	34.8	30.6	33.8	33.5	37.8	34.3
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	45									

NSR ID	RNIA_6F_02									
Description	Dormitory									
Assessment Floor	6/F									
Track	TML									
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.4	-15.3	-15.3	-15.3	-15.4	-15.4	-15.3	-15.2	-15.2	-15.3
Distance Correction	dB(A)	-10.6	-10.0	-9.7	-9.5	-10.4	-10.5	-9.8	-9.4	-9.2	-10.2
Air Absorption	dB(A)	-2.1	-1.8	-1.6	-1.6	-2.0	-2.1	-1.7	-1.5	-1.5	-1.9
View Angle Correction	dB(A)	-9.1	-6.8	-8.2	-4.1	-5.3	-8.8	-7.0	-8.0	-3.8	-5.4
$L_{eq,30min}$	dB(A)	30.7	33.9	33.1	37.4	34.8	30.4	33.4	33.0	37.5	34.3
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	44									

NSR ID	RNIA_6F_03									
Description	Dormitory									
Assessment Floor	6/F									
Track	TML									
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.4	-15.3	-15.3	-15.3	-15.4	-15.4	-15.3	-15.3	-15.3	-15.3
Distance Correction	dB(A)	-10.7	-10.1	-9.8	-9.7	-10.5	-10.6	-9.9	-9.6	-9.4	-10.3
Air Absorption	dB(A)	-2.2	-1.9	-1.7	-1.7	-2.0	-2.1	-1.8	-1.6	-1.5	-1.9
View Angle Correction	dB(A)	-9.1	-7.0	-8.3	-4.2	-5.2	-8.8	-7.1	-8.2	-3.9	-5.3
$L_{eq,30min}$	dB(A)	30.5	33.6	32.7	37.0	34.8	30.2	33.1	32.5	37.1	34.4
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	44									

NSR ID	RNIA_6F_04															
Description	Dormitory															
Assessment Floor	6/F															
Track	TML											LRT				
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.4	-15.4	-15.3	-15.3	-15.3	-15.4	-15.4	-15.3	-15.3	-15.3	-15.1	-15.0	0.0	-15.0	-14.9	0.0
Distance Correction	dB(A)	-11.3	-10.7	-10.2	-9.8	-10.2	-11.2	-10.5	-10.0	-9.5	-9.9	-10.9	-10.3	-10.4	-10.8	-10.2	-10.3
Air Absorption	dB(A)	-2.5	-2.1	-1.9	-1.7	-1.9	-2.4	-2.0	-1.8	-1.6	-1.8	-2.2	-1.9	-2.0	-2.2	-1.9	-2.0
View Angle Correction	dB(A)	-9.9	-7.9	-9.1	-4.3	-4.3	-9.7	-8.1	-9.1	-4.0	-4.3	-22.3	-8.5	-7.1	-22.6	-8.2	-7.1
$L_{eq,30min}$	dB(A)	28.8	31.8	31.3	36.7	36.1	28.5	31.2	30.9	36.8	35.8	6.3	21.0	37.2	6.0	21.5	37.4
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	45															

NSR ID	RNIA_6F_05															
Description	Dormitory															
Assessment Floor	6/F															
Track	TML											LRT				
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.4	-15.4	-15.3	-15.3	-15.3	-15.4	-15.4	-15.3	-15.3	-15.3	-15.0	-14.9	0.0	-15.0	-14.9	0.0
Distance Correction	dB(A)	-11.2	-10.6	-10.2	-9.8	-10.1	-10.4	-10.4	-9.9	-9.4	-9.9	-10.8	-10.2	-10.4	-10.8	-10.1	-10.3
Air Absorption	dB(A)	-2.5	-2.1	-1.9	-1.7	-1.9	-2.0	-2.0	-1.8	-1.6	-1.7	-2.2	-1.9	-2.0	-2.2	-1.9	-1.9
View Angle Correction	dB(A)	-10.0	-7.9	-9.1	-4.2	-4.3	-9.8	-8.2	-9.1	-4.0	-4.3	-22.1	-8.5	-7.1	-22.4	-8.2	-7.1
$L_{eq,30min}$	dB(A)	28.8	31.9	31.4	36.9	36.2	29.6	31.2	31.1	36.9	35.9	6.6	21.2	37.3	6.3	21.6	37.4
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	46															

NSR ID	RNIA_6F_06															
Description	Dormitory															
Assessment Floor	6/F															
Track	TML											LRT				
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.4	-15.3	-15.3	-15.3	-15.4	-15.3	-15.3	-15.3	-15.2	-15.3	-15.0	-14.9	0.0	-15.0	-14.9	0.0
Distance Correction	dB(A)	-11.0	-10.4	-9.9	-9.6	-10.1	-11.0	-10.2	-9.7	-9.2	-9.8	-10.4	-10.2	-10.4	-10.7	-10.1	-10.3
Air Absorption	dB(A)	-2.3	-2.0	-1.8	-1.6	-1.9	-2.3	-1.9	-1.7	-1.5	-1.7	-2.0	-1.9	-2.0	-2.1	-1.8	-1.9
View Angle Correction	dB(A)	-9.9	-7.7	-8.8	-4.0	-4.5	-9.7	-7.9	-8.8	-3.8	-4.5	-20.6	-8.3	-7.3	-20.8	-8.0	-7.3
$L_{eq,30min}$	dB(A)	29.2	32.5	32.0	37.4	36.1	28.8	31.8	31.8	37.5	35.8	8.8	21.4	37.0	8.0	21.9	37.2
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	46															

NSR ID	RNIA_6F_07															
Description	Dormitory															
Assessment Floor	6/F															
Track	TML											LRT				
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.4	-15.3	-15.3	-15.3	-15.3	-15.4	-15.3	-15.3	-15.2	-15.3	-15.0	-14.9	0.0	-15.0	-14.9	0.0
Distance Correction	dB(A)	-11.0	-10.3	-9.9	-9.5	-10.1	-10.9	-10.1	-9.6	-9.2	-9.9	-10.7	-10.2	-10.4	-10.7	-10.1	-10.3
Air Absorption	dB(A)	-2.3	-1.9	-1.7	-1.6	-1.9	-2.3	-1.9	-1.6	-1.5	-1.7	-2.2	-1.9	-2.0	-2.1	-1.8	-2.0
View Angle Correction	dB(A)	-9.8	-7.6	-8.7	-4.0	-4.6	-9.6	-7.8	-8.6	-3.7	-4.7	-20.0	-8.3	-7.5	-20.2	-8.0	-7.4
$L_{eq,30min}$	dB(A)	29.4	32.7	32.3	37.5	36.0	29.0	32.1	32.0	37.6	35.6	8.9	21.5	36.9	8.7	21.9	37.0
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	46															

Appendix 4.4 - Detail of Predicted Railway Noise Level at 6/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,T}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_6F_08																
Description	Dormitory																
Assessment Floor	6/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.4	-15.3	-15.3	-15.2	-15.3	-15.4	-15.3	-15.3	-15.2	-15.3	-15.0	-14.9	0.0	-15.0	-14.9	0.0
Distance Correction	dB(A)	-10.8	-10.1	-9.7	-9.4	-10.1	-10.7	-9.9	-9.4	-9.0	-9.9	-10.7	-10.1	-10.4	-10.6	-10.0	-10.4
Air Absorption	dB(A)	-2.2	-1.8	-1.6	-1.5	-1.9	-2.2	-1.8	-1.5	-1.4	-1.7	-2.1	-1.9	-2.0	-2.1	-1.8	-2.0
View Angle Correction	dB(A)	-9.7	-7.3	-8.4	-3.9	-4.8	-9.5	-7.5	-8.3	-3.6	-4.9	-18.8	-8.3	-7.7	-18.9	-8.0	-7.7
$L_{eq,1,30min}$	dB(A)	29.8	33.3	32.9	37.9	35.7	29.5	32.7	32.7	38.0	35.3	10.2	21.6	36.6	10.1	22.0	36.7
Rolling Noise Overall ($L_{eq,1,30min}$)	dB(A)	46															

NSR ID	RNIA_6F_09																
Description	Dormitory																
Assessment Floor	6/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.4	-15.3	-15.3	-15.2	-15.3	-15.4	-15.3	-15.2	-15.2	-15.3	-15.0	-14.9	0.0	-15.0	-14.9	0.0
Distance Correction	dB(A)	-10.7	-9.9	-9.5	-9.2	-10.1	-10.6	-9.7	-9.2	-8.8	-9.8	-10.6	-10.0	-10.4	-10.5	-10.0	-10.3
Air Absorption	dB(A)	-2.1	-1.8	-1.6	-1.5	-1.8	-2.1	-1.7	-1.5	-1.3	-1.7	-2.1	-1.8	-2.0	-2.1	-1.8	-2.0
View Angle Correction	dB(A)	-9.7	-7.2	-8.2	-3.7	-4.9	-9.5	-7.5	-8.1	-3.4	-5.1	-18.0	-8.2	-7.9	-18.1	-7.9	-7.9
$L_{eq,1,30min}$	dB(A)	30.0	33.6	33.3	38.3	35.7	29.6	33.0	33.2	38.4	35.3	11.1	21.8	36.5	11.0	22.2	36.6
Rolling Noise Overall ($L_{eq,1,30min}$)	dB(A)	46															

NSR ID	RNIA_6F_10																
Description	Dormitory																
Assessment Floor	6/F																
Track	TML											LRT					
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5	LRT_NB_1	LRT_NB_2	LRT_NB_3	LRT_SB_1	LRT_SB_2	LRT_SB_3
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2	73.8	73.8	73.8	73.8	73.8	73.8
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+10.0	+10.0	+10.0	+10.0	+10.0	+10.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.4	-15.3	-15.3	-15.2	-15.3	-15.4	-15.3	-15.2	-15.2	-15.3	-15.0	-14.9	0.0	-15.0	-14.9	0.0
Distance Correction	dB(A)	-10.6	-9.9	-9.4	-9.1	-10.1	-10.5	-9.6	-9.1	-8.8	-9.8	-10.5	-10.0	-10.4	-10.5	-10.0	-10.4
Air Absorption	dB(A)	-2.1	-1.7	-1.5	-1.4	-1.8	-2.1	-1.6	-1.4	-1.3	-1.7	-2.1	-1.8	-2.0	-2.0	-1.8	-2.0
View Angle Correction	dB(A)	-9.6	-7.1	-8.1	-3.7	-5.1	-9.5	-7.3	-8.0	-3.4	-5.2	-17.5	-8.2	-8.0	-17.6	-7.9	-8.0
$L_{eq,1,30min}$	dB(A)	30.2	33.9	33.6	38.4	35.6	29.8	33.3	33.5	38.5	35.1	11.6	21.8	36.3	11.6	22.2	36.4
Rolling Noise Overall ($L_{eq,1,30min}$)	dB(A)	46															

Appendix 4.4 - Detail of Predicted Railway Noise Level at 7/F

TML

Monitoring Condition	Data	Unit
Train Length	8	Cars
Train Speed	130	km/hr
Monitoring Distance	25	m
SEL (North Bound)	81.4	dB(A)
SEL (South Bound)	80.7	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	9	Cars
Train Speed	130	km/hr
Train Frequency	40	Train/hour
Train Frequency	20	Train/30min

SEL_{ref} (9 Cars, 130km/hr, measured 25m)	Data	Unit
SEL_{ref} (North Bound)	81.9	dB(A)
SEL_{ref} (South Bound)	81.2	dB(A)

LRT

Monitoring Condition	Data	Unit
Train Length	2	Cars
Train Speed	50	km/hr
Monitoring Distance	25	m
$L_{eq,30min}$	65	dB(A)
SEL	70.9	dB(A)

Operation Detail (Worst Case Scenario)	Data	Unit
Train Length	2	Cars
Train Speed	70	km/hr
Train Frequency	19	Train/hour
Train Frequency	10	Train/30min

SEL_{ref} (2 Cars, 70km/hr, measured 25m)	Data	Unit
SEL_{ref}	73.8	dB(A)

NSR ID	RNIA_7F_01									
Description	Conference Room (1)									
Assessment Floor	7/F									
Track	TML									
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	dB(A)	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Façade Correction	dB(A)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Barrier Correction	dB(A)	-15.3	-15.2	-15.1	-15.1	-15.2	-15.3	-15.2	-15.1	-15.1	-15.2
Distance Correction	dB(A)	-10.6	-10.0	-9.6	-9.5	-10.4	-10.5	-9.7	-9.3	-9.2	-10.2
Air Absorption	dB(A)	-2.1	-1.8	-1.6	-1.6	-2.0	-2.0	-1.7	-1.5	-1.5	-1.9
View Angle Correction	dB(A)	-9.1	-6.8	-8.1	-4.1	-5.3	-8.8	-7.0	-8.0	-3.8	-5.5
$L_{eq,30min}$	dB(A)	30.9	34.1	33.4	37.6	34.9	30.5	33.6	33.2	37.7	34.4
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	45									

NSR ID	RNIA_7F_02									
Description	Conference Room (2)									
Assessment Floor	7/F									
Track	TML									
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.3	-15.2	-15.2	-15.1	-15.2	-15.3	-15.2	-15.1	-15.1	-15.2
Distance Correction	dB(A)	-10.6	-10.0	-9.7	-9.6	-10.5	-10.6	-9.8	-9.4	-9.3	-10.2
Air Absorption	dB(A)	-2.1	-1.8	-1.7	-1.6	-2.0	-2.1	-1.7	-1.5	-1.5	-1.9
View Angle Correction	dB(A)	-9.1	-6.9	-8.2	-4.1	-5.3	-8.8	-7.0	-8.1	-3.8	-5.4
$L_{eq,30min}$	dB(A)	30.8	34.0	33.2	37.4	34.9	30.5	33.5	33.0	37.5	34.4
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	44									

NSR ID	RNIA_7F_03									
Description	Superintedent's Office									
Assessment Floor	7/F									
Track	TML									
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.3	-15.2	-15.2	-15.1	-15.2	-15.3	-15.2	-15.1	-15.1	-15.2
Distance Correction	dB(A)	-10.7	-10.1	-9.8	-9.7	-10.5	-10.6	-9.9	-9.5	-9.3	-10.2
Air Absorption	dB(A)	-2.2	-1.9	-1.7	-1.7	-2.0	-2.1	-1.8	-1.6	-1.5	-1.9
View Angle Correction	dB(A)	-9.1	-6.9	-8.3	-4.2	-5.2	-8.8	-7.1	-8.2	-3.9	-5.3
$L_{eq,30min}$	dB(A)	30.7	33.8	32.9	37.2	34.9	30.4	33.3	32.7	37.3	34.5
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	44									

NSR ID	RNIA_7F_04									
Description	Assistant Superintedent's Office									
Assessment Floor	7/F									
Track	TML									
Track ID	Unit	TML_NB_1	TML_NB_2	TML_NB_3	TML_NB_4	TML_NB_5	TML_SB_1	TML_SB_2	TML_SB_3	TML_SB_4	TML_SB_5
SEL_{ref}	dB(A)	81.9	81.9	81.9	81.9	81.9	81.2	81.2	81.2	81.2	81.2
Train Frequency Correction	dB(A)	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0	+13.0
Time Correction (30min)	dB(A)	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6	-32.6
Track Deterioration Correction	dB(A)	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0	+3.0
Façade Correction	dB(A)	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5	+2.5
Barrier Correction	dB(A)	-15.3	-15.2	-15.2	-15.2	-15.3	-15.3	-15.2	-15.1	-15.1	-15.2
Distance Correction	dB(A)	-10.8	-10.2	-9.9	-9.7	-10.5	-10.7	-10.0	-9.6	-9.4	-10.3
Air Absorption	dB(A)	-2.2	-1.9	-1.7	-1.7	-2.1	-2.1	-1.8	-1.6	-1.5	-1.9
View Angle Correction	dB(A)	-9.1	-7.0	-8.4	-4.2	-5.2	-8.8	-7.1	-8.3	-4.0	-5.3
$L_{eq,30min}$	dB(A)	30.6	33.6	32.7	37.1	34.9	30.3	33.1	32.5	37.1	34.5
Rolling Noise Overall ($L_{eq,30min}$)	dB(A)	44									