

# Traffic Noise Mitigation Plan

(Ref. EP-468/2013/A)



Agreement No. CE 13/2014 (CE)

# Development of Kwu Tung North and Fanling North New Development Areas Phase 1 – Design and Construction





Agreement No. CE 13/2014 (CE)


## Development of Kwu Tung North and Fanling North New Development Areas, Phase 1 – Design and Construction

### Traffic Noise Mitigation Plan

(Ref. EP-468/2013/A)

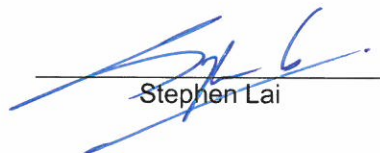
30 April 2019

Reviewed:

  
Igor Ho

30 April 2019

Approved for Issue:

  
Stephen Lai

30 April 2019

### AECOM ASIA COMPANY LIMITED

**Disclaimer:**

*This Report is prepared for Civil Engineering and Development Department (CEDD) and is given for its sole benefit in relation to and pursuant to Agreement No. CE 13/2014 (CE) Development of Kwu Tung North and Fanling North New Development Areas, Phase 1 – Design and Construction and may not be disclosed to, quoted to or relied upon by any person (other than CEDD) without our prior written consent. No person other than CEDD into whose possession a copy of this report comes may rely on this report without our express written consent and CEDD may not rely on it for any purpose other than as described above.*

**TABLE OF CONTENTS**

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	Background .....	1
1.2	Objective of this Traffic Noise Mitigation Plan .....	1
<b>2</b>	<b>REVIEW ON TRAFFIC NOISE MITIGATION MEASURES .....</b>	<b>2</b>
2.1	Introduction.....	2
2.2	Environmental Legislation, Standards and Criteria .....	2
2.3	Representative Noise Sensitive Receivers .....	2
2.4	Traffic Noise Impact Assessment Methodology .....	3
2.5	Traffic Noise Impact Assessment.....	4
2.6	Evaluation of Residual Impact .....	8
2.7	Implementation Programme of Mitigation Measures.....	8
<b>3</b>	<b>CONCLUSION .....</b>	<b>9</b>

<b>Figure No.</b>	<b>Title</b>
Figure 1.1	Location of the Project (DP4)
Figures 2.1a to 2.1e	Location of Representative Noise Sensitive Receivers and Assessment Points (Residential and School)
Figures 2.1f to 2.1h	Location of Representative Noise Sensitive Receivers and Assessment Points (Social Welfare)
Figure 2.1i	(Not used)
Figures 2.1j to 2.1l	Location of Representative Noise Sensitive Receivers and Assessment Points (Kindergarten)
Figures 2.2a to 2.2e	Latest Proposal of Traffic Noise Mitigation Measures
Figures 2.3	Locations of Proposed Social Welfare Facilities with Residential Premises and Home for the Elderly
Figures 2.4	Locations of Proposed Kindergarten
<b>Appendices</b>	
Appendix 1.1	Traffic Noise Mitigation Measures Proposed in P&E Review
Appendix 2.1	Details of Road Traffic Forecast at Year 2044 and 2029 (For RCHE)
Appendix 2.2	Computer Plot of Road Scheme
Appendix 2.3	Unmitigated Road Traffic Noise Impacts on NSRs (KTN) at Year 2044
Appendix 2.4	Details of Road Traffic Noise Impacts on NSRs (Mitigated Scenario - KTN) at Year 2044
Appendix 2.5	Details of Noise Mitigation Measures at RCHE
Appendix 2.6	Details Breakdown of Protected and Benefitted Land Uses
Appendix 2.7	Summary of Road Traffic Noise Mitigation Proposal for the Project

## 1 INTRODUCTION

### 1.1 Background

- 1.1.1 The North East New Territories (NENT) New Development Areas (NDAs) Planning and Engineering (P&E) Study, after consideration and incorporation of comments from the three-stage public engagement programme, planned to proceed with development in the Kwu Tung North (KTN) and Fanling North (FLN). The NENT NDAs P&E Study is a designated project under Item 1 Schedule 3 of the Environmental Impact Assessment Ordinance (EIAO), and covers a total of thirteen individual designated projects which require environmental permits under Schedule 2 of EIAO.
- 1.1.2 An EIA Report was prepared to assess the environmental impacts associated with the proposed construction and operational works of the NENT NDAs. The EIA Report (Register No. AEIAR-175/2013) was approved by the Director of Environmental Protection (DEP) on 18 October 2013 with approval conditions stipulated in the Director's letter (Reference: (45) in EP2/N7/S3/57 Pt.3). There are twelve Environmental Permits (EPs) and one Further Environmental Permit (FEP) issued by DEP on 21 November 2013 and 3 January 2014 to cover all the identified designated projects in NENT NDAs. Construction and operation of KTN NDA Road D1 to D5 (hereinafter known as "the Project"), which is defined as Designated Project 4 (DP4) in EIA Report, is governed by EP-468/2013.
- 1.1.3 During the planning and engineering (P&E) review under Agreement No. CE 13/2014 – Development of Kwu Tung North and Fanling North New Development Areas, Phase 1 – Design and Construction (D&C), minor changes in the road alignment of the Project were proposed based on the findings of the planning and engineering review such as latest engineering design. The traffic noise mitigation measures proposed in the P&E review is provided in **Appendix 1.1**. Variation of environmental permit (VEP) for the Project was subsequently applied for the proposed changes and the latest Environmental Permit (EP No: EP-468/2013/A) was issued by DEP on 27 January 2017. Location of the Project is shown in **Figure 1.1**.
- 1.1.4 Pursuant to EP Condition 2.10, the Permit Holder, Civil Engineering and Development Department (CEDD), shall no later than one month before the commencement of construction of the Project, submit four hard copies and two electronic copies of Traffic Noise Mitigation Plan (the Plan) to the DEP for approval. If there is any change proposed to the traffic noise mitigation measures in the approved Plan, the Permit Holder shall, no later than one month before the implementation of any such change, submit to the Director for approval four hard copies and two electronic copies of an update to the Plan (the Updated Plan). The Plan or any Updated Plan shall demonstrate that the traffic noise performance requirements set out in the EIA Report (Register No.: AEIAR-175/2013) will not be exceeded with the mitigation measures in place.
- 1.1.5 AECOM Asia Co Ltd has been commissioned by the CEDD to prepare the Plan for submission to DEP for approval.

### 1.2 Objective of this Traffic Noise Mitigation Plan

- 1.2.1 This Traffic Noise Mitigation Plan (the Plan) has been prepared to demonstrate that the traffic noise performance requirements set out in the EIA Report (Register No.: AEIAR-175/2013) for the Project will not be exceeded with the mitigation measures in place.

## 2 REVIEW ON TRAFFIC NOISE MITIGATION MEASURES

### 2.1 Introduction

2.1.1 As mentioned in **Section 1.1.3**, a set of traffic noise mitigation measures was developed under P&E review (**Appendix 1.1** refers). A review on the traffic noise mitigation measures has been conducted and the potential cumulative traffic noise impact within 300m study area of the Project has been evaluated and discussed in the following sections.

### 2.2 Environmental Legislation, Standards and Criteria

2.2.1 The criteria for assessing road traffic noise are given in the *Technical Memorandum on Environmental Impact Assessment Process* (EIAO-TM). The road traffic noise criterion is 70dB(A) for domestic premises, hotels, hostels and offices, and 65dB(A) for educational institutes and places of worship. For hospitals, clinics etc, a more stringent criterion of 55dB(A) is stipulated. It should be noted that all these criteria only apply to Noise Sensitive Receivers (NSRs) that rely on opened windows for ventilation.

### 2.3 Representative Noise Sensitive Receivers

2.3.1 The representative NSRs generally follow same assessment points as adopted in the Engineering Review for Accommodating Additional Population in KTN and FLN NDAs and for Remaining Packages of NDAs – Report on Environmental Review (July 2017) (“P&E ERR”), except that the assessment points at KTN Sites A1-2, A1-4, A1-5, A2-2, A2-7, A3-2, A3-3 and A3-4 have been updated based on the updated information of blocking layout plans. Details of the revised representative NSRs for residential development are presented in **Table 2.1** with all the proposed assessment points shown in **Figures 2.1a – 2.1e**.

2.3.2 Except for the proposed Residential Care Home for the Elderly (RCHE) in KTN Site B2-5, the exact locations for other proposed social welfare facilities, home for the elderly and kindergarten within the KTN NDA are not yet confirmed during this review. Therefore, following same assessment approach as adopted in the EIA Report, sensitivity test on the potential road traffic noise impact has been conducted at the proposed social welfare facilities, home for the elderly and kindergarten. The locations of social welfare facilities, home for the elderly and kindergarten have been updated according to the best available information during this review. It should be noted that, during the design of the social welfare facilities and kindergarten, noise sensitive uses should be located to avoid exceedance as far as practicable. While the layout of RCHE at KTN Site B2-5 is being developed and yet to be finalized, the locations of the assessment points for the proposed RCHE are same as those adopted in P&E ERR. Details of the revised representative NSRs for social welfare facilities, home for the elderly and kindergarten/school are presented in **Table 2.1** with all the proposed assessment points for the proposed social welfare facilities, home for the elderly and kindergarten presented in **Figures 2.1f – 2.1h** and **Figures 2.1j – 2.1l** respectively.

**Table 2.1 Details of Revised Representative Noise Sensitive Receivers**

NSR	Assessment Point (AP) <sup>(1)</sup>	Revised / New AP <sup>(2)</sup>	Land Use <sup>(3)</sup>	Status	No. of Floor	Traffic Noise Criterion, L <sub>10(1hr)</sub> , dB(A)	Remarks
A1-2	N2500 – N2506 (Residential)	N2500 – N2510	PRH	Planned	36-39	70	Updated information from HA <sup>(4)</sup>
	N6681 – N6683 (Social Welfare)	N6681 – N6683			5	70	
	N6161 – N6183 (Kindergarten)	N6161 – N6175	E		1-2	65	
A1-4	- (Residential)	N2542, N2545	R	Planned	27	70	Updated information from CEDD
	R6268 – R6270 (Kindergarten)	N6269 – N6270, N6315 – N6318	E		1-2	65	

NSR	Assessment Point (AP) <sup>(1)</sup>	Revised / New AP <sup>(2)</sup>	Land Use <sup>(3)</sup>	Status	No. of Floor	Traffic Noise Criterion, L <sub>10(1hr)</sub> , dB(A)	Remarks
A1-5	R2542 (Residential)	N2543 – N2544	CDA	Planned	27	70	Updated information from CEDD
	R6315 – R6318 (Kindergarten)	-	E		-	65	
A2-2	N2621 – N2625, N2626a-b, N2627 – N2629 (Residential)	N2621 – N2640	PRH	Planned	40	70	Updated information from HA
	N6717 – N6719, N6740 – N6742 (Social welfare)	-			-	70	
	N6201 – N6242 (Kindergarten)	N6201 – N6213, N6220 – N6238	E		1-3	65	
A2-7	N2681 – N2683 (Residential)	N2681 – N2683	R	Planned	40	70	Updated information from HA
	- (Social Welfare)	N6613 – N6614			7	70	
	R6113 – R6128 (Kindergarten)	N6113 – N6132	E		1-7	65	
A3-2	R3301 (School)	N3301 – N3302	E	Planned	8	65	New APs based on updated layout
A3-3	N2721 – N2725, N2726a-b, N2727a-b, N2728 – N2730, N2731a-b (Residential)	N2721 – N2723, N2724a-e, N2725, N2726a-b, N2727a-b, N2728, N2729a-b, N2730, N2731a-b	PRH	Planned	39-40	70	Updated information from HA
	N6001 – N6004, R6520 – R6537 (Social Welfare)	N6520 – N6522			7	70	
	N6001 – N6019, N6040 – N6052, R6020 – R6037 (Kindergarten)	N6020 – N6035	E		1-7	65	
A3-4	R3381 (School)	N3381 – N3382	E	Planned	8	65	New APs based on updated layout

Notes:

- (1) Reference was made from Planning and Engineering Review for Accommodating Additional Population in KTN and FLN NDAs and for Remaining Packages of NDAs – Report on Environmental Review (July 2017) (“P&E ERR”).
- (2) The revised / new representative NSRs, where applicable, have been identified for road traffic noise assessment according to best available information during the preparation of this Plan.
- (3) R – Residential; PRH – Public Rental Housing; E: Educational; CDA: Comprehensive Development Areas.
- (4) Layout of KTN Site A1-2 was based on the updated information provided by HA though this site has been handed over to Hong Kong Housing Society (HKHS) and the layout is being developed by HKHS during the preparation of this Plan.

## 2.4 Traffic Noise Impact Assessment Methodology

- 2.4.1 Same road traffic noise assessment methodology as presented in Section 4.6.2.1 of the EIA Report has been adopted in this noise impact assessment.

2.4.2 As the commencement year of all the proposed road networks for KTN and FLN NDA remains in 2029, the year with maximum traffic flow within a 15-year period upon commencement of operation of the road works remains 2044 (i.e. same as that stated in the EIA Report and P&E ERR). For the purpose of this review, traffic noise impact at the representative NSRs in Year 2044 has been assessed to evaluate the traffic noise compliance and the required mitigation measures for ultimate scenario. Traffic forecast for the Year 2044 (**Appendix 2.1** refers) as adopted in P&E ERR has been used for this traffic noise impact assessment. For without project scenario, the predicted overall noise levels at the design year (i.e. Year 2044) are extracted from the EIA Report.

## 2.5 Traffic Noise Impact Assessment

2.5.1 A computer plot of the road scheme and a plan showing the location of existing roads, new roads and other roads is presented in **Appendix 2.2**. **Appendix 2.3** presents the unmitigated road traffic noise impacts on NSRs and the locations where direct noise mitigation measures should be provided on the proposed project roads in order to alleviate the adverse noise impacts at those affected NSRs.

2.5.2 Based on the best available information during the preparation of this Plan, the latest recommended mitigation proposal as presented in **Figures 2.2a – 2.2e** has been reviewed. The mitigated noise levels of the representative NSRs within 300m of the Project are summarised in **Table 2.2**, with detailed road traffic noise levels presented in **Appendix 2.4**.

**Table 2.2 Predicted Road Traffic Noise Levels under Mitigated Scenario at KTN in Year 2044 (At Residential Premises, Primary School and Secondary School)**

NSR	Assessment Point	Use <sup>(1)</sup>	L <sub>10(1hr)</sub> dB(A)		Compliance [Y/N]	Mitigation Measures Required [Y/N] <sup>(2)</sup>
			Criterion <sup>(3)</sup>	Predicted Noise Levels		
KTN -1	R1001-1005	W, E, R	65 - 70	59 - 67	Y	N
KTN -2	R1021-1034	E, R	65 - 70	59 - 65	Y	N
KTN -4	R1041-1043	R	70	68 - 70	Y	N
KTN -7	R1061 <sup>(4)</sup>	E	65	62 - 64	Y	N
KTN-9	R1085-1090	R	70	56 - 69	Y	N
KTN-11	R1102-1107	R	70	58 - 70	Y	N
KTN-12	R1121	R	70	67	Y	N
KTN-20	R1161-1162	R	70	21 - 23	Y	N
KTN-32	R1181-1186	R	70	59 - 68	Y	N
KTN-33	R1201-1202	R	70	68 - 70	Y	N
KTN-45	R1501-1502, R1504, R1506, N1505	R	70	66 - 70	Y	N
KTN-46	R1241	R	70	51 - 52	Y	N
KTN-48	R1281-1282, R1284-1290	R	70	57 - 70	Y	N
KTN-49	R1301	R	70	61	Y	N
KTN-50	R1681-1682	R	70	69 - 70	Y	N
KTN-P2	R1541-1546	R	70	61 - 68	Y	N
KTN-P6	R1521, R1523-1527	R	70	60 - 70	Y	N
A1-2	N2500-2510	PRH	70	56 - 70	Y	N
A1-4	R2521-2522, N2542, N2545	R	70	62 - 67	Y	N
A1-5	R2541, N2543-2544	CDA	70	62 - 67	Y	N
A1-6	R2561	R	70	65 - 67	Y	N
A1-8	N2581-2583	HOS	70	63 - 68	Y	N
A1-9	R2601-2611, N2612	R	70	53 - 70	Y	N
A2-2	N2621-2640	PRH	70	59 - 69	Y	N
A2-4	N2641	HOS	70	66 - 70	Y	N
A2-5	R2661	R	70	63 - 68	Y	N

NSR	Assessment Point	Use <sup>(1)</sup>	L <sub>10(1hr)</sub> dB(A)		Compliance [Y/N]	Mitigation Measures Required [Y/N] <sup>(2)</sup>
			Criterion <sup>(3)</sup>	Predicted Noise Levels		
A2-7	N2681-2683	PRH	70	58 - 70	Y	N
A2-9	R2701-2707	R	70	54 - 68	Y	N
A2-11	R3222-3223	E	65	62 - 65	Y	N
A2-12	R3241	E	65	61 - 63	Y	N
A2-13	R3264-3265	E	65	55 - 65	Y	N
A3-1	R3282	E	65	59 - 63	Y	N
A3-2	N3301-3302	E	65	52 - 65	Y	N
A3-3	N2721-2723, N2724a-e, N2725, N2726a-b, N2727a-b, N2728, N2729a-b, N2730, N2731a-b	PRH	70	52 - 71	Y <sup>(5)</sup>	N <sup>(5)</sup>
A3-4	N3381-3382	E	65	59 - 62	Y	N
A3-6	R2741-2747	R	70	63 - 70	Y	N
A3-7	R2141	R	70	41	Y	N
B1-1	N3001-3003	E	65	59 - 65	Y	N
B2-6	N3421-3422	E	65	52 - 64	Y	N
B2-7	N3441-3442	E	65	56 - 64	Y	N
B2-8	N3401-3403	E	65	59 - 65	Y	N
B2-10	R2761-2764	CDA	70	36 - 70	Y	N
C1-3	R2021-2024	CDA	70	64 - 70	Y	N
C1-4	R2001, R2102-2103	R	70	62 - 67	Y	N
D1-5	R3481	R	70	63	Y	N
D1-7	R2781-2783, N2784-2794	R	70	61 - 70	Y	N
D1-9	R2041-2043, R2046-2047, N2046-2047	R	70	51 - 69	Y	N
D1-11	R2821-2830, N2831-2835	R	70	56 - 70	Y	N
E1-2	R2862-2863	E	65	60 - 63	Y	N
E1-3	R3701-3704	G	70	59 - 67	Y	N
E1-4	R3721	E	65	60	Y	N
F1-3	R2841-2848	OU	70	60 - 69	Y	N
H1-1	R1504, R1506, N1505	R	70	66 - 70	Y	N

Notes:

- (1) R – Residential; E – Educational; G – Government; CDA – Comprehensive Development Areas; PRH – Public Rental Housing; HOS – Home Ownership Scheme; W – Place of Worship; OU – Other Specified Uses.
- (2) For existing and planned NSRs outside and within the non-development area of NDA, direct mitigation measures are required when "With Project Overall Noise Level exceeds Noise Criteria" AND, either "With Project - Without Project Overall Noise Level  $\geq$  1dB(A)" or "New Roads exceeds Noise Criteria" or "New Roads Contribution  $\geq$  1 dB(A)".
- (3) Relevant environmental standards/criteria: TM-EIAO noise standards for road traffic noise.
- (4) Based on latest information (<https://www.legco.gov.hk/yr17-18/english/fc/pwsc/papers/p18-19e.pdf>), the existing Lady Ho Tung Welfare Centre (KTN-7) will be revitalised as Lady Ho Tung Welfare Centre Eco-Learn Institutes. Hence, R1061 will be changed for educational use.
- (5) As advised by HD, architectural fin or similar measures will be adopted at assessment points N2724d as the further noise mitigation measures in public housing site at KTN Site A3-3 to mitigate the residual noise impacts. With the implementation of architectural fin or similar measures, the traffic noise levels at NSRs would comply with noise limit of 70dB(A). As such, no further direct mitigation measures are required.

2.5.3 The mitigated traffic noise levels at all planned and existing residential premises will comply with the relevant noise criterion except KTN Site A3-3. As discussed in **Section 2.3.2**, the exact locations for the proposed social welfare facilities, home for the elderly and kindergarten are not yet confirmed except the RCHE at KTN Site B2-5. Hence, a sensitivity test on the possible locations has been conducted with findings presented in **Table 2.3** and **2.4**. Similar to the findings of the EIA Report, the predicted road traffic noise levels at some of the NSRs would exceed the relevant noise criterion, and thus non-sensitive use at that particular façade or acoustic insulation should be adopted. In addition, during the design of the social welfare facilities and kindergarten, noise sensitive uses should be located to avoid exceedance as far as practicable. **Figure 2.3** and **Figure 2.4** show the façades of potential locations for the



proposed social welfare facilities, home for the elderly and kindergarten at KTN respectively which can rely on open window for ventilation without exceeding the traffic noise criteria.

2.5.4 Road traffic noise levels at the representative NSRs of proposed RCHE in KTN Site B2-5 were also predicted based on 2029 traffic flows with consideration of the year of population intake as worst case scenario in view of the provision of noise mitigation measures at Fanling Highway. Details of the results are provided in **Appendix 2.5**. During P&E study, various lengths of architectural fins have been proposed at critical assessment points SI-1, SI-4, W-1 and W-2, and also noise mitigation measures in the form of provision of air-conditioning and insulated glazed unit have been considered to further mitigate the residual noise impact at SI-1, W-1 and W-2 to meet the relevant noise criteria. If there is any change in layout plan during detailed design stage, the noise mitigation measures should be further reviewed by the Engineer / Design & Build (D&B) Contractor of RCHE to ensure that the stipulated criteria at the NSRs can be met in the future. Details of proposed noise mitigation measures on the proposed RCHE are presented in **Appendix 2.5**.

**Table 2.3 Road Traffic Noise Sensitivity Analysis for Potential Locations of Social Welfare under Mitigated Scenario at KTN in Year 2044**

NSR	Assessment Point	Use <sup>(1)</sup>	L <sub>10(1hr)</sub> dB(A)		Compliance [Y/N]	Mitigation Measures Required [Y/N]
			Criterion <sup>(2)</sup>	Predicted Noise Levels		
A1-2	N6681-6683	H	70	53 - 60	Y	N
A1-6	R6831-6851	R	70	17 - 68	Y	N
A2-5	R6581-6592	R	70	19 - 71	Y <sup>(3)</sup>	N <sup>(3)</sup>
A2-7	N6613-6614	R	70	66 - 70	Y	N
A3-3	N6001-6004, N6520-6522	R	65 - 70	58 - 67	Y <sup>(3)</sup>	N <sup>(3)</sup>
B2-5	N-1 to N-6, E-1 to E-5, SI-1 to SI-6, W-1 to W-5, W-G, NI-1 to NI-6	R/ H	55 - 70	38 - 70	Y <sup>(4)</sup>	N <sup>(4)</sup>
B2-8	N6781-6784	R	70	51 - 69	Y	N
B2-10	R6861-6867	R	70	55 - 67	Y	N

Notes:

(1) R – Residential; H – Hospital.

(2) Relevant environmental standards/criteria: TM-EIAO noise standards for road traffic noise.

(3) Non-sensitive use at the particular façade that would exceed the traffic noise limit or acoustic insulation should be adopted during the design stage. **Figure 2.3** shows the façades of potential locations for the proposed social welfare facilities and home for the elderly at KTN respectively which can rely on open window for ventilation without exceeding the traffic noise criteria. With the implementation of proper design, there would be no exceedance anticipated at these NSRs.

(4) As confirmed by Architectural Service Department (ArchSD), appropriate noise mitigation measures would be proposed and adopted by the D&B contractor to mitigate the traffic noise impact at RCHE. A Noise Impact Assessment (NIA) will be conducted separately by the contractor as engaged by ArchSD/ Social Welfare Department (SWD) to demonstrate that the latest RCHE layout would comply with relevant noise criteria.

**Table 2.4 Road Traffic Noise Sensitivity Analysis for Potential Locations of Kindergartens under Mitigated Scenario at KTN in Year 2044**

NSR	Assessment Point	Use <sup>(1)</sup>	L <sub>10(1hr)</sub> dB(A)		Compliance [Y/N]	Mitigation Measures Required [Y/N]
			Criterion <sup>(2)</sup>	Predicted Noise Levels		
A1-2	N6161-6175	E	65	42 - 70	Y <sup>(3)</sup>	N <sup>(3)</sup>
A1-4	R6261-6267, R6271, N6269-6270, N6315-6318	E	65	32 - 70	Y <sup>(3)</sup>	N <sup>(3)</sup>
A1-5	R6301-6314	E	65	17 - 68	Y <sup>(3)</sup>	N <sup>(3)</sup>
A1-6	R6331-6351	E	65	17 - 68	Y <sup>(3)</sup>	N <sup>(3)</sup>
A1-8	R6381-6392	E	65	42 - 69	Y <sup>(3)</sup>	N <sup>(3)</sup>
A2-2	N6201-6213,	E	65	29 - 74	Y <sup>(3)</sup>	N <sup>(3)</sup>

NSR	Assessment Point	Use <sup>(1)</sup>	L <sub>10(1hr)</sub> dB(A)		Compliance [Y/N]	Mitigation Measures Required [Y/N]
			Criterion <sup>(2)</sup>	Predicted Noise Levels		
	N6220-6238					
A2-4	N6141-6148	E	65	25 - 67	Y <sup>(3)</sup>	N <sup>(3)</sup>
A2-7	R6113-6132	E	65	39 - 70	Y <sup>(3)</sup>	N <sup>(3)</sup>
A3-3	N6001-6035, N6040-6052	E	65	43 - 73	Y <sup>(3)</sup>	N <sup>(3)</sup>

Notes:

(1) E – Educational.

(2) Relevant environmental standards/criteria: TM-EIAO noise standards for road traffic noise.

(3) Non-sensitive use at the particular façade that would exceed the traffic noise limit or acoustic insulation should be adopted during the design stage. **Figure 2.4** shows the façades of potential locations for the proposed kindergarten at KTN respectively which can rely on open window for ventilation without exceeding the traffic noise criteria. With the implementation of proper design, there would be no exceedance anticipated at these NSRs.

2.5.5 The noise mitigation proposal for the Project has been reviewed during the preparation of this proposal. Summary of traffic noise mitigation measures for the Project are presented in **Appendix 2.7**. Locations of road traffic noise mitigation measures are shown in **Figures 2.2a – 2.2e**. While the façades of the potential locations of proposed social welfare facilities, home for the elderly and kindergarten which can rely on open window for ventilation without exceeding the traffic noise criteria are shown in **Figure 2.3** and **Figure 2.4** respectively. Provision of architectural fins, air-conditioning and insulated glazed unit will be adopted during the detailed design stage of the RCHE at KTN Site B2-5 (**Appendix 2.5** refers).

2.5.6 To study the noise performance of the Project, traffic noise levels at the residential premises, educational institutions and places of public worship which have direct line of sight to the Project have been reviewed. The numbers of dwellings, classrooms, places of public worship that would be benefited from and protected by the provision of recommended noise mitigation measures have been calculated with estimated results and details of calculation presented in **Table 2.5** and **Appendix 2.6** respectively.

**Table 2.5 Summary of Protected and Benefitted Land Uses**

NSE <sup>(1)</sup>	Total No. of NSE	Unmitigated Scenario	Mitigated Scenario		
		No. of Exposed NSE	No. of Exposed NSE	Protected NSE	Benefitted NSE
<b><i>KTN – Existing NSE</i></b>					
Dwellings	1143	629	0	629	629
Classrooms	31	31	0	31	31
<b><i>KTN - Planned NSE</i></b>					
Dwellings	41429	9346	0 <sup>(3)</sup>	9346	9338
Classroom <sup>(2)</sup>	578	351	0	351	351

Notes:

(1) NSE – Noise sensitive element

(2) As the school layouts showing classrooms are not available during the preparation of this report, a total of six classrooms has been assumed for each floor.

(3) As advised by HD, architectural fin or similar measures will be adopted at the exposed dwellings (i.e. Assessment points N2724d) as the further noise mitigation measures in public housing site at KTN Site A3-3 to mitigate the residual noise impacts. With the implementation of architectural fin or similar measures, the traffic noise levels at NSRs would comply with noise limit of 70dB(A). As such, there will be no more exposed NSE among the existing and planned NSE in KTN NDA.

2.5.7 With the implementation of recommended direct mitigation measures including the provision of noise barrier and LNRS, no exceedance is predicted at the planned dwellings in KTN NDA. The noise mitigation measures required and the building layout assumed in this Plan will not affect the development potential of those concerned sites for residential premises.

2.5.8 The eligibility of the affected premises for indirect technical remedies (ITR) has been reviewed according to the three criteria (i.e. "With Project Overall Noise Level exceeds Noise Criteria" AND, either "With Project - Without Project Overall Noise Level ≥ 1dB(A)" or "New Roads

exceeds Noise Criteria" or "New Roads Contribution  $\geq 1$  dB(A)"). Since none of the receivers (Tables 2.2 to 2.4 refer) has met all three criteria, no ITR is required.

## 2.6 Evaluation of Residual Impact

- 2.6.1 During the operational phase, the impact arising from the Project can be mitigated by implementing the proposed noise control measures such as barrier, enclosure, low noise road surfacing and thus residual noise impacts are not anticipated.

## 2.7 Implementation Programme of Mitigation Measures

- 2.7.1 In view of the extensive scale of development and substantial land area involved, the KTN NDA will be developed in two phases, i.e. advance and remaining phases. As such, the implementation programme of noise mitigation measures has been developed according to implementation programme of the KTN NDA. The recommended noise mitigation measures should be in place before the occupation of corresponding areas in KTN NDA in order to protect the planned NSRs from adverse traffic noise impact. A summary of Road Traffic Noise Mitigation Proposal for the Project, together with the implementation programme, is presented in **Appendix 2.7**.
- 2.7.2 If there is any change proposed to the traffic noise mitigation measures in the approved TNMP, the Permit Holder shall, no later than one month before the implementation of any such change, submit to the DEP for approval of an update to the TNMP.

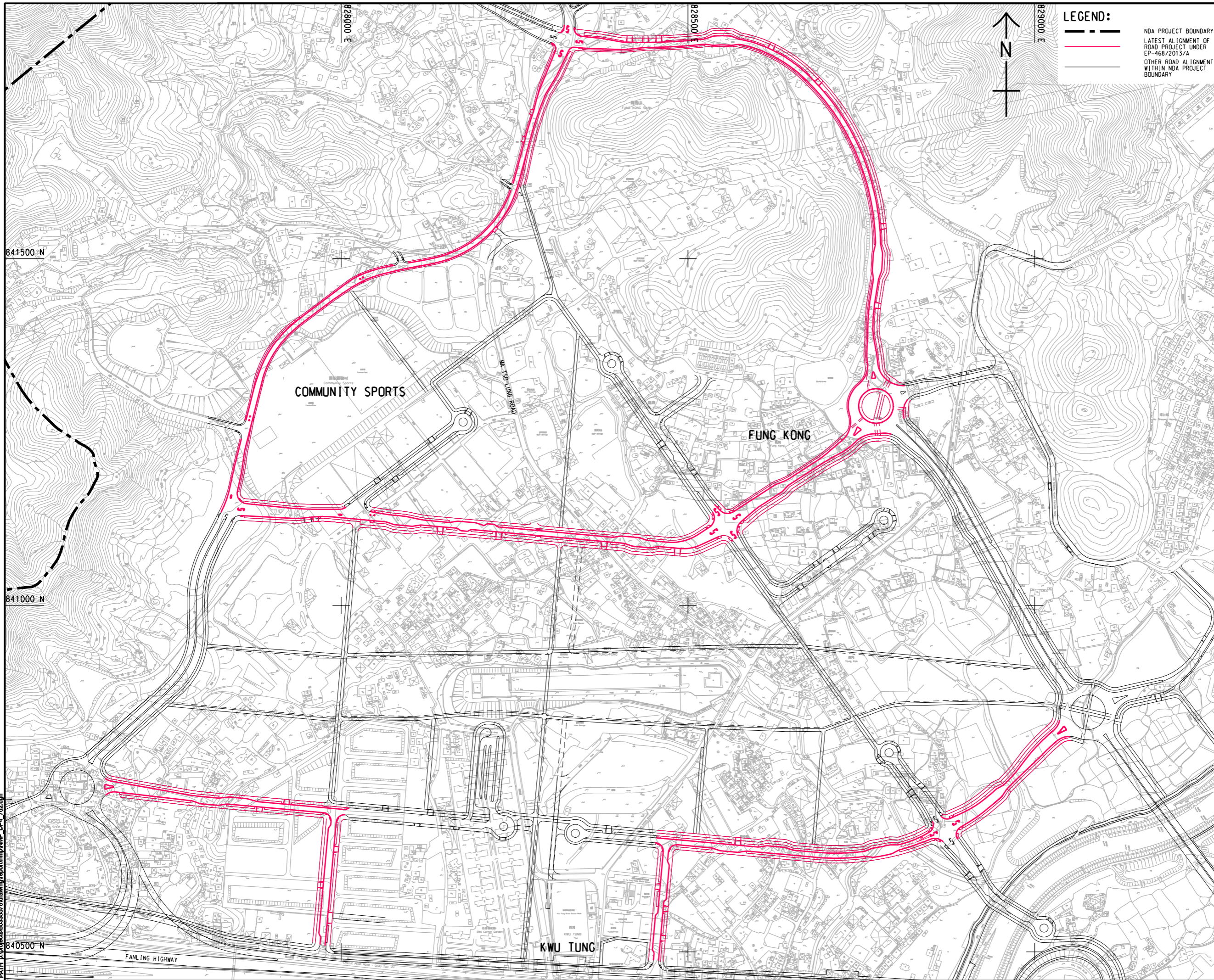
### **3 CONCLUSION**

- 3.1.1 The traffic noise mitigation measures for the Project have been reviewed based on latest available information of the development layouts. Assessment results indicate that traffic noise performance requirements set out in the EIA report (Register No.: AEIAR-175/2013) will not be exceeded with the mitigation measures in place.
- 3.1.2 All mitigation measures recommended in this Plan will be fully implemented and properly maintained throughout the operational phase(s) of the Project. If there is any change proposed to the traffic noise mitigation measures in the approved TNMP, the Permit Holder shall, no later than one month before the implementation of any such change, submit to the DEP for approval of an update to the TNMP.

## ***FIGURES***

---

Pld File by: LIAK2 11/03/2019  
 PATH: P:\projects\6033576\drawing\p\p\NMP\_DP4\_702.dgn  
 Project Management Initials: 841500 N  
 Designer: 841000 N  
 Checked: 840500 N  
 Approved: 840500 N  
 ISO A1 594mm x 841mm



**LEGEND:**

- NDA PROJECT BOUNDARY
- LATEST ALIGNMENT OF ROAD PROJECT UNDER EP-468/2013/A
- OTHER ROAD ALIGNMENT WITHIN NDA PROJECT BOUNDARY



**PROJECT**  
 項目  
**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 業主  
 土木工程拓展署  
 Civil Engineering and Development Department

**CONSULTANT**  
 工程顧問公司  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

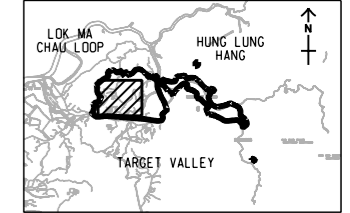
**ISSUE/REVISION**  
 修訂

IR	DATE	DESCRIPTION	CHK
號	日期	內容摘要	核對

**STATUS**  
 階段

**SCALE** 比例: A1 1:3000  
**DIMENSION UNIT** 尺寸單位: METRES

**KEY PLAN** 索引圖: A1 1:15000



**PROJECT NO.** 項目編號: 60335576  
**CONTRACT NO.** 合約編號: CE 13/2014 (CE)

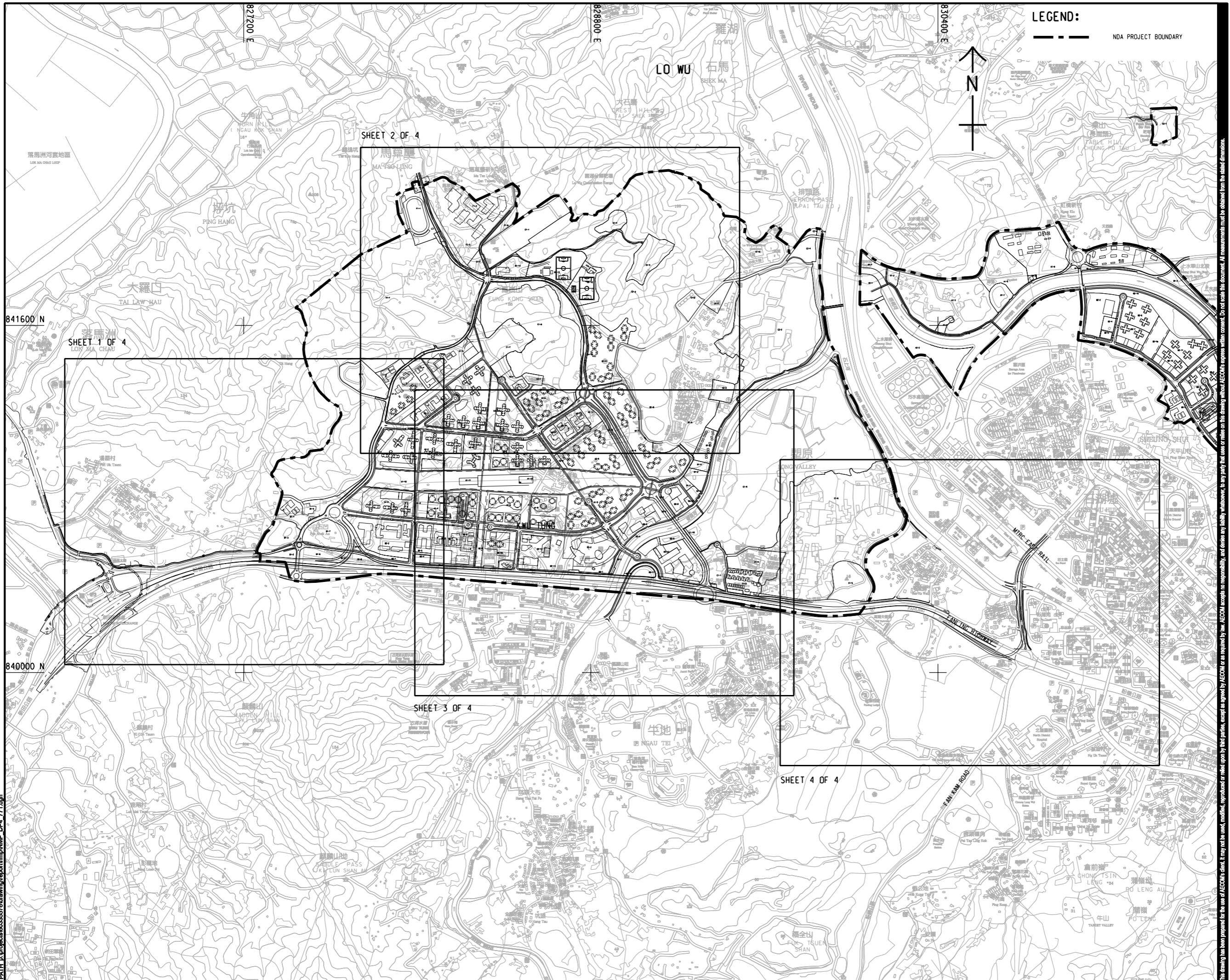
**SHEET TITLE** 圖紙名稱: LOCATION OF THE PROJECT (DP4)

**SHEET NUMBER** 圖紙編號: 60335576/NMP/DP4/FIGURE 1.1

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and does not warrant, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

841600 N

840000 N



LEGEND:  
 - - - - - NDA PROJECT BOUNDARY

**AECOM**

PROJECT  
 DEVELOPMENT OF  
 KWU TUNG NORTH AND  
 FANLING NORTH  
 NEW DEVELOPMENT  
 AREAS, PHASE 1 -  
 DESIGN AND  
 CONSTRUCTION

CLIENT  
 土木工程拓展署  
 CEDD Civil Engineering and  
 Development Department

CONSULTANT  
 工務顧問公司  
 AECOM Asia Company Ltd.  
 www.aecom.com

SUB-CONSULTANTS  
 分判工務顧問公司

ISSUE/REVISION  
 修訂

NO.	DATE	DESCRIPTION	CHK.

STATUS  
 階段

SCALE  
 比例  
 A1 1 : 8000

DIMENSION UNIT  
 尺寸單位  
 METRES

KEY PLAN  
 索引圖

PROJECT NO.  
 項目編號  
 60335576

CONTRACT NO.  
 合約編號  
 CE 13/2014 (CE)

SHEET TITLE  
 圖紙名稱  
 LOCATION OF REPRESENTATIVE  
 NSRs AND ASSESSMENT POINTS  
 (RESIDENTIAL AND SCHOOL)  
 KEY PLAN

SHEET NUMBER  
 圖紙編號  
 60335576/NMP/DP4/FIGURE 2.1a

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and disclaims any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

ISO A1 594mm x 841mm  
Approved:  
Checked:  
Designer:  
Project Management Initials:

**NOTE:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/FIGURE 2.1b TO FIGURE 2.1e

**LEGEND:**

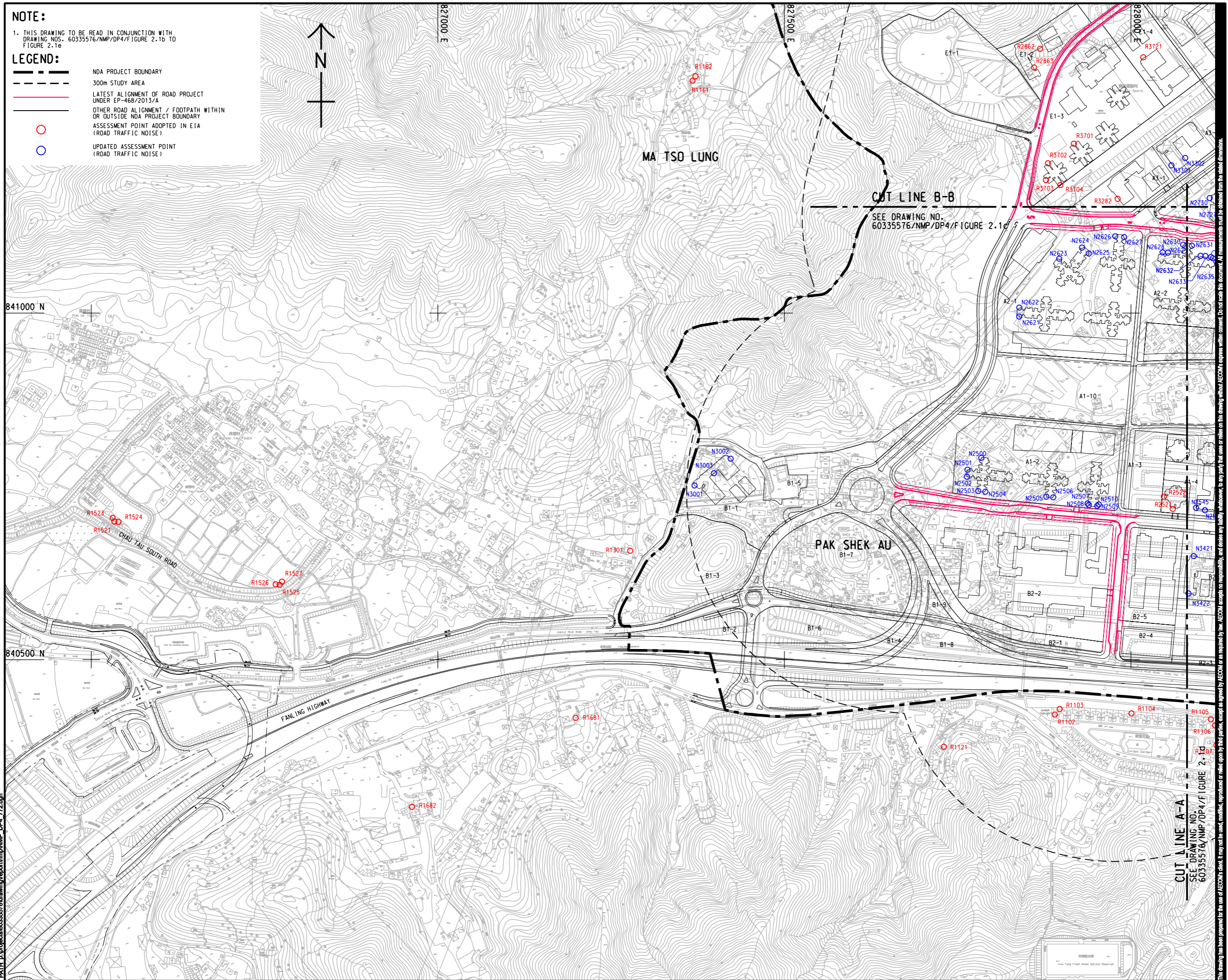
- NDA PROJECT BOUNDARY
- 300m STUDY AREA
- LATEST ALIGNMENT OF ROAD PROJECT UNDER EP-468/2013/A
- OTHER ROAD ALIGNMENT / FOOTPATH WITHIN OR OUTSIDE NDA PROJECT BOUNDARY
- ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
- UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)



841000 N

840500 N

Pld File by: TangBo 2019/02/26  
PATH: F:\projects\60335576\drawing\epc\mnp\DP4\_772.dgn



SEE DRAWING NO. 60335576/NMP/DP4/FIGURE 2.1b

CUT LINE A-A  
SEE DRAWING NO. 60335576/NMP/DP4/FIGURE 2.1d

**AECOM**  
PROJECT  
**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**  
CLIENT  
土木工務發展署  
CEDD Civil Engineering and Development Department

CONSULTANT  
AECOM Asia Company Ltd.  
www.aecom.com

SUB-CONSULTANTS  
分判工程顧問公司

ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK.

STATUS

SCALE  
A1 1:2500  
DIMENSION UNIT  
METRES

KEY PLAN  
A1 1:150000

PROJECT NO. 60335576  
CONTRACT NO. CE 13/2014 (CE)

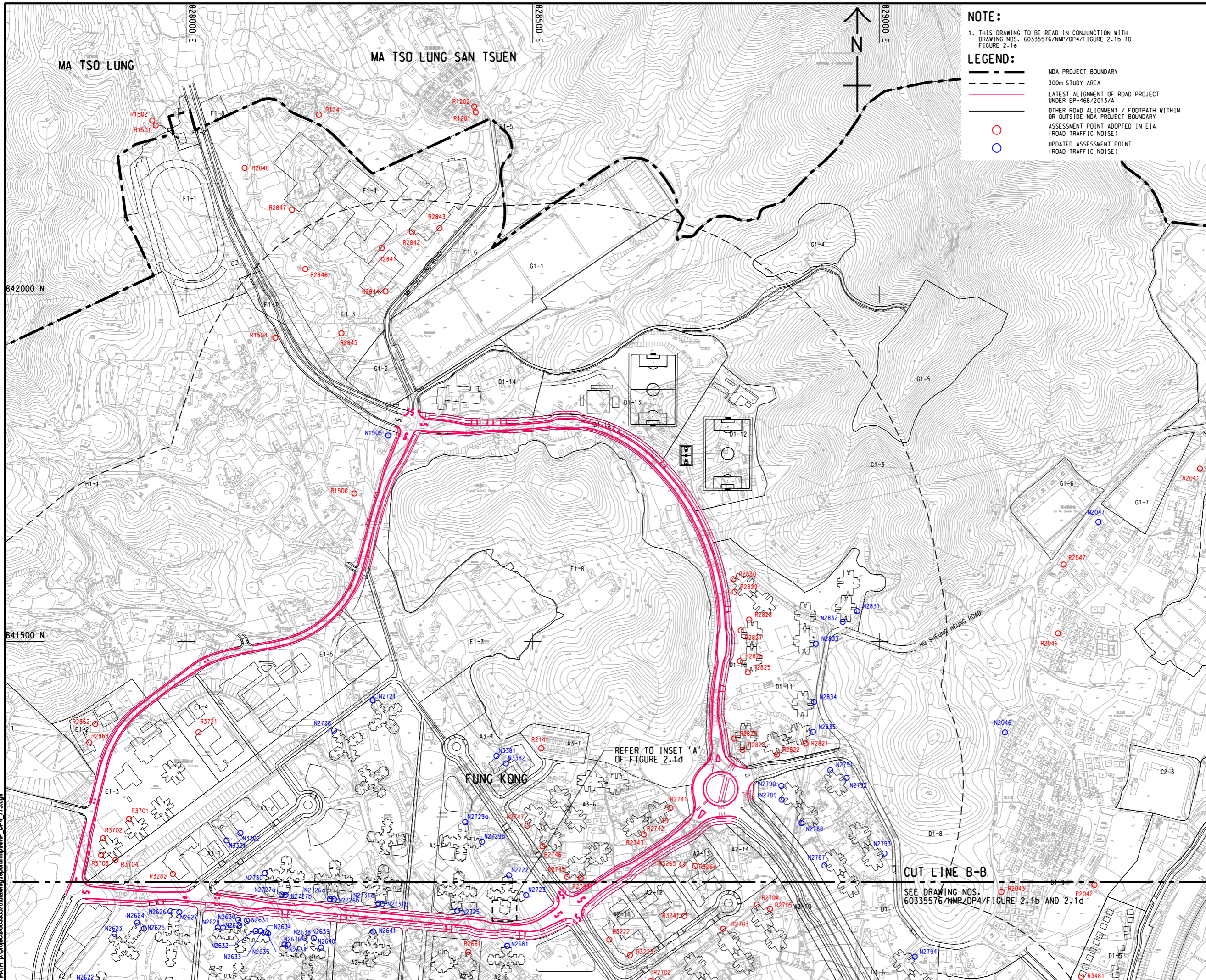
SHEET TITLE  
LOCATION OF REPRESENTATIVE NSRs AND ASSESSMENT POINTS (RESIDENTIAL AND SCHOOL)  
SHEET 1 OF 4

SHEET NUMBER  
60335576/NMP/DP4/FIGURE 2.1b

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and does not warrant, for any part, in whole or in part, of this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.



ISO A1 594mm x 841mm  
Approved:  
Checked:  
Designer:  
Project Management Initials:  
842000 N  
841500 N  
Pld File by: TangBo 2019/02/26  
PATH: E:\projects\60335576\drawing\pump\NMP\_DP4\_773.dgn



**NOTE:**  
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/FIGURE 2.1b TO FIGURE 2.1e

**LEGEND:**

- NDA PROJECT BOUNDARY
- 300m STUDY AREA
- LATEST ALIGNMENT OF ROAD PROJECT UNDER EP-468/2013/A
- OTHER ROAD ALIGNMENT / FOOTPATH WITHIN OR OUTSIDE NDA PROJECT BOUNDARY
- ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
- UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)

**AECOM**

**PROJECT**  
項目

**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
業主

**CEDD** 土木工程拓展署  
Civil Engineering and Development Department

**CONSULTANT**  
工程顧問公司

AECOM Asia Company Ltd.  
www.aecom.com

**SUB-CONSULTANTS**  
分判工程顧問公司

**ISSUE/REVISION**  
更改

NO.	DATE	DESCRIPTION	CHK.

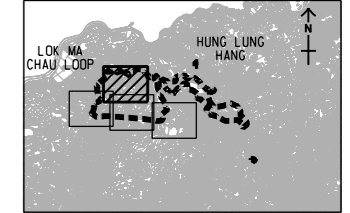
**STATUS**  
階段

**SCALE**  
比例

**DIMENSION UNIT**  
尺寸單位

A1 1:2500 METRES

**KEY PLAN** A1 1:15000  
索引圖



**PROJECT NO.**  
項目編號

60335576

**CONTRACT NO.**  
合約編號

CE 13/2014 (CE)

**SHEET TITLE**  
圖名

LOCATION OF REPRESENTATIVE NSRS AND ASSESSMENT POINTS (RESIDENTIAL AND SCHOOL)

SHEET 2 OF 4

**SHEET NUMBER**  
圖號

60335576/NMP/DP4/FIGURE 2.1c

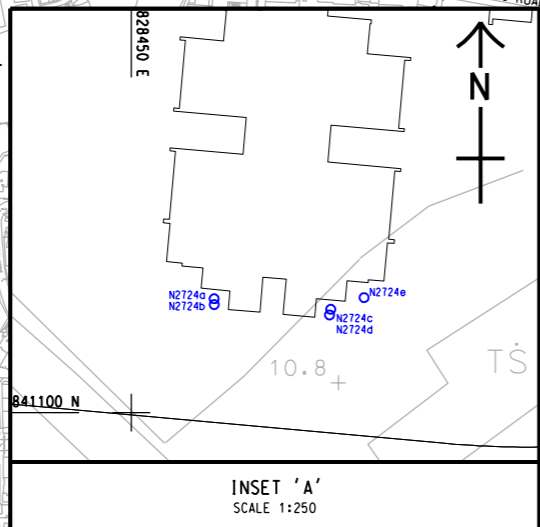
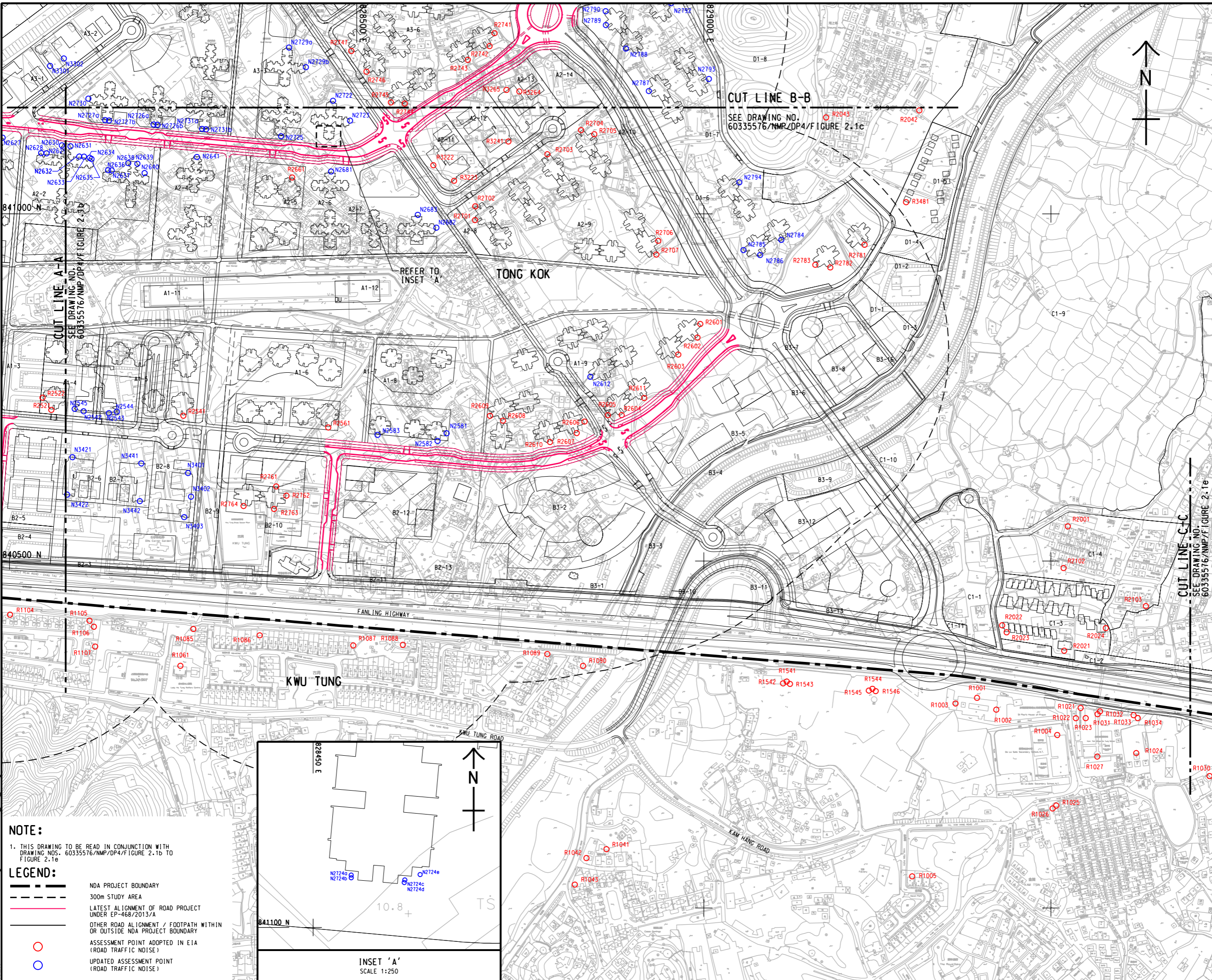
This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

REFER TO INSET 'A' OF FIGURE 2.1d

CUT LINE B-B  
SEE DRAWING NOS. 60335576/NMP/DP4/FIGURE 2.1b AND 2.1d

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:

File By: LIAW2  
 2019/07  
 PATH: P:\PROJECTS\60335576\DRAWING\REPORT\NMP\_DP4\_774.dgn



**NOTE:**  
 1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/FIGURE 2.1b TO FIGURE 2.1e

**LEGEND:**

- NDA PROJECT BOUNDARY
- - - 300m STUDY AREA
- LATEST ALIGNMENT OF ROAD PROJECT UNDER EP-468/013/A
- - - OTHER ROAD ALIGNMENT / FOOTPATH WITHIN OR OUTSIDE NDA PROJECT BOUNDARY
- ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
- UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)

**AECOM**

**PROJECT**  
 DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION

**CLIENT**  
 土木工程拓展署  
 CEDD Civil Engineering and Development Department

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 宏利工程顧問公司

**ISSUE/REVISION**

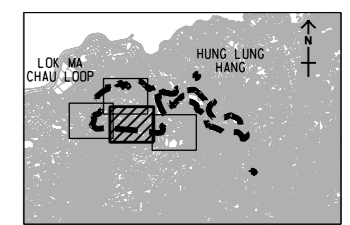
NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 預備

**SCALE**  
 1:2500

**DIMENSION UNIT**  
 METRES

**KEY PLAN** A1 1:150000



**PROJECT NO.**  
 60335576

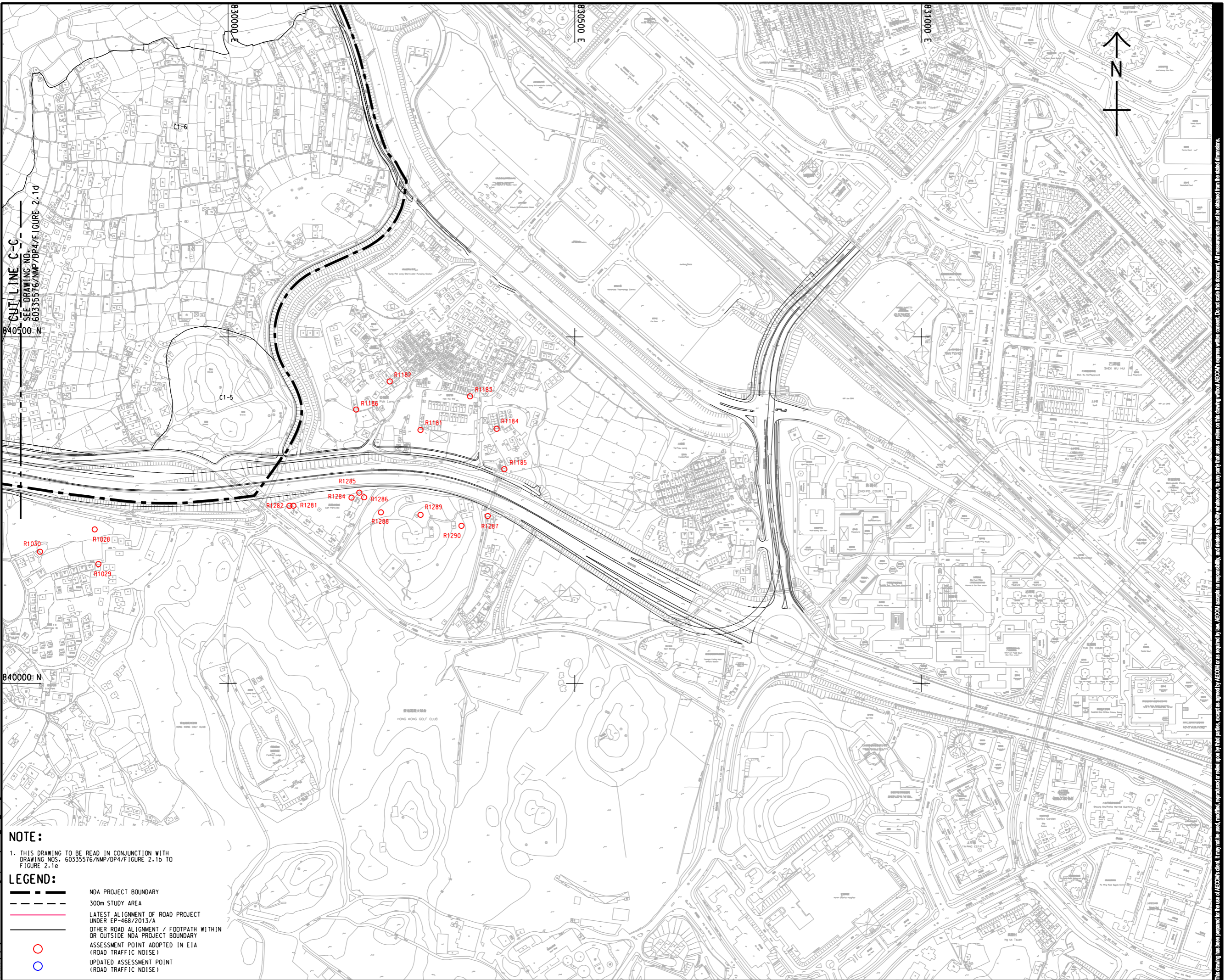
**CONTRACT NO.**  
 CE 13/2014 (CE)

**SHEET TITLE**  
 LOCATION OF REPRESENTATIVE NSRS AND ASSESSMENT POINTS (RESIDENTIAL AND SCHOOL)

**SHEET NUMBER**  
 60335576/NMP/DP4/FIGURE 2.1d

SHEET 3 OF 4

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and disclaims any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the related dimensions.



CUTLINE C-C  
SEE DRAWING NO.  
60335576/NMP/DP4/FIGURE 2.1d



**AECOM**

**PROJECT**  
項目

**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
業主

**CEDD** 土木工程拓展署  
Civil Engineering and Development Department

**CONSULTANT**  
工程顧問公司

AECOM Asia Company Ltd.  
www.aecom.com

**SUB-CONSULTANTS**  
分判工程顧問公司

**ISSUE/REVISION**  
修訂

NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
階段

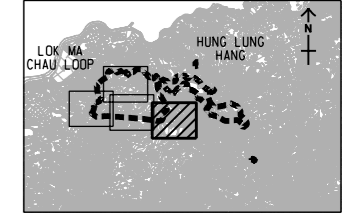
**SCALE**  
比例

A1 1:2500

**DIMENSION UNIT**  
尺寸單位

METRES

**KEY PLAN** A1 1:15000



**PROJECT NO.**  
項目編號

60335576

**CONTRACT NO.**  
合約編號

CE 13/2014 (CE)

**SHEET TITLE**  
圖紙名稱

LOCATION OF REPRESENTATIVE NSRS AND ASSESSMENT POINTS (RESIDENTIAL AND SCHOOL)

SHEET 4 OF 4

**SHEET NUMBER**  
圖紙編號

60335576/NMP/DP4/FIGURE 2.1e

**NOTE:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/FIGURE 2.1b TO FIGURE 2.1e

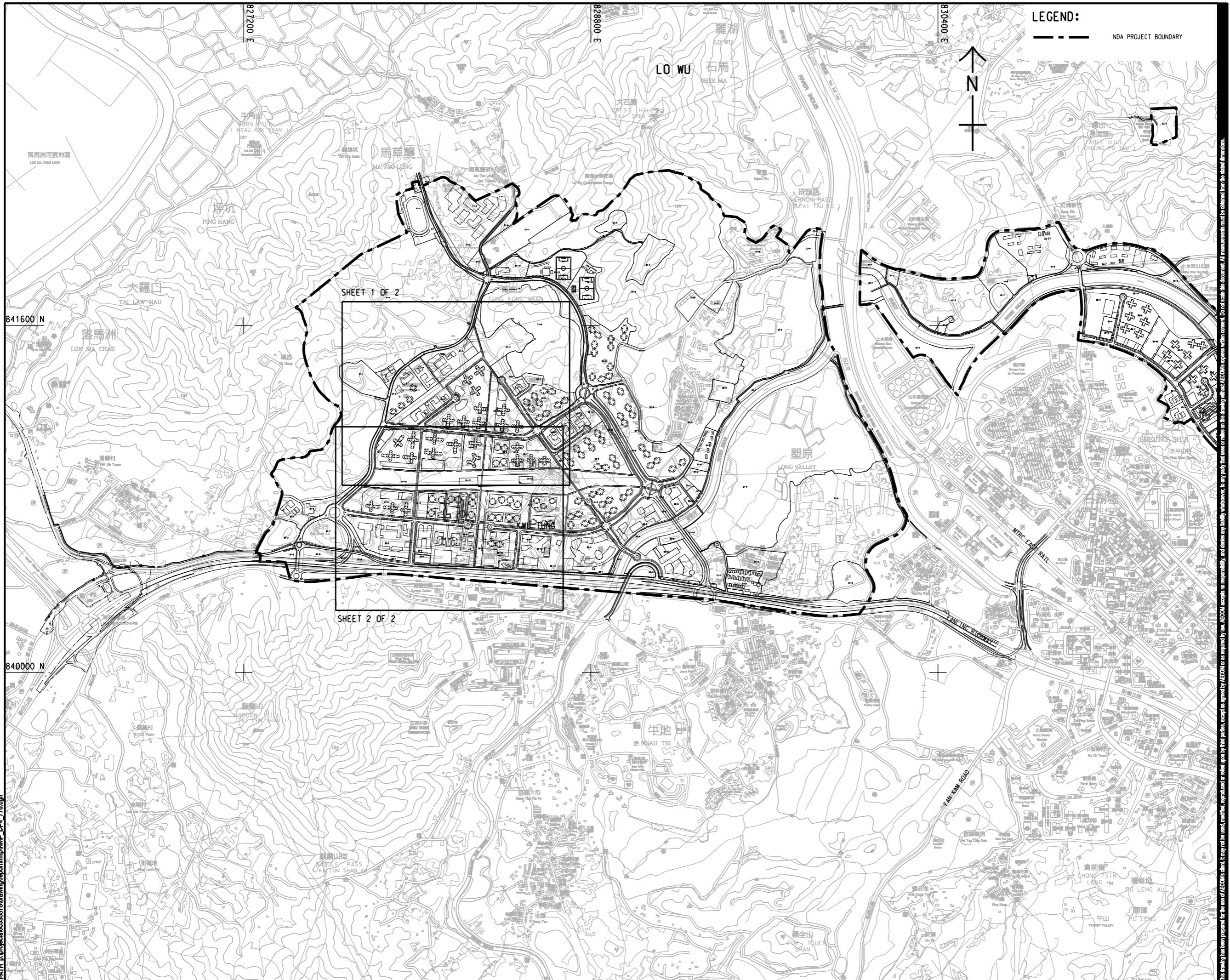
**LEGEND:**

- NDA PROJECT BOUNDARY
- - - 300m STUDY AREA
- LATEST ALIGNMENT OF ROAD PROJECT UNDER EP-468/2013/A
- OTHER ROAD ALIGNMENT / FOOTPATH WITHIN OR OUTSIDE NDA PROJECT BOUNDARY
- ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
- UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and does not warrant, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale the drawing. All measurements must be obtained from the stated dimensions.

841600 N

840000 N



LEGEND:  
 - - - - - NDA PROJECT BOUNDARY

**AECOM**

**PROJECT**  
 DEVELOPMENT OF  
 KWU TUNG NORTH AND  
 FANLING NORTH  
 NEW DEVELOPMENT  
 AREAS, PHASE 1 -  
 DESIGN AND  
 CONSTRUCTION

**CLIENT**  
 土木工程拓展署  
 CEDD Civil Engineering and  
 Development Department

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**  
 修訂

NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 階段

**SCALE**  
 比例  
 A1 1 : 8000

**DIMENSION UNIT**  
 尺寸單位  
 METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號  
 60335576

**CONTRACT NO.**  
 合約編號  
 CE 13/2014 (CE)

**SHEET TITLE**  
 圖紙名稱  
 LOCATION OF REPRESENTATIVE  
 NSRS AND ASSESSMENT POINTS  
 (SOCIAL WELFARE)  
 KEY PLAN

**SHEET NUMBER**  
 圖紙編號  
 60335576/NMP/DP4/FIGURE 2.1f

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party, for losses or claims on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the related dimensions.

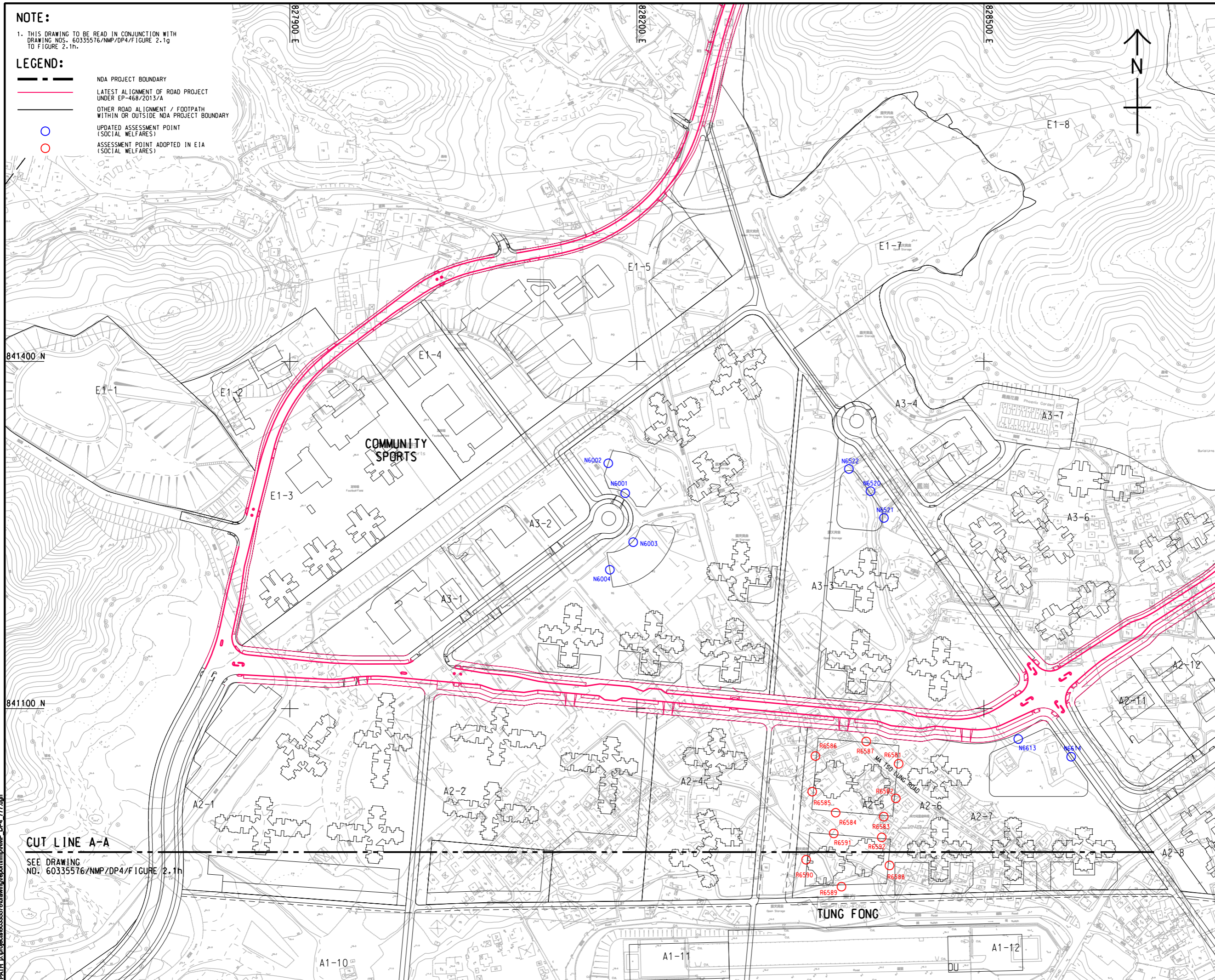
ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:  
 2019/02/26  
 PATH: E:\projects\60335576\NMP\DP4\_777.dgn  
 Pld File by: TangBo

**NOTE:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/FIGURE 2.1g TO FIGURE 2.1h.

**LEGEND:**

- NDA PROJECT BOUNDARY
- LATEST ALIGNMENT OF ROAD PROJECT UNDER EP-468/2013/A
- OTHER ROAD ALIGNMENT / FOOTPATH WITHIN OR OUTSIDE NDA PROJECT BOUNDARY
- UPDATED ASSESSMENT POINT (SOCIAL WELFARES)
- ASSESSMENT POINT ADOPTED IN EIA (SOCIAL WELFARES)



**CUT LINE A-A**

SEE DRAWING NO: 60335576/NMP/DP4/FIGURE 2.1h



**PROJECT**

**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**



**CONSULTANT**

AECOM Asia Company Ltd.  
www.aecom.com

**SUB-CONSULTANTS**

**ISSUE/REVISION**

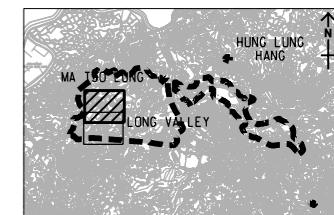
IR/	DATE	DESCRIPTION	CHK.
號	日期	內容摘要	號

**STATUS**

**SCALE**      **DIMENSION UNIT**

A1 1: 1500      METRES

**KEY PLAN**      A1 1: 10000



**PROJECT NO.**      **CONTRACT NO.**

60335576      CE 13/2014 (CE)

**SHEET TITLE**

LOCATION OF REPRESENTATIVE NSRS AND ASSESSMENT POINTS (SOCIAL WELFARE)

SHEET 1 OF 2

**SHEET NUMBER**

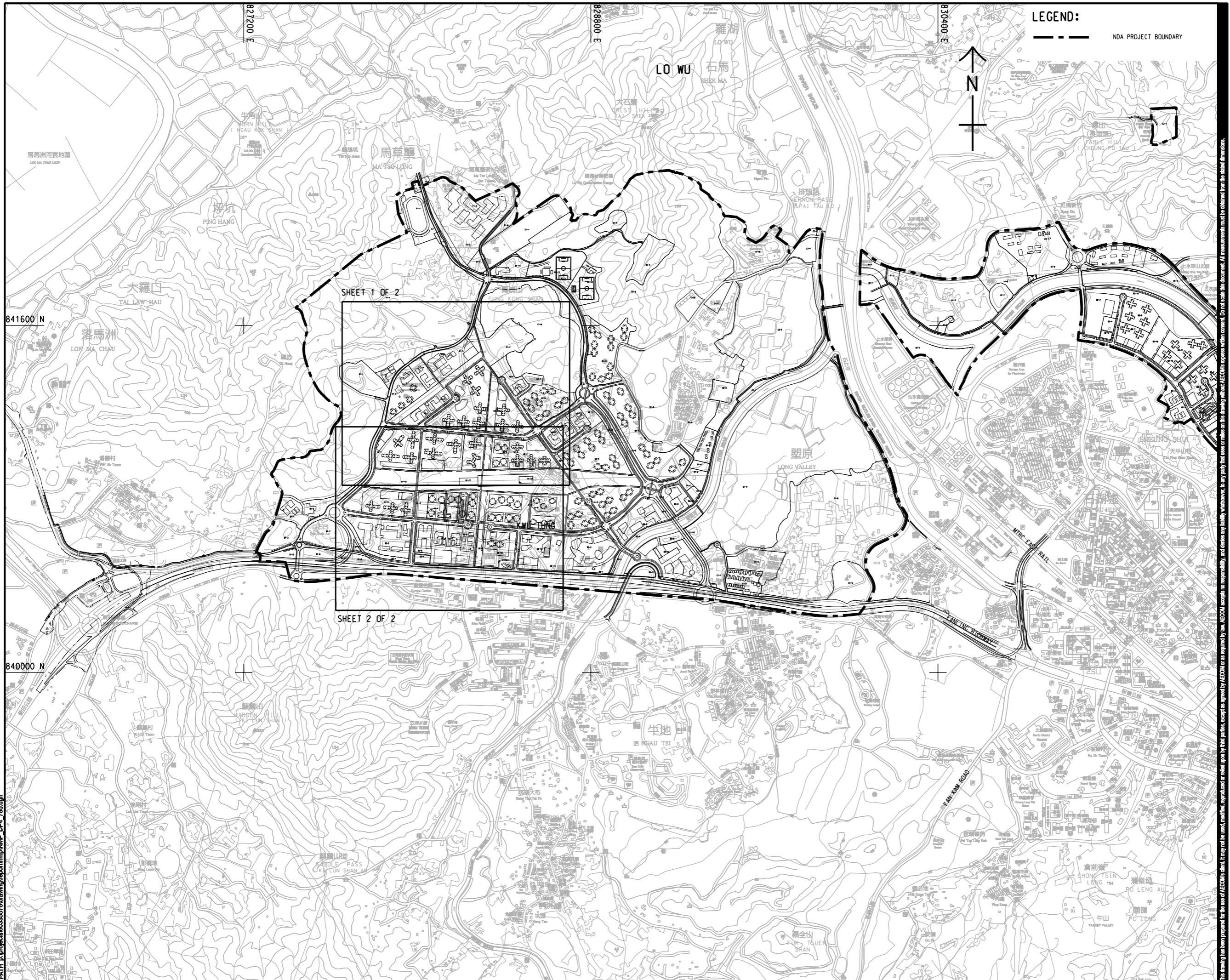
60335576/NMP/DP4/FIGURE 2.1g

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party, for uses or reliance on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.



841600 N

840000 N



**LEGEND:**  
 - - - - - NDA PROJECT BOUNDARY

**AECOM**

**PROJECT**  
 DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION

**CLIENT**  
 土木工程拓展署  
 CEDD Civil Engineering and Development Department

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**  
 修訂

IR	DATE	DESCRIPTION	CHK.

**STATUS**  
 階段

**SCALE**  
 比例  
 A1 1 : 8000

**DIMENSION UNIT**  
 尺寸單位  
 METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號  
 60335576

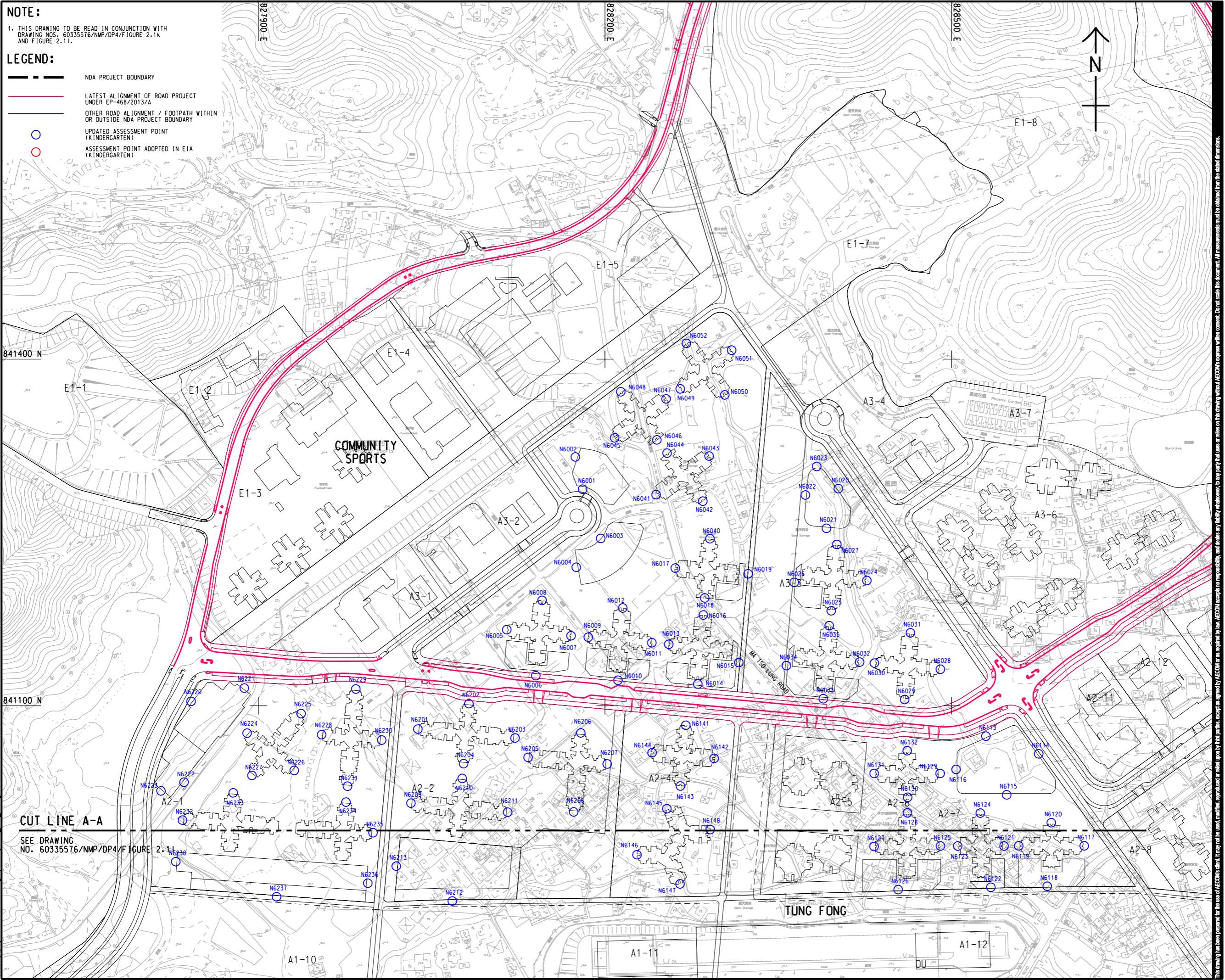
**CONTRACT NO.**  
 合約編號  
 CE 13/2014 (CE)

**SHEET TITLE**  
 圖紙名稱  
 LOCATION OF REPRESENTATIVE NSRS AND ASSESSMENT POINTS (KINDERGARTEN) KEY PLAN

**SHEET NUMBER**  
 圖紙編號  
 60335576/NMP/DP4/FIGURE 2.1j

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and disclaims any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:  
 Pld File by: TangBo 2019/02/26  
 PATH: E:\projects\60335576\drawing\cadd\NMP\_DP4\_781.dgn



**NOTE:**  
 1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/Figure 2.1k AND Figure 2.11.

**LEGEND:**

- NDA PROJECT BOUNDARY
- LATEST ALIGNMENT OF ROAD PROJECT UNDER EP-468/2013/A
- OTHER ROAD ALIGNMENT / FOOTPATH WITHIN OR OUTSIDE NDA PROJECT BOUNDARY
- UPDATED ASSESSMENT POINT (KINDERGARTEN)
- ASSESSMENT POINT ADOPTED IN EIA (KINDERGARTEN)

**AECOM**

**PROJECT**  
 DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION

**CLIENT**  
 土木工程拓展署  
 CEDD Civil Engineering and Development Department

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**

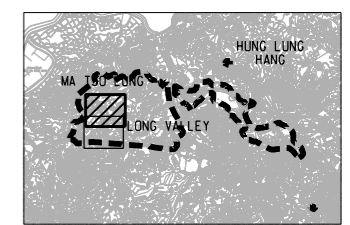
NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 現狀

**SCALE**  
 1:1500

**DIMENSION UNIT**  
 METRES

**KEY PLAN** A1:100000



**PROJECT NO.** 60335576  
**CONTRACT NO.** CE 13/2014 (CE)

**SHEET TITLE**  
 LOCATION OF REPRESENTATIVE NSRs AND ASSESSMENT POINTS (KINDERGARTEN)

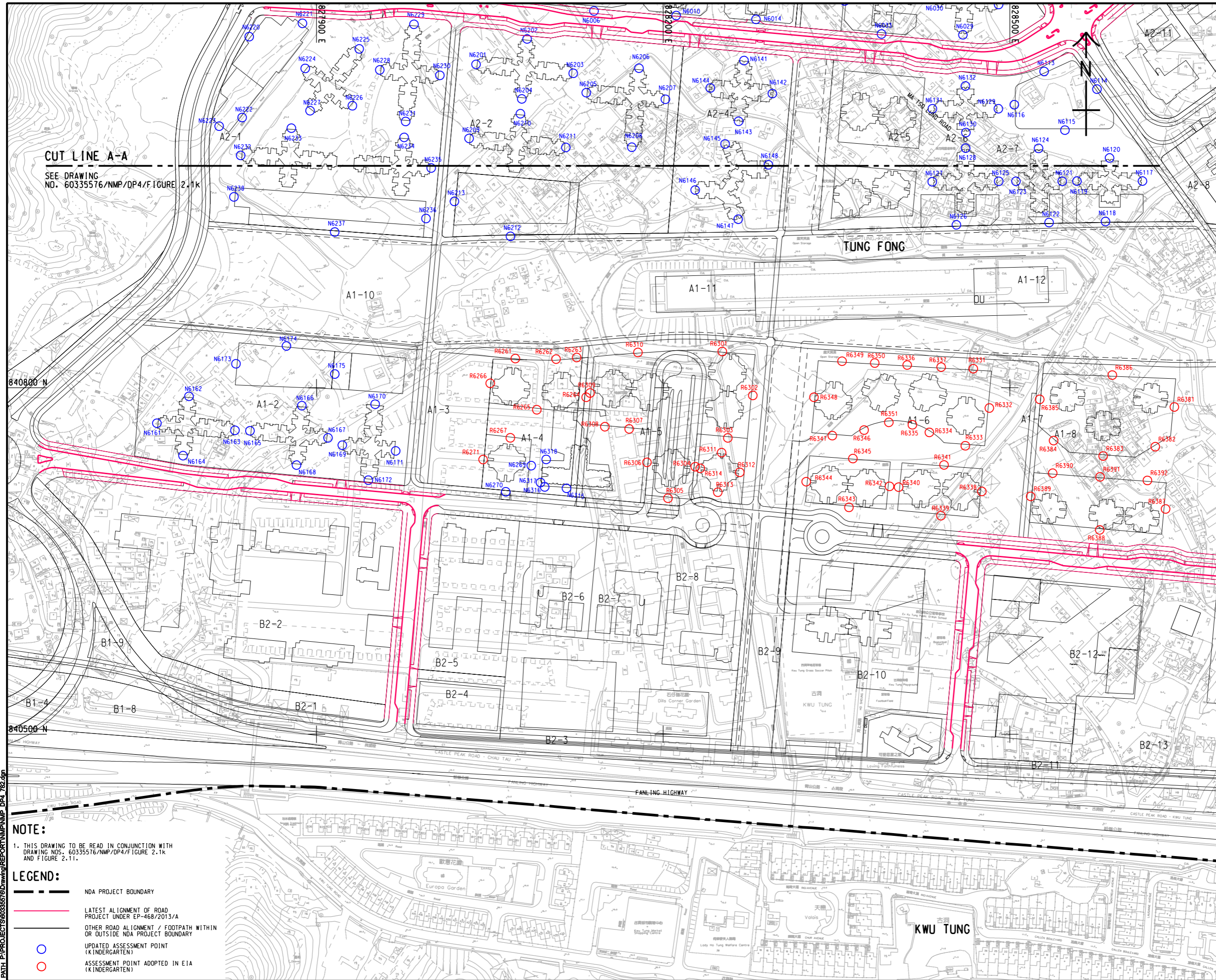
**SHEET NUMBER**  
 60335576/NMP/DP4/FIGURE 2.1k

SHEET 1 OF 2

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.



ISO A1 594mm x 841mm  
Approved:  
Checked:  
Designer:  
Project Management Initials:



CUT LINE A-A

SEE DRAWING NO. 60335576/NMP/DP4/FIGURE 2.1K

840800 N

840500 N

NOTE:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/FIGURE 2.1K AND FIGURE 2.11.

LEGEND:

- NDA PROJECT BOUNDARY
- LATEST ALIGNMENT OF ROAD PROJECT UNDER EP-468/2013/A
- OTHER ROAD ALIGNMENT / FOOTPATH WITHIN OR OUTSIDE NDA PROJECT BOUNDARY
- UPDATED ASSESSMENT POINT (KINDERGARTEN)
- ASSESSMENT POINT ADOPTED IN EIA (KINDERGARTEN)



**PROJECT**  
DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION

**CLIENT**  
土木工務發展署  
CEDD Civil Engineering and Development Department

**CONSULTANT**  
AECOM Asia Company Ltd.  
www.aecom.com

**SUB-CONSULTANTS**  
分判工程顧問公司

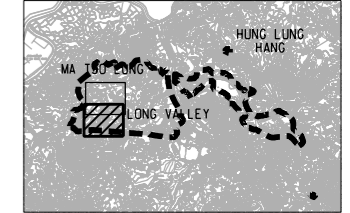
**ISSUE/REVISION**

IR	DATE	DESCRIPTION	CHK

**STATUS**

**SCALE**  
A1 1: 1500  
**DIMENSION UNIT**  
METRES

**KEY PLAN** A1 1: 10000



**PROJECT NO.** 60335576  
**CONTRACT NO.** CE 13/2014 (CE)

**SHEET TITLE**  
LOCATION OF REPRESENTATIVE NSRS AND ASSESSMENT POINTS (KINDERGARTEN)

**SHEET NUMBER**  
60335576/NMP/DP4/FIGURE 2.11

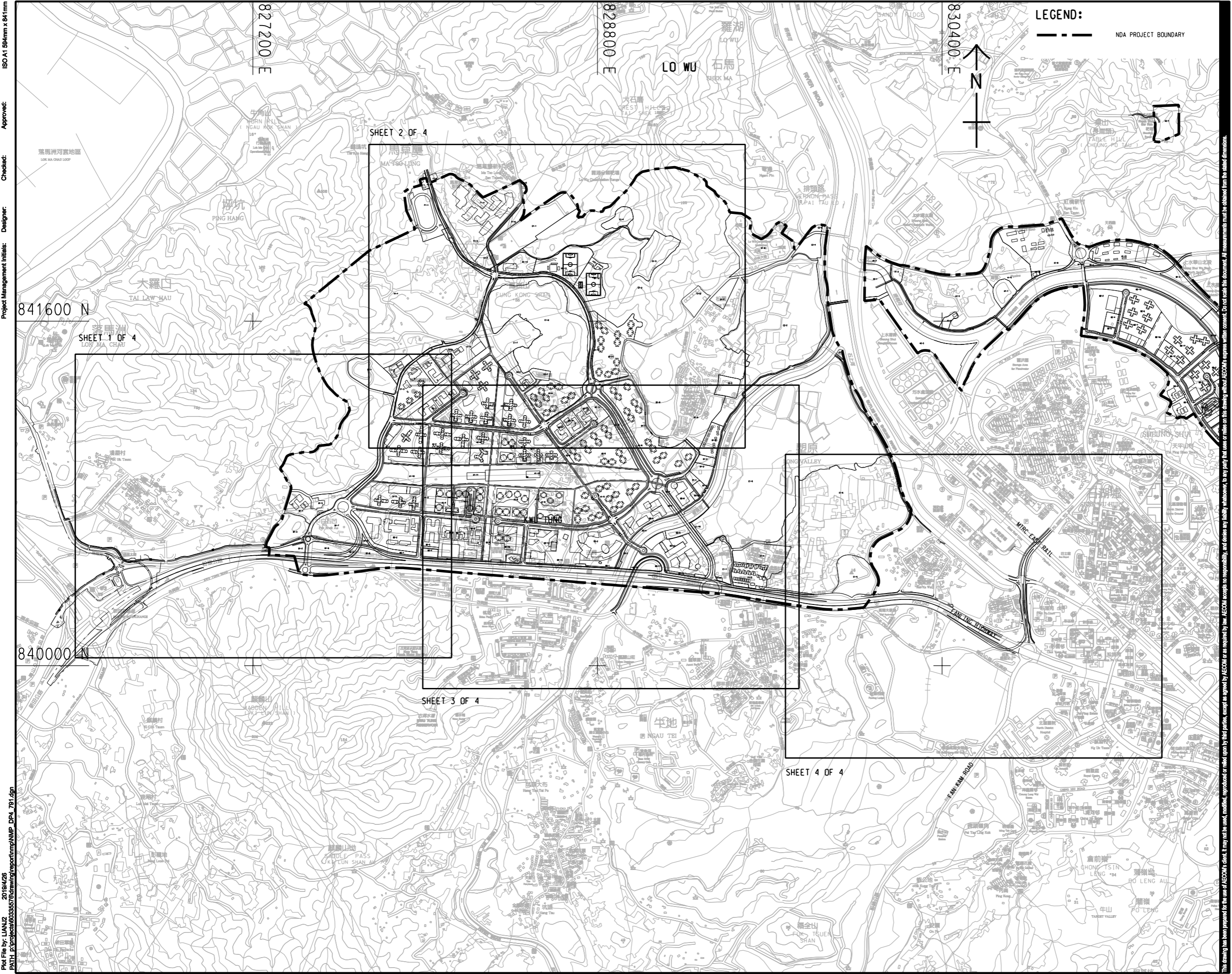
SHEET 2 OF 2

Pld File by: TungBo 2019/02/28  
PATH: P:\PROJECTS\60335576\Drawing\REPORT\NMP\DP4\_782.dgn

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and disclaims any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

Pid File by: LIAH2 2019/04/25 2019/04/25 2019/04/25  
PATH: P:\projects\6033576\drawing\figure\NMP\_DP4\_791.dgn

Approved: \_\_\_\_\_  
Checked: \_\_\_\_\_  
Designer: \_\_\_\_\_  
Project Management Initials: \_\_\_\_\_



LEGEND: - - - - - NDA PROJECT BOUNDARY

**AECOM**

**PROJECT**  
項目  
**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
業主  
**CEDD** 土木工程拓展署  
Civil Engineering and Development Department

**CONSULTANT**  
工程顧問公司  
**AECOM Asia Company Ltd.**  
www.aecom.com

**SUB-CONSULTANTS**  
分判工程顧問公司

**ISSUE/REVISION**  
修訂

NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
階段

**SCALE**  
比例  
**A1 1 : 8000**

**DIMENSION UNIT**  
尺寸單位  
**METRES**

**KEY PLAN**  
索引圖

**PROJECT NO.**  
項目編號  
**60335576**

**CONTRACT NO.**  
合約編號  
**CE 13/2014 (CE)**

**SHEET TITLE**  
圖紙名稱  
**LATEST PROPOSAL OF TRAFFIC NOISE MITIGATION MEASURES KEY PLAN**

**SHEET NUMBER**  
圖紙編號  
**60335576/NMP/DP4/FIGURE 2.2a**

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

ISO A1 594mm x 841mm  
Approved:  
Checked:  
Designer:  
Project Management Initials:

**NOTE:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/FIGURE 2.2b TO FIGURE 2.2e

**LEGEND:**

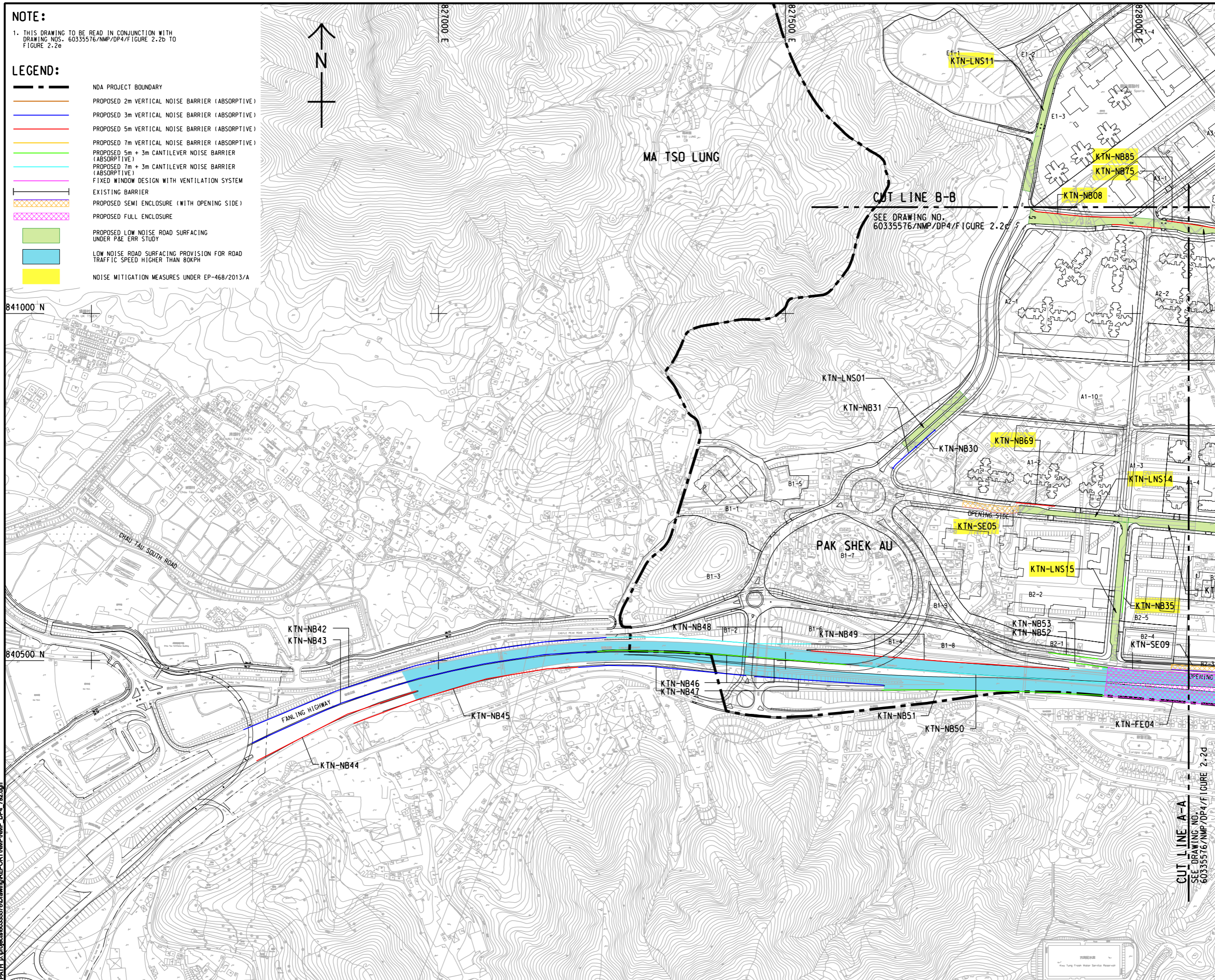
- NDA PROJECT BOUNDARY
- PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
- EXISTING BARRIER
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- PROPOSED LOW NOISE ROAD SURFACING UNDER P&E ERR STUDY
- LOW NOISE ROAD SURFACING PROVISION FOR ROAD TRAFFIC SPEED HIGHER THAN 80KPH
- NOISE MITIGATION MEASURES UNDER EP-468/2013/A



841000 N

840500 N

Pld File by: LIAK2 2016/10/23  
PATH: E:\projects\60335576\Drawing\REPORT\NMP\_DP4\_792.dgn



SEE DRAWING NO. 60335576/NMP/DP4/FIGURE 2.2b

CUT LINE A-A  
SEE DRAWING NO. 60335576/NMP/DP4/FIGURE 2.2d

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and does not warrant, for any part, full loss or damage on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

**AECOM**

**PROJECT**  
項目

**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
業主

**CEDD** 土木工程拓展署  
Civil Engineering and Development Department

**CONSULTANT**  
工程顧問公司

AECOM Asia Company Ltd.  
www.aecom.com

**SUB-CONSULTANTS**  
分判工程顧問公司

**ISSUE/REVISION**  
號次

IR/號次	DATE/日期	DESCRIPTION/內容摘要	CHK/核對

**STATUS**  
階段

**SCALE**  
比例

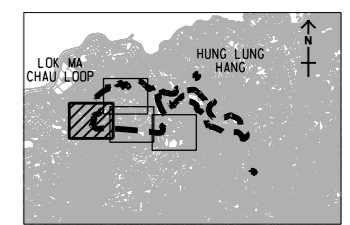
A1 1:2500

**DIMENSION UNIT**  
尺寸單位

METRES

**KEY PLAN**  
索引圖

A1 1:150000



**PROJECT NO.**  
項目編號

60335576

**CONTRACT NO.**  
合約編號

CE 13/2014 (CE)

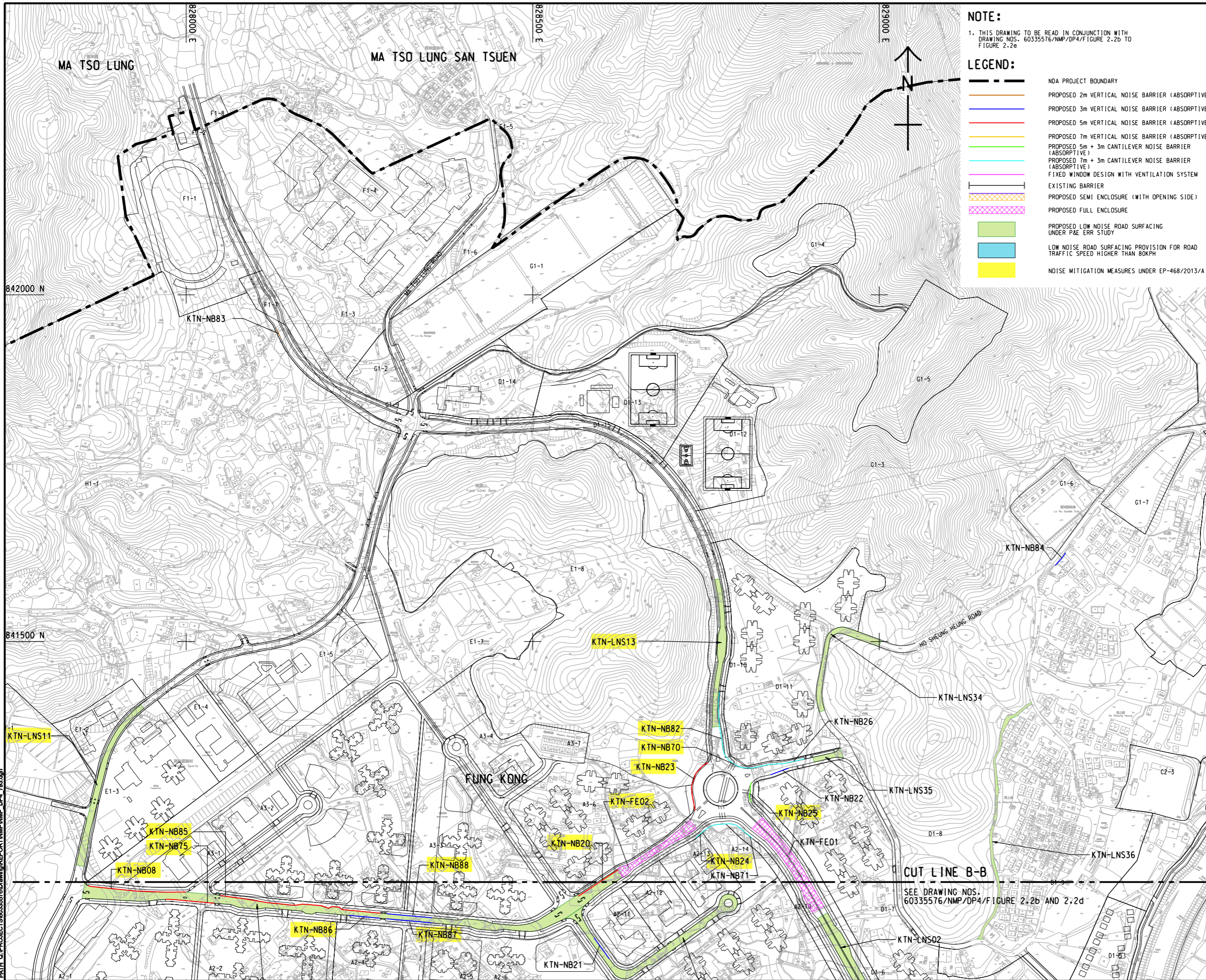
**SHEET TITLE**  
圖紙名稱

LATEST PROPOSAL OF TRAFFIC NOISE MITIGATION MEASURES

**SHEET NUMBER**  
圖紙編號

60335576/NMP/DP4/FIGURE 2.2b

ISO A1 594mm x 841mm  
Approved:  
Checked:  
Designer:  
Project Management Initials:  
842000 N  
841500 N  
Pld File by: LUN02 2019/04/26  
PATH: G:\PROJECTS\6033576\DRAWING\REPORT\NMP\_DP4\_793.dgn



**NOTE:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 6033576/NMP/DP4/FIGURE 2.2b TO FIGURE 2.2e

**LEGEND:**

- NDA PROJECT BOUNDARY
- PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
- EXISTING BARRIER
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- PROPOSED LOW NOISE ROAD SURFACING UNDER P&E ERR STUDY
- LOW NOISE ROAD SURFACING PROVISION FOR ROAD TRAFFIC SPEED HIGHER THAN 80KPH
- NOISE MITIGATION MEASURES UNDER EP-468/2013/A



**PROJECT**  
**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 土木工程拓展署  
 CEDD Civil Engineering and Development Department

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 安邦工程顧問有限公司

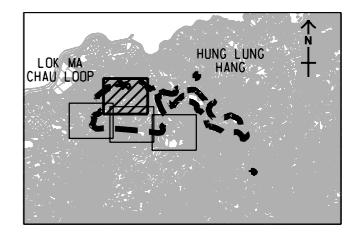
**ISSUE/REVISION**

NO.	DATE	DESCRIPTION	CHK.

**STATUS**

**SCALE** 1:2500  
**DIMENSION UNIT** METRES

**KEY PLAN** A11:150000



**PROJECT NO.** 60335576  
**CONTRACT NO.** CE 13/2014 (CE)

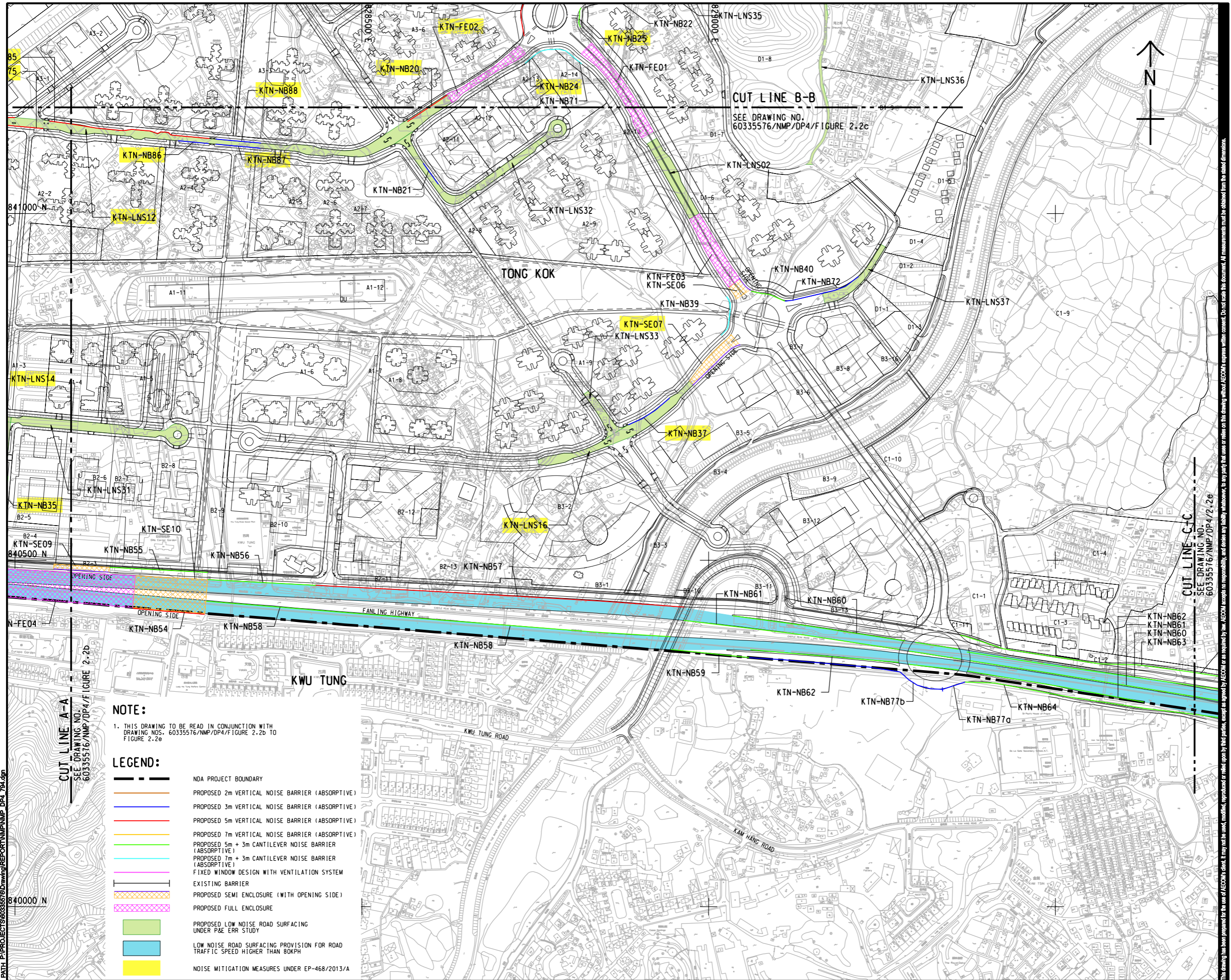
**SHEET TITLE**  
 LATEST PROPOSAL OF TRAFFIC NOISE MITIGATION MEASURES

**SHEET NUMBER**  
 60335576/NMP/DP4/FIGURE 2.2c  
 SHEET 2 OF 4

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:

Pld File By: LIAH2  
 PATH: P:\PROJECTS\60335576\DRAWING\REPORT\NMP\_DP4\_794.dgn  
 2019/07



**NOTE:**  
 1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/FIGURE 2.2b TO FIGURE 2.2e

**LEGEND:**

	NDA PROJECT BOUNDARY
	PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
	PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
	FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
	EXISTING BARRIER
	PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
	PROPOSED FULL ENCLOSURE
	PROPOSED LOW NOISE ROAD SURFACING UNDER P&E ERR STUDY
	LOW NOISE ROAD SURFACING PROVISION FOR ROAD TRAFFIC SPEED HIGHER THAN 80KPH
	NOISE MITIGATION MEASURES UNDER EP-468/2013/A

**AECOM**  
 PROJECT  
 DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION  
 CLIENT  
 CEDD 土木工程拓展署  
 Civil Engineering and Development Department

CONSULTANT  
 AECOM Asia Company Ltd.  
 www.aecom.com

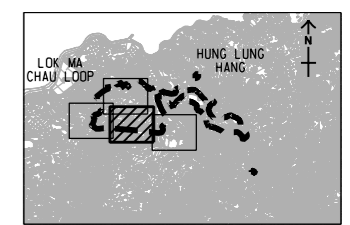
SUB-CONSULTANTS  
 分判工程顧問公司

**ISSUE/REVISION**

NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 現狀

**SCALE**  
 A1 1:2500  
**KEY PLAN** A1 1:150000

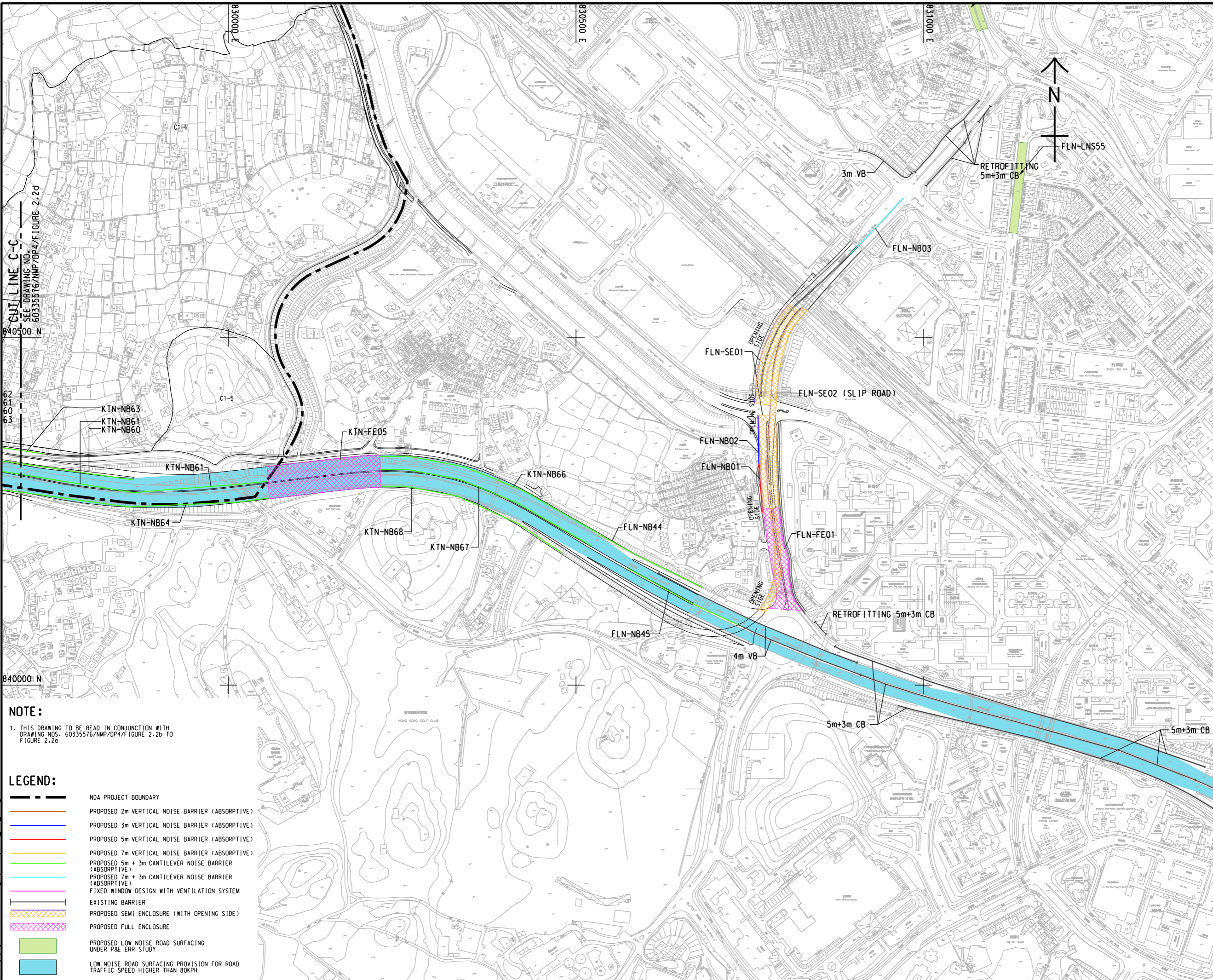


**PROJECT NO.** 60335576  
**CONTRACT NO.** CE 13/2014 (CE)

**SHEET TITLE**  
 LATEST PROPOSAL OF TRAFFIC NOISE MITIGATION MEASURES

**SHEET NUMBER**  
 60335576/NMP/DP4/FIGURE 2.2d

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:  
 CUTLINE C-C  
 SEE DRAWING NO. 60335576/NMP/DP4/FIGURE 2.2d  
 840500 N  
 62  
 61  
 63  
 840000 N  
 22/03/2019  
 LIAK2  
 PATH: E:\projects\60335576\drawing\p\mnp\DP4\_705.dgn



**NOTE:**  
 1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/FIGURE 2.2b TO FIGURE 2.2e

**LEGEND:**

	NDA PROJECT BOUNDARY
	PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
	PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
	FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
	EXISTING BARRIER
	PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
	PROPOSED FULL ENCLOSURE
	PROPOSED LOW NOISE ROAD SURFACING UNDER P&E ERR STUDY
	LOW NOISE ROAD SURFACING PROVISION FOR ROAD TRAFFIC SPEED HIGHER THAN 80KPH

**AECOM**

**PROJECT**  
 項目  
**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 業主  
 土木工程拓展署  
 Civil Engineering and Development Department

**CONSULTANT**  
 工程顧問公司  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分門工程顧問公司

**ISSUE/REVISION**  
 修訂

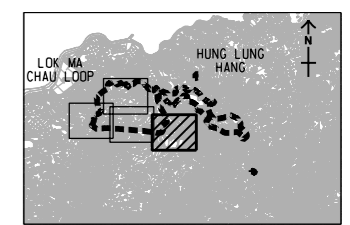
IR/ 修訂	DATE 日期	DESCRIPTION 內容描述	CHK. 核對

**STATUS**  
 階段

**SCALE**  
 比例  
 A1 1:2500

**DIMENSION UNIT**  
 尺寸單位  
 METRES

**KEY PLAN** A1 1:15000  
 索引圖



**PROJECT NO.**  
 項目編號  
 60335576

**CONTRACT NO.**  
 合約編號  
 CE 13/2014 (CE)

**SHEET TITLE**  
 圖紙名稱  
**LATEST PROPOSAL OF TRAFFIC NOISE MITIGATION MEASURES**

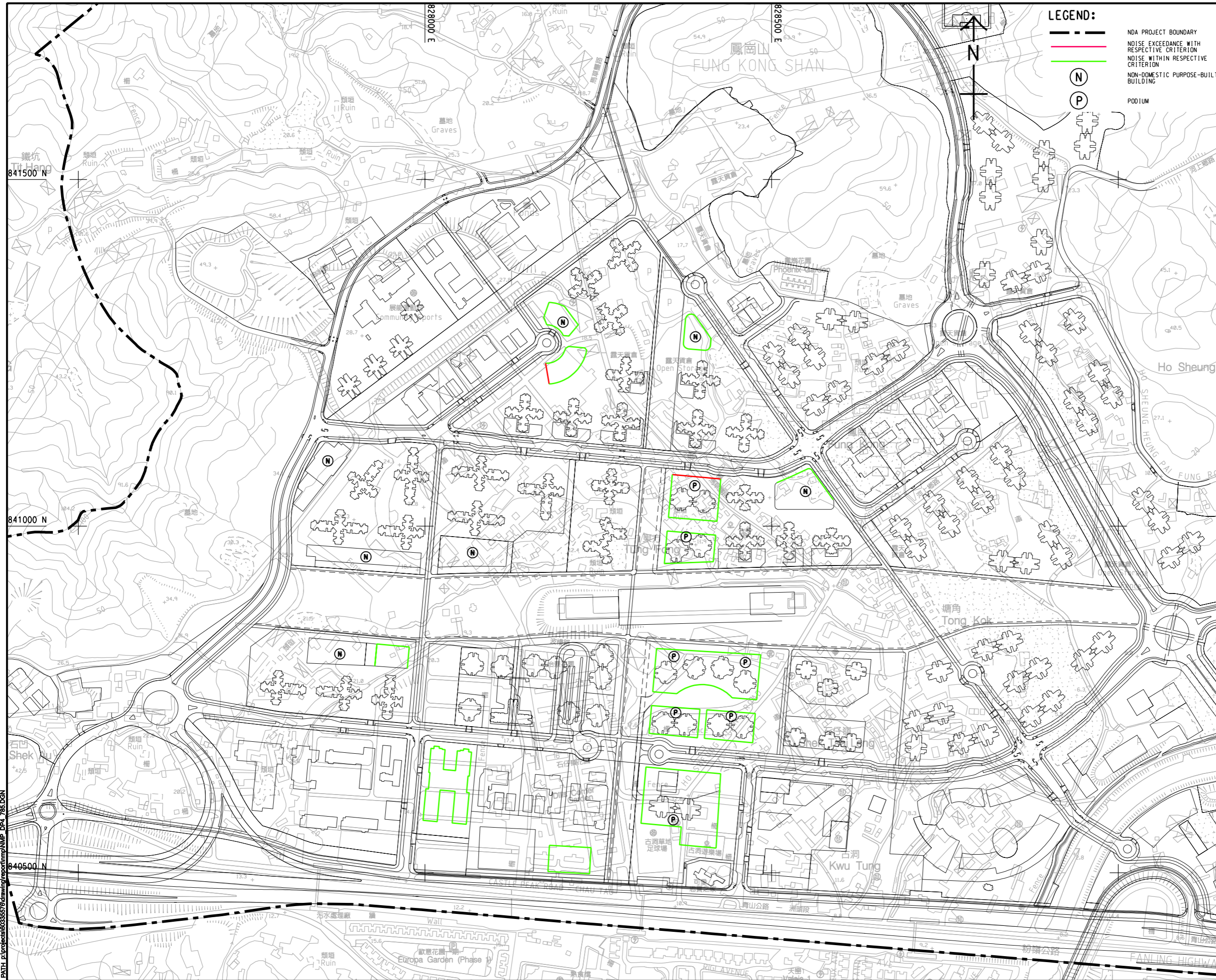
**SHEET NUMBER**  
 圖紙編號  
 60335576/NMP/DP4/FIGURE 2.2e

SHEET 4 OF 4

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and does not warrant, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this drawing. All measurements must be obtained from the stated dimensions.

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:

Pld File by: LIANJ2  
 2019/04/26  
 PATH: E:\projects\60335576\drawing\pmp\NMP\_DP4\_785.DGN



**LEGEND:**

- NDA PROJECT BOUNDARY
- NOISE EXCEEDANCE WITH RESPECTIVE CRITERION
- NOISE WITHIN RESPECTIVE CRITERION
- N NON-DOMESTIC PURPOSE-BUILT BUILDING
- P PODIUM

**AECOM**

**PROJECT**  
 項目

**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 業主

**CEDD** 土木工程拓展署  
 Civil Engineering and Development Department

**CONSULTANT**  
 工程顧問公司

AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**  
 校對

I/R	DATE	DESCRIPTION	CHK.

**STATUS**  
 階段

**SCALE**  
 比例

A1 1 : 2500

**DIMENSION UNIT**  
 尺寸單位

METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號

60335576

**CONTRACT NO.**  
 合約編號

CE 13/2014 (CE)

**SHEET TITLE**  
 圖紙名稱

LOCATIONS OF PROPOSED SOCIAL WELFARE FACILITIES WITH RESIDENTIAL PREMISES AND HOME FOR THE ELDERLY

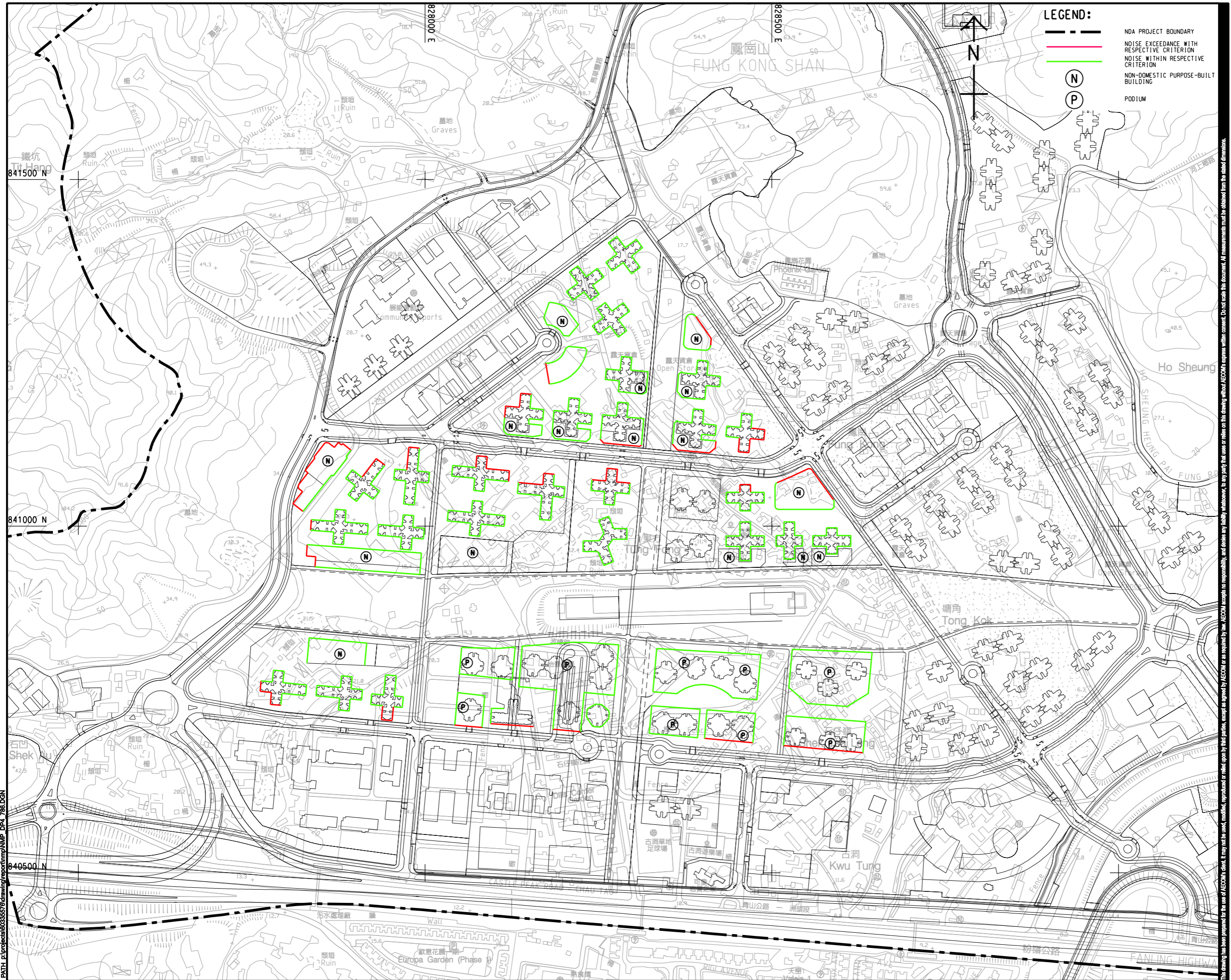
**SHEET NUMBER**  
 圖紙編號

60335576/NMP/DP4/FIGURE 2.3

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:

Pdf File by: LIAK2  
 2019/04/26  
 PATH: E:\projects\60335576\drawing\figure\NMP\_DP4\_788.DGN



**LEGEND:**

- NDA PROJECT BOUNDARY
- NOISE EXCEEDANCE WITH RESPECTIVE CRITERION
- NOISE WITHIN RESPECTIVE CRITERION
- NON-DOMESTIC PURPOSE-BUILT BUILDING
- PODIUM

**AECOM**

**PROJECT**  
 項目

**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 業主

**CEDD** 土木工程拓展署  
 Civil Engineering and Development Department

**CONSULTANT**  
 工程顧問公司

AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**  
 修訂

NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 階段

**SCALE**  
 比例

A1 1:2500

**DIMENSION UNIT**  
 尺寸單位

METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號

60335576

**CONTRACT NO.**  
 合約編號

CE 13/2014 (CE)

**SHEET TITLE**  
 圖紙名稱

LOCATIONS OF PROPOSED KINDERGARTEN

**SHEET NUMBER**  
 圖紙編號

60335576/NMP/DP4/FIGURE 2.4

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.



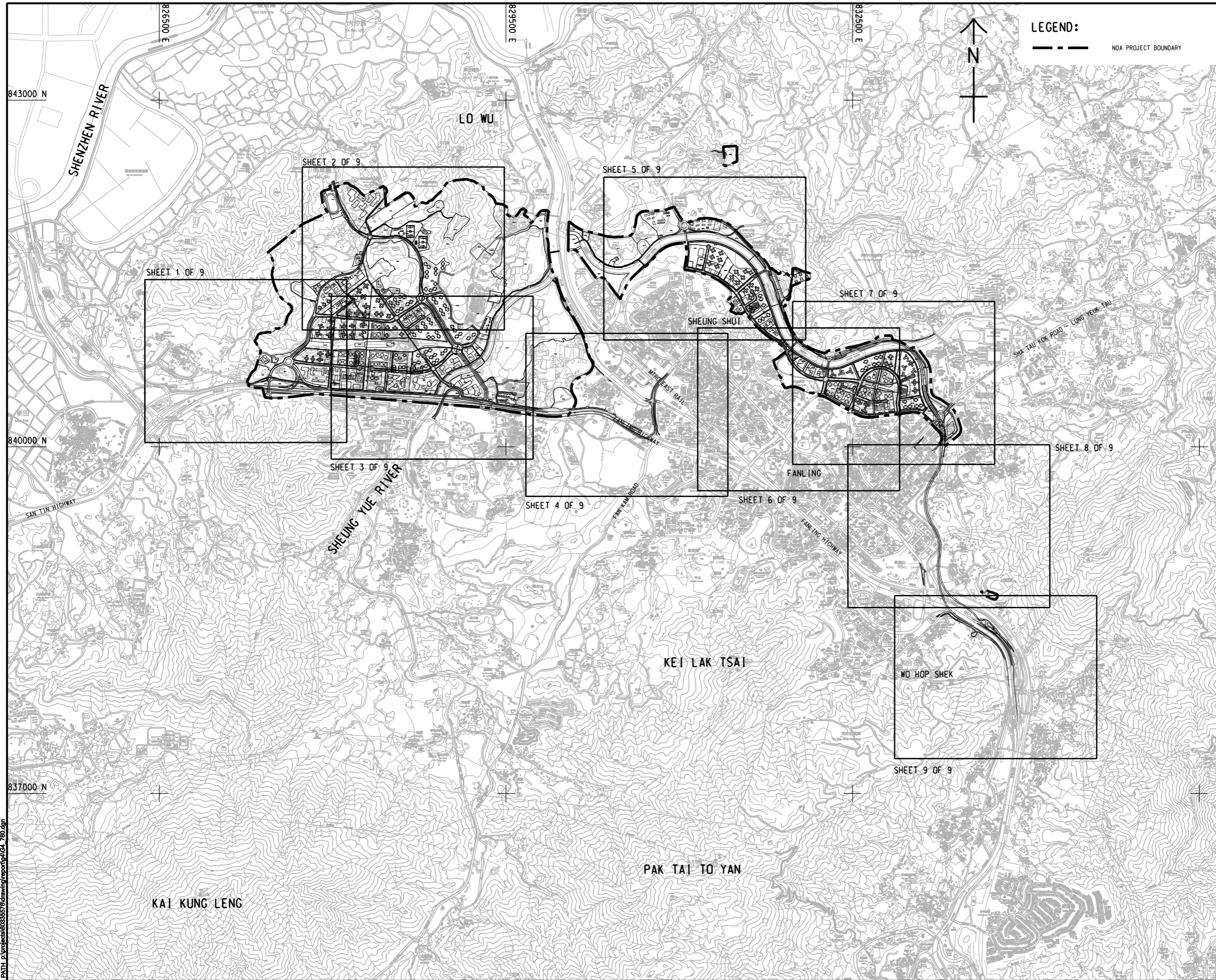
## ***APPENDICES***

---

*Appendix 1.1*

---

***Traffic Noise Mitigation Measures Proposed in P&E Review***



LEGEND:

--- NDA PROJECT BOUNDARY



**PROJECT**  
 項目  
**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 業主  
 土木工程拓展署  
 Civil Engineering and Development Department

**CONSULTANT**  
 工程顧問公司  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

ISSUE/REVISION

IR	DATE	DESCRIPTION	CHK.
號	日期	內容摘要	號

STATUS

**SCALE**  
 比例  
 A1 1 : 15000

**DIMENSION UNIT**  
 尺寸單位  
 METRES

KEY PLAN

**PROJECT NO.**  
 項目編號  
 60335576

**CONTRACT NO.**  
 合約編號  
 CE 13/2014 (CE)

**SHEET TITLE**  
 圖紙名稱  
 KEY PLAN LOCATIONS AND EXTENT OF MITIGATION MEASURES AT YEAR 2044 (KTN & FLN)

**SHEET NUMBER**  
 圖紙編號  
 60335576/G4/FIGURE 4.6.1a

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM in writing. AECOM accepts no responsibility, and disclaims any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:

**NOTES:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/G4/Figure 4.6.1b TO 4.6.1j
2. FOR BUILDING NAME, LANDUSE, FLOOR OF EACH AND SELECTED ASSESSMENT POINT, PLEASE REFER TO DRAWING NO. 60335576/G4/XXX.

**LEGEND:**

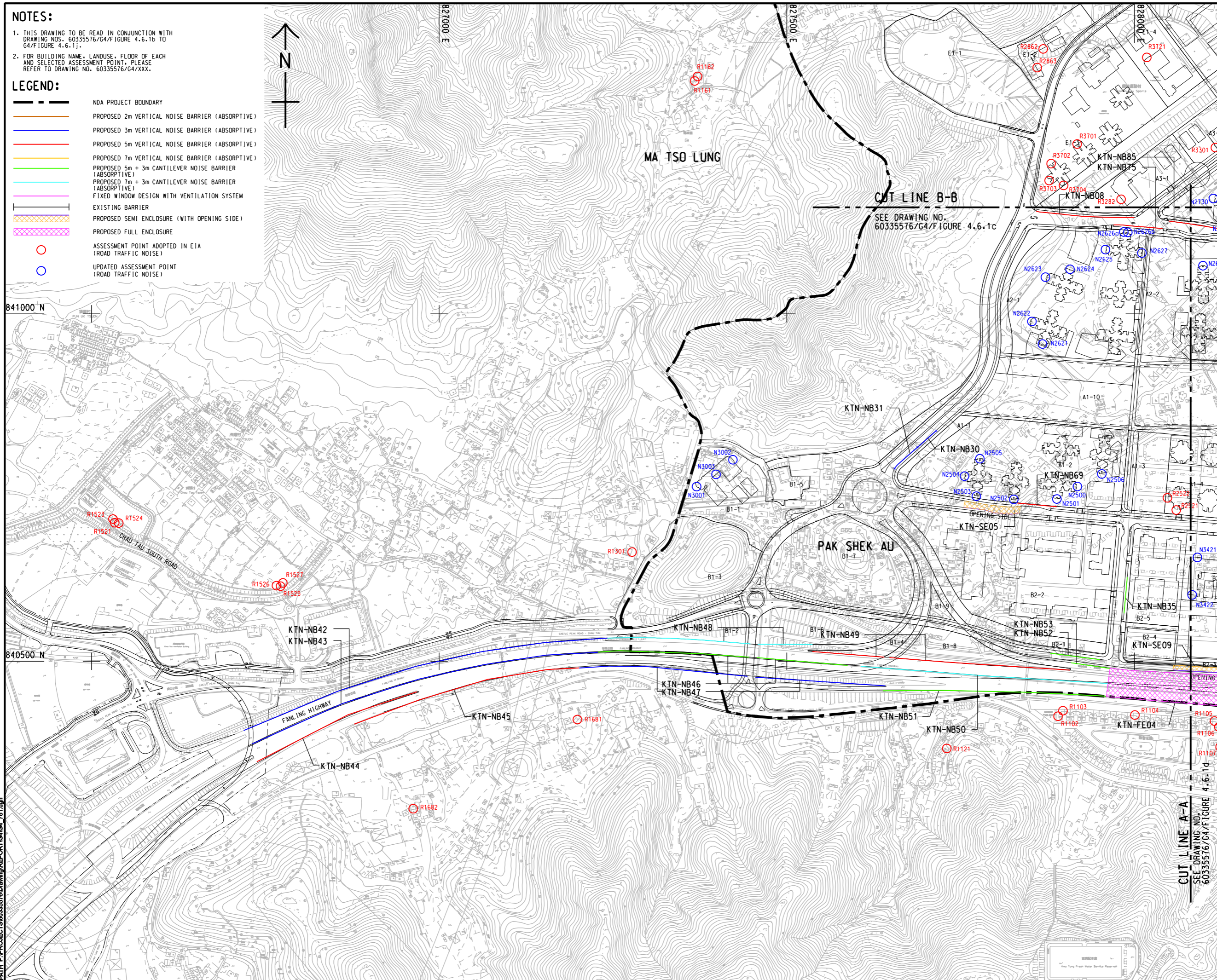
- NDA PROJECT BOUNDARY
- PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
- EXISTING BARRIER
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
- UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)



841000 N

840500 N

Pld File by: CHENSRL 2017/1/25  
 PATH: P:\PROJECTS\60335576\Drawing\REPORT\G4\G4\_701.dgn



**PROJECT**  
 項目  
**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 委託  
 土木工程拓展署  
 Civil Engineering and Development Department

**CONSULTANT**  
 顧問公司  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**  
 更改

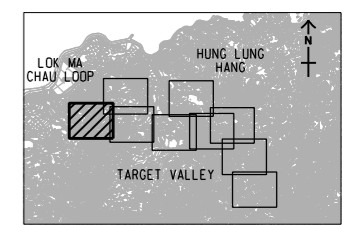
IR/更改	DATE/日期	DESCRIPTION/內容描述	CHK/核

**STATUS**  
 階段

**SCALE**  
 比例  
 A1 1:2500

**DIMENSION UNIT**  
 尺寸單位  
 METRES

**KEY PLAN**  
 索引圖  
 A1 1:15000



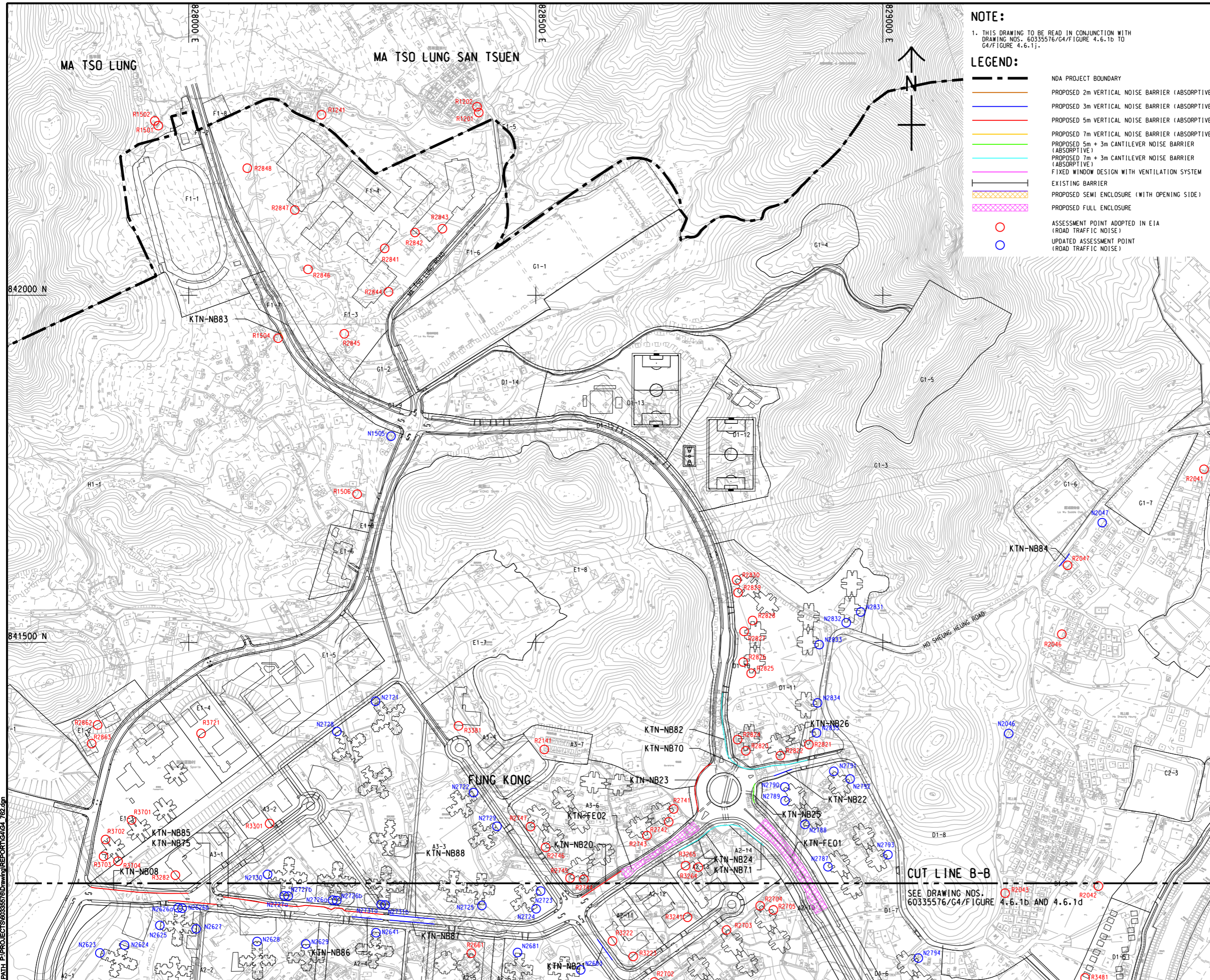
**PROJECT NO.**  
 項目編號  
 60335576

**CONTRACT NO.**  
 合約編號  
 CE 13/2014 (CE)

**SHEET TITLE**  
 圖名  
 LOCATIONS AND EXTENT OF MITIGATION MEASURES AT YEAR 2044 (KTN & FLN)

**SHEET NUMBER**  
 圖號  
 60335576/G4/FIGURE 4.6.1b

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and does not warrant, for any part, in whole or in part, of this drawing without AECOM's express written consent. Do not create this document. Measurements must be obtained from the related dimensions.



**NOTE:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/G4/Figure 4.6.1b TO 4.6.1j.

**LEGEND:**

- NDA PROJECT BOUNDARY
- PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
- EXISTING BARRIER
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
- UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)



**PROJECT**  
DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION

**CLIENT**  
土木工務發展署  
CEDD Civil Engineering and Development Department

**CONSULTANT**  
AECOM Asia Company Ltd.  
www.aecom.com

**SUB-CONSULTANTS**  
分判工程顧問公司

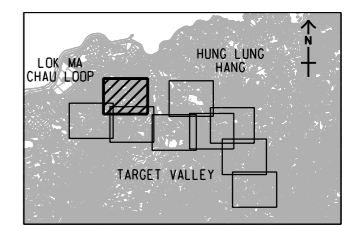
**ISSUE/REVISION**

NO.	DATE	DESCRIPTION	CHK.

**STATUS**

**SCALE**  
A1 1:2500  
**DIMENSION UNIT**  
METRES

**KEY PLAN** A1 1:15000



**PROJECT NO.** 60335576  
**CONTRACT NO.** CE 13/2014 (CE)

**SHEET TITLE**  
LOCATIONS AND EXTENT OF MITIGATION MEASURES AT YEAR 2044 (KTN & FLN)

**SHEET NUMBER**  
60335576/G4/FIGURE 4.6.1c

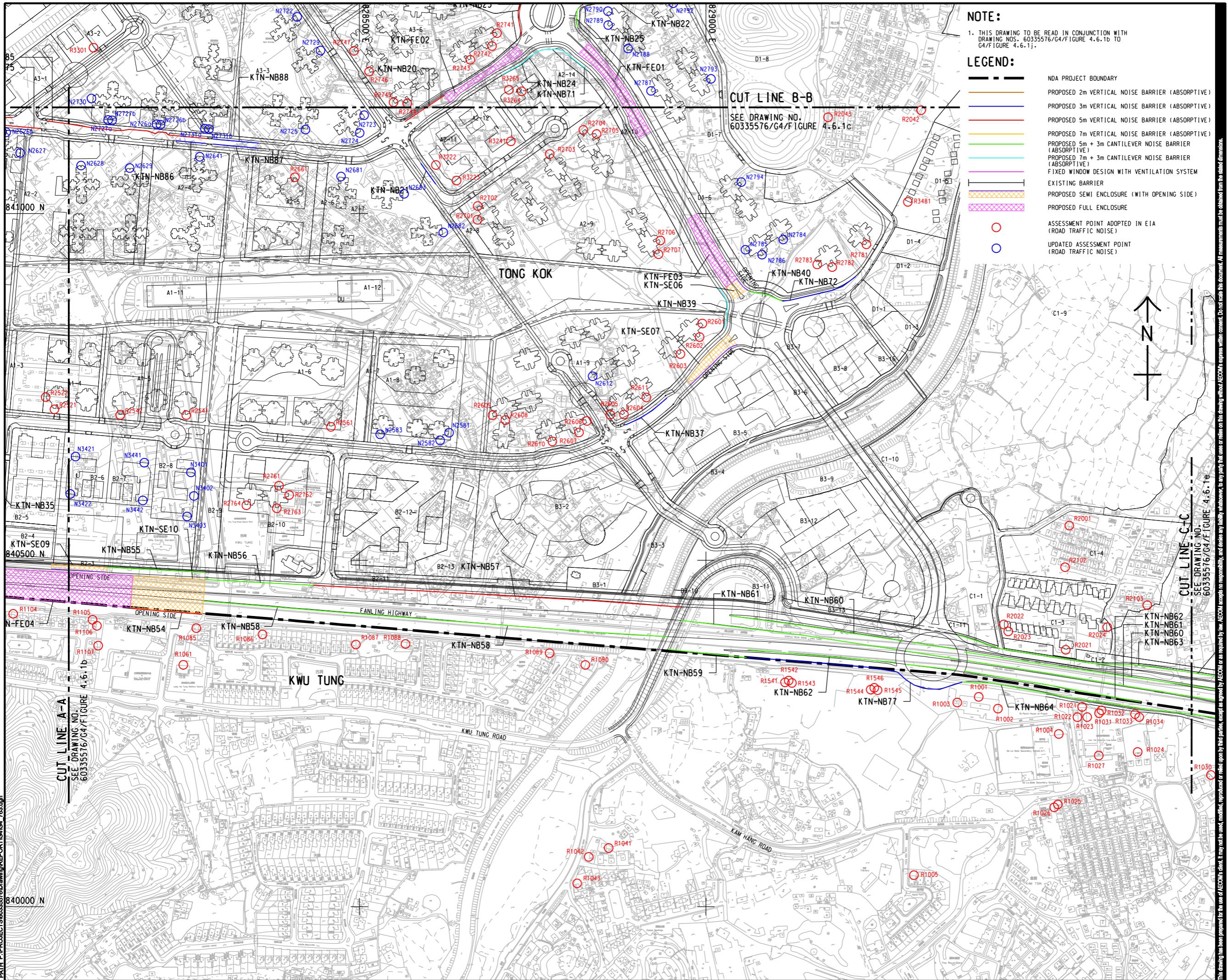
**CUT LINE B-B**

SEE DRAWING NOS. 60335576/G4/FIGURE 4.6.1b AND 4.6.1d

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:

Pld File by: CHENSRL 2017/1/25  
 PATH: P:\PROJECTS\60335576\DRAWING\REPORT\CA1G4\_783.dgn



- NOTE:**  
 1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/G4/Figure 4.6.1b TO G4/Figure 4.6.1j.
- LEGEND:**
- NDA PROJECT BOUNDARY
  - PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
  - PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
  - PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
  - PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
  - PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
  - PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
  - FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
  - EXISTING BARRIER
  - PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
  - PROPOSED FULL ENCLOSURE
  - ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
  - UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)

CUT LINE B-B  
 SEE DRAWING NO. 60335576/G4/Figure 4.6.1c



**AECOM**

**PROJECT**  
 DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION

**CLIENT**  
 土木工程拓展署  
 CEDD Civil Engineering and Development Department

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**

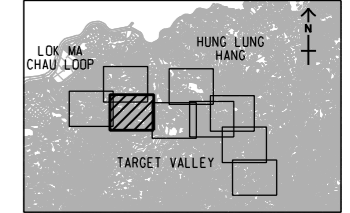
NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 核准

**SCALE**  
 比例: A1 1:2500

**DIMENSION UNIT**  
 尺寸單位: METRES

**KEY PLAN**  
 索引圖: A1 1:150000



**PROJECT NO.**  
 項目編號: 60335576

**CONTRACT NO.**  
 合約編號: CE 13/2014 (CE)

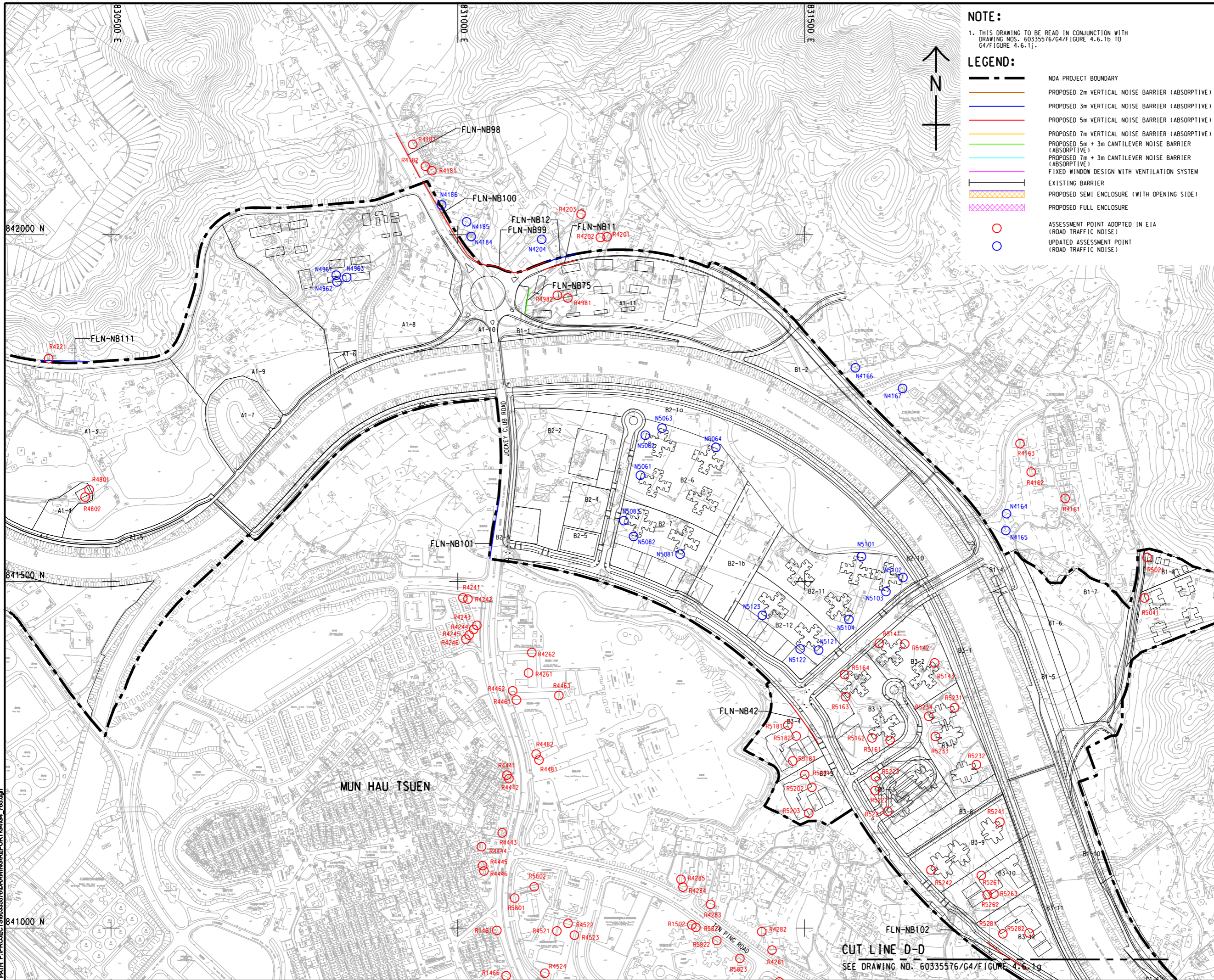
**SHEET TITLE**  
 圖名: LOCATIONS AND EXTENT OF MITIGATION MEASURES AT YEAR 2044 (KTN & FLN)

SHEET 3 OF 9

**SHEET NUMBER**  
 圖號: 60335576/G4/FIGURE 4.6.1d

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and disclaims any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the related dimensions.





**NOTE:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/G4/Figure 4.6.1b TO G4/Figure 4.6.1j.

**LEGEND:**

- NDA PROJECT BOUNDARY
- PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
- EXISTING BARRIER
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
- UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)



**PROJECT**  
 項目  
**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 業主  
 土木工程拓展署  
 Civil Engineering and Development Department

**CONSULTANT**  
 工程顧問  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**  
 更改

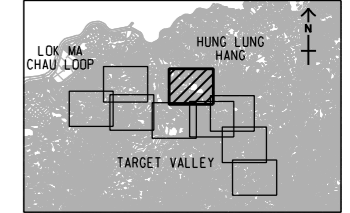
NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 階段

**SCALE**  
 比例  
 A1 1:2500

**DIMENSION UNIT**  
 尺寸單位  
 METRES

**KEY PLAN**  
 索引圖  
 A1 1:150000



**PROJECT NO.**  
 項目編號  
 60335576

**CONTRACT NO.**  
 合約編號  
 CE 13/2014 (CE)

**SHEET TITLE**  
 圖名

**LOCATIONS AND EXTENT OF MITIGATION MEASURES AT YEAR 2044 (KTN & FLN)**

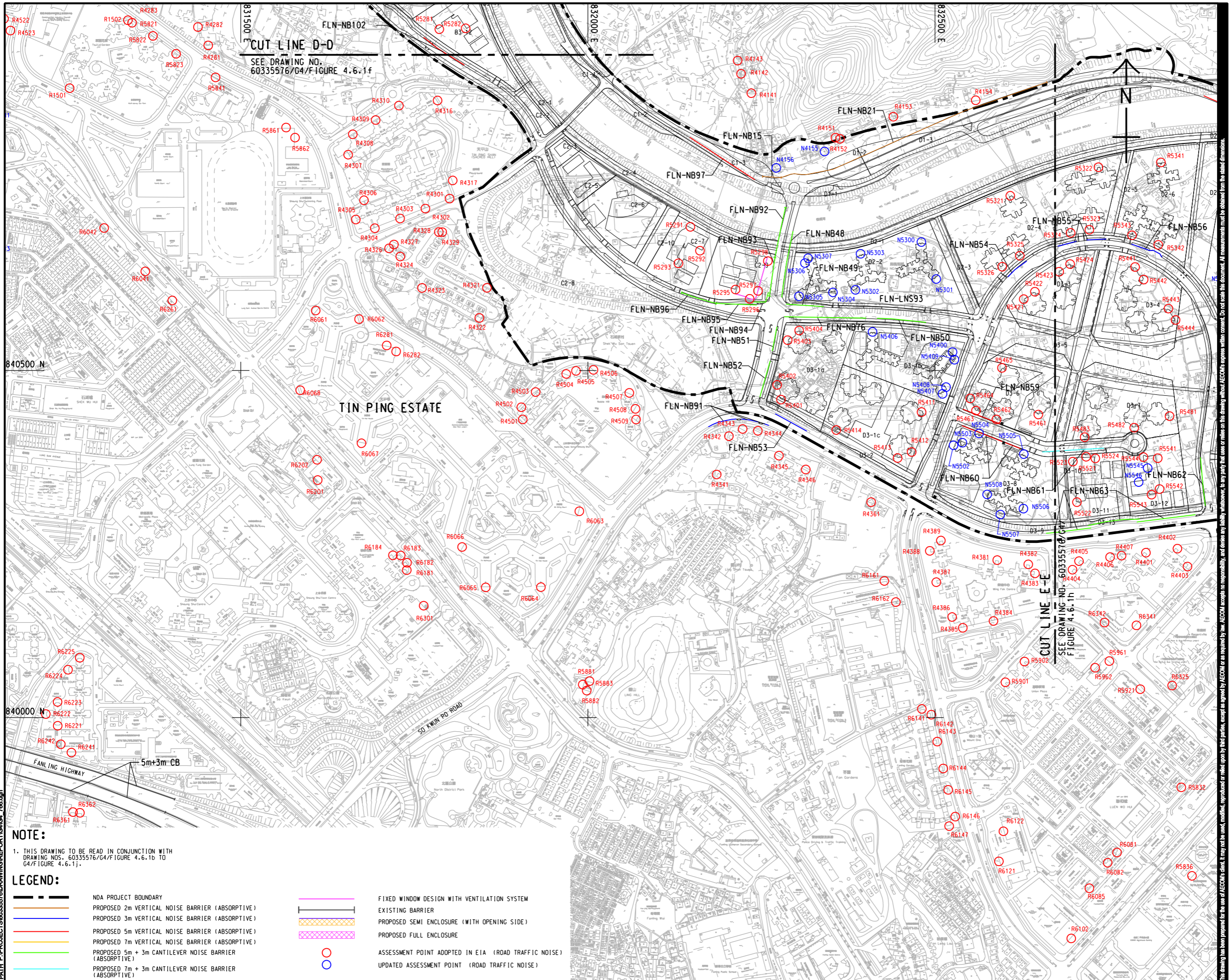
**SHEET NUMBER**  
 圖號  
 60335576/G4/FIGURE 4.6.1f

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the related dimensions.

**CUT LINE D-D**  
 SEE DRAWING NO. 60335576/G4/FIGURE 4.6.1g



ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:



**AECOM**

**PROJECT**  
 DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION

**CLIENT**  
 土木工程拓展署  
 CEDD Civil Engineering and Development Department

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 芬利工程顧問有限公司

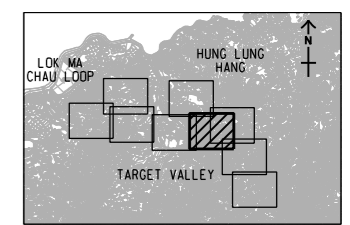
**ISSUE/REVISION**

NO.	DATE	DESCRIPTION	CHK.

**SCALE**  
 1:2500

**DIMENSION UNIT**  
 METRES

**KEY PLAN**  
 A1 1:150000



**PROJECT NO.**  
 60335576

**CONTRACT NO.**  
 CE 13/2014 (CE)

**SHEET TITLE**  
 LOCATIONS AND EXTENT OF MITIGATION MEASURES AT YEAR 2044 (KTN & FLN)

**SHEET NUMBER**  
 60335576/G4/FIGURE 4.6.1g

SHEET 6 OF 9

**NOTE:**

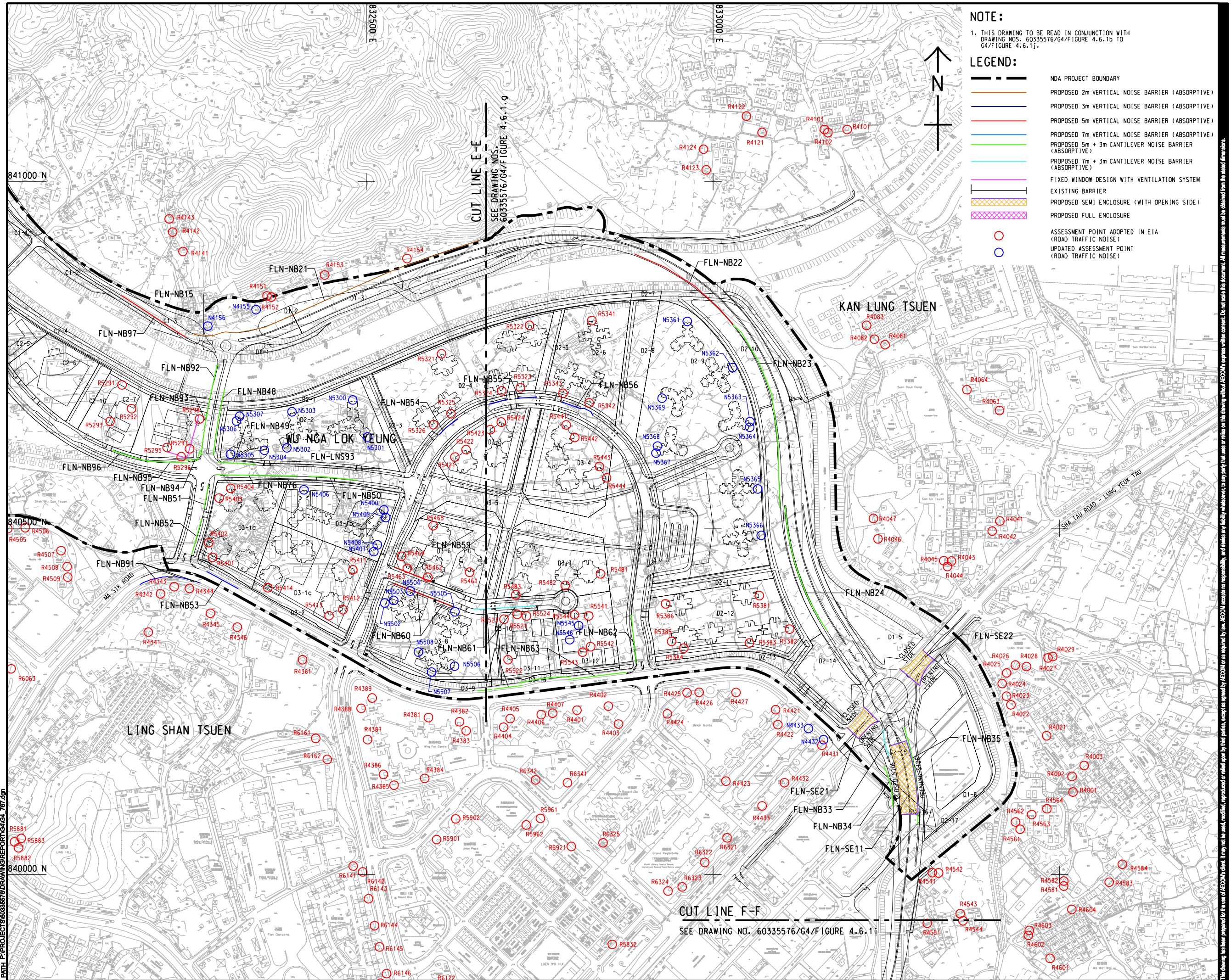
- THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/G4/FIGURE 4.6.1b TO G4/FIGURE 4.6.1j.

**LEGEND:**

	NDA PROJECT BOUNDARY		FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
	PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)		EXISTING BARRIER
	PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)		PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
	PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)		PROPOSED FULL ENCLOSURE
	PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)		ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
	PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)		UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)
	PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)		

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and does not warrant, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the related dimensions.

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:  
 19/02/2017  
 P:\PROJECTS\60335576\DRAWING\INGEN\REPORT\G4.6.1.9.dgn  
 Plot File by: yeiky  
 PATH: P:\PROJECTS\60335576\DRAWING\INGEN\REPORT\G4.6.1.9.dgn



**NOTE:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/G4/FIGURE 4.6.1b TO 4.6.1j.

**LEGEND:**

- NDA PROJECT BOUNDARY
- PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
- EXISTING BARRIER
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
- UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)

**AECOM**

**PROJECT**  
 DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION

**CLIENT**  
 土木工程拓展署  
 CEDD Civil Engineering and Development Department

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**

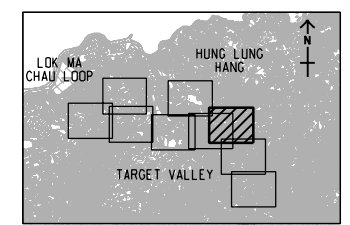
NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 現狀

**SCALE**  
 比例: A1 1:2500

**DIMENSION UNIT**  
 尺寸單位: METRES

**KEY PLAN**  
 索引圖: A1 1:150000



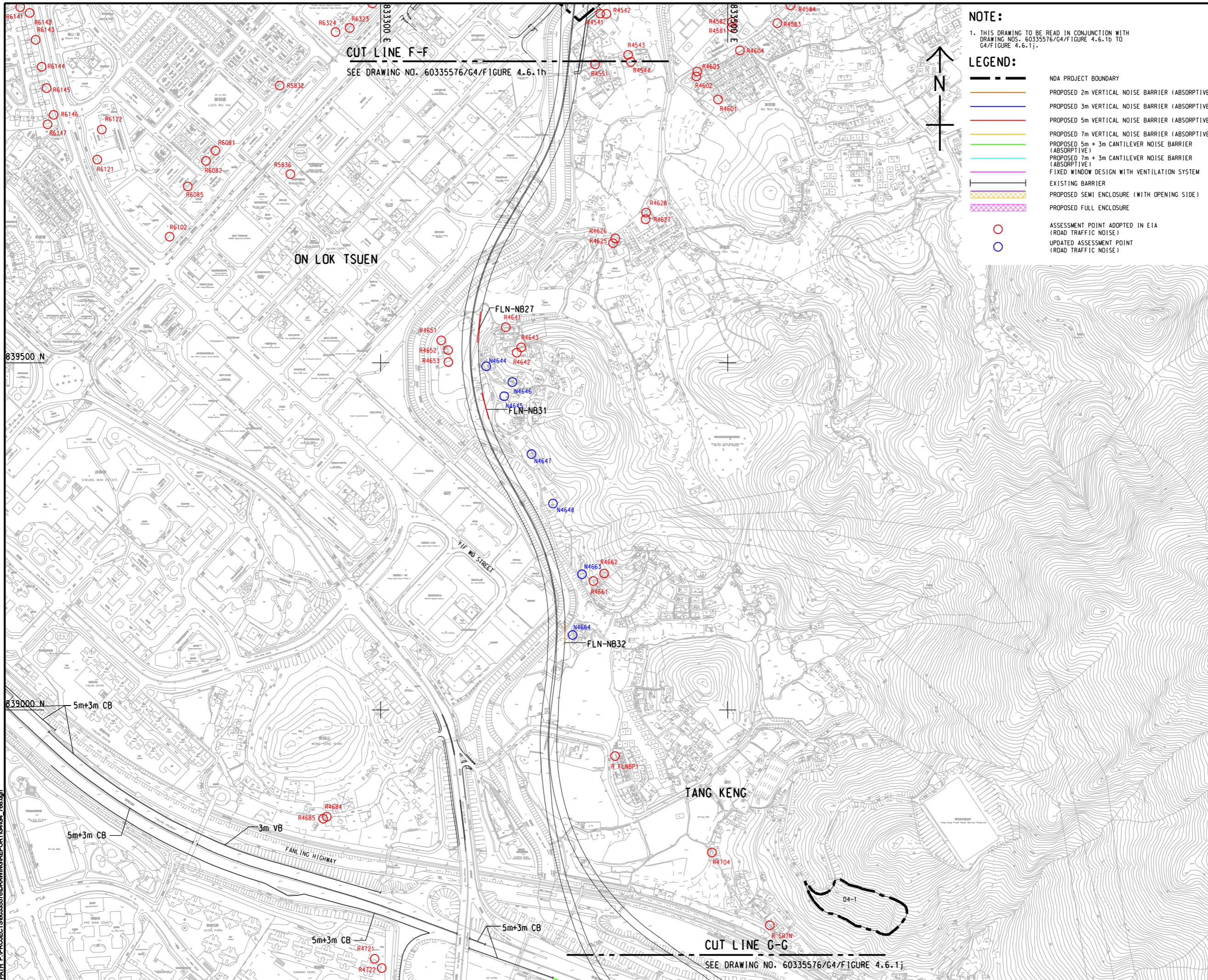
**PROJECT NO.**  
 項目編號: 60335576

**CONTRACT NO.**  
 合約編號: CE 13/2014 (CE)

**SHEET TITLE**  
 圖紙名稱: LOCATIONS AND EXTENT OF MITIGATION MEASURES AT YEAR 2044 (KTN & FLN)

**SHEET NUMBER**  
 圖紙編號: 60335576/G4/FIGURE 4.6.1h

SHEET 7 OF 9



**NOTE:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/G4/FIGURE 4.6.1b TO G4/FIGURE 4.6.1j.

**LEGEND:**

- NDA PROJECT BOUNDARY
- PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
- EXISTING BARRIER
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
- UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)



**PROJECT**  
 DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION

**CLIENT**  
 土木工程拓展署  
 CEDD Civil Engineering and Development Department

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 芬利士建築師有限公司

**ISSUE/REVISION**

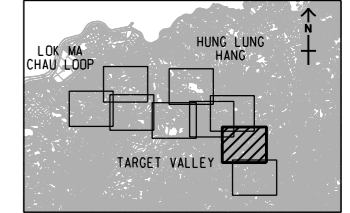
IR	DATE	DESCRIPTION	CHK

**STATUS**

**SCALE**  
 A1 1:2500

**DIMENSION UNIT**  
 METRES

**KEY PLAN** A1 1:15000



**PROJECT NO.**  
 60335576

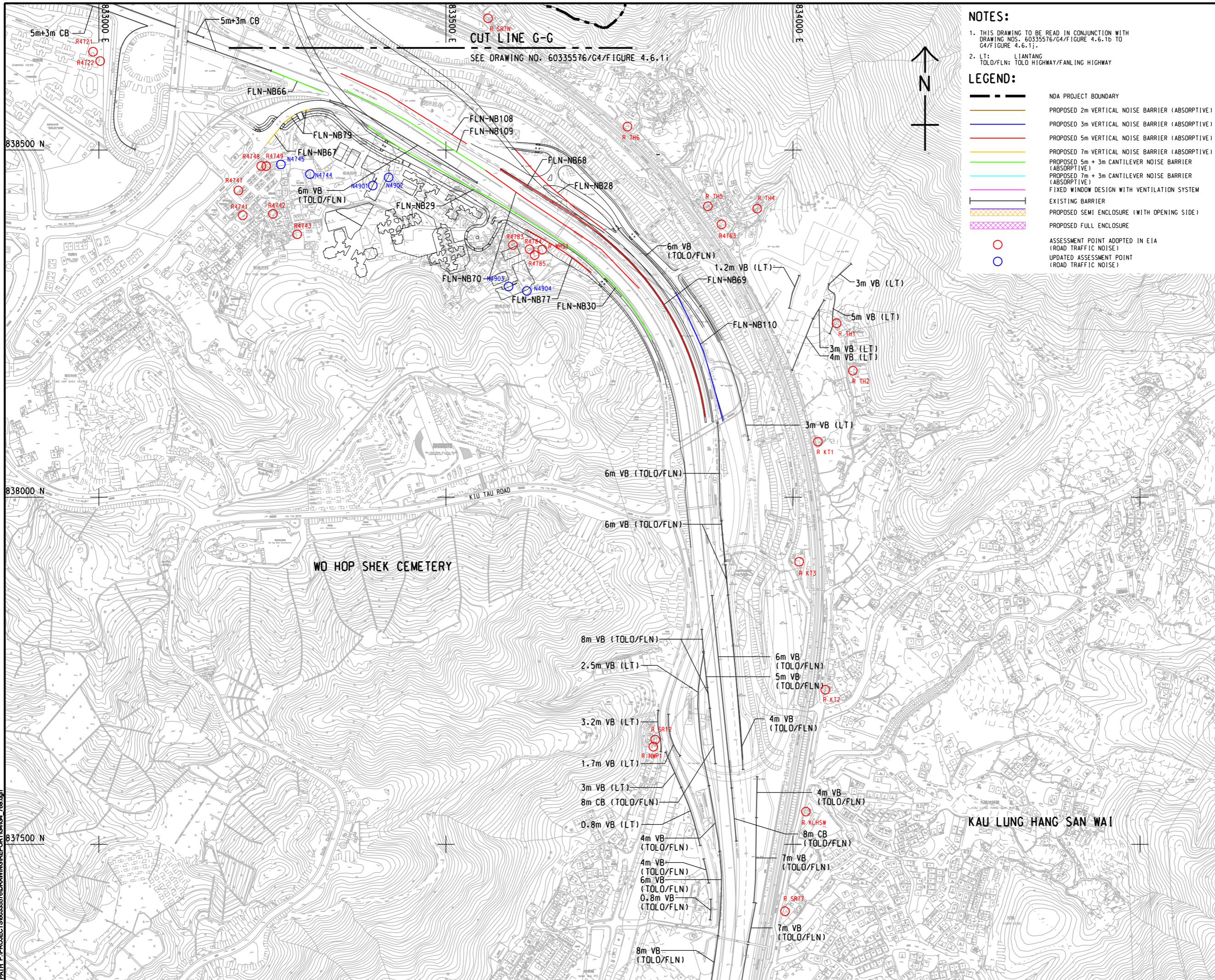
**CONTRACT NO.**  
 CE 13/2014 (CE)

**SHEET TITLE**  
 LOCATIONS AND EXTENT OF MITIGATION MEASURES AT YEAR 2044 (KTN & FLN)

**SHEET NUMBER**  
 60335576/G4/FIGURE 4.6.1i

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party, for losses or claims of any kind arising from the use of this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:  
 Pld File by: HUANGXW, 2016/11/15  
 PATH: P:\PROJECTS\60335576\DRAWING\REPORT\CA4-789.dgn



**NOTES:**

- THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS.: 60335576/G4/FIGURE 4.6.1b TO G4/FIGURE 4.6.1j
- LT: LIANTANG TOLO HIGHWAY/FANLING HIGHWAY

**LEGEND:**

- NDA PROJECT BOUNDARY
- PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
- EXISTING BARRIER
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- ASSESSMENT POINT ADOPTED IN EIA (ROAD TRAFFIC NOISE)
- UPDATED ASSESSMENT POINT (ROAD TRAFFIC NOISE)

**AECOM**

**PROJECT**  
 项目

**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 业主

**CEDD** 土木工程拓展署  
 Civil Engineering and Development Department

**CONSULTANT**  
 工程顾问公司

AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顾问公司

**ISSUE/REVISION**  
 修订

NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 阶段

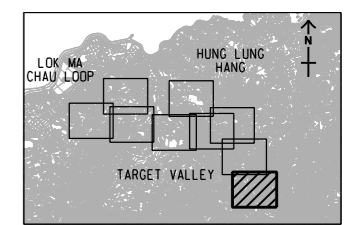
**SCALE**  
 比例

A1 1:2500

**DIMENSION UNIT**  
 尺寸单位

METRES

**KEY PLAN** A1 1:15000  
 索引图



**PROJECT NO.**  
 项目编号

60335576

**CONTRACT NO.**  
 合约编号

CE 13/2014 (CE)

**SHEET TITLE**  
 图名

LOCATIONS AND EXTENT OF MITIGATION MEASURES AT YEAR 2044 (KTN & FLN)

SHEET 9 OF 9

**SHEET NUMBER**  
 图号

60335576/G4/FIGURE 4.6.1j

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party, for losses or claims on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

***Appendix 2.1***

---

***Details of Road Traffic Forecast at Year 2044 and 2029  
(For RCHE)***



Figure 1

1

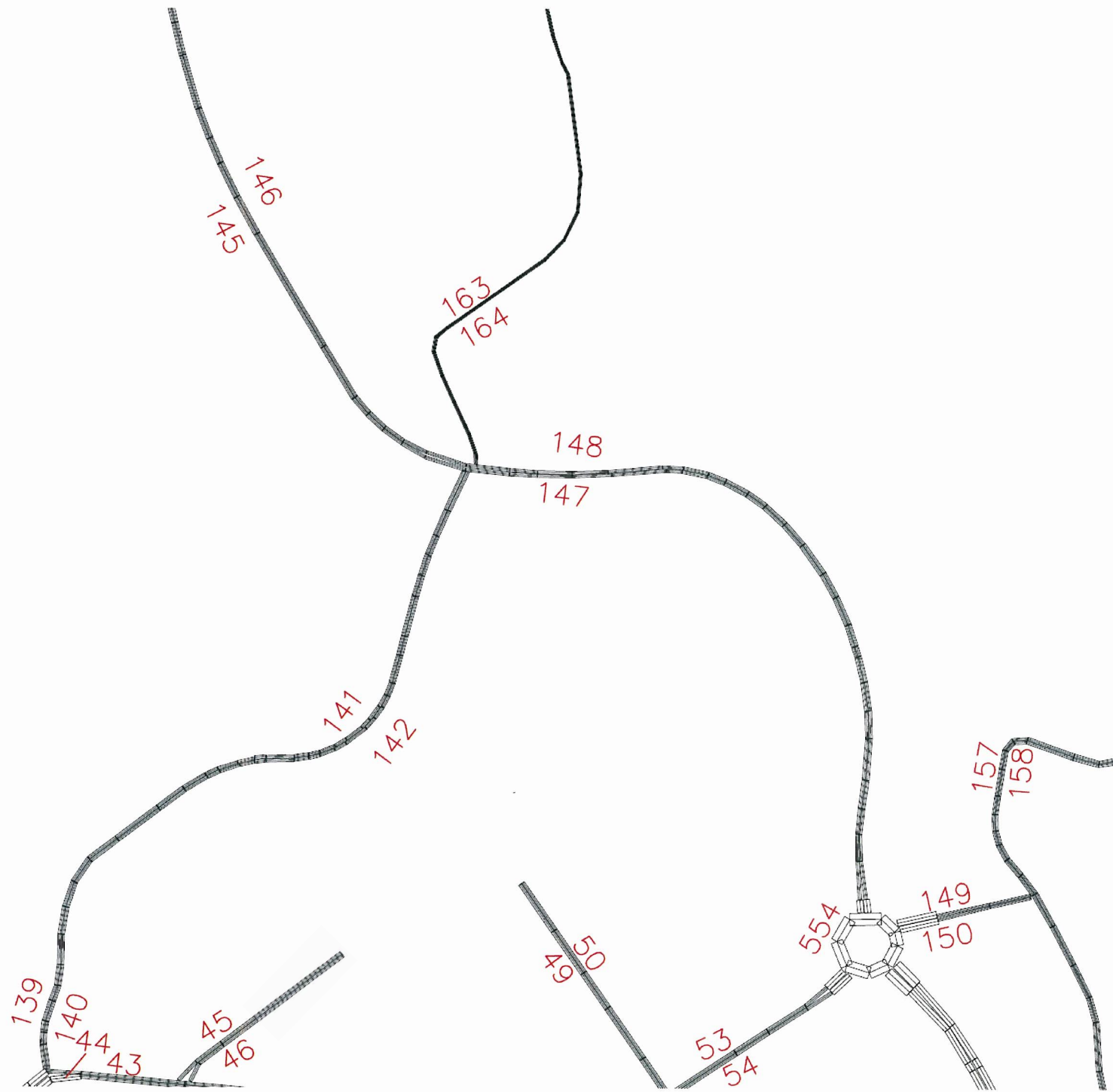


Figure 2

2

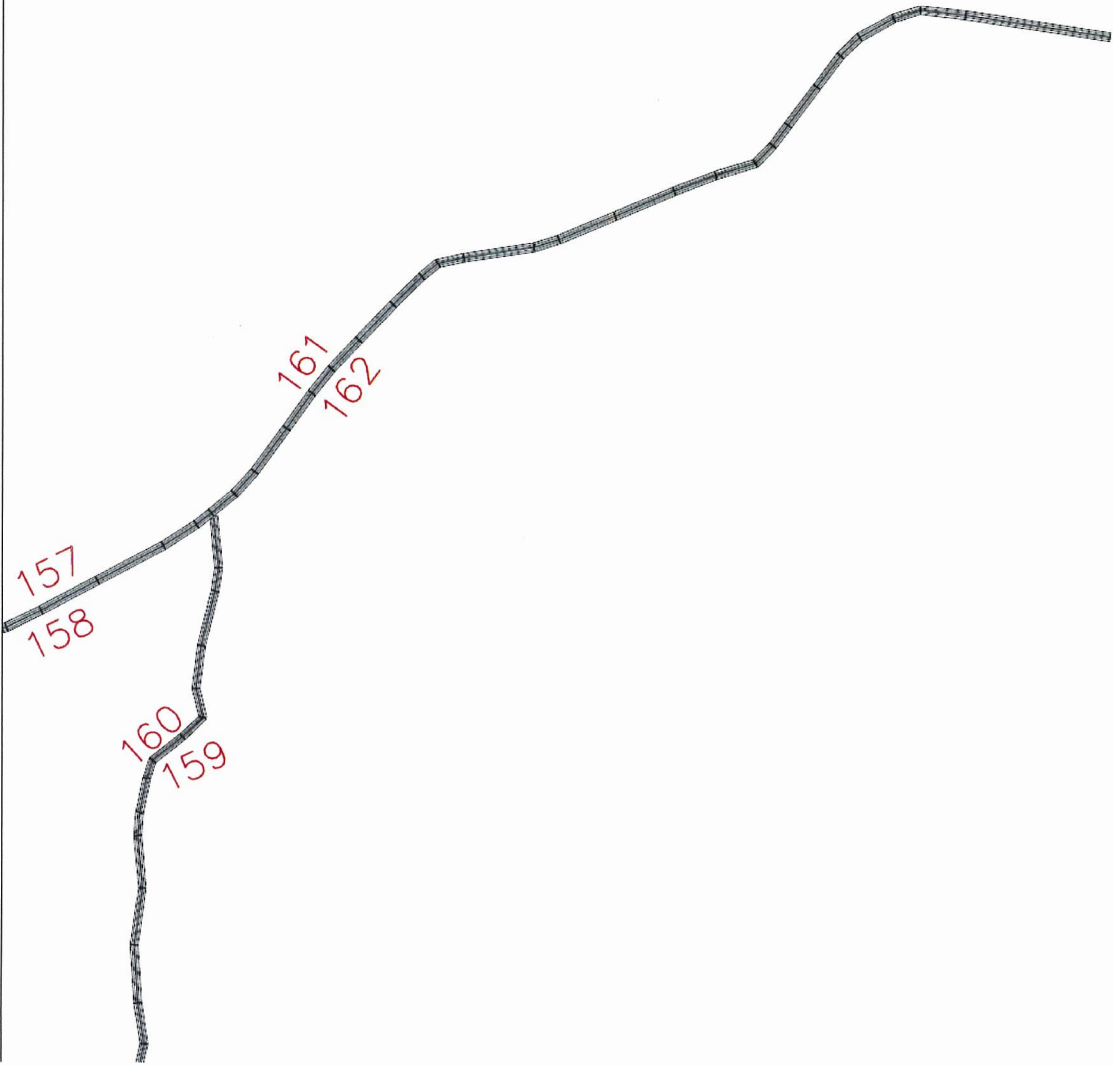


Figure 3





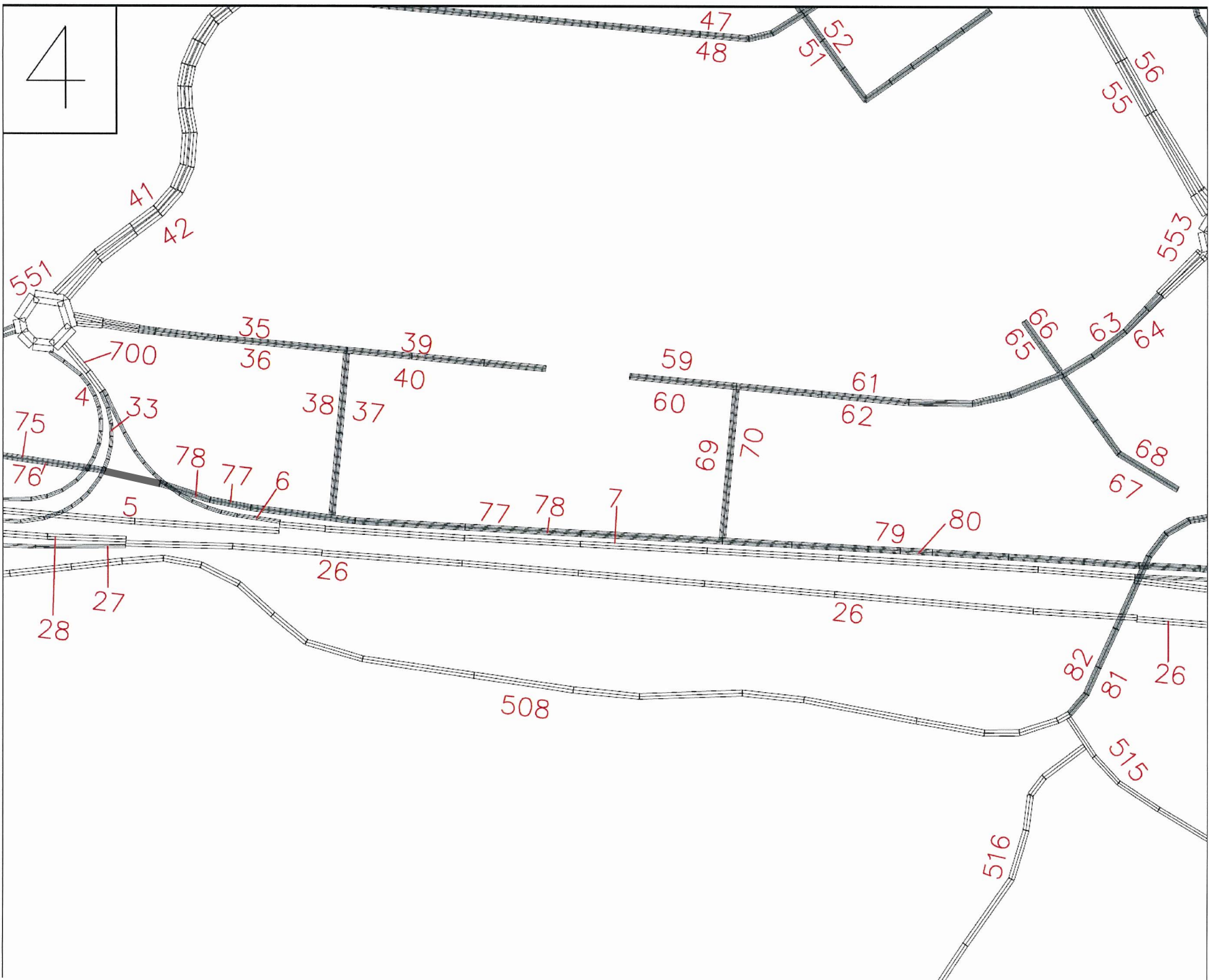


Figure 5

5

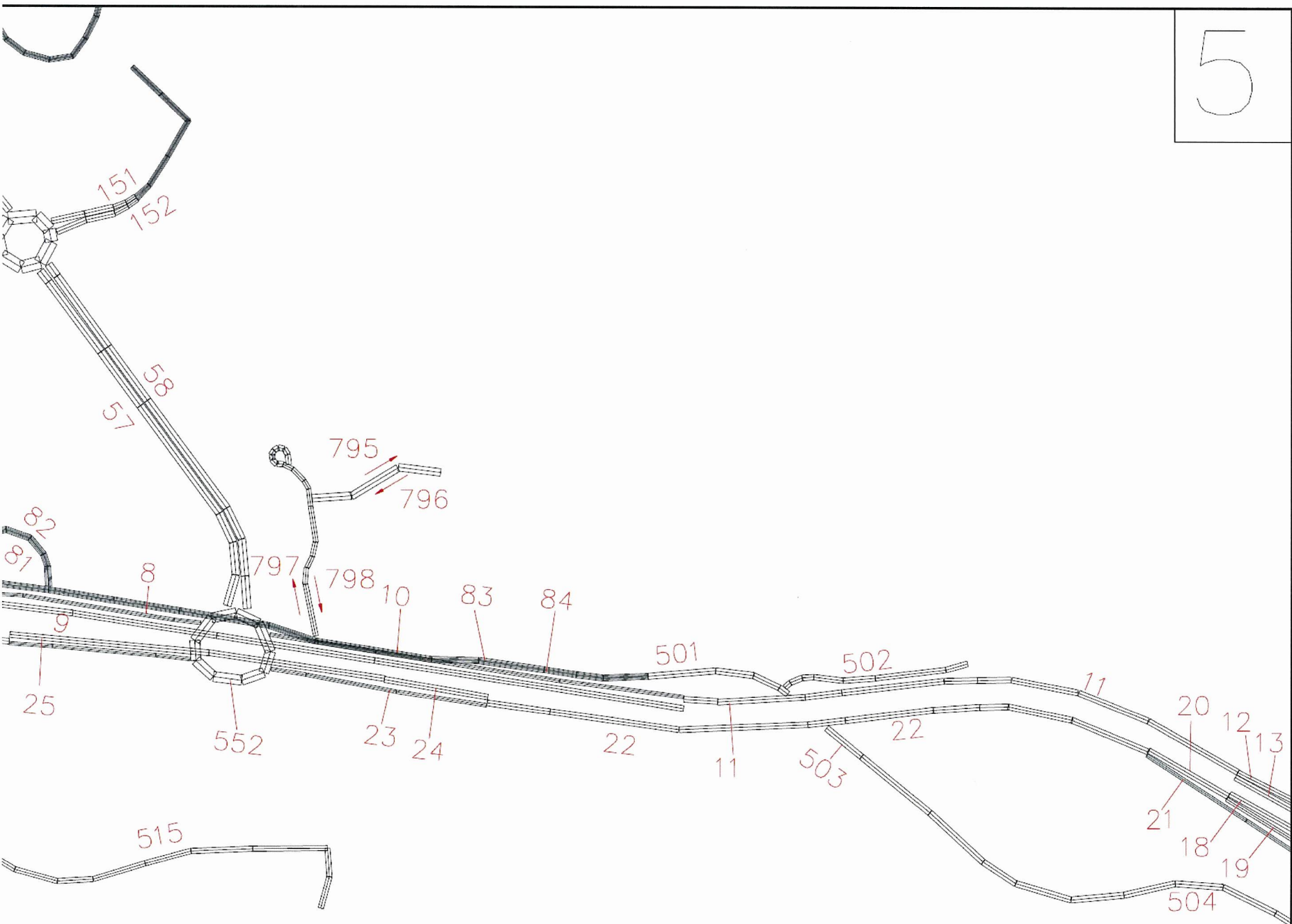


Figure 6

## 2044 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	Total Vehicle	Heavy Vehicle%	Heavy Vehicle%	Speed Limit
	AM	PM	AM	PM	
4	1048	1139	13.0%	17.8%	50
5	4441	3870	30.8%	35.8%	100
6	463	320	30.8%	31.0%	50
7	4904	4190	30.8%	35.4%	100
8	498	264	8.0%	13.6%	50
9	4406	3926	33.4%	36.9%	100
10	1278	951	19.9%	21.4%	50
11	5684	4878	30.4%	33.9%	100
12	1443	1191	27.5%	36.9%	50
13	4241	3687	31.3%	32.9%	100
14	1153	935	28.6%	27.9%	50
15	5394	4622	30.8%	31.9%	100
16	4935	4764	30.3%	30.7%	100
17	673	790	31.9%	39.7%	50
18	4262	3974	30.1%	29.0%	100
19	765	637	28.3%	22.4%	50
20	5027	4611	29.8%	28.0%	100
21	916	975	31.4%	31.6%	50
22	5942	5587	30.1%	28.7%	100
23	1349	1176	23.0%	17.3%	50
24	4593	4410	32.1%	31.7%	100
25	586	394	12.4%	12.9%	50
26	5179	4804	29.9%	30.2%	100
27	772	637	31.4%	25.8%	50
28	4407	4167	29.6%	30.8%	100
33	587	700	13.9%	16.0%	50
35	167	177	31.3%	29.2%	50
36	268	251	21.5%	24.5%	50
37	20	11	27.1%	18.2%	50
38	85	127	12.1%	15.8%	50
39	207	194	26.8%	27.2%	50
40	243	151	23.0%	29.5%	50
41	443	315	31.3%	32.7%	50
42	516	449	14.4%	18.5%	50
43	659	697	15.5%	18.6%	50
44	717	634	15.6%	16.0%	50
45	230	232	17.0%	16.8%	50
46	257	187	14.3%	15.8%	50
47	496	395	20.0%	24.0%	50
48	427	449	24.5%	20.2%	50
49	155	142	14.5%	14.5%	50
50	201	102	14.9%	17.5%	50
51	134	48	13.8%	13.6%	50
52	130	74	13.3%	14.3%	50
53	551	337	21.5%	26.8%	50
54	388	495	28.0%	20.2%	50
55	1228	909	22.1%	18.1%	50
56	1198	835	20.7%	23.0%	50
57	1847	1440	18.9%	16.6%	50
58	1864	1345	17.5%	19.0%	50
59	153	96	13.8%	13.6%	50
60	93	132	13.3%	14.3%	50
61	225	167	16.9%	17.9%	50
62	180	200	22.9%	19.3%	50
63	670	587	14.9%	15.1%	50
64	670	586	15.9%	16.4%	50
65	157	220	13.4%	14.4%	50
66	261	163	13.8%	13.6%	50
67	250	293	13.8%	13.6%	50

## 2044 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	Total Vehicle	Heavy Vehicle%	Heavy Vehicle%	Speed Limit
	AM	PM	AM	PM	
68	399	201	13.3%	14.3%	50
69	189	195	17.1%	16.9%	50
70	204	192	21.6%	18.6%	50
73	443	315	31.3%	32.7%	50
74	516	449	14.4%	18.5%	50
75	201	153	20.4%	26.7%	50
76	120	53	31.3%	42.9%	50
77	201	153	20.4%	26.7%	50
78	120	53	31.3%	42.9%	50
79	79	72	47.0%	48.8%	50
80	90	82	45.6%	44.6%	50
81	303	313	27.0%	22.8%	50
82	447	300	18.5%	23.2%	50
83	453	323	24.5%	32.3%	50
84	327	336	36.8%	30.3%	50
95	1933	1817	29.7%	43.2%	50
96	1372	1332	39.1%	35.8%	50
111	1564	1350	33.1%	44.4%	50
112	795	730	45.0%	43.5%	50
113	1710	1705	37.7%	36.7%	50
114	902	697	34.9%	48.8%	50
115	1135	1085	33.7%	38.0%	50
130	38	0	9.2%	0.0%	50
133	954	701	34.2%	49.2%	50
134	1188	970	30.6%	35.7%	50
135	1029	656	30.6%	46.9%	50
136	1188	970	30.6%	35.7%	50
137	846	543	32.2%	47.1%	50
138	975	684	31.2%	37.5%	50
139	239	93	10.8%	16.6%	50
140	127	119	26.3%	22.5%	50
141	181	78	10.5%	16.6%	50
142	93	107	34.1%	23.2%	50
145	554	279	14.5%	12.4%	50
146	247	398	18.0%	15.6%	50
147	549	293	17.6%	14.6%	50
148	270	416	13.9%	15.0%	50
149	306	256	14.0%	19.5%	50
150	348	235	18.0%	17.3%	50
151	98	97	13.3%	14.3%	50
152	144	74	13.8%	13.6%	50
157	153	128	14.0%	19.5%	50
158	174	118	18.0%	17.3%	50
159	174	118	18.0%	17.3%	50
160	153	128	14.0%	19.5%	50
161	306	256	14.0%	19.5%	50
162	348	235	18.0%	17.3%	50
163	170	94	18.1%	23.2%	50
164	110	127	23.0%	21.0%	50
183	1017	622	24.5%	18.2%	50
184	478	265	16.6%	25.1%	50
301	330	202	15.5%	20.1%	50
302	382	249	17.1%	18.3%	50
303	94	103	16.6%	14.9%	50
304	120	86	13.1%	13.3%	50
305	275	152	16.4%	22.3%	50
306	300	216	19.7%	19.8%	50
309	187	116	18.3%	22.4%	50
310	150	137	21.5%	22.5%	50

## 2044 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	Total Vehicle	Heavy Vehicle%	Heavy Vehicle%	Speed Limit
	AM	PM	AM	PM	
311	143	69	10.8%	24.0%	50
312	113	146	25.0%	16.0%	50
313	91	43	46.3%	65.4%	50
314	140	73	38.9%	55.0%	50
315	167	116	34.9%	30.9%	50
316	140	90	28.6%	43.9%	50
317	655	474	21.3%	25.8%	50
318	418	513	28.4%	27.4%	50
319	524	446	22.1%	22.2%	50
320	383	256	16.7%	17.1%	50
321	440	354	23.3%	25.6%	50
322	330	236	15.9%	16.7%	50
323	126	69	20.3%	26.4%	50
324	183	133	14.7%	12.8%	50
325	321	190	15.1%	14.3%	50
326	243	216	24.5%	24.3%	50
327	256	231	26.0%	28.3%	50
328	434	255	14.7%	14.6%	50
329	729	556	13.8%	20.8%	50
330	411	424	17.2%	18.9%	50
331	410	333	28.5%	32.5%	50
332	535	515	22.0%	24.6%	50
333	115	70	33.8%	34.2%	50
334	154	159	50.0%	40.7%	50
335	75	73	37.2%	39.0%	50
336	74	80	73.6%	46.8%	50
337	400	331	25.3%	26.7%	50
338	259	265	43.9%	34.5%	50
339	413	271	56.3%	73.3%	50
340	414	443	58.5%	48.1%	50
341	253	254	53.1%	54.7%	50
342	264	243	41.3%	54.5%	50
343	395	322	37.8%	48.1%	50
344	376	388	36.3%	40.0%	50
345	891	680	32.6%	37.1%	80
346	635	785	35.0%	31.5%	80
347	1074	714	20.5%	30.6%	50
348	1422	885	23.0%	33.3%	80
349	949	1099	37.4%	35.1%	80
350	585	760	35.4%	37.9%	50
351	886	700	35.8%	32.2%	50
352	914	888	33.0%	29.0%	50
353	620	439	47.7%	41.3%	50
354	632	471	39.0%	41.7%	50
355	957	690	30.9%	31.8%	50
356	972	846	34.0%	27.9%	50
357	678	484	40.9%	44.2%	50
358	534	516	50.2%	51.9%	50
361	207	295	32.7%	33.2%	50
362	300	226	24.6%	33.9%	50
365	286	232	48.5%	46.0%	50
366	168	135	63.2%	65.5%	50
367	609	556	49.6%	49.4%	50
368	5	1	11.4%	16.6%	50
369	623	739	33.1%	30.0%	50
370	486	446	46.5%	41.9%	50
371	1247	1086	25.8%	30.5%	50
372	991	861	19.5%	21.6%	50
373	1025	817	24.0%	27.1%	50

## 2044 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	Total Vehicle	Heavy Vehicle%	Heavy Vehicle%	Speed Limit
	AM	PM	AM	PM	
374	832	867	20.6%	20.8%	50
377	329	351	50.3%	41.6%	50
378	343	361	45.1%	41.4%	50
379	1737	1546	29.3%	34.0%	50
380	1266	1204	20.2%	21.1%	50
389	506	484	49.4%	42.4%	50
390	274	255	40.4%	47.9%	50
405	18	24	44.0%	70.3%	50
406	17	27	58.6%	39.8%	50
407	35	51	51.0%	54.2%	50
427	110	102	30.3%	34.3%	50
436	1267	1173	41.2%	34.4%	50
437	1470	1373	32.7%	36.0%	50
438	921	810	37.2%	26.2%	50
439	688	305	34.5%	34.5%	50
440	2157	1678	33.3%	35.8%	50
441	355	368	52.1%	49.2%	50
443	239	243	52.7%	50.9%	50
446	4374	3492	31.4%	29.7%	100
447	5815	4607	32.7%	29.4%	100
448	1776	1272	41.8%	35.4%	50
449	3946	3254	29.0%	27.2%	100
450	445	247	52.4%	63.0%	80
452	6663	5146	29.8%	28.6%	100
453	7156	5979	33.7%	33.0%	100
454	6224	6562	36.8%	39.3%	100
455	5641	5889	32.9%	35.3%	100
456	6072	6192	33.5%	36.1%	100
457	949	1099	37.4%	35.1%	80
458	4814	4572	32.4%	36.2%	100
459	3961	3791	32.6%	36.7%	100
460	853	780	31.7%	33.6%	50
461	309	521	37.6%	37.5%	50
462	665	584	49.1%	46.5%	50
463	547	765	44.2%	41.8%	50
464	166	170	41.5%	34.6%	50
465	424	340	24.9%	27.1%	50
468	583	673	74.4%	74.8%	80
469	1028	920	64.9%	71.7%	80
470	924	1137	65.7%	58.2%	80
471	431	304	40.9%	52.3%	80
472	493	834	87.3%	60.4%	80
480	1697	1657	35.4%	35.8%	50
481	1746	1521	27.5%	32.2%	50
482	1348	1034	38.2%	28.9%	50
483	1294	1007	39.6%	29.1%	50
485	197	313	29.1%	34.0%	50
486	543	509	35.3%	32.8%	50
487	424	462	38.0%	30.0%	80
488	348	171	30.7%	44.8%	80
501	781	659	29.7%	31.3%	50
502	164	120	29.4%	23.5%	50
503	773	668	32.7%	31.5%	50
504	1030	884	28.6%	27.1%	50
508	717	520	17.7%	20.5%	50
515	734	476	15.7%	15.8%	50
516	279	306	23.4%	30.2%	50
551	1343	1251	18.3%	20.2%	50
552	1855	1392	18.2%	17.8%	50

## 2044 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	Total Vehicle	Heavy Vehicle%	Heavy Vehicle%	Speed Limit
	AM	PM	AM	PM	
553	1930	1468	18.6%	18.0%	50
554	1246	966	18.4%	17.0%	50
556	2348	2170	31.0%	34.2%	50
557	1017	622	24.5%	18.2%	50
558	478	265	16.6%	25.1%	50
601	366	360	60.5%	55.0%	50
602	221	274	26.1%	25.6%	50
603	445	398	34.1%	32.3%	50
604	670	598	49.4%	47.9%	50
605	492	394	47.0%	43.7%	50
606	215	207	34.6%	36.7%	50
607	553	194	25.2%	38.9%	50
608	1275	1123	52.4%	55.0%	50
609	39	24	85.8%	83.0%	50
610	1236	1099	51.3%	54.4%	50
611	917	899	45.0%	43.8%	50
612	532	502	52.8%	56.2%	50
613	419	434	34.8%	27.2%	50
614	13	15	73.4%	93.1%	50
616	37	30	13.7%	16.8%	50
617	37	30	13.7%	16.8%	50
618	75	60	13.7%	16.8%	50
619	149	119	13.7%	16.8%	50
620	75	60	13.7%	16.8%	50
621	22	10	20.8%	26.8%	50
622	11	5	20.8%	26.8%	50
623	11	5	20.8%	26.8%	50
624	113	120	29.1%	40.5%	50
625	1259	872	33.0%	34.1%	50
626	989	861	35.9%	31.3%	50
627	832	820	39.6%	36.1%	50
628	756	439	23.8%	28.1%	50
629	624	485	27.1%	26.0%	50
630	640	353	27.7%	38.2%	50
631	825	652	21.2%	20.0%	50
632	30	28	30.3%	27.4%	50
633	185	166	26.9%	21.3%	50
651	667	600	53.0%	55.9%	50
652	842	790	32.3%	34.3%	50
653	1992	1809	30.3%	32.8%	50
700	1050	1021	21.3%	20.7%	50
795	36	34	40.6%	20.2%	50
796	30	44	29.2%	29.2%	50
797	36	34	40.6%	20.2%	50
798	30	44	29.2%	29.2%	50
801	1299	1296	29.0%	26.2%	50
802	2052	1979	31.2%	28.0%	50
803	689	642	31.5%	33.7%	50
804	345	321	31.5%	33.7%	50
805	345	321	31.5%	33.7%	50
806	172	160	31.5%	33.7%	50
807	172	160	31.5%	33.7%	50
808	1624	1468	21.0%	26.7%	50
809	982	736	25.5%	34.2%	50
810	598	612	41.6%	38.2%	50
811	197	181	37.8%	32.1%	50
812	98	90	37.8%	32.1%	50
813	197	181	37.8%	32.1%	50
814	290	246	35.5%	31.9%	50



## 2044 Traffic Flows and Breakdown by 2 Vehicle Classes

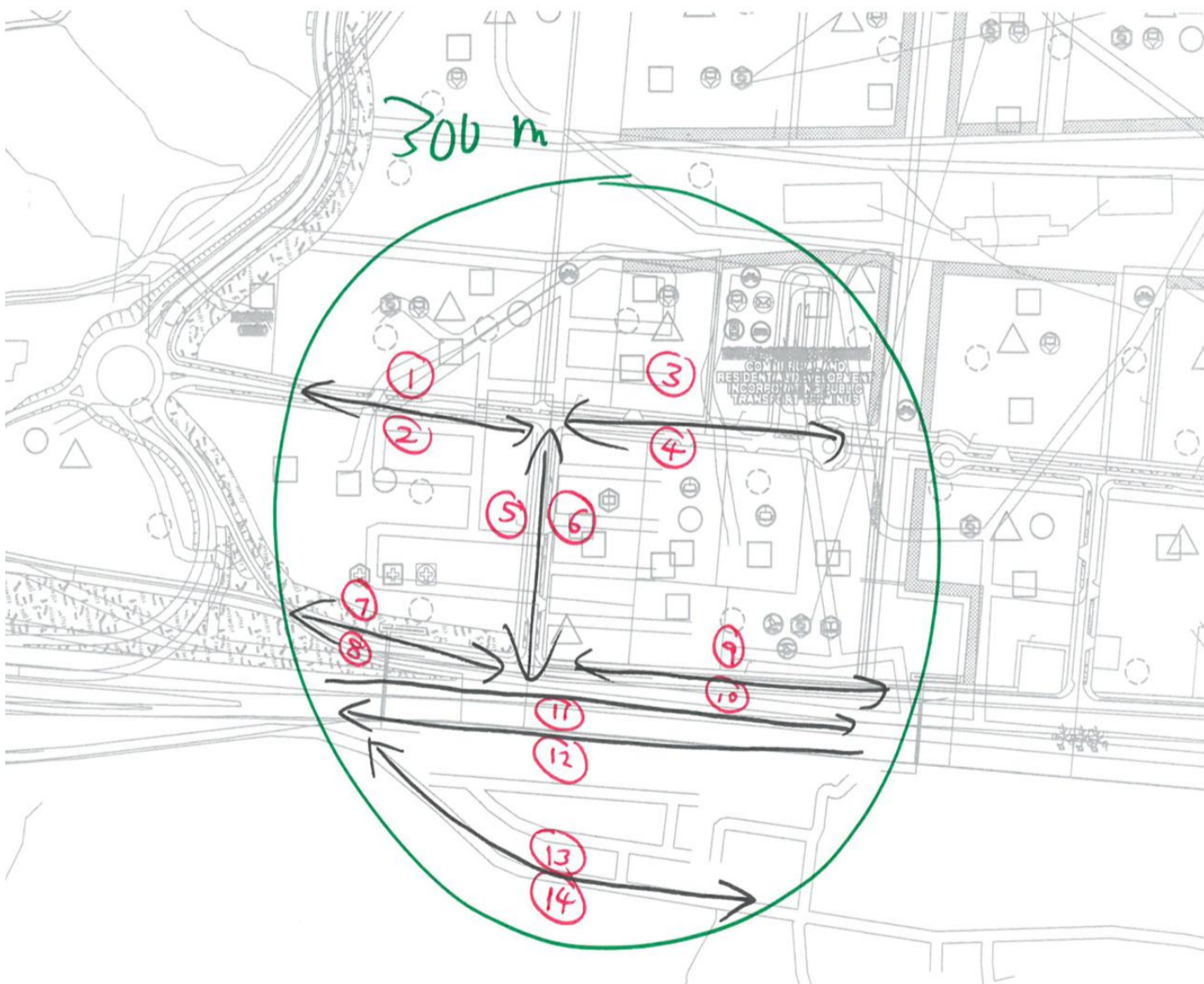
Link No.	Total Vehicle	Total Vehicle	Heavy Vehicle%	Heavy Vehicle%	Speed Limit
	AM	PM	AM	PM	
815	330	203	29.3%	32.0%	50
816	426	228	24.4%	34.7%	50
817	322	57	21.3%	44.9%	50
818	37	30	13.7%	16.8%	50
963	361	407	21.5%	14.5%	50
964	1006	695	15.7%	19.3%	50
971	94	97	34.4%	38.9%	50
972	375	140	26.5%	23.3%	50
999	4994	4867	27.8%	28.7%	100
1000	897	616	23.6%	23.0%	50
1001	1022	628	24.5%	25.6%	50
1002	125	106	21.9%	21.0%	50
1003	89	88	35.1%	23.6%	50
1004	163	116	64.5%	41.9%	50
1005	74	28	100.0%	100.0%	50
1006	215	207	24.4%	24.2%	50
1007	280	185	15.1%	14.3%	50
1008	167	185	34.7%	29.3%	50
1009	496	246	20.0%	22.0%	50
1010	1577	1138	40.6%	35.1%	50
1011	1739	1254	42.9%	35.7%	50
9100	5489	5008	27.4%	31.7%	100
9102	1625	1351	26.8%	27.8%	50
9103	3927	3951	27.2%	28.4%	100
9104	3864	3657	27.7%	33.2%	100
9105	385	768	65.4%	57.6%	50
9106	610	536	11.9%	8.1%	50
9107	1582	1970	38.1%	36.5%	50
9108	2111	1139	24.7%	25.6%	50
9221	578	247	25.0%	48.8%	50
9222	261	64	11.7%	23.6%	50
9225	578	247	25.0%	48.8%	50
9226	261	64	11.7%	23.6%	50
9228	25	35	100.0%	100.0%	50
9233	578	247	25.0%	48.8%	50
9234	261	64	11.7%	23.6%	50
9236	512	233	23.4%	47.0%	50
9237	372	155	17.4%	63.3%	50
9240	538	226	27.2%	44.9%	50
9241	373	156	20.9%	60.5%	50
9242	325	404	22.0%	20.3%	50
9243	477	520	23.1%	24.9%	50
9244	379	165	20.6%	57.1%	50
9245	393	120	27.6%	45.7%	50
9246	1649	1686	38.8%	41.0%	50
9247	356	300	45.7%	59.3%	50
9248	641	607	40.4%	37.5%	50
9249	170	134	38.0%	36.7%	50
9250	113	148	42.4%	59.0%	50
9251	243	152	47.3%	59.7%	50
9252	471	473	41.3%	37.7%	50
9253	1706	824	20.4%	19.1%	50
9254	302	245	23.7%	19.7%	50
9255	5559	4638	27.5%	33.6%	100
9256	5413	5417	30.7%	32.2%	100
9301	156	202	100.0%	100.0%	50
9302	707	560	34.5%	32.5%	50
9303	186	160	100.0%	100.0%	50
9304	341	363	100.0%	100.0%	50

## 2044 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	Total Vehicle	Heavy Vehicle%	Heavy Vehicle%	Speed Limit
	AM	PM	AM	PM	
9402	1045	1015	48.1%	51.0%	50
9403	2122	1711	28.4%	35.7%	50
9404	181	204	21.5%	14.5%	50
9405	181	204	21.5%	14.5%	50
9406	1006	695	15.7%	19.3%	50
9407	393	298	19.1%	18.2%	50
9418	93	117	95.0%	96.1%	50
9419	1045	1015	48.1%	51.0%	50
9607	414	808	30.4%	19.9%	50
9608	1059	860	18.4%	24.4%	50
9609	152	69	21.9%	84.4%	50
9614	160	125	100.0%	100.0%	50
9620	1777	1384	27.2%	34.1%	50
9624	775	1215	26.2%	18.1%	50
9650	230	304	18.3%	11.4%	50
9651	727	664	28.7%	40.7%	50
9652	599	527	21.0%	32.6%	50
9653	128	137	64.6%	72.0%	50
9700	166	177	55.1%	65.3%	50
9701	211	248	61.0%	47.2%	50
9702	338	205	42.2%	46.1%	50
9703	67	49	33.0%	23.4%	50
9704	1404	579	19.7%	18.9%	50
9705	1256	1566	42.3%	40.6%	50
9706	382	312	24.5%	24.1%	50
9707	641	508	46.2%	53.9%	50
9708	1395	1047	28.3%	32.6%	50
9709	4834	4742	25.4%	26.8%	100
9710	141	108	43.8%	59.3%	50
9711	672	500	24.4%	14.5%	50
9712	102	131	35.4%	37.9%	50
9713	95	66	35.4%	37.9%	50
9714	166	101	15.5%	14.5%	50
9715	147	125	13.8%	16.6%	50

## 2029 Traffic Flows and Breakdown by 2 Vehicle Classes

Link No.	Total Vehicle	Total Vehicle	Heavy Vehicle%	Heavy Vehicle%	Speed Limit
	AM	PM	AM	PM	
1	137	100	16.2%	17.8%	50
2	157	97	14.7%	15.3%	50
3	178	166	16.9%	16.7%	50
4	214	124	14.2%	15.6%	50
5	105	91	21.7%	17.2%	50
6	118	62	23.5%	32.5%	50
7	90	71	38.4%	42.3%	50
8	140	75	39.7%	58.7%	50
9	94	84	40.0%	40.1%	50
10	131	117	41.0%	36.9%	50
11	4147	3706	35.0%	37.3%	100
12	4369	4119	33.8%	32.8%	100
13	133	138	21.6%	32.9%	50
14	221	227	26.3%	17.5%	50



***Appendix 2.2***

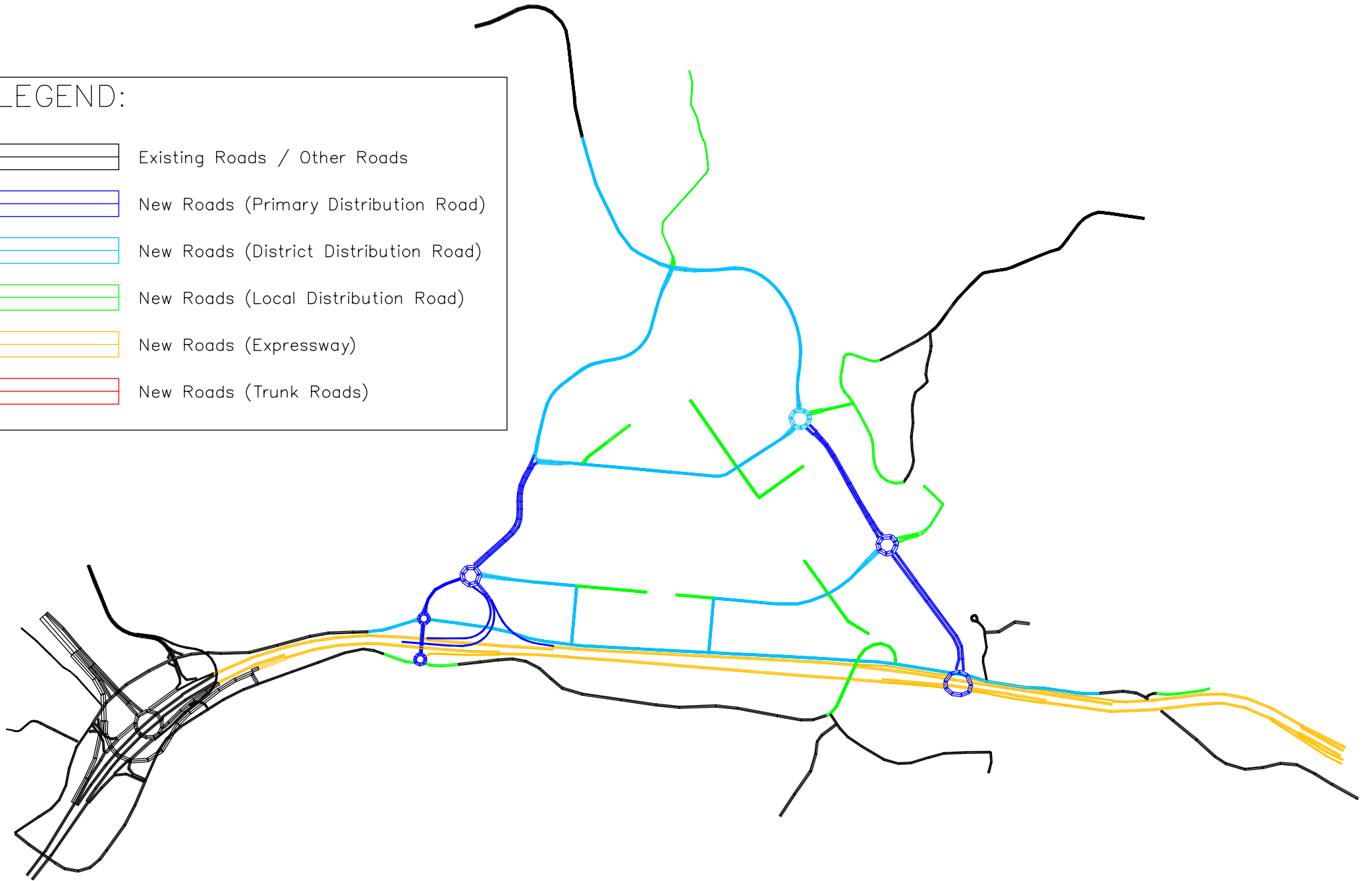
---

***Computer Plot of Road Scheme***



LEGEND:

- Existing Roads / Other Roads
- New Roads (Primary Distribution Road)
- New Roads (District Distribution Road)
- New Roads (Local Distribution Road)
- New Roads (Expressway)
- New Roads (Trunk Roads)



***Appendix 2.3***

---

***Unmitigated Road Traffic Noise Impacts on NSRs (KTN)  
at Year 2044***

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A) <sup>(1)</sup>	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
							PD	DD	LD	EX	TR											New Roads in 2044 dB(A) <sup>(2)</sup> [B]	
R1001	1	10.4	St. Paul's House of Prayer	75.7	44.6	0	57.9	60.3	43.4	75.3	0	75.5	75.5	65	Y	-0.2	N	30.9	Y	Y	Y	Y	
R1002	1	10.4	St. Paul's House of Prayer	73.3	54.4	0	60	56.6	0	72.1	0	72.2	72.3	65	Y	-1.0	N	17.9	Y	Y	Y	Y	
R1003	1	10.4	St. Paul's House of Prayer	73.3	58.2	0	60.5	57	46	71.7	0	72.2	72.3	65	Y	-1.0	N	14.1	Y	Y	Y	Y	
R1004	1	11.5	De La Salle S. Sch NT	76.9	60.3	0	54.7	59.9	37	75.5	0	75.4	75.7	65	Y	-0.2	N	25.4	Y	Y	Y	Y	
R1004	2	15.5	De La Salle S. Sch NT	77.8	53.1	0	56.5	63	37.2	77.4	0	77.6	77.6	65	Y	-0.2	N	24.5	Y	Y	Y	Y	
R1004	3	19.5	De La Salle S. Sch NT	78.8	54.1	0	58.4	64.4	37.9	78.8	0	79	79.0	65	Y	0.2	N	24.9	Y	Y	Y	Y	
R1005	1	16.9	Ascot Park	67.6	67	0	52.6	38.3	42.3	62.4	0	62.9	68.4	70	N	0.8	N	1.4	Y	Y	N	N	
R1005	2	19.9	Ascot Park	67.6	67	0	53.7	38.9	42.5	62.7	0	63.3	68.5	70	N	0.9	N	1.5	Y	Y	N	N	
R1005	3	22.9	Ascot Park	67.6	67	0	55	39.8	42.8	63.1	0	63.8	68.7	70	N	1.1	Y	1.7	Y	Y	N	N	
R1021	1	9.7	KI Village Ho Tung Sch	83.8	47.6	0	52.8	63.2	30.7	81.1	0	81.1	81.1	65	Y	-2.7	N	33.5	Y	Y	Y	Y	
R1022	1	9.7	KI Village Ho Tung Sch	77.6	58.7	0	53.1	58.1	23	74.6	0	74.8	74.9	65	Y	-2.7	N	16.2	Y	Y	Y	Y	
R1023	1	9.7	KI Village Ho Tung Sch	79.7	51.2	0	0	59.5	0	77.9	0	77.9	78.0	65	Y	-1.7	N	26.8	Y	Y	Y	Y	
R1024	1	6.9	Kam Tsin Village	78.6	47.3	0	50	58.1	28.9	75.8	0	75.9	75.9	70	Y	-2.7	N	28.6	Y	Y	Y	Y	
R1024	2	9.9	Kam Tsin Village	78.6	49.7	0	51.4	59.4	31.4	77.1	0	77.2	77.2	70	Y	-1.4	N	27.5	Y	Y	Y	Y	
R1024	3	12.9	Kam Tsin Village	78.6	51.9	0	52.6	61	34.3	77.9	0	78	78.0	70	Y	-0.6	N	26.1	Y	Y	Y	Y	
R1024	4	15.9	Kam Tsin Village	78.6	53.8	0	53.7	62.5	37.1	78.5	0	78.6	78.6	70	Y	-0.1	N	24.8	Y	Y	Y	Y	
R1025	1	12.7	Kam Tsin Village	73.1	59	0	52.7	56.4	38.7	71.5	0	71.7	71.9	70	Y	-1.2	N	12.9	Y	Y	Y	Y	
R1025	2	15.7	Kam Tsin Village	73.3	59.2	0	53.7	57.5	40	72.3	0	72.5	72.7	70	Y	-0.6	N	13.5	Y	Y	Y	Y	
R1025	3	18.7	Kam Tsin Village	73.6	59.3	0	54.7	58.7	40.8	73	0	73.3	73.4	70	Y	-0.2	N	14.1	Y	Y	Y	Y	
R1025	4	21.7	Kam Tsin Village	74.1	59.4	0	55.8	59.6	41.4	73.8	0	74	74.1	70	Y	0.0	N	14.7	Y	Y	Y	Y	
R1026	1	12.7	Kam Tsin Village	68.1	64.1	0	52.7	53.3	42.1	66.4	0	66.7	68.6	70	N	0.5	N	4.5	Y	Y	N	N	
R1026	2	15.7	Kam Tsin Village	68.3	64.1	0	53.7	54	42.8	67	0	67.4	69.1	70	N	0.8	N	5.0	Y	Y	N	N	
R1026	3	18.7	Kam Tsin Village	68.5	64.1	0	54.8	55.1	43.3	67.7	0	68.2	69.6	70	N	1.1	Y	5.5	Y	Y	N	N	
R1026	4	21.7	Kam Tsin Village	68.9	64.1	0	55.8	56.3	43.6	68.3	0	68.8	70.1	70	Y	1.2	Y	6.0	Y	Y	N	N	
R1027	1	10.7	KI Village Ho Tung Kindgt.	77.3	48.8	0	52.8	58.9	31.3	75.7	0	75.8	75.8	65	Y	-1.5	N	27.0	Y	Y	Y	Y	
R1028	1	6.8	Kam Tsin Village	80.9	59.3	0	45.5	54.8	42.5	76.3	0	76.3	76.4	70	Y	-4.5	Y	17.1	Y	Y	Y	Y	
R1028	2	9.8	Kam Tsin Village	80.9	59.7	0	47.1	57.5	42.6	78.1	0	78.2	78.2	70	Y	-2.7	N	18.5	Y	Y	Y	Y	
R1028	3	12.8	Kam Tsin Village	80.9	60.7	0	48.5	60.1	42.6	79.5	0	79.6	79.6	70	Y	-1.3	N	18.9	Y	Y	Y	Y	
R1029	1	8	Kam Tsin Village	77.6	59.9	0	46.2	54.5	39.9	74.5	0	74.6	74.7	70	Y	-2.9	N	14.8	Y	Y	Y	Y	
R1029	2	11	Kam Tsin Village	77.6	60	0	47.4	56	39.9	75.4	0	75.4	75.6	70	Y	-2.0	N	15.6	Y	Y	Y	Y	
R1029	3	14	Kam Tsin Village	77.4	60.3	0	47.4	57.4	40.1	76.1	0	76.1	76.3	70	Y	-1.3	Y	14.7	Y	Y	Y	Y	
R1030	1	9	Kam Tsin Village	77.5	58.1	0	32.9	56	40.1	75	0	75.1	75.2	70	Y	-2.3	N	17.1	Y	Y	Y	Y	
R1030	2	12	Kam Tsin Village	77.5	58.5	0	34.7	57.4	40.1	75.8	0	75.9	76.0	70	Y	-1.5	N	17.5	Y	Y	Y	Y	
R1030	3	15	Kam Tsin Village	77.5	59	0	36.3	58.9	40.2	76.6	0	76.6	76.7	70	Y	-0.8	N	17.7	Y	Y	Y	Y	
R1031	1	8.9	KI Village Ho Tung Sch Extension	79.1	53.6	0	50.8	58.5	21.4	76.1	0	76.1	76.2	65	Y	-2.9	N	22.6	Y	Y	Y	Y	
R1031	2	12.2	KI Village Ho Tung Sch Extension	79.2	55.3	0	54.1	61.7	28.3	78.2	0	78.3	78.3	65	Y	-0.9	N	23.0	Y	Y	Y	Y	
R1032	1	8.9	KI Village Ho Tung Sch Extension	83.8	49.6	0	52.1	62.5	30.1	81.1	0	81.2	81.2	65	Y	-2.6	N	31.6	Y	Y	Y	Y	
R1032	2	12.2	KI Village Ho Tung Sch Extension	83.8	53.6	0	54.6	65.6	34.4	82.9	0	83	83.0	65	Y	-0.8	N	29.4	Y	Y	Y	Y	
R1033	1	8.9	KI Village Ho Tung Sch Extension	84.2	53.6	0	51.7	63.1	35.2	83	0	83.1	83.1	65	Y	-1.1	N	29.5	Y	Y	Y	Y	
R1033	2	12.2	KI Village Ho Tung Sch Extension	84.2	55.9	0	53.6	65.8	39.3	84.2	0	84.3	84.3	65	Y	0.1	N	28.4	Y	Y	Y	Y	
R1034	1	8.9	KI Village Ho Tung Sch Extension	80.9	55.8	0	0	59.7	33	80.4	0	80.4	80.4	65	Y	-0.5	N	24.6	Y	Y	Y	Y	
R1034	2	12.2	KI Village Ho Tung Sch Extension	80.9	57.2	0	0	62.3	36.9	81.5	0	81.6	81.6	65	Y	0.7	N	24.4	Y	Y	Y	Y	
R1041	1	15.9	Casas Domingo	68.3	66.6	0	42.9	36.5	57.1	62.2	0	63.4	68.3	70	N	0.0	N	1.7	Y	N	N	N	
R1041	2	19.2	Casas Domingo	68.4	66.5	0	43.6	37.5	57.2	62.6	0	63.8	68.4	70	N	0.0	N	1.9	Y	N	N	N	
R1042	1	15.9	Casas Domingo	65.6	69.8	0	0	0	0	30.7	0	30.7	69.8	70	N	4.2	Y	0.0	Y	N	N	N	
R1042	2	19.2	Casas Domingo	65.5	69.4	0	0	0	0	31.3	0	31.3	69.4	70	N	3.9	Y	0.0	Y	N	N	N	
R1043	1	14.1	Casas Domingo	65.1	69.3	0	36.2	0	51.3	0	0	51.5	69.3	70	N	4.2	Y	0.0	Y	N	N	N	
R1043	2	17.4	Casas Domingo	65	68.9	0	37.2	0	51.3	0	0	51.5	69.0	70	N	4.0	Y	0.1	Y	N	N	N	
R1043	3	20.7	Casas Domingo	65	68.5	0	37.7	0	51.4	0	0	51.5	68.6	70	N	3.6	Y	0.1	Y	N	N	N	
R1086	1	11.6	Valais	59.5	25.9	0	0	41.8	28.4	59.3	0	59.4	59.4	70	N	-0.1	N	33.5	Y	N	N	N	
R1086	2	15.6	Valais	63.3	27.6	0	0	46.2	31.2	63.2	0	63.3	63.3	70	N	0.0	N	36.7	Y	N	N	N	
R1086	3	19.6	Valais	68.7	28.9	0	0	53	35	69	0	69.1	69.1	70	N	0.4	N	40.2	Y	N	N	N	
R1087	1	11.6	Valais	56.9	46.5	0	0	38.3	26.8	55.9	0	55.9	56.4	70	N	-0.5	N	9.9	Y	N	N	N	
R1087	2	15.6	Valais	59.9	48.4	0	0	42.3	30	59.3	0	59.4	59.7	70	N	-0.2	N	11.3	Y	N	N	N	
R1087	3	19.6	Valais	64.7	51.2	0	0	48.6	35.8	64.8	0	65	65.1	70	N	0.4	N	13.9	Y	N	N	N	
R1088	1	11.6	Valais	56.2	42.6	0	0	37.5	22.9	55.4	0	55.5	55.7	70	N	-0.5	N	13.1	Y	N	N	N	
R1088	2	15.6	Valais	60	45.9	0	0	41.9	25	59.4	0	59.5	59.7	70	N	-0.3	N	13.8	Y	N	N	N	
R1088	3	19.6	Valais	66	50.4	0	0	49.6	28.2	65.9	0	66	66.1	70	N	0.1	N	15.7	Y	N	N	N	
R1089	1	11.6	Valais	57.4	40.2	0	28.1	37.3	52	56.2	0	57.3	57.7	70	N	0.3	Y	17.5	Y	N	N	N	
R1089	2	15.6	Valais	60.9	44.2	0	31.9	41.4	52.5	60.1	0	60.9	61.0	70	N	0.1	N	16.8	Y	N	N	N	
R1089	3	19.6	Valais	69.5	45.6	0	38	51	53.9	69.2	0	69.4	69.4	70	N	-0.1	N	23.8	Y	N	N	N	
R1090	1	11.6	Valais	64.5	61.2	0	34.4	39.7	61.6	56.3	0	62.7	65.0	70	N	0.5	N	3	Y	N	N	N	
R1090	2	15.6	Valais	67	62.2	0	38.1	44.5	61.9	60.8	0	64.5	66.5	70	N	-0.5	N	4.8	Y	N	N	N	
R1090	3	19.6	Valais	69.6	62.4	0	41.1	50.6	62.4	66.8	0	68.2	69.2	70	N	-0.4	N	6.8	Y	N	N	N	
R1102	1	15.6	Europa Garden	73.9	63.9	0	57.7	54.1	33.8	73	0	73.2	73.3	70	Y	-0.6	Y	15.8	Y	Y	Y	Y	
R1102	2	18.6	Europa Garden	76.1	63.4	0	61.9	57.4	48.9	75.6	0	75.1	75.1	70	Y	0	N	12.7	Y	Y	Y	Y	
R1102	3	21.6	Europa Garden	79.1	67.8	0	63.3	59.5	49.7	78.4	0	78.6	79.0	70	Y	-0.1	N	11.2	Y				



Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)			
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	New Roads in 2044 dB(A) <sup>(3)</sup>						C - A dB(A)	D ≥ 1dB(A)	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(3)</sup>	[C]	LD	EX	TR	[D]	[E]	[B]	[Y/N]	[D]	[E]	[Y/N]	[Y/N]			
R1185	1	7	Tsung Pak long	78.1	55.7	0	0	0	0	79.8	0	79.8	0	0	0	79.8	79.8	70	Y	1.7	Y	24.1	Y	Y	Y
R1185	2	10	Tsung Pak long	80.1	60.1	0	0	0	0	82.2	0	82.2	0	0	0	82.2	82.2	70	Y	2.1	Y	22.1	Y	Y	Y
R1185	3	13	Tsung Pak long	80.9	61	0	0	0	0	82.8	0	82.8	0	0	0	82.8	82.9	70	Y	2.0	Y	21.9	Y	Y	Y
R1186	1	7.2	Tsung Pak long	75.1	57.5	0	0	0	0	60.8	0	60.8	75.3	0	0	75.5	75.5	70	Y	0.4	N	18.0	Y	Y	Y
R1186	2	10.2	Tsung Pak long	75.8	58.4	0	0	0	0	60.8	0	60.8	76.5	0	0	76.6	76.7	70	Y	0.9	N	18.3	Y	Y	Y
R1186	3	13.2	Tsung Pak long	76.6	59.4	0	0	0	0	60.8	0	60.8	77.7	0	0	77.8	77.8	70	Y	1.2	Y	18.4	Y	Y	Y
R1201	1	19	Ma Tso Lung	36.3	0	0	0	0	31.2	68.3	0	68.3	0	0	68.3	68.3	70	N	32.0	Y	65.3	Y	N	N	
R1201	2	22	Ma Tso Lung	36.3	0	0	0	0	33	68.3	0	68.3	0	0	68.3	68.3	70	N	32.0	Y	65.3	Y	N	N	
R1201	3	25	Ma Tso Lung	36.3	0	0	0	0	35	68.1	0	68.1	0	0	68.1	68.1	70	N	31.8	Y	65.1	Y	N	N	
R1202	1	19	Ma Tso Lung	0	0	0	0	0	47.8	69.5	0	69.5	0	0	69.5	69.5	70	N	69.5	Y	66.5	Y	N	N	
R1202	2	22	Ma Tso Lung	0	0	0	0	0	49.5	69.5	0	69.5	0	0	69.5	69.5	70	N	69.5	Y	66.5	Y	N	N	
R1202	3	25	Ma Tso Lung	0	0	0	0	0	49.3	69.3	0	69.3	0	0	69.3	69.3	70	N	69.3	Y	66.3	Y	N	N	
R1241	1	16.2	Ma Tso Lung	41.7	0	44.1	0	44.4	48.9	0	0	50.2	51.1	0	50.2	51.1	70	N	9.4	Y	7.0	Y	N	N	
R1241	2	19.2	Ma Tso Lung	41.7	0	44.1	0	45.7	48.9	0	0	50.6	51.5	0	50.6	51.5	70	N	9.8	Y	7.4	Y	N	N	
R1241	3	22.2	Ma Tso Lung	41.7	0	44.1	0	47.2	49	0	0	51.2	52.0	0	51.2	52.0	70	N	10.3	Y	7.9	Y	N	N	
R1281	1	18.6	Golf Parkview	81.9	48.6	0	0	0	47.4	82.9	0	82.9	0	0	82.9	82.9	70	Y	1.0	Y	34.3	Y	N	Y	
R1281	2	21.6	Golf Parkview	81.9	50.2	0	0	0	48.4	82.9	0	82.9	0	0	82.9	82.9	70	Y	1.0	Y	32.7	Y	Y	Y	
R1281	3	25.6	Golf Parkview	81.8	51.7	0	0	0	49.7	82.8	0	82.8	0	0	82.8	82.8	70	Y	1.0	Y	31.1	Y	Y	Y	
R1281	4	29.6	Golf Parkview	81.7	53	0	0	0	51	82.6	0	82.6	0	0	82.6	82.6	70	Y	0.9	N	29.6	Y	Y	Y	
R1282	1	18.6	Golf Parkview	82.3	64.6	0	0	0	49.9	83.2	0	83.2	0	0	83.2	83.2	70	Y	0.9	N	18.6	Y	Y	Y	
R1282	2	21.6	Golf Parkview	82.2	64.4	0	0	0	49.9	83.1	0	83.1	0	0	83.1	83.1	70	Y	0.9	N	18.7	Y	Y	Y	
R1282	3	24.6	Golf Parkview	82.1	64.4	0	0	0	49.8	82.9	0	82.9	0	0	82.9	83.0	70	Y	0.9	N	18.6	Y	Y	Y	
R1282	4	27.6	Golf Parkview	82	64.1	0	0	0	49.8	82.7	0	82.7	0	0	82.7	82.7	70	Y	0.9	N	18.6	Y	Y	Y	
R1284	1	18.6	Golf Parkview	82.4	64.5	0	0	0	47.2	83.3	0	83.3	0	0	83.3	83.3	70	Y	1.1	Y	27.1	Y	Y	Y	
R1284	2	21.6	Golf Parkview	82.1	56.6	0	0	0	47.7	83	0	83	0	0	83	83.1	70	Y	1.0	Y	26.5	Y	Y	Y	
R1284	3	24.6	Golf Parkview	81.9	57	0	0	0	47.7	82.8	0	82.8	0	0	82.8	82.8	70	Y	0.9	N	25.8	Y	Y	Y	
R1284	4	27.6	Golf Parkview	81.7	57.2	0	0	0	47.6	82.6	0	82.6	0	0	82.6	82.6	70	Y	0.9	N	25.4	Y	Y	Y	
R1285	1	18.6	Golf Parkview	83.5	0	0	0	0	48.3	84.4	0	84.4	0	0	84.4	84.4	70	Y	0.9	N	81.4	Y	Y	Y	
R1285	2	21.6	Golf Parkview	83.2	0	0	0	0	49.9	84.1	0	84.1	0	0	84.1	84.1	70	Y	0.9	N	81.1	Y	Y	Y	
R1285	3	24.6	Golf Parkview	82.9	0	0	0	0	51.4	83.7	0	83.7	0	0	83.7	83.7	70	Y	0.8	N	80.7	Y	Y	Y	
R1285	4	27.6	Golf Parkview	82.4	0	0	0	0	53.2	83.3	0	83.3	0	0	83.3	83.3	70	Y	0.8	N	80.3	Y	Y	Y	
R1286	1	18.6	Golf Parkview	79.2	62	0	0	0	0	79.8	0	79.8	0	0	79.8	79.9	70	Y	0.7	N	17.9	Y	Y	Y	
R1286	2	21.6	Golf Parkview	79.1	62.2	0	0	0	0	79.8	0	79.8	0	0	79.8	79.8	70	Y	0.7	N	17.6	Y	Y	Y	
R1286	3	24.6	Golf Parkview	79	62.5	0	0	0	0	79.6	0	79.6	0	0	79.6	79.7	70	Y	0.7	N	17.2	Y	Y	Y	
R1286	4	27.6	Golf Parkview	78.9	62.8	0	0	0	0	79.5	0	79.5	0	0	79.5	79.6	70	Y	0.7	N	16.8	Y	Y	Y	
R1287	1	9.2	Fanling Highway A100	83.7	32.3	0	0	0	35.5	84.9	0	84.9	0	0	84.9	84.9	70	Y	1.2	Y	52.6	Y	Y	Y	
R1287	2	12.2	Fanling Highway A100	83.7	33.4	0	0	0	36.3	85.1	0	85.1	0	0	85.1	85.1	70	Y	1.4	Y	51.7	Y	Y	Y	
R1287	3	15.2	Fanling Highway A100	83.6	34.5	0	0	0	37	84.9	0	84.9	0	0	84.9	84.9	70	Y	1.3	Y	50.4	Y	Y	Y	
R1287	4	18.2	Fanling Highway A100	83.4	35.6	0	0	0	37.7	84.6	0	84.6	0	0	84.6	84.6	70	Y	1.2	Y	49.0	Y	Y	Y	
R1288	1	9.2	Fanling Highway A100	74.6	29.2	0	0	16.6	39.6	74.5	0	74.5	74.5	0	74.5	74.5	70	Y	-0.1	N	45.3	Y	Y	Y	
R1288	2	12.2	Fanling Highway A100	76.1	30	0	0	18	40.7	76.8	0	76.8	76.8	0	76.8	76.8	70	Y	0.7	N	46.8	Y	Y	Y	
R1288	3	15.2	Fanling Highway A100	78.1	31.1	0	0	19.8	41.7	78.9	0	78.9	78.9	0	78.9	78.9	70	Y	0.8	N	47.8	Y	Y	Y	
R1288	4	18.2	Fanling Highway A100	79.3	32.6	0	0	22.1	42.7	80	0	80	80.0	0	80	80.0	70	Y	0.7	N	47.4	Y	Y	Y	
R1289	1	10	Fanling Highway A100	79.7	17.7	0	0	0	38.6	80.1	0	80.1	80.1	0	80.1	80.1	70	Y	0.4	N	62.3	Y	Y	Y	
R1289	2	13	Fanling Highway A100	80.2	22.6	0	0	0	39.6	81	0	81	81.0	0	81	81.0	70	Y	0.6	Y	57.4	Y	Y	Y	
R1289	3	16	Fanling Highway A100	80.5	26	0	0	0	40.5	81.4	0	81.4	81.4	0	81.4	81.4	70	Y	0.9	N	51.4	Y	Y	Y	
R1289	4	19	Fanling Highway A100	80.7	31	0	0	0	41.3	81.7	0	81.7	81.7	0	81.7	81.7	70	Y	1.0	Y	50.7	Y	Y	Y	
R1290	1	9.2	Fanling Highway A100	80.4	0	0	0	0	35.4	80.6	0	80.6	80.6	0	80.6	80.6	70	Y	0.2	N	77.6	Y	Y	Y	
R1290	2	12.2	Fanling Highway A100	80.6	0	0	0	0	36.2	81.3	0	81.3	81.3	0	81.3	81.3	70	Y	0.7	N	78.3	Y	Y	Y	
R1290	3	15.2	Fanling Highway A100	80.7	0	0	0	0	36.9	81.7	0	81.7	81.7	0	81.7	81.7	70	Y	1.0	Y	78.7	Y	Y	Y	
R1290	4	18.2	Fanling Highway A100	80.7	0	0	0	0	37.5	81.8	0	81.8	81.8	0	81.8	81.8	70	Y	1.1	Y	78.8	Y	Y	Y	
R1301	1	9	Pak Shek Au	71	57.9	0	0	54.6	57.2	50.3	68.2	68.8	69.1	0	68.8	69.1	70	N	-1.9	N	11.2	Y	N	N	
R1301	2	12	Pak Shek Au	71.1	58.2	0	0	54.9	57.6	51.7	68.9	69.5	69.8	0	69.5	69.8	70	N	-1.3	N	11.6	Y	N	N	
R1501	1	11.8	Ma Tso Lung	0	0	63.3	0	63.8	22	0	0	63.8	66.5	0	63.8	66.5	70	N	66.5	Y	3.2	Y	N	N	
R1501	2	14.8	Ma Tso Lung	0	0	63.2	0	63.7	22.4	0	0	63.7	66.5	0	63.7	66.5	70	N	66.5	Y	3.3	Y	N	N	
R1502	1	11.8	Ma Tso Lung	0	0	63.8	0	61.7	0	0	0	61.7	65.9	0	61.7	65.9	70	N	65.9	Y	2.1	Y	N	N	
R1502	2	14.8	Ma Tso Lung	0	0	63.8	0	61.6	0	0	0	61.6	65.8	0	61.6	65.8	70	N	65.8	Y	2.0	Y	N	N	
R1504	1	10.4	Ma Tso Lung	48.1	0	0	0	74.1	53.2	0	0	74.1	74.1	0	74.1	74.1	70	Y	1.1	Y	71.1	Y	Y	Y	
R1506	1	13.9	Ma Tso Lung	62.1	0	0	23.6	65.9	49.8	0	0	66	66.0	0	66	66.0	70	N	3.9	Y	6.0	Y	N	N	
R1521	1	5.4	OZP Planned Dev	68	67.9	58.8	0	0	0	0	0	68.4	68.4	0	68.4	68.4	70	N	0.4	N	0.0	N	N	N	
R1521	2	8.4	OZP Planned Dev	68	67.9	58.8	0	0	0	0	0	68.4	68.4	0	68.4	68.4	70	N	0.4	N	0.0	N	N	N	
R1521	3	11.4	OZP Planned Dev	68	68	58.9	0	0	0	0	0	68.5	68.5	0	68.5	68.5	70	N	0.5	N	0.0	N	N	N	
R1521	4	14.4	OZP Planned Dev	68.1	68	58.9	0	0	0	0	0														

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria								
						PD	DD	LD	EX	TR								New Roads in 2044 dB(A) <sup>(2)</sup> [B]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
R1544	2	13.8	OZP Planned Dev	82.5	48.4	0	60.6	65.4	55.2	80.6	0	80.8	80.8	70	Y	-1.7	N	32.4	Y	Y	Y	Y	
R1544	3	17.8	OZP Planned Dev	82.6	49.4	0	64.8	66.1	55.8	81.1	0	81.4	81.4	70	Y	-1.2	N	32.0	Y	Y	Y	Y	
R1545	1	9.8	OZP Planned Dev	79.4	59.4	0	30.6	60.5	55.1	76	0	76.2	76.3	70	Y	-3.1	N	18.9	Y	Y	Y	Y	
R1545	2	13.8	OZP Planned Dev	79.4	57.5	0	31.5	62	56.1	77.4	0	77.5	77.6	70	Y	-1.8	N	20.1	Y	Y	Y	Y	
R1545	3	17.8	OZP Planned Dev	79.3	57.6	0	32.3	62.5	56.7	77.7	0	77.9	77.9	70	Y	-1.4	N	20.3	Y	Y	Y	Y	
R1546	1	9.8	OZP Planned Dev	78.6	58.3	0	58.5	60.1	0	75.4	0	75.6	75.7	70	Y	-2.9	N	17.4	Y	Y	Y	Y	
R1546	2	13.8	OZP Planned Dev	78.9	58.5	0	61.1	62.3	0	77.1	0	77.4	77.4	70	Y	-1.5	N	18.9	Y	Y	Y	Y	
R1546	3	17.8	OZP Planned Dev	79.3	58.6	0	65.5	63.3	0	77.9	0	78.3	78.3	70	Y	-1.0	N	19.7	Y	Y	Y	Y	
R1681	1	11.7	Luen Shen Area	78	69.7	47.8	0	52.6	0	77.2	0	77.2	78.0	70	Y	0.0	N	8.3	Y	Y	Y	Y	
R1681	2	15.7	Luen Shen Area	78	69.7	48	0	53.6	0	77.5	0	77.5	78.2	70	Y	0.2	N	8.5	Y	Y	Y	Y	
R1682	1	13.3	Luen Shen Area	75.7	70	56.5	47.1	47.1	50.3	74.5	0	74.5	75.9	70	Y	0.2	N	5.7	Y	Y	Y	Y	
R1682	2	17.3	Luen Shen Area	75.8	70.2	56.6	47.2	47.5	50.3	74.6	0	74.7	76.0	70	Y	0.2	N	5.6	Y	Y	Y	Y	
R2001	1	10.7	Yin Kong	33.9	62.1	0	51.1	0	39.7	0	0	51.4	62.5	70	N	28.6	Y	0.4	N	N	N	N	
R2001	2	13.7	Yin Kong	33.8	62.1	0	51.6	0	39.7	0	0	51.9	62.5	70	N	28.7	Y	0.4	N	N	N	N	
R2001	3	16.7	Yin Kong	33.8	62	0	52.3	0	39.7	0	0	52.5	62.4	70	N	28.6	Y	0.4	N	N	N	N	
R2021	1	10.7	Enchi Lodge	81.6	56.3	0	50.8	74.6	0	81.1	0	82	82.0	70	Y	0.4	N	25.7	Y	Y	Y	Y	
R2021	2	13.7	Enchi Lodge	82.6	57.3	0	53	74.4	0	82.6	0	83.2	83.2	70	Y	0.6	N	25.5	Y	Y	Y	Y	
R2022	1	10.7	Yin Kong Tsuen (S)	75.3	64.8	0	61.3	68.8	37.8	75.8	0	76.7	77.0	70	Y	1.7	Y	12.2	Y	Y	Y	Y	
R2022	2	13.7	Yin Kong Tsuen (S)	76.8	64.7	0	62.8	68.7	37.8	77.1	0	77.9	78.1	70	Y	1.3	Y	13.4	Y	Y	Y	Y	
R2022	3	16.7	Yin Kong Tsuen (S)	77.5	64.7	0	65	68.7	37.8	77.8	0	78.5	78.6	70	Y	1.1	Y	13.9	Y	Y	Y	Y	
R2023	1	10.7	Yin Kong Tsuen (S)	79	60.9	0	55.8	72.1	39	79.3	0	80	80.1	70	Y	1.1	Y	19.2	Y	Y	Y	Y	
R2023	2	13.7	Yin Kong Tsuen (S)	80.6	61.4	0	57.8	72.1	39	80.6	0	81.2	81.2	70	Y	0.6	N	19.8	Y	Y	Y	Y	
R2023	3	16.7	Yin Kong Tsuen (S)	81.1	61.5	0	60.4	72	39	81.2	0	81.8	81.8	70	Y	0.7	N	20.3	Y	Y	Y	Y	
R2024	1	9.4	Yin Kong Tsuen (S)	74.1	59.3	0	0	65.8	43.1	73.3	0	74.1	74.1	70	Y	0.0	N	18.4	Y	Y	Y	Y	
R2024	2	12.4	Yin Kong Tsuen (S)	75	58.8	0	0	65.8	43	74.4	0	75	75.0	70	Y	0.0	N	19.2	Y	Y	Y	Y	
R2024	3	15.4	Yin Kong Tsuen (S)	75.4	59.9	0	0	65.8	43	75.2	0	75.7	75.7	70	Y	0.3	N	19.8	Y	Y	Y	Y	
R2041	1	5.5	Ho Sheung Heung	34.7	66.5	0	0	0	0	0	0	66.5	70	N	31.8	Y	0.0	N	N	N	N		
R2041	2	8.5	Ho Sheung Heung	34.7	66.5	0	0	0	0	0	0	66.5	70	N	31.8	Y	0.0	N	N	N	N	N	
R2041	3	11.5	Ho Sheung Heung	34.7	66.5	0	0	0	0	0	0	66.5	70	N	31.8	Y	0.0	N	N	N	N	N	
R2042	1	5.5	Ho Sheung Heung	45	0	0	31	0	0	51.5	21.3	0	51.6	51.6	70	N	6.6	Y	0.0	N	N	N	N
R2042	2	8.5	Ho Sheung Heung	45.8	0	0	33.4	0	0	51.5	24.3	0	51.6	5.8	70	N	48.6	Y	0.0	N	N	N	N
R2042	3	11.5	Ho Sheung Heung	46.5	0	0	36.2	0	0	51.5	28	0	51.7	5.7	70	N	48.7	Y	0.0	N	N	N	N
R2043	1	5.5	Ho Sheung Heung	61.8	64.5	0	56.8	24.5	45.5	0	0	57.1	65.2	70	N	3.4	Y	0.7	N	N	N	N	
R2043	2	8.5	Ho Sheung Heung	61.9	71.7	0	56.9	24.6	49.1	0	0	57.5	71.9	70	Y	10.0	Y	0.2	N	N	N	Y	
R2043	3	11.5	Ho Sheung Heung	61.5	71.6	0	57.1	24.7	49.9	0	0	57.8	71.8	70	Y	10.3	Y	0.2	N	N	N	Y	
R2046	1	5.5	Ho Sheung Heung	58.5	62.8	0	0	24.8	32.1	0	0	32.8	62.8	70	N	4.3	Y	0.0	N	N	N	N	
R2046	2	8.5	Ho Sheung Heung	58.9	64.1	0	0	26.5	33.4	0	0	34.2	64.1	70	N	5.2	Y	0.0	N	N	N	N	
R2046	3	11.5	Ho Sheung Heung	59.2	65.1	0	0	28.8	34.6	0	0	35.6	65.7	70	N	6.5	Y	0.0	N	N	N	N	
R2047	1	5.5	Ho Sheung Heung	49.8	72.8	0	0	37.9	50.4	0	0	50.7	72.8	70	Y	23.0	Y	0.0	N	N	N	Y	
R2047	2	8.5	Ho Sheung Heung	49.8	73.2	0	0	38.1	50.5	0	0	50.7	73.3	70	Y	23.5	Y	0.1	N	N	N	Y	
R2047	3	11.5	Ho Sheung Heung	49.8	73.5	0	0	38.4	50.5	0	0	50.7	73.6	70	Y	23.8	Y	0.1	N	N	N	Y	
R2102	1	10.7	C1-4	73.8	57	0	58.4	64.8	18.2	73.4	0	74.1	74.1	70	Y	0.3	N	17.1	Y	Y	Y	Y	
R2102	2	13.7	C1-4	74.4	57.2	0	59.1	64.8	18.4	74.1	0	74.7	74.8	70	Y	0.4	N	17.6	Y	Y	Y	Y	
R2102	3	16.7	C1-4	74.9	57.3	0	60	64.8	18.6	74.6	0	75.2	75.3	70	Y	0.4	N	18.0	Y	Y	Y	Y	
R2103	1	10.7	C1-4	76	57.6	0	51.9	66.6	44.3	75.3	0	75.8	75.9	70	Y	0.1	N	18.1	Y	Y	Y	Y	
R2103	2	13.7	C1-4	76.5	58	0	52.4	66.6	44.3	76	0	76.5	76.6	70	Y	0.1	N	18.6	Y	Y	Y	Y	
R2103	3	16.7	C1-4	76.9	58.2	0	53.1	66.6	44.3	76.6	0	77.1	77.1	70	Y	0.2	N	18.9	Y	Y	Y	Y	
R2141	1	21	Fung Kong Garden	51	0	0	0	40.4	28.8	0	0	40.7	40.7	70	N	-10.3	N	37.7	Y	N	N	N	
R2141	2	24	Fung Kong Garden	51	0	0	0	40.5	28.9	0	0	40.7	40.7	70	N	-10.3	N	37.7	Y	N	N	N	
R2141	3	27	Fung Kong Garden	51	0	0	0	40.5	29	0	0	40.8	40.8	70	N	-10.2	N	37.8	Y	N	N	N	
R2521	1	32.5	A1-4	-	22.8	0	50.5	58.8	67.8	50.6	0	68.5	68.5	70	N	-	-	50.7	Y	N	N	N	
R2521	2	35.2	A1-4	-	23.5	0	50.6	58.6	69.3	51.5	0	69.8	69.8	70	N	-	-	46.3	Y	N	N	N	
R2521	3	37.9	A1-4	-	24.1	0	50.8	58.3	69.1	52.3	0	69.6	69.6	70	N	-	-	45.5	Y	N	N	N	
R2521	4	40.6	A1-4	-	24.7	0	50.9	58	68.8	53.2	0	69.4	69.4	70	N	-	-	44.7	Y	N	N	N	
R2521	5	43.3	A1-4	-	25.3	0	51	57.8	68.5	54.1	0	69.1	69.1	70	N	-	-	43.8	Y	N	N	N	
R2521	6	46	A1-4	-	26.1	0	51.1	57.5	68.2	55.1	0	68.9	68.9	70	N	-	-	42.8	Y	N	N	N	
R2521	7	48.7	A1-4	-	26.7	0	51.2	57.3	67.9	56.3	0	68.6	68.6	70	N	-	-	41.9	Y	N	N	N	
R2521	8	51.4	A1-4	-	27.5	0	51.3	57.1	67.6	58	0	68.5	68.5	70	N	-	-	41.0	Y	N	N	N	
R2521	9	54.1	A1-4	-	28.2	0	51.5	56.9	67.4	59.9	0	68.5	68.5	70	N	-	-	40.3	Y	N	N	N	
R2521	10	56.8	A1-4	-	29	0	51.7	56.7	67.1	61.7	0	68.6	68.6	70	N	-	-	39.6	Y	N	N	N	
R2521	11	59.5	A1-4	-	29.7	0	52	56.6	66.9	63	0	68.8	68.8	70	N	-	-	39.1	Y	N	N	N	
R2521	12	62.2	A1-4	-	30.5	0	52.2	56.5	66.6	64	0	68.9	68.9	70	N	-	-	38.4	Y	N	N	N	
R2521	13	64.9	A1-4	-	31.4	0	52.3	56.4	66.4	64.8	0	69	69.0	70	N	-	-	37.6	Y	N	N	N	
R2521	14	67.6	A1-4	-	32.2	0	52.4	56.3	66.2	65.6	0	69.3	69.3	70	N	-	-	37	Y	N	N	N	
R2521	15	70.3	A1-4	-	33.1	0	52.5	56.2	66	66.4	0	69.5	69.5	70	N	-	-	36.4	Y	N	N	N	
R2521	16	73	A1-4	-	34	0	52.7	56.2	65.9	67.2	0	69.9	69.9	70	N	-	-	35.9	Y	N	N	N	
R2521	17	75.7	A1-4	-	34.9	0	52.8	56.1	65.7	68.1	0	70.3	70.3	70	N	-	-	35.4	Y	N	N	N	
R2521	18	78.4	A1-4	-	35.9	0	53	56	65.5	68.8	0	70.7	70.7	70	Y	-	-	34.8	Y	Y	Y	Y	
R2521	19	81.1	A1-4	-	36.9																		

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation		Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)			New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(1)(B)</sup>											
R2522	14	71.5	A1-4	-	34.1	0	51.2	57.8	61.2	63.6	0	66.4	66.4	70	N	-	-	32.3	Y	N	N
R2522	15	74.5	A1-4	-	36	0	51.2	57.7	61.1	64.1	0	66.6	66.6	70	N	-	-	30.6	Y	N	N
R2522	16	77.5	A1-4	-	38	0	51.3	57.6	61	64.7	0	66.9	66.9	70	N	-	-	28.9	Y	N	N
R2522	17	80.5	A1-4	-	39.4	0	51.3	57.5	60.9	65.2	0	67.2	67.2	70	N	-	-	27.8	Y	N	N
R2522	18	83.5	A1-4	-	40	0	51.4	57.4	60.7	65.8	0	67.5	67.5	70	N	-	-	27.5	Y	N	N
R2522	19	86.5	A1-4	-	40.5	0	51.5	57.3	60.6	66.2	0	67.8	67.8	70	N	-	-	27.3	Y	N	N
R2522	20	89.5	A1-4	-	41	0	51.6	57.2	60.4	66.6	0	68	68.0	70	N	-	-	27.0	Y	N	N
R2522	21	92.5	A1-4	-	41.4	0	51.7	57.2	60.3	66.8	0	68.2	68.2	70	N	-	-	26.8	Y	N	N
R2522	22	95.5	A1-4	-	42	0	51.9	57.2	60.1	67.1	0	68.3	68.4	70	N	-	-	26.4	Y	N	N
R2522	23	98.5	A1-4	-	42.9	0	52.1	57.2	60	67.3	0	68.5	68.5	70	N	-	-	25.6	Y	N	N
R2522	24	101.5	A1-4	-	43.8	0	52.4	57.2	59.9	67.5	0	68.6	68.6	70	N	-	-	24.8	Y	N	N
R2522	25	104.5	A1-4	-	45.1	0	52.6	57.2	59.8	67.7	0	68.8	68.8	70	N	-	-	23.7	Y	N	N
R2522	26	107.5	A1-4	-	45.9	0	52.9	57.1	59.6	67.8	0	68.9	68.9	70	N	-	-	23.0	Y	N	N
R2522	27	110.5	A1-4	-	46.9	0	53.2	57	59.5	68	0	69	69.0	70	N	-	-	22.1	Y	N	N
R2522	28	113.5	A1-4	-	47.7	0	53.3	57	59.4	68.1	0	69.1	69.1	70	N	-	-	21.4	Y	N	N
R2522	29	116.5	A1-4	-	48.3	0	53.4	56.9	59.3	68.3	0	69.2	69.2	70	N	-	-	20.9	Y	N	N
R2522	30	119.5	A1-4	-	48.8	0	53.4	56.9	59.2	68.4	0	69.3	69.3	70	N	-	-	20.5	Y	N	N
R2541	1	21	A1-5	-	20.1	0	27.2	55	44.2	63.4	0	67.1	67.1	70	N	-	-	47.0	Y	N	N
R2541	2	24	A1-5	-	20.9	0	30.6	55	64.1	63.7	0	67.2	67.2	70	N	-	-	46.3	Y	N	N
R2541	3	27	A1-5	-	21.8	0	34.4	55	64	63.9	0	67.3	67.3	70	N	-	-	45.5	Y	N	N
R2541	4	30	A1-5	-	22.8	0	37.6	55.6	64.2	64.2	0	67.5	67.5	70	N	-	-	44.7	Y	N	N
R2541	5	33	A1-5	-	23.7	0	40.5	55.7	64.5	64.4	0	67.7	67.7	70	N	-	-	44.0	Y	N	N
R2541	6	36	A1-5	-	24.8	0	41.7	55.7	64.3	64.7	0	67.8	67.8	70	N	-	-	43.0	Y	N	N
R2541	7	39	A1-5	-	25.7	0	44.1	55.8	64.1	65	0	67.9	67.9	70	N	-	-	42.1	Y	N	N
R2541	8	42	A1-5	-	26.8	0	42.3	55.8	63.9	65.4	0	68	68.0	70	N	-	-	41.2	Y	N	N
R2541	9	45	A1-5	-	27.8	0	42.4	55.7	63.7	65.7	0	68.1	68.1	70	N	-	-	40.3	Y	N	N
R2541	10	48	A1-5	-	28.8	0	42.5	55.7	63.5	65.9	0	68.1	68.1	70	N	-	-	39.3	Y	N	N
R2541	11	51	A1-5	-	29.8	0	42.6	55.6	63.3	66.1	0	68.2	68.2	70	N	-	-	38.4	Y	N	N
R2541	12	54	A1-5	-	31	0	42.7	55.5	63.1	66.3	0	68.2	68.2	70	N	-	-	37.2	Y	N	N
R2541	13	57	A1-5	-	32.3	0	42.8	55.5	62.8	66.4	0	68.3	68.3	70	N	-	-	36.0	Y	N	N
R2541	14	60	A1-5	-	33	0	42.9	55.4	62.6	66.6	0	68.3	68.3	70	N	-	-	34.6	Y	N	N
R2541	15	63	A1-5	-	33.3	0	43	55.3	62.4	66.7	0	68.3	68.3	70	N	-	-	33.0	Y	N	N
R2541	16	66	A1-5	-	37.3	0	43.1	55.2	62.3	66.9	0	68.4	68.4	70	N	-	-	31.1	Y	N	N
R2541	17	69	A1-5	-	39.3	0	43.2	55.2	62.1	67.1	0	68.5	68.5	70	N	-	-	29.2	Y	N	N
R2541	18	72	A1-5	-	41.6	0	43.4	55.1	61.9	67.4	0	68.7	68.7	70	N	-	-	27.1	Y	N	N
R2541	19	75	A1-5	-	42.9	0	43.7	55	61.7	67.7	0	68.9	68.9	70	N	-	-	26.0	Y	N	N
R2541	20	78	A1-5	-	43.8	0	44	55	61.5	68.1	0	69.2	69.2	70	N	-	-	25.4	Y	N	N
R2541	21	81	A1-5	-	44.7	0	44.4	55	61.4	68.5	0	69.5	69.5	70	N	-	-	24.8	Y	N	N
R2541	22	84	A1-5	-	45.3	0	45.2	55	61.2	68.9	0	69.8	69.8	70	N	-	-	24.5	Y	N	N
R2541	23	87	A1-5	-	45.9	0	45.9	55.1	61	69.4	0	70.1	70.1	70	N	-	-	24.2	Y	N	N
R2541	24	90	A1-5	-	46.1	0	46.8	55.1	60.9	69.7	0	70.4	70.4	70	N	-	-	24.3	Y	N	N
R2541	25	93	A1-5	-	46.2	0	47.7	55.1	60.7	70.1	0	70.7	70.7	70	Y	-	-	24.5	Y	Y	Y
R2541	26	96	A1-5	-	46.4	0	48.4	55.2	60.6	70.4	0	71.1	71.0	70	Y	-	-	24.6	Y	Y	Y
R2541	27	99	A1-5	-	46.6	0	48.9	55.2	60.5	70.7	0	71.2	71.2	70	Y	-	-	24.6	Y	Y	Y
R2541	28	102	A1-5	-	46.8	0	49.3	55.3	60.3	70.9	0	71.4	71.4	70	Y	-	-	24.6	Y	Y	Y
R2541	29	105	A1-5	-	47.1	0	49.5	55.4	60.2	71	0	71.5	71.5	70	Y	-	-	24.4	Y	Y	Y
R2541	30	108	A1-5	-	47.4	0	49.7	55.4	60.1	71.2	0	71.7	71.7	70	Y	-	-	24.3	Y	Y	Y
R2561	1	26	A1-6	-	14.4	0	19.1	65	62.6	62	0	68.2	68.2	70	N	-	-	53.6	Y	N	N
R2561	2	29	A1-6	-	15.6	0	19.7	64.8	62.4	62.2	0	68.1	68.1	70	N	-	-	52.4	Y	N	N
R2561	3	32	A1-6	-	16.9	0	20.3	64.5	62.3	62.5	0	68	68.0	70	N	-	-	51.0	Y	N	N
R2561	4	35	A1-6	-	18.4	0	20.9	64.3	62.1	62.7	0	67.9	67.9	70	N	-	-	49.4	Y	N	N
R2561	5	38	A1-6	-	20.1	0	21.6	64	61.9	62.9	0	67.8	67.8	70	N	-	-	47.7	Y	N	N
R2561	6	41	A1-6	-	21.8	0	22.3	63.8	61.7	63.1	0	67.7	67.7	70	N	-	-	45.9	Y	N	N
R2561	7	44	A1-6	-	23.2	0	23	63.6	61.5	63.3	0	67.6	67.6	70	N	-	-	44.4	Y	N	N
R2561	8	47	A1-6	-	24.8	0	23.7	63.3	61.3	63.7	0	67.7	67.7	70	N	-	-	42.9	Y	N	N
R2561	9	50	A1-6	-	26.4	0	24.5	63.1	61.1	64	0	67.7	67.7	70	N	-	-	41.3	Y	N	N
R2561	10	53	A1-6	-	28.3	0	25.2	62.9	60.9	64.4	0	67.7	67.7	70	N	-	-	39.4	Y	N	N
R2561	11	56	A1-6	-	30.5	0	26	62.7	60.7	64.8	0	67.8	67.8	70	N	-	-	37.3	Y	N	N
R2561	12	59	A1-6	-	32.8	0	26.8	62.5	60.5	65.2	0	67.9	67.9	70	N	-	-	35.2	Y	N	N
R2561	13	62	A1-6	-	35.7	0	27.6	62.3	60.3	65.8	0	68.2	68.2	70	N	-	-	32.5	Y	N	N
R2561	14	65	A1-6	-	39.5	0	28.6	62.1	60.2	66.2	0	68.4	68.4	70	N	-	-	28.9	Y	N	N
R2561	15	68	A1-6	-	42.2	0	29.6	62	60	66.8	0	68.7	68.7	70	N	-	-	26.5	Y	N	N
R2561	16	71	A1-6	-	43.5	0	30.4	61.9	59.8	67.4	0	69	69.0	70	N	-	-	25.5	Y	N	N
R2561	17	74	A1-6	-	43.8	0	31.4	61.8	59.6	67.9	0	69.4	69.4	70	N	-	-	25.6	Y	N	N
R2561	18	77	A1-6	-	43.9	0	32.3	61.7	59.5	68.4	0	69.7	69.7	70	N	-	-	25.7	Y	N	N
R2561	19	80	A1-6	-	44	0	33.3	61.6	59.3	68.7	0	69.9	69.9	70	N	-	-	25.9	Y	N	N
R2561	20	83	A1-6	-	43.9	0	34.2	61.4	59.2	69.1	0	70.1	70.2	70	N	-	-	26.3	Y	N	N
R2561	21	86	A1-6	-	43.9	0	35.2	61.3	59	69.5	0	70.4	70.4	70	N	-	-	26.5	Y	N	N
R2561	22	89	A1-6	-	43.9	0	36.7	61.2	58.9	69.9	0	70.8	70.8	70	Y	-	-	26.9	Y	Y	Y
R2561	23	92	A1-6	-	43.9	0	37.1	61.1	58.7	70.3	0	71	71.0	70	Y	-	-	27.1	Y	Y	Y
R2561	24	95	A1-6	-	43.9	0	37.7	61.1	58.6	70.6	0	71.3	71.3	70	Y	-	-	27.4	Y	Y	Y
R2561	25	98	A1-6	-	43.8	0	38.7	61	58.5	71	0	71.6	71.6	70	Y	-	-	27.8	Y	Y	Y
R2561	26	101	A1-6	-	43.8	0	39.4	60.9	58.3	71.3	0	71.8	71.8	70	Y	-	-	29			

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)	
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>												Overall Noise Level in 2044 dB(A) [C]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)		New Road > Criteria B > Criteria
					Existing Road in 2044 dB(A) <sup>(1)</sup>	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(1)</sup> [B]											
R2601	17	54.7	A1-9	-	37.8	0	72.3	61.9	50.6	0	0	72.7	72.7	70	Y	-	-	34.9	Y	Y	Y	Y	
R2601	18	57.4	A1-9	-	38.3	0	72.2	61.8	50.5	0	0	72.6	72.6	70	Y	-	-	34.3	Y	Y	Y	Y	
R2601	19	60.1	A1-9	-	38.4	0	72.1	61.7	50.4	0	0	72.5	72.5	70	Y	-	-	34.1	Y	Y	Y	Y	
R2601	20	62.8	A1-9	-	38.7	0	72	61.6	50.4	0	0	72.4	72.4	70	Y	-	-	33.8	Y	Y	Y	Y	
R2602	1	11.5	A1-9	-	33.6	0	70.7	70.8	53.6	0	0	73.8	73.8	70	Y	-	-	40.2	Y	Y	Y	Y	
R2602	2	14.2	A1-9	-	33.6	0	70.7	70.7	53.5	0	0	73.7	73.8	70	Y	-	-	40.2	Y	Y	Y	Y	
R2602	3	16.9	A1-9	-	33.7	0	70.6	70.6	53.5	0	0	73.7	73.7	70	Y	-	-	40.0	Y	Y	Y	Y	
R2602	4	19.6	A1-9	-	33.7	0	70.6	70.5	53.5	0	0	73.6	73.6	70	Y	-	-	39.9	Y	Y	Y	Y	
R2602	5	22.3	A1-9	-	33.7	0	70.5	70.4	53.5	0	0	73.5	73.5	70	Y	-	-	39.8	Y	Y	Y	Y	
R2602	6	25	A1-9	-	33.7	0	70.4	70.3	53.5	0	0	73.4	73.4	70	Y	-	-	39.7	Y	Y	Y	Y	
R2602	7	27.7	A1-9	-	33.7	0	70.3	70.1	53.4	0	0	73.3	73.3	70	Y	-	-	39.6	Y	Y	Y	Y	
R2602	8	30.4	A1-9	-	33.8	0	70.2	70	53.4	0	0	73.2	73.2	70	Y	-	-	39.4	Y	Y	Y	Y	
R2602	9	33.1	A1-9	-	33.8	0	70.1	69.9	53.4	0	0	73.1	73.1	70	Y	-	-	39.3	Y	Y	Y	Y	
R2602	10	35.8	A1-9	-	33.9	0	70	69.7	53.4	0	0	72.9	72.9	70	Y	-	-	39.0	Y	Y	Y	Y	
R2602	11	38.5	A1-9	-	34	0	69.9	69.5	53.4	0	0	72.8	72.8	70	Y	-	-	38.8	Y	Y	Y	Y	
R2602	12	41.2	A1-9	-	34.1	0	69.8	69.3	53.5	0	0	72.7	72.7	70	Y	-	-	38.6	Y	Y	Y	Y	
R2602	13	43.9	A1-9	-	34.3	0	69.7	69.2	53.5	0	0	72.5	72.5	70	Y	-	-	38.2	Y	Y	Y	Y	
R2602	14	46.6	A1-9	-	34.5	0	69.6	69	53.7	0	0	72.4	72.4	70	Y	-	-	37.9	Y	Y	Y	Y	
R2602	15	49.3	A1-9	-	35	0	69.5	68.9	53.9	0	0	72.3	72.3	70	Y	-	-	37.3	Y	Y	Y	Y	
R2602	16	52	A1-9	-	35.7	0	69.4	68.7	54.2	0	0	72.2	72.2	70	Y	-	-	36.5	Y	Y	Y	Y	
R2602	17	54.7	A1-9	-	37.2	0	69.3	68.5	54.4	0	0	72	72.0	70	Y	-	-	34.8	Y	Y	Y	Y	
R2602	18	57.4	A1-9	-	39.4	0	69.2	68.4	54.4	0	0	71.9	71.9	70	Y	-	-	32.5	Y	Y	Y	Y	
R2602	19	60.1	A1-9	-	41	0	69.2	68.2	54.6	0	0	71.8	71.8	70	Y	-	-	30.8	Y	Y	Y	Y	
R2602	20	62.8	A1-9	-	43.9	0	69.1	68.1	54.7	0	0	71.7	71.7	70	Y	-	-	29.1	Y	Y	Y	Y	
R2603	1	11.5	A1-9	-	14	0	67.1	70.8	54.7	0	0	72.4	72.4	70	Y	-	-	58.2	Y	Y	Y	Y	
R2603	2	14.2	A1-9	-	14.7	0	67.1	70.8	54.7	0	0	72.4	72.4	70	Y	-	-	57.6	Y	Y	Y	Y	
R2603	3	16.9	A1-9	-	15.5	0	67	70.7	54.7	0	0	72.3	72.3	70	Y	-	-	56.7	Y	Y	Y	Y	
R2603	4	19.6	A1-9	-	16.4	0	67	70.6	54.7	0	0	72.3	72.3	70	Y	-	-	55.8	Y	Y	Y	Y	
R2603	5	22.3	A1-9	-	17.4	0	67	70.5	54.7	0	0	72.2	72.2	70	Y	-	-	54.7	Y	Y	Y	Y	
R2603	6	25	A1-9	-	18.5	0	67	70.4	54.6	0	0	72.1	72.1	70	Y	-	-	53.5	Y	Y	Y	Y	
R2603	7	27.7	A1-9	-	19.7	0	67	70.3	54.7	0	0	72	72	70	Y	-	-	52.3	Y	Y	Y	Y	
R2603	8	30.4	A1-9	-	20.9	0	66.9	70.1	54.6	0	0	71.9	71.9	70	Y	-	-	51.0	Y	Y	Y	Y	
R2603	9	33.1	A1-9	-	22.2	0	66.8	70	54.6	0	0	71.8	71.8	70	Y	-	-	49.6	Y	Y	Y	Y	
R2603	10	35.8	A1-9	-	23.7	0	66.8	69.9	54.6	0	0	71.7	71.7	70	Y	-	-	48.0	Y	Y	Y	Y	
R2603	11	38.5	A1-9	-	25.1	0	66.8	69.7	54.6	0	0	71.6	71.6	70	Y	-	-	46.5	Y	Y	Y	Y	
R2603	12	41.2	A1-9	-	26.6	0	66.7	69.6	54.6	0	0	71.5	71.5	70	Y	-	-	44.9	Y	Y	Y	Y	
R2603	13	43.9	A1-9	-	28.2	0	66.7	69.4	54.6	0	0	71.4	71.4	70	Y	-	-	43.2	Y	Y	Y	Y	
R2603	14	46.6	A1-9	-	30	0	66.6	69.3	54.7	0	0	71.2	71.2	70	Y	-	-	41.2	Y	Y	Y	Y	
R2603	15	49.3	A1-9	-	32.2	0	66.6	69.1	54.7	0	0	71.1	71.1	70	Y	-	-	38.9	Y	Y	Y	Y	
R2603	16	52	A1-9	-	35.1	0	66.5	69	54.9	0	0	71	71.0	70	Y	-	-	35.9	Y	Y	Y	Y	
R2603	17	54.7	A1-9	-	38.5	0	66.5	68.8	55	0	0	70.9	70.9	70	Y	-	-	32.4	Y	Y	Y	Y	
R2603	18	57.4	A1-9	-	41.2	0	66.4	68.7	55.2	0	0	70.8	70.8	70	Y	-	-	29.6	Y	Y	Y	Y	
R2603	19	60.1	A1-9	-	42.5	0	66.4	68.5	55.3	0	0	70.7	70.7	70	Y	-	-	28.2	Y	Y	Y	Y	
R2603	20	62.8	A1-9	-	43.1	0	66.4	68.4	55.7	0	0	70.6	70.7	70	Y	-	-	27.6	Y	Y	Y	Y	
R2604	1	11.5	A1-9	-	22.7	0	59.6	72.7	64.9	56.6	0	72.6	72.6	70	Y	-	-	53.6	Y	Y	Y	Y	
R2604	2	14.2	A1-9	-	22.8	0	59.6	72.6	64.9	56.9	0	73.6	73.6	70	Y	-	-	50.8	Y	Y	Y	Y	
R2604	3	16.9	A1-9	-	23.8	0	59.6	72.5	64.8	57.2	0	73.4	73.4	70	Y	-	-	49.6	Y	Y	Y	Y	
R2604	4	19.6	A1-9	-	24.7	0	59.6	72.3	64.6	57.6	0	73.3	73.3	70	Y	-	-	48.6	Y	Y	Y	Y	
R2604	5	22.3	A1-9	-	25.8	0	59.6	72.1	64.5	57.9	0	73.1	73.1	70	Y	-	-	47.3	Y	Y	Y	Y	
R2604	6	25	A1-9	-	26.9	0	59.6	71.9	64.4	58.3	0	73	73.0	70	Y	-	-	46.1	Y	Y	Y	Y	
R2604	7	27.7	A1-9	-	28	0	59.6	71.7	64.2	58.6	0	72.8	72.8	70	Y	-	-	44.8	Y	Y	Y	Y	
R2604	8	30.4	A1-9	-	29.2	0	59.6	71.5	64.1	59	0	72.6	72.6	70	Y	-	-	43.4	Y	Y	Y	Y	
R2604	9	33.1	A1-9	-	30.4	0	59.6	71.3	63.9	59.5	0	72.5	72.5	70	Y	-	-	42.1	Y	Y	Y	Y	
R2604	10	35.8	A1-9	-	31.9	0	59.6	71	63.8	59.9	0	72.3	72.3	70	Y	-	-	40.4	Y	Y	Y	Y	
R2604	11	38.5	A1-9	-	33.3	0	59.6	70.8	63.6	60.2	0	72.1	72.1	70	Y	-	-	38.8	Y	Y	Y	Y	
R2604	12	41.2	A1-9	-	35.2	0	59.6	70.6	63.5	60.6	0	72	72.0	70	Y	-	-	36.8	Y	Y	Y	Y	
R2604	13	43.9	A1-9	-	37.5	0	59.7	70.4	63.3	60.7	0	71.8	71.8	70	Y	-	-	34.3	Y	Y	Y	Y	
R2604	14	46.6	A1-9	-	40.1	0	59.9	70.2	63.2	61	0	71.7	71.7	70	Y	-	-	31.6	Y	Y	Y	Y	
R2604	15	49.3	A1-9	-	42.8	0	60.2	70	63.1	61.3	0	71.6	71.6	70	Y	-	-	28.8	Y	Y	Y	Y	
R2604	16	52	A1-9	-	44.6	0	60.4	69.8	63	61.8	0	71.5	71.5	70	Y	-	-	26.9	Y	Y	Y	Y	
R2604	17	54.7	A1-9	-	46.2	0	61	69.6	62.9	62.1	0	71.4	71.4	70	Y	-	-	25.2	Y	Y	Y	Y	
R2604	18	57.4	A1-9	-	47	0	61.5	69.4	62.8	62.6	0	71.4	71.4	70	Y	-	-	24.4	Y	Y	Y	Y	
R2604	19	60.1	A1-9	-	47.2	0	61.8	69.3	62.7	63.1	0	71.4	71.4	70	Y	-	-	24.2	Y	Y	Y	Y	
R2604	20	62.8	A1-9	-	47.2	0	61.9	69.1	62.6	63.7	0	71.4	71.4	70	Y	-	-	24.2	Y	Y	Y	Y	
R2605	1	11.5	A1-9	-	15.8	0	0	66.2	70.7	54.6	0	72.1	72.1	70	Y	-	-	56.5	Y	Y	Y	Y	
R2605	2	14.2	A1-9	-	15.8	0	0	66.1	70.4	54.9	0	71.9	71.9	70	Y	-	-	56.0	Y	Y	Y	Y	
R2605	3	16.9	A1-9	-	16.4	0	0	66.1	70	55.2	0	71.6	71.6	70	Y	-	-	55.1	Y	Y	Y	Y	
R2605	4	19.6	A1-9	-	17.2	0	0	66	69.6	55.5	0	71.3	71.3	70	Y	-	-	54.0	Y	Y	Y	Y	
R2605	5	22.3	A1-9	-	18	0	0	65.9	69.2	55.8	0	71	71.0	70	Y	-	-	52.9	Y	Y	Y	Y	
R2605	6	25	A1-9	-	19	0	0	65.8	68.8	56.3	0	70.7											

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)	D ≥ 1dB(A)	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)			New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(1)</sup> [B]	[C]		[D]		[E]							
R2606	10	36.8	A1-9	-	13.6	0	50	65.3	66.6	59.7	0	69.5	69.5	70	N	-	-	55.7	Y	N	N	
R2606	11	39.5	A1-9	-	14.5	0	50	65.1	66.3	60.1	0	69.4	69.4	70	N	-	-	54.7	Y	N	N	
R2606	12	42.2	A1-9	-	15.8	0	50.2	65	66.1	60.4	0	69.3	69.3	70	N	-	-	53.4	Y	N	N	
R2606	13	44.9	A1-9	-	17.2	0	50.4	64.9	65.8	60.5	0	69.1	69.1	70	N	-	-	51.8	Y	N	N	
R2606	14	47.6	A1-9	-	18.9	0	50.7	64.8	65.7	60.8	0	69	69.0	70	N	-	-	50.0	Y	N	N	
R2606	15	50.3	A1-9	-	20.9	0	51	64.6	65.5	61	0	68.9	68.9	70	N	-	-	48.0	Y	N	N	
R2606	16	53	A1-9	-	23.5	0	51.5	64.5	65.2	61.2	0	68.8	68.8	70	N	-	-	45.3	Y	N	N	
R2606	17	55.7	A1-9	-	27.4	0	52.2	64.4	65	61.4	0	68.7	68.7	70	N	-	-	41.3	Y	N	N	
R2606	18	58.4	A1-9	-	30.8	0	53.3	64.2	64.9	61.7	0	68.7	68.7	70	N	-	-	37.9	Y	N	N	
R2606	19	61.1	A1-9	-	32.1	0	54.7	64.2	64.7	61.9	0	68.7	68.7	70	N	-	-	36.6	Y	N	N	
R2606	20	63.8	A1-9	-	32.5	0	56.2	64	64.6	62.4	0	68.8	68.8	70	N	-	-	36.3	Y	N	N	
R2607	1	12.5	A1-9	-	17.7	0	36.1	68.9	62.9	57	0	70.1	70.1	70	N	-	-	52.3	Y	N	N	
R2607	2	15.2	A1-9	-	17.7	0	36.8	68.8	62.9	57.6	0	70	70.0	70	N	-	-	52.2	Y	N	N	
R2607	3	17.9	A1-9	-	17.9	0	37.6	68.7	62.8	58.2	0	70	70.0	70	N	-	-	52.0	Y	N	N	
R2607	4	20.6	A1-9	-	18.5	0	37.9	68.6	62.7	58.7	0	69.9	69.9	70	N	-	-	51.3	Y	N	N	
R2607	5	23.3	A1-9	-	19.4	0	38.2	68.5	62.6	59.3	0	69.9	69.9	70	N	-	-	50.5	Y	N	N	
R2607	6	26	A1-9	-	20.5	0	38.7	68.3	62.5	59.7	0	69.8	69.8	70	N	-	-	49.3	Y	N	N	
R2607	7	28.7	A1-9	-	21.7	0	39.3	68.1	62.4	60	0	69.7	69.7	70	N	-	-	48.0	Y	N	N	
R2607	8	31.4	A1-9	-	23.1	0	39.9	68	62.2	60.4	0	69.6	69.6	70	N	-	-	46.5	Y	N	N	
R2607	9	34.1	A1-9	-	24.6	0	40.5	67.8	62.1	60.6	0	69.5	69.5	70	N	-	-	44.9	Y	N	N	
R2607	10	36.8	A1-9	-	26.3	0	41	67.6	62	60.8	0	69.4	69.4	70	N	-	-	43.1	Y	N	N	
R2607	11	39.5	A1-9	-	28.1	0	41.6	67.5	61.8	61	0	69.2	69.2	70	N	-	-	41.1	Y	N	N	
R2607	12	42.2	A1-9	-	30	0	42.1	67.3	61.7	61.3	0	69.1	69.1	70	N	-	-	39.1	Y	N	N	
R2607	13	44.9	A1-9	-	32.1	0	42.9	67.1	61.6	61.6	0	69.1	69.1	70	N	-	-	37.0	Y	N	N	
R2607	14	47.6	A1-9	-	34.4	0	43.3	66.9	61.4	61.9	0	69	69.0	70	N	-	-	34.6	Y	N	N	
R2607	15	50.3	A1-9	-	37.2	0	44	66.8	61.3	62.4	0	69	69.0	70	N	-	-	31.8	Y	N	N	
R2607	16	53	A1-9	-	41.3	0	44.8	66.6	61.2	63.2	0	69	69.0	70	N	-	-	27.7	Y	N	N	
R2607	17	55.7	A1-9	-	45.4	0	45.8	66.4	61.3	64.4	0	69.3	69.3	70	N	-	-	23.9	Y	N	N	
R2607	18	58.4	A1-9	-	47.1	0	47.1	66.3	61.3	65.7	0	69.7	69.7	70	N	-	-	22.6	Y	N	N	
R2607	19	61.1	A1-9	-	47.5	0	48.7	66.2	61.4	66.9	0	70.2	70.3	70	N	-	-	22.8	Y	N	N	
R2607	20	63.8	A1-9	-	48.5	0	50.7	66	61.5	68	0	70.7	70.7	70	Y	-	-	23.0	Y	N	N	
R2608	1	12.8	A1-9	-	17.3	0	15.3	52.4	48.6	47.2	0	54.2	54.2	70	N	-	-	36.8	Y	N	N	
R2608	2	15.5	A1-9	-	17.2	0	16.1	52.4	48.6	47.3	0	54.2	54.2	70	N	-	-	36.9	Y	N	N	
R2608	3	18.2	A1-9	-	17.3	0	17	52.4	48.6	47.5	0	54.2	54.2	70	N	-	-	36.8	Y	N	N	
R2608	4	20.9	A1-9	-	17.4	0	17.9	52.4	48.6	47.6	0	54.2	54.2	70	N	-	-	36.7	Y	N	N	
R2608	5	23.6	A1-9	-	17.4	0	18.9	52.4	48.6	47.8	0	54.2	54.2	70	N	-	-	36.7	Y	N	N	
R2608	6	26.3	A1-9	-	17.4	0	19.9	52.4	48.6	47.8	0	54.2	54.2	70	N	-	-	36.7	Y	N	N	
R2608	7	29	A1-9	-	17.4	0	21	52.4	48.5	47.4	0	54.2	54.2	70	N	-	-	36.7	Y	N	N	
R2608	8	31.7	A1-9	-	17.4	0	22.2	52.5	48.5	47.7	0	54.3	54.3	70	N	-	-	36.8	Y	N	N	
R2608	9	34.4	A1-9	-	17.5	0	23.3	52.7	48.5	47.7	0	54.5	54.5	70	N	-	-	36.9	Y	N	N	
R2608	10	37.1	A1-9	-	17.4	0	24.5	53.1	48.5	47.5	0	54.7	54.7	70	N	-	-	37.2	Y	N	N	
R2608	11	39.8	A1-9	-	17.5	0	25.9	53.2	48.5	47.1	0	54.9	54.9	70	N	-	-	37.3	Y	N	N	
R2608	12	42.5	A1-9	-	17.5	0	27.3	53.2	48.5	47.8	0	54.9	54.9	70	N	-	-	37.3	Y	N	N	
R2608	13	45.2	A1-9	-	17.5	0	28.8	53.2	48.5	47.5	0	55	55.0	70	N	-	-	37.4	Y	N	N	
R2608	14	47.9	A1-9	-	17.5	0	30.6	53.2	48.5	47.4	0	55.1	55.1	70	N	-	-	37.5	Y	N	N	
R2608	15	50.6	A1-9	-	17.5	0	32.6	53.1	48.4	47.4	0	55.2	55.2	70	N	-	-	37.6	Y	N	N	
R2608	16	53.3	A1-9	-	17.5	0	35.2	53.1	48.4	48.8	0	55.4	55.5	70	N	-	-	37.9	Y	N	N	
R2608	17	56	A1-9	-	17.5	0	38.1	53	48.4	50.6	0	55.9	55.9	70	N	-	-	38.3	Y	N	N	
R2608	18	58.7	A1-9	-	18.1	0	40.8	53	48.4	52.8	0	56.7	56.7	70	N	-	-	38.5	Y	N	N	
R2608	19	61.4	A1-9	-	19.6	0	41.5	53	48.4	55.3	0	58	58.0	70	N	-	-	38.4	Y	N	N	
R2608	20	64.1	A1-9	-	21.9	0	42	53.3	48.4	58	0	59.7	59.7	70	N	-	-	37.8	Y	N	N	
R2609	1	12.8	A1-9	-	11.5	0	0	60.5	21	61.3	0	63.9	63.9	70	N	-	-	52.1	Y	N	N	
R2609	2	15.5	A1-9	-	11.5	0	0	60.4	21	61.5	0	64	64.0	70	N	-	-	52.2	Y	N	N	
R2609	3	18.2	A1-9	-	11.5	0	0	60.4	21	61.7	0	64.1	64.1	70	N	-	-	52.3	Y	N	N	
R2609	4	20.9	A1-9	-	11.5	0	0	60.4	21	61.9	0	64.2	64.2	70	N	-	-	52.4	Y	N	N	
R2609	5	23.6	A1-9	-	11.6	0	0	60.4	20.9	62.1	0	64.4	64.4	70	N	-	-	52.5	Y	N	N	
R2609	6	26.3	A1-9	-	11.6	0	0	60.3	20.9	62.2	0	64.4	64.4	70	N	-	-	52.5	Y	N	N	
R2609	7	29	A1-9	-	11.6	0	0	60.3	20.9	62.4	0	64.5	64.5	70	N	-	-	52.6	Y	N	N	
R2609	8	31.7	A1-9	-	11.6	0	0	60.3	20.8	62.4	0	64.5	64.5	70	N	-	-	52.6	Y	N	N	
R2609	9	34.4	A1-9	-	11.6	0	0	60.3	20.8	62.5	0	64.6	64.6	70	N	-	-	52.7	Y	N	N	
R2609	10	37.1	A1-9	-	11.7	0	0	60.3	20.8	62.6	0	64.6	64.6	70	N	-	-	52.6	Y	N	N	
R2609	11	39.8	A1-9	-	11.7	0	0	60.3	20.7	62.7	0	64.7	64.7	70	N	-	-	52.7	Y	N	N	
R2609	12	42.5	A1-9	-	11.7	0	0	60.4	20.6	62.8	0	64.8	64.8	70	N	-	-	52.8	Y	N	N	
R2609	13	45.2	A1-9	-	11.7	0	0	60.3	20.6	62.9	0	64.8	64.8	70	N	-	-	52.8	Y	N	N	
R2609	14	47.9	A1-9	-	11.7	0	0	60.2	20.5	63	0	64.8	64.8	70	N	-	-	52.8	Y	N	N	
R2609	15	50.6	A1-9	-	11.7	0	0	60.2	20.5	63.1	0	64.9	64.9	70	N	-	-	52.9	Y	N	N	
R2609	16	53.3	A1-9	-	11.8	0	0	60.1	20.4	63.1	0	64.8	64.8	70	N	-	-	52.7	Y	N	N	
R2609	17	56	A1-9	-	12.9	0	0	60	20.3	63.2	0	64.9	64.9	70	N	-	-	51.8	Y	N	N	
R2609	18	58.7	A1-9	-	14.6	0	0	59.9	20.3	63.2	0	64.9	64.9	70	N	-	-	50.2	Y	N	N	
R2609	19	61.4	A1-9	-	16.5	0	0	59.9	20.2	63.3	0	64.9	64.9	70	N	-	-	48.3	Y	N	N	
R2609	20	64.1	A1-9	-	19	0	0	59.8	20.2	63.3	0	64.9	64.9	70	N	-	-	45.8	Y	N	N	
R2610	1	12.5	A1-9	-	18.3	0	13.4	68.6	57.2	59.5	0	69.4	69.4	70	N	-	-	51.0	Y	N	N	
R2610	2	15.2	A1-9	-	18.2	0	14.2	68.5	57.2	60	0	69.4	69.4	70	N	-	-	50.4	Y	N	N	

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	C - A dB(A) [D]			D ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD											EX	TR	
R2611	3	16.9	A1-9	-	25.5	0	62	72.6	59.9	37.6	0	73.2	73.2	70	Y	-	-	47.7	Y	Y	Y	Y
R2611	4	19.6	A1-9	-	26.5	0	62	72.4	59.9	38.6	0	73	73.0	70	Y	-	-	46.5	Y	Y	Y	Y
R2611	5	22.3	A1-9	-	27.6	0	62	72.3	59.9	39.6	0	72.9	72.9	70	Y	-	-	45.3	Y	Y	Y	Y
R2611	6	25	A1-9	-	28.6	0	61.9	72.1	59.8	40.8	0	72.7	72.7	70	Y	-	-	44.1	Y	Y	Y	Y
R2611	7	27.7	A1-9	-	29.7	0	61.9	71.8	59.9	42	0	72.5	72.5	70	Y	-	-	42.8	Y	Y	Y	Y
R2611	8	30.4	A1-9	-	31	0	61.9	71.6	59.8	43.6	0	72.3	72.3	70	Y	-	-	41.3	Y	Y	Y	Y
R2611	9	33.1	A1-9	-	32.2	0	61.9	71.4	59.8	45.4	0	72.2	72.2	70	Y	-	-	40.0	Y	Y	Y	Y
R2611	10	35.8	A1-9	-	33.7	0	61.9	71.2	59.7	47.8	0	72	72.0	70	Y	-	-	38.3	Y	Y	Y	Y
R2611	11	38.5	A1-9	-	35.5	0	62	71	59.6	51.1	0	71.8	71.8	70	Y	-	-	36.3	Y	Y	Y	Y
R2611	12	41.2	A1-9	-	37.6	0	62.1	70.8	59.6	53.9	0	71.7	71.7	70	Y	-	-	34.1	Y	Y	Y	Y
R2611	13	43.9	A1-9	-	40.1	0	62.4	70.6	59.6	56.6	0	71.6	71.6	70	Y	-	-	31.5	Y	Y	Y	Y
R2611	14	46.6	A1-9	-	42.3	0	62.8	70.4	59.5	59.9	0	71.5	71.5	70	Y	-	-	29.2	Y	Y	Y	Y
R2611	15	49.3	A1-9	-	43.9	0	63	70.2	59.6	55.1	0	71.4	71.4	70	Y	-	-	27.5	Y	Y	Y	Y
R2611	16	52	A1-9	-	45.1	0	63	70	59.6	55.3	0	71.2	71.3	70	Y	-	-	26.2	Y	Y	Y	Y
R2611	17	54.7	A1-9	-	45.6	0	63.1	69.8	59.6	55.7	0	71.1	71.1	70	Y	-	-	25.5	Y	Y	Y	Y
R2611	18	57.4	A1-9	-	45.9	0	63	69.7	59.7	56.1	0	71	71.0	70	Y	-	-	25.1	Y	Y	Y	Y
R2611	19	60.1	A1-9	-	46.3	0	63	69.5	59.9	56.6	0	70.9	70.9	70	Y	-	-	24.8	Y	Y	Y	Y
R2611	20	62.8	A1-9	-	46.1	0	63	69.3	60	57.2	0	70.8	70.8	70	Y	-	-	24.7	Y	Y	Y	Y
R2661	1	27	A2-5	-	0	0	0	65.4	53.5	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
R2661	2	30	A2-5	-	0	0	0	68.8	53.8	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N
R2661	3	33	A2-5	-	0	0	0	70.2	53.8	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N	N
R2661	4	36	A2-5	-	0	0	0	70.3	53.8	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N	N
R2661	5	39	A2-5	-	0	0	0	70.3	53.8	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N	N
R2661	6	42	A2-5	-	0	0	0	70.1	53.8	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N	N
R2661	7	45	A2-5	-	0	0	0	69.9	53.8	0	0	70	70.0	70	N	-	-	67.0	Y	N	N	N
R2661	8	48	A2-5	-	0	0	0	69.8	53.8	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	N
R2661	9	51	A2-5	-	0	0	0	69.6	53.7	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	N
R2661	10	54	A2-5	-	0	0	0	69.5	53.7	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N
R2661	11	57	A2-5	-	0	0	0	69.3	53.7	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N
R2661	12	60	A2-5	-	0	0	0	69.1	53.7	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	N
R2661	13	63	A2-5	-	0	0	0	69	53.7	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N
R2661	14	66	A2-5	-	0	0	0	68.8	53.6	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N
R2661	15	69	A2-5	-	0	0	0	68.7	53.6	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	N
R2661	16	72	A2-5	-	0	0	0	68.5	53.6	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N
R2661	17	75	A2-5	-	0	0	0	68.4	53.5	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N
R2661	18	78	A2-5	-	0	0	0	68.2	53.5	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N
R2661	19	81	A2-5	-	0	0	0	68.1	53.5	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
R2661	20	84	A2-5	-	0	0	0	67.9	53.5	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N
R2661	21	87	A2-5	-	0	0	0	67.8	53.4	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
R2661	22	90	A2-5	-	0	0	0	67.6	53.4	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N
R2661	23	93	A2-5	-	0	0	0	67.5	53.4	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
R2661	24	96	A2-5	-	0	0	0	67.3	53.3	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
R2661	25	99	A2-5	-	0	0	0	67.2	53.3	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
R2661	26	102	A2-5	-	0	0	0	67.1	53.2	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
R2661	27	105	A2-5	-	0	0	0	67	53.2	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N
R2661	28	108	A2-5	-	0	0	0	66.9	53.2	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
R2661	29	111	A2-5	-	0	0	0	66.8	53.1	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
R2661	30	114	A2-5	-	0	0	0	66.6	53.1	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
R2701	1	13	A2-9	-	10	0	0	53.5	61	0	0	61.7	61.7	70	N	-	-	51.3	Y	N	N	N
R2701	2	15.7	A2-9	-	10.1	0	0	53.5	60.9	0	0	61.6	61.6	70	N	-	-	51.1	Y	N	N	N
R2701	3	18.4	A2-9	-	10.1	0	0	53.5	60.8	0	0	61.5	61.5	70	N	-	-	51.0	Y	N	N	N
R2701	4	21.1	A2-9	-	10.1	0	0	53.5	60.7	0	0	61.4	61.4	70	N	-	-	50.9	Y	N	N	N
R2701	5	23.8	A2-9	-	10.1	0	0	53.5	60.5	0	0	61.3	61.3	70	N	-	-	50.8	Y	N	N	N
R2701	6	26.5	A2-9	-	10.1	0	0	53.5	60.3	0	0	61.1	61.1	70	N	-	-	50.6	Y	N	N	N
R2701	7	29.2	A2-9	-	10.1	0	0	53.5	60.1	0	0	60.9	60.9	70	N	-	-	50.4	Y	N	N	N
R2701	8	31.9	A2-9	-	10.1	0	0	53.5	59.8	0	0	60.8	60.8	70	N	-	-	50.3	Y	N	N	N
R2701	9	34.6	A2-9	-	10.1	0	0	53.5	59.7	0	0	60.6	60.6	70	N	-	-	50.1	Y	N	N	N
R2701	10	37.3	A2-9	-	10.1	0	0	53.4	59.5	0	0	60.4	60.4	70	N	-	-	49.9	Y	N	N	N
R2701	11	40	A2-9	-	10.1	0	0	53.4	59.2	0	0	60.3	60.3	70	N	-	-	49.8	Y	N	N	N
R2701	12	42.7	A2-9	-	10.2	0	0	53.4	59.1	0	0	60.1	60.1	70	N	-	-	49.5	Y	N	N	N
R2701	13	45.4	A2-9	-	10.8	0	0	53.4	58.8	0	0	59.9	59.9	70	N	-	-	48.8	Y	N	N	N
R2701	14	48.1	A2-9	-	11.3	0	0	53.4	58.7	0	0	59.8	59.8	70	N	-	-	48.2	Y	N	N	N
R2701	15	50.8	A2-9	-	11.9	0	0	53.5	58.5	0	0	59.7	59.7	70	N	-	-	47.5	Y	N	N	N
R2701	16	53.5	A2-9	-	12.4	0	0	53.5	58.3	0	0	59.5	59.5	70	N	-	-	46.9	Y	N	N	N
R2701	17	56.2	A2-9	-	13	0	0	53.4	58.1	0	0	59.4	59.4	70	N	-	-	46.1	Y	N	N	N
R2701	18	58.9	A2-9	-	13.8	0	0	53.4	57.9	0	0	59.2	59.2	70	N	-	-	45.2	Y	N	N	N
R2701	19	61.6	A2-9	-	14.4	0	0	53.5	57.8	0	0	59.1	59.1	70	N	-	-	44.5	Y	N	N	N
R2701	20	64.3	A2-9	-	15.2	0	0	53.5	57.6	0	0	59.1	59.1	70	N	-	-	43.8	Y	N	N	N
R2702	1	13	A2-9	-	13.7	0	0	56.7	55.6	66	0	66.9	66.9	70	N	-	-	53.0	Y	N	N	N
R2702	2	15.7	A2-9	-	13.7	0	0	56.7	55.6	66	0	66.8	66.8	70	N	-	-	52.9	Y	N	N	N
R2702	3	18.4	A2-9	-	13.8	0	0	56.7	55.6	65.9	0	66.7	66.7	70	N	-	-	52.7	Y	N	N	N
R2702	4	21.1	A2-9	-	13.8	0	0	56.7	55.6	65.7	0	66.6	66.6	70	N	-	-	52.6	Y	N	N	N
R2702	5	23.8	A2-9	-																		

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)	
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A)	D ≥ 1dB(A)	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(1)</sup>	[C]			[D]	[E]						
R2703	6	26.5	A2-9	-	15.4	0	63.8	57.3	64.4	0	0	67.5	67.5	70	N	-	-	52.0	Y	N	N
R2703	7	29.2	A2-9	-	15.4	0	63.8	57.3	64.2	0	0	67.4	67.4	70	N	-	-	51.9	Y	N	N
R2703	8	31.9	A2-9	-	15.4	0	63.8	57.3	63.9	0	0	67.3	67.3	70	N	-	-	51.8	Y	N	N
R2703	9	34.6	A2-9	-	15.4	0	63.8	57.3	63.7	0	0	67.2	67.2	70	N	-	-	51.7	Y	N	N
R2703	10	37.3	A2-9	-	15.4	0	63.8	57.3	63.5	0	0	67.1	67.1	70	N	-	-	51.6	Y	N	N
R2703	11	40	A2-9	-	15.5	0	63.7	57.3	63.3	0	0	67	67.0	70	N	-	-	51.4	Y	N	N
R2703	12	42.7	A2-9	-	15.5	0	63.7	57.3	63.1	0	0	66.9	66.9	70	N	-	-	51.3	Y	N	N
R2703	13	45.4	A2-9	-	15.5	0	63.7	57.4	62.9	0	0	66.8	66.8	70	N	-	-	51.2	Y	N	N
R2703	14	48.1	A2-9	-	15.5	0	63.7	57.5	62.7	0	0	66.8	66.8	70	N	-	-	51.2	Y	N	N
R2703	15	50.8	A2-9	-	15.5	0	63.7	57.7	62.5	0	0	66.7	66.7	70	N	-	-	51.1	Y	N	N
R2703	16	53.5	A2-9	-	15.5	0	63.6	58	62.3	0	0	66.7	66.7	70	N	-	-	51.1	Y	N	N
R2703	17	56.2	A2-9	-	15.4	0	63.6	58.6	62.2	0	0	66.7	66.7	70	N	-	-	51.2	Y	N	N
R2703	18	58.9	A2-9	-	15.5	0	63.6	59.4	62	0	0	66.7	66.7	70	N	-	-	51.1	Y	N	N
R2703	19	61.6	A2-9	-	15.4	0	63.6	60.2	61.9	0	0	66.9	66.9	70	N	-	-	51.4	Y	N	N
R2703	20	64.3	A2-9	-	15.6	0	63.5	60.9	61.8	0	0	67	67.0	70	N	-	-	51.3	Y	N	N
R2704	1	13	A2-9	-	20.6	0	67.7	62.6	59.9	0	0	69.4	69.4	70	N	-	-	48.8	Y	N	N
R2704	2	15.7	A2-9	-	20.9	0	67.7	62.6	59.8	0	0	69.4	69.4	70	N	-	-	48.5	Y	N	N
R2704	3	18.4	A2-9	-	21.2	0	67.7	62.6	59.7	0	0	69.4	69.4	70	N	-	-	48.2	Y	N	N
R2704	4	21.1	A2-9	-	21.5	0	67.7	62.6	59.6	0	0	69.3	69.3	70	N	-	-	47.8	Y	N	N
R2704	5	23.8	A2-9	-	21.9	0	67.6	62.6	59.5	0	0	69.3	69.3	70	N	-	-	47.4	Y	N	N
R2704	6	26.5	A2-9	-	22.2	0	67.6	62.6	59.3	0	0	69.3	69.3	70	N	-	-	47.1	Y	N	N
R2704	7	29.2	A2-9	-	22.6	0	67.6	62.6	59.1	0	0	69.2	69.2	70	N	-	-	46.6	Y	N	N
R2704	8	31.9	A2-9	-	23	0	67.5	62.6	59	0	0	69.2	69.2	70	N	-	-	46.2	Y	N	N
R2704	9	34.6	A2-9	-	23.9	0	67.5	62.5	58.8	0	0	69.1	69.1	70	N	-	-	45.7	Y	N	N
R2704	10	37.3	A2-9	-	23.8	0	67.5	62.5	58.6	0	0	69.1	69.1	70	N	-	-	45.3	Y	N	N
R2704	11	40	A2-9	-	24.2	0	67.4	62.5	58.5	0	0	69	69.0	70	N	-	-	44.8	Y	N	N
R2704	12	42.7	A2-9	-	24.6	0	67.4	62.5	58.3	0	0	69	69.0	70	N	-	-	44.4	Y	N	N
R2704	13	45.4	A2-9	-	24.9	0	67.3	62.5	58.1	0	0	68.9	68.9	70	N	-	-	44.0	Y	N	N
R2704	14	48.1	A2-9	-	25.3	0	67.3	62.4	58	0	0	68.9	68.9	70	N	-	-	43.6	Y	N	N
R2704	15	50.8	A2-9	-	25.7	0	67.2	62.4	57.9	0	0	68.8	68.8	70	N	-	-	43.1	Y	N	N
R2704	16	53.5	A2-9	-	26.1	0	67.1	62.4	57.8	0	0	68.8	68.8	70	N	-	-	42.7	Y	N	N
R2704	17	56.2	A2-9	-	26.5	0	67.1	62.5	57.7	0	0	68.7	68.7	70	N	-	-	42.2	Y	N	N
R2704	18	58.9	A2-9	-	26.9	0	67	62.5	57.6	0	0	68.7	68.7	70	N	-	-	41.8	Y	N	N
R2704	19	61.6	A2-9	-	27.4	0	66.9	62.6	57.5	0	0	68.6	68.6	70	N	-	-	41.2	Y	N	N
R2704	20	64.3	A2-9	-	27.9	0	66.9	62.6	57.4	0	0	68.6	68.6	70	N	-	-	40.7	Y	N	N
R2705	1	13	A2-9	-	32.1	0	72.6	61.1	54	0	0	72.9	72.9	70	Y	-	-	40.8	Y	Y	Y
R2705	2	15.7	A2-9	-	32.5	0	72.6	61.1	54.1	0	0	72.9	72.9	70	Y	-	-	40.4	Y	Y	Y
R2705	3	18.4	A2-9	-	33	0	72.5	61.1	54.3	0	0	72.9	72.9	70	Y	-	-	39.9	Y	Y	Y
R2705	4	21.1	A2-9	-	33.6	0	72.5	61.1	54.4	0	0	72.9	72.9	70	Y	-	-	39.3	Y	Y	Y
R2705	5	23.8	A2-9	-	34.1	0	72.5	61.1	54.4	0	0	72.8	72.8	70	Y	-	-	38.7	Y	Y	Y
R2705	6	26.5	A2-9	-	34.7	0	72.4	61.1	54.5	0	0	72.8	72.8	70	Y	-	-	38.1	Y	Y	Y
R2705	7	29.2	A2-9	-	35.3	0	72.4	61.1	54.6	0	0	72.8	72.8	70	Y	-	-	37.5	Y	Y	Y
R2705	8	31.9	A2-9	-	35.9	0	72.3	61	54.6	0	0	72.7	72.7	70	Y	-	-	36.8	Y	Y	Y
R2705	9	34.6	A2-9	-	36.8	0	72.3	61	54.7	0	0	72.7	72.7	70	Y	-	-	35.9	Y	Y	Y
R2705	10	37.3	A2-9	-	37.3	0	72.2	60.9	54.7	0	0	72.6	72.6	70	Y	-	-	35.3	Y	Y	Y
R2705	11	40	A2-9	-	38.1	0	72.1	60.9	54.7	0	0	72.5	72.5	70	Y	-	-	34.4	Y	Y	Y
R2705	12	42.7	A2-9	-	38.9	0	72.1	60.9	54.8	0	0	72.5	72.5	70	Y	-	-	33.6	Y	Y	Y
R2705	13	45.4	A2-9	-	39.6	0	72	60.8	54.8	0	0	72.4	72.4	70	Y	-	-	32.8	Y	Y	Y
R2705	14	48.1	A2-9	-	40.3	0	71.9	60.8	54.8	0	0	72.3	72.3	70	Y	-	-	32.0	Y	Y	Y
R2705	15	50.8	A2-9	-	40.9	0	71.8	60.7	54.8	0	0	72.2	72.2	70	Y	-	-	31.3	Y	Y	Y
R2705	16	53.5	A2-9	-	41.5	0	71.7	60.7	54.8	0	0	72.2	72.2	70	Y	-	-	30.7	Y	Y	Y
R2705	17	56.2	A2-9	-	41.8	0	71.7	60.6	54.8	0	0	72.1	72.1	70	Y	-	-	30.3	Y	Y	Y
R2705	18	58.9	A2-9	-	42.2	0	71.6	60.6	54.8	0	0	72	72.0	70	Y	-	-	29.8	Y	Y	Y
R2705	19	61.6	A2-9	-	42.5	0	71.5	60.5	54.8	0	0	71.9	71.9	70	Y	-	-	29.4	Y	Y	Y
R2705	20	64.3	A2-9	-	42.8	0	71.4	60.5	54.8	0	0	71.8	71.8	70	Y	-	-	29.0	Y	Y	Y
R2706	1	13	A2-9	-	29.2	0	73.5	54.5	52.9	0	0	73.6	73.6	70	Y	-	-	44.4	Y	Y	Y
R2706	2	15.7	A2-9	-	29.7	0	73.5	54.5	52.9	0	0	73.6	73.6	70	Y	-	-	43.9	Y	Y	Y
R2706	3	18.4	A2-9	-	30.2	0	73.5	54.5	53	0	0	73.6	73.6	70	Y	-	-	43.4	Y	Y	Y
R2706	4	21.1	A2-9	-	30.7	0	73.4	54.5	53.2	0	0	73.5	73.5	70	Y	-	-	42.8	Y	Y	Y
R2706	5	23.8	A2-9	-	31.3	0	73.4	54.5	53.3	0	0	73.5	73.5	70	Y	-	-	42.2	Y	Y	Y
R2706	6	26.5	A2-9	-	31.9	0	73.3	54.5	53.3	0	0	73.4	73.4	70	Y	-	-	41.5	Y	Y	Y
R2706	7	29.2	A2-9	-	32.4	0	73.2	54.5	53.4	0	0	73.3	73.3	70	Y	-	-	40.9	Y	Y	Y
R2706	8	31.9	A2-9	-	33	0	73.2	54.5	53.5	0	0	73.3	73.3	70	Y	-	-	40.3	Y	Y	Y
R2706	9	34.6	A2-9	-	33.7	0	73.1	54.5	53.5	0	0	73.2	73.2	70	Y	-	-	39.5	Y	Y	Y
R2706	10	37.3	A2-9	-	34.4	0	73	54.5	53.5	0	0	73.1	73.1	70	Y	-	-	38.7	Y	Y	Y
R2706	11	40	A2-9	-	35.1	0	72.9	54.5	53.5	0	0	73	73.0	70	Y	-	-	37.9	Y	Y	Y
R2706	12	42.7	A2-9	-	35.9	0	72.8	54.5	53.6	0	0	73	73.0	70	Y	-	-	37.1	Y	Y	Y
R2706	13	45.4	A2-9	-	36.8	0	72.8	54.5	53.6	0	0	72.9	72.9	70	Y	-	-	36.1	Y	Y	Y
R2706	14	48.1	A2-9	-	37.8	0	72.6	54.5	53.6	0	0	72.8	72.8	70	Y	-	-	35.0	Y	Y	Y
R2706	15	50.8	A2-9	-	38.8	0	72.5	54.5	53.6	0	0	72.7	72.7	70	Y	-	-	33.9	Y	Y	Y
R2706	16	53.5	A2-9	-	39.9	0	72.4	54.5	53.6	0	0	72.6	72.6	70	Y	-	-	32.7	Y	Y	Y
R2706	17	56.2	A2-9	-	41.2	0	72.3	54.4	53.6	0	0	72.5	72.5	70	Y	-	-	31.3	Y	Y	Y
R2706	18	58.9	A2-9	-	42.4	0	72.2	54.4	53.5	0	0	72.4	72.4	70	Y	-	-	30.2	Y	Y	Y
R2706																					

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)		New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)			New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(3)</sup>	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]		
R2707	19	61.6	A2-9	-	29.9	0	69.1	54.2	49	0	0	69.2	69.2	70	N	-	-	39.3	Y	N	N	
R2741	20	64.3	A2-9	-	30.9	0	69	54.2	49	0	0	69.2	69.2	70	N	-	-	38.3	Y	N	N	
R2741	1	19.5	A3-6	-	13.9	0	65.7	71.1	56.6	0	0	72.3	72.3	70	Y	-	-	58.2	Y	Y	Y	
R2741	2	22.2	A3-6	-	14.1	0	65.6	71	56.4	0	0	72.2	72.2	70	Y	-	-	57.9	Y	Y	Y	
R2741	3	24.9	A3-6	-	14.4	0	65.6	70.8	56.1	0	0	72.1	72.1	70	Y	-	-	57.5	Y	Y	Y	
R2741	4	27.6	A3-6	-	14.6	0	65.6	70.7	55.8	0	0	72	72.0	70	Y	-	-	57.3	Y	Y	Y	
R2741	5	30.3	A3-6	-	14.9	0	65.6	70.5	55.5	0	0	71.8	71.8	70	Y	-	-	56.8	Y	Y	Y	
R2741	6	33	A3-6	-	15.1	0	65.5	70.4	55.3	0	0	71.7	71.7	70	Y	-	-	56.5	Y	Y	Y	
R2741	7	35.7	A3-6	-	15.5	0	65.5	70.2	55	0	0	71.6	71.6	70	Y	-	-	56.0	Y	Y	Y	
R2741	8	38.4	A3-6	-	15.7	0	65.4	70	54.8	0	0	71.4	71.4	70	Y	-	-	55.6	Y	Y	Y	
R2741	9	41.1	A3-6	-	16	0	65.4	69.9	54.6	0	0	71.3	71.3	70	Y	-	-	55.2	Y	Y	Y	
R2741	10	43.8	A3-6	-	16.4	0	65.3	69.7	54.3	0	0	71.2	71.2	70	Y	-	-	54.7	Y	Y	Y	
R2741	11	46.5	A3-6	-	16.7	0	65.3	69.6	54.1	0	0	71	71.0	70	Y	-	-	54.2	Y	Y	Y	
R2741	12	49.2	A3-6	-	17.2	0	65.3	69.4	53.9	0	0	70.9	70.9	70	Y	-	-	53.6	Y	Y	Y	
R2741	13	51.9	A3-6	-	17.6	0	65.2	69.2	53.7	0	0	70.8	70.8	70	Y	-	-	53.1	Y	Y	Y	
R2741	14	54.6	A3-6	-	18.1	0	65.1	69.1	53.5	0	0	70.7	70.7	70	Y	-	-	52.5	Y	Y	Y	
R2741	15	57.3	A3-6	-	18.6	0	65.1	69	53.3	0	0	70.5	70.5	70	Y	-	-	51.8	Y	Y	Y	
R2741	16	60	A3-6	-	19.1	0	65	68.8	53.2	0	0	70.4	70.4	70	N	-	-	51.2	Y	N	N	
R2741	17	62.7	A3-6	-	19.7	0	64.9	68.7	53	0	0	70.3	70.3	70	N	-	-	50.6	Y	N	N	
R2741	18	65.4	A3-6	-	20.3	0	64.8	68.5	52.9	0	0	70.2	70.2	70	N	-	-	49.9	Y	N	N	
R2741	19	68.1	A3-6	-	20.9	0	64.8	68.4	52.7	0	0	70.1	70.1	70	N	-	-	49.2	Y	N	N	
R2741	20	70.8	A3-6	-	21.5	0	64.7	68.3	52.6	0	0	70	70.0	70	N	-	-	48.5	Y	N	N	
R2742	1	19.5	A3-6	-	10.4	0	65.3	72.6	57.4	0	0	73.5	73.5	70	Y	-	-	62.7	Y	Y	Y	
R2742	2	22.2	A3-6	-	10.6	0	65.3	72.5	57.3	0	0	73.4	73.4	70	Y	-	-	62.4	Y	Y	Y	
R2742	3	24.9	A3-6	-	10.7	0	65.3	72.3	57.2	0	0	73.2	73.2	70	Y	-	-	62.1	Y	Y	Y	
R2742	4	27.6	A3-6	-	10.9	0	65.3	72.2	57.1	0	0	73.1	73.1	70	Y	-	-	61.9	Y	Y	Y	
R2742	5	30.3	A3-6	-	11.1	0	65.3	72	57.1	0	0	72.9	72.9	70	Y	-	-	61.5	Y	Y	Y	
R2742	6	33	A3-6	-	11.4	0	65.3	71.8	56.9	0	0	72.8	72.8	70	Y	-	-	61.1	Y	Y	Y	
R2742	7	35.7	A3-6	-	11.5	0	65.2	71.6	56.8	0	0	72.6	72.6	70	Y	-	-	60.8	Y	Y	Y	
R2742	8	38.4	A3-6	-	11.8	0	65.2	71.4	56.7	0	0	72.4	72.4	70	Y	-	-	60.3	Y	Y	Y	
R2742	9	41.1	A3-6	-	12	0	65.2	71.1	56.6	0	0	72.2	72.2	70	Y	-	-	59.9	Y	Y	Y	
R2742	10	43.8	A3-6	-	12.3	0	65.1	70.9	56.5	0	0	72.1	72.1	70	Y	-	-	59.6	Y	Y	Y	
R2742	11	46.5	A3-6	-	12.6	0	65.1	70.8	56.4	0	0	71.9	71.9	70	Y	-	-	59.1	Y	Y	Y	
R2742	12	49.2	A3-6	-	12.9	0	65.1	70.5	56.2	0	0	71.7	71.7	70	Y	-	-	58.6	Y	Y	Y	
R2742	13	51.9	A3-6	-	13.1	0	65	70.4	56.1	0	0	71.6	71.6	70	Y	-	-	58.3	Y	Y	Y	
R2742	14	54.6	A3-6	-	13.5	0	65	70.2	56	0	0	71.4	71.4	70	Y	-	-	57.7	Y	Y	Y	
R2742	15	57.3	A3-6	-	13.7	0	64.9	70	56	0	0	71.3	71.3	70	Y	-	-	57.4	Y	Y	Y	
R2742	16	60	A3-6	-	14	0	64.9	69.8	55.8	0	0	71.1	71.1	70	Y	-	-	56.9	Y	Y	Y	
R2742	17	62.7	A3-6	-	14.4	0	64.8	69.6	55.7	0	0	71	71.0	70	Y	-	-	56.4	Y	Y	Y	
R2742	18	65.4	A3-6	-	14.7	0	64.8	69.5	55.7	0	0	70.9	70.9	70	Y	-	-	56.1	Y	Y	Y	
R2742	19	68.1	A3-6	-	15.1	0	64.7	69.3	55.6	0	0	70.7	70.7	70	Y	-	-	55.5	Y	Y	Y	
R2742	20	70.8	A3-6	-	15.7	0	64.6	69.1	55.6	0	0	70.6	70.6	70	Y	-	-	54.8	Y	Y	Y	
R2743	1	19.5	A3-6	-	6.2	0	63.5	72.3	57.1	0	0	73	73.0	70	Y	-	-	65.9	Y	Y	Y	
R2743	2	22.2	A3-6	-	6.2	0	63.5	72.2	57.1	0	0	72.9	72.9	70	Y	-	-	65.8	Y	Y	Y	
R2743	3	24.9	A3-6	-	6.3	0	63.5	72.1	57	0	0	72.7	72.7	70	Y	-	-	65.5	Y	Y	Y	
R2743	4	27.6	A3-6	-	6.3	0	63.5	71.9	57	0	0	72.6	72.6	70	Y	-	-	65.4	Y	Y	Y	
R2743	5	30.3	A3-6	-	6.4	0	63.5	71.7	56.9	0	0	72.4	72.4	70	Y	-	-	65.1	Y	Y	Y	
R2743	6	33	A3-6	-	6.4	0	63.5	71.5	56.9	0	0	72.3	72.3	70	Y	-	-	65.0	Y	Y	Y	
R2743	7	35.7	A3-6	-	6.5	0	63.5	71.3	56.8	0	0	72.1	72.1	70	Y	-	-	64.7	Y	Y	Y	
R2743	8	38.4	A3-6	-	6.5	0	63.4	71.1	56.8	0	0	71.9	71.9	70	Y	-	-	64.5	Y	Y	Y	
R2743	9	41.1	A3-6	-	6.4	0	63.4	70.9	56.7	0	0	71.7	71.7	70	Y	-	-	64.4	Y	Y	Y	
R2743	10	43.8	A3-6	-	6.5	0	63.4	70.7	56.6	0	0	71.6	71.6	70	Y	-	-	64.2	Y	Y	Y	
R2743	11	46.5	A3-6	-	6.5	0	63.4	70.5	56.6	0	0	71.4	71.4	70	Y	-	-	64.0	Y	Y	Y	
R2743	12	49.2	A3-6	-	6.5	0	63.4	70.3	56.5	0	0	71.2	71.2	70	Y	-	-	63.8	Y	Y	Y	
R2743	13	51.9	A3-6	-	6.6	0	63.4	70.1	56.4	0	0	71.1	71.1	70	Y	-	-	63.6	Y	Y	Y	
R2743	14	54.6	A3-6	-	6.6	0	63.4	69.9	56.4	0	0	70.9	70.9	70	Y	-	-	63.4	Y	Y	Y	
R2743	15	57.3	A3-6	-	6.5	0	63.4	69.7	56.3	0	0	70.8	70.8	70	Y	-	-	63.4	Y	Y	Y	
R2743	16	60	A3-6	-	6.5	0	63.4	69.6	56.2	0	0	70.7	70.7	70	Y	-	-	63.3	Y	Y	Y	
R2743	17	62.7	A3-6	-	6.6	0	63.3	69.4	56.2	0	0	70.5	70.5	70	Y	-	-	63.0	Y	Y	Y	
R2743	18	65.4	A3-6	-	6.6	0	63.3	69.2	56.1	0	0	70.4	70.4	70	N	-	-	62.9	Y	N	N	
R2743	19	68.1	A3-6	-	6.6	0	63.3	69.1	56	0	0	70.2	70.2	70	N	-	-	62.7	Y	N	N	
R2743	20	70.8	A3-6	-	6.4	0	63.3	68.9	56	0	0	70.1	70.1	70	N	-	-	62.8	Y	N	N	
R2746	1	19.5	A3-6	-	0	0	13.5	61.4	68.6	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	
R2746	2	22.2	A3-6	-	0	0	13.5	61.4	68.4	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	
R2746	3	24.9	A3-6	-	0	0	13.5	61.4	68.1	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	
R2746	4	27.6	A3-6	-	0	0	13.6	61.4	67.8	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	
R2746	5	30.3	A3-6	-	0	0	13.6	61.4	67.4	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	
R2746	6	33	A3-6	-	0	0	13.6	61.3	67.1	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	
R2746	7	35.7	A3-6	-	0	0	13.6	61.3	66.8	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	
R2746	8	38.4	A3-6	-	0	0	13.6	61.3	66.4	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	
R2746	9	41.1	A3-6	-	0	0	13.6	61.2	66.1	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	
R2746	10	43.8	A3-6	-	0	0	13.6	61.2	65.8	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	
R2746	11	46.5	A3-6	-	0	0	13.6	61.1	65.5	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
R2746	12	49.2	A3																			



Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
							PD	DD	LD	EX	TR											New Roads in 2044 dB(A) <sup>(3)</sup> [B]	
R2747	12	49.2	A3-6	-	0	0	11.4	58.4	65.4	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N		
R2747	13	51.9	A3-6	-	0	0	11.4	58.4	65.1	0	0	66	66.0	70	N	-	-	63.0	Y	N	N		
R2747	14	54.6	A3-6	-	0	0	11.4	58.4	64.9	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N		
R2747	15	57.3	A3-6	-	0	0	11.4	58.3	64.6	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N		
R2747	16	60	A3-6	-	0	0	11.4	58.4	64.4	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N		
R2747	17	62.7	A3-6	-	0	0	11.4	58.3	64.2	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N		
R2747	18	65.4	A3-6	-	0	0	11.4	58.3	64	0	0	65	65.0	70	N	-	-	62.0	Y	N	N		
R2747	19	68.1	A3-6	-	0	0	11.4	58.3	63.8	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N		
R2747	20	70.8	A3-6	-	0	0	11.3	58.3	63.6	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N		
R2761	1	29.5	B2-10	-	0	0	0	37	30.2	0	0	37.9	37.9	70	N	-	-	34.9	Y	N	N		
R2761	2	32.5	B2-10	-	0	0	0	37.1	30.2	0	0	37.9	37.9	70	N	-	-	34.9	Y	N	N		
R2761	3	35.5	B2-10	-	0	0	0	37.2	30.1	0	0	38	38.0	70	N	-	-	35.0	Y	N	N		
R2761	4	38.5	B2-10	-	0	0	0	37.1	30	0	0	37.9	37.9	70	N	-	-	34.9	Y	N	N		
R2761	5	41.5	B2-10	-	0	0	0	37.1	30	0	0	37.9	37.9	70	N	-	-	34.9	Y	N	N		
R2761	6	44.5	B2-10	-	0	0	0	37	29.9	0	0	37.8	37.8	70	N	-	-	34.8	Y	N	N		
R2761	7	47.5	B2-10	-	0	0	0	37	29.8	0	0	37.8	37.8	70	N	-	-	34.8	Y	N	N		
R2761	8	50.5	B2-10	-	0	0	0	37	29.7	0	0	37.8	37.8	70	N	-	-	34.8	Y	N	N		
R2761	9	53.5	B2-10	-	0	0	0	36.9	29.6	0	0	37.7	37.7	70	N	-	-	34.7	Y	N	N		
R2761	10	56.5	B2-10	-	0	0	0	36.8	29.5	0	0	37.6	37.6	70	N	-	-	34.6	Y	N	N		
R2761	11	59.5	B2-10	-	0	0	0	36.8	29.6	0	0	37.6	37.6	70	N	-	-	34.6	Y	N	N		
R2761	12	62.5	B2-10	-	0	0	0	37.1	30.4	0	0	37.9	37.9	70	N	-	-	34.9	Y	N	N		
R2761	13	65.5	B2-10	-	0	0	0	37.8	31.9	0	0	38.8	38.8	70	N	-	-	35.8	Y	N	N		
R2761	14	68.5	B2-10	-	0	0	0	39.9	34	0	0	40.9	40.9	70	N	-	-	37.9	Y	N	N		
R2761	15	71.5	B2-10	-	0	0	0	50.8	36.5	0	0	50.9	50.9	70	N	-	-	47.9	Y	N	N		
R2761	16	74.5	B2-10	-	0	0	0	54.2	39.3	0	0	54.3	54.3	70	N	-	-	51.3	Y	N	N		
R2761	17	77.5	B2-10	-	0	0	0	54.3	42.9	0	0	54.6	54.6	70	N	-	-	51.6	Y	N	N		
R2761	18	80.5	B2-10	-	0	0	0	54.4	47.4	0	0	55.2	55.2	70	N	-	-	52.2	Y	N	N		
R2761	19	83.5	B2-10	-	0	0	0	54.5	50.2	0	0	55.9	55.9	70	N	-	-	52.9	Y	N	N		
R2761	20	86.5	B2-10	-	0	0	0	54.6	51.7	0	0	56.4	56.4	70	N	-	-	53.4	Y	N	N		
R2762	1	29.5	B2-10	-	36.5	0	0	56	26.7	65.7	0	66.1	66.1	70	N	-	-	29.6	Y	N	N		
R2762	2	32.5	B2-10	-	37.3	0	0	59.7	27.2	67.5	0	68.2	68.2	70	N	-	-	29.2	Y	N	N		
R2762	3	35.5	B2-10	-	37.9	0	0	62.4	28.3	68.2	0	69.2	69.2	70	N	-	-	31.3	Y	N	N		
R2762	4	38.5	B2-10	-	38.3	0	0	63.1	30.1	68.6	0	69.7	69.7	70	N	-	-	31.4	Y	N	N		
R2762	5	41.5	B2-10	-	38.9	0	0	63.3	31.7	69.1	0	70.1	70.1	70	N	-	-	31.2	Y	N	N		
R2762	6	44.5	B2-10	-	39.5	0	0	63.2	32.1	69.6	0	70.5	70.5	70	Y	-	-	31.0	Y	N	Y		
R2762	7	47.5	B2-10	-	40.1	0	0	63.1	32.2	69.7	0	70.6	70.6	70	Y	-	-	30.5	Y	N	Y		
R2762	8	50.5	B2-10	-	40.7	0	0	63	32.2	69.9	0	70.7	70.8	70	Y	-	-	30.1	Y	N	Y		
R2762	9	53.5	B2-10	-	41.5	0	0	62.9	32.3	70.2	0	70.9	70.9	70	Y	-	-	29.4	Y	N	Y		
R2762	10	56.5	B2-10	-	42.3	0	0	62.8	32.2	70.3	0	71	71.0	70	Y	-	-	28.7	Y	N	Y		
R2762	11	59.5	B2-10	-	43.4	0	0	62.8	32.1	70.6	0	71.3	71.3	70	Y	-	-	27.9	Y	N	Y		
R2762	12	62.5	B2-10	-	44.9	0	0	62.7	32.1	71.1	0	71.7	71.7	70	Y	-	-	26.8	Y	N	Y		
R2762	13	65.5	B2-10	-	46.6	0	0	62.7	32.1	71.4	0	71.9	72.0	70	Y	-	-	25.4	Y	N	Y		
R2762	14	68.5	B2-10	-	48.6	0	0	62.7	32.2	71.5	0	72.1	72.1	70	Y	-	-	24.5	Y	N	Y		
R2762	15	71.5	B2-10	-	47.1	0	0	62.6	32.3	71.7	0	72.2	72.2	70	Y	-	-	24.1	Y	N	Y		
R2762	16	74.5	B2-10	-	48.6	0	0	62.6	32.6	71.9	0	72.4	72.4	70	Y	-	-	23.8	Y	N	Y		
R2762	17	77.5	B2-10	-	48.8	0	0	62.6	33	72	0	72.5	72.5	70	Y	-	-	23.7	Y	N	Y		
R2762	18	80.5	B2-10	-	48.8	0	0	62.6	33.3	72.2	0	72.7	72.7	70	Y	-	-	23.9	Y	N	Y		
R2762	19	83.5	B2-10	-	48.9	0	0	62.6	33.8	72.3	0	72.8	72.8	70	Y	-	-	23.9	Y	N	Y		
R2762	20	86.5	B2-10	-	49.1	0	0	62.5	34.4	72.5	0	72.9	72.9	70	Y	-	-	23.8	Y	N	Y		
R2763	1	29.5	B2-10	-	49.8	0	25	57	0	72.6	0	72.8	72.8	70	Y	-	-	23.0	Y	N	Y		
R2763	2	32.5	B2-10	-	51.4	0	26	58.4	0	74.1	0	74.2	74.3	70	Y	-	-	22.9	Y	N	Y		
R2763	3	35.5	B2-10	-	52.1	0	27	59.6	0	74.8	0	75	75.0	70	Y	-	-	22.9	Y	N	Y		
R2763	4	38.5	B2-10	-	53.1	0	28.9	60.4	0	75.1	0	75.3	75.3	70	Y	-	-	22.2	Y	N	Y		
R2763	5	41.5	B2-10	-	53.6	0	31	61.1	0	75.3	0	75.5	75.5	70	Y	-	-	21.9	Y	N	Y		
R2763	6	44.5	B2-10	-	54.1	0	32.6	61.4	0	75.4	0	75.6	75.6	70	Y	-	-	21.5	Y	N	Y		
R2763	7	47.5	B2-10	-	54.4	0	33.8	61.5	0	75.5	0	75.7	75.7	70	Y	-	-	21.3	Y	N	Y		
R2763	8	50.5	B2-10	-	54.6	0	35.7	61.6	0	75.6	0	75.8	75.8	70	Y	-	-	21.2	Y	N	Y		
R2763	9	53.5	B2-10	-	54.9	0	39.6	61.5	0	75.8	0	75.9	76.0	70	Y	-	-	21.1	Y	N	Y		
R2763	10	56.5	B2-10	-	55	0	41.8	61.5	0	75.9	0	76.1	76.1	70	Y	-	-	21.1	Y	N	Y		
R2763	11	59.5	B2-10	-	55.3	0	42.2	61.6	0	76	0	76.1	76.1	70	Y	-	-	20.8	Y	N	Y		
R2763	12	62.5	B2-10	-	55.5	0	42.3	61.6	0	76.1	0	76.2	76.2	70	Y	-	-	20.7	Y	N	Y		
R2763	13	65.5	B2-10	-	55.7	0	42.4	61.7	0	76.1	0	76.3	76.3	70	Y	-	-	20.6	Y	N	Y		
R2763	14	68.5	B2-10	-	55.8	0	42.4	61.7	0	76.1	0	76.3	76.3	70	Y	-	-	20.5	Y	N	Y		
R2763	15	71.5	B2-10	-	55.9	0	42.7	61.7	0	76.2	0	76.4	76.4	70	Y	-	-	20.5	Y	N	Y		
R2763	16	74.5	B2-10	-	56	0	42.9	61.7	0	76.3	0	76.5	76.5	70	Y	-	-	20.5	Y	N	Y		
R2763	17	77.5	B2-10	-	56.1	0	43.3	61.7	0	76.4	0	76.5	76.6	70	Y	-	-	20.5	Y	N	Y		
R2763	18	80.5	B2-10	-	56.2	0	43.7	61.6	0	76.4	0	76.6	76.6	70	Y	-	-	20.4	Y	N	Y		
R2763	19	83.5	B2-10	-	56.2	0	44	61.7	0	76.5	0	76.6	76.7	70	Y	-	-	20.5	Y	N	Y		
R2763	20	86.5	B2-10	-	56.3	0	44.3	61.7	0	76.5	0	76.7	76.7	70	Y	-	-	20.4	Y	N	Y		
R2764	1	29.5	B2-10	-	48.7	0	20	59.2	0	74.4	0	74.6	74.6	70	Y	-	-	25.9	Y	N	Y		
R2764	2	32.5	B2-10	-	49.8	0	21.5	59.4	0	74.8	0	74.9	75.0	70	Y	-	-	25.2	Y	N	Y		
R2764	3	35.5	B2-10	-	50.6	0	23.3	59.7	0	75	0	75.2	75.2	70	Y	-	-	24.6	Y	N	Y		
R2764	4	38.5	B2-10	-	51.2	0	25.1	59.9	0	75.2	0	75.4	75.4	70	Y	-	-	24.2	Y	N	Y		
R2764	5	41.5	B2-10	-	51.6	0	27.2	60															

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4.5)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>						Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)			New Road > Criteria B > Criteria					
					Existing Road in 2044 dB(A) <sup>(1)</sup>	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX								TR	New Roads in 2044 dB(A) <sup>(1)</sup> [B]			
R2781	5	22	D1-7	-	37.5	0	57.7	0	65.4	0	0	66.1	66.1	70	N	-	-	28.6	Y	N	N	N
R2781	6	25	D1-7	-	37.6	0	57.9	0	65.1	0	0	65.9	65.9	70	N	-	-	28.3	Y	N	N	N
R2781	7	28	D1-7	-	37.6	0	58.2	0	64.8	0	0	65.6	65.6	70	N	-	-	28.0	Y	N	N	N
R2781	8	31	D1-7	-	37.6	0	58.4	0	64.5	0	0	65.4	65.5	70	N	-	-	27.9	Y	N	N	N
R2781	9	34	D1-7	-	37.6	0	58.6	0	64.2	0	0	65.3	65.3	70	N	-	-	27.7	Y	N	N	N
R2781	10	37	D1-7	-	37.6	0	58.7	0	63.9	0	0	65.1	65.1	70	N	-	-	27.5	Y	N	N	N
R2781	11	40	D1-7	-	37.6	0	58.9	0	63.6	0	0	64.9	64.9	70	N	-	-	27.3	Y	N	N	N
R2781	12	43	D1-7	-	37.6	0	59	0	63.4	0	0	64.8	64.8	70	N	-	-	27.2	Y	N	N	N
R2781	13	46	D1-7	-	37.6	0	59.2	0	63.1	0	0	64.6	64.6	70	N	-	-	27.0	Y	N	N	N
R2781	14	49	D1-7	-	37.5	0	59.3	0	62.9	0	0	64.4	64.5	70	N	-	-	27.0	Y	N	N	N
R2781	15	52	D1-7	-	37.5	0	59.4	0	62.7	0	0	64.3	64.4	70	N	-	-	26.9	Y	N	N	N
R2781	16	55	D1-7	-	37.5	0	59.5	0	62.4	0	0	64.2	64.2	70	N	-	-	26.7	Y	N	N	N
R2781	17	58	D1-7	-	37.4	0	59.6	0	62.2	0	0	64.1	64.1	70	N	-	-	26.7	Y	N	N	N
R2781	18	61	D1-7	-	37.4	0	59.7	0	62	0	0	64	64.0	70	N	-	-	26.6	Y	N	N	N
R2781	19	64	D1-7	-	37.3	0	59.9	0	61.8	0	0	64	64.0	70	N	-	-	26.7	Y	N	N	N
R2781	20	67	D1-7	-	37.3	0	60.1	0	61.6	0	0	63.9	63.9	70	N	-	-	26.6	Y	N	N	N
R2781	21	70	D1-7	-	37.3	0	60.3	0	61.5	0	0	63.9	63.9	70	N	-	-	26.6	Y	N	N	N
R2781	22	73	D1-7	-	37.3	0	60.6	0	61.3	0	0	63.9	63.9	70	N	-	-	26.6	Y	N	N	N
R2781	23	76	D1-7	-	37.3	0	60.9	0	61.1	0	0	64	64.0	70	N	-	-	26.7	Y	N	N	N
R2781	24	79	D1-7	-	37.2	0	61.4	0	61	0	0	64.2	64.2	70	N	-	-	27.0	Y	N	N	N
R2781	25	82	D1-7	-	37.2	0	61.8	0	60.8	0	0	64.4	64.4	70	N	-	-	27.2	Y	N	N	N
R2782	1	10	D1-7	-	39.7	0	64.7	55.6	63.7	0	0	67.5	67.5	70	N	-	-	27.8	Y	N	N	N
R2782	2	13	D1-7	-	39.7	0	64.7	55.6	63.6	0	0	67.5	67.5	70	N	-	-	27.8	Y	N	N	N
R2782	3	16	D1-7	-	39.7	0	64.7	55.5	63.6	0	0	67.4	67.4	70	N	-	-	27.7	Y	N	N	N
R2782	4	19	D1-7	-	39.7	0	64.6	55.3	63.5	0	0	67.4	67.4	70	N	-	-	27.7	Y	N	N	N
R2782	5	22	D1-7	-	39.7	0	64.6	55.2	63.3	0	0	67.3	67.3	70	N	-	-	27.6	Y	N	N	N
R2782	6	25	D1-7	-	39.7	0	64.5	55	63.3	0	0	67.2	67.2	70	N	-	-	27.5	Y	N	N	N
R2782	7	28	D1-7	-	39.7	0	64.5	54.8	63.1	0	0	67.1	67.1	70	N	-	-	27.4	Y	N	N	N
R2782	8	31	D1-7	-	39.7	0	64.4	54.6	63	0	0	67	67.0	70	N	-	-	27.3	Y	N	N	N
R2782	9	34	D1-7	-	39.7	0	64.4	54.4	62.8	0	0	66.9	66.9	70	N	-	-	27.2	Y	N	N	N
R2782	10	37	D1-7	-	39.7	0	64.3	54.2	62.7	0	0	66.9	66.9	70	N	-	-	27.2	Y	N	N	N
R2782	11	40	D1-7	-	39.6	0	64.5	54.1	62.5	0	0	66.8	66.8	70	N	-	-	27.2	Y	N	N	N
R2782	12	43	D1-7	-	39.6	0	64.6	53.9	62.3	0	0	66.8	66.8	70	N	-	-	27.2	Y	N	N	N
R2782	13	46	D1-7	-	39.7	0	64.7	53.7	62.1	0	0	66.8	66.8	70	N	-	-	27.1	Y	N	N	N
R2782	14	49	D1-7	-	39.7	0	64.8	53.5	62	0	0	66.8	66.8	70	N	-	-	27.1	Y	N	N	N
R2782	15	52	D1-7	-	39.7	0	64.8	53.4	61.8	0	0	66.8	66.8	70	N	-	-	27.1	Y	N	N	N
R2782	16	55	D1-7	-	40	0	65.5	53.2	61.7	0	0	66.8	66.8	70	N	-	-	26.8	Y	N	N	N
R2782	17	58	D1-7	-	40.6	0	65.3	53.1	61.5	0	0	67	67.0	70	N	-	-	26.4	Y	N	N	N
R2782	18	61	D1-7	-	41.2	0	65.6	52.9	61.4	0	0	67.2	67.2	70	N	-	-	26.0	Y	N	N	N
R2782	19	64	D1-7	-	41.3	0	66	52.8	61.2	0	0	67.4	67.4	70	N	-	-	26.1	Y	N	N	N
R2782	20	67	D1-7	-	41.4	0	66.3	52.6	61	0	0	67.5	67.6	70	N	-	-	26.2	Y	N	N	N
R2782	21	70	D1-7	-	41.3	0	66.6	52.5	60.9	0	0	67.7	67.7	70	N	-	-	26.4	Y	N	N	N
R2782	22	73	D1-7	-	41.3	0	66.7	52.3	60.7	0	0	67.8	67.8	70	N	-	-	26.5	Y	N	N	N
R2782	23	76	D1-7	-	41.3	0	66.8	52.2	60.6	0	0	67.9	67.9	70	N	-	-	26.6	Y	N	N	N
R2782	24	79	D1-7	-	41.3	0	66.9	52.1	60.4	0	0	67.9	67.9	70	N	-	-	26.6	Y	N	N	N
R2782	25	82	D1-7	-	41.2	0	66.9	52	60.3	0	0	67.9	67.9	70	N	-	-	26.7	Y	N	N	N
R2821	1	19	D1-11	-	31.1	0	59.5	62	70	0	0	71	71.0	70	Y	-	-	39.9	Y	Y	Y	Y
R2821	2	22	D1-11	-	31.8	0	59.5	62	69.9	0	0	70.9	70.9	70	Y	-	-	39.1	Y	Y	Y	Y
R2821	3	25	D1-11	-	32.5	0	59.5	61.9	69.8	0	0	70.8	70.8	70	Y	-	-	38.3	Y	Y	Y	Y
R2821	4	28	D1-11	-	33.2	0	59.4	61.9	69.7	0	0	70.7	70.7	70	Y	-	-	37.5	Y	Y	Y	Y
R2821	5	31	D1-11	-	33.9	0	59.4	61.8	69.5	0	0	70.5	70.5	70	Y	-	-	36.6	Y	Y	Y	Y
R2821	6	34	D1-11	-	34.7	0	59.4	61.7	69.3	0	0	70.3	70.3	70	N	-	-	35.6	Y	N	N	N
R2821	7	37	D1-11	-	35.6	0	59.4	61.7	69	0	0	70.1	70.1	70	N	-	-	34.5	Y	N	N	N
R2821	8	40	D1-11	-	36.5	0	59.4	61.6	68.8	0	0	70	70.0	70	N	-	-	33.5	Y	N	N	N
R2821	9	43	D1-11	-	37.6	0	59.4	61.5	68.6	0	0	69.8	69.8	70	N	-	-	32.2	Y	N	N	N
R2821	10	46	D1-11	-	38.7	0	59.3	61.5	68.3	0	0	69.6	69.6	70	N	-	-	30.9	Y	N	N	N
R2821	11	49	D1-11	-	39.9	0	59.3	61.4	68.1	0	0	69.4	69.4	70	N	-	-	29.5	Y	N	N	N
R2821	12	52	D1-11	-	40.7	0	59.3	61.3	67.9	0	0	69.2	69.2	70	N	-	-	28.5	Y	N	N	N
R2821	13	55	D1-11	-	41.5	0	59.3	61.2	67.7	0	0	69	69.0	70	N	-	-	27.5	Y	N	N	N
R2821	14	58	D1-11	-	42.3	0	59.2	61.1	67.5	0	0	68.9	68.9	70	N	-	-	26.6	Y	N	N	N
R2821	15	61	D1-11	-	43	0	59.2	61	67.3	0	0	68.7	68.7	70	N	-	-	25.7	Y	N	N	N
R2821	16	64	D1-11	-	43.5	0	59.1	61	67	0	0	68.5	68.5	70	N	-	-	25.0	Y	N	N	N
R2821	17	67	D1-11	-	43.9	0	59.1	60.9	66.9	0	0	68.4	68.4	70	N	-	-	24.5	Y	N	N	N
R2821	18	70	D1-11	-	44.4	0	59.1	60.8	66.7	0	0	68.2	68.2	70	N	-	-	23.8	Y	N	N	N
R2821	19	73	D1-11	-	44.8	0	59	60.7	66.5	0	0	68.1	68.1	70	Y	-	-	23.3	Y	N	N	N
R2821	20	76	D1-11	-	45.4	0	59	60.7	66.3	0	0	68	68.0	70	N	-	-	22.6	Y	N	N	N
R2822	1	19	D1-11	-	19.2	0	65.1	65.9	71.2	0	0	73.1	73.1	70	Y	-	-	53.8	Y	Y	Y	Y
R2822	2	22	D1-11	-	19.6	0	65.1	65.8	70.9	0	0	72.9	72.9	70	Y	-	-	53.3	Y	Y	Y	Y
R2822	3	25	D1-11	-	20	0	65.1	65.7	70.7	0	0	72.7	72.7	70	Y	-	-	52.7	Y	Y	Y	Y
R2822	4	28	D1-11	-	20.5	0	65.1	65.6	70.4	0	0	72.5	72.5	70	Y	-	-	52.0	Y	Y	Y	Y
R2822	5	31	D1-11	-	21	0	65.1	65.4	70	0	0	72.2	72.2	70	Y	-	-	51.2	Y	Y	Y	Y
R2822	6	34	D1-11	-	21.6	0	65.1	65.3	69.7	0	0	72	72.0	70	Y	-	-	50.5	Y	Y	Y	Y
R2822	7	37	D1-11	-	21.9	0	65															

Assessment Point				Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)
ID	Floor	Floor Level (mPD)	D1-11		Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A) <sup>(1)</sup>	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)			New Road > Criteria B > Criteria	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
								PD	DD	LD	EX	TR										New Roads in 2044 dB(A) <sup>(3)</sup> [B]	
R2823	8	40	D1-11	-	0	0	65.1	70.6	64.5	0	0	72.4	72.4	70	Y	-	-	69.4	Y	Y	Y	Y	
R2823	9	43	D1-11	-	0	0	65	70.3	64.4	0	0	72.2	72.2	70	Y	-	-	69.2	Y	Y	Y	Y	
R2823	10	46	D1-11	-	0	0	64.9	70.2	64.2	0	0	72.1	72.1	70	Y	-	-	69.1	Y	Y	Y	Y	
R2823	11	49	D1-11	-	0	0	64.7	70	64	0	0	71.9	71.9	70	Y	-	-	68.9	Y	Y	Y	Y	
R2823	12	52	D1-11	-	0	0	64.6	69.8	63.8	0	0	71.7	71.7	70	Y	-	-	68.7	Y	Y	Y	Y	
R2823	13	55	D1-11	-	0	0	64.5	69.6	63.7	0	0	71.5	71.5	70	Y	-	-	68.5	Y	Y	Y	Y	
R2823	14	58	D1-11	-	0	0	64.4	69.4	63.5	0	0	71.4	71.4	70	Y	-	-	68.4	Y	Y	Y	Y	
R2823	15	61	D1-11	-	0	0	64.2	69.2	63.3	0	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	Y	Y	
R2823	16	64	D1-11	-	0	0	64.1	69.1	63.1	0	0	71	71	70	Y	-	-	68.0	Y	Y	Y	Y	
R2823	17	67	D1-11	-	0	0	64	68.9	63	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	Y	Y	
R2823	18	70	D1-11	-	0	0	63.9	68.7	62.8	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	Y	Y	
R2823	19	73	D1-11	-	0	0	63.8	68.6	62.7	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	Y	Y	
R2823	20	76	D1-11	-	0	0	63.7	68.4	62.5	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N	N	
R2824	1	19	D1-11	-	0	0	0	72.4	39.6	0	0	72.4	72.4	70	Y	-	-	69.4	Y	Y	Y	Y	
R2824	2	22	D1-11	-	0	0	0	72.3	39.6	0	0	72.3	72.3	70	Y	-	-	69.3	Y	Y	Y	Y	
R2824	3	25	D1-11	-	0	0	0	72.2	39.6	0	0	72.2	72.2	70	Y	-	-	69.2	Y	Y	Y	Y	
R2824	4	28	D1-11	-	0	0	0	72	39.6	0	0	72	72	70	Y	-	-	69.0	Y	Y	Y	Y	
R2824	5	31	D1-11	-	0	0	0	71.8	39.6	0	0	71.8	71.8	70	Y	-	-	68.8	Y	Y	Y	Y	
R2824	6	34	D1-11	-	0	0	0	71.6	39.6	0	0	71.6	71.6	70	Y	-	-	68.6	Y	Y	Y	Y	
R2824	7	37	D1-11	-	0	0	0	71.4	39.6	0	0	71.4	71.4	70	Y	-	-	68.4	Y	Y	Y	Y	
R2824	8	40	D1-11	-	0	0	0	71.2	39.6	0	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	Y	Y	
R2824	9	43	D1-11	-	0	0	0	71	39.6	0	0	71	71	70	Y	-	-	68.0	Y	Y	Y	Y	
R2824	10	46	D1-11	-	0	0	0	70.8	39.6	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y	Y	
R2824	11	49	D1-11	-	0	0	0	70.7	39.6	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	Y	Y	
R2824	12	52	D1-11	-	0	0	0	70.5	39.6	0	0	70.5	70.5	70	Y	-	-	67.5	Y	Y	Y	Y	
R2824	13	55	D1-11	-	0	0	0	70.3	39.6	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N	N	
R2824	14	58	D1-11	-	0	0	0	70.1	39.6	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	N	
R2824	15	61	D1-11	-	0	0	0	69.9	39.6	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	N	
R2824	16	64	D1-11	-	0	0	0	69.8	39.6	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N	
R2824	17	67	D1-11	-	0	0	0	69.6	39.6	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N	
R2824	18	70	D1-11	-	0	0	0	69.5	39.6	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N	
R2824	19	73	D1-11	-	0	0	0	69.3	39.6	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N	N	
R2824	20	76	D1-11	-	0	0	0	69.1	39.6	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N	
R2825	1	21	D1-11	-	19.1	0	51.9	66	51.9	0	0	66.3	66.3	70	N	-	-	47.1	Y	N	N	N	
R2825	2	24	D1-11	-	19.5	0	51.9	66.2	52.2	0	0	66.5	66.5	70	N	-	-	47.0	Y	N	N	N	
R2825	3	27	D1-11	-	20	0	51.8	66.4	52.5	0	0	66.7	66.7	70	N	-	-	46.7	Y	N	N	N	
R2825	4	30	D1-11	-	20.6	0	51.8	66.4	52.7	0	0	66.7	66.7	70	N	-	-	46.7	Y	N	N	N	
R2825	5	33	D1-11	-	21.2	0	51.8	66.4	52.8	0	0	66.7	66.7	70	N	-	-	46.5	Y	N	N	N	
R2825	6	36	D1-11	-	21.8	0	51.8	66.3	52.9	0	0	66.7	66.7	70	N	-	-	44.9	Y	N	N	N	
R2825	7	39	D1-11	-	22.4	0	51.8	66.2	53.1	0	0	66.6	66.6	70	N	-	-	44.2	Y	N	N	N	
R2825	8	42	D1-11	-	22.9	0	51.8	66.1	53.1	0	0	66.5	66.5	70	N	-	-	43.6	Y	N	N	N	
R2825	9	45	D1-11	-	23.6	0	51.8	66	53.2	0	0	66.4	66.4	70	N	-	-	42.8	Y	N	N	N	
R2825	10	48	D1-11	-	24.2	0	51.7	65.9	53.2	0	0	66.3	66.3	70	N	-	-	42.1	Y	N	N	N	
R2825	11	51	D1-11	-	24.8	0	51.7	65.8	53.2	0	0	66.1	66.1	70	N	-	-	41.3	Y	N	N	N	
R2825	12	54	D1-11	-	25.4	0	51.7	65.6	53.2	0	0	66	66	70	N	-	-	40.6	Y	N	N	N	
R2825	13	57	D1-11	-	26.1	0	51.7	65.5	53.2	0	0	65.9	65.9	70	N	-	-	39.8	Y	N	N	N	
R2825	14	60	D1-11	-	26.8	0	51.6	65.4	53.2	0	0	65.8	65.8	70	N	-	-	39.0	Y	N	N	N	
R2825	15	63	D1-11	-	27.5	0	51.6	65.3	53.2	0	0	65.7	65.7	70	N	-	-	38.2	Y	N	N	N	
R2825	16	66	D1-11	-	28.2	0	51.6	65.1	53.1	0	0	65.6	65.6	70	N	-	-	37.4	Y	N	N	N	
R2825	17	69	D1-11	-	29	0	51.6	65	53.1	0	0	65.5	65.5	70	N	-	-	36.5	Y	N	N	N	
R2825	18	72	D1-11	-	29.7	0	51.5	64.9	53.1	0	0	65.4	65.4	70	N	-	-	35.7	Y	N	N	N	
R2825	19	75	D1-11	-	30.4	0	51.5	64.8	53.1	0	0	65.3	65.3	70	N	-	-	34.6	Y	N	N	N	
R2825	20	78	D1-11	-	31.7	0	51.5	64.7	53.1	0	0	65.2	65.2	70	N	-	-	33.5	Y	N	N	N	
R2826	1	21	D1-11	-	0	0	0	70.6	31.7	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	Y	Y	
R2826	2	24	D1-11	-	0	0	0	70.9	31.7	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	Y	Y	
R2826	3	27	D1-11	-	0	0	0	70.9	31.7	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	Y	Y	
R2826	4	30	D1-11	-	0	0	0	70.8	31.7	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y	Y	
R2826	5	33	D1-11	-	0	0	0	70.6	31.7	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	Y	Y	
R2826	6	36	D1-11	-	0	0	0	70.4	31.7	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N	N	
R2826	7	39	D1-11	-	0	0	0	70.2	31.8	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N	N	
R2826	8	42	D1-11	-	0	0	0	70	31.8	0	0	70	70.0	70	N	-	-	67.0	Y	N	N	N	
R2826	9	45	D1-11	-	0	0	0	69.8	31.8	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N	
R2826	10	48	D1-11	-	0	0	0	69.6	31.8	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N	
R2826	11	51	D1-11	-	0	0	0	69.4	31.8	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N	
R2826	12	54	D1-11	-	0	0	0	69.2	31.8	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	N	
R2826	13	57	D1-11	-	0	0	0	69	31.8	0	0	69	69.0	70	N	-	-	66.0	Y	N	N	N	
R2826	14	60	D1-11	-	0	0	0	68.8	31.8	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	N	
R2826	15	63	D1-11	-	0	0	0	68.7	31.9	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N	
R2826	16	66	D1-11	-	0	0	0	68.5	31.9	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N	
R2826	17	69	D1-11	-	0	0	0	68.3	32	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N	
R2826	18	72	D1-11	-	0	0	0	68.1	32	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N	
R2826	19	75	D1-11	-	0	0	0	68	32.1	0	0	68	68.0	70	N	-	-	65.0	Y	N	N	N	
R2826	20	78	D1-11	-	0	0																	

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road Contribution ≥ 1dB(A)	New Road > Criteria B > Criteria								
						PD	DD	LD	EX	TR								New Roads in 2044 dB(A) <sup>(3)</sup> [B]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution ≥ 1dB(A)		
R2828	1	21	D1-11	-	21.4	0	0	65.2	22.3	0	0	65.2	65.2	70	N	-	-	43.8	Y	N	N	N	
R2828	2	24	D1-11	-	21.4	0	0	65.7	23.1	0	0	65.7	65.7	70	N	-	-	44.3	Y	N	N	N	
R2828	3	27	D1-11	-	21.4	0	0	65.8	23.9	0	0	65.8	65.8	70	N	-	-	44.4	Y	N	N	N	
R2828	4	30	D1-11	-	21.4	0	0	65.8	24.4	0	0	65.8	65.8	70	N	-	-	44.4	Y	N	N	N	
R2828	5	33	D1-11	-	21.4	0	0	65.8	25.2	0	0	65.8	65.8	70	N	-	-	44.4	Y	N	N	N	
R2828	6	36	D1-11	-	21.4	0	0	65.7	25.8	0	0	65.7	65.7	70	N	-	-	44.3	Y	N	N	N	
R2828	7	39	D1-11	-	21.4	0	0	65.5	26.6	0	0	65.5	65.5	70	N	-	-	44.1	Y	N	N	N	
R2828	8	42	D1-11	-	21.4	0	0	65.3	27.3	0	0	65.3	65.3	70	N	-	-	43.9	Y	N	N	N	
R2828	9	45	D1-11	-	21.4	0	0	65.1	28.1	0	0	65.1	65.1	70	N	-	-	43.7	Y	N	N	N	
R2828	10	48	D1-11	-	21.4	0	0	65	28.9	0	0	65	65.0	70	N	-	-	43.6	Y	N	N	N	
R2828	11	51	D1-11	-	21.4	0	0	64.8	29.7	0	0	64.8	64.8	70	N	-	-	43.4	Y	N	N	N	
R2828	12	54	D1-11	-	21.4	0	0	64.6	31.1	0	0	64.6	64.6	70	N	-	-	43.2	Y	N	N	N	
R2828	13	57	D1-11	-	21.4	0	0	64.4	31.5	0	0	64.5	64.5	70	N	-	-	43.1	Y	N	N	N	
R2828	14	60	D1-11	-	21.4	0	0	64.3	32.6	0	0	64.3	64.3	70	N	-	-	42.9	Y	N	N	N	
R2828	15	63	D1-11	-	21.6	0	0	64.1	33.5	0	0	64.1	64.1	70	N	-	-	42.5	Y	N	N	N	
R2828	16	66	D1-11	-	21.9	0	0	63.9	34.2	0	0	63.9	63.9	70	N	-	-	42.0	Y	N	N	N	
R2828	17	69	D1-11	-	22.3	0	0	63.7	34.7	0	0	63.7	63.7	70	N	-	-	41.4	Y	N	N	N	
R2828	18	72	D1-11	-	22.9	0	0	63.6	35	0	0	63.6	63.6	70	N	-	-	40.7	Y	N	N	N	
R2828	19	75	D1-11	-	23.6	0	0	63.4	35.3	0	0	63.4	63.4	70	N	-	-	39.8	Y	N	N	N	
R2828	20	78	D1-11	-	24.4	0	0	63.3	35.5	0	0	63.3	63.3	70	N	-	-	38.9	Y	N	N	N	
R2829	1	21	D1-11	-	0	0	0	28.8	70.4	45.6	0	0	70.5	70.5	70	Y	-	-	67.5	Y	Y	Y	Y
R2829	2	24	D1-11	-	0	0	0	28.7	71	46.1	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	Y	Y
R2829	3	27	D1-11	-	0	0	0	28.7	71	46.5	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	Y	Y
R2829	4	30	D1-11	-	0	0	0	28.7	70.8	46.9	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y	Y
R2829	5	33	D1-11	-	0	0	0	28.7	70.5	47.2	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	Y	Y
R2829	6	36	D1-11	-	0	0	0	28.7	70.3	47.4	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N	N
R2829	7	39	D1-11	-	0	0	0	28.7	70	47.6	0	0	70	70.0	70	N	-	-	67.0	Y	N	N	N
R2829	8	42	D1-11	-	0	0	0	28.7	69.7	47.8	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	N
R2829	9	45	D1-11	-	0	0	0	28.7	69.4	47.9	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N
R2829	10	48	D1-11	-	0	0	0	28.7	69.1	48	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N
R2829	11	51	D1-11	-	0	0	0	28.6	68.8	48.1	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	N
R2829	12	54	D1-11	-	0	0	0	28.6	68.5	48.2	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N
R2829	13	57	D1-11	-	0	0	0	28.6	68.3	48.2	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N
R2829	14	60	D1-11	-	0	0	0	28.7	68	48.3	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N
R2829	15	63	D1-11	-	0	0	0	28.8	67.8	48.3	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
R2829	16	66	D1-11	-	0	0	0	29.1	67.6	48.3	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
R2829	17	69	D1-11	-	0	0	0	29.3	67.4	48.4	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
R2829	18	72	D1-11	-	0	0	0	29.5	67.2	48.4	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N
R2829	19	75	D1-11	-	0	0	0	29.8	67	48.4	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
R2829	20	78	D1-11	-	0	0	0	30.1	66.8	48.4	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
R2830	1	21	D1-11	-	0	0	0	68.2	23.8	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N	
R2830	2	24	D1-11	-	0	0	0	68.9	24.3	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N	
R2830	3	27	D1-11	-	0	0	0	69	24.9	0	0	69	69.0	70	N	-	-	66.0	Y	N	N	N	
R2830	4	30	D1-11	-	0	0	0	68.9	25.6	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N	
R2830	5	33	D1-11	-	0	0	0	68.6	26.1	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N	
R2830	6	36	D1-11	-	0	0	0	68.3	26.9	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N	
R2830	7	39	D1-11	-	0	0	0	68.1	27.6	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N	
R2830	8	42	D1-11	-	0	0	0	67.8	28.4	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N	
R2830	9	45	D1-11	-	0	0	0	67.5	29.2	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N	
R2830	10	48	D1-11	-	0	0	0	67.2	30.2	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N	
R2830	11	51	D1-11	-	0	0	0	67	31.9	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N	
R2830	12	54	D1-11	-	0	0	0	66.7	32.2	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N	
R2830	13	57	D1-11	-	0	0	0	66.4	33.2	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N	
R2830	14	60	D1-11	-	0	0	0	66.2	34.2	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N	
R2830	15	63	D1-11	-	0	0	0	66	34.9	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N	
R2830	16	66	D1-11	-	0	0	0	65.7	35.4	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N	
R2830	17	69	D1-11	-	0	0	0	65.5	35.8	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N	
R2830	18	72	D1-11	-	0	0	0	65.3	36.1	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N	
R2830	19	75	D1-11	-	0	0	0	65.1	36.2	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N	
R2830	20	78	D1-11	-	0	0	0	65	36.4	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N	
R2841	1	17	F1-3	-	0	0	0	43.1	60.3	0	0	60.4	60.4	70	N	-	-	57.4	Y	N	N	N	
R2841	2	21	F1-3	-	0	0	0	45.6	60.4	0	0	60.5	60.5	70	N	-	-	57.5	Y	N	N	N	
R2841	3	25	F1-3	-	0	0	0	49.1	60.4	0	0	60.7	60.7	70	N	-	-	57.7	Y	N	N	N	
R2841	4	29	F1-3	-	0	0	0	52.3	60.5	0	0	61.1	61.1	70	N	-	-	58.1	Y	N	N	N	
R2841	5	33	F1-3	-	0	0	0	54.7	60.8	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	N	
R2841	6	37	F1-3	-	0	0	0	56.9	61.5	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N	N	
R2841	7	41	F1-3	-	0	0	0	57.8	61.9	0	0	63.3	63.3	70	N	-	-	60.3	Y	N	N	N	
R2841	8	45	F1-3	-	0	0	0	58.3	62.2	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	N	
R2841	9	49	F1-3	-	0	0	0	58.7	62.5	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N	
R2841	10	53	F1-3	-	0	0	0	58.9	62.6	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N	
R2842	1	17	F1-3	-	0	0	0	32.3	51.3	61.5	0	0	61.9	61.9	70	N	-	-	29.6	Y	N	N	N
R2842	2	21	F1-3	-	0	0	0	33.3	51.9	61.6	0	0	62	62.0	70	N	-	-	28.7	Y	N	N	N
R2842	3	25	F1-3	-	0	0	0	35	52.1	61.6	0	0	62.1	62.1	70	N	-	-	27.6	Y			

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation		Mitigation Measures Required (Y/N)	
				Overall Noise Level in 2044 dB(A)	New Roads <sup>[2]</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)		New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)			New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>[2]</sup> [B]	[C]	[D]	D ≥ 1dB(A)	[E]	≥ 1dB(A)	B > Criteria	[F]				
R2844	4	30	F1-3	-	0	0	0	60.6	68.2	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	
R2844	5	34	F1-3	-	0	0	0	60.9	67.9	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	
R2844	6	38	F1-3	-	0	0	0	61	67.6	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	
R2844	7	42	F1-3	-	0	0	0	61.1	67.2	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	
R2844	8	46	F1-3	-	0	0	0	61.1	66.8	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	
R2844	9	50	F1-3	-	0	0	0	61.1	66.5	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	
R2844	10	54	F1-3	-	0	0	0	61	66.2	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	
R2845	1	18	F1-3	-	0	0	0	66.3	58.1	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
R2845	2	22	F1-3	-	0	0	0	66.3	58.1	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
R2845	3	26	F1-3	-	0	0	0	66.3	58.1	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
R2845	4	30	F1-3	-	0	0	0	66.2	58.1	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	
R2845	5	34	F1-3	-	0	0	0	66.1	58	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	
R2845	6	38	F1-3	-	0	0	0	66.1	57.9	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	
R2845	7	42	F1-3	-	0	0	0	66	57.8	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	
R2845	8	46	F1-3	-	0	0	0	66	57.7	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	
R2845	9	50	F1-3	-	0	0	0	65.9	57.6	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	
R2845	10	54	F1-3	-	0	0	0	65.8	57.5	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	
R2846	1	10	F1-3	-	0	0	0	65.6	26.6	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	
R2846	2	14	F1-3	-	0	0	0	65.6	28.2	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	
R2846	3	18	F1-3	-	0	0	0	65.6	30	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	
R2846	4	22	F1-3	-	0	0	0	65.6	32.1	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	
R2846	5	26	F1-3	-	0	0	0	65.5	34.3	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	
R2846	6	30	F1-3	-	0	0	0	65.5	37	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	
R2846	7	34	F1-3	-	0	0	0	65.5	41.6	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	
R2846	8	38	F1-3	-	0	0	0	65.6	44.3	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	
R2846	9	42	F1-3	-	0	0	0	65.7	46.9	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	
R2846	10	46	F1-3	-	0	0	0	65.7	49	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	
R2847	1	10	F1-3	-	0	0	0	63.9	29.2	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	
R2847	2	14	F1-3	-	0	0	0	64	30.4	0	0	64.0	64.0	70	N	-	-	61.0	Y	N	N	
R2847	3	18	F1-3	-	0	0	0	63.9	31.6	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	
R2847	4	22	F1-3	-	0	0	0	64	32.7	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	
R2847	5	26	F1-3	-	0	0	0	64.1	33.9	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N	
R2847	6	30	F1-3	-	0	0	0	64.3	35.4	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	
R2847	7	34	F1-3	-	0	0	0	64.4	37.8	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	
R2847	8	38	F1-3	-	0	0	0	64.4	40.7	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	
R2847	9	42	F1-3	-	0	0	0	64.4	43.1	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	
R2847	10	46	F1-3	-	0	0	0	64.4	41.8	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	
R2848	1	10	F1-3	-	0	0	0	67.6	27.4	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	
R2848	2	14	F1-3	-	0	0	0	67.6	28.3	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	
R2848	3	18	F1-3	-	0	0	0	67.5	29.2	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	
R2848	4	22	F1-3	-	0	0	0	67.4	30	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	
R2848	5	26	F1-3	-	0	0	0	67.3	30.7	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	
R2848	6	30	F1-3	-	0	0	0	67.2	31.4	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	
R2848	7	34	F1-3	-	0	0	0	67	32.1	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	
R2848	8	38	F1-3	-	0	0	0	66.9	32.9	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
R2848	9	42	F1-3	-	0	0	0	66.8	33.8	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	
R2848	10	46	F1-3	-	0	0	0	66.6	34.8	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	
R2862	1	28.5	E1-2	-	0	0	25.4	64.8	38.7	0	0	64.8	64.8	65	N	-	-	61.8	Y	N	N	
R2862	2	32.5	E1-2	-	0	0	25.4	64.7	38.8	0	0	64.7	64.7	65	N	-	-	61.7	Y	N	N	
R2862	3	36.5	E1-2	-	0	0	25.6	64.6	38.9	0	0	64.6	64.6	65	N	-	-	61.6	Y	N	N	
R2862	4	40.5	E1-2	-	0	0	26.3	64.4	39	0	0	64.4	64.4	65	N	-	-	61.4	Y	N	N	
R2862	5	44.5	E1-2	-	0	0	27.8	64.2	39.3	0	0	64.3	64.3	65	N	-	-	61.3	Y	N	N	
R2862	6	48.5	E1-2	-	0	0	30.5	64	39.8	0	0	64	64.0	65	N	-	-	61.0	Y	N	N	
R2862	7	52.5	E1-2	-	0	0	33.9	63.7	41.2	0	0	63.8	63.8	65	N	-	-	60.8	Y	N	N	
R2862	8	56.5	E1-2	-	0	0	38.4	63.5	42.6	0	0	63.6	63.6	65	N	-	-	60.6	Y	N	N	
R2863	1	28.5	E1-2	-	0	0	0	63.9	22.2	0	0	63.9	63.9	65	N	-	-	60.9	Y	N	N	
R2863	2	32.5	E1-2	-	0	0	0	63.9	22.4	0	0	63.9	63.9	65	N	-	-	60.9	Y	N	N	
R2863	3	36.5	E1-2	-	0	0	0	63.7	22.5	0	0	63.7	63.7	65	N	-	-	60.7	Y	N	N	
R2863	4	40.5	E1-2	-	0	0	0	63.6	22.7	0	0	63.6	63.6	65	N	-	-	60.6	Y	N	N	
R2863	5	44.5	E1-2	-	0	0	0	63.3	23	0	0	63.3	63.3	65	N	-	-	60.3	Y	N	N	
R2863	6	48.5	E1-2	-	0	0	0	63	23.4	0	0	63	63.0	65	N	-	-	60.0	Y	N	N	
R2863	7	52.5	E1-2	-	0	0	0	62.7	23.9	0	0	62.7	62.7	65	N	-	-	59.7	Y	N	N	
R2863	8	56.5	E1-2	-	0	0	0	62.4	24.5	0	0	62.4	62.4	65	N	-	-	59.4	Y	N	N	
R3222	1	11	A2-11	-	0	0	0	61.7	67.6	0	0	68.6	68.6	65	Y	-	-	65.6	Y	Y	Y	
R3222	2	15	A2-11	-	0	0	0	61.7	67.5	0	0	68.5	68.5	65	Y	-	-	65.5	Y	Y	Y	
R3222	3	19	A2-11	-	0	0	0	61.6	67.2	0	0	68.3	68.3	65	Y	-	-	65.3	Y	Y	Y	
R3222	4	23	A2-11	-	0	0	0	61.6	66.9	0	0	68.1	68.1	65	Y	-	-	65.1	Y	Y	Y	
R3222	5	27	A2-11	-	0	0	0	61.6	66.6	0	0	67.8	67.8	65	Y	-	-	64.8	Y	Y	Y	
R3222	6	31	A2-11	-	0	0	0	61.5	66.2	0	0	67.4	67.4	65	Y	-	-	64.4	Y	Y	Y	
R3222	7	35	A2-11	-	0	0	0	61.4	65.7	0	0	67.1	67.1	65	Y	-	-	64.1	Y	Y	Y	
R3222	8	39	A2-11	-	0	0	0	61.4	65.3	0	0	66.8	66.8	65	Y	-	-	63.8	Y	Y	Y	
R3223	1	11	A2-11	-	9.5	0	0	55.6	15.8	66.1	0	0	66.5	66.5	65	Y	-	-	56.5	Y	Y	Y
R3223	2	15	A2-11	-	9.5	0	0	55.6	15.8	66.4	0	0	66.4	66.4	65	Y	-	-	56.4	Y	Y	Y
R3223	3	19	A2-11	-	9.5	0	0	55.6	15.8	65.9	0	0	66.3	66.3	65	Y	-	-	56.3	Y	Y	Y
R3223	4	23	A2-11	-	9.5	0	0	55.6	15.8	65.6	0	0	66	66.0	65	Y	-	-	56.0	Y	Y	Y
R3223	5	27	A2-11	-	9.6	0	0	55.6	15.7	65.3	0	0	65.7	65.7	65	Y	-	-	55.6	Y	Y	Y
R3223	6	31	A2-11	-	9.6	0	0	55.5	15.7	64.9	0											

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)			New Road > Criteria B > Criteria					
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD									EX	TR	New Roads in 2044 dB(A) <sup>(2)</sup> [B]		
R3264	7	35.5	A2-13	-	35.8	0	67	67.6	55.1	0	0	70.5	70.5	65	Y	-	-	34.7	Y	Y	Y	Y
R3264	8	39.5	A2-13	-	35.8	0	67	67.5	55.1	0	0	70.4	70.4	65	Y	-	-	34.6	Y	Y	Y	Y
R3265	1	11.5	A2-13	-	33	0	57.7	71.6	56.1	0	0	71.9	71.9	65	Y	-	-	40.8	Y	Y	Y	Y
R3265	2	15.5	A2-13	-	33	0	57.7	71.6	56.2	0	0	71.9	71.9	65	Y	-	-	38.9	Y	Y	Y	Y
R3265	3	19.5	A2-13	-	34.4	0	57.7	71.5	56.2	0	0	71.8	71.8	65	Y	-	-	37.4	Y	Y	Y	Y
R3265	4	23.5	A2-13	-	35	0	57.7	71.4	56.2	0	0	71.7	71.7	65	Y	-	-	36.7	Y	Y	Y	Y
R3265	5	27.5	A2-13	-	35.4	0	57.7	71.3	56.1	0	0	71.6	71.6	65	Y	-	-	36.2	Y	Y	Y	Y
R3265	6	31.5	A2-13	-	35.6	0	57.6	71.1	56.1	0	0	71.5	71.5	65	Y	-	-	35.9	Y	Y	Y	Y
R3265	7	35.5	A2-13	-	35.8	0	57.6	70.9	56.1	0	0	71.3	71.3	65	Y	-	-	35.5	Y	Y	Y	Y
R3265	8	39.5	A2-13	-	35.9	0	57.6	70.8	56.1	0	0	71.1	71.1	65	Y	-	-	35.2	Y	Y	Y	Y
R3282	1	20	A3-1	-	0	0	56	71.3	0	0	0	71.4	71.4	65	Y	-	-	68.4	Y	Y	Y	Y
R3282	2	24	A3-1	-	0	0	56	71.3	0	0	0	71.4	71.4	65	Y	-	-	68.4	Y	Y	Y	Y
R3282	3	28	A3-1	-	0	0	56	71.2	0	0	0	71.4	71.4	65	Y	-	-	68.4	Y	Y	Y	Y
R3282	4	32	A3-1	-	0	0	56	71.1	0	0	0	71.3	71.3	65	Y	-	-	68.3	Y	Y	Y	Y
R3282	5	36	A3-1	-	0	0	56	71	0	0	0	71.1	71.1	65	Y	-	-	68.1	Y	Y	Y	Y
R3282	6	40	A3-1	-	0	0	56	70.8	0	0	0	71	71.0	65	Y	-	-	68.0	Y	Y	Y	Y
R3282	7	44	A3-1	-	0	0	56	70.6	0	0	0	70.8	70.8	65	Y	-	-	67.8	Y	Y	Y	Y
R3282	8	48	A3-1	-	0	0	56	70.3	0	0	0	70.5	70.5	65	Y	-	-	67.5	Y	Y	Y	Y
N3301	1	26.5	A3-2	-	0	0	30.3	53	49.6	0	0	54.6	54.6	65	N	-	-	51.6	Y	N	N	N
N3301	2	30.5	A3-2	-	0	0	31.6	63.1	59.5	0	0	64.7	64.7	65	N	-	-	61.7	Y	N	N	N
N3301	3	34.5	A3-2	-	0	0	32.9	64.9	62.2	0	0	66.8	66.8	65	Y	-	-	63.8	Y	Y	Y	Y
N3301	4	38.5	A3-2	-	0	0	34.4	65	62.6	0	0	67	67.0	65	Y	-	-	64.0	Y	Y	Y	Y
N3301	5	42.5	A3-2	-	0	0	35.8	64.9	63.2	0	0	67.2	67.2	65	Y	-	-	64.2	Y	Y	Y	Y
N3301	6	46.5	A3-2	-	0	0	37.2	65	63.3	0	0	67.2	67.2	65	Y	-	-	64.2	Y	Y	Y	Y
N3301	7	50.5	A3-2	-	0	0	38.7	64.9	63.2	0	0	67.2	67.2	65	Y	-	-	64.2	Y	Y	Y	Y
N3301	8	54.5	A3-2	-	0	0	40.3	64.9	62.9	0	0	67.1	67.1	65	Y	-	-	64.1	Y	Y	Y	Y
N3381	1	18	A3-4	-	0	0	0	50.1	61.3	0	0	61.6	61.6	65	N	-	-	58.6	Y	N	N	N
N3381	2	22	A3-4	-	0	0	0	50.1	61.3	0	0	61.6	61.6	65	N	-	-	58.6	Y	N	N	N
N3381	3	26	A3-4	-	0	0	0	50.1	61.2	0	0	61.6	61.6	65	N	-	-	58.6	Y	N	N	N
N3381	4	30	A3-4	-	0	0	0	50.1	61.1	0	0	61.5	61.5	65	N	-	-	58.5	Y	N	N	N
N3381	5	34	A3-4	-	0	0	0	50.1	61	0	0	61.3	61.3	65	N	-	-	58.3	Y	N	N	N
N3381	6	38	A3-4	-	0	0	0	50.1	60.8	0	0	61.2	61.2	65	N	-	-	58.2	Y	N	N	N
N3381	7	42	A3-4	-	0	0	0	50.1	60.6	0	0	61	61.0	65	N	-	-	58.0	Y	N	N	N
N3381	8	46	A3-4	-	0	0	0	50.1	60.4	0	0	60.8	60.8	65	N	-	-	57.8	Y	N	N	N
R3481	1	7.5	D1-5	-	43.6	0	56.4	18.9	62.2	0	0	63.2	63.3	70	N	-	-	19.7	Y	N	N	N
R3481	2	10.5	D1-5	-	43.8	0	57	18.9	62.1	0	0	63.3	63.3	70	N	-	-	19.5	Y	N	N	N
R3481	3	13.5	D1-5	-	44	0	57.4	18.9	62	0	0	63.3	63.3	70	N	-	-	19.3	Y	N	N	N
R3701	1	34.5	E1-3	-	0	0	0	62.1	62.1	0	20.6	62.1	62.1	70	N	-	-	59.1	Y	N	N	N
R3701	2	37.5	E1-3	-	0	0	0	62.1	62.1	0	21.4	62.1	62.1	70	N	-	-	59.1	Y	N	N	N
R3701	3	40.5	E1-3	-	0	0	0	62.1	62.1	0	22.2	62.1	62.1	70	N	-	-	59.1	Y	N	N	N
R3701	4	43.5	E1-3	-	0	0	0	62	62	0	23.1	62	62.0	70	N	-	-	59.0	Y	N	N	N
R3701	5	46.5	E1-3	-	0	0	0	62	62	0	24	62	62.0	70	N	-	-	59.0	Y	N	N	N
R3701	6	49.5	E1-3	-	0	0	0	61.9	61.9	0	24.9	61.9	61.9	70	N	-	-	58.9	Y	N	N	N
R3701	7	52.5	E1-3	-	0	0	0	61.9	61.9	0	25.9	61.9	61.9	70	N	-	-	58.9	Y	N	N	N
R3701	8	55.5	E1-3	-	0	0	0	61.8	61.8	0	26.8	61.8	61.8	70	N	-	-	58.8	Y	N	N	N
R3701	9	58.5	E1-3	-	0	0	0	61.8	61.8	0	27.8	61.8	61.8	70	N	-	-	58.8	Y	N	N	N
R3701	10	61.5	E1-3	-	0	0	0	61.8	61.8	0	28.9	61.8	61.8	70	N	-	-	58.8	Y	N	N	N
R3701	11	64.5	E1-3	-	0	0	0	61.9	61.9	0	30.1	61.9	61.9	70	N	-	-	58.9	Y	N	N	N
R3701	12	67.5	E1-3	-	0	0	0	61.9	61.9	0	31.3	61.9	61.9	70	N	-	-	58.9	Y	N	N	N
R3701	13	70.5	E1-3	-	0	0	0	61.9	61.9	0	32.6	61.9	61.9	70	N	-	-	58.9	Y	N	N	N
R3701	14	73.5	E1-3	-	0	0	0	61.9	61.9	0	34	61.9	61.9	70	N	-	-	58.9	Y	N	N	N
R3701	15	76.5	E1-3	-	0	0	0	61.8	61.8	0	35.6	61.8	61.8	70	N	-	-	58.8	Y	N	N	N
R3701	16	79.5	E1-3	-	0	0	0	61.8	61.8	0	37.2	61.8	61.8	70	N	-	-	58.8	Y	N	N	N
R3701	17	82.5	E1-3	-	0	0	0	61.7	61.7	0	39.2	61.7	61.7	70	N	-	-	58.7	Y	N	N	N
R3701	18	85.5	E1-3	-	0	0	0	61.6	61.6	0	41.4	61.7	61.7	70	N	-	-	58.7	Y	N	N	N
R3701	19	88.5	E1-3	-	0	0	0	61.6	61.6	0	44	61.6	61.6	70	N	-	-	58.6	Y	N	N	N
R3701	20	91.5	E1-3	-	0	0	0	61.5	61.5	0	46.9	61.6	61.6	70	N	-	-	58.6	Y	N	N	N
R3702	1	34.5	E1-3	-	0	0	0	66.9	66.9	0	23.8	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
R3702	2	37.5	E1-3	-	0	0	0	66.8	66.8	0	24.6	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
R3702	3	40.5	E1-3	-	0	0	0	66.7	66.7	0	25.4	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
R3702	4	43.5	E1-3	-	0	0	0	66.5	66.5	0	26.3	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
R3702	5	46.5	E1-3	-	0	0	0	66.3	66.3	0	27.2	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
R3702	6	49.5	E1-3	-	0	0	0	66.1	66.1	0	28.2	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
R3702	7	52.5	E1-3	-	0	0	0	65.8	65.8	0	29.1	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
R3702	8	55.5	E1-3	-	0	0	0	65.6	65.6	0	30.1	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
R3702	9	58.5	E1-3	-	0	0	0	65.3	65.3	0	31.2	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
R3702	10	61.5	E1-3	-	0	0	0	65.1	65.1	0	32.4	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
R3702	11	64.5	E1-3	-	0	0	0	64.9	64.9	0	33.5	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
R3702	12	67.5	E1-3	-	0	0	0	64.6	64.6	0	34.7	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
R3702	13	70.5	E1-3	-	0	0	0	64.4	64.4	0	36.1	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
R3702	14	73.5	E1-3	-	0	0	0	64.2	64.2	0	37.6	64.2	64.2	70	N	-	-	61.2	Y	N	N	N
R3702	15	76.5	E1-3	-	0	0	0	64	64	0	39.2	64.1	64.1	70	N	-	-	61.1	Y	N	N	N
R3702	16	79.5	E1-3	-	0	0	0	63.8	63.8	0	41.											

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	C - A dB(A) [D]			D ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD												EX	
R3703	17	82.5	E1-3	-	0	0	61	67.2	0	50	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
R3703	18	85.5	E1-3	-	0	0	60.9	67.1	0	51.7	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N
R3703	19	88.5	E1-3	-	0	0	60.8	66.9	0	52.4	0	68	68	70	N	-	-	65.0	Y	N	N	N
R3703	20	91.5	E1-3	-	0	0	60.7	66.8	0	52.7	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
R3704	1	34.5	E1-3	-	0	0	61.2	69.5	47.9	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	N
R3704	2	37.5	E1-3	-	0	0	61.1	69.4	47.9	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	N
R3704	3	40.5	E1-3	-	0	0	61	69.3	47.9	0	0	70	70.0	70	N	-	-	67.0	Y	N	N	N
R3704	4	43.5	E1-3	-	0	0	60.9	69.3	47.9	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	N
R3704	5	46.5	E1-3	-	0	0	60.8	69.2	47.9	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N
R3704	6	49.5	E1-3	-	0	0	60.7	69.1	47.9	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	N
R3704	7	52.5	E1-3	-	0	0	60.7	69	47.9	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N
R3704	8	55.5	E1-3	-	0	0	60.7	68.9	47.9	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N
R3704	9	58.5	E1-3	-	0	0	60.8	68.8	48	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N
R3704	10	61.5	E1-3	-	0	0	60.8	68.7	48	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N
R3704	11	64.5	E1-3	-	0	0	60.8	68.6	48.2	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N	N
R3704	12	67.5	E1-3	-	0	0	60.8	68.5	48.3	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	N
R3704	13	70.5	E1-3	-	0	0	60.8	68.4	48.7	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N
R3704	14	73.5	E1-3	-	0	0	60.7	68.3	49.3	0	0	69	69.0	70	N	-	-	66.0	Y	N	N	N
R3704	15	76.5	E1-3	-	0	0	60.7	68.1	50.2	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N
R3704	16	79.5	E1-3	-	0	0	60.7	68.1	51	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N
R3704	17	82.5	E1-3	-	0	0	60.6	67.9	51.3	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
R3704	18	85.5	E1-3	-	0	0	60.5	67.8	51.5	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N
R3704	19	88.5	E1-3	-	0	0	60.5	67.7	51.7	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N
R3704	20	91.5	E1-3	-	0	0	60.4	67.5	52	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	N
R3721	1	28	E1-4	-	0	0	59.6	40.3	0	0	0	59.7	59.7	65	N	-	-	56.7	Y	N	N	N
R3721	2	32	E1-4	-	0	0	59.6	40.3	0	0	0	59.7	59.7	65	N	-	-	56.7	Y	N	N	N
R3721	3	36	E1-4	-	0	0	59.6	40.3	0	0	0	59.7	59.7	65	N	-	-	56.7	Y	N	N	N
R3721	4	40	E1-4	-	0	0	59.6	40.4	0	0	0	59.7	59.7	65	N	-	-	56.7	Y	N	N	N
R3721	5	44	E1-4	-	0	0	59.6	40.4	0	0	0	59.6	59.6	65	N	-	-	56.6	Y	N	N	N
R3721	6	48	E1-4	-	0	0	59.6	40.9	0	0	0	59.6	59.6	65	N	-	-	56.6	Y	N	N	N
R3721	7	52	E1-4	-	0	0	59.6	41.9	0	0	0	59.7	59.7	65	N	-	-	56.7	Y	N	N	N
R3721	8	56	E1-4	-	0	0	59.7	41.9	0	0	0	59.8	59.8	65	N	-	-	56.8	Y	N	N	N
R2744	1	19.5	A3-6	-	0	0	56.4	72.5	62.2	0	0	73	73.0	70	Y	-	-	70.0	Y	Y	Y	Y
R2744	2	22.2	A3-6	-	0	0	56.4	72.3	62.1	0	0	72.8	72.8	70	Y	-	-	69.8	Y	Y	Y	Y
R2744	3	24.9	A3-6	-	0	0	56.4	72	61.9	0	0	72.5	72.5	70	Y	-	-	69.5	Y	Y	Y	Y
R2744	4	27.6	A3-6	-	0	0	56.4	71.7	61.7	0	0	72.3	72.3	70	Y	-	-	69.3	Y	Y	Y	Y
R2744	5	30.3	A3-6	-	0	0	56.5	71.4	61.6	0	0	71.9	71.9	70	Y	-	-	68.9	Y	Y	Y	Y
R2744	6	33	A3-6	-	0	0	56.5	71.1	61.4	0	0	71.7	71.7	70	Y	-	-	68.7	Y	Y	Y	Y
R2744	7	35.7	A3-6	-	0	0	56.5	70.7	61.2	0	0	71.3	71.3	70	Y	-	-	68.3	Y	Y	Y	Y
R2744	8	38.4	A3-6	-	0	0	56.5	70.5	61	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	Y	Y
R2744	9	41.1	A3-6	-	0	0	56.5	70.2	60.8	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y	Y
R2744	10	43.8	A3-6	-	0	0	56.5	69.9	60.5	0	0	70.5	70.5	70	Y	-	-	67.5	Y	Y	Y	Y
R2744	11	46.5	A3-6	-	0	0	56.6	69.6	60.4	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N	N
R2744	12	49.2	A3-6	-	0	0	56.6	69.3	60.2	0	0	70	70.0	70	N	-	-	67.0	Y	N	N	N
R2744	13	51.9	A3-6	-	0	0	56.7	69.1	60	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N
R2744	14	54.6	A3-6	-	0	0	57	68.9	59.8	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N
R2744	15	57.3	A3-6	-	0	0	57.3	68.7	59.6	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N
R2744	16	60	A3-6	-	0	0	57.9	68.5	59.4	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N	N
R2744	17	62.7	A3-6	-	0	0	58.4	68.2	59.3	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N
R2744	18	65.4	A3-6	-	0	0	58.8	68	59.1	0	0	69	69.0	70	N	-	-	66.0	Y	N	N	N
R2744	19	68.1	A3-6	-	0	0	59.1	67.8	58.9	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	N
R2744	20	70.8	A3-6	-	0	0	59.2	67.7	58.8	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
R2745	1	19.5	A3-6	-	0	0	67.1	67.6	0	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N	N
R2745	2	22.2	A3-6	-	0	0	67	67.3	0	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N	N
R2745	3	24.9	A3-6	-	0	0	66.9	67	0	0	0	70	70.0	70	N	-	-	67.0	Y	N	N	N
R2745	4	27.6	A3-6	-	0	0	66.7	66.6	0	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	N
R2745	5	30.3	A3-6	-	0	0	66.6	66.3	0	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N
R2745	6	33	A3-6	-	0	0	66.4	65.9	0	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	N
R2745	7	35.7	A3-6	-	0	0	66.2	65.5	0	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N
R2745	8	38.4	A3-6	-	0	0	66	65.2	0	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N
R2745	9	41.1	A3-6	-	0	0	65.8	64.8	0	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	N
R2745	10	43.8	A3-6	-	0	0	65.6	64.5	0	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N
R2745	11	46.5	A3-6	-	0	0	65.4	64.2	0	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
R2745	12	49.2	A3-6	-	0	0	65.2	63.9	0	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
R2745	13	51.9	A3-6	-	0	0	65	63.6	0	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
R2745	14	54.6	A3-6	-	0	0	64.8	63.4	0	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N
R2745	15	57.3	A3-6	-	0	0	64.7	63.2	0	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
R2745	16	60	A3-6	-	0	0	64.5	62.9	0	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
R2745	17	62.7	A3-6	-	0	0	64.3	62.7	0	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
R2745	18	65.4	A3-6	-	0	0	64.2	62.5	0	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
R2745	19	68.1	A3-6	-	0	0	64	62.3	0	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
R2745	20	70.8	A3-6	-	0	0	63.8	62.1	0	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
N2612	1	11.5	A1-9	-	15.7	0	55.9	67.1	10.9	0	0	67.4	67.4	70	N	-	-					

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A) [A]	New Roads <sup>(2)</sup>				Overall Noise Level in 2044 dB(A) [C]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria								
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(3)</sup> [B]												
N3382	2	22	A3-4	-	0	28.4	53.6	59.4	0	0	60.4	60.4	65	N	-	-	57.4	Y	N	N		
N3382	3	26	A3-4	-	0	28.4	53.6	59.4	0	0	60.4	60.4	65	N	-	-	57.4	Y	N	N		
N3382	4	30	A3-4	-	0	28.4	53.6	59.3	0	0	60.3	60.3	65	N	-	-	57.3	Y	N	N		
N3382	5	34	A3-4	-	0	28.4	53.6	59.2	0	0	60.2	60.2	65	N	-	-	57.2	Y	N	N		
N3382	6	38	A3-4	-	0	28.4	53.6	59	0	0	60.1	60.1	65	N	-	-	57.1	Y	N	N		
N3382	7	42	A3-4	-	0	28.4	53.6	58.9	0	0	60	60	65	N	-	-	57	Y	N	N		
N3382	8	46	A3-4	-	0	28.4	53.6	58.7	0	0	59.8	59.8	65	N	-	-	56.8	Y	N	N		
N3302	1	26.5	A3-2	-	0	0	35	54.6	0	0	54.6	54.6	65	N	-	-	51.6	Y	N	N		
N3302	2	30.5	A3-2	-	0	0	36.7	55.7	0	0	55.7	55.7	65	N	-	-	52.7	Y	N	N		
N3302	3	34.5	A3-2	-	0	0	37.6	57.6	0	0	57.7	57.7	65	N	-	-	54.7	Y	N	N		
N3302	4	38.5	A3-2	-	0	0	38.6	60.9	0	0	60.9	60.9	65	N	-	-	57.9	Y	N	N		
N3302	5	42.5	A3-2	-	0	0	39.6	63.8	0	0	63.8	63.8	65	N	-	-	60.8	Y	N	N		
N3302	6	46.5	A3-2	-	0	0	40.7	64.2	0	0	64.2	64.2	65	N	-	-	61.2	Y	N	N		
N3302	7	50.5	A3-2	-	0	0	42.1	64	0	0	64	64.0	65	N	-	-	61.0	Y	N	N		
N3302	8	54.5	A3-2	-	0	0	43.6	63.7	0	0	63.7	63.7	65	N	-	-	60.7	Y	N	N		
N2721	1	23.5	A3-3	-	0	0	43.6	58	43	0	0	58.3	58.3	70	N	-	-	55.3	Y	N	N	
N2721	2	26.3	A3-3	-	0	0	43.6	58	43	0	0	58.3	58.3	70	N	-	-	55.3	Y	N	N	
N2721	3	29.1	A3-3	-	0	0	43.6	58	43.1	0	0	58.3	58.3	70	N	-	-	55.3	Y	N	N	
N2721	4	31.9	A3-3	-	0	0	43.6	58	43	0	0	58.2	58.2	70	N	-	-	55.2	Y	N	N	
N2721	5	34.7	A3-3	-	0	0	43.6	57.9	43.1	0	0	58.2	58.2	70	N	-	-	55.2	Y	N	N	
N2721	6	37.5	A3-3	-	0	0	43.6	57.9	43.1	0	0	58.2	58.2	70	N	-	-	55.2	Y	N	N	
N2721	7	40.3	A3-3	-	0	0	43.6	57.9	43.2	0	0	58.2	58.2	70	N	-	-	55.2	Y	N	N	
N2721	8	43.1	A3-3	-	0	0	43.6	57.9	43.2	0	0	58.2	58.2	70	N	-	-	55.2	Y	N	N	
N2721	9	45.9	A3-3	-	0	0	43.6	57.9	43.2	0	0	58.2	58.2	70	N	-	-	55.2	Y	N	N	
N2721	10	48.7	A3-3	-	0	0	43.6	57.8	43.4	0	0	58.1	58.1	70	N	-	-	55.1	Y	N	N	
N2721	11	51.5	A3-3	-	0	0	43.6	57.8	43.5	0	0	58.1	58.1	70	N	-	-	55.1	Y	N	N	
N2721	12	54.3	A3-3	-	0	0	43.6	57.8	43.5	0	0	58.1	58.1	70	N	-	-	55.1	Y	N	N	
N2721	13	57.1	A3-3	-	0	0	43.6	57.8	43.5	0	0	58.1	58.1	70	N	-	-	55.1	Y	N	N	
N2721	14	59.9	A3-3	-	0	0	43.6	57.7	43.6	0	0	58	58.0	70	N	-	-	55.0	Y	N	N	
N2721	15	62.7	A3-3	-	0	0	43.6	57.7	43.6	0	0	58	58.0	70	N	-	-	55.0	Y	N	N	
N2721	16	65.5	A3-3	-	0	0	43.6	57.7	43.5	0	0	58	58.0	70	N	-	-	55.0	Y	N	N	
N2721	17	68.3	A3-3	-	0	0	43.6	57.6	43.5	0	0	58	58.0	70	N	-	-	55.0	Y	N	N	
N2721	18	71.1	A3-3	-	0	0	43.6	57.6	43.5	0	0	57.9	57.9	70	N	-	-	54.9	Y	N	N	
N2721	19	73.9	A3-3	-	0	0	43.6	57.6	43.6	-5	0	57.9	57.9	70	N	-	-	54.9	Y	N	N	
N2721	20	76.7	A3-3	-	0	0	43.5	57.6	43.6	0	0	57.9	57.9	70	N	-	-	54.9	Y	N	N	
N2721	21	79.5	A3-3	-	0	0	43.5	57.6	43.5	0	0	57.9	57.9	70	N	-	-	54.9	Y	N	N	
N2721	22	82.3	A3-3	-	0	0	43.5	57.6	43.5	-5	0	57.9	57.9	70	N	-	-	54.9	Y	N	N	
N2721	23	85.1	A3-3	-	0	0	43.5	57.5	43.5	0	0	57.9	57.9	70	N	-	-	54.9	Y	N	N	
N2721	24	87.9	A3-3	-	0	0	43.5	57.5	43.5	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	
N2721	25	90.7	A3-3	-	0	0	43.5	57.5	43.5	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	
N2721	26	93.5	A3-3	-	0	0	43.5	57.5	43.5	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	
N2721	27	96.3	A3-3	-	0	0	43.5	57.5	43.4	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	
N2721	28	99.1	A3-3	-	0	0	43.5	57.5	43.4	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	
N2721	29	101.9	A3-3	-	0	0	43.5	57.4	43.4	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	
N2721	30	104.7	A3-3	-	0	0	43.4	57.4	43.4	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	
N2721	31	107.5	A3-3	-	0	0	43.4	57.4	43.4	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	
N2721	32	110.3	A3-3	-	0	0	43.4	57.4	43.4	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	
N2721	33	113.1	A3-3	-	0	0	43.4	57.4	43.4	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	
N2721	34	115.9	A3-3	-	0	0	43.4	57.4	43.3	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	
N2721	35	118.7	A3-3	-	0	0	43.4	57.3	43.3	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	
N2721	36	121.5	A3-3	-	0	0	43.4	57.3	43.3	0	0	57.6	57.6	70	N	-	-	54.6	Y	N	N	
N2721	37	124.3	A3-3	-	0	0	43.3	57.3	43.3	0	0	57.6	57.6	70	N	-	-	54.6	Y	N	N	
N2721	38	127.1	A3-3	-	0	0	43.3	57.2	43.3	0	0	57.6	57.6	70	N	-	-	54.6	Y	N	N	
N2728	1	23.5	A3-3	-	0	0	46	56.8	37.3	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	2	26.3	A3-3	-	0	0	46	56.8	37.3	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	3	29.1	A3-3	-	0	0	46	56.8	37.3	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	4	31.9	A3-3	-	0	0	46	56.8	37.3	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	5	34.7	A3-3	-	0	0	46	56.8	37.3	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	6	37.5	A3-3	-	0	0	46	56.8	37.3	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	7	40.3	A3-3	-	0	0	46	56.8	37.3	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	8	43.1	A3-3	-	0	0	46	56.8	37.3	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	9	45.9	A3-3	-	0	0	45.9	56.7	37.3	0	0	57.1	57.1	70	N	-	-	54.1	Y	N	N	
N2728	10	48.7	A3-3	-	0	0	45.9	56.7	37.3	0	0	57.1	57.1	70	N	-	-	54.1	Y	N	N	
N2728	11	51.5	A3-3	-	0	0	45.9	56.7	37.3	0	0	57.1	57.1	70	N	-	-	54.1	Y	N	N	
N2728	12	54.3	A3-3	-	0	0	45.9	56.7	37.3	0	0	57.1	57.1	70	N	-	-	54.1	Y	N	N	
N2728	13	57.1	A3-3	-	0	0	45.9	56.7	37.3	0	0	57.1	57.1	70	N	-	-	54.1	Y	N	N	
N2728	14	59.9	A3-3	-	0	0	45.9	56.7	37.3	0	0	57.1	57.1	70	N	-	-	54.1	Y	N	N	
N2728	15	62.7	A3-3	-	0	0	45.9	56.7	37.3	0	0	57.1	57.1	70	N	-	-	54.1	Y	N	N	
N2728	16	65.5	A3-3	-	0	0	45.9	56.7	37.3	0	0	57.1	57.1	70	N	-	-	54.1	Y	N	N	
N2728	17	68.3	A3-3	-	0	0	45.9	56.8	37.3	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	18	71.1	A3-3	-	0	0	45.9	56.8	37.3	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	19	73.9	A3-3	-	0	0	45.9	56.9	37.3	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	20	76.7	A3-3	-	0	0	45.9	56.9	37.2	0	0	57.2	57.2	70	N	-	-	54.2	Y	N	N	
N2728	21	79.5	A3-3	-	0	0	45.8	56.9	37.2	0	0	57.3	57.3	70	N	-	-	54.3	Y	N	N	
N2728	22	82.3	A3-3	-	0	0	45.8	56.9	37.2	0	0	57.3	57.3	70	N	-	-	54.3	Y	N	N	
N2728	23	85.1	A3-3	-	0	0	45.8	56.9	37.2	0	0	57.2	57.2	70	N							



Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation		Mitigation Measures Required <sup>(4)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	C - a dB(A)	D ≥ 1dB(A)	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)			New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(3)</sup> [B]	[C]	[D]	[E]	[F]	[G]	[H]				
N2728	39	129.9	A3-3	-	0	0	45.6	57	36.9	0	0	57.4	57.4	70	N	-	-	54.4	Y	N	N
N2730	1	23.5	A3-3	-	0	0	47.1	67.4	65.8	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N
N2730	2	26.3	A3-3	-	0	0	47.1	67.4	65.8	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N
N2730	3	29.1	A3-3	-	0	0	47.1	67.3	65.7	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N
N2730	4	31.9	A3-3	-	0	0	47.1	67.3	65.7	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N
N2730	5	34.7	A3-3	-	0	0	47.1	67.2	65.6	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N
N2730	6	37.5	A3-3	-	0	0	47.1	67.1	65.5	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N
N2730	7	40.3	A3-3	-	0	0	47.1	67	65.4	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2730	8	43.1	A3-3	-	0	0	47.2	66.9	65.3	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N
N2730	9	45.9	A3-3	-	0	0	47.2	66.8	65.2	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
N2730	10	48.7	A3-3	-	0	0	47.2	66.7	65.1	0	0	69	69.0	70	N	-	-	66.0	Y	N	N
N2730	11	51.5	A3-3	-	0	0	47.2	66.5	65	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
N2730	12	54.3	A3-3	-	0	0	47.2	66.4	64.8	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N
N2730	13	57.1	A3-3	-	0	0	47.3	66.3	64.7	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N
N2730	14	59.9	A3-3	-	0	0	47.3	66.1	64.5	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N
N2730	15	62.7	A3-3	-	0	0	47.4	66	64.4	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N
N2730	16	65.5	A3-3	-	0	0	47.5	65.9	64.2	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N
N2730	17	68.3	A3-3	-	0	0	47.6	65.8	64.1	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N
N2730	18	71.1	A3-3	-	0	0	47.9	65.6	64	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N
N2730	19	73.9	A3-3	-	0	0	48.3	65.5	63.8	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N
N2730	20	76.7	A3-3	-	0	0	48.6	65.4	63.7	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N
N2730	21	79.5	A3-3	-	0	0	48.8	65.3	63.5	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N
N2730	22	82.3	A3-3	-	0	0	48.9	65.1	63.4	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N
N2730	23	85.1	A3-3	-	0	0	49	65	63.3	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N
N2730	24	87.9	A3-3	-	0	0	49	64.9	63.1	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N
N2730	25	90.7	A3-3	-	0	0	49	64.8	63	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N
N2730	26	93.5	A3-3	-	0	0	49	64.7	62.9	0	0	67	67.0	70	N	-	-	64.0	Y	N	N
N2730	27	96.3	A3-3	-	0	0	49.1	64.6	62.7	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N
N2730	28	99.1	A3-3	-	0	0	49	64.5	62.6	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
N2730	29	101.9	A3-3	-	0	0	49.1	64.4	62.5	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N
N2730	30	104.7	A3-3	-	0	0	49.1	64.3	62.4	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N
N2730	31	107.5	A3-3	-	0	0	49.1	64.2	62.3	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
N2730	32	110.3	A3-3	-	0	0	49.2	64.1	62.2	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N
N2730	33	113.1	A3-3	-	0	0	49.2	64	62.1	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
N2730	34	115.9	A3-3	-	0	0	49.3	63.9	62	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
N2730	35	118.7	A3-3	-	0	0	49.3	63.8	61.9	0	0	66	66.0	70	N	-	-	63.0	Y	N	N
N2730	36	121.5	A3-3	-	0	0	49.4	63.7	61.8	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N
N2730	37	124.3	A3-3	-	0	0	49.5	63.6	61.7	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
N2730	38	127.1	A3-3	-	0	0	49.6	63.5	61.6	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N
N2730	39	129.9	A3-3	-	0	0	49.7	63.4	61.5	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N
N2583	1	25	A1-8	-	14.8	0	14.2	67.7	55.7	51	0	68.1	68.1	70	N	-	-	53.2	Y	N	N
N2583	2	27.7	A1-8	-	15.7	0	14.4	67.6	55.5	51.8	0	67.9	67.9	70	N	-	-	52.1	Y	N	N
N2583	3	30.4	A1-8	-	16.9	0	14.6	67.4	55.3	52.8	0	67.8	67.8	70	N	-	-	50.8	Y	N	N
N2583	4	33.1	A1-8	-	18.3	0	14.8	67.2	55.1	53.8	0	67.6	67.6	70	N	-	-	49.2	Y	N	N
N2583	5	35.8	A1-8	-	19.7	0	15	67	54.9	54.9	0	67.5	67.5	70	N	-	-	47.5	Y	N	N
N2583	6	38.5	A1-8	-	21.3	0	15.5	66.8	54.7	56.1	0	67.4	67.4	70	N	-	-	46.1	Y	N	N
N2583	7	41.2	A1-8	-	23.1	0	16.1	66.6	54.5	57.5	0	67.3	67.3	70	N	-	-	44.2	Y	N	N
N2583	8	43.9	A1-8	-	25.2	0	16.7	66.4	54.3	58.7	0	67.3	67.3	70	N	-	-	42.1	Y	N	N
N2583	9	46.6	A1-8	-	27.1	0	17.3	66.2	54.1	59.9	0	67.3	67.3	70	N	-	-	40.2	Y	N	N
N2583	10	49.3	A1-8	-	29.1	0	18	66	53.9	60.8	0	67.4	67.4	70	N	-	-	38.3	Y	N	N
N2583	11	52	A1-8	-	31.3	0	18.7	65.9	53.7	61.6	0	67.4	67.4	70	N	-	-	36.1	Y	N	N
N2583	12	54.7	A1-8	-	34.3	0	19.4	65.7	53.5	62.4	0	67.5	67.5	70	N	-	-	33.2	Y	N	N
N2583	13	57.4	A1-8	-	38.4	0	20.2	65.5	53.3	63.2	0	67.7	67.7	70	N	-	-	29.3	Y	N	N
N2583	14	60.1	A1-8	-	42.4	0	20.9	65.3	53.2	64.4	0	68	68.0	70	N	-	-	25.6	Y	N	N
N2583	15	62.8	A1-8	-	44.2	0	21.7	65.2	53	65.9	0	68.7	68.7	70	N	-	-	24.5	Y	N	N
N2583	16	65.5	A1-8	-	44.6	0	22.4	65.1	52.9	67.3	0	69.4	69.4	70	N	-	-	24.8	Y	N	N
N2583	17	68.2	A1-8	-	44.7	0	23.2	65	52.7	68.2	0	69.9	70.0	70	N	-	-	25.3	Y	N	N
N2583	18	70.9	A1-8	-	44.7	0	24	64.8	52.6	68.7	0	70.3	70.3	70	N	-	-	25.6	Y	N	N
N2583	19	73.6	A1-8	-	44.7	0	24.9	64.8	52.4	69.2	0	70.6	70.6	70	Y	-	-	25.9	Y	Y	Y
N2583	20	76.3	A1-8	-	44.7	0	25.8	64.6	52.3	69.7	0	70.9	70.9	70	Y	-	-	26.2	Y	Y	Y
N2583	21	79	A1-8	-	44.7	0	26.8	64.6	52.2	70.2	0	71.3	71.3	70	Y	-	-	26.6	Y	Y	Y
N2583	22	81.7	A1-8	-	44.7	0	27.8	64.4	52.1	70.6	0	71.6	71.6	70	Y	-	-	26.9	Y	Y	Y
N2583	23	84.4	A1-8	-	44.7	0	29	64.4	51.9	71.1	0	72	72.0	70	Y	-	-	27.3	Y	Y	Y
N2583	24	87.1	A1-8	-	44.6	0	30.2	64.3	51.9	71.4	0	72.2	72.3	70	Y	-	-	27.7	Y	Y	Y
N2583	25	89.8	A1-8	-	44.6	0	31.5	64.2	51.9	71.7	0	72.5	72.5	70	Y	-	-	28.1	Y	Y	Y
N2583	26	92.5	A1-8	-	44.6	0	32.9	64.1	51.7	71.9	0	72.6	72.6	70	Y	-	-	28.4	Y	Y	Y
N2583	27	95.2	A1-8	-	44.6	0	34.2	64.1	51.7	72.1	0	72.8	72.8	70	Y	-	-	28.2	Y	Y	Y
N2583	28	97.9	A1-8	-	44.6	0	35.6	64	51.6	72.2	0	72.9	72.9	70	Y	-	-	28.3	Y	Y	Y
N2583	29	100.6	A1-8	-	44.5	0	36	63.9	51.6	72.4	0	73	73.0	70	Y	-	-	28.5	Y	Y	Y
N2583	30	103.3	A1-8	-	44.5	0	36.6	63.8	51.5	72.5	0	73.1	73.1	70	Y	-	-	28.6	Y	Y	Y
N2583	31	106	A1-8	-	44.5	0	37.5	63.8	51.4	72.5	0	73.1	73.1	70	Y	-	-	28.6	Y	Y	Y
N2583	32	108.7	A1-8	-	44.5	0	38.3	63.8	51.3	72.6	0	73.2	73.2	70	Y	-	-	28.7	Y	Y	Y
N2583	33	111.4	A1-8	-	44.5	0	38.9	63.7	51.2	72.7	0	73.2	73.2	70	Y	-	-	28.7	Y	Y	Y
N2583	34	114.1	A1-8	-	44.5	0	39.														

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)	
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>												Overall Noise Level in 2044 dB(A) [C]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)		New Road > Criteria B > Criteria
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(3)</sup> [B]											
N2581	19	73.6	A1-8	-	46.1	0	18.4	61	44	68.8	0	69.5	69.5	70	N	-	-	23.4	Y	N	N		
N2581	20	75.3	A1-8	-	46.2	0	18.4	61	44	69	0	69.6	69.6	70	N	-	-	23.4	Y	N	N		
N2581	21	79	A1-8	-	46.2	0	18.4	60.8	45.3	69.1	0	69.7	69.7	70	N	-	-	23.5	Y	N	N		
N2581	22	81.7	A1-8	-	46.2	0	18.4	60.8	45.8	69.2	0	69.8	69.8	70	N	-	-	23.6	Y	N	N		
N2581	23	84.4	A1-8	-	46.2	0	18.3	60.7	46.3	69.3	0	69.9	69.9	70	N	-	-	23.7	Y	N	N		
N2581	24	87.1	A1-8	-	46.2	0	18.4	60.6	46.6	69.5	0	70	70.0	70	N	-	-	23.8	Y	N	N		
N2581	25	89.8	A1-8	-	46.2	0	18.4	60.4	46.8	69.6	0	70.1	70.1	70	N	-	-	23.9	Y	N	N		
N2581	26	92.5	A1-8	-	46.2	0	18.4	60.4	47.1	69.7	0	70.2	70.2	70	N	-	-	24.0	Y	N	N		
N2581	27	95.2	A1-8	-	46.1	0	18.4	60.3	47.3	69.8	0	70.3	70.3	70	N	-	-	24.2	Y	N	N		
N2581	28	97.9	A1-8	-	46.1	0	18.4	60.2	47.6	69.9	0	70.4	70.4	70	N	-	-	24.3	Y	N	N		
N2581	29	100.6	A1-8	-	46.1	0	18.4	60.2	48.1	70.1	0	70.5	70.5	70	Y	-	-	24.4	Y	Y	Y		
N2581	30	103.3	A1-8	-	46.1	0	18.2	60.2	48.5	70.2	0	70.6	70.6	70	Y	-	-	24.5	Y	Y	Y		
N2581	31	106	A1-8	-	46.1	0	18.2	60.1	49.2	70.3	0	70.7	70.7	70	Y	-	-	24.6	Y	Y	Y		
N2581	32	108.7	A1-8	-	46.1	0	18.3	60.1	49.8	70.4	0	70.8	70.8	70	Y	-	-	24.7	Y	Y	Y		
N2581	33	111.4	A1-8	-	46.1	0	18.5	60.1	50.2	70.5	0	70.9	70.9	70	Y	-	-	24.8	Y	Y	Y		
N2581	34	114.1	A1-8	-	46.1	0	18.7	60.1	50.4	70.6	0	71	71.0	70	Y	-	-	24.9	Y	Y	Y		
N2581	35	116.8	A1-8	-	46	0	18.8	60	50.5	70.6	0	71.1	71.0	70	Y	-	-	25.0	Y	Y	Y		
N2582	1	26	A1-8	-	34.2	0	12.4	68	49.4	67.8	0	70.9	70.9	70	Y	-	-	36.7	Y	Y	Y		
N2582	2	27.7	A1-8	-	35	0	12.4	67.8	49.1	68	0	70.9	70.9	70	Y	-	-	35.9	Y	Y	Y		
N2582	3	30.4	A1-8	-	35.9	0	12.5	67.5	48.9	68.1	0	70.9	70.9	70	Y	-	-	35.0	Y	Y	Y		
N2582	4	33.1	A1-8	-	36.9	0	12.3	67.4	48.8	68.2	0	70.8	70.8	70	Y	-	-	33.9	Y	Y	Y		
N2582	5	35.8	A1-8	-	38.3	0	12.3	67.2	48.6	68.2	0	70.8	70.8	70	Y	-	-	32.5	Y	Y	Y		
N2582	6	38.5	A1-8	-	39.3	0	12.5	67	48.4	68.3	0	70.7	70.7	70	Y	-	-	31.4	Y	Y	Y		
N2582	7	41.2	A1-8	-	46	0	12.8	66.7	48.2	68.4	0	71.1	71.0	70	Y	-	-	29.7	Y	Y	Y		
N2582	8	43.9	A1-8	-	41.6	0	13.3	66.5	47.9	68.4	0	70.6	70.6	70	Y	-	-	29.0	Y	Y	Y		
N2582	9	46.6	A1-8	-	42.3	0	13.8	66.3	47.7	68.5	0	70.6	70.6	70	Y	-	-	28.3	Y	Y	Y		
N2582	10	49.3	A1-8	-	42.7	0	14.4	66.1	47.5	68.5	0	70.5	70.5	70	Y	-	-	27.8	Y	Y	Y		
N2582	11	52	A1-8	-	43	0	15	66	47.4	68.6	0	70.5	70.5	70	Y	-	-	27.5	Y	Y	Y		
N2582	12	54.7	A1-8	-	43.3	0	15.8	65.8	47.3	68.7	0	70.5	70.5	70	Y	-	-	27.2	Y	Y	Y		
N2582	13	57.4	A1-8	-	43.7	0	16.6	65.6	47.1	68.9	0	70.6	70.6	70	Y	-	-	26.9	Y	Y	Y		
N2582	14	60.1	A1-8	-	44	0	17.3	65.5	46.9	69.2	0	70.7	70.8	70	Y	-	-	26.6	Y	Y	Y		
N2582	15	62.8	A1-8	-	44.9	0	18	65.4	46.8	69.5	0	70.9	70.9	70	Y	-	-	26.0	Y	Y	Y		
N2582	16	65.5	A1-8	-	45.7	0	18.8	65.2	46.8	69.8	0	71.1	71.1	70	Y	-	-	25.4	Y	Y	Y		
N2582	17	68.2	A1-8	-	46	0	19.5	65.1	46.8	70.2	0	71.3	71.4	70	Y	-	-	25.4	Y	Y	Y		
N2582	18	70.9	A1-8	-	46.2	0	20.3	65	47	70.5	0	71.6	71.6	70	Y	-	-	25.4	Y	Y	Y		
N2582	19	73.6	A1-8	-	46.3	0	21.3	64.8	47.1	70.7	0	71.7	71.7	70	Y	-	-	25.4	Y	Y	Y		
N2582	20	76.3	A1-8	-	46.2	0	22.2	64.7	47.3	71	0	72	72.0	70	Y	-	-	25.8	Y	Y	Y		
N2582	21	79	A1-8	-	46.2	0	23.3	64.6	47.5	71.3	0	72.1	72.1	70	Y	-	-	25.9	Y	Y	Y		
N2582	22	81.7	A1-8	-	46.2	0	24.6	64.5	47.7	71.5	0	72.3	72.3	70	Y	-	-	26.1	Y	Y	Y		
N2582	23	84.4	A1-8	-	46.2	0	26.2	64.4	47.9	71.8	0	72.5	72.5	70	Y	-	-	26.3	Y	Y	Y		
N2582	24	87.1	A1-8	-	46.2	0	28.4	64.3	48	72	0	72.7	72.7	70	Y	-	-	26.5	Y	Y	Y		
N2582	25	89.8	A1-8	-	46.2	0	30.8	64.2	48	72.2	0	72.9	72.9	70	Y	-	-	26.7	Y	Y	Y		
N2582	26	92.5	A1-8	-	46.2	0	32	64.1	48.1	72.5	0	73.1	73.1	70	Y	-	-	26.9	Y	Y	Y		
N2582	27	95.2	A1-8	-	46.2	0	32.5	64	48.3	72.6	0	73.2	73.2	70	Y	-	-	27.0	Y	Y	Y		
N2582	28	97.9	A1-8	-	46.2	0	32.9	64	48.3	72.8	0	73.4	73.4	70	Y	-	-	27.2	Y	Y	Y		
N2582	29	100.6	A1-8	-	46.2	0	33.1	63.9	48.6	72.9	0	73.4	73.4	70	Y	-	-	27.2	Y	Y	Y		
N2582	30	103.3	A1-8	-	46.1	0	33.3	63.9	48.8	73	0	73.5	73.5	70	Y	-	-	27.4	Y	Y	Y		
N2582	31	106	A1-8	-	46.1	0	33.5	63.8	49.2	73	0	73.5	73.6	70	Y	-	-	27.5	Y	Y	Y		
N2582	32	108.7	A1-8	-	46.1	0	33.8	63.7	49.6	73.1	0	73.6	73.6	70	Y	-	-	27.5	Y	Y	Y		
N2582	33	111.4	A1-8	-	46.1	0	34.1	63.6	50.2	73.2	0	73.6	73.6	70	Y	-	-	27.6	Y	Y	Y		
N2582	34	114.1	A1-8	-	46.1	0	34.4	63.5	50.5	73.2	0	73.7	73.7	70	Y	-	-	27.6	Y	Y	Y		
N2582	35	116.8	A1-8	-	46.1	0	35	63.5	50.6	73.3	0	73.7	73.7	70	Y	-	-	27.6	Y	Y	Y		
N1505	1	14.6	Ma Tao Lung	57.8	0	0	69.8	56.7	0	0	0	70	70.0	70	N	12.2	Y	67.0	Y	N	N		
N2727a	1	23.5	A3-3	-	0	0	47.2	65.2	49.8	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N		
N2727a	2	26.3	A3-3	-	0	0	48.5	70.6	51.4	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	Y		
N2727a	3	29.1	A3-3	-	0	0	48.5	71.2	51.6	0	0	71.3	71.3	70	Y	-	-	68.3	Y	Y	Y		
N2727a	4	31.9	A3-3	-	0	0	48.5	71.1	51.6	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	Y		
N2727a	5	34.7	A3-3	-	0	0	48.5	70.8	51.6	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y		
N2727a	6	37.5	A3-3	-	0	0	48.5	70.5	51.6	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	Y		
N2727a	7	40.3	A3-3	-	0	0	48.6	70.2	51.5	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N		
N2727a	8	43.1	A3-3	-	0	0	48.6	69.9	51.5	0	0	70	70.0	70	N	-	-	67.0	Y	N	N		
N2727a	9	45.9	A3-3	-	0	0	48.6	69.6	51.5	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N		
N2727a	10	48.7	A3-3	-	0	0	48.6	69.4	51.4	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N		
N2727a	11	51.5	A3-3	-	0	0	48.6	69.1	51.4	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N		
N2727a	12	54.3	A3-3	-	0	0	48.5	68.8	51.4	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N		
N2727a	13	57.1	A3-3	-	0	0	48.5	68.6	51.3	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N		
N2727a	14	59.9	A3-3	-	0	0	48.5	68.4	51.3	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N		
N2727a	15	62.7	A3-3	-	0	0	48.6	68.1	51.2	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N		
N2727a	16	65.5	A3-3	-	0	0	48.6	67.9	51.2	0	0	68	68.0	70	N	-	-	65.0	Y	N	N		
N2727a	17	68.3	A3-3	-	0	0	48.5	67.7	51.1	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N		
N2727a	18	71.1	A3-3	-	0	0	48.5	67.5	51.1	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N		
N2727a	19	73.9	A3-3	-	0	0	48.5	67.3	51	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N		
N2727a</																							

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)		D ≥ 1dB(A)				New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			
ID	Floor	Floor Level (mPD)	Location	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A)	[C]	[D]	D ≥ 1dB(A)	[E]	≥ 1dB(A)	B > Criteria	[Y/N]			
N2727b	2	26.3	A3-3	-	9.5	0	18.4	69.4	0	0	0	69.4	69.4	70	N	-	-	59.4	Y	N		
N2727b	3	29.1	A3-3	-	9.5	0	18.4	70.7	0	0	0	70.7	70.7	70	Y	-	-	60.7	Y	Y		
N2727b	4	31.9	A3-3	-	9.5	0	18.5	70.6	0	0	0	70.6	70.6	70	Y	-	-	60.6	Y	Y		
N2727b	5	34.7	A3-3	-	9.5	0	18.4	70.3	0	0	0	70.3	70.3	70	N	-	-	60.3	Y	N		
N2727b	6	37.5	A3-3	-	9.5	0	18.4	70.1	0	0	0	70.1	70.1	70	N	-	-	60.1	Y	N		
N2727b	7	40.3	A3-3	-	9.5	0	18.4	69.8	0	0	0	69.8	69.8	70	N	-	-	59.8	Y	N		
N2727b	8	43.1	A3-3	-	9.5	0	18.4	69.5	0	0	0	69.5	69.5	70	N	-	-	59.5	Y	N		
N2727b	9	45.9	A3-3	-	9.5	0	18.4	69.2	0	0	0	69.2	69.2	70	N	-	-	59.2	Y	N		
N2727b	10	48.7	A3-3	-	9.5	0	18.4	68.9	0	0	0	68.9	68.9	70	N	-	-	58.9	Y	N		
N2727b	11	51.5	A3-3	-	9.5	0	18.4	68.7	0	0	0	68.7	68.7	70	N	-	-	58.7	Y	N		
N2727b	12	54.3	A3-3	-	9.5	0	18.4	68.4	0	0	0	68.4	68.4	70	N	-	-	58.4	Y	N		
N2727b	13	57.1	A3-3	-	9.5	0	18.4	68.2	0	0	0	68.2	68.2	70	N	-	-	58.2	Y	N		
N2727b	14	59.9	A3-3	-	9.5	0	18.3	67.9	0	0	0	67.9	67.9	70	N	-	-	57.9	Y	N		
N2727b	15	62.7	A3-3	-	9.5	0	18.3	67.7	0	0	0	67.7	67.7	70	N	-	-	57.7	Y	N		
N2727b	16	65.5	A3-3	-	9.5	0	18.3	67.5	0	0	0	67.5	67.5	70	N	-	-	57.5	Y	N		
N2727b	17	68.3	A3-3	-	9.5	0	18.3	67.3	0	0	0	67.3	67.3	70	N	-	-	57.3	Y	N		
N2727b	18	71.1	A3-3	-	9.5	0	18.2	67.1	0	0	0	67.1	67.1	70	N	-	-	57.1	Y	N		
N2727b	19	73.9	A3-3	-	9.5	0	18.2	66.9	0	0	0	66.9	66.9	70	N	-	-	56.9	Y	N		
N2727b	20	76.7	A3-3	-	9.5	0	18.1	66.7	0	0	0	66.7	66.7	70	N	-	-	56.7	Y	N		
N2727b	21	79.5	A3-3	-	9.5	0	18.1	66.5	0	0	0	66.5	66.5	70	N	-	-	56.5	Y	N		
N2727b	22	82.3	A3-3	-	9.5	0	18.1	66.4	0	0	0	66.4	66.4	70	N	-	-	56.4	Y	N		
N2727b	23	85.1	A3-3	-	9.5	0	18.1	66.2	0	0	0	66.2	66.2	70	N	-	-	56.2	Y	N		
N2727b	24	87.9	A3-3	-	9.5	0	18	66	0	0	0	66	66.0	70	N	-	-	56.0	Y	N		
N2727b	25	90.7	A3-3	-	9.5	0	18.2	65.9	0	0	0	65.9	65.9	70	N	-	-	55.9	Y	N		
N2727b	26	93.5	A3-3	-	9.4	0	17.9	65.7	0	0	0	65.7	65.7	70	N	-	-	55.8	Y	N		
N2727b	27	96.3	A3-3	-	9.4	0	17.9	65.6	0	0	0	65.6	65.6	70	N	-	-	55.7	Y	N		
N2727b	28	99.1	A3-3	-	9.4	0	17.9	65.4	0	0	0	65.4	65.4	70	N	-	-	55.5	Y	N		
N2727b	29	101.9	A3-3	-	9.4	0	17.9	65.3	0	0	0	65.3	65.3	70	N	-	-	55.4	Y	N		
N2727b	30	104.7	A3-3	-	9.4	0	17.8	65.2	0	0	0	65.2	65.2	70	N	-	-	55.3	Y	N		
N2727b	31	107.5	A3-3	-	9.4	0	17.8	65	0	0	0	65	65.0	70	N	-	-	55.1	Y	N		
N2727b	32	110.3	A3-3	-	9.4	0	17.7	64.9	0	0	0	64.9	64.9	70	N	-	-	55.0	Y	N		
N2727b	33	113.1	A3-3	-	9.4	0	17.7	64.8	0	0	0	64.8	64.8	70	N	-	-	54.9	Y	N		
N2727b	34	115.9	A3-3	-	9.4	0	17.7	64.7	0	0	0	64.7	64.7	70	N	-	-	54.8	Y	N		
N2727b	35	118.7	A3-3	-	9.4	0	17.7	64.5	0	0	0	64.5	64.5	70	N	-	-	54.6	Y	N		
N2727b	36	121.5	A3-3	-	9.4	0	17.7	64.4	0	0	0	64.4	64.4	70	N	-	-	54.5	Y	N		
N2727b	37	124.3	A3-3	-	9.4	0	18.2	64.3	0	0	0	64.3	64.3	70	N	-	-	54.4	Y	N		
N2727b	38	127.1	A3-3	-	9.5	0	18.3	64.2	0	0	0	64.2	64.2	70	N	-	-	54.2	Y	N		
N2727b	39	129.9	A3-3	-	10.3	0	18.3	64.1	0	0	0	64.1	64.1	70	N	-	-	54.1	Y	N		
N2726a	1	21.5	A3-3	-	7.6	0	18.7	57.9	35	0	0	57.9	57.9	70	N	-	-	49.6	Y	N		
N2726a	2	24.3	A3-3	-	7.6	0	18.7	65.5	40.3	0	0	65.5	65.5	70	N	-	-	57.2	Y	N		
N2726a	3	27.1	A3-3	-	7.6	0	18.7	70.6	42	0	0	70.6	70.6	70	Y	-	-	62.3	Y	Y		
N2726a	4	29.9	A3-3	-	7.6	0	18.7	71.4	42.8	0	0	71.4	71.4	70	Y	-	-	63.1	Y	Y		
N2726a	5	32.7	A3-3	-	7.6	0	18.7	71.3	43	0	0	71.3	71.3	70	Y	-	-	63.0	Y	Y		
N2726a	6	35.5	A3-3	-	7.6	0	18.7	71	43.1	0	0	71	71.0	70	Y	-	-	62.7	Y	Y		
N2726a	7	38.3	A3-3	-	7.6	0	18.7	70.7	43.1	0	0	70.7	70.7	70	Y	-	-	62.4	Y	Y		
N2726a	8	41.1	A3-3	-	7.6	0	18.7	70.4	43.1	0	0	70.4	70.4	70	N	-	-	62.1	Y	N		
N2726a	9	43.9	A3-3	-	7.6	0	18.7	70.1	43.1	0	0	70.1	70.1	70	N	-	-	61.8	Y	N		
N2726a	10	46.7	A3-3	-	7.6	0	18.7	69.9	43.1	0	0	69.9	69.9	70	N	-	-	61.6	Y	N		
N2726a	11	49.5	A3-3	-	7.5	0	18.7	69.6	43.1	0	0	69.6	69.6	70	N	-	-	61.4	Y	N		
N2726a	12	52.3	A3-3	-	7.5	0	18.7	69.4	43.1	0	0	69.4	69.4	70	N	-	-	61.2	Y	N		
N2726a	13	55.1	A3-3	-	7.5	0	18.7	69.1	43	0	0	69.1	69.1	70	N	-	-	60.9	Y	N		
N2726a	14	57.9	A3-3	-	7.5	0	18.6	68.9	43	0	0	68.9	68.9	70	N	-	-	60.7	Y	N		
N2726a	15	60.7	A3-3	-	7.5	0	18.6	68.6	43	0	0	68.6	68.6	70	N	-	-	60.4	Y	N		
N2726a	16	63.5	A3-3	-	7.5	0	18.6	68.4	43	0	0	68.4	68.4	70	N	-	-	60.2	Y	N		
N2726a	17	66.3	A3-3	-	7.5	0	18.6	68.2	43	0	0	68.2	68.2	70	N	-	-	60.0	Y	N		
N2726a	18	69.1	A3-3	-	7.5	0	18.6	68	42.9	0	0	68	68.0	70	N	-	-	59.8	Y	N		
N2726a	19	71.9	A3-3	-	7.5	0	18.6	67.8	42.9	0	0	67.8	67.8	70	N	-	-	59.6	Y	N		
N2726a	20	74.7	A3-3	-	7.5	0	18.5	67.6	42.9	0	0	67.6	67.6	70	N	-	-	59.4	Y	N		
N2726a	21	77.5	A3-3	-	7.5	0	18.5	67.5	42.9	0	0	67.5	67.5	70	N	-	-	59.3	Y	N		
N2726a	22	80.3	A3-3	-	7.4	0	18.5	67.3	42.8	0	0	67.3	67.3	70	N	-	-	59.2	Y	N		
N2726a	23	83.1	A3-3	-	7.4	0	18.5	67.1	42.8	0	0	67.1	67.1	70	N	-	-	59.0	Y	N		
N2726a	24	85.9	A3-3	-	7.4	0	18.4	67	42.8	0	0	67	67.0	70	N	-	-	58.9	Y	N		
N2726a	25	88.7	A3-3	-	7.4	0	18.4	66.8	42.8	0	0	66.8	66.8	70	N	-	-	58.7	Y	N		
N2726a	26	91.5	A3-3	-	7.4	0	18.3	66.6	42.7	0	0	66.6	66.6	70	N	-	-	58.5	Y	N		
N2726a	27	94.3	A3-3	-	7.4	0	18.3	66.5	42.7	0	0	66.5	66.5	70	N	-	-	58.4	Y	N		
N2726a	28	97.1	A3-3	-	7.4	0	18.3	66.4	42.7	0	0	66.4	66.4	70	N	-	-	58.3	Y	N		
N2726a	29	99.9	A3-3	-	7.4	0	18.3	66.2	42.6	0	0	66.2	66.2	70	N	-	-	58.1	Y	N		
N2726a	30	102.7	A3-3	-	7.3	0	18.2	66.1	42.6	0	0	66.1	66.1	70	N	-	-	58.1	Y	N		
N2726a	31	105.5	A3-3	-	7.3	0	18.2	66	42.6	0	0	66	66.0	70	N	-	-	58.0	Y	N		
N2726a	32	108.3	A3-3	-	7.3	0	18.1	65.8	42.6	0	0	65.8	65.8	70	N	-	-	57.8	Y	N		
N2726a	33	111.1	A3-3	-	7.3	0	18.1	65.7	42.5	0	0	65.7	65.7	70	N	-	-	57.7	Y	N		
N2726a	34	113.9	A3-3	-	7.3	0	18	65.6	42.5	0	0	65.6	65.6	70	N	-	-	57.6	Y	N		
N2726a	35	116.7	A3-3	-	7.3	0	18	65.5	42.5	0	0	65.5	65.5	70	N	-	-	57.5	Y	N		
N2726a	36	119.5	A3-3	-	7.3	0	18	65.4	42.4	0	0	65.4	65.4	70	N	-	-	57.4	Y	N		
N2726a	37	122.3	A3-3	-	7.3	0	18	65.2	42.4	0	0	65.2	65.2	70	N	-	-	57.2	Y	N		
N2726a	38	125.1	A3-3	-	7.3	0	17.9	65.1	42.4	0	0	65.1	65.1	70	N	-	-	57.1	Y	N		
N2726																						

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	Existing Roads in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Roads in 2044 dB(A) <sup>(3)</sup> [B]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) [E]			New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
						PD	DD	LD	EX	TR													
NZ726b	16	63.5	A3-3	-	0	0	13.5	67	33	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N	
NZ726b	17	66.3	A3-3	-	0	0	13.5	66.8	33	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N	
NZ726b	18	69.1	A3-3	-	0	0	13.4	66.6	33	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N	
NZ726b	19	71.9	A3-3	-	0	0	13.4	66.4	33	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N	
NZ726b	20	74.7	A3-3	-	0	0	13.4	66.2	33	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N	
NZ726b	21	77.5	A3-3	-	0	0	13.3	66.1	33	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N	
NZ726b	22	80.3	A3-3	-	0	0	13.3	66	33	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N	
NZ726b	23	83.1	A3-3	-	0	0	13.3	65.8	33	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N	
NZ726b	24	85.9	A3-3	-	0	0	13.2	65.6	33	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	
NZ726b	25	88.7	A3-3	-	0	0	13.2	65.5	33	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N	
NZ726b	26	91.5	A3-3	-	0	0	13.1	65.3	33	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N	
NZ726b	27	94.3	A3-3	-	0	0	13.1	65.2	33	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N	
NZ726b	28	97.1	A3-3	-	0	0	13.1	65.1	32.9	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N	
NZ726b	29	99.9	A3-3	-	0	0	13	64.9	32.9	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N	
NZ726b	30	102.7	A3-3	-	0	0	13	64.8	32.9	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N	
NZ726b	31	105.5	A3-3	-	0	0	12.9	64.6	32.9	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N	
NZ726b	32	108.3	A3-3	-	0	0	12.9	64.5	32.9	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N	
NZ726b	33	111.1	A3-3	-	0	0	12.8	64.4	32.9	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N	
NZ726b	34	113.9	A3-3	-	0	0	12.8	64.3	32.9	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N	
NZ726b	35	116.7	A3-3	-	0	0	12.8	64.2	32.8	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N	
NZ726b	36	119.5	A3-3	-	0	0	12.7	64	32.8	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N	
NZ726b	37	122.3	A3-3	-	0	0	12.7	63.9	32.9	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	N	
NZ726b	38	125.1	A3-3	-	0	0	12.8	63.8	32.9	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N	N	
NZ726b	39	127.9	A3-3	-	0	0	12.9	64.5	32.9	0	0	64.5	64.5	70	N	-	-	60.7	Y	N	N	N	
NZ726b	40	130.7	A3-3	-	0	0	13.1	63.6	32.9	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N	N	
NZ731a	1	19.5	A3-3	-	0	0	19.1	61.6	30	0	0	61.6	61.6	70	N	-	-	58.6	Y	N	N	N	
NZ731a	2	22.3	A3-3	-	0	0	19.1	69.2	33.7	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	N	
NZ731a	3	25.1	A3-3	-	0	0	19.1	71.8	36.6	0	0	71.8	71.8	70	Y	-	-	68.8	Y	Y	Y	Y	
NZ731a	4	27.9	A3-3	-	0	0	19.1	71.8	37.9	0	0	71.8	71.8	70	Y	-	-	68.8	Y	Y	Y	Y	
NZ731a	5	30.7	A3-3	-	0	0	19.1	71.6	38.7	0	0	71.6	71.6	70	Y	-	-	68.6	Y	Y	Y	Y	
NZ731a	6	33.5	A3-3	-	0	0	19.1	71.3	39.9	0	0	71.3	71.3	70	Y	-	-	68.3	Y	Y	Y	Y	
NZ731a	7	36.3	A3-3	-	0	0	19.1	71	39.3	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	Y	Y	
NZ731a	8	39.1	A3-3	-	0	0	19.1	70.7	39.4	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	Y	Y	
NZ731a	9	41.9	A3-3	-	0	0	19.1	70.4	39.4	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N	N	
NZ731a	10	44.7	A3-3	-	0	0	19.1	70.1	39.4	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	N	
NZ731a	11	47.5	A3-3	-	0	0	19.1	69.8	39.4	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N	
NZ731a	12	50.3	A3-3	-	0	0	19.1	69.6	39.4	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N	
NZ731a	13	53.1	A3-3	-	0	0	19.1	69.3	39.4	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N	N	
NZ731a	14	55.9	A3-3	-	0	0	19.1	69.1	39.4	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N	
NZ731a	15	58.7	A3-3	-	0	0	19.1	68.9	39.4	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N	
NZ731a	16	61.5	A3-3	-	0	0	19.1	68.7	39.4	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N	
NZ731a	17	64.3	A3-3	-	0	0	19.1	68.4	39.4	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	N	
NZ731a	18	67.1	A3-3	-	0	0	19.1	68.2	39.4	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N	
NZ731a	19	69.9	A3-3	-	0	0	19.1	68	39.4	0	0	68	68.0	70	N	-	-	65.0	Y	N	N	N	
NZ731a	20	72.7	A3-3	-	0	0	19.1	67.9	39.3	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N	
NZ731a	21	75.5	A3-3	-	0	0	19.1	67.7	39.3	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N	
NZ731a	22	78.3	A3-3	-	0	0	19	67.5	39.3	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N	
NZ731a	23	81.1	A3-3	-	0	0	19	67.3	39.3	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N	
NZ731a	24	83.9	A3-3	-	0	0	19	67.2	39.3	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N	
NZ731a	25	86.7	A3-3	-	0	0	19	67	39.3	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N	
NZ731a	26	89.5	A3-3	-	0	0	19	66.9	39.3	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N	
NZ731a	27	92.3	A3-3	-	0	0	18.9	66.7	39.3	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N	
NZ731a	28	95.1	A3-3	-	0	0	18.9	66.6	39.2	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N	
NZ731a	29	97.9	A3-3	-	0	0	18.9	66.4	39.2	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N	
NZ731a	30	100.7	A3-3	-	0	0	18.9	66.3	39.2	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N	
NZ731a	31	103.5	A3-3	-	0	0	18.9	66.2	39.2	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N	
NZ731a	32	106.3	A3-3	-	0	0	18.8	66	39.2	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N	
NZ731a	33	109.1	A3-3	-	0	0	18.8	65.9	39.2	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N	
NZ731a	34	111.9	A3-3	-	0	0	18.8	65.8	39.1	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N	
NZ731a	35	114.7	A3-3	-	0	0	18.8	65.7	39.1	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N	
NZ731a	36	117.5	A3-3	-	0	0	18.8	65.6	39.1	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	
NZ731a	37	120.3	A3-3	-	0	0	18.7	65.5	39.1	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N	
NZ731a	38	123.1	A3-3	-	0	0	18.7	65.3	39	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N	
NZ731a	39	125.9	A3-3	-	0	0	18.6	65.2	39	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N	
NZ731b	1	19.5	A3-3	-	0	0	18.6	65.1	38.9	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N	
NZ731b	2	22.3	A3-3	-	0	0	0	66.9	27.4	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N	
NZ731b	3	25.1	A3-3	-	0	0	0	70.2	28.6	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N	N	
NZ731b	4	27.9	A3-3	-	0	0	0	70.3	30.4	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N	N	
NZ731b	5	30.7	A3-3	-	0	0	0	70	32.7	0	0	70	70.0	70	N	-	-	67.0	Y	N	N	N	
NZ731b	6	33.5	A3-3	-	0	0	0	69.7	34.5	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	N	
NZ731b	7	36.3	A3-3	-	0	0	0	69.4	36.4	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N	
NZ731b	8	39.1	A3-3	-	0	0	0	69.2	37.3	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	N	
NZ731b	9	41.9	A3-3	-	0	0																	

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)(3)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)		New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)			New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(2)</sup> [B]	[C]		[D]	[E]	≥ 1dB(A)	B > Criteria					
N2731b	29	97.9	A3-3	-	0	0	0	65	38.1	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	
N2731b	30	100.7	A3-3	-	0	0	0	64.9	38	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	
N2731b	31	103.5	A3-3	-	0	0	0	64.7	38.1	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	
N2731b	32	106.3	A3-3	-	0	0	0	64.6	38.1	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	
N2731b	33	109.1	A3-3	-	0	0	0	64.5	38.1	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	
N2731b	34	111.9	A3-3	-	0	0	0	64.4	38.2	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	
N2731b	35	114.7	A3-3	-	0	0	0	64.3	38.2	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	
N2731b	36	117.5	A3-3	-	0	0	0	64.2	38.3	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	
N2731b	37	120.3	A3-3	-	0	0	0	64	38.3	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	
N2731b	38	123.1	A3-3	-	0	0	0	63.9	38.4	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	
N2731b	39	125.9	A3-3	-	0	0	0	63.8	38.5	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N	
N2731b	40	128.7	A3-3	-	0	0	0	63.7	38.7	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	
N2681	1	19.1	A2-7	-	0	0	13.4	72.1	56.5	0	0	72.2	72.2	70	Y	-	-	69.2	Y	Y	Y	
N2681	2	21.9	A2-7	-	0	0	13.4	71.9	56.5	0	0	72	72.0	70	Y	-	-	69.0	Y	Y	Y	
N2681	3	24.7	A2-7	-	0	0	13.4	71.7	56.5	0	0	71.9	71.9	70	Y	-	-	68.9	Y	Y	Y	
N2681	4	27.5	A2-7	-	0	0	13.4	71.5	56.5	0	0	71.7	71.7	70	Y	-	-	68.7	Y	Y	Y	
N2681	5	30.3	A2-7	-	0	0	13.4	71.3	56.4	0	0	71.5	71.5	70	Y	-	-	68.5	Y	Y	Y	
N2681	6	33.1	A2-7	-	0	0	13.4	71.1	56.4	0	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	Y	
N2681	7	35.9	A2-7	-	0	0	13.4	70.8	56.4	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	Y	
N2681	8	38.7	A2-7	-	0	0	13.4	70.6	56.4	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y	
N2681	9	41.5	A2-7	-	0	0	13.4	70.4	56.3	0	0	70.5	70.5	70	Y	-	-	67.5	Y	Y	Y	
N2681	10	44.3	A2-7	-	0	0	13.3	70.2	56.3	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N	
N2681	11	47.1	A2-7	-	0	0	13.4	69.9	56.3	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	
N2681	12	49.9	A2-7	-	0	0	13.5	69.7	56.2	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	
N2681	13	52.7	A2-7	-	0	0	13.5	69.5	56.2	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	
N2681	14	55.5	A2-7	-	0	0	13.6	69.3	56.2	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	
N2681	15	58.3	A2-7	-	0	0	13.3	69.1	56.1	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N	
N2681	16	61.1	A2-7	-	0	0	13.6	68.9	56.1	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	
N2681	17	63.9	A2-7	-	0	0	13.5	68.7	56.1	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	
N2681	18	66.7	A2-7	-	0	0	13.4	68.5	56	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	
N2681	19	69.5	A2-7	-	0	0	13.4	68.3	56	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	
N2681	20	72.3	A2-7	-	0	0	13.7	68.2	56	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	
N2681	21	75.1	A2-7	-	0	0	14	68	55.9	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	
N2681	22	77.9	A2-7	-	0	0	14.4	67.9	55.9	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	
N2681	23	80.7	A2-7	-	0	0	14.7	67.7	55.9	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	
N2681	24	83.5	A2-7	-	0	0	15.2	67.5	55.9	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	
N2681	25	86.3	A2-7	-	0	0	15.6	67.4	55.8	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	
N2681	26	89.1	A2-7	-	0	0	16	67.2	55.8	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	
N2681	27	91.9	A2-7	-	0	0	16.2	67.1	55.8	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	
N2681	28	94.7	A2-7	-	0	0	16.6	67	55.7	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	
N2681	29	97.5	A2-7	-	0	0	17	66.9	55.7	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	
N2681	30	100.3	A2-7	-	0	0	17.5	66.7	55.7	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	
N2681	31	103.1	A2-7	-	0	0	17.8	66.6	55.7	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
N2681	32	105.9	A2-7	-	0	0	18.1	66.5	55.6	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	
N2681	33	108.7	A2-7	-	0	0	18.5	66.4	55.6	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	
N2681	34	111.5	A2-7	-	0	0	18.9	66.3	55.6	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	
N2681	35	114.3	A2-7	-	0	0	19.4	66.2	55.5	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	
N2681	36	117.1	A2-7	-	0	0	19.8	66	55.6	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	
N2681	37	119.9	A2-7	-	0	0	20.2	65.9	55.5	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	
N2681	38	122.7	A2-7	-	0	0	20.6	65.8	55.6	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	
N2681	39	125.5	A2-7	-	0	0	21.1	65.7	55.5	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	
N2681	40	128.3	A2-7	-	0	0	21.5	65.6	55.5	0	0	66	66	70	N	-	-	63.0	Y	N	N	
N2682	1	19.1	A2-7	-	12.9	0	44.1	55.1	62.8	0	0	63.5	63.5	70	N	-	-	50.4	Y	N	N	
N2682	2	21.9	A2-7	-	12.9	0	44.1	55.1	62.6	0	0	63.4	63.4	70	N	-	-	50.3	Y	N	N	
N2682	3	24.7	A2-7	-	13	0	44.1	55.1	62.4	0	0	63.2	63.2	70	N	-	-	50.0	Y	N	N	
N2682	4	27.5	A2-7	-	13	0	44.1	55.1	62.2	0	0	63	63.0	70	N	-	-	49.8	Y	N	N	
N2682	5	30.3	A2-7	-	13	0	44.1	55.1	62	0	0	62.9	62.9	70	N	-	-	49.7	Y	N	N	
N2682	6	33.1	A2-7	-	13.1	0	44.1	55.1	61.7	0	0	62.6	62.6	70	N	-	-	49.3	Y	N	N	
N2682	7	35.9	A2-7	-	13.1	0	44.1	55.1	61.5	0	0	62.4	62.4	70	N	-	-	49.1	Y	N	N	
N2682	8	38.7	A2-7	-	13.1	0	44.1	55.1	61.2	0	0	62.3	62.3	70	N	-	-	49.0	Y	N	N	
N2682	9	41.5	A2-7	-	13.1	0	44.1	55.2	61	0	0	62.1	62.1	70	N	-	-	48.8	Y	N	N	
N2682	10	44.3	A2-7	-	13.1	0	44.1	55.2	60.8	0	0	61.9	61.9	70	N	-	-	48.6	Y	N	N	
N2682	11	47.1	A2-7	-	13.1	0	44.1	55.2	60.5	0	0	61.7	61.7	70	N	-	-	48.4	Y	N	N	
N2682	12	49.9	A2-7	-	13.1	0	44.1	55.3	60.3	0	0	61.6	61.6	70	N	-	-	48.3	Y	N	N	
N2682	13	52.7	A2-7	-	13.1	0	44.1	55.5	60.1	0	0	61.5	61.5	70	N	-	-	48.1	Y	N	N	
N2682	14	55.5	A2-7	-	13.1	0	44.1	55.8	59.9	0	0	61.4	61.4	70	N	-	-	48.1	Y	N	N	
N2682	15	58.3	A2-7	-	13.2	0	44.1	56	59.8	0	0	61.4	61.4	70	N	-	-	48.0	Y	N	N	
N2682	16	61.1	A2-7	-	13.2	0	44.1	56.2	59.6	0	0	61.3	61.3	70	N	-	-	47.9	Y	N	N	
N2682	17	63.9	A2-7	-	13.2	0	44.1	56.5	59.4	0	0	61.3	61.3	70	N	-	-	47.9	Y	N	N	
N2682	18	66.7	A2-7	-	13.3	0	44.1	57	59.4	0	0	61.4	61.4	70	N	-	-	47.9	Y	N	N	
N2682	19	69.5	A2-7	-	13.2	0	44.2	57.7	59.2	0	0	61.8	61.6	70	N	-	-	48.2	Y	N	N	
N2682	20	72.3	A2-7	-	13.6	0	44.2	58.3	59.1	0	0	61.6	61.8	70	N	-	-	48.0	Y	N	N	
N2682	21	75.1	A2-7	-	14.1	0	44.3	58.6	59	0	0	61.9	61.9	70	N	-	-	47.8	Y	N	N	
N2682	22	77.9	A2-7	-	14.1	0	44.4	58.9	58.9	0	0	62	62.0	70	N	-	-	47.7	Y	N	N	
N2682	23	80.7	A2-7	-	14.5	0	44.5	5														

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)		New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)			New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(1)</sup> [B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]				
N2683	2	21.9	A2-7	-	11	0	18.6	50.8	61.9	0	0	62.2	62.2	70	N	-	-	50.9	Y	N	N	
N2683	3	24.7	A2-7	-	11.2	0	18.6	50.9	61.7	0	0	62	62.0	70	N	-	-	50.5	Y	N	N	
N2683	4	27.5	A2-7	-	11.3	0	18.6	50.9	61.5	0	0	61.9	61.9	70	N	-	-	50.3	Y	N	N	
N2683	5	30.3	A2-7	-	11.4	0	18.6	50.9	61.3	0	0	61.7	61.7	70	N	-	-	50.0	Y	N	N	
N2683	6	33.1	A2-7	-	11.5	0	18.6	51	61.1	0	0	61.5	61.5	70	N	-	-	49.7	Y	N	N	
N2683	7	35.9	A2-7	-	11.7	0	18.6	51.1	60.9	0	0	61.3	61.3	70	N	-	-	49.3	Y	N	N	
N2683	8	38.7	A2-7	-	11.7	0	18.5	51.1	60.7	0	0	61.2	61.2	70	N	-	-	49.2	Y	N	N	
N2683	9	41.5	A2-7	-	11.7	0	18.5	51.3	60.6	0	0	61	61.0	70	N	-	-	49.0	Y	N	N	
N2683	10	44.3	A2-7	-	11.7	0	18.5	51.5	60.3	0	0	60.9	60.9	70	N	-	-	48.9	Y	N	N	
N2683	11	47.1	A2-7	-	11.7	0	18.7	51.9	60.2	0	0	60.8	60.8	70	N	-	-	48.8	Y	N	N	
N2683	12	49.9	A2-7	-	11.7	0	18.8	52.6	60	0	0	60.7	60.7	70	N	-	-	48.7	Y	N	N	
N2683	13	52.7	A2-7	-	11.8	0	19	53.9	59.9	0	0	60.9	60.9	70	N	-	-	48.8	Y	N	N	
N2683	14	55.5	A2-7	-	11.8	0	19.2	55.7	59.8	0	0	61.2	61.2	70	N	-	-	49.1	Y	N	N	
N2683	15	58.3	A2-7	-	11.8	0	19.5	57.3	59.7	0	0	61.7	61.7	70	N	-	-	49.6	Y	N	N	
N2683	16	61.1	A2-7	-	11.9	0	19.8	58.3	59.6	0	0	62	62.0	70	N	-	-	49.9	Y	N	N	
N2683	17	63.9	A2-7	-	11.9	0	20.1	59.1	59.5	0	0	62.3	62.3	70	N	-	-	50.1	Y	N	N	
N2683	18	66.7	A2-7	-	11.9	0	20.7	59.6	59.4	0	0	62.5	62.5	70	N	-	-	50.3	Y	N	N	
N2683	19	69.5	A2-7	-	11.9	0	21.2	59.9	59.3	0	0	62.6	62.6	70	N	-	-	50.4	Y	N	N	
N2683	20	72.3	A2-7	-	11.9	0	21.7	60.3	59.2	0	0	62.8	62.8	70	N	-	-	50.6	Y	N	N	
N2683	21	75.1	A2-7	-	11.6	0	22.4	60.5	59.2	0	0	62.9	62.9	70	N	-	-	51.0	Y	N	N	
N2683	22	77.9	A2-7	-	12.1	0	23	60.9	59.1	0	0	63.1	63.1	70	N	-	-	50.7	Y	N	N	
N2683	23	80.7	A2-7	-	12.5	0	23.6	61.1	59.1	0	0	63.2	63.2	70	N	-	-	50.5	Y	N	N	
N2683	24	83.5	A2-7	-	13	0	24.2	61.4	59.1	0	0	63.4	63.4	70	N	-	-	50.2	Y	N	N	
N2683	25	86.3	A2-7	-	13.5	0	24.9	61.5	59.2	0	0	63.5	63.5	70	N	-	-	49.8	Y	N	N	
N2683	26	89.1	A2-7	-	14.1	0	25.5	61.6	59.2	0	0	63.5	63.5	70	N	-	-	49.2	Y	N	N	
N2683	27	91.9	A2-7	-	14.6	0	26.1	61.6	59.1	0	0	63.6	63.6	70	N	-	-	48.9	Y	N	N	
N2683	28	94.7	A2-7	-	15.2	0	26.9	61.7	59.1	0	0	63.6	63.6	70	N	-	-	48.3	Y	N	N	
N2683	29	97.5	A2-7	-	15.7	0	27.5	61.7	59.1	0	0	63.6	63.6	70	N	-	-	47.8	Y	N	N	
N2683	30	100.3	A2-7	-	16.3	0	28.3	61.7	59	0	0	63.6	63.6	70	N	-	-	47.2	Y	N	N	
N2683	31	103.1	A2-7	-	16.9	0	29	61.7	58.9	0	0	63.5	63.5	70	N	-	-	46.5	Y	N	N	
N2683	32	105.9	A2-7	-	17.5	0	29.8	61.7	58.8	0	0	63.5	63.5	70	N	-	-	45.9	Y	N	N	
N2683	33	108.7	A2-7	-	18.1	0	30.5	61.7	58.7	0	0	63.5	63.5	70	N	-	-	45.3	Y	N	N	
N2683	34	111.5	A2-7	-	18.8	0	31.2	61.7	58.6	0	0	63.4	63.4	70	N	-	-	44.5	Y	N	N	
N2683	35	114.3	A2-7	-	19.4	0	32.1	61.7	58.5	0	0	63.4	63.4	70	N	-	-	44.0	Y	N	N	
N2683	36	117.1	A2-7	-	20.1	0	32.8	61.7	58.4	0	0	63.4	63.4	70	N	-	-	43.3	Y	N	N	
N2683	37	119.9	A2-7	-	20.8	0	33.7	61.8	58.3	0	0	63.4	63.4	70	N	-	-	42.6	Y	N	N	
N2683	38	122.7	A2-7	-	21.4	0	34.7	61.7	58.2	0	0	63.3	63.3	70	N	-	-	41.9	Y	N	N	
N2683	39	125.5	A2-7	-	22.1	0	35.7	61.8	58.1	0	0	63.4	63.4	70	N	-	-	41.3	Y	N	N	
N2683	40	128.3	A2-7	-	22.8	0	36.8	61.8	58	0	0	63.3	63.3	70	N	-	-	40.5	Y	N	N	
N2729a	1	23.6	A3-3	-	0	0	21.5	52	62.3	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N	
N2729a	2	26.4	A3-3	-	0	0	21.5	52	62.3	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N	
N2729a	3	29.2	A3-3	-	0	0	21.5	52	62.3	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N	
N2729a	4	32	A3-3	-	0	0	21.5	52	62.2	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N	
N2729a	5	34.8	A3-3	-	0	0	21.4	52	62.1	0	0	62.5	62.5	70	N	-	-	59.5	Y	N	N	
N2729a	6	37.6	A3-3	-	0	0	21.5	52	62	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N	
N2729a	7	40.4	A3-3	-	0	0	21.5	52	62	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N	
N2729a	8	43.2	A3-3	-	0	0	21.4	52	61.9	0	0	62.3	62.3	70	N	-	-	59.3	Y	N	N	
N2729a	9	46	A3-3	-	0	0	21.5	52	61.8	0	0	62.2	62.2	70	N	-	-	59.2	Y	N	N	
N2729a	10	48.8	A3-3	-	0	0	21.5	52.2	61.7	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N	
N2729a	11	51.6	A3-3	-	0	0	21.7	52.7	61.6	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N	
N2729a	12	54.4	A3-3	-	0	0	21.8	53.1	61.5	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N	
N2729a	13	57.2	A3-3	-	0	0	22.2	53.3	61.3	0	0	62	62.0	70	N	-	-	59.0	Y	N	N	
N2729a	14	60	A3-3	-	0	0	22.5	53.3	61.2	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N	
N2729a	15	62.8	A3-3	-	0	0	22.8	53.3	61.1	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	
N2729a	16	65.6	A3-3	-	0	0	23.2	53.3	61.1	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	
N2729a	17	68.4	A3-3	-	0	0	23.6	53.3	61.1	0	0	61.7	61.7	70	N	-	-	58.7	Y	N	N	
N2729a	18	71.2	A3-3	-	0	0	24	53.2	61.1	0	0	61.7	61.7	70	N	-	-	58.7	Y	N	N	
N2729a	19	74	A3-3	-	0	0	24.3	53.2	61.2	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	
N2729a	20	76.8	A3-3	-	0	0	24.9	53.2	61.1	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	
N2729a	21	79.6	A3-3	-	0	0	25.4	53.2	61.3	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N	
N2729a	22	82.4	A3-3	-	0	0	25.9	53.2	61.3	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N	
N2729a	23	85.2	A3-3	-	0	0	26.6	53.2	61.2	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N	
N2729a	24	88	A3-3	-	0	0	27.2	53.2	61.2	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	
N2729a	25	90.8	A3-3	-	0	0	27.9	53.1	61.1	0	0	61.7	61.7	70	N	-	-	58.7	Y	N	N	
N2729a	26	93.6	A3-3	-	0	0	28.7	53.1	61.1	0	0	61.7	61.7	70	N	-	-	58.7	Y	N	N	
N2729a	27	96.4	A3-3	-	0	0	29.6	53.1	60.9	0	0	61.6	61.6	70	N	-	-	58.6	Y	N	N	
N2729a	28	99.2	A3-3	-	0	0	30.7	53.1	60.8	0	0	61.5	61.5	70	N	-	-	58.5	Y	N	N	
N2729a	29	102	A3-3	-	0	0	32.1	53.1	60.7	0	0	61.4	61.4	70	N	-	-	58.4	Y	N	N	
N2729a	30	104.8	A3-3	-	0	0	34.4	53.1	60.6	0	0	61.3	61.3	70	N	-	-	58.3	Y	N	N	
N2729a	31	107.6	A3-3	-	0	0	36.2	53.1	60.5	0	0	61.2	61.2	70	N	-	-	58.2	Y	N	N	
N2729a	32	110.4	A3-3	-	0	0	37.8	53.1	60.4	0	0	61.2	61.2	70	N	-	-	58.2	Y	N	N	
N2729a	33	113.2	A3-3	-	0	0	38.7	53.2	60.3	0	0	61.1	61.1	70	N	-	-	58.1	Y	N	N	
N2729a	34	116	A3-3	-	0	0	38.9	53.3	60.2	0	0	61	61.0	70	N	-	-	58.0	Y	N	N	
N2729a	35	118.8	A3-3	-	0	0	39.1	53.3	60.1	0	0	61	61.0	70	N	-	-	58.0	Y	N	N	
N2729a																						

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation		Mitigation Measures Required <sup>(4)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria							
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD								EX	TR	New Roads in 2044 dB(A) <sup>(2)</sup> [B]		
N27296	15	62.8	A3-3	-	0	0	25.5	58.5	62.7	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N
N27296	16	65.6	A3-3	-	0	0	26	58.5	62.6	0	0	64.1	64.0	70	N	-	-	61.0	Y	N	N
N27296	17	68.4	A3-3	-	0	0	26.6	58.4	62.5	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N
N27296	18	71.2	A3-3	-	0	0	27.2	58.4	62.4	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N
N27296	19	74	A3-3	-	0	0	27.8	58.4	62.3	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N
N27296	20	76.8	A3-3	-	0	0	28.5	58.4	62.1	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N
N27296	21	79.6	A3-3	-	0	0	29.2	58.3	62	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N
N27296	22	82.4	A3-3	-	0	0	30	58.3	61.9	0	0	63.5	63.5	70	N	-	-	60.5	Y	N	N
N27296	23	85.2	A3-3	-	0	0	30.8	58.3	61.8	0	0	63.4	63.4	70	N	-	-	60.4	Y	N	N
N27296	24	88	A3-3	-	0	0	31.7	58.3	61.7	0	0	63.3	63.3	70	N	-	-	60.3	Y	N	N
N27296	25	90.8	A3-3	-	0	0	32.8	58.2	61.5	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N
N27296	26	93.6	A3-3	-	0	0	34	58.2	61.4	0	0	63.1	63.1	70	N	-	-	60.1	Y	N	N
N27296	27	96.4	A3-3	-	0	0	35.5	58.2	61.3	0	0	63.1	63.1	70	N	-	-	60.1	Y	N	N
N27296	28	99.2	A3-3	-	0	0	37.4	58.2	61.2	0	0	63	63.0	70	N	-	-	60.0	Y	N	N
N27296	29	102	A3-3	-	0	0	39.8	58.2	61.1	0	0	63	63.0	70	N	-	-	60.0	Y	N	N
N27296	30	104.8	A3-3	-	0	0	42.1	58.3	61.1	0	0	62.9	62.9	70	N	-	-	59.9	Y	N	N
N27296	31	107.6	A3-3	-	0	0	43.3	58.4	61	0	0	62.9	62.9	70	N	-	-	59.9	Y	N	N
N27296	32	110.4	A3-3	-	0	0	43.8	58.4	60.9	0	0	62.9	62.9	70	N	-	-	59.9	Y	N	N
N27296	33	113.2	A3-3	-	0	0	44	58.5	60.8	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N
N27296	34	116	A3-3	-	0	0	44.2	58.5	60.7	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N
N27296	35	118.8	A3-3	-	0	0	44.4	58.5	60.6	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N
N27296	36	121.6	A3-3	-	0	0	44.6	58.5	60.5	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N
N27296	37	124.4	A3-3	-	0	0	45	58.4	60.4	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N
N27296	38	127.2	A3-3	-	0	0	45.5	58.4	60.3	0	0	62.5	62.5	70	N	-	-	59.5	Y	N	N
N27296	39	130	A3-3	-	0	0	46.1	58.4	60.2	0	0	62.5	62.5	70	N	-	-	59.5	Y	N	N
N27296	40	132.8	A3-3	-	0	0	46.5	58.4	60.1	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N
N2722	1	23.6	A3-3	-	0	0	22.8	60.9	64.5	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
N2722	2	26.4	A3-3	-	0	0	22.8	60.9	64.5	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
N2722	3	29.2	A3-3	-	0	0	22.8	60.8	64.4	0	0	66	66.0	70	N	-	-	63.0	Y	N	N
N2722	4	32	A3-3	-	0	0	22.8	60.8	64.3	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N
N2722	5	34.8	A3-3	-	0	0	22.7	60.8	64.2	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
N2722	6	37.6	A3-3	-	0	0	22.8	60.7	64.1	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
N2722	7	40.4	A3-3	-	0	0	22.9	60.7	63.9	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N
N2722	8	43.2	A3-3	-	0	0	22.9	60.6	63.8	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N
N2722	9	46	A3-3	-	0	0	23.1	60.6	63.7	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N
N2722	10	48.8	A3-3	-	0	0	23.5	60.6	63.6	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N
N2722	11	51.6	A3-3	-	0	0	23.8	60.5	63.4	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N
N2722	12	54.4	A3-3	-	0	0	24.2	60.5	63.3	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N
N2722	13	57.2	A3-3	-	0	0	24.6	60.4	63.2	0	0	65	65.0	70	N	-	-	62.0	Y	N	N
N2722	14	60	A3-3	-	0	0	25	60.3	63	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N
N2722	15	62.8	A3-3	-	0	0	25.4	60.3	62.9	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N
N2722	16	65.6	A3-3	-	0	0	26	60.2	62.7	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N
N2722	17	68.4	A3-3	-	0	0	26.5	60.2	62.6	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N
N2722	18	71.2	A3-3	-	0	0	26.9	60.1	62.5	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N
N2722	19	74	A3-3	-	0	0	27.5	60.1	62.4	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N
N2722	20	76.8	A3-3	-	0	0	28	60	62.2	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N
N2722	21	79.6	A3-3	-	0	0	28.6	59.9	62.1	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N
N2722	22	82.4	A3-3	-	0	0	29.2	59.8	62	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N
N2722	23	85.2	A3-3	-	0	0	29.9	59.8	61.9	0	0	64	64.0	70	N	-	-	61.0	Y	N	N
N2722	24	88	A3-3	-	0	0	30.5	59.7	61.8	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N
N2722	25	90.8	A3-3	-	0	0	31.3	59.6	61.7	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N
N2722	26	93.6	A3-3	-	0	0	32	59.6	61.6	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N
N2722	27	96.4	A3-3	-	0	0	32.8	59.5	61.4	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N
N2722	28	99.2	A3-3	-	0	0	33.6	59.4	61.3	0	0	63.5	63.5	70	N	-	-	60.5	Y	N	N
N2722	29	102	A3-3	-	0	0	34.5	59.4	61.2	0	0	63.4	63.4	70	N	-	-	60.4	Y	N	N
N2722	30	104.8	A3-3	-	0	0	35.4	59.3	61.1	0	0	63.3	63.3	70	N	-	-	60.3	Y	N	N
N2722	31	107.6	A3-3	-	0	0	36.4	59.2	61	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N
N2722	32	110.4	A3-3	-	0	0	37.6	59.2	60.9	0	0	63.1	63.1	70	N	-	-	60.1	Y	N	N
N2722	33	113.2	A3-3	-	0	0	38.9	59.1	60.8	0	0	63.1	63.1	70	N	-	-	60.1	Y	N	N
N2722	34	116	A3-3	-	0	0	40.4	59.1	60.7	0	0	63	63.0	70	N	-	-	60.0	Y	N	N
N2722	35	118.8	A3-3	-	0	0	42.6	59	60.6	0	0	62.9	62.9	70	N	-	-	59.9	Y	N	N
N2722	36	121.6	A3-3	-	0	0	44.3	59	60.5	0	0	62.9	62.9	70	N	-	-	59.9	Y	N	N
N2722	37	124.4	A3-3	-	0	0	46	58.9	60.4	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N
N2722	38	127.2	A3-3	-	0	0	46.8	58.9	60.3	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N
N2722	39	130	A3-3	-	0	0	47.3	58.8	60.2	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N
N2722	40	132.8	A3-3	-	0	0	47.5	58.8	60.1	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N
N2723	1	23.6	A3-3	-	0	0	41.4	68.1	64.8	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N
N2723	2	26.4	A3-3	-	0	0	41.4	68.1	64.7	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N
N2723	3	29.2	A3-3	-	0	0	41.4	68	64.6	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N
N2723	4	32	A3-3	-	0	0	41.4	67.9	64.5	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N
N2723	5	34.8	A3-3	-	0	0	41.4	67.8	64.3	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N
N2723	6	37.6	A3-3	-	0	0	41.4	67.7	64.2	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2723	7	40.4	A3-3	-	0	0	41.4	67.6	64.1	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N
N2723	8	43.2	A3-3	-	0	0	41.4	67.4	63.9	0	0	69	69.0	70	N	-	-	66.0	Y	N	N
N2723	9	46	A3-3	-	0	0	41.4	67.3	63.8	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)		
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Roads in 2044 dB(A) <sup>(3)</sup> [B]	PD	DD	LD			EX	TR	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]		New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD															
N2723	28	99.2	A3-3	-	0	0	43.9	65.1	61.3	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N			
N2723	29	102	A3-3	-	0	0	45.3	65	61.3	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N			
N2723	30	104.8	A3-3	-	0	0	46.5	64.9	61.2	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N			
N2723	31	107.6	A3-3	-	0	0	47.4	64.8	61.1	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N			
N2723	32	110.4	A3-3	-	0	0	47.9	64.7	61	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N			
N2723	33	113.2	A3-3	-	0	0	48.1	64.6	60.9	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N			
N2723	34	116	A3-3	-	0	0	48	64.5	60.8	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N			
N2723	35	118.8	A3-3	-	0	0	48.1	64.5	60.7	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N			
N2723	36	121.6	A3-3	-	0	0	48.1	64.4	60.6	0	0	66	66.0	70	N	-	-	63.0	Y	N	N			
N2723	37	124.4	A3-3	-	0	0	48.1	64.3	60.5	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N			
N2723	38	127.2	A3-3	-	0	0	48.2	64.3	60.4	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N			
N2723	39	130	A3-3	-	0	0	48.2	64.3	60.4	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N			
N2723	40	132.8	A3-3	-	0	0	48.2	64.2	60.3	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N			
N2725	1	23.6	A3-3	-	0	0	18.3	62.4	39.5	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N			
N2725	2	26.4	A3-3	-	0	0	18.3	69.6	43.8	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N			
N2725	3	29.2	A3-3	-	0	0	18.2	72.7	44.6	0	0	72.7	72.7	70	Y	-	-	69.7	Y	Y	Y			
N2725	4	32	A3-3	-	0	0	18.2	72.6	44.7	0	0	72.6	72.6	70	Y	-	-	69.6	Y	Y	Y			
N2725	5	34.8	A3-3	-	0	0	18.2	72.4	44.7	0	0	72.4	72.4	70	Y	-	-	69.4	Y	Y	Y			
N2725	6	37.6	A3-3	-	0	0	18.2	72.1	44.7	0	0	72.1	72.1	70	Y	-	-	69.1	Y	Y	Y			
N2725	7	40.4	A3-3	-	0	0	18.3	71.7	44.7	0	0	71.7	71.7	70	Y	-	-	68.7	Y	Y	Y			
N2725	8	43.2	A3-3	-	0	0	18.3	71.4	44.8	0	0	71.4	71.4	70	Y	-	-	68.4	Y	Y	Y			
N2725	9	46	A3-3	-	0	0	18.3	71.1	44.7	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	Y			
N2725	10	48.8	A3-3	-	0	0	18.3	70.9	44.7	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	Y			
N2725	11	51.6	A3-3	-	0	0	18.2	72.6	44.7	0	0	72.6	72.6	70	Y	-	-	73.6	Y	Y	Y			
N2725	12	54.4	A3-3	-	0	0	18.2	70.3	44.7	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N			
N2725	13	57.2	A3-3	-	0	0	18.2	70.1	44.7	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N			
N2725	14	60	A3-3	-	0	0	18.2	69.9	44.7	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N			
N2725	15	62.8	A3-3	-	0	0	18.3	69.6	44.6	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N			
N2725	16	65.6	A3-3	-	0	0	18.2	69.4	44.7	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N			
N2725	17	68.4	A3-3	-	0	0	18.2	69.2	44.6	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N			
N2725	18	71.2	A3-3	-	0	0	18.3	69	44.6	0	0	69	69.0	70	N	-	-	66.0	Y	N	N			
N2725	19	74	A3-3	-	0	0	18.4	68.9	44.6	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N			
N2725	20	76.8	A3-3	-	0	0	18.5	68.7	44.6	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N			
N2725	21	79.6	A3-3	-	0	0	18.5	68.5	44.6	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N			
N2725	22	82.4	A3-3	-	0	0	18.6	68.3	44.6	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N			
N2725	23	85.2	A3-3	-	0	0	18.7	68.2	44.6	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N			
N2725	24	88	A3-3	-	0	0	18.9	68	44.6	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N			
N2725	25	90.8	A3-3	-	0	0	18.9	67.9	44.7	0	0	68	68.0	70	N	-	-	65.0	Y	N	N			
N2725	26	93.6	A3-3	-	0	0	19.2	67.7	44.7	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N			
N2725	27	96.4	A3-3	-	0	0	19.3	67.6	44.8	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N			
N2725	28	99.2	A3-3	-	0	0	19.5	67.5	44.8	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N			
N2725	29	102	A3-3	-	0	0	19.6	67.4	44.8	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N			
N2725	30	104.8	A3-3	-	0	0	19.8	67.3	44.9	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N			
N2725	31	107.6	A3-3	-	0	0	19.9	67.1	45	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N			
N2725	32	110.4	A3-3	-	0	0	20.1	67	45.1	0	0	67	67.0	70	N	-	-	64.0	Y	N	N			
N2725	33	113.2	A3-3	-	0	0	20.3	66.9	45.2	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N			
N2725	34	116	A3-3	-	0	0	20.5	66.8	45.3	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N			
N2725	35	118.8	A3-3	-	0	0	20.7	66.7	45.3	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N			
N2725	36	121.6	A3-3	-	0	0	20.8	66.6	45.4	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N			
N2725	37	124.4	A3-3	-	0	0	21.1	66.5	45.6	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N			
N2725	38	127.2	A3-3	-	0	0	21.2	66.4	45.7	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N			
N2725	39	130	A3-3	-	0	0	21.6	66.3	45.8	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N			
N2725	40	132.8	A3-3	-	0	0	22	66.2	45.9	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N			
N2724a	1	23.6	A3-3	-	0	0	8.9	72.6	20.4	0	0	72.6	72.6	70	Y	-	-	69.6	Y	Y	Y			
N2724a	2	26.4	A3-3	-	0	0	8.9	72.3	20.5	0	0	72.3	72.3	70	Y	-	-	69.3	Y	Y	Y			
N2724a	3	29.2	A3-3	-	0	0	8.9	72	20.5	0	0	72	72.0	70	Y	-	-	69.0	Y	Y	Y			
N2724a	4	32	A3-3	-	0	0	8.9	71.7	20.5	0	0	71.7	71.7	70	Y	-	-	68.7	Y	Y	Y			
N2724a	5	34.8	A3-3	-	0	0	8.9	71.4	20.5	0	0	71.4	71.4	70	Y	-	-	68.4	Y	Y	Y			
N2724a	6	37.6	A3-3	-	0	0	8.9	71	20.5	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	Y			
N2724a	7	40.4	A3-3	-	0	0	8.9	70.7	20.5	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	Y			
N2724a	8	43.2	A3-3	-	0	0	8.9	70.4	20.5	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N			
N2724a	9	46	A3-3	-	0	0	8.9	70.2	20.5	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N			
N2724a	10	48.8	A3-3	-	0	0	8.9	69.9	20.5	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N			
N2724a	11	51.6	A3-3	-	0	0	8.9	69.6	20.5	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N			
N2724a	12	54.4	A3-3	-	0	0	8.9	69.4	20.4	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N			
N2724a	13	57.2	A3-3	-	0	0	8.9	69.1	20.4	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N			
N2724a	14	60	A3-3	-	0	0	8.9	68.9	20.4	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N			
N2724a	15	62.8	A3-3	-	0	0	8.9	68.7	20.4	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N			
N2724a	16	65.6	A3-3	-	0	0	8.9	68.5	20.4	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N			
N2724a	17	68.4	A3-3	-	0	0	8.9	68.3	20.4	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N			
N2724a	18	71.2	A3-3	-	0	0	8.9	68.1	20.4	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N			
N2724a	19	74	A3-3	-	0	0	8.9	67.9	20.4	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N			
N2724a	20	76.8	A3-3	-	0	0	8.9	67.7	20.3	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N			
N2724a	21	79.6	A3-3	-	0	0	8.9	67.6	20.3	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N			
N2724a	22	82.4	A3-3																					



Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>[2]</sup>					Overall Noise Level in 2044 dB(A) [C]	New Roads in 2044 dB(A) <sup>[2]</sup> [B]	New Road Contribution ≥ 1dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria								
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	PD	DD	LD								EX	TR	C - A dB(A) [D]	D ≥ 1dB(A)		
NZ724b	1	23.6	A3-3	-	0	0	8.9	72.6	20.5	0	0	72.6	72.6	70	Y	-	-	69.6	Y	Y	Y	Y
NZ724b	2	26.4	A3-3	-	0	0	8.9	72.3	20.5	0	0	72.3	72.3	70	Y	-	-	69.3	Y	Y	Y	Y
NZ724b	3	29.2	A3-3	-	0	0	8.9	72	20.5	0	0	72	72.0	70	Y	-	-	69.0	Y	Y	Y	Y
NZ724b	4	32	A3-3	-	0	0	8.9	71.6	20.5	0	0	71.6	71.6	70	Y	-	-	68.6	Y	Y	Y	Y
NZ724b	5	34.8	A3-3	-	0	0	8.9	71.3	20.5	0	0	71.3	71.3	70	Y	-	-	68.3	Y	Y	Y	Y
NZ724b	6	37.6	A3-3	-	0	0	8.9	71	20.5	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	Y	Y
NZ724b	7	40.4	A3-3	-	0	0	8.9	70.7	20.5	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	Y	Y
NZ724b	8	43.2	A3-3	-	0	0	8.9	70.4	20.5	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N	N
NZ724b	9	46	A3-3	-	0	0	8.9	70.1	20.5	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	N
NZ724b	10	48.8	A3-3	-	0	0	8.9	69.8	20.5	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N
NZ724b	11	51.6	A3-3	-	0	0	8.9	69.5	20.5	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N
NZ724b	12	54.4	A3-3	-	0	0	8.9	69.3	20.4	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N	N
NZ724b	13	57.2	A3-3	-	0	0	8.9	69	20.4	0	0	69	69.0	70	N	-	-	66.0	Y	N	N	N
NZ724b	14	60	A3-3	-	0	0	8.9	68.8	20.4	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	N
NZ724b	15	62.8	A3-3	-	0	0	8.9	68.6	20.4	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N
NZ724b	16	65.6	A3-3	-	0	0	8.9	68.4	20.4	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	N
NZ724b	17	68.4	A3-3	-	0	0	8.9	68.2	20.4	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
NZ724b	18	71.2	A3-3	-	0	0	8.9	68	20.4	0	0	68	68.0	70	N	-	-	65.0	Y	N	N	N
NZ724b	19	74	A3-3	-	0	0	8.9	67.8	20.4	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N
NZ724b	20	76.8	A3-3	-	0	0	8.9	67.6	20.3	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
NZ724b	21	79.6	A3-3	-	0	0	8.9	67.5	20.3	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
NZ724b	22	82.4	A3-3	-	0	0	8.9	67.3	20.3	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
NZ724b	23	85.2	A3-3	-	0	0	8.9	67.1	20.3	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
NZ724b	24	88	A3-3	-	0	0	8.9	67	20.3	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
NZ724b	25	90.8	A3-3	-	0	0	9.3	66.8	20.3	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
NZ724b	26	93.6	A3-3	-	0	0	9.9	66.7	20.3	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
NZ724b	27	96.4	A3-3	-	0	0	10.7	66.5	20.3	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
NZ724b	28	99.2	A3-3	-	0	0	11.4	66.4	20.2	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
NZ724b	29	102	A3-3	-	0	0	12.2	66.3	20.2	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
NZ724b	30	104.8	A3-3	-	0	0	13.1	66.2	20.2	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
NZ724b	31	107.6	A3-3	-	0	0	14	66	20.2	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
NZ724b	32	110.4	A3-3	-	0	0	14.9	65.9	20.2	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
NZ724b	33	113.2	A3-3	-	0	0	15.8	65.8	20.1	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
NZ724b	34	116	A3-3	-	0	0	16.8	65.7	20.3	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
NZ724b	35	118.8	A3-3	-	0	0	17.9	65.6	20.5	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
NZ724b	36	121.6	A3-3	-	0	0	18.8	65.5	20.8	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
NZ724b	37	124.4	A3-3	-	0	0	20.3	65.3	21.1	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
NZ724b	38	127.2	A3-3	-	0	0	21.1	65.2	21.3	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
NZ724b	39	130	A3-3	-	0	0	22.4	65.1	21.7	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
NZ724b	40	132.8	A3-3	-	0	0	23.6	65	22.3	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
NZ724c	1	23.6	A3-3	-	0	0	13.4	72.5	55.2	0	0	72.6	72.6	70	Y	-	-	69.6	Y	Y	Y	Y
NZ724c	2	26.4	A3-3	-	0	0	13.4	72.2	55.2	0	0	72.3	72.3	70	Y	-	-	69.3	Y	Y	Y	Y
NZ724c	3	29.2	A3-3	-	0	0	13.4	71.9	55.1	0	0	72	72.0	70	Y	-	-	69.0	Y	Y	Y	Y
NZ724c	4	32	A3-3	-	0	0	13.4	71.7	55.1	0	0	71.8	71.8	70	Y	-	-	68.8	Y	Y	Y	Y
NZ724c	5	34.8	A3-3	-	0	0	13.4	71.4	55.1	0	0	71.5	71.5	70	Y	-	-	68.5	Y	Y	Y	Y
NZ724c	6	37.6	A3-3	-	0	0	13.4	71.2	55	0	0	71.3	71.3	70	Y	-	-	68.3	Y	Y	Y	Y
NZ724c	7	40.4	A3-3	-	0	0	13.2	70.9	55	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	Y	Y
NZ724c	8	43.2	A3-3	-	0	0	13.4	70.6	54.9	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y	Y
NZ724c	9	46	A3-3	-	0	0	13.4	70.4	54.9	0	0	70.5	70.5	70	Y	-	-	67.5	Y	Y	Y	Y
NZ724c	10	48.8	A3-3	-	0	0	13.5	70.1	54.8	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N	N
NZ724c	11	51.6	A3-3	-	0	0	13.4	69.9	54.8	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	N
NZ724c	12	54.4	A3-3	-	0	0	13.4	69.7	54.7	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N
NZ724c	13	57.2	A3-3	-	0	0	13.5	69.5	54.6	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N
NZ724c	14	60	A3-3	-	0	0	13.2	69.3	54.6	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N
NZ724c	15	62.8	A3-3	-	0	0	13.3	69.1	54.5	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	N
NZ724c	16	65.6	A3-3	-	0	0	13.3	68.9	54.4	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N
NZ724c	17	68.4	A3-3	-	0	0	13.6	68.7	54.4	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N
NZ724c	18	71.2	A3-3	-	0	0	13.9	68.5	54.3	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
NZ724c	19	74	A3-3	-	0	0	14.2	68.3	54.3	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N
NZ724c	20	76.8	A3-3	-	0	0	14.6	68.2	54.2	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N
NZ724c	21	79.6	A3-3	-	0	0	14.9	68	54.2	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
NZ724c	22	82.4	A3-3	-	0	0	15.2	67.9	54.1	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N
NZ724c	23	85.2	A3-3	-	0	0	15.6	67.7	54.1	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
NZ724c	24	88	A3-3	-	0	0	15.9	67.6	54.1	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N
NZ724c	25	90.8	A3-3	-	0	0	16.3	67.4	54.1	0	0	67.4	67.4	70	N	-	-	64.6	Y	N	N	N
NZ724c	26	93.6	A3-3	-	0	0	16.5	67.3	54.2	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
NZ724c	27	96.4	A3-3	-	0	0	16.9	67.1	54.1	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
NZ724c	28	99.2	A3-3	-	0	0	17.3	67	54.1	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N
NZ724c	29	102	A3-3	-	0	0	17.6	66.9	54	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
NZ724c	30	104.8	A3-3	-	0	0	18	66.8	54	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
NZ724c	31	107.6	A3-3	-	0	0	18.4	66.7	54	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
NZ724c	32	110.4	A3-3	-	0	0	18.8	66.5	53.9	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
NZ724c	33																					

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria								
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD								EX	TR	New Roads in 2044 dB(A) <sup>(2)</sup> [B]			
NZ724d	14	60	A3-3	-	0	0	13.2	70	56	0	0	69.9	70.1	70	N	-	-	67.1	Y	N	N	
NZ724d	15	62.8	A3-3	-	0	0	13.3	69.8	55.9	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	
NZ724d	16	65.6	A3-3	-	0	0	13.3	69.6	55.8	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	
NZ724d	17	68.4	A3-3	-	0	0	13.6	69.4	55.7	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	
NZ724d	18	71.2	A3-3	-	0	0	13.9	69.2	55.7	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	
NZ724d	19	74	A3-3	-	0	0	14.2	69	55.6	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	
NZ724d	20	76.8	A3-3	-	0	0	14.6	68.8	55.6	0	0	69	69.0	70	N	-	-	66.0	Y	N	N	
NZ724d	21	79.6	A3-3	-	0	0	14.9	68.7	55.5	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	
NZ724d	22	82.4	A3-3	-	0	0	15.2	68.6	55.5	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	
NZ724d	23	85.2	A3-3	-	0	0	15.6	68.4	55.5	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	
NZ724d	24	88	A3-3	-	0	0	15.9	68.3	55.4	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	
NZ724d	25	90.8	A3-3	-	0	0	16.3	68.1	55.4	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	
NZ724d	26	93.6	A3-3	-	0	0	16.5	68	55.4	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	
NZ724d	27	96.4	A3-3	-	0	0	16.9	67.8	55.4	0	0	68	68.0	70	N	-	-	65.0	Y	N	N	
NZ724d	28	99.2	A3-3	-	0	0	17.3	67.7	55.4	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	
NZ724d	29	102	A3-3	-	0	0	17.6	67.6	55.4	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	
NZ724d	30	104.8	A3-3	-	0	0	18	67.4	55.4	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	
NZ724d	31	107.6	A3-3	-	0	0	18.4	67.3	55.4	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	
NZ724d	32	110.4	A3-3	-	0	0	18.8	67.2	55.4	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	
NZ724d	33	113.2	A3-3	-	0	0	19.1	67.1	55.3	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	
NZ724d	34	116	A3-3	-	0	0	19.5	67	55.3	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	
NZ724d	35	118.8	A3-3	-	0	0	19.9	66.9	55.3	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	
NZ724d	36	121.6	A3-3	-	0	0	20.3	66.8	55.3	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	
NZ724d	37	124.4	A3-3	-	0	0	20.7	66.7	55.2	0	0	67	67	70	N	-	-	64.0	Y	N	N	
NZ724d	38	127.2	A3-3	-	0	0	21.1	66.6	55.3	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
NZ724d	39	130	A3-3	-	0	0	21.5	66.5	55.2	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	
NZ724d	40	132.8	A3-3	-	0	0	21.8	66.4	55.2	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	
NZ724e	1	23.6	A3-3	-	0	0	13.4	72.7	57.2	0	0	72.8	72.8	70	Y	-	-	69.8	Y	Y	Y	
NZ724e	2	26.4	A3-3	-	0	0	13.4	72.5	57.1	0	0	72.6	72.6	70	Y	-	-	69.6	Y	Y	Y	
NZ724e	3	29.2	A3-3	-	0	0	13.4	72.2	57.1	0	0	72.3	72.3	70	Y	-	-	69.3	Y	Y	Y	
NZ724e	4	32	A3-3	-	0	0	13.4	71.9	57.1	0	0	72.1	72.1	70	Y	-	-	69.1	Y	Y	Y	
NZ724e	5	34.8	A3-3	-	0	0	13.4	71.7	57	0	0	71.8	71.8	70	Y	-	-	68.8	Y	Y	Y	
NZ724e	6	37.6	A3-3	-	0	0	13.4	71.4	57	0	0	71.5	71.5	70	Y	-	-	68.5	Y	Y	Y	
NZ724e	7	40.4	A3-3	-	0	0	13.3	71.1	57	0	0	71.3	71.3	70	Y	-	-	68.3	Y	Y	Y	
NZ724e	8	43.2	A3-3	-	0	0	13.4	70.9	56.9	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	Y	
NZ724e	9	46	A3-3	-	0	0	13.5	70.7	56.8	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y	
NZ724e	10	48.8	A3-3	-	0	0	13.5	70.4	56.8	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	Y	
NZ724e	11	51.6	A3-3	-	0	0	13.5	70.2	56.7	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N	
NZ724e	12	54.4	A3-3	-	0	0	13.4	70	56.7	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N	
NZ724e	13	57.2	A3-3	-	0	0	13.5	69.8	56.6	0	0	70	70.0	70	N	-	-	67.0	Y	N	N	
NZ724e	14	60	A3-3	-	0	0	13.3	69.6	56.5	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	
NZ724e	15	62.8	A3-3	-	0	0	13.4	69.3	56.5	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	
NZ724e	16	65.6	A3-3	-	0	0	13.4	69.1	56.4	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	
NZ724e	17	68.4	A3-3	-	0	0	13.7	69	56.3	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	
NZ724e	18	71.2	A3-3	-	0	0	13.9	68.8	56.3	0	0	68.9	68.9	70	N	-	-	66.1	Y	N	N	
NZ724e	19	74	A3-3	-	0	0	14.3	68.6	56.2	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	
NZ724e	20	76.8	A3-3	-	0	0	14.6	68.5	56.1	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	
NZ724e	21	79.6	A3-3	-	0	0	14.9	68.3	56.1	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	
NZ724e	22	82.4	A3-3	-	0	0	15.2	68.2	56	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	
NZ724e	23	85.2	A3-3	-	0	0	15.6	68	56	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	
NZ724e	24	88	A3-3	-	0	0	15.8	67.9	56	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	
NZ724e	25	90.8	A3-3	-	0	0	16.2	67.7	56	0	0	68	68.0	70	N	-	-	65.0	Y	N	N	
NZ724e	26	93.6	A3-3	-	0	0	16.5	67.6	55.9	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	
NZ724e	27	96.4	A3-3	-	0	0	16.9	67.4	55.9	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	
NZ724e	28	99.2	A3-3	-	0	0	17.3	67.3	55.9	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	
NZ724e	29	102	A3-3	-	0	0	17.6	67.2	55.9	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	
NZ724e	30	104.8	A3-3	-	0	0	18	67.1	55.9	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	
NZ724e	31	107.6	A3-3	-	0	0	18.4	67	55.9	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	
NZ724e	32	110.4	A3-3	-	0	0	18.6	66.9	55.9	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	
NZ724e	33	113.2	A3-3	-	0	0	19	66.8	55.8	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	
NZ724e	34	116	A3-3	-	0	0	19.4	66.7	55.8	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	
NZ724e	35	118.8	A3-3	-	0	0	19.8	66.5	55.7	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
NZ724e	36	121.6	A3-3	-	0	0	20.2	66.4	55.7	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	
NZ724e	37	124.4	A3-3	-	0	0	20.6	66.3	55.7	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	
NZ724e	38	127.2	A3-3	-	0	0	21	66.2	55.7	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	
NZ724e	39	130	A3-3	-	0	0	21.3	66.1	55.7	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	
NZ724e	40	132.8	A3-3	-	0	0	21.7	66	55.7	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	
NZ641	1	22.5	A2-4	-	0	0	74.5	47.9	0	0	74.5	74.5	70	Y	-	-	71.5	Y	Y	Y		
NZ641	2	25.3	A2-4	-	0	0	74.2	48.2	0	0	74.2	74.2	70	Y	-	-	71.2	Y	Y	Y		
NZ641	3	28.1	A2-4	-	0	0	74	48.4	0	0	74	74.0	70	Y	-	-	71.0	Y	Y	Y		
NZ641	4	30.9	A2-4	-	0	0	73.7	48.6	0	0	73.7	73.7	70	Y	-	-	70.7	Y	Y	Y		
NZ641	5	33.7	A2-4	-	0	0	73.5	48.7	0	0	73.5	73.5	70	Y	-	-	70.5	Y	Y	Y		
NZ641	6	36.5	A2-4	-	0	0	73.2	48.8	0	0	73.2	73.2	70	Y	-	-	70.2	Y	Y	Y		
NZ641	7	39.3	A2-4	-	0	0	72.9	48.9	0	0	72.9	72.9	70	Y	-	-	69.9	Y	Y	Y		
NZ641	8	42.1	A2-4	-	0	0	72.6	49	0	0	72.6	72.6	70	Y	-</							

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	C - A dB(A)		New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)			New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(3)</sup> [B]					D ≥ 1dB(A)							
N2641	27	95.3	A2-4	-	0	0	0	68.9	48.8	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	
N2641	28	99.1	A2-4	-	0	0	0	68.7	48.8	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	
N2641	29	100.7	A2-4	-	0	0	0	68.6	48.8	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	
N2641	30	103.7	A2-4	-	0	0	0	68.5	48.7	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	
N2641	31	106.5	A2-4	-	0	0	0	68.3	48.7	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	
N2641	32	109.3	A2-4	-	0	0	0	68.2	48.7	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	
N3401	1	20.5	B2-8	-	0	0	11.8	45	62.2	0	0	62.3	62.3	65	N	-	-	59.3	Y	N	N	
N3401	2	24.5	B2-8	-	0	0	13	45	62.1	0	0	62.2	62.2	65	N	-	-	59.2	Y	N	N	
N3401	3	28.5	B2-8	-	0	0	14	45.1	62	0	0	62.1	62.1	65	N	-	-	59.1	Y	N	N	
N3401	4	32.5	B2-8	-	0	0	14.9	45.1	62	0	0	62.1	62.1	65	N	-	-	59.1	Y	N	N	
N3401	5	36.5	B2-8	-	0	0	15.8	45	61.9	0	0	62	62	65	N	-	-	59.0	Y	N	N	
N3401	6	40.5	B2-8	-	0	0	16.7	44.9	61.8	0	0	61.9	61.9	65	N	-	-	58.9	Y	N	N	
N3401	7	44.5	B2-8	-	0	0	17.5	44.8	61.8	0	0	61.9	61.9	65	N	-	-	58.9	Y	N	N	
N3401	8	48.5	B2-8	-	0	0	18.2	44.6	61.6	0	0	61.7	61.7	65	N	-	-	58.7	Y	N	N	
N3402	1	20.5	B2-8	-	38.4	0	0	57.7	30	72.2	0	72.3	72.4	65	Y	-	-	34.0	Y	Y	Y	
N3402	2	24.5	B2-8	-	39.3	0	0	57.7	31.2	72.5	0	72.6	72.6	65	Y	-	-	33.3	Y	Y	Y	
N3402	3	28.5	B2-8	-	40.4	0	0	57.7	32.5	72.7	0	72.9	72.9	65	Y	-	-	32.5	Y	Y	Y	
N3402	4	32.5	B2-8	-	41.3	0	0	57.7	34	72.9	0	73.1	73.1	65	Y	-	-	31.8	Y	Y	Y	
N3402	5	36.5	B2-8	-	42.2	0	0	57.7	35.4	73.1	0	73.2	73.2	65	Y	-	-	31.0	Y	Y	Y	
N3402	6	40.5	B2-8	-	43.1	0	0	57.7	36.8	73.2	0	73.3	73.3	65	Y	-	-	30.2	Y	Y	Y	
N3402	7	44.5	B2-8	-	43.9	0	0	57.7	38.4	73.3	0	73.4	73.4	65	Y	-	-	29.5	Y	Y	Y	
N3402	8	48.5	B2-8	-	44.5	0	0	57.7	40.3	73.3	0	73.4	73.4	65	Y	-	-	28.9	Y	Y	Y	
N3403	1	20.5	B2-8	-	49.8	0	0	28.6	60.4	0	74.8	0	74.9	75.0	65	Y	-	-	25.2	Y	Y	Y
N3403	2	24.5	B2-8	-	40.4	0	0	27.8	60.4	0	75.1	0	75.2	75.2	65	Y	-	-	24.3	Y	Y	Y
N3403	3	28.5	B2-8	-	52.3	0	0	33.1	60.3	0	75.3	0	75.4	75.4	65	Y	-	-	23.1	Y	Y	Y
N3403	4	32.5	B2-8	-	53.5	0	0	35.7	60.3	0	75.4	0	75.5	75.6	65	Y	-	-	22.1	Y	Y	Y
N3403	5	36.5	B2-8	-	54.6	0	0	40.1	60.3	0	75.5	0	75.6	75.7	65	Y	-	-	21.1	Y	Y	Y
N3403	6	40.5	B2-8	-	55.4	0	0	43.7	60.2	0	75.7	0	75.8	75.9	65	Y	-	-	20.5	Y	Y	Y
N3403	7	44.5	B2-8	-	56	0	0	44.6	60.2	0	75.8	0	75.9	76.0	65	Y	-	-	20.0	Y	Y	Y
N3403	8	48.5	B2-8	-	56.4	0	0	45.2	60.2	0	76	0	76.1	76.1	65	Y	-	-	19.7	Y	Y	Y
N3442	1	20.5	B2-7	-	47.7	0	0	47.5	54.3	48.9	0	54.7	49.1	69.1	65	Y	-	-	21.7	Y	Y	Y
N3442	2	24.5	B2-7	-	47.7	0	0	43.1	54.2	23.4	69.3	0	69.5	69.5	65	Y	-	-	21.8	Y	Y	Y
N3442	3	28.5	B2-7	-	48.2	0	0	43.4	54.3	27.3	69.6	0	69.7	69.7	65	Y	-	-	21.5	Y	Y	Y
N3442	4	32.5	B2-7	-	49	0	0	43.8	54.2	32.4	69.7	0	69.8	69.9	65	Y	-	-	20.9	Y	Y	Y
N3442	5	36.5	B2-7	-	50.7	0	0	44.3	54.2	38.6	70	0	70.2	70.2	65	Y	-	-	19.5	Y	Y	Y
N3442	6	40.5	B2-7	-	52.6	0	0	45.2	54.2	39.4	70.5	0	70.6	70.7	65	Y	-	-	18.1	Y	Y	Y
N3442	7	44.5	B2-7	-	54	0	0	46.2	54.2	39.6	70.8	0	71.1	71.0	65	Y	-	-	17.0	Y	Y	Y
N3442	8	48.5	B2-7	-	55	0	0	47.5	54.3	39.6	71.5	0	71.6	71.7	65	Y	-	-	16.7	Y	Y	Y
N3421	1	20.5	B2-6	-	0	0	0	23.5	44.6	66.7	0	66.7	66.7	65	Y	-	-	63.7	Y	Y	Y	
N3421	2	24.5	B2-6	-	0	0	0	24.7	44.6	66.6	0	66.7	66.7	65	Y	-	-	63.7	Y	Y	Y	
N3421	3	28.5	B2-6	-	0	0	0	26.1	44.5	66.6	0	66.6	66.6	65	Y	-	-	63.6	Y	Y	Y	
N3421	4	32.5	B2-6	-	0	0	0	27.2	44.5	66.4	0	66.5	66.5	65	Y	-	-	63.5	Y	Y	Y	
N3421	5	36.5	B2-6	-	0	0	0	28.5	44.7	66.3	0	66.3	66.3	65	Y	-	-	63.3	Y	Y	Y	
N3421	6	40.5	B2-6	-	0	0	0	29.9	45	66.1	0	66.2	66.2	65	Y	-	-	63.2	Y	Y	Y	
N3421	7	44.5	B2-6	-	0	0	0	31.5	45.7	66	0	66.6	66.6	65	Y	-	-	63.0	Y	Y	Y	
N3421	8	48.5	B2-6	-	0	0	0	33.5	46.1	65.8	0	65.8	65.8	65	Y	-	-	62.8	Y	Y	Y	
N3422	1	20.5	B2-6	-	40	0	0	25.7	50.7	15.3	65.5	0	65.7	65.7	65	Y	-	-	25.7	Y	Y	Y
N3422	2	24.5	B2-6	-	41.6	0	0	26.6	50.8	15.2	65.9	0	66	66.0	65	Y	-	-	24.4	Y	Y	Y
N3422	3	28.5	B2-6	-	43.4	0	0	28.1	50.8	16.5	66.2	0	66.3	66.3	65	Y	-	-	22.9	Y	Y	Y
N3422	4	32.5	B2-6	-	45.4	0	0	30.1	50.8	19	66.5	0	66.7	66.7	65	Y	-	-	21.5	Y	Y	Y
N3422	5	36.5	B2-6	-	47.7	0	0	32.6	50.9	22.5	67	0	67.1	67.2	65	Y	-	-	19.5	Y	Y	Y
N3422	6	40.5	B2-6	-	50.1	0	0	35.5	51	27.4	67.7	0	67.8	67.9	65	Y	-	-	17.8	Y	Y	Y
N3422	7	44.5	B2-6	-	51.5	0	0	38.4	51.4	33.6	68.6	0	68.7	68.7	65	Y	-	-	17.2	Y	Y	Y
N3422	8	48.5	B2-6	-	53.6	0	0	42.4	51.9	42.2	69.7	0	69.7	69.9	65	Y	-	-	16.3	Y	Y	Y
N3441	1	20.5	B2-7	-	0	0	0	20.4	45.2	66.4	0	66.4	66.4	65	Y	-	-	63.4	Y	Y	Y	
N3441	2	24.5	B2-7	-	0	0	0	21.1	45.2	66.4	0	66.4	66.4	65	Y	-	-	63.4	Y	Y	Y	
N3441	3	28.5	B2-7	-	0	0	0	21.9	45.2	66.3	0	66.3	66.3	65	Y	-	-	63.3	Y	Y	Y	
N3441	4	32.5	B2-7	-	0	0	0	22.7	45.2	66.2	0	66.2	66.2	65	Y	-	-	63.2	Y	Y	Y	
N3441	5	36.5	B2-7	-	0	0	0	23.5	45.5	66	0	66.1	66.1	65	Y	-	-	63.1	Y	Y	Y	
N3441	6	40.5	B2-7	-	0	0	0	24.5	46.4	65.9	0	65.9	65.9	65	Y	-	-	62.9	Y	Y	Y	
N3441	7	44.5	B2-7	-	0	0	0	25.4	47.4	65.7	0	65.8	65.8	65	Y	-	-	62.8	Y	Y	Y	
N3441	8	48.5	B2-7	-	0	0	0	26.3	47.5	65.5	0	65.6	65.6	65	Y	-	-	62.6	Y	Y	Y	
N3001	1	18.8	B1-1	-	59.4	0	0	41.2	48.3	36.1	68.6	0	68.6	69.1	65	Y	-	-	9.7	Y	Y	Y
N3001	2	22.8	B1-1	-	59.8	0	0	42.7	48.7	37.7	68.9	0	68.9	69.4	65	Y	-	-	9.6	Y	Y	Y
N3001	3	26.8	B1-1	-	60	0	0	44.3	49.3	39.5	69.1	0	69.2	69.7	65	Y	-	-	9.7	Y	Y	Y
N3001	4	30.8	B1-1	-	60.2	0	0	46.5	49.8	41.6	69.3	0	69.4	69.9	65	Y	-	-	9.7	Y	Y	Y
N3001	5	34.8	B1-1	-	60.3	0	0	49.1	50.7	44.1	69.6	0	69.7	70.2	65	Y	-	-	9.9	Y	Y	Y
N3001	6	38.8	B1-1	-	60.4	0	0	51.5	51.7	46.8	69.1	0	70.2	70.6	65	Y	-	-	10.2	Y	Y	Y
N3001	7	42.8	B1-1	-	60.4	0	0	53.3	53.1	49.7	70.6	0	70.8	71.2	65	Y	-	-	10.8	Y	Y	Y
N3001	8	46.8	B1-1	-	60.4	0	0	55.4	54	50.8	71.2	0	71.4	71.7	65	Y	-	-	11.3	Y	Y	Y
N3002	1	18.8	B1-1	-	30.3	0	0	62	47.8	0	45.9	0	62.3	62.3	65	N	-	-	32.0	Y	N	N
N3002	2	22.8	B1-1	-	31.9	0	0	62.6	47.8	0	47.4	0	62.9	62.9	65	N	-	-	31.0			

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)		
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Roads in 2044 dB(A) <sup>(3)</sup> [B]	PD	DD	LD			EX	TR	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]		New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	LD	EX	TR															
N2831	8	52	D1-11	-	59.4	0	23.2	0	62.7	0	0	62.6	64.4	70	N	-	-	5.0	Y	N	N			
N2831	9	55	D1-11	-	59.5	0	23.2	0	62.6	0	0	62.6	64.3	70	N	-	-	4.8	Y	N	N			
N2831	10	58	D1-11	-	59.5	0	23.2	0	62.4	0	0	62.4	64.2	70	N	-	-	4.7	Y	N	N			
N2831	11	61	D1-11	-	59.5	0	23.2	0	62.3	0	0	62.3	64.1	70	N	-	-	4.6	Y	N	N			
N2831	12	64	D1-11	-	59.6	0	23.2	0	62.1	0	0	62.1	64.1	70	N	-	-	4.5	Y	N	N			
N2831	13	67	D1-11	-	59.6	0	23.2	0	62	0	0	62	64.0	70	N	-	-	4.4	Y	N	N			
N2831	14	70	D1-11	-	59.6	0	23.2	0	61.8	0	0	61.8	63.9	70	N	-	-	4.3	Y	N	N			
N2831	15	73	D1-11	-	59.6	0	23.1	0	61.6	0	0	61.6	63.7	70	N	-	-	4.1	Y	N	N			
N2831	16	76	D1-11	-	59.6	0	23.1	0	61.5	0	0	61.5	63.7	70	N	-	-	4.1	Y	N	N			
N2831	17	79	D1-11	-	59.6	0	23.1	0	61.3	0	0	61.3	63.6	70	N	-	-	4.0	Y	N	N			
N2831	18	82	D1-11	-	59.6	0	23	0	61.2	0	0	61.2	63.5	70	N	-	-	3.9	Y	N	N			
N2831	19	85	D1-11	-	59.6	0	23	0	61	0	0	61	63.4	70	N	-	-	3.8	Y	N	N			
N2831	20	88	D1-11	-	59.6	0	23.1	0	60.9	0	0	60.9	63.3	70	N	-	-	3.7	Y	N	N			
N2832	1	31	D1-11	-	54.6	0	30.6	46.3	71.1	0	0	71.1	71.2	70	Y	-	-	16.6	Y	Y	Y			
N2832	2	34	D1-11	-	54.6	0	30.7	46.6	70.9	0	0	70.9	71.0	70	Y	-	-	16.4	Y	Y	Y			
N2832	3	37	D1-11	-	54.6	0	30.7	46.6	70.5	0	0	70.5	70.6	70	Y	-	-	16.0	Y	Y	Y			
N2832	4	40	D1-11	-	54.6	0	30.8	46.7	70.1	0	0	70.1	70.2	70	N	-	-	15.6	Y	N	N			
N2832	5	43	D1-11	-	54.6	0	30.8	46.7	69.7	0	0	69.7	69.8	70	N	-	-	15.2	Y	N	N			
N2832	6	46	D1-11	-	54.6	0	30.9	46.7	69.2	0	0	69.3	69.4	70	N	-	-	14.8	Y	N	N			
N2832	7	49	D1-11	-	54.6	0	30.9	46.8	68.8	0	0	68.9	69.0	70	N	-	-	14.4	Y	N	N			
N2832	8	52	D1-11	-	54.7	0	31	46.8	68.5	0	0	68.5	68.7	70	N	-	-	14.0	Y	N	N			
N2832	9	55	D1-11	-	54.7	0	31.1	46.8	68.1	0	0	68.2	68.4	70	N	-	-	13.7	Y	N	N			
N2832	10	58	D1-11	-	54.7	0	31.2	46.8	67.8	0	0	67.8	68.0	70	N	-	-	13.3	Y	N	N			
N2832	11	61	D1-11	-	54.7	0	31.3	46.8	67.5	0	0	67.5	67.8	70	N	-	-	12.9	Y	N	N			
N2832	12	64	D1-11	-	54.9	0	31.5	46.8	67.2	0	0	67.3	67.5	70	N	-	-	12.6	Y	N	N			
N2832	13	67	D1-11	-	55	0	31.6	46.8	67	0	0	67	67.3	70	N	-	-	12.3	Y	N	N			
N2832	14	70	D1-11	-	55.1	0	31.8	46.8	66.7	0	0	66.8	67.0	70	N	-	-	11.9	Y	N	N			
N2832	15	73	D1-11	-	55.2	0	31.9	46.8	66.5	0	0	66.5	66.8	70	N	-	-	11.6	Y	N	N			
N2832	16	76	D1-11	-	55.2	0	32.1	46.8	66.3	0	0	66.3	66.6	70	N	-	-	11.4	Y	N	N			
N2832	3	37	D1-11	-	55.2	0	32.3	46.8	66	0	0	66.1	66.4	70	N	-	-	11.2	Y	N	N			
N2832	4	40	D1-11	-	55.3	0	32.5	46.9	65.8	0	0	65.9	66.2	70	N	-	-	10.9	Y	N	N			
N2832	5	43	D1-11	-	55.3	0	32.8	46.9	65.6	0	0	65.7	66.1	70	N	-	-	10.8	Y	N	N			
N2832	3	37	D1-11	-	55.3	0	33.1	47	65.5	0	0	65.5	65.9	70	N	-	-	10.6	Y	N	N			
N2833	1	21	D1-11	-	42.7	0	46.4	0	65.2	0	0	65.3	65.3	70	N	-	-	22.6	Y	N	N			
N2833	2	24	D1-11	-	52.1	0	46.4	0	69.6	0	0	69.6	69.6	70	N	-	-	17.5	Y	N	N			
N2833	3	27	D1-11	-	55.5	0	46.4	0	70.5	0	0	70.5	70.6	70	Y	-	-	15.1	Y	Y	Y			
N2833	4	30	D1-11	-	56.1	0	46.4	0	70.4	0	0	70.5	70.6	70	Y	-	-	14.5	Y	Y	Y			
N2833	5	33	D1-11	-	56.4	0	46.4	0	70.2	0	0	70.2	70.4	70	N	-	-	14.0	Y	N	N			
N2833	6	36	D1-11	-	56.5	0	46.4	0	69.9	0	0	69.9	70.1	70	N	-	-	13.6	Y	N	N			
N2833	7	39	D1-11	-	56.5	0	46.4	0	69.5	0	0	69.5	69.7	70	N	-	-	13.2	Y	N	N			
N2833	8	42	D1-11	-	56.5	0	46.4	0	69.1	0	0	69.1	69.4	70	N	-	-	12.9	Y	N	N			
N2833	9	45	D1-11	-	56.5	0	46.4	0	68.8	0	0	68.8	69.0	70	N	-	-	12.5	Y	N	N			
N2833	10	48	D1-11	-	56.5	0	46.4	0	68.4	0	0	68.4	68.7	70	N	-	-	12.2	Y	N	N			
N2833	11	51	D1-11	-	56.5	0	46.3	0	68.1	0	0	68.1	68.4	70	N	-	-	11.9	Y	N	N			
N2833	12	54	D1-11	-	56.5	0	46.3	0	67.8	0	0	67.8	68.1	70	N	-	-	11.6	Y	N	N			
N2833	13	57	D1-11	-	56.5	0	46.3	0	67.5	0	0	67.5	67.8	70	N	-	-	11.3	Y	N	N			
N2833	14	60	D1-11	-	56.5	0	46.3	0	67.2	0	0	67.2	67.5	70	N	-	-	11.1	Y	N	N			
N2833	15	63	D1-11	-	56.5	0	46.3	0	66.9	0	0	67	67.3	70	N	-	-	10.8	Y	N	N			
N2833	16	66	D1-11	-	56.5	0	46.3	0	66.7	0	0	66.7	67.1	70	N	-	-	10.6	Y	N	N			
N2833	17	69	D1-11	-	56.4	0	46.2	0	66.5	0	0	66.5	66.9	70	N	-	-	10.5	Y	N	N			
N2833	18	72	D1-11	-	56.5	0	46.2	0	66.2	0	0	66.3	66.7	70	N	-	-	10.2	Y	N	N			
N2833	19	75	D1-11	-	56.4	0	46.2	0	66	0	0	66.1	66.5	70	N	-	-	10.1	Y	N	N			
N2833	20	78	D1-11	-	56.5	0	46.2	0	65.8	0	0	65.9	66.3	70	N	-	-	9.8	Y	N	N			
N2834	1	19	D1-11	-	31.4	0	47.6	0	71.9	0	0	71.9	71.9	70	Y	-	-	40.5	Y	Y	Y			
N2834	2	22	D1-11	-	32.3	0	47.6	0	71.9	0	0	71.9	71.9	70	Y	-	-	39.6	Y	Y	Y			
N2834	3	25	D1-11	-	33.5	0	47.6	0	71.3	0	0	71.3	71.3	70	Y	-	-	37.8	Y	Y	Y			
N2834	4	28	D1-11	-	34.9	0	47.6	0	70.7	0	0	70.7	70.7	70	Y	-	-	35.8	Y	Y	Y			
N2834	5	31	D1-11	-	37.3	0	47.6	0	70.1	0	0	70.1	70.1	70	N	-	-	32.8	Y	N	N			
N2834	6	34	D1-11	-	40.8	0	47.6	0	69.5	0	0	69.6	69.6	70	N	-	-	28.8	Y	N	N			
N2834	7	37	D1-11	-	43.1	0	47.6	0	69.1	0	0	69.1	69.1	70	N	-	-	26.0	Y	N	N			
N2834	8	40	D1-11	-	44.6	0	47.6	0	68.7	0	0	68.7	68.7	70	N	-	-	24.1	Y	N	N			
N2834	9	43	D1-11	-	45.4	0	47.5	0	68.3	0	0	68.4	68.4	70	N	-	-	23.0	Y	N	N			
N2834	10	46	D1-11	-	46.3	0	47.5	0	68	0	0	68	68.0	70	N	-	-	21.7	Y	N	N			
N2834	11	49	D1-11	-	46.7	0	47.5	0	67.6	0	0	67.7	67.7	70	N	-	-	21.0	Y	N	N			
N2834	12	52	D1-11	-	46.9	0	47.5	0	67.4	0	0	67.4	67.5	70	N	-	-	20.6	Y	N	N			
N2834	13	55	D1-11	-	47	0	47.5	0	67.1	0	0	67.1	67.2	70	N	-	-	20.2	Y	N	N			
N2834	14	58	D1-11	-	47.1	0	47.4	0	66.9	0	0	66.9	67.0	70	N	-	-	19.9	Y	N	N			
N2834	15	61	D1-11	-	47.3	0	47.4	0	66.6	0	0	66.7	66.7	70	N	-	-	19.4	Y	N	N			
N2834	16	64	D1-11	-	47.6	0	47.4	0	66.4	0	0	66.5	66.5	70	N	-	-	18.9	Y	N	N			
N2834	17	67	D1-11	-	48.1	0	47.3	0	66.2	0	0	66.3	66.4	70	N	-	-	18.3	Y	N	N			
N2834	18	70	D1-11	-	48.4	0	47.3	0	66	0	0	66.1	66.2	70	N	-	-	17.8	Y	N	N			
N2834	19	73	D1-11	-	48.8	0	47.3	0	65.9	0	0	65.9	66.0	70	N	-	-	17.2	Y	N	N			
N2834	20	76	D1-11	-	49.2	0	47.2	0	65.7	0	0	65.7	65.9	70	N	-	-	16.7	Y	N	N			
N2835	1	19	D1-11	-	34.5	0	23.9	0	67.3	0	0	67.3	67.3	70	N	-	-	32.8	Y	N	N			
N2835	2	22	D1-11	-	36	0	23.9	0	67.6	0	0	67.6	67.6	70										

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	C - A dB(A) [D]			D ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			
						PD	DD	LD dB(A)	EX	TR											New Roads in 2044 dB(A) [B]		
NZ792	1	16	D1-7	-	42.3	0	0	17.8	67.2	0	0	67.2	67.2	70	N	-	-	24.9	Y	N	N		
NZ792	2	19	D1-7	-	43.2	0	0	17.8	68	0	0	68	68.1	70	N	-	-	24.9	Y	N	N		
NZ792	3	22	D1-7	-	43.7	0	0	17.8	68.3	0	0	68.3	68.4	70	N	-	-	24.7	Y	N	N		
NZ792	4	25	D1-7	-	44.2	0	0	17.8	68.4	0	0	68.4	68.4	70	N	-	-	24.2	Y	N	N		
NZ792	5	28	D1-7	-	45.1	0	0	17.8	68.3	0	0	68.3	68.3	70	N	-	-	23.2	Y	N	N		
NZ792	6	31	D1-7	-	45.8	0	0	17.8	68.2	0	0	68.2	68.2	70	N	-	-	22.4	Y	N	N		
NZ792	7	34	D1-7	-	46.9	0	0	17.8	67.9	0	0	67.9	68.0	70	N	-	-	21.1	Y	N	N		
NZ792	8	37	D1-7	-	47.8	0	0	17.7	67.8	0	0	67.8	67.8	70	N	-	-	20.0	Y	N	N		
NZ792	9	40	D1-7	-	48.8	0	0	17.7	67.5	0	0	67.5	67.6	70	N	-	-	18.8	Y	N	N		
NZ792	10	43	D1-7	-	49.8	0	0	17.7	67.3	0	0	67.3	67.4	70	N	-	-	17.6	Y	N	N		
NZ792	11	46	D1-7	-	50.5	0	0	17.8	67.1	0	0	67.1	67.2	70	N	-	-	16.7	Y	N	N		
NZ792	12	49	D1-7	-	51.1	0	0	17.9	66.9	0	0	66.9	67.0	70	N	-	-	15.9	Y	N	N		
NZ792	13	52	D1-7	-	51.8	0	0	18	66.7	0	0	66.7	66.9	70	N	-	-	15.1	Y	N	N		
NZ792	14	55	D1-7	-	52.5	0	0	18.1	66.5	0	0	66.5	66.7	70	N	-	-	14.2	Y	N	N		
NZ792	15	58	D1-7	-	53.1	0	0	18.2	66.3	0	0	66.3	66.5	70	N	-	-	13.4	Y	N	N		
NZ792	16	61	D1-7	-	53.6	0	0	18.5	66.1	0	0	66.1	66.4	70	N	-	-	12.8	Y	N	N		
NZ792	17	64	D1-7	-	54	0	0	18.7	66	0	0	66	66.2	70	N	-	-	12.2	Y	N	N		
NZ792	18	67	D1-7	-	54.4	0	0	19.1	65.8	0	0	65.8	66.1	70	N	-	-	11.7	Y	N	N		
NZ792	19	70	D1-7	-	54.8	0	0	19.4	65.6	0	0	65.6	66.0	70	N	-	-	11.2	Y	N	N		
NZ792	20	73	D1-7	-	55.3	0	0	19.7	65.5	0	0	65.5	65.9	70	N	-	-	10.6	Y	N	N		
NZ792	21	76	D1-7	-	55.7	0	0	20.1	65.3	0	0	65.3	65.7	70	N	-	-	10.0	Y	N	N		
NZ792	22	79	D1-7	-	56.1	0	0	20.5	65.1	0	0	65.1	65.6	70	N	-	-	9.5	Y	N	N		
NZ792	23	82	D1-7	-	56.4	0	0	21	65	0	0	65	65.5	70	N	-	-	9.1	Y	N	N		
NZ792	24	85	D1-7	-	56.7	0	0	21.5	64.8	0	0	64.8	65.4	70	N	-	-	8.8	Y	N	N		
NZ792	25	88	D1-7	-	56.8	0	0	22	64.7	0	0	64.7	65.3	70	N	-	-	8.5	Y	N	N		
NZ793	1	16	D1-7	-	42.6	0	0	0	67.6	0	0	67.6	67.6	70	N	-	-	25.0	Y	N	N		
NZ793	2	19	D1-7	-	44.3	0	0	0	68.2	0	0	68.2	68.2	70	N	-	-	23.9	Y	N	N		
NZ793	3	22	D1-7	-	46.4	0	0	0	68.2	0	0	68.2	68.3	70	N	-	-	21.9	Y	N	N		
NZ793	4	25	D1-7	-	48.9	0	0	0	68.1	0	0	68.1	68.2	70	N	-	-	19.3	Y	N	N		
NZ793	5	28	D1-7	-	51.5	0	0	0	67.9	0	0	67.9	68.0	70	N	-	-	16.5	Y	N	N		
NZ793	6	31	D1-7	-	53.1	0	0	0	67.7	0	0	67.7	67.8	70	N	-	-	14.7	Y	N	N		
NZ793	7	34	D1-7	-	54	0	0	0	67.4	0	0	67.4	67.6	70	N	-	-	13.6	Y	N	N		
NZ793	8	37	D1-7	-	54.7	0	0	0	67.1	0	0	67.1	67.3	70	N	-	-	12.6	Y	N	N		
NZ793	9	40	D1-7	-	55.2	0	0	0	66.8	0	0	66.8	67.1	70	N	-	-	11.9	Y	N	N		
NZ793	10	43	D1-7	-	55.5	0	0	0	66.5	0	0	66.5	66.9	70	N	-	-	11.4	Y	N	N		
NZ793	11	46	D1-7	-	55.7	0	0	0	66.3	0	0	66.3	66.7	70	N	-	-	11.0	Y	N	N		
NZ793	12	49	D1-7	-	55.9	0	0	0	66.1	0	0	66.1	66.5	70	N	-	-	10.6	Y	N	N		
NZ793	13	52	D1-7	-	56.1	0	0	0	65.8	0	0	65.8	66.3	70	N	-	-	10.2	Y	N	N		
NZ793	14	55	D1-7	-	56.3	0	0	0	65.6	0	0	65.6	66.1	70	N	-	-	9.8	Y	N	N		
NZ793	15	58	D1-7	-	56.6	0	0	0	65.4	0	0	65.4	65.9	70	N	-	-	9.3	Y	N	N		
NZ793	16	61	D1-7	-	56.9	0	0	0	65.2	0	0	65.2	65.8	70	N	-	-	8.9	Y	N	N		
NZ793	17	64	D1-7	-	57.1	0	0	0	65	0	0	65	65.6	70	N	-	-	8.5	Y	N	N		
NZ793	18	67	D1-7	-	57.2	0	0	0	64.8	0	0	64.8	65.5	70	N	-	-	8.3	Y	N	N		
NZ793	19	70	D1-7	-	57.3	0	0	0	64.6	0	0	64.6	65.3	70	N	-	-	8.0	Y	N	N		
NZ793	20	73	D1-7	-	57.4	0	0	0	64.4	0	0	64.4	65.2	70	N	-	-	7.8	Y	N	N		
NZ793	21	76	D1-7	-	57.5	0	0	0	64.3	0	0	64.3	65.1	70	N	-	-	7.6	Y	N	N		
NZ793	22	79	D1-7	-	57.6	0	0	0	64.1	0	0	64.1	65.0	70	N	-	-	7.4	Y	N	N		
NZ793	23	82	D1-7	-	57.6	0	0	0	64	0	0	64	64.9	70	N	-	-	7.3	Y	N	N		
NZ793	24	85	D1-7	-	57.6	0	0	0	63.8	0	0	63.8	64.8	70	N	-	-	7.2	Y	N	N		
NZ793	25	88	D1-7	-	57.6	0	0	0	63.6	0	0	63.6	64.6	70	N	-	-	7.0	Y	N	N		
NZ794	1	16	D1-7	-	52.4	0	0	9.9	64.5	0	0	64.5	64.8	70	N	-	-	12.4	Y	N	N		
NZ794	2	19	D1-7	-	52.6	0	0	9.9	64.5	0	0	64.5	64.8	70	N	-	-	12.2	Y	N	N		
NZ794	3	22	D1-7	-	52.7	0	0	9.9	64.4	0	0	64.4	64.7	70	N	-	-	12.0	Y	N	N		
NZ794	4	25	D1-7	-	53	0	0	9.9	64.3	0	0	64.3	64.6	70	N	-	-	11.6	Y	N	N		
NZ794	5	28	D1-7	-	53.3	0	0	9.9	64.2	0	0	64.2	64.5	70	N	-	-	11.2	Y	N	N		
NZ794	6	31	D1-7	-	53.9	0	0	9.9	63.9	0	0	63.9	64.4	70	N	-	-	10.5	Y	N	N		
NZ794	7	34	D1-7	-	54.5	0	0	9.9	63.8	0	0	63.8	64.2	70	N	-	-	9.7	Y	N	N		
NZ794	8	37	D1-7	-	55.3	0	0	9.9	63.6	0	0	63.6	64.2	70	N	-	-	8.9	Y	N	N		
NZ794	9	40	D1-7	-	56.1	0	0	9.9	63.3	0	0	63.3	64.1	70	N	-	-	8.0	Y	N	N		
NZ794	10	43	D1-7	-	56.5	0	0	9.9	63.1	0	0	63.1	64.0	70	N	-	-	7.5	Y	N	N		
NZ794	11	46	D1-7	-	56.7	0	0	9.8	62.9	0	0	62.9	63.9	70	N	-	-	7.2	Y	N	N		
NZ794	12	49	D1-7	-	56.8	0	0	9.8	62.8	0	0	62.8	63.8	70	N	-	-	7.0	Y	N	N		
NZ794	13	52	D1-7	-	56.8	0	0	9.8	62.6	0	0	62.6	63.6	70	N	-	-	6.8	Y	N	N		
NZ794	14	55	D1-7	-	56.8	0	0	9.8	62.4	0	0	62.4	63.5	70	N	-	-	6.7	Y	N	N		
NZ794	15	58	D1-7	-	56.8	0	0	9.8	62.2	0	0	62.2	63.3	70	N	-	-	6.5	Y	N	N		
NZ794	16	61	D1-7	-	56.8	0	0	9.6	62	0	0	62	63.1	70	N	-	-	6.3	Y	N	N		
NZ794	17	64	D1-7	-	56.7	0	0	9.7	61.8	0	0	61.8	63.0	70	N	-	-	6.3	Y	N	N		
NZ794	18	67	D1-7	-	56.7	0	0	9.8	61.7	0	0	61.7	62.9	70	N	-	-	6.2	Y	N	N		
NZ794	19	70	D1-7	-	56.6	0	0	9.8	61.5	0	0	61.5	62.7	70	N	-	-	6.1	Y	N	N		
NZ794	20	73	D1-7	-	56.6	0	0	9.9	61.4	0	0	61.4	62.6	70	N	-	-	6.0	Y	N	N		
NZ794	21	76	D1-7	-	56.5	0	0	9.8	61.2	0	0	61.2	62.5	70	N	-	-	5.9	Y	N	N		
NZ794	22	79	D1-7	-	56.4	0	0	9.8	61.1	0	0	61.1	62.3	70	N	-	-	5.9	Y	N	N		
NZ794	23	82	D1-7	-	56.4	0	0	9.8	60.9	0	0	60.9	62.2	70	N	-	-	5.8	Y	N	N		
NZ794	24	85	D1-7	-	56.3	0	0	9.8	60.8	0	0	60.8	62.1	70	N	-	-	5.8	Y	N	N		
NZ794	25	88	D1-7	-	56.2	0	0	9.9	60.7	0	0	60.7	62.0	70	N	-	-	5.8	Y	N	N		
NZ787	1	16	D1-7	-	0	0	74.7	62	52.9	0	0	75	75.0	70	Y	-	-	72.0	Y	Y	Y		
NZ787	2	19	D1-7	-	0	0	74.7	62	52.8	0	0	74.9											

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)	New Road Contribution ≥ 1dB(A)			New Road > Criteria B > Criteria					
							PD	DD	LD	EX	TR								New Roads in 2044 dB(A) <sup>(3)</sup> [B]	C - A dB(A) [D]	D ≥ 1dB(A)	E	
NZ787	19	70	D1-7	-	0	0	71.9	61.6	51.5	0	0	72.4	72.4	70	Y	-	-	69.4	Y	Y	Y	Y	
NZ787	20	73	D1-7	-	0	0	71.8	61.6	51.4	0	0	72.2	72.2	70	Y	-	-	69.2	Y	Y	Y	Y	
NZ787	21	76	D1-7	-	0	0	71.6	61.6	51.3	0	0	72.1	72.1	70	Y	-	-	69.1	Y	Y	Y	Y	
NZ787	22	79	D1-7	-	0	0	71.5	61.6	51.2	0	0	71.9	71.9	70	Y	-	-	68.9	Y	Y	Y	Y	
NZ787	23	82	D1-7	-	0	0	71.3	61.6	51.2	0	0	71.8	71.8	70	Y	-	-	68.8	Y	Y	Y	Y	
NZ787	24	85	D1-7	-	0	0	71.2	61.5	51.1	0	0	71.7	71.7	70	Y	-	-	68.7	Y	Y	Y	Y	
NZ787	25	88	D1-7	-	0	0	71.1	61.5	51	0	0	71.6	71.6	70	Y	-	-	68.6	Y	Y	Y	Y	
NZ788	1	16	D1-7	-	0	0	72.7	66.1	53.1	0	0	73.6	73.6	70	Y	-	-	70.6	Y	Y	Y	Y	
NZ788	2	19	D1-7	-	0	0	72.6	66	53.1	0	0	73.5	73.5	70	Y	-	-	70.5	Y	Y	Y	Y	
NZ788	3	22	D1-7	-	0	0	72.6	65.9	53	0	0	73.4	73.4	70	Y	-	-	70.4	Y	Y	Y	Y	
NZ788	4	25	D1-7	-	0	0	72.5	65.7	52.9	0	0	73.4	73.4	70	Y	-	-	70.4	Y	Y	Y	Y	
NZ788	5	28	D1-7	-	0	0	72.4	65.6	52.8	0	0	73.3	73.3	70	Y	-	-	70.3	Y	Y	Y	Y	
NZ788	6	31	D1-7	-	0	0	72.3	65.5	52.7	0	0	73.2	73.2	70	Y	-	-	70.2	Y	Y	Y	Y	
NZ788	7	34	D1-7	-	0	0	72.2	65.4	52.6	0	0	73	73.0	70	Y	-	-	70.0	Y	Y	Y	Y	
NZ788	8	37	D1-7	-	0	0	72.1	65.3	52.5	0	0	72.9	72.9	70	Y	-	-	69.9	Y	Y	Y	Y	
NZ788	9	40	D1-7	-	0	0	71.9	65.2	52.4	0	0	72.8	72.8	70	Y	-	-	69.8	Y	Y	Y	Y	
NZ788	10	43	D1-7	-	0	0	71.8	65.2	52.3	0	0	72.7	72.7	70	Y	-	-	69.7	Y	Y	Y	Y	
NZ788	11	46	D1-7	-	0	0	71.6	65.1	52.2	0	0	72.5	72.5	70	Y	-	-	69.5	Y	Y	Y	Y	
NZ788	12	49	D1-7	-	0	0	71.5	65	52.1	0	0	72.4	72.4	70	Y	-	-	69.4	Y	Y	Y	Y	
NZ788	13	52	D1-7	-	0	0	71.3	64.9	52	0	0	72.3	72.3	70	Y	-	-	69.3	Y	Y	Y	Y	
NZ788	14	55	D1-7	-	0	0	71.2	64.8	51.9	0	0	72.2	72.2	70	Y	-	-	69.2	Y	Y	Y	Y	
NZ788	15	58	D1-7	-	0	0	71	64.8	51.7	0	0	72	72.0	70	Y	-	-	69.0	Y	Y	Y	Y	
NZ788	16	61	D1-7	-	0	0	70.9	64.7	51.7	0	0	71.9	71.9	70	Y	-	-	68.9	Y	Y	Y	Y	
NZ788	17	64	D1-7	-	0	0	70.8	64.6	51.5	0	0	71.7	71.7	70	Y	-	-	68.7	Y	Y	Y	Y	
NZ788	18	67	D1-7	-	0	0	70.6	64.6	51.4	0	0	71.6	71.6	70	Y	-	-	68.6	Y	Y	Y	Y	
NZ788	19	70	D1-7	-	0	0	70.5	64.5	51.3	0	0	71.5	71.5	70	Y	-	-	68.5	Y	Y	Y	Y	
NZ788	20	73	D1-7	-	0	0	70.3	64.4	51.2	0	0	71.4	71.4	70	Y	-	-	68.4	Y	Y	Y	Y	
NZ788	21	76	D1-7	-	0	0	70.2	64.4	51.1	0	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	Y	Y	
NZ788	22	79	D1-7	-	0	0	70.1	64.3	51	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	Y	Y	
NZ788	23	82	D1-7	-	0	0	69.9	64.3	50.9	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	Y	Y	
NZ788	24	85	D1-7	-	0	0	69.8	64.2	50.8	0	0	69.8	70.9	70	Y	-	-	67.9	Y	Y	Y	Y	
NZ788	25	88	D1-7	-	0	0	69.7	64.1	50.7	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y	Y	
NZ789	1	16	D1-7	-	0	0	72.4	68.9	58.7	0	0	74.1	74.1	70	Y	-	-	71.1	Y	Y	Y	Y	
NZ789	2	19	D1-7	-	0	0	72.4	68.8	58.7	0	0	74.1	74.1	70	Y	-	-	71.1	Y	Y	Y	Y	
NZ789	3	22	D1-7	-	0	0	72.3	68.7	58.7	0	0	74	74.0	70	Y	-	-	71.0	Y	Y	Y	Y	
NZ789	4	25	D1-7	-	0	0	72.2	68.6	58.6	0	0	73.9	73.9	70	Y	-	-	70.9	Y	Y	Y	Y	
NZ789	5	28	D1-7	-	0	0	72.1	68.5	58.6	0	0	73.8	73.8	70	Y	-	-	70.8	Y	Y	Y	Y	
NZ789	6	31	D1-7	-	0	0	72	68.4	58.5	0	0	73.7	73.7	70	Y	-	-	70.7	Y	Y	Y	Y	
NZ789	7	34	D1-7	-	0	0	71.9	68.2	58.4	0	0	73.6	73.6	70	Y	-	-	70.6	Y	Y	Y	Y	
NZ789	8	37	D1-7	-	0	0	71.8	68.1	58.3	0	0	73.4	73.4	70	Y	-	-	70.4	Y	Y	Y	Y	
NZ789	9	40	D1-7	-	0	0	71.6	68	58.1	0	0	73.3	73.3	70	Y	-	-	70.3	Y	Y	Y	Y	
NZ789	10	43	D1-7	-	0	0	71.5	67.8	58	0	0	73.2	73.2	70	Y	-	-	70.2	Y	Y	Y	Y	
NZ789	11	46	D1-7	-	0	0	71.3	67.7	57.9	0	0	73	73.0	70	Y	-	-	70.0	Y	Y	Y	Y	
NZ789	12	49	D1-7	-	0	0	71.2	67.5	57.7	0	0	72.9	72.9	70	Y	-	-	69.9	Y	Y	Y	Y	
NZ789	13	52	D1-7	-	0	0	71	67.4	57.6	0	0	72.7	72.7	70	Y	-	-	69.7	Y	Y	Y	Y	
NZ789	14	55	D1-7	-	0	0	70.9	67.3	57.5	0	0	72.6	72.6	70	Y	-	-	69.6	Y	Y	Y	Y	
NZ789	15	58	D1-7	-	0	0	70.8	67.1	57.3	0	0	72.5	72.5	70	Y	-	-	69.5	Y	Y	Y	Y	
NZ789	16	61	D1-7	-	0	0	70.6	67	57.2	0	0	72.3	72.3	70	Y	-	-	69.3	Y	Y	Y	Y	
NZ789	17	64	D1-7	-	0	0	70.5	66.9	57.1	0	0	72.2	72.2	70	Y	-	-	69.2	Y	Y	Y	Y	
NZ789	18	67	D1-7	-	0	0	70.3	66.7	57	0	0	72	72.0	70	Y	-	-	69.0	Y	Y	Y	Y	
NZ789	19	70	D1-7	-	0	0	70.2	66.6	56.8	0	0	71.9	71.9	70	Y	-	-	68.9	Y	Y	Y	Y	
NZ789	20	73	D1-7	-	0	0	70.1	66.5	56.7	0	0	71.8	71.8	70	Y	-	-	68.8	Y	Y	Y	Y	
NZ789	21	76	D1-7	-	0	0	69.9	66.4	56.5	0	0	71.6	71.6	70	Y	-	-	68.6	Y	Y	Y	Y	
NZ789	22	79	D1-7	-	0	0	69.8	66.3	56.4	0	0	71.5	71.5	70	Y	-	-	68.5	Y	Y	Y	Y	
NZ789	23	82	D1-7	-	0	0	69.7	66.2	56.3	0	0	71.4	71.4	70	Y	-	-	68.4	Y	Y	Y	Y	
NZ789	24	85	D1-7	-	0	0	69.5	66	56.2	0	0	71.3	71.3	70	Y	-	-	68.3	Y	Y	Y	Y	
NZ789	25	88	D1-7	-	0	0	69.4	65.9	56.1	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	Y	Y	
NZ790	1	16	D1-7	-	35.6	0	60.4	68.4	69.2	0	0	72.1	72.1	70	Y	-	-	36.5	Y	Y	Y	Y	
NZ790	2	19	D1-7	-	38.2	0	60.4	68.4	69.2	0	0	72.1	72.1	70	Y	-	-	33.9	Y	Y	Y	Y	
NZ790	3	22	D1-7	-	39.2	0	60.4	68.3	69.1	0	0	72	72.0	70	Y	-	-	32.8	Y	Y	Y	Y	
NZ790	4	25	D1-7	-	39.7	0	60.3	68.2	68.9	0	0	71.9	71.9	70	Y	-	-	32.2	Y	Y	Y	Y	
NZ790	5	28	D1-7	-	39.9	0	60.3	68.1	68.7	0	0	71.7	71.7	70	Y	-	-	31.8	Y	Y	Y	Y	
NZ790	6	31	D1-7	-	40	0	60.2	68	68.5	0	0	71.6	71.6	70	Y	-	-	31.6	Y	Y	Y	Y	
NZ790	7	34	D1-7	-	40.1	0	60.2	67.9	68.2	0	0	71.4	71.4	70	Y	-	-	31.3	Y	Y	Y	Y	
NZ790	8	37	D1-7	-	40.3	0	60.1	67.7	68	0	0	71.2	71.2	70	Y	-	-	30.8	Y	Y	Y	Y	
NZ790	9	40	D1-7	-	40.6	0	60	67.6	67.8	0	0	71	71.1	70	Y	-	-	30.5	Y	Y	Y	Y	
NZ790	10	43	D1-7	-	40.9	0	59.9	67.5	67.5	0	0	70.9	70.9	70	Y	-	-	30.0	Y	Y	Y	Y	
NZ790	11	46	D1-7	-	41.2	0	59.8	67.3	67.3	0	0	70.7	70.7	70	Y	-	-	29.5	Y	Y	Y	Y	
NZ790	12	49	D1-7	-	41.7	0	59.7	67.2	67.1	0	0	70.5	70.5	70	Y	-	-	28.8	Y	Y	Y	Y	
NZ790	13	52	D1-7	-	42.3	0	59.6	67	66.8	0	0	70.3	70.3	70	N	-	-	28.0	Y	N	N	N	
NZ790	14	55	D1-7	-	43.1	0	59.5	66.9	66.6	0	0	70.2	70.2	70	N	-	-	27.1	Y	N	N	N	
NZ790	15	58	D1-7	-	44.1	0	59.4	66.8	66.4	0													

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)	
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>												Overall Noise Level in 2044 dB(A) [C]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) [E]	New Road Contribution ≥ 1dB(A) [E]		New Road > Criteria B > Criteria
					Existing Road in 2044 dB(A) <sup>(1)</sup>	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(1)</sup> [B]											
N2791	12	49	D1-7	-	46.4	0	28.5	59.5	68.6	0	0	68.9	69.2	70	N	-	-	22.8	Y	N	N		
N2791	13	52	D1-7	-	47.1	0	28.5	59.5	68.4	0	0	68.9	68.9	70	N	-	-	21.8	Y	N	N		
N2791	14	55	D1-7	-	47.9	0	28.5	59.5	68.2	0	0	68.7	68.7	70	N	-	-	20.8	Y	N	N		
N2791	15	58	D1-7	-	48.5	0	28.4	59.4	67.9	0	0	68.5	68.4	70	N	-	-	20.1	Y	N	N		
N2791	16	61	D1-7	-	49.3	0	28.4	59.4	67.7	0	0	68.3	68.4	70	N	-	-	19.1	Y	N	N		
N2791	17	64	D1-7	-	49.8	0	28.4	59.3	67.5	0	0	68.1	68.2	70	N	-	-	18.4	Y	N	N		
N2791	18	67	D1-7	-	50.2	0	28.3	59.3	67.3	0	0	67.9	68.0	70	N	-	-	17.8	Y	N	N		
N2791	19	70	D1-7	-	50.5	0	28.3	59.3	67.1	0	0	67.8	67.8	70	N	-	-	17.3	Y	N	N		
N2791	20	73	D1-7	-	50.9	0	28.3	59.2	66.9	0	0	67.6	67.7	70	N	-	-	16.8	Y	N	N		
N2791	21	76	D1-7	-	51.2	0	28.2	59.2	66.7	0	0	67.4	67.5	70	N	-	-	16.3	Y	N	N		
N2791	22	79	D1-7	-	51.5	0	28.2	59.2	66.6	0	0	67.3	67.4	70	N	-	-	15.9	Y	N	N		
N2791	23	82	D1-7	-	51.7	0	28.1	59.1	66.4	0	0	67.2	67.3	70	N	-	-	15.6	Y	N	N		
N2791	24	85	D1-7	-	51.8	0	28	59.1	66.2	0	0	67	67.1	70	N	-	-	15.3	Y	N	N		
N2791	25	88	D1-7	-	51.8	0	28.1	59	66.1	0	0	66.8	67.0	70	N	-	-	15.2	Y	N	N		
N2047	1	12.5	Ho Sheung Heung	62.1	68.5	0	0	26.2	45.6	0	0	45.6	68.5	70	N	6.4	Y	0.0	N	N	N		
N2047	2	15.5	Ho Sheung Heung	61.8	68.4	0	0	26.8	45.6	0	0	45.6	68.4	70	N	6.6	Y	0.0	N	N	N		
N2047	3	18.5	Ho Sheung Heung	61.3	68.3	0	0	27.5	45.6	0	0	45.7	68.3	70	N	7.0	Y	0.0	N	N	N		
N2046	1	10.5	Ho Sheung Heung	52.6	71.6	0	0	23.4	37.4	0	0	37.6	71.6	70	Y	19.0	Y	0.0	N	N	Y		
N2046	2	13.5	Ho Sheung Heung	52.5	71.5	0	0	23.6	38.2	0	0	38.4	71.5	70	Y	19.0	Y	0.0	N	N	Y		
N2046	3	16.5	Ho Sheung Heung	52.3	71	0	0	23.9	39.1	0	0	39.2	71.0	70	Y	18.7	Y	0.0	N	N	Y		
R1061	1	15.2	Lady Ho Tung Welfare Centre Eco-Learn Institute	75.3	30.8	0	0	30.9	54.1	14.6	73.5	0	73.6	73.6	65	Y	-1.4	N	42.8	Y	Y	Y	
R1061	2	20.2	Lady Ho Tung Welfare Centre Eco-Learn Institute	75.1	33.1	0	0	33.8	55.8	17.7	74.5	0	74.5	74.5	65	Y	-0.6	N	41.4	Y	Y	Y	
R1085	1	11.6	Yalals	58.4	52.2	0	0	11.5	36.8	26.1	54.9	0	55	56.8	70	N	-1.6	N	4.6	Y	N	N	
R1085	2	15.6	Yalals	61	51.2	0	0	11.8	41.2	28.3	59	0	60.3	60.3	70	N	-1.0	N	6.9	Y	N	N	
R1085	3	19.6	Yalals	67.4	54	0	0	12	49.8	32	67.1	0	67.2	67.4	70	N	0.0	N	13.4	Y	N	N	
R1105	1	15.7	Europa Garden	83.2	30.2	0	0	52.6	61.5	30.7	82.6	0	82.6	82.6	70	Y	-0.6	N	52.4	Y	Y	Y	
R1105	2	18.7	Europa Garden	83.2	32	0	0	52.9	62.5	31.4	82.9	0	82.9	82.9	70	Y	-0.3	N	50.9	Y	Y	Y	
R1105	3	21.7	Europa Garden	-	33.9	0	0	53	63.1	32.2	82.9	0	83	83.0	70	Y	-	-	49.1	Y	Y	Y	
R1106	1	15.7	Europa Garden	77.2	49	0	0	55.7	28.8	76	0	76	76.0	70	Y	-1.2	N	27.0	Y	Y	Y		
R1106	2	18.7	Europa Garden	78.9	54.3	0	0	58.8	29.4	78.5	0	78.6	78.6	70	Y	-0.3	N	24.3	Y	Y	Y		
R1107	1	15.7	Europa Garden	67.8	47.5	0	0	59.4	30	78.8	0	59	78.9	70	Y	-	-	32.9	Y	Y	Y		
R1107	2	18.7	Europa Garden	72.9	54.3	0	0	55	0	65.4	0	65.5	65.5	70	N	-2.3	N	18.0	Y	N	N		
R1107	3	21.7	Europa Garden	76	58.2	0	0	57	0	75.6	0	75.6	75.7	70	Y	-0.3	N	17.5	Y	Y	Y		
R2783	1	10	D1-7	-	34.9	0	0	68.5	55	58.8	0	69.1	69.1	70	N	-	-	34.2	Y	N	N		
R2783	2	13	D1-7	-	34.8	0	0	68.5	54.8	58.8	0	69.1	69.1	70	N	-	-	34.3	Y	N	N		
R2783	3	16	D1-7	-	34.8	0	0	68.5	54.7	58.8	0	69.1	69.1	70	N	-	-	34.3	Y	N	N		
R2783	4	19	D1-7	-	34.8	0	0	68.5	54.5	58.7	0	69.1	69.1	70	N	-	-	34.3	Y	N	N		
R2783	5	22	D1-7	-	34.8	0	0	68.6	54.3	58.6	0	69.1	69.1	70	N	-	-	34.3	Y	N	N		
R2783	6	25	D1-7	-	34.8	0	0	68.6	54.1	58.5	0	69.1	69.1	70	N	-	-	34.3	Y	N	N		
R2783	7	28	D1-7	-	34.9	0	0	68.6	53.9	58.5	0	69.1	69.1	70	N	-	-	34.2	Y	N	N		
R2783	8	31	D1-7	-	34.9	0	0	68.6	53.7	58.4	0	69.1	69.1	70	N	-	-	34.2	Y	N	N		
R2783	9	34	D1-7	-	35.1	0	0	68.5	53.5	58.3	0	69	69.0	70	N	-	-	33.9	Y	N	N		
R2783	10	37	D1-7	-	35.3	0	0	68.5	53.4	58.1	0	69	69.0	70	N	-	-	33.7	Y	N	N		
R2783	11	40	D1-7	-	35.2	0	0	68.5	53.2	58	0	68.5	69.0	70	N	-	-	32.8	Y	N	N		
R2783	12	43	D1-7	-	37.7	0	0	68.4	53	57.9	0	68.9	68.9	70	N	-	-	31.2	Y	N	N		
R2783	13	46	D1-7	-	38.3	0	0	68.5	52.8	57.7	0	68.9	68.9	70	N	-	-	30.6	Y	N	N		
R2783	14	49	D1-7	-	38.5	0	0	68.5	52.7	57.6	0	68.9	68.9	70	N	-	-	30.4	Y	N	N		
R2783	15	52	D1-7	-	38.7	0	0	68.5	52.6	57.5	0	68.9	68.9	70	N	-	-	30.2	Y	N	N		
R2783	16	55	D1-7	-	39	0	0	68.6	52.4	57.3	0	69	69.0	70	N	-	-	30.0	Y	N	N		
R2783	17	58	D1-7	-	39.8	0	0	68.7	52.3	57.2	0	69.1	69.1	70	N	-	-	29.3	Y	N	N		
R2783	18	61	D1-7	-	40.5	0	0	68.9	52.1	57	0	69.3	69.3	70	N	-	-	28.8	Y	N	N		
R2783	19	64	D1-7	-	40.7	0	0	69	52	56.9	0	69.3	69.4	70	N	-	-	28.7	Y	N	N		
R2783	20	67	D1-7	-	40.7	0	0	69.1	51.8	56.8	0	69.4	69.4	70	N	-	-	28.7	Y	N	N		
R2783	21	70	D1-7	-	40.7	0	0	69.1	51.7	56.7	0	69.4	69.4	70	N	-	-	28.7	Y	N	N		
R2783	22	73	D1-7	-	40.7	0	0	69.1	51.6	56.5	0	69.4	69.4	70	N	-	-	28.7	Y	N	N		
R2783	23	76	D1-7	-	40.7	0	0	69.1	51.4	56.4	0	69.4	69.4	70	N	-	-	28.7	Y	N	N		
R2783	24	79	D1-7	-	40.7	0	0	69.1	51.3	56.3	0	69.4	69.4	70	N	-	-	28.7	Y	N	N		
R2783	25	82	D1-7	-	40.6	0	0	69.1	51.2	56.2	0	69.4	69.4	70	N	-	-	28.8	Y	N	N		
N2784	1	14	D1-7	-	16.3	0	0	68.3	58.5	55.9	0	68.9	68.9	70	N	-	-	52.5	Y	N	N		
N2784	2	17	D1-7	-	17.4	0	0	68.4	58.4	55.9	0	69	69.0	70	N	-	-	51.5	Y	N	N		
N2784	3	20	D1-7	-	18.5	0	0	68.5	58.3	55.9	0	69.1	69.1	70	N	-	-	50.5	Y	N	N		
N2784	4	23	D1-7	-	19.8	0	0	68.5	58.3	55.9	0	69.1	69.1	70	N	-	-	49.3	Y	N	N		
N2784	5	26	D1-7	-	21	0	0	68.5	58.2	55.8	0	69.1	69.1	70	N	-	-	48.1	Y	N	N		
N2784	6	29	D1-7	-	22	0	0	68.3	58.1	55.8	0	69.1	69.1	70	N	-	-	46.8	Y	N	N		
N2784	7	32	D1-7	-	23.6	0	0	68.5	58	55.8	0	69.1	69.1	70	N	-	-	45.5	Y	N	N		
N2784	8	35	D1-7	-	25.1	0	0	68.5	57.9	55.7	0	69	69.0	70	N	-	-	43.9	Y	N	N		
N2784	9	38	D1-7	-	26.7	0	0	68.4	57.8	55.7	0	69	69.0	70	N	-	-	42.3	Y	N	N		
N2784	10	41	D1-7	-	28.7	0	0	68.4	57.7	55.7	0	69	69.0	70	N	-	-	40.3	Y	N	N		
N2784	11	44	D1-7	-	31.2	0	0	68.3	57.6	55.6	0	68.9	68.9	70	N	-	-	37.7	Y	N	N		
N2784	12	47	D1-7	-	34.2	0	0	68.3	57.5	55.6	0	68.9	68.9	70	N	-	-	34.7	Y	N	N		
N2784	13	50	D1-7	-	36.6	0	0	68.3	57.4	55.6	0	68.9	68.9	70	N	-	-	32.3	Y	N	N		
N2784	14	53	D1-7	-	38.8	0	0	68.3	57.3	55.5	0	68.9	68.9	70	N	-	-	29.9	Y	N	N		
N2784	15	56	D1-7	-	39.3	0	0	68.3	57.2	55.4	0	68.9	68.9	70	N	-	-	29.6	Y	N	N		
N2784	16	59																					

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)	
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>												Overall Noise Level in 2044 dB(A) [C]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)		New Road > Criteria B > Criteria
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(1)</sup> [B]											
NZ785	10	41	D1-7	-	31.7	0	74.3	59.3	42.9	0	0	74.4	74.4	70	Y	-	-	42.7	Y	Y	Y	Y	
NZ785	11	44	D1-7	-	31.8	0	74.2	59.2	42.9	0	0	74.3	74.3	70	Y	-	-	42.5	Y	Y	Y	Y	
NZ785	12	47	D1-7	-	32.1	0	74	59.2	43	0	0	74.2	74.2	70	Y	-	-	42.2	Y	Y	Y	Y	
NZ785	13	50	D1-7	-	32.6	0	73.8	59.1	43.1	0	0	74	74.0	70	Y	-	-	41.4	Y	Y	Y	Y	
NZ785	14	53	D1-7	-	33.4	0	73.7	59	43.3	0	0	73.9	73.9	70	Y	-	-	40.5	Y	Y	Y	Y	
NZ785	15	56	D1-7	-	34	0	73.6	58.9	43.6	0	0	73.7	73.7	70	Y	-	-	39.7	Y	Y	Y	Y	
NZ785	16	59	D1-7	-	34.6	0	73.4	58.9	44.3	0	0	73.6	73.6	70	Y	-	-	39.0	Y	Y	Y	Y	
NZ785	17	62	D1-7	-	35.5	0	73.3	58.8	45.5	0	0	73.4	73.4	70	Y	-	-	37.9	Y	Y	Y	Y	
NZ785	18	65	D1-7	-	36.7	0	73.1	58.7	47	0	0	73.3	73.3	70	Y	-	-	36.6	Y	Y	Y	Y	
NZ785	19	68	D1-7	-	37.6	0	73	58.6	48.3	0	0	73.2	73.2	70	Y	-	-	35.6	Y	Y	Y	Y	
NZ785	20	71	D1-7	-	37.9	0	72.9	58.6	48.8	0	0	73	73.0	70	Y	-	-	35.1	Y	Y	Y	Y	
NZ785	21	74	D1-7	-	38.1	0	72.7	58.5	49.2	0	0	72.9	72.9	70	Y	-	-	34.8	Y	Y	Y	Y	
NZ785	22	77	D1-7	-	38.1	0	72.6	58.4	49.4	0	0	72.8	72.8	70	Y	-	-	34.7	Y	Y	Y	Y	
NZ785	23	80	D1-7	-	38.1	0	72.5	58.3	49.5	0	0	72.7	72.7	70	Y	-	-	34.6	Y	Y	Y	Y	
NZ785	24	83	D1-7	-	38.1	0	72.4	58.2	49.5	0	0	72.5	72.5	70	Y	-	-	34.4	Y	Y	Y	Y	
NZ785	25	86	D1-7	-	38	0	72.2	58.2	49.5	0	0	72.4	72.4	70	Y	-	-	34.4	Y	Y	Y	Y	
NZ786	1	14	D1-7	-	16.3	0	71.5	59.8	54.6	0	0	71.9	71.9	70	Y	-	-	55.1	Y	Y	Y	Y	
NZ786	2	17	D1-7	-	17.7	0	71.5	59.7	55.9	0	0	71.9	71.9	70	Y	-	-	54.1	Y	Y	Y	Y	
NZ786	3	20	D1-7	-	18.9	0	71.4	59.7	55.9	0	0	71.8	71.8	70	Y	-	-	52.8	Y	Y	Y	Y	
NZ786	4	23	D1-7	-	20.1	0	71.4	59.6	55.9	0	0	71.8	71.8	70	Y	-	-	51.7	Y	Y	Y	Y	
NZ786	5	26	D1-7	-	21.2	0	71.3	59.5	55.9	0	0	71.7	71.7	70	Y	-	-	50.5	Y	Y	Y	Y	
NZ786	6	29	D1-7	-	22.4	0	71.3	59.5	55.9	0	0	71.7	71.7	70	Y	-	-	49.3	Y	Y	Y	Y	
NZ786	7	32	D1-7	-	23.6	0	71.2	59.4	55.8	0	0	71.6	71.6	70	Y	-	-	48.0	Y	Y	Y	Y	
NZ786	8	35	D1-7	-	24.7	0	71.1	59.3	55.8	0	0	71.5	71.5	70	Y	-	-	46.6	Y	Y	Y	Y	
NZ786	9	38	D1-7	-	26.4	0	71	59.2	55.8	0	0	71.4	71.4	70	Y	-	-	45.0	Y	Y	Y	Y	
NZ786	10	41	D1-7	-	28.1	0	70.9	59.1	55.7	0	0	71.3	71.3	70	Y	-	-	43.2	Y	Y	Y	Y	
NZ786	11	44	D1-7	-	30	0	70.8	59	55.7	0	0	71.2	71.2	70	Y	-	-	41.2	Y	Y	Y	Y	
NZ786	12	47	D1-7	-	32.5	0	70.7	58.9	55.6	0	0	71.1	71.1	70	Y	-	-	38.6	Y	Y	Y	Y	
NZ786	13	50	D1-7	-	35	0	70.6	58.8	55.6	0	0	71	71.0	70	Y	-	-	36.0	Y	Y	Y	Y	
NZ786	14	53	D1-7	-	37.2	0	70.5	58.7	55.5	0	0	70.9	70.9	70	Y	-	-	33.7	Y	Y	Y	Y	
NZ786	15	56	D1-7	-	39.1	0	70.4	58.6	55.5	0	0	70.8	70.8	70	Y	-	-	31.7	Y	Y	Y	Y	
NZ786	16	59	D1-7	-	40.7	0	70.3	58.5	55.5	0	0	70.7	70.7	70	Y	-	-	30.0	Y	Y	Y	Y	
NZ786	17	62	D1-7	-	41.4	0	70.2	58.4	55.5	0	0	70.6	70.6	70	Y	-	-	29.2	Y	Y	Y	Y	
NZ786	18	65	D1-7	-	41.7	0	70.1	58.3	55.6	0	0	70.5	70.5	70	Y	-	-	28.8	Y	Y	Y	Y	
NZ786	19	68	D1-7	-	41.9	0	69.9	58.2	55.7	0	0	70.4	70.4	70	N	-	-	28.5	Y	N	N	N	
NZ786	20	71	D1-7	-	41.9	0	69.8	58.1	55.8	0	0	70.3	70.3	70	N	-	-	28.4	Y	N	N	N	
NZ786	21	74	D1-7	-	41.9	0	69.7	58	55.8	0	0	70.2	70.2	70	N	-	-	28.3	Y	N	N	N	
NZ786	22	77	D1-7	-	41.9	0	69.6	57.9	55.8	0	0	70.1	70.1	70	N	-	-	28.2	Y	N	N	N	
NZ786	23	80	D1-7	-	41.9	0	69.5	57.8	55.7	0	0	70	70.0	70	N	-	-	28.1	Y	N	N	N	
NZ786	24	83	D1-7	-	41.9	0	69.4	57.7	55.7	0	0	69.9	69.9	70	N	-	-	28.0	Y	N	N	N	
NZ786	25	86	D1-7	-	41.9	0	69.3	57.6	55.6	0	0	69.7	69.8	70	N	-	-	27.9	Y	N	N	N	
NZ621	1	31	A2-2	-	35.7	0	68.6	49	0	49.3	0	68.7	68.7	70	N	-	-	33.0	Y	N	N	N	
NZ621	2	33.8	A2-2	-	36.2	0	68.6	49	0	49.5	0	68.7	68.7	70	N	-	-	32.5	Y	N	N	N	
NZ621	3	36.6	A2-2	-	36.9	0	68.5	49.1	0	49.7	0	68.6	68.6	70	N	-	-	31.7	Y	N	N	N	
NZ621	4	39.4	A2-2	-	37.7	0	68.4	49.2	0	50	0	68.6	68.6	70	N	-	-	30.9	Y	N	N	N	
NZ621	5	42.2	A2-2	-	38.7	0	68.4	49.3	0	50.2	0	68.5	68.5	70	N	-	-	29.8	Y	N	N	N	
NZ621	6	45	A2-2	-	39.8	0	68.3	49.4	0	50.4	0	68.4	68.4	70	N	-	-	28.6	Y	N	N	N	
NZ621	7	47.8	A2-2	-	41	0	68.2	49.5	0	50.5	0	68.3	68.3	70	N	-	-	27.3	Y	N	N	N	
NZ621	8	50.6	A2-2	-	41.6	0	68	49.6	0	50.5	0	68.2	68.2	70	N	-	-	26.6	Y	N	N	N	
NZ621	9	53.4	A2-2	-	42.1	0	67.9	49.7	0	50.7	0	68.1	68.1	70	N	-	-	26.0	Y	N	N	N	
NZ621	10	56.2	A2-2	-	42.4	0	67.8	49.8	0	50.8	0	68	68.0	70	N	-	-	25.6	Y	N	N	N	
NZ621	11	59	A2-2	-	42.7	0	67.7	49.9	0	51.1	0	67.9	67.9	70	N	-	-	25.2	Y	N	N	N	
NZ621	12	61.8	A2-2	-	43.1	0	67.6	50	0	51	0	67.7	67.7	70	N	-	-	24.6	Y	N	N	N	
NZ621	13	64.6	A2-2	-	43.6	0	67.4	50	0	51.1	0	67.6	67.6	70	N	-	-	24.0	Y	N	N	N	
NZ621	14	67.4	A2-2	-	44.1	0	67.3	50.1	0	51.2	0	67.5	67.5	70	N	-	-	23.4	Y	N	N	N	
NZ621	15	70.2	A2-2	-	44.4	0	67.2	50.1	0	51.3	0	67.4	67.4	70	N	-	-	23.0	Y	N	N	N	
NZ621	16	73	A2-2	-	44.6	0	67.1	50.1	0	51.4	0	67.3	67.3	70	N	-	-	22.7	Y	N	N	N	
NZ621	17	75.8	A2-2	-	44.8	0	66.9	50.1	0	51.5	0	67.1	67.2	70	N	-	-	22.4	Y	N	N	N	
NZ621	18	78.6	A2-2	-	45	0	66.8	50.1	0	51.7	0	67	67.1	70	N	-	-	22.1	Y	N	N	N	
NZ621	19	81.4	A2-2	-	45.2	0	66.7	50.2	0	51.9	0	67	67.0	70	N	-	-	21.8	Y	N	N	N	
NZ621	20	84.2	A2-2	-	45.5	0	66.6	50.2	0	52.2	0	66.8	66.9	70	N	-	-	21.4	Y	N	N	N	
NZ621	21	87	A2-2	-	45.6	0	66.5	50.4	0	52.6	0	66.8	66.8	70	N	-	-	21.2	Y	N	N	N	
NZ621	22	89.8	A2-2	-	46.1	0	66.3	50.7	0	53.1	0	66.7	66.7	70	N	-	-	20.6	Y	N	N	N	
NZ621	23	92.6	A2-2	-	46.4	0	66.2	50.8	0	54.1	0	66.6	66.6	70	N	-	-	20.2	Y	N	N	N	
NZ621	24	95.4	A2-2	-	46.8	0	66.1	50.8	0	54.8	0	66.4	66.4	70	N	-	-	19.8	Y	N	N	N	
NZ621	25	98.2	A2-2	-	47.1	0	66	50.8	0	55.1	0	66.5	66.5	70	N	-	-	19.4	Y	N	N	N	
NZ621	26	101	A2-2	-	47.3	0	65.9	50.8	0	55.4	0	66.4	66.4	70	N	-	-	19.1	Y	N	N	N	
NZ621	27	103.8	A2-2	-	47.5	0	65.8	50.9	0	55.5	0	66.3	66.4	70	N	-	-	18.9	Y	N	N	N	
NZ621	28	106.6	A2-2	-	47.7	0	65.7	50.9	0	55.6	0	66.2	66.3	70	N	-	-	18.6	Y	N	N	N	
NZ621	29	109.4	A2-2	-	47.9	0	65.6	50.9	0	55.6	0	66.2	66.2	70	N	-	-	18.3	Y	N	N	N	
NZ621	30	112.2	A2-2	-	48	0	65.5	50.9	0	55.6	0	66.1	66.1	70	N	-	-	18.1	Y	N	N	N	
NZ621	31	1																					



Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>						Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation						
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX				TR	New Roads in 2044 dB(A) <sup>(3)</sup> [B]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
NZ622	13	64.6	A2-2	-	0	0	66.3	54.7	0	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
NZ622	14	67.4	A2-2	-	0	0	66.4	54.9	0	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
NZ622	15	70.2	A2-2	-	0	0	66.3	55.1	0	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
NZ622	16	73	A2-2	-	0	0	66.3	55.2	0	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
NZ622	17	75.8	A2-2	-	0	0	66.3	55.3	0	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
NZ622	18	78.6	A2-2	-	0	0	66.2	55.4	0	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
NZ622	19	81.4	A2-2	-	0	0	66.2	55.5	0	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
NZ622	20	84.2	A2-2	-	0	0	66.1	55.6	0	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
NZ622	21	87	A2-2	-	0	0	66	55.8	0	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
NZ622	22	89.8	A2-2	-	0	0	66	55.9	0	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
NZ622	23	92.6	A2-2	-	0	0	65.9	56.1	0	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
NZ622	24	95.4	A2-2	-	0	0	65.7	56.3	0	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
NZ622	25	98.2	A2-2	-	0	0	65.7	56.5	0	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
NZ622	26	101	A2-2	-	0	0	65.5	56.7	0	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
NZ622	27	103.8	A2-2	-	0	0	65.5	56.8	0	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
NZ622	28	106.6	A2-2	-	0	0	65.4	57	0	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
NZ622	29	109.4	A2-2	-	0	0	65.2	57.1	0	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
NZ622	30	112.2	A2-2	-	0	0	65.2	57.3	0	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
NZ622	31	115	A2-2	-	0	0	65	57.4	0	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
NZ622	32	117.8	A2-2	-	0	0	64.9	57.5	0	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
NZ622	33	120.6	A2-2	-	0	0	64.8	57.6	0	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
NZ622	34	123.4	A2-2	-	0	0	64.8	57.6	0	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
NZ622	35	126.2	A2-2	-	0	0	64.7	57.7	0	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
NZ622	36	129	A2-2	-	0	0	64.6	57.8	0	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
NZ622	37	131.8	A2-2	-	0	0	64.5	57.9	0	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
NZ622	38	134.6	A2-2	-	0	0	64.4	57.9	0	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
NZ622	39	137.4	A2-2	-	0	0	64.3	57.9	0	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
NZ622	40	140.2	A2-2	-	0	0	64.2	57.9	0	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
NZ623	1	31	A2-2	-	0	0	40.3	66.7	54.5	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
NZ623	2	33.8	A2-2	-	0	0	41.6	66.7	54.3	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
NZ623	3	36.6	A2-2	-	0	0	42.8	66.7	54.1	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
NZ623	4	39.4	A2-2	-	0	0	44.2	66.6	53.8	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
NZ623	5	42.2	A2-2	-	0	0	45.7	66.6	53.6	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
NZ623	6	45	A2-2	-	0	0	47.3	66.7	53.3	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
NZ623	7	47.8	A2-2	-	0	0	49.3	66.7	53.1	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
NZ623	8	50.6	A2-2	-	0	0	51.3	66.7	52.9	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
NZ623	9	53.4	A2-2	-	0	0	52.9	66.7	52.6	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
NZ623	10	56.2	A2-2	-	0	0	53.9	66.8	52.4	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
NZ623	11	59	A2-2	-	0	0	55	66.9	52.2	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
NZ623	12	61.8	A2-2	-	0	0	56	67	52	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
NZ623	13	64.6	A2-2	-	0	0	57	67.1	51.8	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
NZ623	14	67.4	A2-2	-	0	0	57.9	67.1	51.6	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
NZ623	15	70.2	A2-2	-	0	0	58.6	67.1	51.4	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N
NZ623	16	73	A2-2	-	0	0	59.1	67.1	51.3	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
NZ623	17	75.8	A2-2	-	0	0	59.3	67.1	51.1	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N
NZ623	18	78.6	A2-2	-	0	0	59.6	67	51	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N
NZ623	19	81.4	A2-2	-	0	0	59.8	66.9	50.8	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N
NZ623	20	84.2	A2-2	-	0	0	60	66.8	50.6	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
NZ623	21	87	A2-2	-	0	0	60.1	66.7	50.5	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
NZ623	22	89.8	A2-2	-	0	0	60.3	66.7	50.4	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
NZ623	23	92.6	A2-2	-	0	0	60.3	66.6	50.2	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
NZ623	24	95.4	A2-2	-	0	0	60.4	66.4	50.1	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
NZ623	25	98.2	A2-2	-	0	0	60.4	66.3	50	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
NZ623	26	101	A2-2	-	0	0	60.4	66.2	49.9	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
NZ623	27	103.8	A2-2	-	0	0	60.4	66.1	49.7	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N
NZ623	28	106.6	A2-2	-	0	0	60.3	66	49.6	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
NZ623	29	109.4	A2-2	-	0	0	60.3	65.9	49.5	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
NZ623	30	112.2	A2-2	-	0	0	60.2	65.8	49.4	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
NZ623	31	115	A2-2	-	0	0	60.1	65.7	49.3	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
NZ623	32	117.8	A2-2	-	0	0	60.1	65.6	49.1	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
NZ623	33	120.6	A2-2	-	0	0	60	65.5	49	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
NZ623	34	123.4	A2-2	-	0	0	60	65.4	48.9	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
NZ623	35	126.2	A2-2	-	0	0	59.9	65.3	48.9	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
NZ623	36	129	A2-2	-	0	0	59.8	65.3	48.8	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
NZ623	37	131.8	A2-2	-	0	0	59.7	65.2	48.7	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
NZ623	38	134.6	A2-2	-	0	0	59.7	65.1	48.6	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
NZ623	39	137.4	A2-2	-	0	0	59.6	65	48.5	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
NZ623	40	140.2	A2-2	-	0	0	59.5	64.9	48.4	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
NZ624	1	31	A2-2	-	0	0	52.6	71.2	56.1	0	0	71.4	71.4	70	Y	-	-	68.4	Y	Y	Y	Y
NZ624	2	33.8	A2-2	-	0	0	52.7	71.1	55.8	0	0	71.3	71.3	70	Y	-	-	68.3	Y	Y	Y	Y
NZ624	3	36.6	A2-2	-	0	0	52.8	71	55.4	0	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	Y	Y
NZ624	4	39.4	A2-2	-	0	0	52.9	70.9	55.1	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	Y	Y
NZ624	5	42.2	A2-2	-	0	0	52.9	70.8	54.8	0	0	71.1	71.0	70	Y	-	-	68.0	Y	Y	Y	Y

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)		
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Roads in 2044 dB(A) <sup>(3)</sup> [B]	PD	DD	LD			EX	TR	C - A dB(A)	D ≥ 1dB(A)	New Road Contribution dB(A)		New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	LD	EX	TR															
N2624	26	101	A2-2	-	0	0	59.6	67.8	50.8	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N			
N2624	27	103.8	A2-2	-	0	0	59.6	67.7	50.7	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N			
N2624	28	106.6	A2-2	-	0	0	59.7	67.6	50.5	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N			
N2624	29	109.4	A2-2	-	0	0	59.7	67.4	50.4	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N			
N2624	30	112.2	A2-2	-	0	0	59.8	67.3	50.3	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N			
N2624	31	115	A2-2	-	0	0	59.8	67.2	50.2	0	0	68	68	70	N	-	-	65	Y	N	N			
N2624	32	117.8	A2-2	-	0	0	59.8	67.1	50.1	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N			
N2624	33	120.6	A2-2	-	0	0	59.8	67	50	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N			
N2624	34	123.4	A2-2	-	0	0	59.8	66.9	49.9	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N			
N2624	35	126.2	A2-2	-	0	0	59.8	66.8	49.8	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N			
N2624	36	129	A2-2	-	0	0	59.8	66.6	49.7	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N			
N2624	37	131.8	A2-2	-	0	0	59.7	66.6	49.6	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N			
N2624	38	134.6	A2-2	-	0	0	59.7	66.5	49.5	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N			
N2624	39	137.4	A2-2	-	0	0	59.6	66.4	49.4	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N			
N2624	40	140.2	A2-2	-	0	0	59.6	66.3	49.3	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N			
N2625	1	31	A2-2	-	0	0	0	65.9	50.5	0	0	66	66	70	N	-	-	63.0	Y	N	N			
N2625	2	33.8	A2-2	-	0	0	0	65.9	50.3	0	0	66	66	70	N	-	-	63.0	Y	N	N			
N2625	3	36.6	A2-2	-	0	0	0	65.8	50.1	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N			
N2625	4	39.4	A2-2	-	0	0	0	65.7	49.9	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N			
N2625	5	42.2	A2-2	-	0	0	0	65.7	49.6	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N			
N2625	6	45	A2-2	-	0	0	0	65.6	49.4	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N			
N2625	7	47.8	A2-2	-	0	0	0	65.5	49.1	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N			
N2625	8	50.6	A2-2	-	0	0	0	65.4	48.9	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N			
N2625	9	53.4	A2-2	-	0	0	0	65.3	48.7	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N			
N2625	10	56.2	A2-2	-	0	0	0	65.2	48.5	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N			
N2625	11	59	A2-2	-	0	0	0	65	48.3	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N			
N2625	12	61.8	A2-2	-	0	0	0	64.9	48.1	0	0	65	65	70	N	-	-	62.0	Y	N	N			
N2625	13	64.6	A2-2	-	0	0	0	64.8	47.9	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N			
N2625	14	67.4	A2-2	-	0	0	0	64.7	47.7	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N			
N2625	15	70.2	A2-2	-	0	0	0	64.5	47.5	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N			
N2625	16	73	A2-2	-	0	0	0	64.4	47.3	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N			
N2625	17	75.8	A2-2	-	0	0	0	64.3	47.1	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N			
N2625	18	78.6	A2-2	-	0	0	0	64.2	47	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N			
N2625	19	81.4	A2-2	-	0	0	0	64.1	46.8	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N			
N2625	20	84.2	A2-2	-	0	0	0	63.9	46.7	0	0	64	64	70	N	-	-	61.0	Y	N	N			
N2625	21	87	A2-2	-	0	0	0	63.8	46.5	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N			
N2625	22	89.8	A2-2	-	0	0	0	63.7	46.4	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N			
N2625	23	92.6	A2-2	-	0	0	0	63.6	46.2	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N			
N2625	24	95.4	A2-2	-	0	0	0	63.5	46.1	0	0	63.5	63.5	70	N	-	-	60.5	Y	N	N			
N2625	25	98.2	A2-2	-	0	0	0	63.3	46	0	0	63.4	63.4	70	N	-	-	60.4	Y	N	N			
N2625	26	101	A2-2	-	0	0	0	63.2	45.9	0	0	63.3	63.3	70	N	-	-	60.3	Y	N	N			
N2625	27	103.8	A2-2	-	0	0	0	63.1	45.7	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N			
N2625	28	106.6	A2-2	-	0	0	0	63	45.6	0	0	63	63	70	N	-	-	60.0	Y	N	N			
N2625	29	109.4	A2-2	-	0	0	0	62.9	45.4	0	0	62.9	62.9	70	N	-	-	59.9	Y	N	N			
N2625	30	112.2	A2-2	-	0	0	0	62.8	45.3	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N			
N2625	31	115	A2-2	-	0	0	0	62.7	45.2	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N			
N2625	32	117.8	A2-2	-	0	0	0	62.6	45.1	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N			
N2625	33	120.6	A2-2	-	0	0	0	62.5	45	0	0	62.5	62.5	70	N	-	-	59.5	Y	N	N			
N2625	34	123.4	A2-2	-	0	0	0	62.4	44.9	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N			
N2625	35	126.2	A2-2	-	0	0	0	62.3	44.8	0	0	62.3	62.3	70	N	-	-	59.3	Y	N	N			
N2625	36	129	A2-2	-	0	0	0	62.2	44.7	0	0	62.2	62.2	70	N	-	-	59.2	Y	N	N			
N2625	37	131.8	A2-2	-	0	0	0	62.1	44.6	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N			
N2625	38	134.6	A2-2	-	0	0	0	62	44.5	0	0	62	62	70	N	-	-	59.0	Y	N	N			
N2625	39	137.4	A2-2	-	0	0	0	61.9	44.4	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N			
N2625	40	140.2	A2-2	-	0	0	0	61.8	44.3	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N			
N2626	1	31	A2-2	-	0	0	54.1	72.7	0	0	0	72.8	72.8	70	Y	-	-	69.8	Y	Y	Y			
N2626	2	33.8	A2-2	-	0	0	54.1	72.5	0	0	0	72.6	72.6	70	Y	-	-	69.6	Y	Y	Y			
N2626	3	36.6	A2-2	-	0	0	54.1	72.3	0	0	0	72.3	72.3	70	Y	-	-	69.3	Y	Y	Y			
N2626	4	39.4	A2-2	-	0	0	54.1	72	0	0	0	72	72	70	Y	-	-	69.1	Y	Y	Y			
N2626	5	42.2	A2-2	-	0	0	54.1	71.7	0	0	0	71.8	71.8	70	Y	-	-	68.8	Y	Y	Y			
N2626	6	45	A2-2	-	0	0	54.2	71.4	0	0	0	71.5	71.5	70	Y	-	-	68.5	Y	Y	Y			
N2626	7	47.8	A2-2	-	0	0	54.2	71.1	0	0	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	Y			
N2626	8	50.6	A2-2	-	0	0	54.1	70.8	0	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	Y			
N2626	9	53.4	A2-2	-	0	0	54.1	70.6	0	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	Y			
N2626	10	56.2	A2-2	-	0	0	54.2	70.3	0	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N			
N2626	11	59	A2-2	-	0	0	54.2	70	0	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N			
N2626	12	61.8	A2-2	-	0	0	54.2	69.8	0	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N			
N2626	13	64.6	A2-2	-	0	0	54.3	69.6	0	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N			
N2626	14	67.4	A2-2	-	0	0	54.3	69.4	0	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N			
N2626	15	70.2	A2-2	-	0	0	54.4	69.2	0	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N			
N2626	16	73	A2-2	-	0	0	54.5	68.9	0	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N			
N2626	17	75.8	A2-2	-	0	0	54.6	68.7	0	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N			
N2626	18	78.6	A2-2	-	0	0	54.6	68.6	0	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N			
N2626	19	81.4	A2-2	-	0	0	54.8	68.4	0	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N			
N2626	20	84.2	A2-2	-	0	0	54.9	68.2	0	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N			
N2626	21	87	A2-2	-	0	0	55.2	68	0	0	0	68.2	68.2	70										

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)		New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)			New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(3)</sup> [B]	[C]		[D]	D ≥ 1dB(A)	[E]	≥ 1dB(A)						
N2626	39	137.4	A2-2	-	0	0	57.1	65.8	0	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	
N2626	40	140.2	A2-2	-	0	0	57.1	65.7	0	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	
N2627	1	31	A2-2	-	0	0	72.6	61.7	0	0	0	72.9	72.9	70	Y	-	-	69.9	Y	Y	Y	
N2627	2	33.8	A2-2	-	0	0	72.4	61.2	0	0	0	72.7	72.7	70	Y	-	-	69.7	Y	Y	Y	
N2627	3	36.6	A2-2	-	0	0	72.1	60.7	0	0	0	72.4	72.4	70	Y	-	-	69.4	Y	Y	Y	
N2627	4	39.4	A2-2	-	0	0	71.8	60.2	0	0	0	72.1	72.1	70	Y	-	-	69.1	Y	Y	Y	
N2627	5	42.2	A2-2	-	0	0	71.5	59.8	0	0	0	71.8	71.8	70	Y	-	-	68.8	Y	Y	Y	
N2627	6	45	A2-2	-	0	0	71.3	59.3	0	0	0	71.5	71.5	70	Y	-	-	68.5	Y	Y	Y	
N2627	7	47.8	A2-2	-	0	0	71	58.9	0	0	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	Y	
N2627	8	50.6	A2-2	-	0	0	70.7	58.6	0	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	Y	
N2627	9	53.4	A2-2	-	0	0	70.4	58.2	0	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	Y	
N2627	10	56.2	A2-2	-	0	0	70.1	57.9	0	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N	
N2627	11	59	A2-2	-	0	0	69.9	57.6	0	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	
N2627	12	61.8	A2-2	-	0	0	69.6	57.3	0	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	
N2627	13	64.6	A2-2	-	0	0	69.4	57	0	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	
N2627	14	67.4	A2-2	-	0	0	69.2	56.7	0	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	
N2627	15	70.2	A2-2	-	0	0	69	56.5	0	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	
N2627	16	73	A2-2	-	0	0	68.7	56.2	0	0	0	69	69.0	70	N	-	-	66.0	Y	N	N	
N2627	17	75.8	A2-2	-	0	0	68.5	56	0	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	
N2627	18	78.6	A2-2	-	0	0	68.3	55.8	0	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	
N2627	19	81.4	A2-2	-	0	0	68.2	55.6	0	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	
N2627	20	84.2	A2-2	-	0	0	68	55.4	0	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	
N2627	21	87	A2-2	-	0	0	67.8	55.2	0	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	
N2627	22	89.8	A2-2	-	0	0	67.6	55	0	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	
N2627	23	92.6	A2-2	-	0	0	67.5	54.9	0	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	
N2627	24	95.4	A2-2	-	0	0	67.3	54.7	0	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	
N2627	25	98.2	A2-2	-	0	0	67.2	54.6	0	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	
N2627	26	101	A2-2	-	0	0	67	54.4	0	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	
N2627	27	103.8	A2-2	-	0	0	66.9	54.3	0	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	
N2627	28	106.6	A2-2	-	0	0	66.7	54.1	0	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	
N2627	29	109.4	A2-2	-	0	0	66.6	54	0	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
N2627	30	112.2	A2-2	-	0	0	66.5	53.8	0	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	
N2627	31	115	A2-2	-	0	0	66.3	53.7	0	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	
N2627	32	117.8	A2-2	-	0	0	66.2	53.6	0	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	
N2627	33	120.6	A2-2	-	0	0	66.1	53.5	0	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	
N2627	34	123.4	A2-2	-	0	0	66	53.3	0	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	
N2627	35	126.2	A2-2	-	0	0	65.9	53.2	0	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	
N2627	36	129	A2-2	-	0	0	65.8	53.1	0	0	0	66.1	66.1	70	N	-	-	63.0	Y	N	N	
N2627	37	131.8	A2-2	-	0	0	65.7	53	0	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	
N2627	38	134.6	A2-2	-	0	0	65.6	52.9	0	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	
N2627	39	137.4	A2-2	-	0	0	65.5	52.8	0	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	
N2627	40	140.2	A2-2	-	0	0	65.4	52.7	0	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	
N2635	1	25	A2-2	-	0	0	70.8	56.5	0	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	Y	
N2635	2	27.8	A2-2	-	0	0	70.7	56.6	0	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	Y	
N2635	3	30.6	A2-2	-	0	0	70.6	56.5	0	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y	
N2635	4	33.4	A2-2	-	0	0	70.5	56.5	0	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	Y	
N2635	5	36.2	A2-2	-	0	0	70.4	56.5	0	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	Y	
N2635	6	39	A2-2	-	0	0	70.3	56.5	0	0	0	70.5	70.5	70	Y	-	-	67.5	Y	Y	Y	
N2635	7	41.8	A2-2	-	0	0	70.2	56.5	0	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N	
N2635	8	44.6	A2-2	-	0	0	70	56.5	0	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N	
N2635	9	47.4	A2-2	-	0	0	69.9	56.5	0	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	
N2635	10	50.2	A2-2	-	0	0	69.7	56.4	0	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	
N2635	11	53	A2-2	-	0	0	69.6	56.4	0	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	
N2635	12	55.8	A2-2	-	0	0	69.4	56.4	0	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	
N2635	13	58.6	A2-2	-	0	0	69.3	56.4	0	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	
N2635	14	61.4	A2-2	-	0	0	69.1	56.3	0	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	
N2635	15	64.2	A2-2	-	0	0	69	56.3	0	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	
N2635	16	67	A2-2	-	0	0	68.8	56.3	0	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	
N2635	17	69.8	A2-2	-	0	0	68.7	56.2	0	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	
N2635	18	72.6	A2-2	-	0	0	68.5	56.2	0	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	
N2635	19	75.4	A2-2	-	0	0	68.4	56.1	0	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	
N2635	20	78.2	A2-2	-	0	0	68.3	56.1	0	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	
N2635	21	81	A2-2	-	0	0	68.1	56	0	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	
N2635	22	83.8	A2-2	-	0	0	68	56	0	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	
N2635	23	86.6	A2-2	-	0	0	67.9	56	0	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	
N2635	24	89.4	A2-2	-	0	0	67.7	55.9	0	0	0	68.0	68.0	70	N	-	-	65.0	Y	N	N	
N2635	25	92.2	A2-2	-	0	0	67.6	55.9	0	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	
N2635	26	95	A2-2	-	0	0	67.5	55.8	0	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	
N2635	27	97.8	A2-2	-	0	0	67.4	55.8	0	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	
N2635	28	100.6	A2-2	-	0	0	67.2	55.7	0	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	
N2635	29	103.4	A2-2	-	0	0	67.1	55.7	0	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	
N2635	30	106.2	A2-2	-	0	0	67	55.6	0	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	
N2635	31	109	A2-2	-	0	0	66.9	55.6	0	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	
N2635	32	111.8	A2-2	-	0	0	66.8	55.5	0	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	
N2635	33	114.6	A2-2	-	0	0	66.7	55.5	0	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	
N2635	34	117.4	A2-2	-	0	0	66.6	55.4	0	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
N2635	35	120.																				

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	C - A dB(A) [D]			D ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD												EX	
N2630	12	55.8	A2-2	-	15.5	0	46.5	69.2	61.7	0	0	70	70.0	70	N	-	-	54.4	Y	N	N	
N2630	13	58.6	A2-2	-	15.5	0	46.5	69	61.7	0	0	69.8	69.8	70	N	-	-	54.2	Y	N	N	
N2630	14	61.4	A2-2	-	15.6	0	46.5	68.8	61.6	0	0	69.6	69.6	70	N	-	-	53.9	Y	N	N	
N2630	15	64.2	A2-2	-	15.6	0	46.5	68.6	61.5	0	0	69.4	69.4	70	N	-	-	53.7	Y	N	N	
N2630	16	67	A2-2	-	15.6	0	46.4	68.4	61.4	0	0	69.2	69.2	70	N	-	-	53.5	Y	N	N	
N2630	17	69.8	A2-2	-	15.5	0	46.4	68.2	61.4	0	0	69	69.0	70	N	-	-	53.4	Y	N	N	
N2630	18	72.6	A2-2	-	15.5	0	46.4	68	61.3	0	0	68.8	68.8	70	N	-	-	53.2	Y	N	N	
N2630	19	75.4	A2-2	-	15.5	0	46.4	67.9	61.2	0	0	68.7	68.7	70	N	-	-	53.1	Y	N	N	
N2630	20	78.2	A2-2	-	15.5	0	46.4	67.7	61.1	0	0	68.6	68.6	70	N	-	-	53.0	Y	N	N	
N2630	21	81	A2-2	-	15.5	0	46.4	67.5	61	0	0	68.4	68.4	70	N	-	-	52.8	Y	N	N	
N2630	22	83.8	A2-2	-	15.5	0	46.4	67.3	61	0	0	68.2	68.2	70	N	-	-	52.6	Y	N	N	
N2630	23	86.6	A2-2	-	15.5	0	46.4	67.2	60.9	0	0	68.1	68.1	70	N	-	-	52.5	Y	N	N	
N2630	24	89.4	A2-2	-	15.5	0	46.4	67	60.8	0	0	68	68.0	70	N	-	-	52.4	Y	N	N	
N2630	25	92.2	A2-2	-	15.5	0	46.3	66.9	60.7	0	0	67.9	67.9	70	N	-	-	52.3	Y	N	N	
N2630	26	95	A2-2	-	15.4	0	46.3	66.7	60.6	0	0	67.7	67.7	70	N	-	-	52.2	Y	N	N	
N2630	27	97.8	A2-2	-	15.4	0	46.3	66.6	60.5	0	0	67.6	67.6	70	N	-	-	52.1	Y	N	N	
N2630	28	100.6	A2-2	-	15.4	0	46.3	66.4	60.4	0	0	67.4	67.4	70	N	-	-	51.9	Y	N	N	
N2630	29	103.4	A2-2	-	15.4	0	46.3	66.3	60.4	0	0	67.3	67.3	70	N	-	-	51.8	Y	N	N	
N2630	30	106.2	A2-2	-	15.4	0	46.3	66.2	60.3	0	0	67.2	67.2	70	N	-	-	51.7	Y	N	N	
N2630	31	109	A2-2	-	15.4	0	46.3	66	60.2	0	0	67.1	67.1	70	N	-	-	51.6	Y	N	N	
N2630	32	111.8	A2-2	-	15.4	0	46.2	65.9	60.1	0	0	67	67.0	70	N	-	-	51.5	Y	N	N	
N2630	33	114.6	A2-2	-	15.4	0	46.2	65.8	60	0	0	66.9	66.9	70	N	-	-	51.4	Y	N	N	
N2630	34	117.4	A2-2	-	15.3	0	46.2	65.7	60	0	0	66.8	66.8	70	N	-	-	51.4	Y	N	N	
N2630	35	120.2	A2-2	-	15.3	0	46.2	65.6	60	0	0	66.7	66.7	70	N	-	-	51.3	Y	N	N	
N2630	36	123	A2-2	-	15.1	0	46.2	65.4	59.8	0	0	66.5	66.5	70	N	-	-	51.3	Y	N	N	
N2630	37	125.8	A2-2	-	15.1	0	46.2	65.3	59.7	0	0	66.4	66.4	70	N	-	-	51.2	Y	N	N	
N2630	38	128.6	A2-2	-	15.9	0	46.1	65.2	59.6	0	0	66.3	66.3	70	N	-	-	50.3	Y	N	N	
N2630	39	131.4	A2-2	-	17	0	46.1	65.1	59.6	0	0	66.2	66.2	70	N	-	-	49.1	Y	N	N	
N2630	40	134.2	A2-2	-	18.1	0	46.1	65	59.5	0	0	66.2	66.2	70	N	-	-	48.0	Y	N	N	
N2631	1	25	A2-2	-	0	0	0	71.9	58.3	0	0	72	72.0	70	Y	-	-	69.0	Y	Y	Y	
N2631	2	27.8	A2-2	-	0	0	0	71.7	58.3	0	0	71.9	71.9	70	Y	-	-	68.9	Y	Y	Y	
N2631	3	30.6	A2-2	-	0	0	0	71.5	58.3	0	0	71.7	71.7	70	Y	-	-	68.7	Y	Y	Y	
N2631	4	33.4	A2-2	-	0	0	0	71.4	58.3	0	0	71.6	71.6	70	Y	-	-	68.6	Y	Y	Y	
N2631	5	36.2	A2-2	-	0	0	0	71.1	58.3	0	0	71.4	71.4	70	Y	-	-	68.4	Y	Y	Y	
N2631	6	39	A2-2	-	0	0	0	70.9	58.2	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	Y	
N2631	7	41.8	A2-2	-	0	0	0	70.6	58.2	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	Y	
N2631	8	44.6	A2-2	-	0	0	0	70.4	58.2	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	Y	
N2631	9	47.4	A2-2	-	0	0	0	70.2	58.1	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N	
N2631	10	50.2	A2-2	-	0	0	0	69.9	58.1	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	
N2631	11	53	A2-2	-	0	0	0	69.7	58	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	
N2631	12	55.8	A2-2	-	0	0	0	69.5	58	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	
N2631	13	58.6	A2-2	-	0	0	0	69.2	57.9	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	
N2631	14	61.4	A2-2	-	0	0	0	69	57.9	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N	
N2631	15	64.2	A2-2	-	0	0	0	68.8	57.8	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	
N2631	16	67	A2-2	-	0	0	0	68.6	57.8	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	
N2631	17	69.8	A2-2	-	0	0	0	68.4	57.7	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	
N2631	18	72.6	A2-2	-	0	0	0	68.2	57.6	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	
N2631	19	75.4	A2-2	-	0	0	0	68	57.6	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	
N2631	20	78.2	A2-2	-	0	0	0	67.8	57.5	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	
N2631	21	81	A2-2	-	0	0	0	67.7	57.4	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	
N2631	22	83.8	A2-2	-	0	0	0	67.5	57.4	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	
N2631	23	86.6	A2-2	-	0	0	0	67.3	57.3	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	
N2631	24	89.4	A2-2	-	0	0	0	67.2	57.2	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	
N2631	25	92.2	A2-2	-	0	0	0	67	57.1	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	
N2631	26	95	A2-2	-	0	0	0	66.9	57.1	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	
N2631	27	97.8	A2-2	-	0	0	0	66.7	57	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	
N2631	28	100.6	A2-2	-	0	0	0	66.6	56.9	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	
N2631	29	103.4	A2-2	-	0	0	0	66.5	56.8	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
N2631	30	106.2	A2-2	-	0	0	0	66.3	56.8	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	
N2631	31	109	A2-2	-	0	0	0	66.2	56.7	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	
N2631	32	111.8	A2-2	-	0	0	0	66.1	56.6	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	
N2631	33	114.6	A2-2	-	0	0	0	66	56.5	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	
N2631	34	117.4	A2-2	-	0	0	0	65.8	56.5	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	
N2631	35	120.2	A2-2	-	0	0	0	65.7	56.4	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	
N2631	36	123	A2-2	-	0	0	0	65.6	56.3	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	
N2631	37	125.8	A2-2	-	0	0	0	65.5	56.2	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	
N2631	38	128.6	A2-2	-	0	0	0	65.4	56.2	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	
N2631	39	131.4	A2-2	-	0	0	0	65.3	56.1	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	
N2631	40	134.2	A2-2	-	0	0	0	65.2	56	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	
N2638	1	25	A2-2	-	0	0	8.4	70	54.3	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	
N2638	2	27.8	A2-2	-	0	0	8.4	69.9	54.6	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	
N2638	3	30.6	A2-2	-	0	0	8.4	69.8	54.8	0	0	70	70.0	70	N	-	-	67.0	Y	N	N	
N2638	4	33.4	A2-2	-	0	0	8.4	69.7	54.9	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	
N2638	5	36.2	A2-2	-	0	0	8.4	69.6	54.9	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	
N2638	6	39	A2-2	-	0	0	8.4	69.5	55	0	0	69.7	69.7									

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation		Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	C - A dB(A) [D]		New Road Contribution				New Road > Criteria				
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(3)</sup> [B]				C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
N2638	25	92.2	A2-2	-	0	0	8.2	66.8	54.6	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N
N2638	26	95	A2-2	-	0	0	8.2	66.7	54.6	0	0	67	67.0	70	N	-	-	64.0	Y	N	N
N2638	27	97.8	A2-2	-	0	0	8.2	66.6	54.6	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
N2638	28	100.6	A2-2	-	0	0	8.2	66.5	54.5	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N
N2638	29	103.4	A2-2	-	0	0	8.1	66.4	54.5	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
N2638	30	106.2	A2-2	-	0	0	8.1	66.3	54.5	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N
N2638	31	109	A2-2	-	0	0	8.1	66.1	54.4	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
N2638	32	111.8	A2-2	-	0	0	8.1	66	54.4	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N
N2638	33	114.6	A2-2	-	0	0	8.1	65.9	54.4	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
N2638	34	117.4	A2-2	-	0	0	8	65.8	54.3	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
N2638	35	120.2	A2-2	-	0	0	8	65.7	54.3	0	0	66	66.0	70	N	-	-	63.0	Y	N	N
N2638	36	123	A2-2	-	0	0	8	65.6	54.2	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N
N2638	37	125.8	A2-2	-	0	0	8	65.5	54.2	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N
N2638	38	128.6	A2-2	-	0	0	7.8	65.4	54.2	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
N2638	39	131.4	A2-2	-	0	0	8	65.3	54.1	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N
N2638	40	134.2	A2-2	-	0	0	8.1	65.3	54.1	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N
N2639	1	25	A2-2	-	0	0	0	70.1	58.1	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N
N2639	2	27.8	A2-2	-	0	0	0	70	57.9	0	0	70	70.0	70	N	-	-	67.0	Y	N	N
N2639	3	30.6	A2-2	-	0	0	0	69.9	57.9	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N
N2639	4	33.4	A2-2	-	0	0	0	69.8	57.9	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N
N2639	5	36.2	A2-2	-	0	0	0	69.7	57.9	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N
N2639	6	39	A2-2	-	0	0	0	69.6	57.9	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N
N2639	7	41.8	A2-2	-	0	0	0	69.5	57.9	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N
N2639	8	44.6	A2-2	-	0	0	0	69.3	57.9	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2639	9	47.4	A2-2	-	0	0	0	69.2	57.9	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N
N2639	10	50.2	A2-2	-	0	0	0	69	57.8	0	0	69	69.0	70	N	-	-	66.0	Y	N	N
N2639	11	53	A2-2	-	0	0	0	68.9	57.8	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
N2639	12	55.8	A2-2	-	0	0	0	68.7	57.8	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N
N2639	13	58.6	A2-2	-	0	0	0	68.6	57.8	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N
N2639	14	61.4	A2-2	-	0	0	0	68.4	57.8	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N
N2639	15	64.2	A2-2	-	0	0	0	68.3	57.8	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N
N2639	16	67	A2-2	-	0	0	0	68.1	57.7	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N
N2639	17	69.8	A2-2	-	0	0	0	68	57.7	0	0	68	68.0	70	N	-	-	65.0	Y	N	N
N2639	18	72.6	A2-2	-	0	0	0	67.9	57.7	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N
N2639	19	75.4	A2-2	-	0	0	0	67.7	57.7	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N
N2639	20	78.2	A2-2	-	0	0	0	67.6	57.7	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N
N2639	21	81	A2-2	-	0	0	0	67.4	57.6	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N
N2639	22	83.8	A2-2	-	0	0	0	67.3	57.6	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N
N2639	23	86.6	A2-2	-	0	0	0	67.2	57.6	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N
N2639	24	89.4	A2-2	-	0	0	0	67.1	57.6	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N
N2639	25	92.2	A2-2	-	0	0	0	66.9	57.5	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
N2639	26	95	A2-2	-	0	0	0	66.8	57.5	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N
N2639	27	97.8	A2-2	-	0	0	0	66.7	57.5	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
N2639	28	100.6	A2-2	-	0	0	0	66.6	57.4	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N
N2639	29	103.4	A2-2	-	0	0	0	66.5	57.4	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N
N2639	30	106.2	A2-2	-	0	0	0	66.3	57.4	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N
N2639	31	109	A2-2	-	0	0	0	66.2	57.3	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
N2639	32	111.8	A2-2	-	0	0	0	66.1	57.3	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
N2639	33	114.6	A2-2	-	0	0	0	66	57.3	0	0	66	66.0	70	N	-	-	63.0	Y	N	N
N2639	34	117.4	A2-2	-	0	0	0	65.9	57.2	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N
N2639	35	120.2	A2-2	-	0	0	0	65.8	57.2	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
N2639	36	123	A2-2	-	0	0	0	65.7	57.2	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N
N2639	37	125.8	A2-2	-	0	0	0	65.6	57.1	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N
N2639	38	128.6	A2-2	-	0	0	0	65.5	57.1	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N
N2639	39	131.4	A2-2	-	0	0	0	65.4	57.1	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N
N2639	40	134.2	A2-2	-	0	0	0	65.3	57	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N
N2634	1	25	A2-2	-	0	0	0	71.3	58.1	0	0	71.5	71.5	70	Y	-	-	68.5	Y	Y	Y
N2634	2	27.8	A2-2	-	0	0	0	71.2	58.2	0	0	71.4	71.4	70	Y	-	-	68.4	Y	Y	Y
N2634	3	30.6	A2-2	-	0	0	0	71.1	58.2	0	0	71.3	71.3	70	Y	-	-	68.3	Y	Y	Y
N2634	4	33.4	A2-2	-	0	0	0	71	58.1	0	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	Y
N2634	5	36.2	A2-2	-	0	0	0	70.9	58.1	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	Y
N2634	6	39	A2-2	-	0	0	0	70.8	58.1	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	Y
N2634	7	41.8	A2-2	-	0	0	0	70.7	58.1	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	Y
N2634	8	44.6	A2-2	-	0	0	0	70.5	58.1	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	Y
N2634	9	47.4	A2-2	-	0	0	0	70.4	58.1	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	Y
N2634	10	50.2	A2-2	-	0	0	0	70.2	58	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N
N2634	11	53	A2-2	-	0	0	0	70	58	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N
N2634	12	55.8	A2-2	-	0	0	0	69.9	58	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N
N2634	13	58.6	A2-2	-	0	0	0	69.7	58	0	0	70	70.0	70	N	-	-	67.0	Y	N	N
N2634	14	61.4	A2-2	-	0	0	0	69.6	57.9	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N
N2634	15	64.2	A2-2	-	0	0	0	69.4	57.9	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N
N2634	16	67	A2-2	-	0	0	0	69.3	57.8	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N
N2634	17	69.8	A2-2	-	0	0	0	69.1	57.8	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N
N2634	18	72.6	A2-2	-	0	0	0	69	57.8	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2634	19	75.4	A2-2	-	0	0	0	68.8	57.7	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
N2634	20	78.2	A2-2	-	0	0	0	68.7	57.7	0	0	69	69.0	70	N	-	-				

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation		Mitigation Measures Required <sup>(4)</sup> (Y/N)
ID	Floor	Floor Level [mPD]		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria								
					Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD					EX			TR	New Roads in 2044 dB(A) <sup>(3)</sup> [B]			
N2634	38	128.6	A2-2	-	0	0	0	66.5	56.8	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
N2634	39	131.4	A2-2	-	0	0	0	66.4	56.7	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N
N2634	40	134.2	A2-2	-	0	0	0	66.3	56.6	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
N2632	1	25	A2-2	-	0	0	0	70.8	58.1	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	N
N2632	2	27.8	A2-2	-	0	0	0	70.7	58.1	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	N
N2632	3	30.6	A2-2	-	0	0	0	70.6	58.1	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	N
N2632	4	33.4	A2-2	-	0	0	0	70.5	58.1	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	N
N2632	5	36.2	A2-2	-	0	0	0	70.4	58.1	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	N
N2632	6	39	A2-2	-	0	0	0	70.3	58	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	N
N2632	7	41.8	A2-2	-	0	0	0	70.2	58	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N
N2632	8	44.6	A2-2	-	0	0	0	70	58	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N
N2632	9	47.4	A2-2	-	0	0	0	69.8	58	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N
N2632	10	50.2	A2-2	-	0	0	0	69.7	57.9	0	0	70	70.0	70	N	-	-	67.0	Y	N	N
N2632	11	53	A2-2	-	0	0	0	69.5	57.9	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N
N2632	12	55.8	A2-2	-	0	0	0	69.4	57.9	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N
N2632	13	58.6	A2-2	-	0	0	0	69.2	57.8	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N
N2632	14	61.4	A2-2	-	0	0	0	69	57.8	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N
N2632	15	64.2	A2-2	-	0	0	0	68.9	57.8	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2632	16	67	A2-2	-	0	0	0	68.7	57.7	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
N2632	17	69.8	A2-2	-	0	0	0	68.6	57.7	0	0	69	69.0	70	N	-	-	66.0	Y	N	N
N2632	18	72.6	A2-2	-	0	0	0	68.4	57.6	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N
N2632	19	75.4	A2-2	-	0	0	0	68.3	57.6	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N
N2632	20	78.2	A2-2	-	0	0	0	68.1	57.5	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N
N2632	21	81	A2-2	-	0	0	0	68	57.5	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N
N2632	22	83.8	A2-2	-	0	0	0	67.9	57.4	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N
N2632	23	86.6	A2-2	-	0	0	0	67.7	57.4	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N
N2632	24	89.4	A2-2	-	0	0	0	67.6	57.3	0	0	68	68.0	70	N	-	-	65.0	Y	N	N
N2632	25	92.2	A2-2	-	0	0	0	67.5	57.2	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N
N2632	26	95	A2-2	-	0	0	0	67.3	57.2	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N
N2632	27	97.8	A2-2	-	0	0	0	67.2	57.1	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N
N2632	28	100.6	A2-2	-	0	0	0	67.1	57.1	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N
N2632	29	103.4	A2-2	-	0	0	0	67	57	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N
N2632	30	106.2	A2-2	-	0	0	0	66.8	57	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N
N2632	31	109	A2-2	-	0	0	0	66.7	56.9	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N
N2632	32	111.8	A2-2	-	0	0	0	66.6	56.8	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N
N2632	33	114.6	A2-2	-	0	0	0	66.5	56.8	0	0	67	67.0	70	N	-	-	64.0	Y	N	N
N2632	34	117.4	A2-2	-	0	0	0	66.4	56.7	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
N2632	35	120.2	A2-2	-	0	0	0	66.3	56.7	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N
N2632	36	123	A2-2	-	0	0	0	66.2	56.6	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N
N2632	37	125.8	A2-2	-	0	0	0	66.1	56.5	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N
N2632	38	128.6	A2-2	-	0	0	0	66	56.5	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
N2632	39	131.4	A2-2	-	0	0	0	65.9	56.4	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N
N2632	40	134.2	A2-2	-	0	0	0	65.8	56.3	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N
N2633	1	25	A2-2	-	0	0	0	71.2	58.3	0	0	71.4	71.4	70	Y	-	-	68.4	Y	Y	N
N2633	2	27.8	A2-2	-	0	0	0	71.1	58.3	0	0	71.3	71.3	70	Y	-	-	68.3	Y	Y	N
N2633	3	30.6	A2-2	-	0	0	0	71	58.3	0	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	N
N2633	4	33.4	A2-2	-	0	0	0	70.9	58.3	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	N
N2633	5	36.2	A2-2	-	0	0	0	70.8	58.3	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	N
N2633	6	39	A2-2	-	0	0	0	70.7	58.3	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	N
N2633	7	41.8	A2-2	-	0	0	0	70.5	58.2	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	N
N2633	8	44.6	A2-2	-	0	0	0	70.4	58.2	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	N
N2633	9	47.4	A2-2	-	0	0	0	70.2	58.2	0	0	70.5	70.5	70	Y	-	-	67.5	Y	Y	N
N2633	10	50.2	A2-2	-	0	0	0	70.1	58.2	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N
N2633	11	53	A2-2	-	0	0	0	69.9	58.1	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N
N2633	12	55.8	A2-2	-	0	0	0	69.8	58.1	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N
N2633	13	58.6	A2-2	-	0	0	0	69.6	58.1	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N
N2633	14	61.4	A2-2	-	0	0	0	69.4	58	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N
N2633	15	64.2	A2-2	-	0	0	0	69.3	58	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N
N2633	16	67	A2-2	-	0	0	0	69.1	58	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N
N2633	17	69.8	A2-2	-	0	0	0	69	57.9	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2633	18	72.6	A2-2	-	0	0	0	68.8	57.9	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
N2633	19	75.4	A2-2	-	0	0	0	68.7	57.8	0	0	69	69.0	70	N	-	-	66.0	Y	N	N
N2633	20	78.2	A2-2	-	0	0	0	68.5	57.8	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
N2633	21	81	A2-2	-	0	0	0	68.4	57.7	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N
N2633	22	83.8	A2-2	-	0	0	0	68.2	57.7	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N
N2633	23	86.6	A2-2	-	0	0	0	68.1	57.6	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N
N2633	24	89.4	A2-2	-	0	0	0	68	57.6	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N
N2633	25	92.2	A2-2	-	0	0	0	67.8	57.5	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N
N2633	26	95	A2-2	-	0	0	0	67.7	57.5	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N
N2633	27	97.8	A2-2	-	0	0	0	67.6	57.4	0	0	68	68.0	70	N	-	-	65.0	Y	N	N
N2633	28	100.6	A2-2	-	0	0	0	67.4	57.4	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N
N2633	29	103.4	A2-2	-	0	0	0	67.3	57.3	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N
N2633	30	106.2	A2-2	-	0	0	0	67.2	57.2	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N
N2633	31	109	A2-2	-	0	0	0	67.1	57.2	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N
N2633	32	111.8	A2-2	-	0	0	0	67	57.1	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N
N2633	33	114.6	A2-2	-	0	0	0	66.9	57.1	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N
N2633	34	117.4	A2-2	-	0	0	0	66.8	57												

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation		Mitigation Measures Required <sup>(4)(5)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)		New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)			New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(3)</sup> [B]	[C]	[D]	D ≥ 1dB(A)	[E]	≥ 1dB(A)	B > Criteria				
N2640	11	53	A2-2	-	0	0	68.1	46.7	0	0	68.1	68.1	70	-	-	65.1	Y	N	N		
N2640	12	55.8	A2-2	-	0	0	68	46.7	0	0	68	68.0	70	N	-	-	65.0	Y	N	N	
N2640	13	58.6	A2-2	-	0	0	67.9	46.7	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	
N2640	14	61.4	A2-2	-	0	0	67.7	46.7	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	
N2640	15	64.2	A2-2	-	0	0	67.6	46.6	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	
N2640	16	67	A2-2	-	0	0	67.5	46.6	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	
N2640	17	69.8	A2-2	-	0	0	67.4	46.6	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	
N2640	18	72.6	A2-2	-	0	0	67.3	46.6	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	
N2640	19	75.4	A2-2	-	0	0	67.2	46.6	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	
N2640	20	78.2	A2-2	-	0	0	67.1	46.6	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	
N2640	21	81	A2-2	-	0	0	66.9	46.5	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
N2640	22	83.8	A2-2	-	0	0	66.8	46.5	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	
N2640	23	86.6	A2-2	-	0	0	66.7	46.5	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	
N2640	24	89.4	A2-2	-	0	0	66.6	46.5	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	
N2640	25	92.2	A2-2	-	0	0	66.5	46.4	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	
N2640	26	95	A2-2	-	0	0	66.4	46.4	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	
N2640	27	97.8	A2-2	-	0	0	66.3	46.4	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	
N2640	28	100.6	A2-2	-	0	0	66.2	46.4	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	
N2640	29	103.4	A2-2	-	0	0	66.1	46.3	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	
N2640	30	106.2	A2-2	-	0	0	66	46.3	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	
N2640	31	109	A2-2	-	0	0	65.9	46.3	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	
N2640	32	111.8	A2-2	-	0	0	65.8	46.3	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	
N2640	33	114.6	A2-2	-	0	0	65.7	46.2	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	
N2640	34	117.4	A2-2	-	0	0	65.6	46.2	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	
N2640	35	120.2	A2-2	-	0	0	65.5	46.2	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	
N2640	36	123	A2-2	-	0	0	65.4	46.1	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	
N2640	37	125.8	A2-2	-	0	0	65.3	46.1	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	
N2640	38	128.6	A2-2	-	0	0	65.2	46.1	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	
N2640	39	131.4	A2-2	-	0	0	65.2	46.1	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	
N2640	40	134.2	A2-2	-	0	0	65.1	46	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	
N2636	1	25	A2-2	-	0	0	15.7	69.2	55.3	0	0	69.2	69.4	70	N	-	-	66.4	Y	N	N
N2636	2	27.8	A2-2	-	0	0	15.7	69.2	55.5	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N
N2636	3	30.6	A2-2	-	0	0	15.7	69.1	55.6	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2636	4	33.4	A2-2	-	0	0	15.7	69.1	55.6	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2636	5	36.2	A2-2	-	0	0	15.7	69	55.6	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N
N2636	6	39	A2-2	-	0	0	15.7	68.9	55.6	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
N2636	7	41.8	A2-2	-	0	0	15.7	68.9	55.6	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
N2636	8	44.6	A2-2	-	0	0	15.7	68.8	55.6	0	0	69.0	69.0	70	N	-	-	66.0	Y	N	N
N2636	9	47.4	A2-2	-	0	0	15.7	68.7	55.6	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
N2636	10	50.2	A2-2	-	0	0	15.7	68.6	55.5	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N
N2636	11	53	A2-2	-	0	0	15.7	68.5	55.5	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N
N2636	12	55.8	A2-2	-	0	0	15.7	68.4	55.5	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N
N2636	13	58.6	A2-2	-	0	0	15.7	68.3	55.5	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N
N2636	14	61.4	A2-2	-	0	0	15.7	68.2	55.5	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N
N2636	15	64.2	A2-2	-	0	0	15.7	68.1	55.4	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N
N2636	16	67	A2-2	-	0	0	15.7	67.9	55.4	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N
N2636	17	69.8	A2-2	-	0	0	15.6	67.8	55.4	0	0	68	68.0	70	N	-	-	65.0	Y	N	N
N2636	18	72.6	A2-2	-	0	0	15.6	67.7	55.4	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N
N2636	19	75.4	A2-2	-	0	0	15.6	67.6	55.3	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N
N2636	20	78.2	A2-2	-	0	0	15.6	67.5	55.3	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N
N2636	21	81	A2-2	-	0	0	15.6	67.4	55.3	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N
N2636	22	83.8	A2-2	-	0	0	15.6	67.3	55.2	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N
N2636	23	86.6	A2-2	-	0	0	15.6	67.2	55.2	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N
N2636	24	89.4	A2-2	-	0	0	15.6	67	55.2	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N
N2636	25	92.2	A2-2	-	0	0	15.6	66.9	55.2	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N
N2636	26	95	A2-2	-	0	0	15.6	66.8	55.1	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N
N2636	27	97.8	A2-2	-	0	0	15.6	66.7	55.1	0	0	67	67.0	70	N	-	-	64.0	Y	N	N
N2636	28	100.6	A2-2	-	0	0	15.6	66.6	55	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
N2636	29	103.4	A2-2	-	0	0	15.6	66.5	55	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N
N2636	30	106.2	A2-2	-	0	0	15.5	66.4	55	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
N2636	31	109	A2-2	-	0	0	15.5	66.3	54.9	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N
N2636	32	111.8	A2-2	-	0	0	15.5	66.2	54.9	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N
N2636	33	114.6	A2-2	-	0	0	15.5	66.1	54.9	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
N2636	34	117.4	A2-2	-	0	0	15.4	66	54.8	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N
N2636	35	120.2	A2-2	-	0	0	15.5	65.9	54.8	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
N2636	36	123	A2-2	-	0	0	15.7	65.9	54.7	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
N2636	37	125.8	A2-2	-	0	0	15.7	65.8	54.7	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
N2636	38	128.6	A2-2	-	0	0	15.9	65.7	54.6	0	0	66	66.0	70	N	-	-	63.0	Y	N	N
N2636	39	131.4	A2-2	-	0	0	15.9	65.6	54.6	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N
N2636	40	134.2	A2-2	-	0	0	16	65.5	54.6	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
N2637	1	25	A2-2	-	0	0	8.7	69.2	55.1	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2637	2	27.8	A2-2	-	0	0	8.7	69.1	55.3	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2637	3	30.6	A2-2	-	0	0	8.7	69.1	55.3	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2637	4	33.4	A2-2	-	0	0	8.7	69	55.4	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N
N2637	5	36.2	A2-2	-	0	0	8.7	68.9	55.5	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
N2637	6	39	A2-2	-	0	0	8.7	68.9	55.5	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
N2637	7	41.8	A2-2	-	0	0	8.7	68.8	55.5	0	0										

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation		Mitigation Measures Required <sup>[43]</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>[2]</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)		New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)			New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>[3]</sup> [B]	[C]		[D]	[E]						
N2637	24	89.4	A2-2	-	0	0	8.5	66.9	55.1	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N
N2637	25	92.2	A2-2	-	0	0	8.5	66.8	55.1	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N
N2637	26	92.2	A2-2	-	0	0	8.5	66.7	55	0	0	67	67	70	N	-	-	64.0	Y	N	N
N2637	27	97.8	A2-2	-	0	0	8.5	66.6	55	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
N2637	28	100.6	A2-2	-	0	0	8.5	66.5	55	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N
N2637	29	103.4	A2-2	-	0	0	8.5	66.4	54.9	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
N2637	30	106.2	A2-2	-	0	0	8.4	66.3	54.9	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N
N2637	31	109	A2-2	-	0	0	8.4	66.2	54.8	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N
N2637	32	111.8	A2-2	-	0	0	8.4	66.1	54.8	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
N2637	33	114.6	A2-2	-	0	0	8.4	66	54.8	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N
N2637	34	117.4	A2-2	-	0	0	8.3	65.9	54.7	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
N2637	35	120.2	A2-2	-	0	0	8.3	65.8	54.7	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
N2637	36	123	A2-2	-	0	0	8.3	65.7	54.7	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
N2637	37	125.8	A2-2	-	0	0	8.4	65.7	54.6	0	0	66	66.0	70	N	-	-	63.0	Y	N	N
N2637	38	128.6	A2-2	-	0	0	8.5	65.6	54.6	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N
N2637	39	131.4	A2-2	-	0	0	8.6	65.5	54.5	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
N2637	40	134.2	A2-2	-	0	0	8.7	65.4	54.5	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N
N2628	1	25	A2-2	-	0	0	26.9	70.6	62	0	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	N
N2628	2	27.8	A2-2	-	0	0	26.9	70.5	62	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	N
N2628	3	30.6	A2-2	-	0	0	26.9	70.5	61.9	0	0	71.1	71.1	70	Y	-	-	68.1	Y	Y	N
N2628	4	33.4	A2-2	-	0	0	26.9	70.4	61.9	0	0	71	71.0	70	Y	-	-	68.0	Y	Y	N
N2628	5	36.2	A2-2	-	0	0	26.9	70.3	61.9	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	N
N2628	6	39	A2-2	-	0	0	26.9	70.1	61.8	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	N
N2628	7	41.8	A2-2	-	0	0	26.9	70	61.8	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	N
N2628	8	44.6	A2-2	-	0	0	26.9	69.9	61.7	0	0	70.5	70.5	70	Y	-	-	67.5	Y	Y	N
N2628	9	47.4	A2-2	-	0	0	26.9	69.7	61.6	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N
N2628	10	50.2	A2-2	-	0	0	26.9	69.6	61.5	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N
N2628	11	53	A2-2	-	0	0	26.9	69.4	61.5	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N
N2628	12	55.8	A2-2	-	0	0	26.9	69.3	61.4	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N
N2628	13	58.6	A2-2	-	0	0	26.9	69.1	61.3	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N
N2628	14	61.4	A2-2	-	0	0	26.9	68.9	61.2	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N
N2628	15	64.2	A2-2	-	0	0	26.9	68.8	61.1	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N
N2628	16	67	A2-2	-	0	0	26.9	68.6	61	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2628	17	69.8	A2-2	-	0	0	26.9	68.5	60.9	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N
N2628	18	72.6	A2-2	-	0	0	26.9	68.3	60.8	0	0	69	69.0	70	N	-	-	66.0	Y	N	N
N2628	19	75.4	A2-2	-	0	0	26.8	68.2	60.7	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
N2628	20	78.2	A2-2	-	0	0	26.8	68	60.6	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N
N2628	21	81	A2-2	-	0	0	26.8	67.9	60.5	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N
N2628	22	83.8	A2-2	-	0	0	26.8	67.7	60.4	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N
N2628	23	86.6	A2-2	-	0	0	26.8	67.6	60.3	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N
N2628	24	89.4	A2-2	-	0	0	26.8	67.5	60.2	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N
N2628	25	92.2	A2-2	-	0	0	26.8	67.3	60.1	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N
N2628	26	95	A2-2	-	0	0	26.8	67.2	60	0	0	68	68.0	70	N	-	-	65.0	Y	N	N
N2628	27	97.8	A2-2	-	0	0	26.7	67.1	59.9	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N
N2628	28	100.6	A2-2	-	0	0	26.7	66.9	59.8	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N
N2628	29	103.4	A2-2	-	0	0	26.7	66.8	59.7	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N
N2628	30	106.2	A2-2	-	0	0	26.7	66.7	59.6	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N
N2628	31	109	A2-2	-	0	0	26.7	66.6	59.5	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N
N2628	32	111.8	A2-2	-	0	0	26.7	66.5	59.4	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N
N2628	33	114.6	A2-2	-	0	0	26.6	66.4	59.3	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N
N2628	34	117.4	A2-2	-	0	0	26.6	66.3	59.2	0	0	67	67.0	70	N	-	-	64.0	Y	N	N
N2628	35	120.2	A2-2	-	0	0	26.6	66.2	59.2	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
N2628	36	123	A2-2	-	0	0	26.6	66.1	59.1	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
N2628	37	125.8	A2-2	-	0	0	26.5	66	59	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N
N2628	38	128.6	A2-2	-	0	0	26.5	65.9	58.9	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
N2628	39	131.4	A2-2	-	0	0	26.6	65.8	58.8	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N
N2628	40	134.2	A2-2	-	0	0	26.6	65.7	58.7	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N
N2629	1	25	A2-2	-	0	0	23.4	70.4	61.9	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	N
N2629	2	27.8	A2-2	-	0	0	23.4	70.3	61.9	0	0	70.9	70.9	70	Y	-	-	67.9	Y	Y	N
N2629	3	30.6	A2-2	-	0	0	23.4	70.3	61.8	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	N
N2629	4	33.4	A2-2	-	0	0	23.4	70.2	61.8	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	N
N2629	5	36.2	A2-2	-	0	0	23.4	70.1	61.8	0	0	70.7	70.7	70	Y	-	-	67.7	Y	Y	N
N2629	6	39	A2-2	-	0	0	23.4	70	61.7	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	N
N2629	7	41.8	A2-2	-	0	0	23.4	69.8	61.7	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N
N2629	8	44.6	A2-2	-	0	0	23.4	69.7	61.6	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N
N2629	9	47.4	A2-2	-	0	0	23.4	69.5	61.6	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N
N2629	10	50.2	A2-2	-	0	0	23.4	69.4	61.5	0	0	70	70.0	70	N	-	-	67.0	Y	N	N
N2629	11	53	A2-2	-	0	0	23.4	69.2	61.4	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N
N2629	12	55.8	A2-2	-	0	0	23.4	69.1	61.4	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N
N2629	13	58.6	A2-2	-	0	0	23.4	68.9	61.3	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N
N2629	14	61.4	A2-2	-	0	0	23.4	68.7	61.2	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N
N2629	15	64.2	A2-2	-	0	0	23.4	68.6	61.1	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N
N2629	16	67	A2-2	-	0	0	23.4	68.4	61	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
N2629	17	69.8	A2-2	-	0	0	23.4	68.3	60.9	0	0	69	69.0	70	N	-	-	66.0	Y	N	N
N2629	18	72.6	A2-2	-	0	0	23.4	68.1	60.8	0	0	68.8	68.8	70	N	-	-	65.8			



Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)		New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)			New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(2)</sup>	[C]	[D]	D ≥ 1dB(A)	≥ 1dB(A)	≥ 1dB(A)	B > Criteria					
N2629	37	125.8	A2-2	-	0	0	23	65.7	59.2	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	
N2629	38	128.6	A2-2	-	0	0	23	65.6	59.1	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	
N2629	39	131.4	A2-2	-	0	0	23	65.5	59.0	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	
N2629	40	134.2	A2-2	-	0	0	22.9	65.4	58.9	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	
N2503	1	25.8	A1-2	-	39.6	0	64.8	69.3	18.3	53.9	0	70.7	70.7	70	Y	-	-	31.1	Y	Y	N	
N2503	2	28.5	A1-2	-	41.3	0	65	69.1	19.2	55.1	0	70.6	70.6	70	Y	-	-	29.3	Y	Y	N	
N2503	3	31.2	A1-2	-	43.6	0	65.1	68.9	20.2	56.4	0	70.6	70.6	70	Y	-	-	27.0	Y	Y	N	
N2503	4	33.9	A1-2	-	46.8	0	65.2	68.6	21.2	57.8	0	70.5	70.5	70	Y	-	-	23.7	Y	Y	N	
N2503	5	36.6	A1-2	-	49.9	0	65.4	68.3	22.3	59.2	0	70.4	70.5	70	Y	-	-	20.6	Y	Y	N	
N2503	6	39.3	A1-2	-	53.5	0	65.5	68	23.5	61.1	0	70.5	70.5	70	Y	-	-	19.0	Y	Y	N	
N2503	7	42	A1-2	-	57.1	0	65.6	67.7	24.8	62.6	0	70.6	70.6	70	Y	-	-	18.5	Y	Y	N	
N2503	8	44.7	A1-2	-	52.5	0	65.7	67.4	26.1	63.7	0	70.6	70.7	70	Y	-	-	18.2	Y	Y	N	
N2503	9	47.4	A1-2	-	52.9	0	65.8	67.1	27.4	64.5	0	70.7	70.8	70	Y	-	-	17.9	Y	Y	N	
N2503	10	50.1	A1-2	-	53.1	0	65.8	66.9	28.9	65.3	0	70.8	70.9	70	Y	-	-	17.8	Y	Y	N	
N2503	11	52.8	A1-2	-	53.3	0	65.8	66.6	30.4	65.8	0	70.9	70.9	70	Y	-	-	17.6	Y	Y	N	
N2503	12	55.5	A1-2	-	53.4	0	65.9	66.4	32.2	66.1	0	70.9	71.0	70	Y	-	-	17.6	Y	Y	N	
N2503	13	58.2	A1-2	-	53.6	0	65.9	66.2	34.1	66.3	0	70.9	71.0	70	Y	-	-	17.4	Y	Y	N	
N2503	14	60.9	A1-2	-	53.8	0	65.9	65.9	36.5	66.5	0	70.9	71.0	70	Y	-	-	17.2	Y	Y	N	
N2503	15	63.6	A1-2	-	54	0	65.9	65.7	39.8	66.7	0	70.9	71.0	70	Y	-	-	17.0	Y	Y	N	
N2503	16	66.3	A1-2	-	54.4	0	65.9	65.5	42.9	67	0	71	71.1	70	Y	-	-	16.7	Y	Y	N	
N2503	17	69	A1-2	-	55	0	65.9	65.3	44.5	67.5	0	71.1	71.2	70	Y	-	-	16.2	Y	Y	N	
N2503	18	71.7	A1-2	-	55.7	0	66	65.2	45.2	68.2	0	71.4	71.6	70	Y	-	-	15.9	Y	Y	N	
N2503	19	74.4	A1-2	-	56.2	0	66	65	45.5	69.1	0	71.8	71.9	70	Y	-	-	15.7	Y	Y	N	
N2503	20	77.1	A1-2	-	56.8	0	66.1	64.8	46.6	69.8	0	72.2	72.3	70	Y	-	-	15.7	Y	Y	N	
N2503	21	79.8	A1-2	-	56.8	0	66.1	64.7	45.7	70.4	0	72.5	72.7	70	Y	-	-	15.9	Y	Y	N	
N2503	22	82.5	A1-2	-	56.9	0	66.1	64.6	45.7	70.7	0	72.7	72.8	70	Y	-	-	15.9	Y	Y	N	
N2503	23	85.2	A1-2	-	57.1	0	66.2	64.5	45.7	71	0	72.9	73.0	70	Y	-	-	15.9	Y	Y	N	
N2503	24	87.9	A1-2	-	57.2	0	66.2	64.4	45.7	71.1	0	73	73.1	70	Y	-	-	15.9	Y	Y	N	
N2503	25	90.6	A1-2	-	57.3	0	66.3	64.2	45.8	71.2	0	73.1	73.2	70	Y	-	-	15.9	Y	Y	N	
N2503	26	93.3	A1-2	-	57.3	0	66.3	64.2	45.8	71.3	0	73.1	73.2	70	Y	-	-	15.9	Y	Y	N	
N2503	27	96	A1-2	-	57.4	0	66.4	64.1	45.8	71.4	0	73.1	73.3	70	Y	-	-	15.9	Y	Y	N	
N2503	28	98.7	A1-2	-	57.5	0	66.5	64	45.7	71.4	0	73.2	73.3	70	Y	-	-	15.8	Y	Y	N	
N2503	29	101.4	A1-2	-	57.6	0	66.5	63.8	45.7	71.4	0	73.2	73.3	70	Y	-	-	15.7	Y	Y	N	
N2503	30	104.1	A1-2	-	57.7	0	66.5	63.7	45.8	71.4	0	73.1	73.3	70	Y	-	-	15.6	Y	Y	N	
N2503	31	106.8	A1-2	-	57.7	0	66.5	63.6	45.8	71.4	0	73.1	73.3	70	Y	-	-	15.6	Y	Y	N	
N2503	3	31.2	A1-2	-	57.7	0	66.5	63.5	45.8	71.4	0	73.1	73.3	70	Y	-	-	15.6	Y	Y	N	
N2503	4	33.9	A1-2	-	57.7	0	66.5	63.4	45.8	71.4	0	73.1	73.2	70	Y	-	-	15.5	Y	Y	N	
N2503	5	36.6	A1-2	-	57.7	0	66.5	63.3	45.8	71.4	0	73.1	73.2	70	Y	-	-	15.5	Y	Y	N	
N2503	3	31.2	A1-2	-	57.7	0	66.4	63.2	45.8	71.4	0	73.1	73.2	70	Y	-	-	15.5	Y	Y	N	
N2503	4	33.9	A1-2	-	57.7	0	66.4	63.1	45.8	71.4	0	73.1	73.2	70	Y	-	-	15.5	Y	Y	N	
N2503	5	36.6	A1-2	-	57.7	0	66.4	63	45.8	71.5	0	73.1	73.2	70	Y	-	-	15.5	Y	Y	N	
N2503	6	39.3	A1-2	-	57.7	0	66.4	62.9	45.8	71.5	0	73.1	73.2	70	Y	-	-	15.5	Y	Y	N	
N2503	7	42	A1-2	-	57.7	0	66.3	62.8	45.8	71.6	0	73.1	73.3	70	Y	-	-	15.6	Y	Y	N	
N2502	1	25.8	A1-2	-	38.2	0	65.3	66.4	0	61.7	0	69.7	69.7	70	N	-	-	31.5	Y	N	N	
N2502	2	28.5	A1-2	-	40	0	66.5	66.4	0	62.1	0	69.8	69.8	70	N	-	-	29.8	Y	N	N	
N2502	3	31.2	A1-2	-	41.9	0	66.7	66.3	0	62.4	0	69.9	69.9	70	N	-	-	28.0	Y	N	N	
N2502	4	33.9	A1-2	-	43.6	0	66.7	66.2	0	62.8	0	70	70.0	70	N	-	-	26.4	Y	N	N	
N2502	5	36.6	A1-2	-	45.1	0	66.1	66.1	0	63.3	0	70.2	70.2	70	N	-	-	25.1	Y	N	N	
N2502	6	39.3	A1-2	-	46.9	0	66.3	66	0	63.9	0	70.3	70.3	70	N	-	-	23.4	Y	N	N	
N2502	7	42	A1-2	-	48.9	0	66.4	65.9	0	64.5	0	70.5	70.5	70	Y	-	-	21.6	Y	Y	N	
N2502	8	44.7	A1-2	-	51	0	66.5	65.8	0	65.2	0	70.6	70.7	70	Y	-	-	19.7	Y	Y	N	
N2502	9	47.4	A1-2	-	52.1	0	66.5	65.6	0	65.7	0	70.8	70.8	70	Y	-	-	18.7	Y	Y	N	
N2502	10	50.1	A1-2	-	52.9	0	66.7	65.5	0	66.2	0	70.9	71.0	70	Y	-	-	18.1	Y	Y	N	
N2502	11	52.8	A1-2	-	53.2	0	66.7	65.4	0	66.4	0	71	71.1	70	Y	-	-	17.9	Y	Y	N	
N2502	12	55.5	A1-2	-	53.3	0	66.7	65.3	0	66.7	0	71.1	71.1	70	Y	-	-	17.8	Y	Y	N	
N2502	13	58.2	A1-2	-	53.5	0	66.8	65.1	0	66.9	0	71.1	71.2	70	Y	-	-	17.7	Y	Y	N	
N2502	14	60.9	A1-2	-	53.5	0	66.8	65	0	67.1	0	71.1	71.2	70	Y	-	-	17.7	Y	Y	N	
N2502	15	63.6	A1-2	-	53.6	0	66.7	64.8	0	67.3	0	71.2	71.2	70	Y	-	-	17.6	Y	Y	N	
N2502	16	66.3	A1-2	-	53.7	0	66.7	64.7	0	67.4	0	71.2	71.3	70	Y	-	-	17.6	Y	Y	N	
N2502	17	69	A1-2	-	53.8	0	66.7	64.6	0	67.5	0	71.2	71.3	70	Y	-	-	17.5	Y	Y	N	
N2502	18	71.7	A1-2	-	54.1	0	66.7	64.5	0	67.6	0	71.2	71.3	70	Y	-	-	17.2	Y	Y	N	
N2502	19	74.4	A1-2	-	54.3	0	66.7	64.3	0	67.8	0	71.3	71.4	70	Y	-	-	17.1	Y	Y	N	
N2502	20	77.1	A1-2	-	54.5	0	66.7	64.2	0	68.2	0	71.4	71.5	70	Y	-	-	17.0	Y	Y	N	
N2502	21	79.8	A1-2	-	54.8	0	66.7	64.1	0	68.6	0	71.6	71.7	70	Y	-	-	16.9	Y	Y	N	
N2502	22	82.5	A1-2	-	54.9	0	66.7	64	0	69.1	0	71.8	71.9	70	Y	-	-	16.9	Y	Y	N	
N2502	23	85.2	A1-2	-	55	0	66.7	63.9	0	69.5	0	72.1	72.1	70	Y	-	-	17.1	Y	Y	N	
N2502	24	87.9	A1-2	-	55	0	66.7	63.8	0	70	0	72.3	72.4	70	Y	-	-	17.4	Y	Y	N	
N2502	25	90.6	A1-2	-	55	0	66.7	63.7	0	70.2	0	72.4	72.5	70	Y	-	-	17.5	Y	Y	N	
N2502	26	93.3	A1-2	-	55	0	66.7	63.6	0	70.4	0	72.5	72.6	70	Y	-	-	17.6	Y	Y	N	
N2502	27	96	A1-2	-	55.1	0	66.6	63.5	0	70.5	0	72.6	72.7	70	Y	-	-	17.6	Y	Y	N	
N2502	28	98.7	A1-2	-	55.1	0	66.6	63.4	0	70.5	0	72.6	72.6	70	Y	-	-	17.5	Y	Y	N	
N2502	29	101.4	A1-2	-	55.5	0	66.6	63.4	0	70.5	0	72.6	72.7	70	Y	-	-	17.6	Y	Y	N	
N2502	30	104.1	A1-2	-																		

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)		New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)			New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(2)</sup>	[C]	[D]	[E]	≥ 1dB(A)	B > Criteria							
N2501	12	55.5	A1-2	-	52.4	0	67.6	58.2	15.9	62.1	0	69	69.1	70	N	-	-	16.7	Y	N	N	
N2501	13	58.2	A1-2	-	52.6	0	67.6	58.1	15.9	62.1	0	69	69.1	70	N	-	-	16.5	Y	N	N	
N2501	14	60.9	A1-2	-	52.8	0	67.5	58.1	15.9	62.5	0	69.1	69.2	70	N	-	-	16.4	Y	N	N	
N2501	15	63.6	A1-2	-	52.9	0	67.5	58	15.9	62.8	0	69.1	69.2	70	N	-	-	16.3	Y	N	N	
N2501	16	66.3	A1-2	-	53	0	67.4	57.9	15.9	63.1	0	69.1	69.2	70	N	-	-	16.2	Y	N	N	
N2501	17	69	A1-2	-	53.1	0	67.4	57.9	15.8	63.2	0	69.1	69.2	70	N	-	-	16.1	Y	N	N	
N2501	18	71.7	A1-2	-	53.1	0	67.3	57.8	15.8	63.4	0	69.1	69.2	70	N	-	-	16.1	Y	N	N	
N2501	19	74.4	A1-2	-	53.2	0	67.3	57.8	15.8	63.5	0	69.1	69.2	70	N	-	-	16.0	Y	N	N	
N2501	20	77.1	A1-2	-	53.3	0	67.2	57.7	15.8	63.6	0	69.1	69.2	70	N	-	-	15.9	Y	N	N	
N2501	21	79.8	A1-2	-	53.4	0	67.2	57.6	15.7	63.6	0	69.1	69.2	70	N	-	-	15.8	Y	N	N	
N2501	22	82.5	A1-2	-	53.4	0	67.1	57.5	15.7	63.7	0	69.1	69.2	70	N	-	-	15.8	Y	N	N	
N2501	23	85.2	A1-2	-	53.4	0	67.1	57.4	15.7	63.7	0	69	69.1	70	N	-	-	15.7	Y	N	N	
N2501	24	87.9	A1-2	-	53.4	0	67	57.3	15.7	63.7	0	69	69.1	70	N	-	-	15.7	Y	N	N	
N2501	25	90.6	A1-2	-	53.4	0	67	57.2	15.6	63.8	0	69	69.1	70	N	-	-	15.7	Y	N	N	
N2501	26	93.3	A1-2	-	53.5	0	66.9	57.1	15.6	63.8	0	68.9	69.1	70	N	-	-	15.6	Y	N	N	
N2501	27	96	A1-2	-	53.5	0	66.8	57.1	15.6	63.8	0	68.9	69.0	70	N	-	-	15.5	Y	N	N	
N2501	28	98.7	A1-2	-	53.5	0	66.8	57	15.5	63.8	0	68.8	69.0	70	N	-	-	15.5	Y	N	N	
N2501	29	101.4	A1-2	-	53.4	0	66.7	56.9	15.5	63.8	0	68.8	68.9	70	N	-	-	15.5	Y	N	N	
N2501	30	104.1	A1-2	-	53.4	0	66.7	56.8	15.5	63.8	0	68.8	68.9	70	N	-	-	15.5	Y	N	N	
N2501	31	106.8	A1-2	-	53.4	0	66.6	56.7	15.4	63.8	0	68.7	68.9	70	N	-	-	15.5	Y	N	N	
N2501	32	109.5	A1-2	-	53.4	0	66.6	56.7	15.4	63.8	0	68.7	68.8	70	N	-	-	15.4	Y	N	N	
N2501	33	112.2	A1-2	-	53.4	0	66.5	56.6	15.4	63.8	0	68.6	68.8	70	N	-	-	15.4	Y	N	N	
N2501	34	114.9	A1-2	-	53.3	0	66.4	56.5	15.3	63.7	0	68.6	68.7	70	N	-	-	15.4	Y	N	N	
N2501	35	117.6	A1-2	-	53.3	0	66.3	56.4	15.3	63.8	0	68.4	68.7	70	N	-	-	15.4	Y	N	N	
N2501	36	120.3	A1-2	-	53.3	0	66.3	56.3	15.3	63.8	0	68.5	68.6	70	N	-	-	15.3	Y	N	N	
N2501	37	123	A1-2	-	53.3	0	66.3	56.3	15.2	63.7	0	68.5	68.6	70	N	-	-	15.3	Y	N	N	
N2501	38	125.7	A1-2	-	53.2	0	66.2	56.2	15.2	63.7	0	68.4	68.5	70	N	-	-	15.3	Y	N	N	
N2501	39	128.4	A1-2	-	53.2	0	66.2	56.1	15.2	63.8	0	68.4	68.5	70	N	-	-	15.3	Y	N	N	
N2500	1	25.8	A1-2	-	34.8	0	67.3	56.3	0	47.9	0	67.7	67.7	70	N	-	-	32.9	Y	N	N	
N2500	2	28.5	A1-2	-	36.1	0	67.4	56.3	0	48.9	0	67.7	67.7	70	N	-	-	31.6	Y	N	N	
N2500	3	31.2	A1-2	-	37.4	0	67.2	56.4	0	50	0	67.7	67.8	70	N	-	-	30.2	Y	N	N	
N2500	4	33.9	A1-2	-	39.4	0	67.4	56.2	0	51.5	0	67.8	67.8	70	N	-	-	28.4	Y	N	N	
N2500	5	36.6	A1-2	-	41.6	0	67.3	56.2	0	52.7	0	67.8	67.8	70	N	-	-	26.2	Y	N	N	
N2500	6	39.3	A1-2	-	43.9	0	67.3	56.3	0	54.2	0	67.8	67.9	70	N	-	-	24.0	Y	N	N	
N2500	7	42	A1-2	-	45.2	0	67.3	56.3	0	55.6	0	67.9	67.9	70	N	-	-	22.7	Y	N	N	
N2500	8	44.7	A1-2	-	46	0	67.3	56.3	0	56.6	0	67.9	68.0	70	N	-	-	22.0	Y	N	N	
N2500	9	47.4	A1-2	-	46.5	0	67.2	56.4	0	57.7	0	68	68.0	70	N	-	-	21.5	Y	N	N	
N2500	10	50.1	A1-2	-	47.1	0	67.2	56.4	0	58.6	0	68.1	68.1	70	N	-	-	21.0	Y	N	N	
N2500	11	52.8	A1-2	-	48	0	67.2	56.3	0	59.3	0	68.1	68.2	70	N	-	-	20.2	Y	N	N	
N2500	12	55.5	A1-2	-	49.2	0	67.2	56.3	0	59.9	0	68.2	68.2	70	N	-	-	19.0	Y	N	N	
N2500	13	58.2	A1-2	-	50.3	0	67.1	56.3	0	60.5	0	68.3	68.3	70	N	-	-	18.0	Y	N	N	
N2500	14	60.9	A1-2	-	50.8	0	67.1	56.3	0	60.9	0	68.3	68.4	70	N	-	-	17.6	Y	N	N	
N2500	15	63.6	A1-2	-	51.1	0	67	56.3	0	61.4	0	68.4	68.4	70	N	-	-	17.3	Y	N	N	
N2500	16	66.3	A1-2	-	51.2	0	67	56.3	0	61.8	0	68.4	68.5	70	N	-	-	17.3	Y	N	N	
N2500	17	69	A1-2	-	51.2	0	66.9	56.3	0	62.1	0	68.4	68.5	70	N	-	-	17.3	Y	N	N	
N2500	18	71.7	A1-2	-	51.3	0	66.9	56.3	0	62.3	0	68.4	68.5	70	N	-	-	17.2	Y	N	N	
N2500	19	74.4	A1-2	-	51.4	0	66.8	56.3	0	62.5	0	68.5	68.6	70	N	-	-	17.2	Y	N	N	
N2500	20	77.1	A1-2	-	51.5	0	66.7	56.3	0	62.7	0	68.5	68.5	70	N	-	-	17.0	Y	N	N	
N2500	21	79.8	A1-2	-	51.6	0	66.7	56.2	0	62.8	0	68.5	68.5	70	N	-	-	16.9	Y	N	N	
N2500	22	82.5	A1-2	-	51.7	0	66.7	56.2	0	62.8	0	68.4	68.5	70	N	-	-	16.8	Y	N	N	
N2500	23	85.2	A1-2	-	51.7	0	66.6	56.2	0	62.9	0	68.4	68.5	70	N	-	-	16.8	Y	N	N	
N2500	24	87.9	A1-2	-	51.8	0	66.6	56.1	0	63	0	68.4	68.5	70	N	-	-	16.7	Y	N	N	
N2500	25	90.6	A1-2	-	51.9	0	66.5	56	0	63	0	68.4	68.5	70	N	-	-	16.6	Y	N	N	
N2500	26	93.3	A1-2	-	51.9	0	66.4	56	0	63.1	0	68.3	68.4	70	N	-	-	16.5	Y	N	N	
N2500	27	96	A1-2	-	51.9	0	66.4	55.9	0	63.1	0	68.3	68.4	70	N	-	-	16.5	Y	N	N	
N2500	28	98.7	A1-2	-	51.9	0	66.3	55.9	0	63.1	0	68.3	68.4	70	N	-	-	16.5	Y	N	N	
N2500	29	101.4	A1-2	-	51.9	0	66.3	55.8	0	63.1	0	68.2	68.3	70	N	-	-	16.4	Y	N	N	
N2500	30	104.1	A1-2	-	51.9	0	66.2	55.8	0	63.1	0	68.2	68.3	70	N	-	-	16.4	Y	N	N	
N2500	31	106.8	A1-2	-	51.9	0	66.2	55.7	0	63.1	0	68.2	68.3	70	N	-	-	16.4	Y	N	N	
N2500	32	109.5	A1-2	-	51.9	0	66.1	55.6	0	63.1	0	68.1	68.2	70	N	-	-	16.3	Y	N	N	
N2500	33	112.2	A1-2	-	51.8	0	66	55.5	0	63.1	0	68.1	68.2	70	N	-	-	16.4	Y	N	N	
N2500	34	114.9	A1-2	-	51.8	0	66	55.5	0	63.1	0	68	68.1	70	N	-	-	16.3	Y	N	N	
N2500	35	117.6	A1-2	-	51.8	0	65.9	55.4	0	63.1	0	68	68.1	70	N	-	-	16.3	Y	N	N	
N2500	36	120.3	A1-2	-	51.8	0	65.9	55.4	0	63.1	0	68	68.1	70	N	-	-	16.3	Y	N	N	
N2500	37	123	A1-2	-	51.7	0	65.8	55.3	0	63.1	0	67.9	68.0	70	N	-	-	16.3	Y	N	N	
N2500	38	125.7	A1-2	-	51.7	0	65.8	55.3	0	63.1	0	67.9	68.0	70	N	-	-	16.3	Y	N	N	
N2500	39	128.4	A1-2	-	51.7	0	65.7	55.2	0	63.1	0	67.8	67.9	70	N	-	-	16.2	Y	N	N	
N2504	1	25.8	A1-2	-	45.4	0	40.9	69	50.6	58.8	0	69.4	69.5	70	N	-	-	24.1	Y	N	N	
N2504	2	28.5	A1-2	-	45.5	0	41.2	68.8	50.4	58.8	0	69.3	69.3	70	N	-	-	23.8	Y	N	N	
N2504	3	31.2	A1-2	-	45.6	0	41.5	68.6	50.2	58.9	0	69.1	69.1	70	N	-	-	23.5	Y	N	N	
N2504	4	33.9	A1-2	-	45.7	0	42	68.3	49.9	59	0	68.8	68.8	70	N	-	-	23.1	Y	N	N	
N2504	5	36.6	A1-2	-	45.8	0	42.4	68	49.7	59	0	68.6	68.6	70	N	-	-	22.8	Y	N	N	
N2504	6	39.3	A1-2	-	45.9	0	42.8	67.7	49.4	59	0	68.3	68.4	70	N	-	-	22.5	Y	N	N	
N2504	7																					

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)(3)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	C - A dB(A)		New Road Contribution				New Road > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(1)</sup>	Overall Noise Level in 2044 dB(A)		C - A dB(A)	D ≥ 1dB(A)	New Road Contribution ≥ 1dB(A)	New Road Contribution ≥ 1dB(A)	New Road > Criteria B > Criteria					
N2504	27	96	A1-2	-	54.6	0	54	63.5	45	68.9	0	70.1	70.2	70	N	-	-	15.6	Y	N	N	
N2504	28	98.7	A1-2	-	54.7	0	54.4	63.4	44.9	69.1	0	70.2	70.4	70	N	-	-	15.7	Y	N	N	
N2504	29	101.4	A1-2	-	55	0	54.6	63.2	44.7	69.2	0	70.3	70.4	70	N	-	-	15.4	Y	N	N	
N2504	30	104.1	A1-2	-	55.1	0	54.9	63.2	44.6	69.3	0	70.4	70.5	70	Y	-	-	15.4	Y	N	N	
N2504	31	106.8	A1-2	-	55.2	0	55	63	44.5	69.4	0	70.5	70.6	70	Y	-	-	15.4	Y	Y	N	
N2504	32	109.5	A1-2	-	55.3	0	55.1	62.9	44.4	69.6	0	70.6	70.7	70	Y	-	-	15.4	Y	Y	N	
N2504	33	112.2	A1-2	-	55.4	0	55.1	62.8	44.2	69.7	0	70.6	70.7	70	Y	-	-	15.3	Y	Y	N	
N2504	34	114.9	A1-2	-	55.4	0	55.1	62.7	44.1	69.7	0	70.6	70.8	70	Y	-	-	15.4	Y	Y	N	
N2504	35	117.6	A1-2	-	55.4	0	55.2	62.6	44	69.9	0	70.8	70.9	70	Y	-	-	15.5	Y	Y	N	
N2504	36	120.3	A1-2	-	55.4	0	55.3	62.5	43.9	70	0	70.9	71.0	70	Y	-	-	15.6	Y	Y	N	
N2504	37	123	A1-2	-	55.5	0	55.4	62.5	43.8	70.1	0	70.9	71.1	70	Y	-	-	15.6	Y	Y	N	
N2504	38	125.7	A1-2	-	55.5	0	55.4	62.4	43.7	70.3	0	71.1	71.2	70	Y	-	-	15.7	Y	Y	N	
N2504	39	128.4	A1-2	-	55.5	0	55.4	62.3	43.6	70.5	0	71.2	71.3	70	Y	-	-	15.8	Y	Y	N	
N2506	1	25.8	A1-2	-	26.6	0	25.5	68.5	53.8	45.1	0	68.6	68.6	70	N	-	-	42.0	Y	N	N	
N2506	2	28.5	A1-2	-	27.3	0	25.9	68.3	53.6	45.7	0	68.4	68.4	70	N	-	-	41.1	Y	N	N	
N2506	3	31.2	A1-2	-	28.1	0	26.4	68.1	53.4	46.3	0	68.3	68.3	70	N	-	-	40.2	Y	N	N	
N2506	4	33.9	A1-2	-	28.9	0	26.8	67.8	53.2	46.9	0	68	68.0	70	N	-	-	39.1	Y	N	N	
N2506	5	36.6	A1-2	-	29.7	0	27.2	67.5	52.9	47.6	0	67.7	67.7	70	N	-	-	38.0	Y	N	N	
N2506	6	39.3	A1-2	-	30.5	0	27.7	67.3	52.7	48.3	0	67.5	67.5	70	N	-	-	37.0	Y	N	N	
N2506	7	42	A1-2	-	31.2	0	28.2	67	52.4	49	0	67.2	67.2	70	N	-	-	36.0	Y	N	N	
N2506	8	44.7	A1-2	-	31.9	0	28.7	66.7	52.1	49.7	0	66.9	66.9	70	N	-	-	35.0	Y	N	N	
N2506	9	47.4	A1-2	-	32.7	0	29.3	66.4	51.9	50.4	0	66.7	66.7	70	N	-	-	34.0	Y	N	N	
N2506	10	50.1	A1-2	-	33.5	0	29.9	66.2	51.6	51.2	0	66.5	66.5	70	N	-	-	33.0	Y	N	N	
N2506	11	52.8	A1-2	-	34.3	0	30.5	65.9	51.4	52	0	66.2	66.2	70	N	-	-	31.9	Y	N	N	
N2506	12	55.5	A1-2	-	35.1	0	31.1	65.7	51.1	52.9	0	66.1	66.1	70	N	-	-	31.0	Y	N	N	
N2506	13	58.2	A1-2	-	36.2	0	31.8	65.5	50.9	53.8	0	65.9	65.9	70	N	-	-	29.7	Y	N	N	
N2506	14	60.9	A1-2	-	37.2	0	32.6	65.2	50.7	54.7	0	65.7	65.7	70	N	-	-	28.5	Y	N	N	
N2506	15	63.6	A1-2	-	38.4	0	33.4	65	50.4	55.7	0	65.6	65.6	70	N	-	-	27.2	Y	N	N	
N2506	16	66.3	A1-2	-	39.8	0	34.3	64.8	50.2	56.9	0	65.6	65.6	70	N	-	-	25.8	Y	N	N	
N2506	17	69	A1-2	-	40.9	0	35.4	64.6	50	58.3	0	65.7	65.7	70	N	-	-	24.8	Y	N	N	
N2506	18	71.7	A1-2	-	42.1	0	36.4	64.4	49.8	61.9	0	64.8	64.8	70	N	-	-	23.0	Y	N	N	
N2506	19	74.4	A1-2	-	42.8	0	38.7	64.2	49.6	61.6	0	66.2	66.2	70	N	-	-	23.4	Y	N	N	
N2506	20	77.1	A1-2	-	44	0	40.8	64	49.5	63.1	0	66.7	66.7	70	N	-	-	22.7	Y	N	N	
N2506	21	79.8	A1-2	-	45.4	0	41.8	64	49.3	64.2	0	67.2	67.2	70	N	-	-	21.8	Y	N	N	
N2506	22	82.5	A1-2	-	46.9	0	42.2	63.8	49.1	65	0	67.5	67.5	70	N	-	-	20.6	Y	N	N	
N2506	23	85.2	A1-2	-	48.6	0	42.6	63.6	49	65.6	0	67.8	67.8	70	N	-	-	19.2	Y	N	N	
N2506	24	87.9	A1-2	-	49.5	0	42.8	63.6	48.8	66.2	0	68.1	68.2	70	N	-	-	18.7	Y	N	N	
N2506	25	90.6	A1-2	-	50.9	0	43.1	63.4	48.7	66.9	0	68.5	68.6	70	N	-	-	18.6	Y	N	N	
N2506	26	93.3	A1-2	-	50.4	0	43.4	63.3	48.5	67.4	0	68.9	68.9	70	N	-	-	18.5	Y	N	N	
N2506	27	96	A1-2	-	50.7	0	43.9	63.1	48.4	67.8	0	69.1	69.2	70	N	-	-	18.5	Y	N	N	
N2506	28	98.7	A1-2	-	51.1	0	44.5	63	48.2	68.2	0	69.4	69.4	70	N	-	-	18.3	Y	N	N	
N2506	29	101.4	A1-2	-	51.3	0	45.3	62.9	48.1	68.5	0	69.6	69.6	70	N	-	-	18.3	Y	N	N	
N2506	30	104.1	A1-2	-	51.6	0	46.1	62.8	48	68.7	0	69.7	69.8	70	N	-	-	18.2	Y	N	N	
N2506	31	106.8	A1-2	-	51.8	0	47.1	62.7	47.8	68.9	0	69.9	69.9	70	N	-	-	18.1	Y	N	N	
N2506	32	109.5	A1-2	-	52.2	0	48.2	62.6	47.7	69	0	70.2	70.0	70	N	-	-	17.8	Y	N	N	
N2506	33	112.2	A1-2	-	52.5	0	48.6	62.5	47.6	69.2	0	70.1	70.2	70	N	-	-	17.7	Y	N	N	
N2506	34	114.9	A1-2	-	52.7	0	49.2	62.4	47.5	69.3	0	70.2	70.3	70	N	-	-	17.6	Y	N	N	
N2506	35	117.6	A1-2	-	52.9	0	49.6	62.3	47.4	69.5	0	70.3	70.4	70	N	-	-	17.5	Y	N	N	
N2506	36	120.3	A1-2	-	53	0	49.9	62.2	47.3	69.7	0	70.4	70.5	70	Y	-	-	17.5	Y	N	N	
N2506	37	123	A1-2	-	53	0	50	62.2	47.2	69.8	0	70.6	70.7	70	Y	-	-	17.7	Y	Y	N	
N2506	38	125.7	A1-2	-	53.7	0	50.1	62.1	47.1	70.1	0	70.8	70.9	70	Y	-	-	17.8	Y	Y	N	
N2505	1	25.8	A1-2	-	30	0	57.6	68.5	16.8	43.6	0	68.8	68.8	70	N	-	-	38.8	Y	N	N	
N2505	2	28.5	A1-2	-	30.9	0	57.9	68.3	17.7	44.2	0	68.7	68.7	70	N	-	-	37.8	Y	N	N	
N2505	3	31.2	A1-2	-	31.8	0	58.1	68.1	18.5	44.9	0	68.5	68.5	70	N	-	-	36.7	Y	N	N	
N2505	4	33.9	A1-2	-	32.9	0	58.3	67.8	19.5	45.6	0	68.3	68.3	70	N	-	-	35.4	Y	N	N	
N2505	5	36.6	A1-2	-	34	0	58.4	67.5	20.5	46.3	0	68.1	68.1	70	N	-	-	34.1	Y	N	N	
N2505	6	39.3	A1-2	-	35.3	0	58.5	67.3	21.7	47	0	67.9	67.9	70	N	-	-	32.6	Y	N	N	
N2505	7	42	A1-2	-	36.7	0	58.6	67	22.8	47.7	0	67.7	67.7	70	N	-	-	31.0	Y	N	N	
N2505	8	44.7	A1-2	-	38.2	0	58.7	66.7	23.8	48.5	0	67.4	67.4	70	N	-	-	29.2	Y	N	N	
N2505	9	47.4	A1-2	-	39.9	0	58.8	66.4	24.6	49.3	0	67.2	67.2	70	N	-	-	27.3	Y	N	N	
N2505	10	50.1	A1-2	-	41.3	0	58.9	66.2	25.6	50.3	0	67.1	67.1	70	N	-	-	25.8	Y	N	N	
N2505	11	52.8	A1-2	-	42.5	0	58.9	65.9	26.6	51.2	0	66.9	66.9	70	N	-	-	24.4	Y	N	N	
N2505	12	55.5	A1-2	-	43.8	0	59	65.7	27.6	52.2	0	66.7	66.8	70	N	-	-	23.0	Y	N	N	
N2505	13	58.2	A1-2	-	44.9	0	59	65.5	28.7	53.2	0	66.6	66.6	70	N	-	-	21.7	Y	N	N	
N2505	14	60.9	A1-2	-	46.2	0	59.1	65.3	30	54.4	0	66.5	66.5	70	N	-	-	20.3	Y	N	N	
N2505	15	63.6	A1-2	-	48.1	0	59.1	65.1	31.3	56	0	66.4	66.5	70	N	-	-	18.4	Y	N	N	
N2505	16	66.3	A1-2	-	50	0	59.1	64.9	32.8	57.8	0	66.5	66.6	70	N	-	-	16.6	Y	N	N	
N2505	17	69	A1-2	-	50.6	0	59.2	64.7	34.3	59.7	0	66.7	66.8	70	N	-	-	16.2	Y	N	N	
N2505	18	71.7	A1-2	-	50.9	0	59.2	64.5	36.1	61.8	0	67.1	67.2	70	N	-	-	16.3	Y	N	N	
N2505	19	74.4	A1-2	-	51.2	0	59.3	64.3	38.5	63.4	0	67.6	67.7	70	N	-	-	16.5	Y	N	N	
N2505	20	77.1	A1-2	-	51.5	0	59.5	64.1	40.6	64.5	0	68	68.1	70	N	-	-	16.6	Y	N	N	
N2505	21	79.8	A1-2	-	51.9	0	59.7	64	42.9	65.2	0	68.3	68.4	70	N	-	-	16.5	Y	N	N	
N2505	2																					

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)			New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(2)</sup> [B]												
N2509	5	35.6	A1-2	-	28.2	0	31.2	69.4	60.8	50	0	70.0	70.0	70	N	-	-	41.8	N	N		
N2509	6	38.3	A1-2	-	29.2	0	31.8	69.1	60.4	50.7	0	69.7	69.7	70	N	-	-	40.5	N	N		
N2509	7	41	A1-2	-	30.2	0	32.3	68.7	60	51.3	0	69.3	69.3	70	N	-	-	39.1	N	N		
N2509	8	43.7	A1-2	-	31.1	0	32.9	68.4	59.7	52.2	0	69.0	69.0	70	N	-	-	37.9	N	N		
N2509	9	46.4	A1-2	-	32.1	0	33.5	68	59.4	52.7	0	68.7	68.7	70	N	-	-	36.6	N	N		
N2509	10	49.1	A1-2	-	33.1	0	34.1	67.7	59.1	53.4	0	68.4	68.4	70	N	-	-	35.3	N	N		
N2509	11	51.8	A1-2	-	34	0	34.8	67.4	58.8	54.2	0	68.2	68.2	70	N	-	-	34.2	N	N		
N2509	12	54.5	A1-2	-	35	0	35.5	67.2	58.5	55	0	67.9	67.9	70	N	-	-	32.9	N	N		
N2509	13	57.2	A1-2	-	36	0	36.2	67	58.2	55.9	0	67.8	67.8	70	N	-	-	31.8	N	N		
N2509	14	59.9	A1-2	-	37.2	0	37	66.7	58	56.9	0	67.6	67.6	70	N	-	-	30.4	N	N		
N2509	15	62.6	A1-2	-	38.7	0	37.8	66.5	57.7	58.1	0	67.5	67.5	70	N	-	-	28.9	N	N		
N2509	16	65.3	A1-2	-	40.9	0	38.7	66.2	57.5	59.4	0	67.5	67.5	70	N	-	-	26.6	N	N		
N2509	17	68	A1-2	-	43.5	0	39.8	66	57.3	60.7	0	67.6	67.6	70	N	-	-	24.1	N	N		
N2509	18	70.7	A1-2	-	45.5	0	41	65.8	57.1	62.3	0	67.8	67.8	70	N	-	-	22.3	N	N		
N2509	19	73.4	A1-2	-	46.2	0	42.6	65.6	56.9	63.8	0	68.2	68.2	70	N	-	-	22.0	N	N		
N2509	20	76.1	A1-2	-	47	0	44.3	65.4	56.7	65.3	0	68.7	68.7	70	N	-	-	21.7	N	N		
N2509	21	78.8	A1-2	-	47.6	0	46.1	65.2	56.6	66.4	0	69.1	69.2	70	N	-	-	21.6	N	N		
N2509	22	81.5	A1-2	-	48.2	0	47.3	65.2	56.4	67.3	0	69.6	69.7	70	N	-	-	21.5	N	N		
N2509	23	84.2	A1-2	-	48.5	0	48.4	65	56.3	68	0	70	70.0	70	N	-	-	21.5	N	N		
N2509	24	86.9	A1-2	-	48.9	0	49.4	64.8	56.1	68.7	0	70.4	70.4	70	N	-	-	21.5	N	N		
N2509	25	89.6	A1-2	-	49	0	50.2	64.8	56.1	69.2	0	70.8	70.8	70	Y	-	-	21.8	N	N		
N2509	26	92.3	A1-2	-	49.4	0	50.8	64.6	55.9	69.6	0	71	71.0	70	Y	-	-	21.6	N	N		
N2509	27	95	A1-2	-	49.6	0	51.2	64.5	55.8	70	0	71.3	71.3	70	Y	-	-	21.7	N	N		
N2509	28	97.7	A1-2	-	49.7	0	51.6	64.4	55.6	70.3	0	71.4	71.4	70	Y	-	-	21.4	N	N		
N2509	29	100.4	A1-2	-	50.4	0	52.3	64.3	55.5	70.6	0	71.6	71.7	70	Y	-	-	21.3	N	N		
N2509	30	103.1	A1-2	-	50.7	0	52.3	64.1	55.4	70.8	0	71.8	71.8	70	Y	-	-	21.1	N	N		
N2509	31	105.8	A1-2	-	51.1	0	52.6	64	55.3	71	0	71.9	72.0	70	Y	-	-	20.9	N	N		
N2509	32	108.5	A1-2	-	51.2	0	52.8	63.9	55.2	71.2	0	72.1	72.1	70	Y	-	-	20.9	N	N		
N2509	33	111.2	A1-2	-	51.5	0	53	63.9	55.1	71.3	0	72.2	72.2	70	Y	-	-	20.7	N	N		
N2509	34	113.9	A1-2	-	51.8	0	53.2	63.7	54.9	71.4	0	72.2	72.3	70	Y	-	-	20.5	N	N		
N2509	35	116.6	A1-2	-	52	0	53.6	63.6	54.8	71.5	0	72.3	72.3	70	Y	-	-	20.3	N	N		
N2509	36	119.3	A1-2	-	52.1	0	53.6	63.6	54.7	71.7	0	72.4	72.5	70	Y	-	-	20.4	N	N		
N2508	1	24.8	A1-2	-	26.1	0	55.6	71.2	14.9	46.4	0	71.3	71.3	70	Y	-	-	45.2	N	N		
N2508	2	27.5	A1-2	-	26.7	0	56	70.9	15.7	47.1	0	71.1	71.1	70	Y	-	-	44.4	N	N		
N2508	3	30.2	A1-2	-	27.5	0	56.3	70.5	16.6	47.8	0	70.7	70.7	70	Y	-	-	43.2	N	N		
N2508	4	32.9	A1-2	-	28.3	0	56.6	70.2	17.6	48.4	0	70.4	70.4	70	N	-	-	42.1	N	N		
N2508	5	35.6	A1-2	-	29.1	0	56.8	69.8	18.6	49.1	0	70	70.0	70	N	-	-	40.9	N	N		
N2508	6	38.3	A1-2	-	29.9	0	56.9	69.4	19.7	49.8	0	69.7	69.7	70	N	-	-	39.8	N	N		
N2508	7	41	A1-2	-	30.7	0	57	69.1	20.8	50.6	0	69.4	69.4	70	N	-	-	38.7	N	N		
N2508	8	43.7	A1-2	-	31.6	0	57.1	68.8	21.6	51.3	0	69.1	69.1	70	N	-	-	37.5	N	N		
N2508	9	46.4	A1-2	-	32.4	0	57.2	68.4	22.5	52	0	68.8	68.8	70	N	-	-	36.4	N	N		
N2508	10	49.1	A1-2	-	33.3	0	57.2	68.1	23.3	52.8	0	68.5	68.5	70	N	-	-	35.2	N	N		
N2508	11	51.8	A1-2	-	34.2	0	57.3	67.8	24.2	53.6	0	68.3	68.3	70	N	-	-	34.1	N	N		
N2508	12	54.5	A1-2	-	35.2	0	57.3	67.5	25.1	55	0	68.1	68.1	70	N	-	-	32.9	N	N		
N2508	13	57.2	A1-2	-	36.3	0	57.3	67.3	26.1	55.5	0	67.8	68.0	70	N	-	-	31.7	N	N		
N2508	14	59.9	A1-2	-	37.5	0	57.3	67	27	56.5	0	67.8	67.8	70	N	-	-	30.3	N	N		
N2508	15	62.6	A1-2	-	38.9	0	57.4	66.8	28	57.8	0	67.7	67.7	70	N	-	-	28.8	N	N		
N2508	16	65.3	A1-2	-	40.7	0	57.4	66.6	29	59.2	0	67.8	67.8	70	N	-	-	27.1	N	N		
N2508	17	68	A1-2	-	43.3	0	57.4	66.3	30.1	61	0	67.8	67.9	70	N	-	-	24.6	N	N		
N2508	18	70.7	A1-2	-	45.7	0	57.5	66.1	31.2	62.6	0	68.1	68.1	70	N	-	-	22.6	N	N		
N2508	19	73.4	A1-2	-	46.7	0	57.5	65.9	32.6	64.2	0	68.5	68.6	70	N	-	-	21.9	N	N		
N2508	20	76.1	A1-2	-	47.7	0	57.6	65.7	34	65.6	0	69	69.0	70	N	-	-	21.3	N	N		
N2508	21	78.8	A1-2	-	48.6	0	57.7	65.6	35.8	66.7	0	69.5	69.5	70	N	-	-	20.9	N	N		
N2508	22	81.5	A1-2	-	49.4	0	57.8	65.5	37.9	67.6	0	69.9	70.0	70	N	-	-	20.6	N	N		
N2508	23	84.2	A1-2	-	49.8	0	58	65.3	39.7	68.3	0	70.4	70.4	70	N	-	-	20.6	N	N		
N2508	24	86.9	A1-2	-	50.1	0	58.1	65.1	41.8	69	0	70.7	70.8	70	Y	-	-	20.7	N	N		
N2508	25	89.6	A1-2	-	50.4	0	58.2	65.1	43	69.4	0	71	71.0	70	Y	-	-	20.6	N	N		
N2508	26	92.3	A1-2	-	50.6	0	58.3	64.9	43.4	69.8	0	71.3	71.3	70	Y	-	-	20.7	N	N		
N2508	27	95	A1-2	-	50.9	0	58.4	64.8	43.6	70.1	0	71.5	71.5	70	Y	-	-	20.6	N	N		
N2508	28	97.7	A1-2	-	51.1	0	58.5	64.7	43.8	70.4	0	71.7	71.7	70	Y	-	-	20.6	N	N		
N2508	29	100.4	A1-2	-	51.3	0	58.6	64.6	43.9	70.7	0	71.8	71.9	70	Y	-	-	20.6	N	N		
N2508	30	103.1	A1-2	-	51.5	0	58.7	64.4	43.9	70.9	0	72	72.0	70	Y	-	-	20.5	N	N		
N2508	31	105.8	A1-2	-	51.8	0	58.7	64.3	43.9	71.1	0	72.1	72.2	70	Y	-	-	20.4	N	N		
N2508	32	108.5	A1-2	-	51.9	0	58.8	64.2	44	71.2	0	72.2	72.2	70	Y	-	-	20.3	N	N		
N2508	33	111.2	A1-2	-	52.1	0	58.8	64.2	44	71.3	0	72.2	72.3	70	Y	-	-	20.2	N	N		
N2508	34	113.9	A1-2	-	52.3	0	58.9	64.2	43.9	71.4	0	72.4	72.4	70	Y	-	-	20.1	N	N		
N2508	35	116.6	A1-2	-	52.5	0	58.9	64	43.9	71.5	0	72.4	72.5	70	Y	-	-	20.0	N	N		
N2508	36	119.3	A1-2	-	52.6	0	59	63.9	43.9	71.7	0	72.6	72.6	70	Y	-	-	20.0	N	N		
N2510	1	24.8	A1-2	-	22.4	0	23.6	69.4	62.4	47.2	0	70.2	70.2	70	N	-	-	47.8	N	N		
N2510	2	27.5	A1-2	-	23.2	0	24	69.1	62.1	47.8	0	69.9	69.9	70	N	-	-	46.7	N	N		
N2510	3	30.2	A1-2	-	24	0	24.4	68.8	61.8	48.4	0	69.6	69.6	70	N	-	-	45.6	N	N		
N2510	4	32.9	A1-2	-	25	0	24.9	68.5	61.5	49	0	69.4	69.4	70	N	-	-	44.4	N	N		
N2510	5	35.6	A1-2	-	25.9	0	25.3	68.2	61.2	49.6	0	69	69.0	70	N	-	-	43.1	N	N		
N2510	6	38.3	A1-2	-	26.9	0	25.9	67.9	60.8	50.3	0	68.7	68.7	70	N	-	-	41.8	N	N		
N2510	7	41	A1-2	-	27.7	0	26.4	67.6	60.5	50.9	0	68.4	68.4	70	N	-	-	40.7	N	N		
N2510																						

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A)		New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		Existing Road in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR	New Roads in 2044 dB(A) <sup>(1)</sup> [B]				C - A dB(A) [D]	D ≥ 1dB(A)							
N2510	26	92.3	A1-2	-	46	0	42.9	63.7	56.3	68.5	0	69.9	69.9	70	N	-	-	23.9	Y	N	N	
N2510	27	95	A1-2	-	46.5	0	43	63.5	56.1	68.8	0	70.1	70.1	70	N	-	-	23.6	Y	N	N	
N2510	28	97.7	A1-2	-	47.3	0	43.1	63.4	56	69	0	70.2	70.2	70	N	-	-	22.9	Y	N	N	
N2510	29	100.4	A1-2	-	47.8	0	43.2	63.4	55.9	69.2	0	70.3	70.4	70	N	-	-	22.6	Y	N	N	
N2510	30	103.1	A1-2	-	48.4	0	43.3	63.2	55.7	69.4	0	70.5	70.5	70	Y	-	-	22.1	Y	Y	N	
N2510	31	105.8	A1-2	-	48.9	0	43.4	63.1	55.6	69.5	0	70.6	70.6	70	Y	-	-	21.7	Y	Y	N	
N2510	32	108.5	A1-2	-	49.3	0	43.5	63	55.5	69.7	0	70.7	70.7	70	Y	-	-	21.4	Y	Y	N	
N2510	33	111.2	A1-2	-	49.7	0	43.6	62.9	55.3	69.8	0	70.8	70.8	70	Y	-	-	21.1	Y	Y	N	
N2510	34	113.9	A1-2	-	50.1	0	43.7	62.8	55.2	70	0	70.9	70.9	70	Y	-	-	20.8	Y	Y	N	
N2510	35	116.6	A1-2	-	50.4	0	43.8	62.7	55.1	70.1	0	71	71.0	70	Y	-	-	20.6	Y	Y	N	
N2510	36	119.3	A1-2	-	50.6	0	44	62.6	55	70.3	0	71.1	71.1	70	Y	-	-	20.5	Y	Y	N	
N2507	1	24.8	A1-2	-	26.2	0	55.4	69.6	15	46.8	0	69.8	69.8	70	N	-	-	43.6	Y	N	N	
N2507	2	27.5	A1-2	-	26.9	0	55.8	69.4	15.8	47.2	0	69.6	69.6	70	N	-	-	42.7	Y	N	N	
N2507	3	30.2	A1-2	-	27.6	0	56	69.1	16.8	47.7	0	69.3	69.3	70	N	-	-	41.7	Y	N	N	
N2507	4	32.9	A1-2	-	28.4	0	56.3	68.7	17.7	48.1	0	69	69.0	70	N	-	-	40.6	Y	N	N	
N2507	5	35.6	A1-2	-	29.1	0	56.4	68.4	18.7	48.6	0	68.7	68.7	70	N	-	-	39.6	Y	N	N	
N2507	6	38.3	A1-2	-	29.9	0	56.6	68.1	19.8	49.1	0	68.4	68.4	70	N	-	-	38.5	Y	N	N	
N2507	7	41	A1-2	-	30.7	0	56.7	67.7	20.9	49.7	0	68.1	68.1	70	N	-	-	37.4	Y	N	N	
N2507	8	43.7	A1-2	-	31.6	0	56.8	67.4	21.8	50.3	0	67.9	67.9	70	N	-	-	36.3	Y	N	N	
N2507	9	46.4	A1-2	-	32.4	0	56.8	67.1	22.5	50.9	0	67.6	67.6	70	N	-	-	35.2	Y	N	N	
N2507	10	49.1	A1-2	-	33.2	0	56.9	66.8	23.4	51.6	0	67.4	67.4	70	N	-	-	34.2	Y	N	N	
N2507	11	51.8	A1-2	-	34.1	0	56.9	66.5	24.3	52.2	0	67.1	67.1	70	N	-	-	33.0	Y	N	N	
N2507	12	54.5	A1-2	-	35.1	0	57	66.3	25.2	53	0	66.9	66.9	70	N	-	-	31.8	Y	N	N	
N2507	13	57.2	A1-2	-	36.1	0	57.2	66	26.6	53.9	0	66.8	66.8	70	N	-	-	30.7	Y	N	N	
N2507	14	59.9	A1-2	-	37.3	0	57.1	65.8	27	54.8	0	66.6	66.6	70	N	-	-	29.3	Y	N	N	
N2507	15	62.6	A1-2	-	38.7	0	57.1	65.5	27.9	55.9	0	66.5	66.5	70	N	-	-	27.8	Y	N	N	
N2507	16	65.3	A1-2	-	40.3	0	57.1	65.3	28.9	57.4	0	66.5	66.5	70	N	-	-	26.2	Y	N	N	
N2507	17	68	A1-2	-	42.5	0	57.1	65.2	30.1	59.2	0	66.7	66.7	70	N	-	-	24.2	Y	N	N	
N2507	18	70.7	A1-2	-	45	0	57.2	65	31.3	60.9	0	66.9	66.9	70	N	-	-	21.9	Y	N	N	
N2507	19	73.4	A1-2	-	46.3	0	57.2	64.8	32.7	62.8	0	67.3	67.3	70	N	-	-	21.1	Y	N	N	
N2507	20	76.1	A1-2	-	47.6	0	57.3	64.6	34.2	64.3	0	67.9	67.9	70	N	-	-	20.3	Y	N	N	
N2507	21	78.8	A1-2	-	48.4	0	57.4	64.4	35.9	65.5	0	68.3	68.4	70	N	-	-	20.0	Y	N	N	
N2507	22	81.5	A1-2	-	49.3	0	57.6	64.2	38.1	66.5	0	68.9	68.9	70	N	-	-	19.6	Y	N	N	
N2507	23	84.2	A1-2	-	49.7	0	57.7	64.1	39.7	67.3	0	69.3	69.4	70	N	-	-	19.7	Y	N	N	
N2507	24	86.9	A1-2	-	50.1	0	57.8	64	41.8	67.9	0	69.7	69.7	70	N	-	-	19.6	Y	N	N	
N2507	25	89.6	A1-2	-	50.3	0	58	63.8	42.8	68.4	0	70	70.0	70	N	-	-	19.7	Y	N	N	
N2507	26	92.3	A1-2	-	50.6	0	58.1	63.8	43.4	68.8	0	70.3	70.3	70	N	-	-	19.7	Y	N	N	
N2507	27	95	A1-2	-	50.8	0	58.2	63.6	43.7	69.1	0	70.5	70.5	70	Y	-	-	19.7	Y	Y	N	
N2507	28	97.7	A1-2	-	51.1	0	58.3	63.5	43.8	69.4	0	70.7	70.7	70	Y	-	-	19.6	Y	Y	N	
N2507	29	100.4	A1-2	-	51.3	0	58.4	63.4	43.9	69.7	0	70.9	70.9	70	Y	-	-	19.6	Y	Y	N	
N2507	30	103.1	A1-2	-	51.5	0	58.4	63.2	43.9	69.9	0	71	71.0	70	Y	-	-	19.5	Y	Y	N	
N2507	31	105.8	A1-2	-	51.8	0	58.5	63.2	43.8	70	0	71.1	71.2	70	Y	-	-	19.4	Y	Y	N	
N2507	32	108.5	A1-2	-	52	0	58.6	63.1	43.9	70.1	0	71.2	71.2	70	Y	-	-	19.2	Y	Y	N	
N2507	33	111.2	A1-2	-	52.1	0	58.6	62.9	43.9	70.2	0	71.2	71.3	70	Y	-	-	19.2	Y	Y	N	
N2507	34	113.9	A1-2	-	52.3	0	58.7	62.9	43.9	70.3	0	71.3	71.4	70	Y	-	-	19.1	Y	Y	N	
N2507	35	116.6	A1-2	-	52.5	0	58.7	62.8	43.9	70.4	0	71.4	71.4	70	Y	-	-	18.9	Y	Y	N	
N2507	36	119.3	A1-2	-	52.6	0	58.8	62.7	43.9	70.5	0	71.4	71.5	70	Y	-	-	18.9	Y	Y	N	
N2542	1	34.7	A1-4	-	22.8	0	46.6	55	69.2	51.5	0	69.4	69.4	70	N	-	-	46.6	Y	N	N	
N2542	2	37.8	A1-4	-	23.4	0	46.9	55.4	68.9	52.2	0	69.2	69.2	70	N	-	-	45.8	Y	N	N	
N2542	3	40.9	A1-4	-	24.1	0	47.1	55.2	68.6	52.9	0	69	69.0	70	N	-	-	44.9	Y	N	N	
N2542	4	44	A1-4	-	24.7	0	47.3	55	68.3	53.7	0	68.7	68.7	70	N	-	-	44.0	Y	N	N	
N2542	5	47.1	A1-4	-	25.5	0	47.5	54.7	68	54.5	0	68.5	68.4	70	N	-	-	42.9	Y	N	N	
N2542	6	50.2	A1-4	-	26.2	0	47.6	54.5	67.8	55.4	0	68.2	68.2	70	N	-	-	42.0	Y	N	N	
N2542	7	53.3	A1-4	-	26.9	0	47.8	54.3	67.5	56.3	0	68.1	68.1	70	N	-	-	41.2	Y	N	N	
N2542	8	56.4	A1-4	-	27.6	0	47.9	54.1	67.2	57.3	0	67.9	67.9	70	N	-	-	40.3	Y	N	N	
N2542	9	59.5	A1-4	-	28.4	0	48	53.9	67	58.4	0	67.8	67.8	70	N	-	-	39.4	Y	N	N	
N2542	10	62.6	A1-4	-	29.2	0	48.2	53.7	66.7	59.7	0	67.7	67.7	70	N	-	-	38.5	Y	N	N	
N2542	11	65.7	A1-4	-	30	0	48.4	53.5	66.5	61.3	0	67.9	67.9	70	N	-	-	37.9	Y	N	N	
N2542	12	68.8	A1-4	-	30.9	0	48.7	53.4	66.3	62.8	0	68.1	68.1	70	N	-	-	37.2	Y	N	N	
N2542	13	71.9	A1-4	-	31.7	0	49.1	53.3	66.1	64.4	0	68.5	68.5	70	N	-	-	36.8	Y	N	N	
N2542	14	75	A1-4	-	32.6	0	49.5	53.3	65.9	65.8	0	69	69.0	70	N	-	-	36.4	Y	N	N	
N2542	15	78.1	A1-4	-	33.5	0	49.9	53.4	65.7	66.9	0	69.5	69.5	70	N	-	-	36.0	Y	N	N	
N2542	16	81.2	A1-4	-	34.5	0	50.4	53.4	65.5	67.8	0	70	70.0	70	N	-	-	35.5	Y	N	N	
N2542	17	84.3	A1-4	-	35.5	0	50.8	53.4	65.3	68.5	0	70.3	70.3	70	Y	-	-	34.8	Y	N	N	
N2542	18	87.4	A1-4	-	36.4	0	51.1	53.6	65.1	69.2	0	70.7	70.7	70	Y	-	-	34.0	Y	Y	N	
N2542	19	90.5	A1-4	-	37.9	0	51.2	53.7	65	69.7	0	71.1	71.1	70	Y	-	-	33.2	Y	Y	N	
N2542	20	93.6	A1-4	-	39.3	0	51.4	53.9	64.8	70.2	0	71.4	71.4	70	Y	-	-	32.1	Y	Y	N	
N2542	21	96.7	A1-4	-	41.1	0	51.5	54.1	64.6	70.6	0	71.7	71.7	70	Y	-	-	30.6	Y	Y	N	
N2542	22	99.8	A1-4	-	42.7	0	51.6	54.3	64.5	70.9	0	71.9	71.9	70	Y	-	-	29.2	Y	Y	N	
N2542	23	102.9	A1-4	-	44.7	0	51.7	54.6	64.3	71.1	0	72.1	72.1	70	Y	-	-	27.4	Y	Y	N	
N2542	24	106	A1-4	-	45.9	0	51.9	54.8	64.2	71.4	0	72.3	72.3	70	Y	-	-	26.4	Y	Y	N	
N2542	25	109.1	A1-4	-	46.9	0	52	54.9	64	71.6	0	72.4	72.4	70	Y	-	-	25.5	Y	Y	N	
N2542																						

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required [4,5] (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) [1]	New Roads [2]					New Roads in 2044 dB(A) [3] [B]	Overall Noise Level in 2044 dB(A) [C]	C - A dB(A) [D]	D ≥ 1dB(A)			New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			
							PD	DD	LD	EX	TR												
N2543	20	93.6	A1-5	-	39.2	0	51.1	53.4	64.8	70.3	0	71.5	71.5	70	Y	-	-	32.3	Y	Y	N		
N2543	21	96.7	A1-5	-	40.7	0	51.4	53.5	64.6	70.7	0	71.8	71.8	70	Y	-	-	31.1	Y	Y	N		
N2543	22	99.8	A1-5	-	42.4	0	51.5	53.8	64.5	71.1	0	72	72.0	70	Y	-	-	29.6	Y	Y	N		
N2543	23	102.9	A1-5	-	44	0	51.6	54.1	64.3	71.2	0	72.1	72.1	70	Y	-	-	28.1	Y	Y	N		
N2543	24	106	A1-5	-	45.4	0	51.8	54.3	64.2	71.5	0	72.3	72.3	70	Y	-	-	26.9	Y	Y	N		
N2543	25	109.1	A1-5	-	46.3	0	51.9	54.5	64	71.7	0	72.5	72.5	70	Y	-	-	26.2	Y	Y	N		
N2543	26	112.2	A1-5	-	47	0	52	54.6	63.9	71.8	0	72.6	72.6	70	Y	-	-	25.6	Y	Y	N		
N2543	27	115.3	A1-5	-	47.6	0	52.1	54.8	63.8	72	0	72.7	72.7	70	Y	-	-	25.1	Y	Y	N		
N2544	1	34.7	A1-5	-	0	0	0	48.2	66.8	51.7	0	67	67.0	70	N	-	-	64.0	Y	N	N		
N2544	2	37.8	A1-5	-	0	0	0	48.1	66.5	52.5	0	66.8	66.8	70	N	-	-	63.8	Y	N	N		
N2544	3	40.9	A1-5	-	0	0	0	48	66.3	53.4	0	66.6	66.6	70	N	-	-	63.6	Y	N	N		
N2544	4	44	A1-5	-	0	0	0	47.7	66.1	54.4	0	66.4	66.4	70	N	-	-	63.4	Y	N	N		
N2544	5	47.1	A1-5	-	0	0	0	47.6	65.8	55.5	0	66.2	66.2	70	N	-	-	63.2	Y	N	N		
N2544	6	50.2	A1-5	-	0	0	0	47.5	65.6	56.6	0	66.2	66.2	70	N	-	-	63.2	Y	N	N		
N2544	7	53.3	A1-5	-	0	0	0	47.4	65.3	57.7	0	66.1	66.1	70	N	-	-	63.1	Y	N	N		
N2544	8	56.4	A1-5	-	0	0	0	47.3	65.1	58.4	0	66	66.0	70	N	-	-	63.0	Y	N	N		
N2544	9	59.5	A1-5	-	0	0	0	47.3	64.9	59.4	0	66	66.0	70	N	-	-	63.0	Y	N	N		
N2544	10	62.6	A1-5	-	0	0	0	47.4	64.7	60.4	0	66.1	66.1	70	N	-	-	63.1	Y	N	N		
N2544	11	65.7	A1-5	-	0	0	0	47.5	64.4	61.7	0	66.3	66.3	70	N	-	-	63.3	Y	N	N		
N2544	12	68.8	A1-5	-	0	0	0	47.7	64.2	63	0	66.7	66.7	70	N	-	-	63.7	Y	N	N		
N2544	13	71.9	A1-5	-	0	0	0	48.2	64	64.1	0	67.1	67.1	70	N	-	-	64.1	Y	N	N		
N2544	14	75	A1-5	-	0	0	0	48.5	63.8	64.9	0	67.4	67.4	70	N	-	-	64.4	Y	N	N		
N2544	15	78.1	A1-5	-	0	0	0	48.7	63.6	65.6	0	67.8	67.8	70	N	-	-	64.8	Y	N	N		
N2544	16	81.2	A1-5	-	0	0	0	49.1	63.5	66.3	0	68.2	68.2	70	N	-	-	65.2	Y	N	N		
N2544	17	84.3	A1-5	-	0	0	0	49.5	63.3	67	0	68.6	68.6	70	N	-	-	65.6	Y	N	N		
N2544	18	87.4	A1-5	-	0	0	0	50	63.1	67.6	0	69	69.0	70	N	-	-	66.0	Y	N	N		
N2544	19	90.5	A1-5	-	0	0	0	50.4	63	68.2	0	69.4	69.4	70	N	-	-	66.4	Y	N	N		
N2544	20	93.6	A1-5	-	0	0	0	50.7	62.8	68.7	0	69.7	69.7	70	N	-	-	66.7	Y	N	N		
N2544	21	96.7	A1-5	-	0	0	0	50.9	62.6	69.1	0	70	70.0	70	N	-	-	67.0	Y	N	N		
N2544	22	99.8	A1-5	-	0	0	0	51.3	62.5	69.4	0	70.3	70.3	70	N	-	-	67.3	Y	N	N		
N2544	23	102.9	A1-5	-	0	0	0	51.6	62.4	69.6	0	70.5	70.5	70	Y	-	-	67.5	Y	N	N		
N2544	24	106	A1-5	-	0	0	0	51.8	62.2	69.9	0	70.6	70.6	70	Y	-	-	67.6	Y	N	N		
N2544	25	109.1	A1-5	-	0	0	0	52	62.1	70.1	0	70.8	70.8	70	Y	-	-	67.8	Y	N	N		
N2544	26	112.2	A1-5	-	0	0	0	52.2	61.9	70.2	0	70.9	70.9	70	Y	-	-	67.9	Y	N	N		
N2544	27	115.3	A1-5	-	0	0	0	52.3	61.8	70.4	0	71	71.0	70	Y	-	-	68.0	Y	N	N		
N2545	1	34.7	A1-4	-	22.9	0	40.1	54.5	66.5	51.9	0	66.9	66.9	70	N	-	-	44.0	Y	N	N		
N2545	2	37.8	A1-4	-	23.5	0	40.7	55	67	52.4	0	67.4	67.4	70	N	-	-	43.9	Y	N	N		
N2545	3	40.9	A1-4	-	24.2	0	41.2	55	66.9	53	0	67.3	67.3	70	N	-	-	43.1	Y	N	N		
N2545	4	44	A1-4	-	24.9	0	41.6	54.8	66.6	53.6	0	67.1	67.1	70	N	-	-	42.2	Y	N	N		
N2545	5	47.1	A1-4	-	25.6	0	42.1	54.6	66.4	54.2	0	66.9	66.9	70	N	-	-	41.3	Y	N	N		
N2545	6	50.2	A1-4	-	26.3	0	42.4	54.3	66.1	55	0	66.7	66.7	70	N	-	-	40.4	Y	N	N		
N2545	7	53.3	A1-4	-	27	0	42.8	54.1	65.9	55.8	0	66.6	66.6	70	N	-	-	39.6	Y	N	N		
N2545	8	56.4	A1-4	-	27.7	0	43.2	53.9	65.6	56.7	0	66.4	66.4	70	N	-	-	38.7	Y	N	N		
N2545	9	59.5	A1-4	-	28.5	0	43.6	53.7	65.4	57.9	0	66.4	66.4	70	N	-	-	37.9	Y	N	N		
N2545	10	62.6	A1-4	-	29.3	0	44.1	53.6	65.2	59.2	0	66.4	66.4	70	N	-	-	37.1	Y	N	N		
N2545	11	65.7	A1-4	-	30.1	0	44.8	53.4	64.9	60.6	0	66.5	66.5	70	N	-	-	36.4	Y	N	N		
N2545	12	68.8	A1-4	-	30.9	0	45.7	53.3	64.7	61.9	0	66.8	66.8	70	N	-	-	35.9	Y	N	N		
N2545	13	71.9	A1-4	-	31.8	0	46.5	53.2	64.5	63.1	0	67.1	67.1	70	N	-	-	35.3	Y	N	N		
N2545	14	75	A1-4	-	32.7	0	47.2	53.2	64.3	64.2	0	67.5	67.5	70	N	-	-	34.8	Y	N	N		
N2545	15	78.1	A1-4	-	33.6	0	47.8	53.2	64.1	65.3	0	67.9	67.9	70	N	-	-	34.3	Y	N	N		
N2545	16	81.2	A1-4	-	34.6	0	48.4	53.3	63.9	66.1	0	68.3	68.3	70	N	-	-	33.7	Y	N	N		
N2545	17	84.3	A1-4	-	35.6	0	48.9	53.3	63.8	66.8	0	68.7	68.7	70	N	-	-	33.1	Y	N	N		
N2545	18	87.4	A1-4	-	36.7	0	49.1	53.3	63.6	67.4	0	69.1	69.1	70	N	-	-	32.4	Y	N	N		
N2545	19	90.5	A1-4	-	37.9	0	49.4	53.3	63.4	68	0	69.4	69.4	70	N	-	-	31.5	Y	N	N		
N2545	20	93.6	A1-4	-	39.3	0	49.6	53.4	63.3	68.4	0	69.7	69.7	70	N	-	-	30.4	Y	N	N		
N2545	21	96.7	A1-4	-	41.2	0	49.7	53.4	63.1	68.7	0	69.9	69.9	70	N	-	-	28.7	Y	N	N		
N2545	22	99.8	A1-4	-	42.6	0	49.9	53.5	62.9	69	0	70.1	70.1	70	N	-	-	27.5	Y	N	N		
N2545	23	102.9	A1-4	-	44.5	0	50	53.5	62.8	69.2	0	70.2	70.3	70	N	-	-	25.8	Y	N	N		
N2545	24	106	A1-4	-	45.8	0	50.3	53.7	62.7	69.5	0	70.5	70.5	70	Y	-	-	24.7	Y	N	N		
N2545	25	109.1	A1-4	-	46.8	0	50.6	53.8	62.5	69.7	0	70.6	70.6	70	Y	-	-	23.8	Y	N	N		
N2545	26	112.2	A1-4	-	47.6	0	50.8	53.9	62.4	69.9	0	70.7	70.7	70	Y	-	-	23.1	Y	N	N		
N2545	27	115.3	A1-4	-	48.2	0	50.9	54	62.3	70	0	70.8	70.8	70	Y	-	-	22.6	Y	N	N		

Note:  
 [1] Other Roads refer to planned road projects carried out by others such as Development of Lok Ma Chau Loop, Liantang / Heung Yuen Wai Boundary Control Point and Associated Works, Widening of Tolo Highway/Fairing Highway etc.  
 [2] PD - Primary Distributor Road; DD - District Distributor Road; LD - Local Distributor Road; EX - Expressway; TR - Trunk Road.  
 [3] New Roads refer to the proposed road networks including planned internal roads within PC/TKL NDA and modification of connecting roads to NDA.  
 [4] For landuse planned under NDA project, mitigation measures are required to mitigate the noise level to within noise criteria.  
 [5] For existing and planned NSRs outside and within the non-development area of NDA, Direct Mitigation Measures will be required when "With Project Overall Noise Level exceeds Noise Criteria" AND, either "With Project - Without Project Overall Noise Level ≥ 1 dB(A)" or "New Roads exceeds Noise Criteria" or "New Roads Contribution ≥ 1 dB(A)".

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN Social Welfarees & Kindergartens (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)		
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(1)</sup>	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A)	D ≥ 1dB(A)	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)	New Road > Criteria B > Criteria					
ID	Floor	Floor Level (mPD)		[A]		PD	DD	LD	EX	TR	[B]	[C]	dB(A)		[D]		[E]								
N6001	1	19	A3-3 Social welfare and Kindergarten	-	0	21.8	55.6	63.7	0	0	64.3	64.3	65	N	-	-	61.3	-	-	61.3	Y	N	N	N	
N6001	2	23.2	A3-3 Social welfare and Kindergarten	-	0	22.8	55.6	63.8	0	0	64.4	64.4	65	N	-	-	61.4	-	-	61.4	Y	N	N	N	
N6001	3	27.4	A3-3 Social welfare and Kindergarten	-	0	23.8	55.7	63.6	0	0	64.3	64.3	65	N	-	-	61.3	-	-	61.3	Y	N	N	N	
N6001	4	31.6	A3-3 Social welfare and Kindergarten	-	0	25	55.9	63.2	0	0	63.9	63.9	65	N	-	-	60.9	-	-	60.9	Y	N	N	N	
N6001	5	35.8	A3-3 Social welfare and Kindergarten	-	0	26.2	56.1	62.6	0	0	63.5	63.5	65	N	-	-	60.5	-	-	60.5	Y	N	N	N	
N6001	6	40	A3-3 Social welfare and Kindergarten	-	0	27.6	56.5	62	0	0	63.1	63.1	65	N	-	-	60.1	-	-	60.1	Y	N	N	N	
N6001	7	44.2	A3-3 Social welfare and Kindergarten	-	0	29	56.6	61.4	0	0	62.7	62.7	65	N	-	-	59.7	-	-	59.7	Y	N	N	N	
N6001	8	48.4	A3-3 Social welfare and Kindergarten	-	0	21.8	55.6	63.7	0	0	64.3	64.3	65	N	-	-	61.3	-	-	61.3	Y	N	N	N	
N6001	9	52.6	A3-3 Social welfare and Kindergarten	-	0	22.8	55.6	63.8	0	0	64.4	64.4	65	N	-	-	61.4	-	-	61.4	Y	N	N	N	
N6001	10	56.8	A3-3 Social welfare and Kindergarten	-	0	23.8	55.7	63.6	0	0	64.3	64.3	65	N	-	-	61.3	-	-	61.3	Y	N	N	N	
N6001	11	61	A3-3 Social welfare and Kindergarten	-	0	25	55.9	63.2	0	0	63.9	63.9	65	N	-	-	60.9	-	-	60.9	Y	N	N	N	
N6001	12	65.2	A3-3 Social welfare and Kindergarten	-	0	26.2	56.1	62.6	0	0	63.5	63.5	65	N	-	-	60.5	-	-	60.5	Y	N	N	N	
N6001	13	69.4	A3-3 Social welfare and Kindergarten	-	0	27.6	56.5	62	0	0	63.1	63.1	65	N	-	-	60.1	-	-	60.1	Y	N	N	N	
N6001	14	73.6	A3-3 Social welfare and Kindergarten	-	0	29	56.6	61.4	0	0	62.7	62.7	65	N	-	-	59.7	-	-	59.7	Y	N	N	N	
N6002	1	19	A3-3 Social welfare and Kindergarten	-	0	20.8	55.9	56	0	0	59	59	65	N	-	-	56.0	-	-	56.0	Y	N	N	N	
N6002	2	23.2	A3-3 Social welfare and Kindergarten	-	0	21.8	56	56	0	0	59	59	65	N	-	-	56.0	-	-	56.0	Y	N	N	N	
N6002	3	27.4	A3-3 Social welfare and Kindergarten	-	0	22.9	56	56	0	0	59	59	65	N	-	-	56.0	-	-	56.0	Y	N	N	N	
N6002	10	56.8	A3-3 Social welfare and Kindergarten	-	0	22.9	56	56	0	0	59	59	65	N	-	-	56.0	-	-	56.0	Y	N	N	N	
N6003	3	27.4	A3-3 Social welfare and Kindergarten	-	0	27.7	47.9	65	0	0	65	65	65	N	-	-	62.0	-	-	62.0	Y	N	N	N	
N6003	10	56.8	A3-3 Social welfare and Kindergarten	-	0	27.7	47.9	65	0	0	65	65	65	N	-	-	62.0	-	-	62.0	Y	N	N	N	
N6004	3	27.4	A3-3 Social welfare and Kindergarten	-	0	29.8	60.1	65.9	0	0	66.9	66.9	65	Y	-	-	63.9	-	-	63.9	Y	Y	Y	Y	
N6004	4	31.6	A3-3 Social welfare and Kindergarten	-	0	30.4	60	65.8	0	0	66.9	66.9	65	Y	-	-	63.9	-	-	63.9	Y	Y	Y	Y	
N6004	5	35.8	A3-3 Social welfare and Kindergarten	-	0	30.9	60	65.7	0	0	66.8	66.8	65	Y	-	-	63.8	-	-	63.8	Y	Y	Y	Y	
N6004	6	40	A3-3 Social welfare and Kindergarten	-	0	31.6	60	65.5	0	0	66.6	66.6	65	Y	-	-	63.6	-	-	63.6	Y	Y	Y	Y	
N6004	7	44.2	A3-3 Social welfare and Kindergarten	-	0	32.3	60	65.3	0	0	66.4	66.4	65	Y	-	-	63.4	-	-	63.4	Y	Y	Y	Y	
N6004	8	48.4	A3-3 Social welfare and Kindergarten	-	0	28.7	60.1	65.9	0	0	66.9	66.9	65	Y	-	-	63.9	-	-	63.9	Y	Y	Y	Y	
N6004	9	52.6	A3-3 Social welfare and Kindergarten	-	0	29.2	60.1	66	0	0	67	67	65	Y	-	-	64.0	-	-	64.0	Y	Y	Y	Y	
N6004	10	56.8	A3-3 Social welfare and Kindergarten	-	0	29.8	60.1	65.9	0	0	66.9	66.9	65	Y	-	-	63.9	-	-	63.9	Y	Y	Y	Y	
N6004	11	61	A3-3 Social welfare and Kindergarten	-	0	30.4	60	65.8	0	0	66.9	66.9	65	Y	-	-	63.9	-	-	63.9	Y	Y	Y	Y	
N6004	12	65.2	A3-3 Social welfare and Kindergarten	-	0	30.9	60	65.7	0	0	66.8	66.8	65	Y	-	-	63.8	-	-	63.8	Y	Y	Y	Y	
N6004	13	69.4	A3-3 Social welfare and Kindergarten	-	0	31.6	60	65.5	0	0	66.6	66.6	65	Y	-	-	63.6	-	-	63.6	Y	Y	Y	Y	
N6004	14	73.6	A3-3 Social welfare and Kindergarten	-	0	32.3	60	65.3	0	0	66.4	66.4	65	Y	-	-	63.4	-	-	63.4	Y	Y	Y	Y	
N6005	1	20	A3-3 Kindergarten	-	0	47	67.4	65.8	0	0	69.7	69.7	65	Y	-	-	66.7	-	-	66.7	Y	Y	Y	Y	
N6006	1	20	A3-3 Kindergarten	-	13.8	48	76.2	46.3	0	0	76.2	76.2	65	Y	-	-	62.2	-	-	62.2	Y	Y	Y	Y	
N6007	1	20	A3-3 Kindergarten	-	0	0	62.5	42.4	0	0	62.5	62.5	65	N	-	-	59.5	-	-	59.5	Y	N	N	N	
N6008	1	20	A3-3 Kindergarten	-	0	0	45.7	66	0	0	66	66	65	Y	-	-	63.0	-	-	63.0	Y	Y	Y	Y	
N6009	1	18	A3-3 Kindergarten	-	0	0	20.5	62.1	58	0	0	63.6	63.6	65	N	-	-	60.6	-	-	60.6	Y	N	N	N
N6010	1	18	A3-3 Kindergarten	-	7.6	0	19.5	76.1	41.9	0	0	76.1	76.1	65	Y	-	-	67.8	-	-	67.8	Y	Y	Y	Y
N6011	1	18	A3-3 Kindergarten	-	0	0	0	62.5	26.9	0	0	62.5	62.5	65	N	-	-	59.5	-	-	59.5	Y	N	N	N
N6012	1	18	A3-3 Kindergarten	-	0	0	0	40.4	55.9	0	0	56	56	65	N	-	-	53.0	-	-	53.0	Y	N	N	N
N6013	1	17	A3-3 Kindergarten	-	0	0	16	62.2	27.2	0	0	62.2	62.2	65	N	-	-	59.2	-	-	59.2	Y	N	N	N
N6014	1	17	A3-3 Kindergarten	-	0	0	18.4	76.1	42.1	0	0	76.1	76.1	65	Y	-	-	73.1	-	-	73.1	Y	Y	Y	Y
N6015	1	17	A3-3 Kindergarten	-	0	0	0	67.8	45.7	0	0	67.8	67.8	65	Y	-	-	64.8	-	-	64.8	Y	Y	Y	Y
N6016	1	17	A3-3 Kindergarten	-	0	0	0	36.7	50.8	0	0	51	51	65	N	-	-	48.0	-	-	48.0	Y	N	N	N
N6017	1	18	A3-3 Kindergarten	-	0	0	13.7	53.9	47.1	0	0	54.7	54.7	65	N	-	-	51.7	-	-	51.7	Y	N	N	N
N6018	1	18	A3-3 Kindergarten	-	0	0	15.4	54.7	49.8	0	0	55.9	55.9	65	N	-	-	52.9	-	-	52.9	Y	N	N	N
N6019	1	18	A3-3 Kindergarten	-	0	0	0	58.4	48.9	0	0	58.9	58.9	65	N	-	-	55.9	-	-	55.9	Y	N	N	N
N6020	1	17.5	A3-3 Kindergarten	-	0	0	38.9	54.6	67	0	0	67.3	67.3	65	Y	-	-	64.3	-	-	64.3	Y	Y	Y	Y
N6021	1	17.5	A3-3 Kindergarten	-	0	0	21.2	53.7	58.5	0	0	59.7	59.7	65	N	-	-	56.7	-	-	56.7	Y	N	N	N
N6022	1	17.5	A3-3 Kindergarten	-	0	0	0	54.9	45.8	0	0	55.4	55.4	65	N	-	-	52.4	-	-	52.4	Y	N	N	N
N6023	1	17.5	A3-3 Kindergarten	-	0	0	34.6	50.8	65	0	0	65.1	65.1	65	N	-	-	62.1	-	-	62.1	Y	N	N	N
N6024	1	21.1	A3-3 Kindergarten	-	0	0	21.1	58.6	63.7	0	0	64.9	64.9	65	N	-	-	61.9	-	-	61.9	Y	N	N	N
N6025	1	21.1	A3-3 Kindergarten	-	0	0	18.8	55.5	0	0	57.4	57.4	65	N	-	-	56.6	-	-	56.6	Y	N	N	N	
N6026	1	21.1	A3-3 Kindergarten	-	0	0	13.2	58.4	36.9	0	0	58.4	58.4	65	N	-	-	55.4	-	-	55.4	Y	N	N	N
N6027	1	21.1	A3-3 Kindergarten	-	0	0	19.7	26.8	61.2	0	0	61.2	61.2	65	N	-	-	58.2	-	-	58.2	Y	N	N	N
N6028	1	21.1	A3-3 Kindergarten	-	0	0	45.1	68.7	64.1	0	0	70	70	65	Y	-	-	67.0	-	-	67.0	Y	Y	Y	Y
N6029	1	21.1	A3-3 Kindergarten	-	0	0	14.6	74.1	53.8	0	0	74.1	74.1	65	Y	-	-	71.1	-	-	71.1	Y	Y	Y	Y
N6030	1	21.1	A3-3 Kindergarten	-	0	0	16.3	63.7	53.8	0	0	64.1	64.1	65	N	-	-	61.1	-	-	61.1	Y	N	N	N
N6031	1	21.1	A3-3 Kindergarten	-	0	0	17.6	58.9	64.1	0	0	65.3	65.3	65	N	-	-	62.3	-	-	62.3	Y	N	N	N
N6032	1	21.1	A3-3 Kindergarten	-	0	0	0	65	57	0	0	65.7	65.7	65	Y	-	-	62.7	-	-	62.7	Y	Y	Y	Y
N6033	1	21.1	A3-3 Kindergarten	-	0	0	18.3	75.3	44.7	0	0	75.3	75.3	65	Y	-	-	72.3	-	-	72.3	Y	Y	Y	Y
N6034	1	21.1	A3-3 Kindergarten	-	0	0	17.2	66.9	36.9	0	0	66.9	66.9	65	Y	-	-	63.9	-	-	63.9	Y	Y	Y	Y
N6035	1	21.1	A3-3 Kindergarten	-	0	0	0	47.2	57	0	0	57.4	57.4	65	N	-	-	54.4	-	-	54.4	Y	N	N	N
N6040	1	18	A3-3 Kindergarten	-	0	0	0	23.6	51.2	0	0	51.2	51.2	65	N	-	-	48.2	-	-	48.2	Y	N	N	N
N6041	1	19	A3-3 Kindergarten	-	0	0	20.4	52.8	58.7	0	0	59.7	59.7	65	N	-	-	56.7	-	-	56.7	Y	N	N	N
N6042	1	19	A3-3 Kindergarten	-	0	0	0	35.4	52.3	0	0	52.4	52.4	65	N	-	-	49.4	-						

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN Social Welfarees & Kindergartens (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance			Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(1)</sup>	Overall Noise Level in 2044 dB(A) <sup>(1)</sup>	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A)	D ≥ 1dB(A)	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)	New Road > Criteria B > Criteria	
							PD	DD	LD	EX	TR										
N6115	1	10	A2-7 Kindergarten	-	0	0	16.6	14.9	53.4	0	0	53.4	53.4	65	N	-	-	50.4	Y	N	N
N6115	2	14	A2-7 Kindergarten	-	0	0	16.6	14.9	53.4	0	0	53.4	53.4	65	N	-	-	50.4	Y	N	N
N6115	3	18	A2-7 Kindergarten	-	0	0	16.6	14.9	53.4	0	0	53.4	53.4	65	N	-	-	50.4	Y	N	N
N6115	4	22	A2-7 Kindergarten	-	0	0	16.6	14.8	53.3	0	0	53.3	53.3	65	N	-	-	50.3	Y	N	N
N6115	5	26	A2-7 Kindergarten	-	0	0	16.6	14.7	53.2	0	0	53.2	53.2	65	N	-	-	50.2	Y	N	N
N6115	6	30	A2-7 Kindergarten	-	0	0	16.6	14.5	53.1	0	0	53.1	53.1	65	N	-	-	50.1	Y	N	N
N6115	7	34	A2-7 Kindergarten	-	0	0	16.6	14.4	53	0	0	53	53	65	N	-	-	50.0	Y	N	N
N6116	1	10	A2-7 Kindergarten	-	0	0	0	67.2	51.4	0	0	67.3	67.3	65	Y	-	-	64.3	Y	Y	Y
N6116	2	14	A2-7 Kindergarten	-	0	0	0	67.2	51.4	0	0	67.3	67.3	65	Y	-	-	64.3	Y	Y	Y
N6116	3	18	A2-7 Kindergarten	-	0	0	0	67.2	51.4	0	0	67.3	67.3	65	Y	-	-	64.3	Y	Y	Y
N6116	4	22	A2-7 Kindergarten	-	0	0	0	67.1	51.4	0	0	67.2	67.2	65	Y	-	-	64.2	Y	Y	Y
N6116	5	26	A2-7 Kindergarten	-	0	0	0	67	51.4	0	0	67.1	67.1	65	Y	-	-	64.1	Y	Y	Y
N6116	6	30	A2-7 Kindergarten	-	0	0	0	66.8	51.3	0	0	67	67	65	Y	-	-	64.0	Y	Y	Y
N6116	7	34	A2-7 Kindergarten	-	0	0	0	66.7	51.3	0	0	66.8	66.8	65	Y	-	-	63.8	Y	Y	Y
N6117	1	13.6	A2-7 Kindergarten	-	12.9	0	44	53.8	62.6	0	0	63.2	63.2	65	N	-	-	50.1	Y	N	N
N6118	1	13.6	A2-7 Kindergarten	-	0	0	14.3	32.5	45	0	0	45.2	45.2	65	N	-	-	42.2	Y	N	N
N6119	1	13.6	A2-7 Kindergarten	-	0	0	0	48.7	25.2	0	0	48.7	48.7	65	N	-	-	45.7	Y	N	N
N6120	1	13.6	A2-7 Kindergarten	-	10.6	0	16.9	48.1	61.9	0	0	62.1	62.1	65	N	-	-	51.1	Y	N	N
N6121	1	15.1	A2-7 Kindergarten	-	10.5	0	17.3	43.3	53.5	0	0	53.9	53.9	65	N	-	-	43.0	Y	N	N
N6122	1	15.1	A2-7 Kindergarten	-	0	0	13.5	51.2	41.1	0	0	51.6	51.6	65	N	-	-	48.6	Y	N	N
N6123	1	15.1	A2-7 Kindergarten	-	0	0	0	55.7	45.8	0	0	56.1	56.1	65	N	-	-	53.1	Y	N	N
N6124	1	15.1	A2-7 Kindergarten	-	0	0	14.4	36.1	53.7	0	0	53.8	53.8	65	N	-	-	50.8	Y	N	N
N6125	1	16.6	A2-7 Kindergarten	-	0	0	0	55.1	48.4	0	0	55.9	55.9	65	N	-	-	52.9	Y	N	N
N6126	1	16.6	A2-7 Kindergarten	-	0	0	0	33.9	39.5	0	0	40.5	40.5	65	N	-	-	37.5	Y	N	N
N6127	1	16.6	A2-7 Kindergarten	-	0	0	0	51.6	40.2	0	0	51.9	51.9	65	N	-	-	48.9	Y	N	N
N6128	1	16.6	A2-7 Kindergarten	-	0	0	0	39.6	48.5	0	0	49	49	65	N	-	-	46.0	Y	N	N
N6129	1	16.6	A2-7 Kindergarten	-	0	0	12.8	66.3	55.5	0	0	66.6	66.6	65	Y	-	-	63.6	Y	Y	Y
N6130	1	16.6	A2-7 Kindergarten	-	0	0	0	23.5	47.2	0	0	47.2	47.2	65	N	-	-	44.2	Y	N	N
N6131	1	16.6	A2-7 Kindergarten	-	0	0	0	64.1	42.7	0	0	64.1	64.1	65	N	-	-	61.1	Y	N	N
N6132	1	16.6	A2-7 Kindergarten	-	0	0	13.3	72.1	56.4	0	0	72.2	72.2	65	Y	-	-	69.2	Y	Y	Y
N6141	1	16	A2-4 Kindergarten	-	0	0	0	74.8	47.6	0	0	74.8	74.8	65	Y	-	-	71.8	Y	Y	Y
N6142	1	16	A2-4 Kindergarten	-	0	0	0	66.4	36.4	0	0	66.4	66.4	65	Y	-	-	63.4	Y	Y	Y
N6143	1	16	A2-4 Kindergarten	-	0	0	25.5	16.4	14.3	0	0	26.3	26.3	65	N	-	-	23.3	Y	N	N
N6144	1	16	A2-4 Kindergarten	-	0	0	20.7	67.8	49	0	0	67.9	67.9	65	Y	-	-	64.9	Y	Y	Y
N6145	1	16	A2-4 Kindergarten	-	0	0	23.3	62.4	38.2	0	0	62.4	62.4	65	N	-	-	59.4	Y	N	N
N6146	1	16	A2-4 Kindergarten	-	0	0	20	56.6	38.6	18.8	0	56.7	56.7	65	N	-	-	53.7	Y	N	N
N6147	1	16	A2-4 Kindergarten	-	0	0	0	25.4	27.3	0	0	29.5	29.5	65	N	-	-	26.5	Y	N	N
N6148	1	16	A2-4 Kindergarten	-	0	0	0	60.3	39.9	0	0	60.4	60.4	65	N	-	-	57.4	Y	N	N
N6161	1	22.9	A1-2 Kindergarten	-	36.4	0	68	64.3	0	58.1	0	69.8	69.8	65	Y	-	-	33.4	Y	Y	Y
N6162	1	22.9	A1-2 Kindergarten	-	0	0	66.7	22	19.3	19.7	0	65.7	65.7	65	Y	-	-	62.7	Y	Y	Y
N6163	1	22.9	A1-2 Kindergarten	-	23.6	0	51.3	64.1	24.9	52.5	0	64.6	64.6	65	N	-	-	41.0	Y	N	N
N6164	1	22.9	A1-2 Kindergarten	-	43.5	0	63.3	71.3	50.6	57.1	0	72.1	72.1	65	Y	-	-	28.6	Y	Y	Y
N6165	1	22.9	A1-2 Kindergarten	-	26.8	0	60.3	63.8	0	45.9	0	65.5	65.5	65	Y	-	-	38.7	Y	Y	Y
N6166	1	22.9	A1-2 Kindergarten	-	0	0	54.8	16	19.4	22.9	0	54.8	54.8	65	N	-	-	48	Y	N	N
N6167	1	22.9	A1-2 Kindergarten	-	21.7	0	19	62.6	28.7	43.3	0	62.7	62.7	65	N	-	-	41.0	Y	N	N
N6168	1	22.9	A1-2 Kindergarten	-	28.5	0	57.1	70.7	55.1	45.3	0	71.1	71.1	65	Y	-	-	42.6	Y	Y	Y
N6169	1	21.9	A1-2 Kindergarten	-	25.6	0	44.2	64.1	20	51.5	0	64.4	64.4	65	N	-	-	38.8	Y	N	N
N6170	1	21.9	A1-2 Kindergarten	-	0	0	50	16.8	19.2	20	0	50	50	65	N	-	-	47.0	Y	N	N
N6171	1	21.9	A1-2 Kindergarten	-	0	0	0	62.4	62	57.3	0	65.8	65.8	65	Y	-	-	62.8	Y	Y	Y
N6172	1	21.9	A1-2 Kindergarten	-	25.7	0	54.9	72.6	61.3	46.3	0	73	73	65	Y	-	-	47.3	Y	Y	Y
N6173	1	20	A1-2 Kindergarten	-	30.1	0	66.4	51.2	0	41.6	0	66.6	66.6	65	Y	-	-	36.5	Y	Y	Y
N6173	2	24	A1-2 Kindergarten	-	31.6	0	66.5	51.2	0	42.8	0	66.6	66.6	65	Y	-	-	35.0	Y	Y	Y
N6174	1	20	A1-2 Kindergarten	-	0	0	62.9	23.5	19.3	0	0	62.9	62.9	65	N	-	-	59.9	Y	N	N
N6174	2	24	A1-2 Kindergarten	-	0	0	62.9	23.9	19.3	0	0	62.9	62.9	65	N	-	-	59.9	Y	N	N
N6175	1	20	A1-2 Kindergarten	-	0	0	0	52.5	27.1	25.9	0	52.6	52.6	65	N	-	-	49.6	Y	N	N
N6175	2	24	A1-2 Kindergarten	-	0	0	0	52.5	27.4	26.3	0	52.6	52.6	65	N	-	-	49.6	Y	N	N
N6201	1	22.1	A2-2 Kindergarten	-	16.1	0	29	67.2	59.3	19.3	0	67.9	67.9	65	Y	-	-	51.7	Y	Y	Y
N6202	1	22.1	A2-2 Kindergarten	-	0	0	48.1	74.4	62.1	0	0	74.7	74.7	65	Y	-	-	71.7	Y	Y	Y
N6203	1	22.1	A2-2 Kindergarten	-	0	0	0	69	39.9	0	0	69	69	65	Y	-	-	66.0	Y	Y	Y
N6204	1	22.1	A2-2 Kindergarten	-	14.5	0	28.5	21.8	0	19.1	0	29.8	29.9	65	N	-	-	15.2	Y	N	N
N6205	1	22.1	A2-2 Kindergarten	-	0	0	23.8	63.1	52.8	0	0	63.5	63.5	65	N	-	-	60.5	Y	N	N
N6206	1	22.1	A2-2 Kindergarten	-	0	0	8.2	72	53.8	0	0	72.1	72.1	65	Y	-	-	69.1	Y	Y	Y
N6207	1	22.1	A2-2 Kindergarten	-	0	0	0	66.6	25.8	0	0	66.6	66.6	65	Y	-	-	63.6	Y	Y	Y
N6208	1	22.1	A2-2 Kindergarten	-	0	0	33.1	10.5	11.2	0	0	33.1	33.1	65	N	-	-	30.1	Y	N	N
N6209	1	22.1	A2-2 Kindergarten	-	14.9	0	32.5	59.7	52.6	22.7	0	60.5	60.5	65	N	-	-	45.5	Y	N	N
N6210	1	22.1	A2-2 Kindergarten	-	0	0	32.3	59.4	27.7	0	0	59.5	59.5	65	N	-	-	56.5	Y	N	N
N6211	1	22.1	A2-2 Kindergarten	-	0	0	0	57.4	22.4	0	0	57.4	57.4	65	N	-	-	54.4	Y	N	N
N6212	1	19	A2-2 Kindergarten	-	10.6	0	55.7	49.2	48.7	31	0	57.2	57.2	65	N	-	-	46.2	Y	N	N
N6212	2	26	A2-2 Kindergarten	-	10.7	0	55.7	49.3	48.8	32.5	0	57.2	57.2	65	N	-	-	46.1	Y	N	N
N6213	1	19	A2-2 Kindergarten	-	0	0	43.5	54.7	49.9	19.8	0	56.2	56.2	65	N	-	-	53.2	Y	N	N
N6213	2	19	A2-2 Kindergarten	-	0	0	43.8	54.7	49.9	23.7	0	56.2	56.2	65	N	-	-	53.2	Y	N	N
N6220	1	35	A2-2 Kindergarten	-	0	0	73.5	65.6	0	29.4	0	74.1	74.1	65	Y	-	-	71.1	Y	Y	Y
N6220	2	38	A2-2 Kindergarten	-	0	0	73.2	65.4	0	30.9	0	73.8	73.8	65	Y	-	-	70.8	Y	Y	Y
N6220	3	41	A2-2 Kindergarten	-	0	0	72.8	65.3	0	32.4	0	73.5	73.5	65	Y	-	-	70.5	Y	Y	Y
N6221	1	35	A2-2 Kindergarten	-	0	0	56.4														



Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN Social Welfare & Kindergartens (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance			Check Direct Mitigation			Mitigation Measures Required <sup>15</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>1)</sup>	New Roads <sup>2)</sup>					New Roads in 2044 dB(A) <sup>3)</sup>	Overall Noise Level in 2044 dB(A)	New Road Contribution dB(A)				New Road Contribution ≥ 1dB(A)	New Road > Criteria B > Criteria					
							PD	DD	LD	EX	TR									C - A dB(A)	D ≥ 1dB(A)	D ≥ 1dB(A)		
N6231	1	28.1	A2-2 Kindergarten	-	20.3	0	40.5	19.5	0	23.1	0	40.6	40.7	65	N	-	-	19.9	Y	N	N			
N6232	1	28.1	A2-2 Kindergarten	-	37.8	0	69.5	49.8	0	49.2	0	69.6	69.6	65	Y	-	-	31.8	Y	N	Y			
N6233	1	28.1	A2-2 Kindergarten	-	0	0	52.2	47.1	21.4	0	0	53.4	53.4	65	N	-	-	50.4	Y	N	N			
N6234	1	28.1	A2-2 Kindergarten	-	0	0	33.9	57.9	52.5	0	0	59	59	65	N	-	-	56.0	Y	N	N			
N6235	1	28.1	A2-2 Kindergarten	-	0	0	0	56.6	54.5	0	0	58.7	58.7	65	N	-	-	55.7	Y	N	N			
N6236	1	25	A2-2 Kindergarten	-	0	0	0	54.6	53	0	0	56.8	56.8	65	N	-	-	53.8	Y	N	N			
N6236	2	32	A2-2 Kindergarten	-	0	0	0	54.6	53	0	0	56.9	56.9	65	N	-	-	53.9	Y	N	N			
N6237	1	25	A2-2 Kindergarten	-	37.5	0	61.7	49.2	40.2	37.6	0	62	62	65	N	-	-	24.5	Y	N	N			
N6237	2	32	A2-2 Kindergarten	-	37.8	0	61.8	49.4	40.3	39.3	0	62.1	62.1	65	N	-	-	24.3	Y	N	N			
N6238	1	25	A2-2 Kindergarten	-	40.8	0	70.6	50.8	0	53.2	0	70.7	70.7	65	Y	-	-	29.9	Y	Y	Y			
N6238	2	32	A2-2 Kindergarten	-	40.9	0	70.5	50.9	0	53.7	0	70.7	70.7	65	Y	-	-	29.8	Y	Y	Y			
N6269	1	19.5	A1-4 Kindergarten	-	0	0	0	38.3	61.2	54.5	0	62	62	65	N	-	-	59.0	Y	N	N			
N6269	2	24	A1-4 Kindergarten	-	0	0	0	38.6	61.1	55	0	62	62	65	N	-	-	59.0	Y	N	N			
N6270	1	19.5	A1-4 Kindergarten	-	19.8	0	47.6	59.3	72.7	46.8	0	72.9	72.9	65	Y	-	-	53.1	Y	Y	Y			
N6270	2	24	A1-4 Kindergarten	-	20.7	0	49.5	58.9	72.3	48.1	0	72.5	72.5	65	Y	-	-	51.8	Y	Y	Y			
N6315	1	24.3	A1-4 Kindergarten	-	20.3	0	25.3	44.8	70.3	49.7	0	70.3	70.3	65	Y	-	-	50.0	Y	Y	Y			
N6316	1	24.3	A1-4 Kindergarten	-	20.6	0	25	40.7	70.1	48.8	0	70.1	70.1	65	Y	-	-	49.5	Y	Y	Y			
N6317	1	24.3	A1-4 Kindergarten	-	0	0	22.6	32.9	66.3	48.7	0	66.4	66.4	65	Y	-	-	53.4	Y	Y	Y			
N6318	1	24.3	A1-4 Kindergarten	-	0	0	24.5	26.9	20	29.8	0	66.5	66.5	65	Y	-	-	29.6	Y	N	N			
N6520	1	17.5	A3-3 Social welfare	-	0	0	38.9	54.6	67	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N			
N6520	2	21.5	A3-3 Social welfare	-	0	0	38.9	54.6	67	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N			
N6520	3	25.5	A3-3 Social welfare	-	0	0	38.9	54.6	66.8	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N			
N6520	4	29.5	A3-3 Social welfare	-	0	0	38.9	54.6	66.6	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N			
N6520	5	33.5	A3-3 Social welfare	-	0	0	38.9	54.6	66.3	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N			
N6520	6	37.5	A3-3 Social welfare	-	0	0	38.9	54.6	65.9	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N			
N6520	7	41.5	A3-3 Social welfare	-	0	0	38.9	54.6	65.6	0	0	66	66	70	N	-	-	63.0	Y	N	N			
N6521	1	17.5	A3-3 Social welfare	-	0	0	25.7	54.4	66.2	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N			
N6521	2	21.5	A3-3 Social welfare	-	0	0	25.7	54.4	66.2	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N			
N6521	3	25.5	A3-3 Social welfare	-	0	0	25.7	54.4	66	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N			
N6521	4	29.5	A3-3 Social welfare	-	0	0	25.7	54.4	65.8	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N			
N6521	5	33.5	A3-3 Social welfare	-	0	0	25.7	54.4	65.6	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N			
N6521	6	37.5	A3-3 Social welfare	-	0	0	25.6	54.4	65.3	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N			
N6521	7	41.5	A3-3 Social welfare	-	0	0	25.6	54.3	65	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N			
N6522	1	17.5	A3-3 Social welfare	-	0	0	34.6	50.8	65	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N			
N6522	2	21.5	A3-3 Social welfare	-	0	0	34.6	50.8	64.9	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N			
N6522	3	25.5	A3-3 Social welfare	-	0	0	34.6	50.8	64.8	0	0	65	65	70	N	-	-	62.0	Y	N	N			
N6522	4	29.5	A3-3 Social welfare	-	0	0	34.6	50.8	64.6	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N			
N6522	5	33.5	A3-3 Social welfare	-	0	0	34.6	50.8	64.4	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N			
N6522	6	37.5	A3-3 Social welfare	-	0	0	34.6	50.8	64.2	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N			
N6522	7	41.5	A3-3 Social welfare	-	0	0	34.6	50.8	63.9	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N			
N6613	1	10	A2-7 Social welfare	-	0	0	0	72.2	62.1	0	0	72.6	72.6	70	Y	-	-	69.6	Y	Y	Y			
N6613	2	14	A2-7 Social welfare	-	0	0	0	72.2	62.1	0	0	72.6	72.6	70	Y	-	-	69.6	Y	Y	Y			
N6613	3	18	A2-7 Social welfare	-	0	0	0	71.9	62	0	0	72.3	72.3	70	Y	-	-	69.3	Y	Y	Y			
N6613	4	22	A2-7 Social welfare	-	0	0	0	71.5	61.9	0	0	71.9	71.9	70	Y	-	-	68.9	Y	Y	Y			
N6613	5	26	A2-7 Social welfare	-	0	0	0	71.1	61.8	0	0	71.6	71.6	70	Y	-	-	68.6	Y	Y	Y			
N6613	6	30	A2-7 Social welfare	-	0	0	0	70.7	61.7	0	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	Y			
N6613	7	34	A2-7 Social welfare	-	0	0	0	70.3	61.5	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y			
N6614	1	10	A2-7 Social welfare	-	8.3	0	27.9	65.8	68.1	0	0	70.1	70.1	70	N	-	-	61.2	Y	N	N			
N6614	2	14	A2-7 Social welfare	-	8.4	0	28.5	65.8	68	0	0	70	70	70	N	-	-	61.0	Y	N	N			
N6614	3	18	A2-7 Social welfare	-	8.5	0	29.2	65.8	67.6	0	0	69.8	69.8	70	N	-	-	60.7	Y	N	N			
N6614	4	22	A2-7 Social welfare	-	8.8	0	30.1	65.7	67.1	0	0	69.5	69.5	70	N	-	-	60.2	Y	N	N			
N6614	5	26	A2-7 Social welfare	-	10.6	0	31.2	65.7	66.6	0	0	69.2	69.2	70	N	-	-	58.2	Y	N	N			
N6614	6	30	A2-7 Social welfare	-	13	0	32.1	65.6	66.1	0	0	68.9	68.9	70	N	-	-	55.7	Y	N	N			
N6614	7	34	A2-7 Social welfare	-	15.9	0	33.1	65.5	65.7	0	0	68.6	68.6	70	N	-	-	52.6	Y	N	N			
N6681	1	20	A1-2 Social welfare	-	20.3	0	50	52.5	0	28.6	0	54.5	54.5	70	N	-	-	34.2	Y	N	N			
N6681	2	24	A1-2 Social welfare	-	20.4	0	51.6	52.6	0	28.7	0	55.1	55.1	70	N	-	-	34.7	Y	N	N			
N6681	3	28	A1-2 Social welfare	-	20.4	0	56.7	52.6	0	28.7	0	58.1	58.1	70	N	-	-	37.7	Y	N	N			
N6681	4	32	A1-2 Social welfare	-	20.4	0	59.7	52.7	0	28.7	0	60.5	60.5	70	N	-	-	40.1	Y	N	N			
N6681	5	36	A1-2 Social welfare	-	20.4	0	60.6	52.7	0	28.6	0	61.3	61.3	70	N	-	-	40.9	Y	N	N			
N6682	1	20	A1-2 Social welfare	-	0	0	58.7	16	23.8	0	0	58.7	58.7	70	N	-	-	55.7	Y	N	N			
N6682	2	24	A1-2 Social welfare	-	0	0	58.7	16	25	0	0	58.7	58.7	70	N	-	-	55.7	Y	N	N			
N6682	3	28	A1-2 Social welfare	-	0	0	58.7	16	26.3	0	0	58.7	58.7	70	N	-	-	55.7	Y	N	N			
N6682	4	32	A1-2 Social welfare	-	0	0	58.8	16	28	0	0	58.8	58.8	70	N	-	-	55.8	Y	N	N			
N6682	5	36	A1-2 Social welfare	-	0	0	58.8	16	29.8	0	0	58.8	58.8	70	N	-	-	55.8	Y	N	N			
N6683	1	20	A1-2 Social welfare	-	0	0	0	54.2	56.5	27.4	0	58.5	58.5	70	N	-	-	55.5	Y	N	N			
N6683	2	24	A1-2 Social welfare	-	0	0	0	54.9	56.5	27.4	0	58.8	58.8	70	N	-	-	55.8	Y	N	N			
N6683	3	28	A1-2 Social welfare	-	0	0	0	55.1	56.5	27.5	0	58.9	58.9	70	N	-	-	55.9	Y	N	N			
N6683	4	32	A1-2 Social welfare	-	0	0	0	55	56.5	27.6	0	58.8	58.8	70	N	-	-	55.8	Y	N	N			
N6683	5	36	A1-2 Social welfare	-	0	0	0	55	56.5	27.6	0	58.8	58.8	70	N	-	-	55.8	Y	N	N			
N6781	1	16.5	B2-8 Social welfare	-	0	0	11.3	40.5	53.6	0	0	53.8	53.8	70	N	-	-	50.8	Y	N	N			
N6781	2	20.5	B2-8 Social welfare	-	0	0	11.3	40.5	53.6	0	0	53.8	53.8	70	N	-	-	50.8	Y	N	N			
N6781	3	24.5	B2-8 Social welfare	-	0	0	11.5	40.6	53.6	0	0	53.8	53.8	70	N	-	-	50.8	Y	N	N			
N6781	4	28.5	B2-8 Social welfare	-	0	0	11.8	40.7	53.6	0	0	53.8	53.8	70	N	-	-	50.8	Y	N	N			
N6781	5	32.5	B2-8 Social welfare	-	0	0	12.1	40.7	53.6	0	0	53.8	53.8	70	N	-	-	50.8	Y	N	N			
N6782	1	16.5	B2-8 Social welfare	-	49	0																		

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN Social Welfarees & Kindergartens (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>(15)</sup> (Y/N)
ID	Floor	Floor Level (mHPD)		Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(1)</sup>	Overall Noise Level in 2044 dB(A) <sup>(1)</sup>	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A)	D	D ≥ 1dB(A)	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)	New Road > Criteria B > Criteria		
							PD	DD	LD	EX	TR											[B]	
R6261	2	24	A1-4 Kindergarten	-	0	0	54	35.3	20.5	0	0	54.1	54.1	65	N	-	-	-	51.1	Y	N	N	
R6262	1	19.5	A1-4 Kindergarten	-	0	0	49.7	33.9	13.4	0	0	49.8	49.8	65	N	-	-	-	46.8	Y	N	N	
R6262	2	24	A1-4 Kindergarten	-	0	0	49.7	34.7	13.4	0	0	49.8	49.8	65	N	-	-	-	46.8	Y	N	N	
R6263	1	19.5	A1-4 Kindergarten	-	0	0	47.6	33	12.3	0	0	47.8	47.8	65	N	-	-	-	44.8	Y	N	N	
R6263	2	24	A1-4 Kindergarten	-	0	0	47.7	33.6	12.4	0	0	47.9	47.9	65	N	-	-	-	44.9	Y	N	N	
R6264	1	19.5	A1-4 Kindergarten	-	0	0	19.4	34.1	28.3	0	0	35.2	35.2	65	N	-	-	-	32.2	Y	N	N	
R6264	2	24	A1-4 Kindergarten	-	0	0	19.4	38.1	28.4	0	0	38.6	38.6	65	N	-	-	-	35.6	Y	N	N	
R6265	1	19.5	A1-4 Kindergarten	-	19.2	0	25.8	37.4	36.3	31.5	0	40.6	40.6	65	N	-	-	-	21.3	Y	N	N	
R6265	2	24	A1-4 Kindergarten	-	20	0	29.1	40.5	39.2	31.6	0	43.4	43.4	65	N	-	-	-	23.4	Y	N	N	
R6266	1	19.5	A1-4 Kindergarten	-	18.5	0	53.5	55.7	55.7	25.1	0	59.7	59.7	65	N	-	-	-	41.1	Y	N	N	
R6266	2	24	A1-4 Kindergarten	-	18.5	0	53.5	55.3	55.7	25.1	0	59.7	59.7	65	N	-	-	-	41.1	Y	N	N	
R6267	1	19.5	A1-4 Kindergarten	-	0	0	33.1	11.3	5.3	0	0	33.1	33.1	65	N	-	-	-	30.1	Y	N	N	
R6267	2	24	A1-4 Kindergarten	-	0	0	36.7	11.3	5.3	0	0	36.7	36.7	65	N	-	-	-	33.7	Y	N	N	
R6271	1	19.5	A1-4 Kindergarten	-	20.6	0	37	59.9	63.1	54	0	65.2	65.2	65	N	-	-	-	44.6	Y	N	N	
R6271	2	24	A1-4 Kindergarten	-	21.6	0	37.6	59.8	63	54.2	0	65.1	65.1	65	N	-	-	-	43.5	Y	N	N	
R6301	1	17.5	A1-5 Kindergarten	-	0	0	0	52	0	0	0	52	52	65	N	-	-	-	49.0	Y	N	N	
R6301	2	22	A1-5 Kindergarten	-	0	0	0	52	0	0	0	52	52	65	N	-	-	-	49.0	Y	N	N	
R6302	1	17.5	A1-5 Kindergarten	-	0	0	0	27	21.3	29.7	0	33	33	65	N	-	-	-	30.0	Y	N	N	
R6302	2	22	A1-5 Kindergarten	-	0	0	0	27	28.1	29.8	0	33.2	33.2	65	N	-	-	-	30.2	Y	N	N	
R6303	1	17.5	A1-5 Kindergarten	-	17	0	17.3	29.6	46.8	40.5	0	47.8	47.8	65	N	-	-	-	30.7	Y	N	N	
R6303	2	22	A1-5 Kindergarten	-	17.1	0	17.4	29.7	46.8	40.7	0	47.9	47.9	65	N	-	-	-	30.7	Y	N	N	
R6304	1	17.5	A1-5 Kindergarten	-	9.5	0	0	46.1	55.8	60.1	0	61.6	61.6	65	N	-	-	-	51.6	Y	N	N	
R6304	2	22	A1-5 Kindergarten	-	9.5	0	0	46.1	55.8	60.6	0	62	62	65	N	-	-	-	52.0	Y	N	N	
R6305	1	17.5	A1-5 Kindergarten	-	18.7	0	38.6	55	70.1	56.1	0	70.4	70.4	65	Y	-	-	-	51.6	Y	Y	Y	
R6305	2	22	A1-5 Kindergarten	-	19.9	0	40.9	54.9	70	56.8	0	70.3	70.3	65	Y	-	-	-	50.4	Y	Y	Y	
R6306	1	17.5	A1-5 Kindergarten	-	17.6	0	23.9	28.6	61.4	45.3	0	61.5	61.5	65	N	-	-	-	43.8	Y	N	N	
R6306	2	22	A1-5 Kindergarten	-	18	0	24.3	29	61.4	46	0	61.5	61.5	65	N	-	-	-	43.4	Y	N	N	
R6307	1	17.5	A1-5 Kindergarten	-	17.1	0	19.4	29.7	57.5	42	0	57.6	57.6	65	N	-	-	-	40.4	Y	N	N	
R6307	2	22	A1-5 Kindergarten	-	17.2	0	19.4	29.9	57.5	42.4	0	57.6	57.6	65	N	-	-	-	40.3	Y	N	N	
R6308	1	17.5	A1-5 Kindergarten	-	17.3	0	19.4	30.6	56.3	42.4	0	56.5	56.5	65	N	-	-	-	39.1	Y	N	N	
R6308	2	22	A1-5 Kindergarten	-	17.4	0	19.5	31.4	56.3	43.4	0	56.5	56.5	65	N	-	-	-	39.0	Y	N	N	
R6309	1	17.5	A1-5 Kindergarten	-	9.1	0	18.8	24.9	29.7	25.2	0	32.2	32.2	65	N	-	-	-	22.6	Y	N	N	
R6309	2	22	A1-5 Kindergarten	-	9.1	0	18.8	24.9	31.2	25.2	0	33.1	33.1	65	N	-	-	-	23.5	Y	N	N	
R6310	1	17.5	A1-5 Kindergarten	-	0	0	0	44.3	9	0	0	44.3	44.3	65	N	-	-	-	41.3	Y	N	N	
R6310	2	22	A1-5 Kindergarten	-	0	0	0	44.3	9	0	0	44.3	44.3	65	N	-	-	-	41.3	Y	N	N	
R6311	1	17	A1-5 Kindergarten	-	0	0	0	20.9	0	0	0	20.9	20.9	65	N	-	-	-	17.9	Y	N	N	
R6312	1	17	A1-5 Kindergarten	-	10	0	0	49.8	51.8	62.7	0	63.2	63.2	65	N	-	-	-	52.8	Y	N	N	
R6313	1	17	A1-5 Kindergarten	-	19.2	0	24.4	54.9	64.4	62.5	0	66.9	66.9	65	Y	-	-	-	47.6	Y	Y	Y	
R6314	1	17	A1-5 Kindergarten	-	16.6	0	19.8	27.2	54.9	43.8	0	55.2	55.2	65	N	-	-	-	38.5	Y	N	N	
R6331	1	14.8	A1-6 Kindergarten	-	0	0	0	41.8	30.3	0	0	42.1	42.1	65	N	-	-	-	39.1	Y	N	N	
R6331	2	19.3	A1-6 Kindergarten	-	0	0	0	41.9	33.1	0	0	42.4	42.4	65	N	-	-	-	39.4	Y	N	N	
R6332	1	14.8	A1-6 Kindergarten	-	23	0	0	53.6	40.6	30.1	0	53.9	53.9	65	N	-	-	-	30.9	Y	N	N	
R6332	2	19.3	A1-6 Kindergarten	-	25.2	0	0	53.6	40.8	30.4	0	53.9	53.9	65	N	-	-	-	28.7	Y	N	N	
R6333	1	14.8	A1-6 Kindergarten	-	17.1	0	13.3	28.2	40.3	47.9	0	47.9	47.9	65	N	-	-	-	30.7	Y	N	N	
R6333	2	19.3	A1-6 Kindergarten	-	17.5	0	13.4	47.4	28.2	40.5	0	48.3	48.3	65	N	-	-	-	30.7	Y	N	N	
R6334	1	14.8	A1-6 Kindergarten	-	17	0	12.7	33.5	31.9	25.4	0	36.2	36.2	65	N	-	-	-	19.1	Y	N	N	
R6334	2	19.3	A1-6 Kindergarten	-	17	0	12.7	34.8	33.7	25.5	0	37.6	37.6	65	N	-	-	-	20.5	Y	N	N	
R6335	1	14.8	A1-6 Kindergarten	-	18.8	0	14.3	32.6	41.3	32.4	0	42.4	42.4	65	N	-	-	-	23.5	Y	N	N	
R6335	2	19.3	A1-6 Kindergarten	-	19.4	0	14.4	33.3	42	32.5	0	42.9	43	65	N	-	-	-	23.6	Y	N	N	
R6336	1	14.8	A1-6 Kindergarten	-	0	0	0	41.7	34	0	0	42.4	42.4	65	N	-	-	-	39.4	Y	N	N	
R6336	2	19.3	A1-6 Kindergarten	-	0	0	0	42	34.2	0	0	42.7	42.7	65	N	-	-	-	39.7	Y	N	N	
R6337	1	14.8	A1-6 Kindergarten	-	0	0	0	33.4	24.1	0	0	33.9	33.9	65	N	-	-	-	30.9	Y	N	N	
R6337	2	19.3	A1-6 Kindergarten	-	0	0	0	33.4	25	0	0	34.6	34.6	65	N	-	-	-	31.6	Y	N	N	
R6338	1	14.8	A1-6 Kindergarten	-	14.1	0	0	61.5	31.7	54.2	0	62.3	62.3	65	N	-	-	-	48.0	Y	N	N	
R6338	2	19.3	A1-6 Kindergarten	-	14.1	0	0	61.5	34.8	54.8	0	62.4	62.4	65	N	-	-	-	48.1	Y	N	N	
R6339	1	14.8	A1-6 Kindergarten	-	14.2	0	16.8	64.7	64.6	61.1	0	68.5	68.5	65	Y	-	-	-	54.1	Y	Y	Y	
R6339	2	19.3	A1-6 Kindergarten	-	14.8	0	17.8	64.6	64.4	61.6	0	68.5	68.5	65	Y	-	-	-	53.6	Y	Y	Y	
R6340	1	14.8	A1-6 Kindergarten	-	15.1	0	17.3	25	54.7	41.1	0	54.9	54.9	65	N	-	-	-	39.7	Y	N	N	
R6340	2	19.3	A1-6 Kindergarten	-	15.1	0	17.3	25.1	54.6	41.4	0	54.8	54.8	65	N	-	-	-	39.6	Y	N	N	
R6341	1	14.8	A1-6 Kindergarten	-	0	0	0	21.9	14.9	0	0	22.7	22.7	65	N	-	-	-	19.7	Y	N	N	
R6341	2	19.3	A1-6 Kindergarten	-	0	0	0	21.9	14.9	0	0	22.7	22.7	65	N	-	-	-	19.7	Y	N	N	
R6342	1	14.8	A1-6 Kindergarten	-	10.6	0	0	37.6	54.8	41.5	0	55.1	55.1	65	N	-	-	-	44.1	Y	N	N	
R6342	2	19.3	A1-6 Kindergarten	-	10.6	0	0	42.8	54.8	41.8	0	55.3	55.3	65	N	-	-	-	44.3	Y	N	N	
R6343	1	14.8	A1-6 Kindergarten	-	18.5	0	36.2	58.8	64.7	47.6	0	65.7	65.7	65	Y	-	-	-	47.1	Y	Y	Y	
R6343	2	19.3	A1-6 Kindergarten	-	18.4	0	37.8	58.7	64.6	49.2	0	65.7	65.7	65	Y	-	-	-	46.3	Y	Y	Y	
R6344	1	14.8	A1-6 Kindergarten	-	19.3	0	21	48.5	56.8	61.9	0	63.2	63.2	65	N	-	-	-	44.8	Y	N	N	
R6344	2	19.3	A1-6 Kindergarten	-	19.4	0	21.9	48.5	56.8	62.5	0	63.7	63.7	65	N	-	-	-	44.3	Y	N	N	
R6345	1	14.8	A1-6 Kindergarten	-	0	0	0	21	4.4	0	0	21.1	21.1	65	N	-	-	-	18.1	Y	N	N	
R6345	2	19.3	A1-6 Kindergarten	-	0	0	0	21.1	4.4	0	0	21.2	21.2	65	N	-	-	-	18.2	Y	N	N	
R6346	1	14.8	A1-6 Kindergarten	-	10	0	0	31.8	31.8	32.2	0	36.9	36.9	65	N	-	-	-	26.5	Y	N	N	
R6346	2	19.3	A1-6 Kindergarten	-	9.9	0	0	34.4	34.3	32.3	0	38.5	38.5	65	N	-	-	-	28.2	Y	N	N	
R6347	1	14.8	A1-6 Kindergarten	-	17.4	0	15.6	30.3	51.2	40.6													

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN Social Welfarees & Kindergartens (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>(15)</sup> (Y/N)
ID	Floor	Floor Level (mPHD)		Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A)	D ≥ 1dB(A)	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)	New Road > Criteria B > Criteria					
			[A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR			New Roads in 2044 dB(A) <sup>(2)</sup>	[B]	[C]	[D]	[E]	F ≥ 1dB(A)	G > Criteria			
R6385	2	16.5	A1-8 Kindergarten	-	13.8	0	10	55.7	42.6	0	0	54	54	65	N	-	-	42.0	N	N	N	
R6386	1	12	A1-8 Kindergarten	-	0	0	14.8	30.6	47.5	0	0	47.6	47.6	65	N	-	-	44.6	Y	N	N	
R6386	2	16.5	A1-8 Kindergarten	-	0	0	14.8	30.9	47.5	0	0	47.6	47.6	65	N	-	-	44.6	Y	N	N	
R6387	1	12	A1-8 Kindergarten	-	26.1	0	17.4	62.2	42.6	65	0	66.9	66.9	65	Y	-	-	40.8	Y	Y	Y	
R6387	2	16.5	A1-8 Kindergarten	-	27.4	0	17.4	62.1	42.6	65.7	0	67.3	67.3	65	Y	-	-	39.9	Y	Y	Y	
R6388	1	12	A1-8 Kindergarten	-	30	0	12.5	68.4	52.2	61.9	0	69.4	69.4	65	Y	-	-	39.4	Y	Y	Y	
R6388	2	16.5	A1-8 Kindergarten	-	31.3	0	12.6	68.3	52	62.6	0	69.4	69.4	65	Y	-	-	38.1	Y	Y	Y	
R6389	1	12	A1-8 Kindergarten	-	0	0	14.3	61.4	54	48.3	0	62.3	62.3	65	N	-	-	59.3	Y	N	N	
R6389	2	16.5	A1-8 Kindergarten	-	0	0	14.9	61.4	54	49.2	0	62.3	62.3	65	N	-	-	59.3	Y	N	N	
R6390	1	12	A1-8 Kindergarten	-	0	0	0	29.5	43.3	0	0	43.5	43.5	65	N	-	-	40.5	Y	N	N	
R6390	2	16.5	A1-8 Kindergarten	-	0	0	0	29.6	43.5	0	0	43.6	43.6	65	N	-	-	40.6	Y	N	N	
R6391	1	12	A1-8 Kindergarten	-	0	0	0	22.9	46.2	0	0	46.2	46.2	65	N	-	-	43.2	Y	N	N	
R6391	2	16.5	A1-8 Kindergarten	-	0	0	0	23	46.2	0	0	46.2	46.2	65	N	-	-	43.2	Y	N	N	
R6392	1	12	A1-8 Kindergarten	-	0	0	15	23.3	47.9	0	0	47.9	47.9	65	N	-	-	44.9	Y	N	N	
R6392	2	16.5	A1-8 Kindergarten	-	0	0	15	23.3	47.9	0	0	47.9	47.9	65	N	-	-	44.9	Y	N	N	
R6581	1	14	A2-5 Social welfare	-	0	0	11.9	67.4	53.8	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	
R6581	2	18.5	A2-5 Social welfare	-	0	0	11.9	67.3	53.8	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	
R6582	1	14	A2-5 Social welfare	-	0	0	0	59.3	44	0	0	59.5	59.5	70	N	-	-	56.5	Y	N	N	
R6582	2	18.5	A2-5 Social welfare	-	0	0	0	59.3	44	0	0	59.5	59.5	70	N	-	-	56.5	Y	N	N	
R6583	1	14	A2-5 Social welfare	-	0	0	0	17.5	15.8	0	0	19.8	19.8	70	N	-	-	16.8	Y	N	N	
R6583	2	18.5	A2-5 Social welfare	-	0	0	0	17.5	15.8	0	0	19.8	19.8	70	N	-	-	16.8	Y	N	N	
R6584	1	14	A2-5 Social welfare	-	0	0	0	16.7	15.9	0	0	19.3	19.3	70	N	-	-	16.3	Y	N	N	
R6584	2	18.5	A2-5 Social welfare	-	0	0	0	16.7	15.9	0	0	19.3	19.3	70	N	-	-	16.3	Y	N	N	
R6585	1	14	A2-5 Social welfare	-	0	0	17.3	64.7	21.2	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	
R6585	2	18.5	A2-5 Social welfare	-	0	0	17.3	64.7	21.2	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	
R6586	1	14	A2-5 Social welfare	-	0	0	22.8	68.3	37.6	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	
R6586	2	18.5	A2-5 Social welfare	-	0	0	24.2	68.3	38.3	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	
R6587	1	14	A2-5 Social welfare	-	0	0	0	74.2	51.3	0	0	74.2	74.2	70	Y	-	-	71.2	Y	Y	Y	
R6587	2	18.5	A2-5 Social welfare	-	0	0	0	74	51.3	0	0	74.1	74.1	70	Y	-	-	71.1	Y	Y	Y	
R6588	1	14	A2-5 Social welfare	-	0	0	0	51.5	30.1	0	0	51.5	51.5	70	N	-	-	48.5	Y	N	N	
R6588	2	18.5	A2-5 Social welfare	-	0	0	0	51.5	32.2	0	0	51.5	51.5	70	N	-	-	48.5	Y	N	N	
R6589	1	14	A2-5 Social welfare	-	0	0	0	24.9	28.1	0	0	29.8	29.8	70	N	-	-	26.8	Y	N	N	
R6589	2	18.5	A2-5 Social welfare	-	0	0	0	25.1	28.8	0	0	30.3	30.3	70	N	-	-	27.3	Y	N	N	
R6590	1	14	A2-5 Social welfare	-	0	0	0	60	24.8	0	0	60	60	70	N	-	-	57.0	Y	N	N	
R6590	2	18.5	A2-5 Social welfare	-	0	0	0	60	25.2	0	0	60	60	70	N	-	-	57.0	Y	N	N	
R6591	1	14	A2-5 Social welfare	-	0	0	0	52.7	25.2	0	0	52.7	52.7	70	N	-	-	49.7	Y	N	N	
R6591	2	18.5	A2-5 Social welfare	-	0	0	0	53.1	25.3	0	0	53.1	53.1	70	N	-	-	50.1	Y	N	N	
R6592	1	14	A2-5 Social welfare	-	0	0	0	39.5	26.1	0	0	39.7	39.7	70	N	-	-	36.7	Y	N	N	
R6592	2	18.5	A2-5 Social welfare	-	0	0	0	42.2	26.1	0	0	42.3	42.3	70	N	-	-	39.3	Y	N	N	
R6831	1	14.8	A1-6 Social welfare	-	0	0	0	41.8	30.3	0	0	42.1	42.1	70	N	-	-	39.1	Y	N	N	
R6831	2	19.3	A1-6 Social welfare	-	0	0	0	41.9	33.1	0	0	42.4	42.4	70	N	-	-	39.4	Y	N	N	
R6832	1	14.8	A1-6 Social welfare	-	23	0	0	53.6	40.6	30.1	0	53.9	53.9	70	N	-	-	30.9	Y	N	N	
R6832	2	19.3	A1-6 Social welfare	-	25.2	0	0	53.6	40.8	30.4	0	53.9	53.9	70	N	-	-	28.7	Y	N	N	
R6833	1	14.8	A1-6 Social welfare	-	17.1	0	13.3	28.2	40.3	47	0	47.9	47.9	70	N	-	-	30.3	Y	N	N	
R6833	2	19.3	A1-6 Social welfare	-	17.5	0	13.4	47.4	28.2	40.5	0	48.3	48.3	70	N	-	-	30.7	Y	N	N	
R6834	1	14.8	A1-6 Social welfare	-	17	0	12.7	33.5	31.9	25.4	0	36.2	36.2	70	N	-	-	19.1	Y	N	N	
R6834	2	19.3	A1-6 Social welfare	-	17	0	12.7	34.8	33.7	25.5	0	37.6	37.6	70	N	-	-	20.5	Y	N	N	
R6835	1	14.8	A1-6 Social welfare	-	18.8	0	14.3	32.6	41.3	32.4	0	42.4	42.4	70	N	-	-	23.5	Y	N	N	
R6835	2	19.3	A1-6 Social welfare	-	19.4	0	14.4	33.3	42	32.5	0	42.9	43	70	N	-	-	23.6	Y	N	N	
R6836	1	14.8	A1-6 Social welfare	-	0	0	0	41.7	34	0	0	42.4	42.4	70	N	-	-	39.4	Y	N	N	
R6836	2	19.3	A1-6 Social welfare	-	0	0	0	42	34.2	0	0	42.7	42.7	70	N	-	-	39.7	Y	N	N	
R6837	1	14.8	A1-6 Social welfare	-	0	0	0	33.4	24.1	0	0	33.9	33.9	70	N	-	-	30.9	Y	N	N	
R6837	2	19.3	A1-6 Social welfare	-	0	0	0	25	26	0	0	24.6	24.6	70	N	-	-	31.6	Y	N	N	
R6838	1	14.8	A1-6 Social welfare	-	14.1	0	0	61.5	31.7	54.2	0	62.3	62.3	70	N	-	-	48.0	Y	N	N	
R6838	2	19.3	A1-6 Social welfare	-	14.1	0	0	61.5	34.8	54.8	0	62.4	62.4	70	N	-	-	48.1	Y	N	N	
R6839	1	14.8	A1-6 Social welfare	-	14.2	0	16.8	64.7	64.6	61.1	0	68.5	68.5	70	N	-	-	54.1	Y	N	N	
R6839	2	19.3	A1-6 Social welfare	-	14.8	0	17.8	64.6	64.4	61.6	0	68.5	68.5	70	N	-	-	53.6	Y	N	N	
R6840	1	14.8	A1-6 Social welfare	-	15.1	0	17.3	25	54.7	41.1	0	54.9	54.9	70	N	-	-	39.7	Y	N	N	
R6840	2	19.3	A1-6 Social welfare	-	15.1	0	17.3	25.1	54.6	41.4	0	54.8	54.8	70	N	-	-	39.6	Y	N	N	
R6841	1	14.8	A1-6 Social welfare	-	0	0	0	21.9	14.9	0	0	22.7	22.7	70	N	-	-	19.7	Y	N	N	
R6841	2	19.3	A1-6 Social welfare	-	0	0	0	21.9	14.9	0	0	22.7	22.7	70	N	-	-	19.7	Y	N	N	
R6842	1	14.8	A1-6 Social welfare	-	10.6	0	0	37.6	54.8	41.5	0	55.1	55.1	70	N	-	-	44.1	Y	N	N	
R6842	2	19.3	A1-6 Social welfare	-	10.6	0	0	42.8	54.8	41.8	0	55.3	55.3	70	N	-	-	44.3	Y	N	N	
R6843	1	14.8	A1-6 Social welfare	-	18.5	0	36.2	58.8	64.7	47.6	0	65.7	65.7	70	N	-	-	47.1	Y	N	N	
R6843	2	19.3	A1-6 Social welfare	-	19.4	0	37.8	58.7	64.6	49.2	0	65.7	65.7	70	N	-	-	46.3	Y	N	N	
R6844	1	14.8	A1-6 Social welfare	-	18.3	0	21	48.5	56.8	61.9	0	63.2	63.2	70	N	-	-	44.8	Y	N	N	
R6844	2	19.3	A1-6 Social welfare	-	19.4	0	21.9	48.5	56.8	62.5	0	63.7	63.7	70	N	-	-	44.3	Y	N	N	
R6845	1	14.8	A1-6 Social welfare	-	0	0	0	21	4.4	0	0	21.1	21.1	70	N	-	-	18.1	Y	N	N	
R6845	2	19.3	A1-6 Social welfare	-	0	0	0	21.1	4.4	0	0	21.2	21.2	70	N	-	-	18.2	Y	N	N	
R6846	1	14.8	A1-6 Social welfare	-	10	0	0	31.8	31.8	32.2	0	32.4	32.4	70	N	-	-	26.5	Y	N	N	
R6846	2	19.3	A1-6 Social welfare	-	9.9	0	0	34.4	34.3	32.3	0	38.5	38.5	70	N	-	-	28.2	Y	N	N	
R6847	1	14.8	A1-6 Social welfare	-	17.4	0	15.6	30.3	51.2	40.6	0	51.6	51.6	70	N	-	-	34.1	Y	N	N	
R6847	2	19.3	A1-6 Social welfare	-	17.8	0	15.6	30.4	51.2	40.8	0	51.6	51.6	70	N	-	-	33.7	Y	N	N	
R6848	1	14.8	A1-6 Social welfare	-	13.4	0	14.7	18.5	44.8	0	0	44.8	44.8	70	N	-	-	31.1	Y	N	N	
R6848	2	19.3	A1-6																			

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN Social Welfarees & Kindergartens (Unmitigated)

Assessment Point			WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance			Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)	
ID	Floor	Floor Level (mPD)	Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(1)</sup>					New Roads in 2044 dB(A) <sup>(1)</sup>	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A)	D ≥ 1dB(A)	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A)	New Road > Criteria B > Criteria		
			[A]	[A]		PD	DD	LD	EX	TR	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]		
R6865	2	32	B2-10 Social welfare	-	49.5	0	26.6	40	0	74.4	0	74.7	74.7	70	Y	-	-	25.2	Y	N	N
R6866	1	16.5	B2-10 Social welfare	-	16.5	0	17	54.6	54.8	68.6	0	68.9	68.9	70	N	-	-	52.3	Y	N	N
R6866	2	21	B2-10 Social welfare	-	16.6	0	17.3	54.6	54.8	69.2	0	69.5	69.5	70	N	-	-	52.8	Y	N	N
R6867	1	16.5	B2-10 Social welfare	-	15.2	0	17.2	53.3	58.6	66.3	0	67.2	67.2	70	N	-	-	51.9	Y	N	N
R6867	2	21	B2-10 Social welfare	-	16	0	17.6	53.5	58.6	66.9	0	67.7	67.7	70	N	-	-	51.6	Y	N	N
N-2	1	22.7	B2-5 RCHE	-	0	0	51.8	63.8	71.1	0	0	71.9	71.9	70	Y	-	-	68.9	Y	Y	Y
N-2	2	25.8	B2-5 RCHE	-	0	0	52.1	63.7	70.9	0	0	71.7	71.7	70	Y	-	-	68.7	Y	Y	Y
N-2	3	28.9	B2-5 RCHE	-	0	0	52.3	63.4	70.6	0	0	71.4	71.4	70	Y	-	-	68.4	Y	Y	Y
N-2	4	32	B2-5 RCHE	-	0	0	52.3	63.1	70.2	0	0	71	71	70	Y	-	-	68.0	Y	Y	Y
N-2	5	35.1	B2-5 RCHE	-	0	0	52.4	62.7	69.8	0	0	70.6	70.6	70	Y	-	-	67.6	Y	Y	Y
N-2	6	38.2	B2-5 RCHE	-	0	0	52.4	62.4	69.4	0	0	70.3	70.3	70	N	-	-	67.3	Y	N	N
N-2	7	41.3	B2-5 RCHE	-	0	0	52.5	62	69	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N
NI-1	1	22.7	B2-5 RCHE	-	0	0	0	11.6	68.6	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N
NI-1	2	25.8	B2-5 RCHE	-	0	0	0	11.6	68.4	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N
NI-1	3	28.9	B2-5 RCHE	-	0	0	0	11.6	68.2	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N
NI-1	4	32	B2-5 RCHE	-	0	0	0	11.6	68	0	0	68	68	70	N	-	-	65.0	Y	N	N
NI-1	5	35.1	B2-5 RCHE	-	0	0	0	11.7	67.7	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N
NI-1	6	38.2	B2-5 RCHE	-	0	0	0	11.7	67.5	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N
NI-1	7	41.3	B2-5 RCHE	-	0	0	0	11.7	67.2	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N
NI-6	1	22.7	B2-5 RCHE	-	0	0	26	57.7	67.9	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N
NI-6	2	25.8	B2-5 RCHE	-	0	0	26.9	57.7	67.8	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N
NI-6	3	28.9	B2-5 RCHE	-	0	0	27.8	57.6	67.6	0	0	68	68	70	N	-	-	65.0	Y	N	N
NI-6	4	32	B2-5 RCHE	-	0	0	28.9	57.5	67.4	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N
NI-6	5	35.1	B2-5 RCHE	-	0	0	30	57.2	67.1	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N
NI-6	6	38.2	B2-5 RCHE	-	0	0	31.2	56.9	66.8	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N
NI-6	7	41.3	B2-5 RCHE	-	0	0	32.7	56.6	66.5	0	0	67	67	70	N	-	-	64.0	Y	N	N
N-5	1	22.7	B2-5 RCHE	-	0	0	47.8	58.9	72	31.1	0	72.2	72.2	70	Y	-	-	69.2	Y	Y	Y
N-5	2	25.8	B2-5 RCHE	-	0	0	48.2	58.8	71.7	31.3	0	71.9	71.9	70	Y	-	-	68.9	Y	Y	Y
N-5	3	28.9	B2-5 RCHE	-	0	0	48.4	58.5	71.4	31.5	0	71.6	71.6	70	Y	-	-	68.6	Y	Y	Y
N-5	4	32	B2-5 RCHE	-	0	0	48.5	58.2	71	31.7	0	71.2	71.2	70	Y	-	-	68.2	Y	Y	Y
N-5	5	35.1	B2-5 RCHE	-	0	0	48.6	57.8	70.6	31.8	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y
N-5	6	38.2	B2-5 RCHE	-	0	0	48.7	57.4	70.2	32.1	0	70.4	70.4	70	N	-	-	67.4	Y	N	N
N-5	7	41.3	B2-5 RCHE	-	0	0	48.7	57.1	69.9	32.3	0	70.1	70.1	70	N	-	-	67.0	Y	N	N
E-1	1	22.7	B2-5 RCHE	-	0	0	0	45.8	68.3	60.4	0	69	69	70	N	-	-	66.1	Y	N	N
E-1	2	25.8	B2-5 RCHE	-	0	0	0	46	68.2	60.6	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
E-1	3	28.9	B2-5 RCHE	-	0	0	0	46.1	68	60.9	0	68.8	68.8	70	N	-	-	65.8	Y	N	N
E-1	4	32	B2-5 RCHE	-	0	0	0	46.2	67.8	61.2	0	68.7	68.7	70	N	-	-	65.7	Y	N	N
E-1	5	35.1	B2-5 RCHE	-	0	0	0	46.4	67.5	61.3	0	68.5	68.5	70	N	-	-	65.5	Y	N	N
E-1	6	38.2	B2-5 RCHE	-	0	0	0	46.5	67.2	61.5	0	68.3	68.3	70	N	-	-	65.3	Y	N	N
E-1	7	41.3	B2-5 RCHE	-	0	0	0	46.6	67	61.7	0	68.1	68.1	70	N	-	-	65.1	Y	N	N
E-2	1	22.7	B2-5 RCHE	-	17.5	0	0	48.6	64.7	61.3	0	66.4	66.4	70	N	-	-	48.8	Y	N	N
E-2	2	25.8	B2-5 RCHE	-	18.6	0	0	48.7	64.6	61.6	0	66.5	66.5	70	N	-	-	47.8	Y	N	N
E-2	3	28.9	B2-5 RCHE	-	20.1	0	0	48.8	64.6	61.8	0	66.5	66.5	70	N	-	-	46.4	Y	N	N
E-2	4	32	B2-5 RCHE	-	21.9	0	0	48.9	64.5	62	0	66.5	66.5	70	Y	-	-	44.6	Y	N	N
E-2	5	35.1	B2-5 RCHE	-	24	0	0	48.9	64.4	62.2	0	66.5	66.5	70	N	-	-	42.5	Y	N	N
E-2	6	38.2	B2-5 RCHE	-	26.4	0	0	48.9	64.3	62.4	0	66.5	66.5	70	N	-	-	40.1	Y	N	N
E-2	7	41.3	B2-5 RCHE	-	28.9	0	0	49	64.1	62.5	0	66.5	66.5	70	N	-	-	37.6	Y	N	N
E-3	1	22.7	B2-5 RCHE	-	19	0	0	28	59.6	46.3	0	59.8	59.8	70	N	-	-	40.7	Y	N	N
E-3	2	25.8	B2-5 RCHE	-	19.4	0	0	28.3	59.5	46.9	0	59.7	59.7	70	N	-	-	40.3	Y	N	N
E-3	3	28.9	B2-5 RCHE	-	20.8	0	0	28.9	59.5	47.7	0	59.7	59.7	70	N	-	-	38.9	Y	N	N
E-3	4	32	B2-5 RCHE	-	22.5	0	0	29.7	59.5	48.7	0	59.8	59.8	70	N	-	-	37.3	Y	N	N
E-3	5	35.1	B2-5 RCHE	-	24.6	0	0	30.6	59.4	49.8	0	59.8	59.8	70	N	-	-	35.2	Y	N	N
E-3	6	38.2	B2-5 RCHE	-	27.1	0	0	31.7	59.4	51.1	0	60	60	70	N	-	-	32.9	Y	N	N
E-3	7	41.3	B2-5 RCHE	-	30.1	0	0	33.2	59.3	52.6	0	60.1	60.1	70	N	-	-	30.0	Y	N	N
E-4	1	22.7	B2-5 RCHE	-	38.8	0	0	51.3	55.3	66.2	0	66.7	66.7	70	N	-	-	27.9	Y	N	N
E-4	2	25.8	B2-5 RCHE	-	40	0	0	51.4	55.3	66.5	0	66.9	66.9	70	N	-	-	26.9	Y	N	N
E-4	3	28.9	B2-5 RCHE	-	41.4	0	0	51.4	55.3	66.7	0	67.1	67.1	70	N	-	-	25.7	Y	N	N
E-4	4	32	B2-5 RCHE	-	42.9	0	0	51.4	55.3	66.8	0	67.2	67.2	70	N	-	-	24.3	Y	N	N
E-4	5	35.1	B2-5 RCHE	-	44.9	0	0	51.3	55.3	67.1	0	67.5	67.5	70	N	-	-	22.6	Y	N	N
E-4	6	38.2	B2-5 RCHE	-	47	0	0	51.3	55.2	67.3	0	67.6	67.7	70	N	-	-	20.7	Y	N	N
E-4	7	41.3	B2-5 RCHE	-	48.8	0	0	51.3	55.2	67.4	0	67.8	67.8	70	N	-	-	19.0	Y	N	N
E-5	1	22.7	B2-5 RCHE	-	40.2	0	0	52.9	52.2	67.5	0	67.8	67.8	70	N	-	-	27.6	Y	N	N
E-5	2	25.8	B2-5 RCHE	-	41.6	0	0	52.9	52.1	67.8	0	68	68	70	N	-	-	26.4	Y	N	N
E-5	3	28.9	B2-5 RCHE	-	43.1	0	0	52.9	52.1	68	0	68.2	68.2	70	N	-	-	25.1	Y	N	N
E-5	4	32	B2-5 RCHE	-	44.7	0	0	52.8	52.1	68.2	0	68.4	68.4	70	N	-	-	23.7	Y	N	N
E-5	5	35.1	B2-5 RCHE	-	46.7	0	0	52.8	52.1	68.5	0	68.7	68.7	70	N	-	-	22.0	Y	N	N
E-5	6	38.2	B2-5 RCHE	-	48.9	0	0	52.8	52.1	68.8	0	69	69	70	N	-	-	20.1	Y	N	N
E-5	7	41.3	B2-5 RCHE	-	50.1	0	0	52.9	52.1	69.1	0	69.3	69.3	70	N	-	-	19.2	Y	N	N
SI-1	1	22.7	B2-5 RCHE	-	51.3	0	48.3	51.6	0	65.8	0	66	66	70	N	-	-	14.8	Y	N	N
SI-1	2	25.8	B2-5 RCHE	-	51.6	0	49	51.6	0	65.9	0	66.1	66.1	70	N	-	-	14.7	Y	N	N
SI-1	3	28.9	B2-5 RCHE	-	52	0	49.6	51.7	0	66.1	0	66.4	66.5	70	N	-	-	14.5	Y	N	N
SI-1	4	32	B2-5 RCHE	-	52.6	0	50.2	51.7	0	66.6	0	66.8	67	70	N	-	-	14.4	Y	N	N
SI-1	5	35.1	B2-5 RCHE	-	53.6	0	50.9	51.8	0	67.6	0	67.8	67.9	70	N	-	-	14.3	Y	N	N
SI-1	6	38.2	B2-5 RCHE	-	54	0	52	51.9	0	68.9	0	69.1	69.2	70	N	-	-	15.2	Y	N	N
SI-1	7	41.3	B2-5 RCHE	-	54																

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN Social Welfare & Kindergartens (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance			Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup>	Overall Noise Level in 2044 dB(A) <sup>(4)</sup>	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A)	New Road > Criteria B > Criteria	
							PD	DD	LD	EX	TR										
SI-5	2	25.9	B2-5 RCH	-	39	0	0	33.2	0	52.8	0	52.9	52.3	70	N	-	-	14.0	Y	N	N
SI-5	3	28.9	B2-5 RCH	-	39.8	0	0	33.9	0	54	0	54	54.2	70	N	-	-	14.4	Y	N	N
SI-5	4	32	B2-5 RCH	-	40.3	0	0	34.7	0	55.3	0	55.3	55.5	70	N	-	-	15.2	Y	N	N
SI-5	5	35.1	B2-5 RCH	-	40.8	0	0	35.6	0	56.9	0	56.9	57	70	N	-	-	16.2	Y	N	N
SI-5	6	38.2	B2-5 RCH	-	41.2	0	0	36.6	0	58.5	0	58.5	58.6	70	N	-	-	17.4	Y	N	N
SI-5	7	41.3	B2-5 RCH	-	41.8	0	0	37.5	0	60.5	0	60.6	60.6	70	N	-	-	18.8	Y	N	N
W-1	1	22.7	B2-5 RCH	-	55.3	0	53.9	64.6	51.3	73.5	0	74.1	74.1	70	Y	-	-	18.8	Y	Y	Y
W-1	2	25.8	B2-5 RCH	-	55.4	0	54.5	64.4	51.3	73.6	0	74.2	74.2	70	Y	-	-	18.8	Y	Y	Y
W-1	3	28.9	B2-5 RCH	-	55.6	0	55	64.2	51.3	73.7	0	74.2	74.3	70	Y	-	-	18.7	Y	Y	Y
W-1	4	32	B2-5 RCH	-	55.7	0	55.4	64	51.3	73.8	0	74.3	74.4	70	Y	-	-	18.7	Y	Y	Y
W-1	5	35.1	B2-5 RCH	-	55.8	0	55.7	63.9	51.4	73.9	0	74.4	74.4	70	Y	-	-	18.6	Y	Y	Y
W-1	6	38.2	B2-5 RCH	-	55.9	0	55.9	63.8	51.4	74	0	74.5	74.5	70	Y	-	-	18.6	Y	Y	Y
W-1	7	41.3	B2-5 RCH	-	55.9	0	56.1	63.5	51.4	74.1	0	74.5	74.6	70	Y	-	-	18.7	Y	Y	Y
W-2	1	22.7	B2-5 RCH	-	52.4	0	51.9	64.5	52.8	71.4	0	72.3	72.3	55	Y	-	-	19.9	Y	Y	Y
W-2	2	25.8	B2-5 RCH	-	52.6	0	52.6	64.3	52.8	71.5	0	72.4	72.4	55	Y	-	-	19.8	Y	Y	Y
W-2	3	28.9	B2-5 RCH	-	52.8	0	53.2	64.1	52.8	71.6	0	72.4	72.5	55	Y	-	-	19.7	Y	Y	Y
W-2	4	32	B2-5 RCH	-	53	0	53.7	64	52.8	71.7	0	72.5	72.5	55	Y	-	-	19.5	Y	Y	Y
W-2	5	35.1	B2-5 RCH	-	53.1	0	54	63.8	52.8	71.8	0	72.5	72.6	55	Y	-	-	19.5	Y	Y	Y
W-2	6	38.2	B2-5 RCH	-	53.2	0	54.3	63.8	52.8	71.8	0	72.5	72.6	55	Y	-	-	19.4	Y	Y	Y
W-2	7	41.3	B2-5 RCH	-	53.3	0	54.6	63.4	52.7	71.9	0	72.6	72.6	55	Y	-	-	19.3	Y	Y	Y
W-3	1	22.7	B2-5 RCH	-	49.7	0	52.2	64	54.9	68.7	0	70.2	70.2	70	N	-	-	20.5	Y	N	N
W-3	2	25.8	B2-5 RCH	-	49.9	0	53.2	64	54.9	68.9	0	70.3	70.3	70	N	-	-	20.4	Y	N	N
W-3	3	28.9	B2-5 RCH	-	50	0	53.9	63.9	54.9	69	0	70.4	70.4	70	N	-	-	20.4	Y	N	N
W-3	4	32	B2-5 RCH	-	50.1	0	54.3	63.8	54.8	69.1	0	70.4	70.5	70	Y	-	-	20.4	Y	N	Y
W-3	5	35.1	B2-5 RCH	-	50.2	0	54.6	63.7	54.8	69.1	0	70.4	70.5	70	Y	-	-	20.3	Y	N	Y
W-3	6	38.2	B2-5 RCH	-	50.3	0	54.8	63.5	54.7	69.1	0	70.4	70.5	70	Y	-	-	20.2	Y	N	Y
W-3	7	41.3	B2-5 RCH	-	50.4	0	54.9	63.3	54.7	69.2	0	70.4	70.5	70	Y	-	-	20.1	Y	N	Y
W-4	1	22.7	B2-5 RCH	-	45.6	0	44.7	65.2	59.9	67.3	0	69.9	69.9	70	N	-	-	24.3	Y	N	N
W-4	2	25.8	B2-5 RCH	-	45.8	0	45.1	65.2	59.9	67.5	0	70	70	70	N	-	-	24.2	Y	N	N
W-4	3	28.9	B2-5 RCH	-	46	0	45.6	65.2	59.8	67.7	0	70.1	70.1	70	N	-	-	24.1	Y	N	N
W-4	4	32	B2-5 RCH	-	46.1	0	46.1	65.1	59.7	67.8	0	70.1	70.1	70	N	-	-	24.0	Y	N	N
W-4	5	35.1	B2-5 RCH	-	46.2	0	46.5	65	59.6	67.9	0	70.1	70.1	70	N	-	-	23.9	Y	N	N
W-4	6	38.2	B2-5 RCH	-	46.3	0	46.8	64.8	59.5	67.9	0	70.1	70.1	70	N	-	-	23.8	Y	N	N
W-4	7	41.3	B2-5 RCH	-	46.5	0	47.1	64.7	59.4	68	0	70.1	70.1	70	N	-	-	23.6	Y	N	N
W-5	1	22.7	B2-5 RCH	-	36.9	0	47.6	66.1	45.5	66.3	0	70.8	70.8	70	Y	-	-	33.9	Y	Y	Y
W-5	2	25.8	B2-5 RCH	-	37.2	0	48.1	66.2	45.3	66.5	0	70.8	70.8	70	Y	-	-	33.6	Y	Y	Y
W-5	3	28.9	B2-5 RCH	-	37.5	0	48.6	66	45.2	66.6	0	70.8	70.8	70	Y	-	-	33.3	Y	Y	Y
W-5	4	32	B2-5 RCH	-	37.8	0	48.7	65.9	44.9	66.8	0	70.7	70.7	70	Y	-	-	32.9	Y	Y	Y
W-5	5	35.1	B2-5 RCH	-	38.1	0	48.9	65.6	44.7	66.9	0	70.7	70.7	70	Y	-	-	32.6	Y	Y	Y
W-5	6	38.2	B2-5 RCH	-	38.5	0	49.1	65.4	44.4	66.9	0	70.5	70.5	70	Y	-	-	32.5	Y	Y	Y
W-5	7	41.3	B2-5 RCH	-	38.9	0	49.2	65.1	44.1	67	0	70.4	70.4	70	N	-	-	31.0	Y	N	N
W-6	1	22.7	B2-5 RCH	-	46.9	0	45.7	64.7	58.1	68	0	69.9	70	70	N	-	-	23.1	Y	N	N
W-6	2	25.8	B2-5 RCH	-	47.1	0	46.2	64.7	58	68.2	0	70.1	70.1	70	N	-	-	23.0	Y	N	N
W-6	3	28.9	B2-5 RCH	-	47.3	0	46.8	64.6	58	68.3	0	70.2	70.2	70	N	-	-	22.9	Y	N	N
W-6	4	32	B2-5 RCH	-	47.4	0	47.2	64.6	57.9	68.4	0	70.2	70.2	70	N	-	-	22.8	Y	N	N
W-6	5	35.1	B2-5 RCH	-	47.6	0	47.6	64.4	57.9	68.5	0	70.2	70.3	70	N	-	-	22.7	Y	N	N
W-6	6	38.2	B2-5 RCH	-	47.7	0	47.8	64.3	57.8	68.6	0	70.3	70.3	70	N	-	-	22.6	Y	N	N
W-6	7	41.3	B2-5 RCH	-	47.8	0	48.2	64.1	57.7	68.6	0	70.2	70.2	70	N	-	-	22.4	Y	N	N
N-1	1	22.7	B2-5 RCH	-	0	0	51.7	65	68	34.5	0	69.8	69.8	70	N	-	-	66.8	Y	N	N
N-1	2	25.8	B2-5 RCH	-	0	0	51.9	65	67.8	34.5	0	69.7	69.7	70	N	-	-	66.7	Y	N	N
N-1	3	28.9	B2-5 RCH	-	0	0	52	64.8	67.6	34.5	0	69.5	69.5	70	N	-	-	66.5	Y	N	N
N-1	4	32	B2-5 RCH	-	0	0	52.1	64.5	67.3	34.9	0	69.2	69.2	70	N	-	-	66.2	Y	N	N
N-1	5	35.1	B2-5 RCH	-	0	0	52.1	64.3	66.9	35.9	0	64.9	68.9	70	N	-	-	65.9	Y	N	N
N-1	6	38.2	B2-5 RCH	-	0	0	52.2	63.9	66.6	37.3	0	68.6	68.6	70	N	-	-	65.6	Y	N	N
N-1	7	41.3	B2-5 RCH	-	0	0	52.2	63.6	66.3	38.8	0	68.3	68.3	70	N	-	-	65.3	Y	N	N
N-3	1	22.7	B2-5 RCH	-	0	0	23.2	12.6	70.5	0	0	70.5	70.5	70	Y	-	-	67.5	Y	Y	Y
N-3	2	25.8	B2-5 RCH	-	0	0	23.5	12.6	70.4	0	0	70.4	70.4	70	N	-	-	67.4	Y	N	N
N-3	3	28.9	B2-5 RCH	-	0	0	23.9	12.6	70.1	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N
N-3	4	32	B2-5 RCH	-	0	0	24.3	12.6	69.8	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N
N-3	5	35.1	B2-5 RCH	-	0	0	24.7	12.6	69.5	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N
N-3	6	38.2	B2-5 RCH	-	0	0	25	12.6	69.1	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
N-3	7	41.3	B2-5 RCH	-	0	0	25.5	12.6	68.8	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N
N-4	1	22.7	B2-5 RCH	-	0	0	43.7	59.3	70.7	0	0	71	71	70	Y	-	-	68.0	Y	Y	Y
N-4	2	25.8	B2-5 RCH	-	0	0	44.6	59.3	70.5	0	0	70.8	70.8	70	Y	-	-	67.8	Y	Y	Y
N-4	3	28.9	B2-5 RCH	-	0	0	45.1	59	70.2	0	0	70.5	70.5	70	Y	-	-	67.5	Y	Y	Y
N-4	4	32	B2-5 RCH	-	0	0	45.2	58.8	69.9	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N
N-4	5	35.1	B2-5 RCH	-	0	0	45.4	58.4	69.5	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N
N-4	6	38.2	B2-5 RCH	-	0	0	45.5	58.1	69.2	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N
N-4	7	41.3	B2-5 RCH	-	0	0	45.6	57.8	68.9	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N
N-6	1	22.7	B2-5 RCH	-	0	0	39.3	70.1	35.8	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N
N-6	2	25.8	B2-5 RCH	-	0	0	39.3	36.6	69.9	36.6	0	69.9	69.9	70	N	-	-	66.9	Y	N	N
N-6	3	28.9	B2-5 RCH	-	0	0	39.3	69.7	37.5	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N
N-6	4	32	B2-5 RCH	-	0	0	39.3	69.4	38.4	0	0	69.4	69.4	70	N	-	-				

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN Social Welfare & Kindergartens (Unmitigated)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation		Mitigation Measures Required <sup>[5]</sup> (Y/N)	
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>				New Roads in 2044 dB(A) <sup>[3]</sup>	Overall Noise Level in 2044 dB(A) [C]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]			New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)				PD	DD	LD	EX	TR													
NI-2	1	22.7	B2-5 RCHE	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	62.2	Y	N	N
NI-2	2	25.8	B2-5 RCHE	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	62.1	Y	N	N
NI-2	3	28.9	B2-5 RCHE	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	62.0	Y	N	N
NI-2	4	32	B2-5 RCHE	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	61.9	Y	N	N
NI-2	5	35.1	B2-5 RCHE	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	61.7	Y	N	N
NI-2	6	38.2	B2-5 RCHE	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	61.6	Y	N	N
NI-2	7	41.3	B2-5 RCHE	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	61.4	Y	N	N
NI-5	1	22.7	B2-5 RCHE	-	0	0	20.8	5.4	64.5	0	0	0	0	0	0	0	0	-	-	61.5	Y	N	N
NI-5	2	25.8	B2-5 RCHE	-	0	0	21	5.4	64.4	0	0	0	0	0	0	0	0	-	-	61.4	Y	N	N
NI-5	3	28.9	B2-5 RCHE	-	0	0	21.1	5.4	64.3	0	0	0	0	0	0	0	0	-	-	61.3	Y	N	N
NI-5	4	32	B2-5 RCHE	-	0	0	21.2	5.4	64.2	0	0	0	0	0	0	0	0	-	-	61.2	Y	N	N
NI-5	5	35.1	B2-5 RCHE	-	0	0	21.4	5.4	64	0	0	0	0	0	0	0	0	-	-	61.0	Y	N	N
NI-5	6	38.2	B2-5 RCHE	-	0	0	21.6	5.4	63.9	0	0	0	0	0	0	0	0	-	-	60.9	Y	N	N
NI-5	7	41.3	B2-5 RCHE	-	0	0	21.8	5.4	63.7	0	0	0	0	0	0	0	0	-	-	60.7	Y	N	N
NI-3	1	22.7	B2-5 RCHE	-	0	0	0	0	62.5	0	0	0	0	0	0	0	0	-	-	59.5	Y	N	N
NI-3	2	25.8	B2-5 RCHE	-	0	0	0	0	62.5	0	0	0	0	0	0	0	0	-	-	59.5	Y	N	N
NI-3	3	28.9	B2-5 RCHE	-	0	0	0	0	62.4	0	0	0	0	0	0	0	0	-	-	59.4	Y	N	N
NI-3	4	32	B2-5 RCHE	-	0	0	0	0	62.3	0	0	0	0	0	0	0	0	-	-	59.3	Y	N	N
NI-3	5	35.1	B2-5 RCHE	-	0	0	0	0	62.2	0	0	0	0	0	0	0	0	-	-	59.2	Y	N	N
NI-3	6	38.2	B2-5 RCHE	-	0	0	0	0	62.1	0	0	0	0	0	0	0	0	-	-	59.1	Y	N	N
NI-3	7	41.3	B2-5 RCHE	-	0	0	0	0	62	0	0	0	0	0	0	0	0	-	-	59.0	Y	N	N
NI-4	1	22.7	B2-5 RCHE	-	0	0	0	1.6	61.8	0	0	0	0	0	0	0	0	-	-	58.8	Y	N	N
NI-4	2	25.8	B2-5 RCHE	-	0	0	0	1.6	61.8	0	0	0	0	0	0	0	0	-	-	58.8	Y	N	N
NI-4	3	28.9	B2-5 RCHE	-	0	0	0	1.6	61.7	0	0	0	0	0	0	0	0	-	-	58.7	Y	N	N
NI-4	4	32	B2-5 RCHE	-	0	0	0	1.6	61.6	0	0	0	0	0	0	0	0	-	-	58.6	Y	N	N
NI-4	5	35.1	B2-5 RCHE	-	0	0	0	1.6	61.5	0	0	0	0	0	0	0	0	-	-	58.5	Y	N	N
NI-4	6	38.2	B2-5 RCHE	-	0	0	0	1.6	61.4	0	0	0	0	0	0	0	0	-	-	58.4	Y	N	N
NI-4	7	41.3	B2-5 RCHE	-	0	0	0	1.6	61.3	0	0	0	0	0	0	0	0	-	-	58.3	Y	N	N

Note:  
 [1] Other Roads refer to planned road projects carried out by others such as Development of Lok Ma Chau Loop, Liantang / Heung Yuen Wai Boundary Control Point and Associated Works, Widening of Tolo Highway/Farling Highway etc.  
 [2] PD - Primary Distributor Road, DD - District Distributor Road, LD - Local Distributor Road, EX - Expressway, TR - Trunk Roads.  
 [3] New Roads refer to the proposed road networks including planned internal roads within PC/TKL, NDA and modification of connecting roads to NDA.  
 [4] For landuse planned under NDA project, mitigation measures are required to mitigate the noise level to within noise criteria.  
 [5] For existing and planned NSRs outside and within the non-development area of NDA, Direct Mitigation Measures will be required when "With Project Overall Noise Level exceeds Noise Criteria" AND, either "With Project - Without Project Overall Noise Level ≥ 1 dB(A)" or "New Roads exceeds Noise Criteria" or "New Roads Contribution ≥ 1 dB(A)".  
 \*The noise mitigation measures to be adopted would be subject to the final layout design of RCHE.

***Appendix 2.4***

---

***Details of Road Traffic Noise Impacts on NSRs  
(Mitigated Scenario - KTN) at Year 2044***





Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required [4] (Y/N)
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) [1]	New Roads [2]				New Roads in 2044 dB(A) [3] [B]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]				New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
							PD	DD	LD	EX										TR			
N2502	4	33.9	A1-2	-	42.9	0	64.9	63.4	0	52.7	0	67.4	67.4	70	N	-	-	24.5	Y	N	N	N	
N2502	5	36.6	A1-2	-	43.9	0	65.2	63.3	0	53.3	0	67.5	67.6	70	N	-	-	23.7	Y	N	N	N	
N2502	6	39.3	A1-2	-	45	0	65.4	63.2	0	53.8	0	67.6	67.7	70	N	-	-	22.7	Y	N	N	N	
N2502	7	42	A1-2	-	46.1	0	65.6	63.1	0	54.4	0	67.8	67.8	70	N	-	-	21.7	Y	N	N	N	
N2502	8	44.7	A1-2	-	47.7	0	65.8	63	0	55	0	67.9	67.9	70	N	-	-	20.2	Y	N	N	N	
N2502	9	47.4	A1-2	-	49.1	0	66	62.9	0	55.5	0	68	68.0	70	N	-	-	18.9	Y	N	N	N	
N2502	10	50.1	A1-2	-	50.1	0	66.1	62.7	0	56.1	0	68	68.1	70	N	-	-	18.0	Y	N	N	N	
N2502	11	52.8	A1-2	-	50.8	0	66.1	62.6	0	56.4	0	68	68.1	70	N	-	-	17.3	Y	N	N	N	
N2502	12	55.5	A1-2	-	51.2	0	66.2	62.5	0	56.8	0	68.1	68.2	70	N	-	-	17.0	Y	N	N	N	
N2502	13	58.2	A1-2	-	51.7	0	66.2	62.4	0	57.2	0	68.1	68.2	70	N	-	-	16.5	Y	N	N	N	
N2502	14	60.9	A1-2	-	52	0	66.3	62.3	0	57.6	0	68.1	68.2	70	N	-	-	16.2	Y	N	N	N	
N2502	15	63.6	A1-2	-	52.3	0	66.3	62.2	0	58	0	68.1	68.3	70	N	-	-	16.0	Y	N	N	N	
N2502	16	66.3	A1-2	-	52.8	0	66.3	62.1	0	58.3	0	68.2	68.3	70	N	-	-	15.5	Y	N	N	N	
N2502	17	69	A1-2	-	53.1	0	66.3	62	0	58.6	0	68.2	68.3	70	N	-	-	15.2	Y	N	N	N	
N2502	18	71.7	A1-2	-	53.4	0	66.3	61.9	0	58.9	0	68.2	68.3	70	N	-	-	14.9	Y	N	N	N	
N2502	19	74.4	A1-2	-	53.7	0	66.3	61.8	0	59.2	0	68.2	68.3	70	N	-	-	14.6	Y	N	N	N	
N2502	20	77.1	A1-2	-	53.9	0	66.3	61.7	0	59.5	0	68.2	68.4	70	N	-	-	14.5	Y	N	N	N	
N2502	21	79.8	A1-2	-	54.1	0	66.3	61.6	0	59.8	0	68.2	68.4	70	N	-	-	14.3	Y	N	N	N	
N2502	22	82.5	A1-2	-	54.2	0	66.3	61.5	0	60	0	68.2	68.4	70	N	-	-	14.2	Y	N	N	N	
N2502	23	85.2	A1-2	-	54.3	0	66.3	61.4	0	60.2	0	68.3	68.4	70	N	-	-	14.1	Y	N	N	N	
N2502	24	87.9	A1-2	-	54.4	0	66.3	61.3	0	60.5	0	68.3	68.5	70	N	-	-	14.1	Y	N	N	N	
N2502	25	90.6	A1-2	-	54.5	0	66.3	61.3	0	60.7	0	68.3	68.5	70	N	-	-	14.0	Y	N	N	N	
N2502	26	93.3	A1-2	-	54.6	0	66.3	61.2	0	60.9	0	68.4	68.5	70	N	-	-	13.9	Y	N	N	N	
N2502	27	96	A1-2	-	54.7	0	66.3	61.1	0	61.1	0	68.4	68.6	70	N	-	-	13.9	Y	N	N	N	
N2502	28	98.7	A1-2	-	54.7	0	66.4	61.1	0	61.3	0	68.4	68.6	70	N	-	-	13.9	Y	N	N	N	
N2502	29	101.4	A1-2	-	54.8	0	66.4	61.1	0	61.5	0	68.5	68.7	70	N	-	-	13.9	Y	N	N	N	
N2502	30	104.1	A1-2	-	54.9	0	66.3	61.1	0	61.8	0	68.5	68.7	70	N	-	-	13.8	Y	N	N	N	
N2502	31	106.8	A1-2	-	55.1	0	66.3	61	0	61.9	0	68.5	68.7	70	N	-	-	13.6	Y	N	N	N	
N2502	32	109.5	A1-2	-	55.2	0	66.3	60.9	0	62.1	0	68.5	68.7	70	N	-	-	13.5	Y	N	N	N	
N2502	33	112.2	A1-2	-	55.2	0	66.3	60.9	0	62.3	0	68.6	68.8	70	N	-	-	13.6	Y	N	N	N	
N2502	34	114.9	A1-2	-	55.3	0	66.3	60.8	0	62.5	0	68.6	68.8	70	N	-	-	13.5	Y	N	N	N	
N2502	35	117.6	A1-2	-	55.3	0	66.2	60.7	0	62.7	0	68.6	68.8	70	N	-	-	13.5	Y	N	N	N	
N2502	36	120.3	A1-2	-	55.3	0	66.2	60.7	0	62.8	0	68.6	68.8	70	N	-	-	13.5	Y	N	N	N	
N2502	37	123	A1-2	-	55.2	0	66.2	60.6	0	63	0	68.6	68.8	70	N	-	-	13.6	Y	N	N	N	
N2502	38	125.7	A1-2	-	55.3	0	66.1	60.5	0	63.2	0	68.7	68.9	70	N	-	-	13.6	Y	N	N	N	
N2502	39	128.4	A1-2	-	55.3	0	66.1	60.5	0	63.4	0	68.7	68.9	70	N	-	-	13.6	Y	N	N	N	
N2503	1	25.8	A1-2	-	39.2	0	63	62	18.3	63.4	0	63	62	70	N	-	-	26.5	Y	N	N	N	
N2503	2	28.5	A1-2	-	40.7	0	63.4	61.8	19.2	63.1	0	66.8	65.9	70	N	-	-	25.2	Y	N	N	N	
N2503	3	31.2	A1-2	-	42.3	0	63.7	61.6	20.2	62.1	0	66	66.0	70	N	-	-	23.7	Y	N	N	N	
N2503	4	33.9	A1-2	-	44.2	0	64	61.4	21.2	62.8	0	66.1	66.1	70	N	-	-	21.9	Y	N	N	N	
N2503	5	36.6	A1-2	-	46	0	64.2	61.1	22.3	63.5	0	66.2	66.2	70	N	-	-	20.2	Y	N	N	N	
N2503	6	39.3	A1-2	-	47.3	0	64.4	60.9	23.5	64.3	0	66.3	66.3	70	N	-	-	19.0	Y	N	N	N	
N2503	7	42	A1-2	-	48.1	0	64.5	60.7	24.8	65	0	66.4	66.4	70	N	-	-	18.3	Y	N	N	N	
N2503	8	44.7	A1-2	-	48.8	0	64.7	60.5	26.1	65.5	0	66.4	66.5	70	N	-	-	17.7	Y	N	N	N	
N2503	9	47.4	A1-2	-	49.3	0	64.8	60.3	27.4	66	0	66.5	66.6	70	N	-	-	17.3	Y	N	N	N	
N2503	10	50.1	A1-2	-	49.8	0	64.9	60.2	28.9	66.5	0	66.6	66.7	70	N	-	-	16.9	Y	N	N	N	
N2503	11	52.8	A1-2	-	50.4	0	65	60	30.4	66.9	0	66.7	66.8	70	N	-	-	16.4	Y	N	N	N	
N2503	12	55.5	A1-2	-	50.9	0	65.1	59.9	32.2	67.4	0	66.8	66.9	70	N	-	-	16.0	Y	N	N	N	
N2503	13	58.2	A1-2	-	51.4	0	65.1	59.8	34.1	67.9	0	66.8	67.0	70	N	-	-	15.6	Y	N	N	N	
N2503	14	60.9	A1-2	-	51.9	0	65.2	59.7	36.5	68.4	0	66.9	67.1	70	N	-	-	15.2	Y	N	N	N	
N2503	15	63.6	A1-2	-	52.5	0	65.2	59.7	39.8	68.9	0	67	67.1	70	N	-	-	14.6	Y	N	N	N	
N2503	16	66.3	A1-2	-	53.1	0	65.2	59.5	42.9	69.5	0	67.1	67.3	70	N	-	-	14.2	Y	N	N	N	
N2503	17	69	A1-2	-	53.7	0	65.3	59.4	44.5	60.1	0	67.3	67.4	70	N	-	-	13.7	Y	N	N	N	
N2503	18	71.7	A1-2	-	54.6	0	65.3	59.4	45.2	60.7	0	67.4	67.6	70	N	-	-	13.0	Y	N	N	N	
N2503	19	74.4	A1-2	-	55.1	0	65.4	59.2	45.5	61.1	0	67.5	67.8	70	N	-	-	12.7	Y	N	N	N	
N2503	20	77.1	A1-2	-	55.3	0	65.5	59.2	45.6	61.4	0	67.6	67.9	70	N	-	-	12.6	Y	N	N	N	
N2503	21	79.8	A1-2	-	55.5	0	65.5	59.2	45.7	61.7	0	67.7	68.0	70	N	-	-	12.5	Y	N	N	N	
N2503	22	82.5	A1-2	-	55.7	0	65.6	59.2	45.7	61.9	0	67.8	68.1	70	N	-	-	12.4	Y	N	N	N	
N2503	23	85.2	A1-2	-	55.8	0	65.6	59.2	45.7	62.2	0	67.9	68.2	70	N	-	-	12.4	Y	N	N	N	
N2503	24	87.9	A1-2	-	55.9	0	65.7	59.3	45.7	62.4	0	68	68.3	70	N	-	-	12.4	Y	N	N	N	
N2503	25	90.6	A1-2	-	56.1	0	65.8	59.4	45.8	62.7	0	68.1	68.4	70	N	-	-	12.3	Y	N	N	N	
N2503	26	93.3	A1-2	-	56.2	0	65.9	59.4	45.8	62.9	0	68.3	68.5	70	N	-	-	12.3	Y	N	N	N	
N2503	27	96	A1-2	-	56.3	0	66	59.3	45.8	63.2	0	68.4	68.7	70	N	-	-	12.4	Y	N	N	N	
N2503	28	98.7	A1-2	-	56.4	0	66	59.3	45.7	63.4	0	68.5	68.8	70	N	-	-	12.4	Y	N	N	N	
N2503	29	101.4	A1-2	-	56.5	0	66	59.2	45.7	63.6	0	68.6	68.8	70	N	-	-	12.3	Y	N	N	N	
N2503	30	104.1	A1-2	-	56.7	0	66.1	59.1	45.8	63.9	0	68.7	68.9	70	N	-	-	12.2	Y	N	N	N	
N2503	31	106.8	A1-2	-	56.8	0	66.1	59.1	45.8	64.2	0	68.8	69.0	70	N	-	-	12.2	Y	N	N	N	
N2503	32	109.5	A1-2	-	56.8	0	66.1	59	45.8	64.4	0	68.8	69.1	70	N	-	-	12.3	Y	N	N	N	
N2503	33	112.2	A1-2	-	56.9	0	66.1	58.9	45.8	64.5	0	68.9	69.1	70	N	-	-	12.2	Y	N	N	N	
N2503	34	114.9	A1-2	-	56.9	0	66.1	58.8	45.8	64.7	0	68.9	69.2	70	N	-	-	12.3	Y	N	N	N	
N2503	35	117.6	A1-2	-	56.9	0	66.1	58.7	45.8	65	0	69	69.3	70	N	-	-	12.4	Y	N	N		

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required [4] (Y/N)
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) [1]	New Roads [2]				New Roads in 2044 dB(A) [3] [B]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]				New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)			PD	DD	LD	EX	TR														
N2504	14	60.9	A1-2	-	42.2	0	45.1	55.4	44.8	52.8	0	57.7	57.9	70	N	-	-	15.7	Y	N	N	N	
N2504	15	63.6	A1-2	-	43.3	0	45.4	55.3	44.6	53.4	0	57.9	58.1	70	N	-	-	14.8	Y	N	N	N	
N2504	16	66.3	A1-2	-	44.7	0	45.7	55.2	44.4	54	0	58.1	58.3	70	N	-	-	13.6	Y	N	N	N	
N2504	17	69	A1-2	-	46.5	0	46.2	55.1	44.2	54.6	0	58.3	58.6	70	N	-	-	12.1	Y	N	N	N	
N2504	18	71.7	A1-2	-	48.6	0	46.8	54.9	44	55.2	0	58.5	59.0	70	N	-	-	10.4	Y	N	N	N	
N2504	19	74.4	A1-2	-	49.8	0	47.9	54.9	43.8	55.6	0	58.8	59.3	70	N	-	-	9.5	Y	N	N	N	
N2504	20	77.1	A1-2	-	50.5	0	48.8	54.8	43.6	56	0	59	59.6	70	N	-	-	9.1	Y	N	N	N	
N2504	21	79.8	A1-2	-	50.8	0	49.5	54.8	43.5	56.4	0	59.3	59.9	70	N	-	-	9.1	Y	N	N	N	
N2504	22	82.5	A1-2	-	51.1	0	50.1	54.7	43.3	56.8	0	59.5	60.1	70	N	-	-	9.0	Y	N	N	N	
N2504	23	85.2	A1-2	-	51.3	0	51	54.8	43.1	57.1	0	59.8	60.4	70	N	-	-	9.1	Y	N	N	N	
N2504	24	87.9	A1-2	-	51.6	0	51.9	54.9	43	57.5	0	60.2	60.7	70	N	-	-	9.1	Y	N	N	N	
N2504	25	90.6	A1-2	-	51.9	0	52.6	55.2	42.8	57.7	0	60.5	61.1	70	N	-	-	9.2	Y	N	N	N	
N2504	26	93.3	A1-2	-	52.1	0	53.4	55.3	42.7	58.1	0	60.9	61.4	70	N	-	-	9.3	Y	N	N	N	
N2504	27	96	A1-2	-	52.3	0	54	55.5	42.5	58.4	0	61.2	61.7	70	N	-	-	9.4	Y	N	N	N	
N2504	28	98.7	A1-2	-	52.6	0	54.4	55.4	42.4	58.7	0	61.4	61.9	70	N	-	-	9.3	Y	N	N	N	
N2504	29	101.4	A1-2	-	53	0	54.6	55.4	42.2	59	0	61.6	62.2	70	N	-	-	9.2	Y	N	N	N	
N2504	30	104.1	A1-2	-	53.3	0	54.9	55.5	42.1	59.3	0	61.8	62.4	70	N	-	-	9.1	Y	N	N	N	
N2504	31	106.8	A1-2	-	53.5	0	55	55.4	42	59.6	0	62	62.6	70	N	-	-	9.1	Y	N	N	N	
N2504	32	109.5	A1-2	-	53.7	0	55.1	55.3	41.9	59.9	0	62.2	62.7	70	N	-	-	9.0	Y	N	N	N	
N2504	33	112.2	A1-2	-	53.8	0	55.1	55.3	41.7	60.1	0	62.3	62.9	70	N	-	-	9.1	Y	N	N	N	
N2504	34	114.9	A1-2	-	54	0	55.1	55.3	41.6	60.4	0	62.5	63.0	70	N	-	-	9.0	Y	N	N	N	
N2504	35	117.6	A1-2	-	54	0	55.2	55.3	41.5	60.6	0	62.6	63.2	70	N	-	-	9.2	Y	N	N	N	
N2504	36	120.3	A1-2	-	54.1	0	55.3	55.3	41.4	60.9	0	62.8	63.4	70	N	-	-	9.3	Y	N	N	N	
N2504	37	123	A1-2	-	54.2	0	55.4	55.3	41.3	61.1	0	63	63.5	70	N	-	-	9.3	Y	N	N	N	
N2504	38	125.7	A1-2	-	54.2	0	55.4	55.3	41.2	61.4	0	63.2	63.7	70	N	-	-	9.5	Y	N	N	N	
N2504	39	128.4	A1-2	-	54.3	0	55.4	55.3	41.1	61.6	0	63.3	63.8	70	N	-	-	9.5	Y	N	N	N	
N2505	1	25.8	A1-2	-	30	0	54.3	57.6	16.8	43.4	0	54.3	59.4	70	N	-	-	29.4	Y	N	N	N	
N2505	2	28.5	A1-2	-	30.9	0	55.2	61.6	17.7	44	0	62.6	62.6	70	N	-	-	31.7	Y	N	N	N	
N2505	3	31.2	A1-2	-	31.8	0	56.2	64.3	18.5	44.7	0	64.9	64.9	70	N	-	-	33.1	Y	N	N	N	
N2505	4	33.9	A1-2	-	32.9	0	57.2	64.5	19.5	45.3	0	65.3	65.3	70	N	-	-	32.4	Y	N	N	N	
N2505	5	36.6	A1-2	-	34	0	58	64.4	20.5	46	0	65.4	65.4	70	N	-	-	31.4	Y	N	N	N	
N2505	6	39.3	A1-2	-	35.3	0	58.3	64.2	21.7	46.7	0	65.3	65.3	70	N	-	-	30.0	Y	N	N	N	
N2505	7	42	A1-2	-	36.7	0	58.6	64	22.8	47.4	0	65.1	65.1	70	N	-	-	28.4	Y	N	N	N	
N2505	8	44.7	A1-2	-	38.2	0	58.7	63.7	23.8	48.1	0	65	65.0	70	N	-	-	26.8	Y	N	N	N	
N2505	9	47.4	A1-2	-	39.9	0	58.8	63.4	24.6	48.8	0	64.8	64.8	70	N	-	-	24.9	Y	N	N	N	
N2505	10	50.1	A1-2	-	41.3	0	58.9	63.2	25.6	49.6	0	64.7	64.7	70	N	-	-	23.1	Y	N	N	N	
N2505	11	52.8	A1-2	-	42.9	0	58.9	62.9	26.6	50.4	0	64.5	64.5	70	N	-	-	21.4	Y	N	N	N	
N2505	12	55.5	A1-2	-	43.7	0	59	62.7	27.6	51.1	0	64.5	64.5	70	N	-	-	20.8	Y	N	N	N	
N2505	13	58.2	A1-2	-	44.8	0	59	62.5	28.7	51.9	0	64.4	64.4	70	N	-	-	19.6	Y	N	N	N	
N2505	14	60.9	A1-2	-	45.6	0	59.1	62.3	30	52.8	0	64.3	64.3	70	N	-	-	18.7	Y	N	N	N	
N2505	15	63.6	A1-2	-	46.5	0	59.1	62.1	31.3	53.7	0	64.2	64.3	70	N	-	-	17.8	Y	N	N	N	
N2505	16	66.3	A1-2	-	47.3	0	59.1	61.9	32.8	54.7	0	64.2	64.3	70	N	-	-	17.0	Y	N	N	N	
N2505	17	69	A1-2	-	47.9	0	59.1	61.7	34.3	55.5	0	64.2	64.3	70	N	-	-	16.4	Y	N	N	N	
N2505	18	71.7	A1-2	-	48.4	0	59.1	61.5	36.1	56.3	0	64.3	64.4	70	N	-	-	16.0	Y	N	N	N	
N2505	19	74.4	A1-2	-	48.9	0	59.2	61.3	38.5	57.1	0	64.3	64.4	70	N	-	-	15.5	Y	N	N	N	
N2505	20	77.1	A1-2	-	49.5	0	59.3	61.1	40.6	57.8	0	64.4	64.5	70	N	-	-	15.0	Y	N	N	N	
N2505	21	79.8	A1-2	-	50.1	0	59.4	61.1	42.9	58.4	0	64.6	64.7	70	N	-	-	14.6	Y	N	N	N	
N2505	22	82.5	A1-2	-	50.7	0	59.5	60.9	43.8	59	0	64.7	64.9	70	N	-	-	14.2	Y	N	N	N	
N2505	23	85.2	A1-2	-	51.5	0	59.6	60.8	44.2	59.6	0	64.8	65.0	70	N	-	-	13.5	Y	N	N	N	
N2505	24	87.9	A1-2	-	52	0	59.7	60.7	44.5	60.1	0	65	65.2	70	N	-	-	13.2	Y	N	N	N	
N2505	25	90.6	A1-2	-	52.5	0	59.8	60.5	44.6	60.5	0	65.1	65.4	70	N	-	-	12.9	Y	N	N	N	
N2505	26	93.3	A1-2	-	52.8	0	59.9	60.5	44.6	60.9	0	65.3	65.5	70	N	-	-	12.7	Y	N	N	N	
N2505	27	96	A1-2	-	53.2	0	60	60.4	44.7	61.3	0	65.4	65.6	70	N	-	-	12.4	Y	N	N	N	
N2505	28	98.7	A1-2	-	53.5	0	60	60.3	44.7	61.6	0	65.5	65.8	70	N	-	-	12.3	Y	N	N	N	
N2505	29	101.4	A1-2	-	53.8	0	60.1	60.3	44.7	61.9	0	65.7	65.9	70	N	-	-	12.1	Y	N	N	N	
N2505	30	104.1	A1-2	-	54.1	0	60.2	60.2	44.6	62.2	0	65.8	66.1	70	N	-	-	12.0	Y	N	N	N	
N2505	31	106.8	A1-2	-	54.2	0	60.3	60.1	44.6	62.6	0	66	66.2	70	N	-	-	12.0	Y	N	N	N	
N2505	32	109.5	A1-2	-	54.5	0	60.5	60	44.6	62.8	0	66.1	66.3	70	N	-	-	11.8	Y	N	N	N	
N2505	33	112.2	A1-2	-	54.8	0	60.6	60	44.6	63	0	66.2	66.5	70	N	-	-	11.7	Y	N	N	N	
N2505	34	114.9	A1-2	-	54.9	0	60.7	59.9	44.7	63.2	0	66.3	66.6	70	N	-	-	11.7	Y	N	N	N	
N2505	35	117.6	A1-2	-	55	0	60.9	59.8	44.7	63.5	0	66.5	66.8	70	N	-	-	11.8	Y	N	N	N	
N2505	36	120.3	A1-2	-	55	0	61	59.8	44.7	63.7	0	66.6	66.9	70	N	-	-	11.9	Y	N	N	N	
N2505	37	123	A1-2	-	55.1	0	61.2	59.7	44.7	64	0	66.8	67.1	70	N	-	-	12.0	Y	N	N	N	
N2505	38	125.7	A1-2	-	55.2	0	61.3	59.6	44.6	64.2	0	66.9	67.2	70	N	-	-	12.0	Y	N	N	N	
N2506	1	25.8	A1-2	-	26.6	0	25.5	64.6	51.3	43.5	0	64.8	64.8	70	N	-	-	38.2	Y	N	N	N	
N2506	2	28.5	A1-2	-	27.3	0	25.9	64.9	51.1	44	0	65.2	65.2	70	N	-	-	37.8	Y	N	N	N	
N2506	3	31.2	A1-2	-	28.1	0	26.4	65.4	50.9	44.6	0	65.6	65.6	70	N	-	-	37.5	Y	N	N	N	
N2506	4	33.9	A1-2	-	28.9	0	26.8	65.3	50.7	45.1	0	65.5	65.5	70	N	-	-	36.6	Y	N	N	N	
N2506	5	36.6	A1-2	-	29.7	0	27.2	65	50.4	45.7	0	65.2	65.2	70	N	-	-	35.5	Y	N	N	N	
N2506	6	39.3	A1-2	-	30.5	0	27.7	64.8	50.2	46.2	0	65	65.0	70	N	-	-	34.5	Y	N	N	N	
N2506	7																						

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required [A1] (Y/N)
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) [1]	New Roads [2]					New Roads in 2044 dB(A) [3] [B]	C - A dB(A) [D]	D ≥ 1dB(A)				New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			
							PD	DD	LD	EX	TR												
N2506	25	90.6	A1-2	-	47.8	0	43.1	61	46.2	55.7	0	62.3	62.4	70	N	-	-	14.6	Y	N	N	N	
N2506	26	93.3	A1-2	-	48.3	0	43.4	60.9	46	56.1	0	62.3	62.5	70	N	-	-	14.2	Y	N	N	N	
N2506	27	96	A1-2	-	48.7	0	43.9	60.7	45.9	56.4	0	62.3	62.4	70	N	-	-	13.7	Y	N	N	N	
N2506	28	98.7	A1-2	-	49.2	0	44.5	60.6	45.7	56.7	0	62.3	62.5	70	N	-	-	13.3	Y	N	N	N	
N2506	29	101.4	A1-2	-	49.7	0	45.3	60.6	45.6	57.1	0	62.4	62.6	70	N	-	-	12.9	Y	N	N	N	
N2506	30	104.1	A1-2	-	50.2	0	46.1	60.4	45.5	57.4	0	62.4	62.6	70	N	-	-	12.4	Y	N	N	N	
N2506	31	106.8	A1-2	-	50.5	0	47.1	60.3	45.3	57.7	0	62.4	62.7	70	N	-	-	12.2	Y	N	N	N	
N2506	32	109.5	A1-2	-	51	0	48.1	60.2	45.2	58.1	0	62.5	62.8	70	N	-	-	11.8	Y	N	N	N	
N2506	33	112.2	A1-2	-	51.4	0	48.6	60.2	45.1	58.5	0	62.7	63.0	70	N	-	-	11.6	Y	N	N	N	
N2506	34	114.9	A1-2	-	51.7	0	49.2	60.1	45	58.8	0	62.8	63.1	70	N	-	-	11.4	Y	N	N	N	
N2506	35	117.6	A1-2	-	51.8	0	49.6	60	44.9	59.1	0	62.9	63.2	70	N	-	-	11.4	Y	N	N	N	
N2506	36	120.3	A1-2	-	52	0	49.9	59.9	44.8	59.5	0	63	63.3	70	N	-	-	11.3	Y	N	N	N	
N2506	37	123	A1-2	-	52.1	0	50	59.9	44.7	59.8	0	63.1	63.5	70	N	-	-	11.4	Y	N	N	N	
N2506	38	125.7	A1-2	-	52.3	0	50.1	59.8	44.6	60.2	0	63.3	63.6	70	N	-	-	11.3	Y	N	N	N	
N2507	1	24.8	A1-2	-	26.2	0	52	67	15	42.4	0	67.1	67.1	70	N	-	-	40.9	Y	N	N	N	
N2507	2	27.5	A1-2	-	26.9	0	52.7	66.7	15.8	43.1	0	66.9	66.9	70	N	-	-	40.0	Y	N	N	N	
N2507	3	30.2	A1-2	-	27.6	0	53.6	66.4	16.8	43.8	0	66.7	66.7	70	N	-	-	39.1	Y	N	N	N	
N2507	4	32.9	A1-2	-	28.4	0	54.7	66.1	17.7	44.4	0	66.4	66.4	70	N	-	-	38.0	Y	N	N	N	
N2507	5	35.6	A1-2	-	29.1	0	55.6	65.8	18.7	45.1	0	66.2	66.2	70	N	-	-	37.1	Y	N	N	N	
N2507	6	38.3	A1-2	-	29.9	0	56.1	65.4	19.8	45.8	0	65.9	65.9	70	N	-	-	36.0	Y	N	N	N	
N2507	7	41	A1-2	-	30.7	0	56.4	65.1	20.9	46.5	0	65.7	65.7	70	N	-	-	35.0	Y	N	N	N	
N2507	8	43.7	A1-2	-	31.6	0	56.6	64.8	21.8	47.2	0	65.5	65.5	70	N	-	-	33.9	Y	N	N	N	
N2507	9	46.4	A1-2	-	32.4	0	56.7	64.5	22.5	47.9	0	65.2	65.2	70	N	-	-	32.8	Y	N	N	N	
N2507	10	49.1	A1-2	-	33.2	0	56.9	64.2	23.4	48.7	0	65	65.0	70	N	-	-	31.8	Y	N	N	N	
N2507	11	51.8	A1-2	-	34.1	0	56.9	63.9	24.3	49.4	0	64.8	64.8	70	N	-	-	30.7	Y	N	N	N	
N2507	12	54.5	A1-2	-	35.1	0	57	63.6	25.2	50.2	0	64.6	64.6	70	N	-	-	29.5	Y	N	N	N	
N2507	13	57.2	A1-2	-	36.1	0	57	63.4	26	51	0	64.5	64.5	70	N	-	-	28.4	Y	N	N	N	
N2507	14	59.9	A1-2	-	37.2	0	57	63.1	27	51.8	0	64.3	64.4	70	N	-	-	27.2	Y	N	N	N	
N2507	15	62.6	A1-2	-	38.6	0	57.1	62.9	27.9	52.7	0	64.2	64.2	70	N	-	-	25.6	Y	N	N	N	
N2507	16	65.3	A1-2	-	40.2	0	57.1	62.7	28.9	53.9	0	64.2	64.2	70	N	-	-	24.0	Y	N	N	N	
N2507	17	68	A1-2	-	42.3	0	57.1	62.5	30.1	55.3	0	64.2	64.2	70	N	-	-	21.9	Y	N	N	N	
N2507	18	70.7	A1-2	-	44.6	0	57.1	62.3	31.3	56.1	0	64.2	64.3	70	N	-	-	19.7	Y	N	N	N	
N2507	19	73.4	A1-2	-	46	0	57.2	62.1	32.7	56.7	0	64.2	64.3	70	N	-	-	18.3	Y	N	N	N	
N2507	20	76.1	A1-2	-	47.3	0	57.3	61.9	34.2	57.2	0	64.2	64.3	70	N	-	-	17.0	Y	N	N	N	
N2507	21	78.8	A1-2	-	48.2	0	57.4	61.8	35.9	57.7	0	64.2	64.3	70	N	-	-	16.1	Y	N	N	N	
N2507	22	81.5	A1-2	-	49	0	57.4	61.6	38.1	58.2	0	64.2	64.4	70	N	-	-	14.9	Y	N	N	N	
N2507	23	84.2	A1-2	-	49.6	0	57.5	61.5	39.7	58.6	0	64.1	64.5	70	N	-	-	13.5	Y	N	N	N	
N2507	24	86.9	A1-2	-	49.9	0	57.5	61.4	41.8	59	0	64.4	64.6	70	N	-	-	14.7	Y	N	N	N	
N2507	25	89.6	A1-2	-	50.2	0	57.6	61.3	42.8	59.5	0	64.5	64.6	70	N	-	-	14.4	Y	N	N	N	
N2507	26	92.3	A1-2	-	50.5	0	57.6	61.2	43.4	59.9	0	64.6	64.8	70	N	-	-	14.3	Y	N	N	N	
N2507	27	95	A1-2	-	50.7	0	57.7	61.1	43.7	60.4	0	64.7	64.9	70	N	-	-	14.2	Y	N	N	N	
N2507	28	97.7	A1-2	-	51	0	57.8	61	43.8	60.8	0	64.9	65.1	70	N	-	-	14.1	Y	N	N	N	
N2507	29	100.4	A1-2	-	51.2	0	57.9	60.9	43.9	61.3	0	65.1	65.3	70	N	-	-	14.1	Y	N	N	N	
N2507	30	103.1	A1-2	-	51.4	0	58	60.7	43.9	61.7	0	65.2	65.4	70	N	-	-	14.0	Y	N	N	N	
N2507	31	105.8	A1-2	-	51.5	0	58.1	60.7	43.8	62.1	0	65.4	65.6	70	N	-	-	14.1	Y	N	N	N	
N2507	32	108.5	A1-2	-	51.6	0	58.1	60.6	43.9	62.3	0	65.5	65.7	70	N	-	-	14.1	Y	N	N	N	
N2507	33	111.2	A1-2	-	51.7	0	58.2	60.5	43.9	62.6	0	65.6	65.8	70	N	-	-	14.1	Y	N	N	N	
N2507	34	113.9	A1-2	-	51.8	0	58.3	60.4	43.9	62.8	0	65.7	65.9	70	N	-	-	14.1	Y	N	N	N	
N2507	35	116.6	A1-2	-	51.9	0	58.4	60.4	43.9	63.1	0	65.8	66.0	70	N	-	-	14.1	Y	N	N	N	
N2507	36	119.3	A1-2	-	52	0	58.4	60.3	43.9	63.3	0	66	66.1	70	N	-	-	14.1	Y	N	N	N	
N2508	1	24.8	A1-2	-	26.1	0	52.4	68.6	14.9	43.5	0	68.7	68.7	70	N	-	-	42.6	Y	N	N	N	
N2508	2	27.5	A1-2	-	26.7	0	53.1	68.3	15.7	44.2	0	68.5	68.5	70	N	-	-	41.8	Y	N	N	N	
N2508	3	30.2	A1-2	-	27.5	0	54.2	67.9	16.6	44.8	0	68.1	68.1	70	N	-	-	40.6	Y	N	N	N	
N2508	4	32.9	A1-2	-	28.3	0	55.3	67.6	17.6	45.6	0	67.8	67.8	70	N	-	-	39.5	Y	N	N	N	
N2508	5	35.6	A1-2	-	29.1	0	56.1	67.2	18.6	46.3	0	67.5	67.5	70	N	-	-	38.4	Y	N	N	N	
N2508	6	38.3	A1-2	-	29.9	0	56.5	66.8	19.7	46.9	0	67.3	67.3	70	N	-	-	37.4	Y	N	N	N	
N2508	7	41	A1-2	-	30.7	0	56.8	66.4	20.8	47.7	0	66.9	66.9	70	N	-	-	36.2	Y	N	N	N	
N2508	8	43.7	A1-2	-	31.6	0	57	66.1	21.6	48.3	0	66.7	66.7	70	N	-	-	35.1	Y	N	N	N	
N2508	9	46.4	A1-2	-	32.4	0	57.1	65.8	22.5	49.1	0	66.4	66.4	70	N	-	-	34.0	Y	N	N	N	
N2508	10	49.1	A1-2	-	33.3	0	57.1	65.5	23.3	49.8	0	66.2	66.2	70	N	-	-	32.9	Y	N	N	N	
N2508	11	51.8	A1-2	-	34.2	0	57.2	65.2	24.2	50.5	0	65.9	65.9	70	N	-	-	31.7	Y	N	N	N	
N2508	12	54.5	A1-2	-	35.2	0	57.3	64.9	25.1	51.2	0	65.8	65.8	70	N	-	-	30.6	Y	N	N	N	
N2508	13	57.2	A1-2	-	36.3	0	57.3	64.7	26.1	51.9	0	65.6	65.6	70	N	-	-	29.3	Y	N	N	N	
N2508	14	59.9	A1-2	-	37.4	0	57.3	64.4	27	52.7	0	65.4	65.4	70	N	-	-	28.0	Y	N	N	N	
N2508	15	62.6	A1-2	-	38.8	0	57.4	64.2	28	53.5	0	65.3	65.3	70	N	-	-	26.5	Y	N	N	N	
N2508	16	65.3	A1-2	-	40.7	0	57.4	64	29	54.5	0	65.2	65.2	70	N	-	-	24.6	Y	N	N	N	
N2508	17	68	A1-2	-	43.2	0	57.4	63.7	30.1	55.8	0	65.2	65.2	70	N	-	-	22.0	Y	N	N	N	
N2508	18	70.7	A1-2	-	45.3	0	57.5	63.5	31.2	56.6	0	65.1	65.2	70	N	-	-	19.9	Y	N	N	N	
N2508	19	73.4	A1-2	-	46.6	0	57.5	63.3	32.6	57.2	0	65.1	65.1	70	N	-	-	18.6	Y	N	N	N	
N2508	20	76.1	A1-2	-	47.6	0	57.6	63.2	34	57.7	0	65.1	65.2	70	N	-	-	17.6	Y	N	N	N	
N2508	21	78.8	A1-2	-	48.5	0</																	

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	New Roads <sup>[2]</sup>					New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	PD	DD	LD	EX	TR										Overall Noise Level in 2044 dB(A) [C]	Excessance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)
N2509	3	30.2	A1-2	-	26.2	0	30.2	67.6	59	45.4	0	68.2	68.2	70	N	-	-	42.0	Y	N	N	N
N2509	4	32.9	A1-2	-	27.2	0	30.7	67.3	58.7	46.1	0	67.9	67.9	70	N	-	-	40.7	Y	N	N	N
N2509	5	35.6	A1-2	-	28.2	0	31.2	66.9	58.3	46.8	0	67.5	67.5	70	N	-	-	39.3	Y	N	N	N
N2509	6	38.3	A1-2	-	29.2	0	31.8	66.6	57.9	47.4	0	67.2	67.2	70	N	-	-	38.0	Y	N	N	N
N2509	7	41	A1-2	-	30.2	0	32.3	66.2	57.5	48.1	0	66.8	66.8	70	N	-	-	36.6	Y	N	N	N
N2509	8	43.7	A1-2	-	31.1	0	32.9	65.9	57.2	48.7	0	66.5	66.5	70	N	-	-	35.4	Y	N	N	N
N2509	9	46.4	A1-2	-	32.1	0	33.5	65.5	56.9	49.4	0	66.2	66.2	70	N	-	-	34.1	Y	N	N	N
N2509	10	49.1	A1-2	-	33.1	0	34.1	65.2	56.6	50.1	0	65.9	65.9	70	N	-	-	32.8	Y	N	N	N
N2509	11	51.8	A1-2	-	34	0	34.7	64.9	56.3	50.7	0	65.6	65.6	70	N	-	-	31.6	Y	N	N	N
N2509	12	54.5	A1-2	-	35	0	35.4	64.7	56	51.4	0	65.4	65.4	70	N	-	-	30.4	Y	N	N	N
N2509	13	57.2	A1-2	-	36	0	36.1	64.5	55.7	52	0	65.2	65.2	70	N	-	-	29.2	Y	N	N	N
N2509	14	59.9	A1-2	-	37.2	0	36.8	64.2	55.5	52.6	0	65	65.0	70	N	-	-	27.8	Y	N	N	N
N2509	15	62.6	A1-2	-	38.7	0	37.5	64	55.3	53.2	0	64.8	64.9	70	N	-	-	26.2	Y	N	N	N
N2509	16	65.3	A1-2	-	40.8	0	38.4	63.7	55	53.8	0	64.6	64.7	70	N	-	-	23.9	Y	N	N	N
N2509	17	68	A1-2	-	43.4	0	39.4	63.5	54.8	54.4	0	64.5	64.5	70	N	-	-	21.1	Y	N	N	N
N2509	18	70.7	A1-2	-	45.2	0	40.4	63.3	54.6	55	0	64.4	64.5	70	N	-	-	19.3	Y	N	N	N
N2509	19	73.4	A1-2	-	46.3	0	41.9	63.1	54.4	55.5	0	64.3	64.4	70	N	-	-	18.3	Y	N	N	N
N2509	20	76.1	A1-2	-	46.8	0	43.5	62.9	54.2	56.1	0	64.3	64.3	70	N	-	-	17.5	Y	N	N	N
N2509	21	78.8	A1-2	-	47.4	0	45.2	62.8	54.1	56.6	0	64.2	64.3	70	N	-	-	16.9	Y	N	N	N
N2509	22	81.5	A1-2	-	48	0	46.1	62.7	54	57.1	0	64.3	64.4	70	N	-	-	16.4	Y	N	N	N
N2509	23	84.2	A1-2	-	48.4	0	46.6	62.6	53.9	57.7	0	64.3	64.4	70	N	-	-	16.0	Y	N	N	N
N2509	24	86.9	A1-2	-	48.8	0	47.1	62.4	53.7	58.2	0	64.3	64.4	70	N	-	-	15.6	Y	N	N	N
N2509	25	89.6	A1-2	-	48.9	0	47.6	62.3	53.7	58.7	0	64.4	64.5	70	N	-	-	15.6	Y	N	N	N
N2509	26	92.3	A1-2	-	49.3	0	48.1	62.2	53.6	59.2	0	64.4	64.6	70	N	-	-	15.3	Y	N	N	N
N2509	27	95	A1-2	-	49.5	0	48.5	62.1	53.5	59.7	0	64.6	64.7	70	N	-	-	15.2	Y	N	N	N
N2509	28	97.7	A1-2	-	50	0	49.1	61.9	53.3	60.2	0	64.6	64.8	70	N	-	-	14.8	Y	N	N	N
N2509	29	100.4	A1-2	-	50.3	0	49.6	61.9	53.2	60.7	0	64.8	65.0	70	N	-	-	14.7	Y	N	N	N
N2509	30	103.1	A1-2	-	50.6	0	50.2	61.7	53.1	61.2	0	64.9	65.1	70	N	-	-	14.5	Y	N	N	N
N2509	31	105.8	A1-2	-	50.9	0	50.7	61.6	53	61.6	0	65.1	65.2	70	N	-	-	14.3	Y	N	N	N
N2509	32	108.5	A1-2	-	51	0	51.1	61.5	52.9	61.9	0	65.2	65.3	70	N	-	-	14.3	Y	N	N	N
N2509	33	111.2	A1-2	-	51.1	0	51.4	61.5	52.8	62.2	0	65.3	65.3	70	N	-	-	14.4	Y	N	N	N
N2509	34	113.9	A1-2	-	51.3	0	51.7	61.3	52.7	62.5	0	65.4	65.6	70	N	-	-	14.3	Y	N	N	N
N2509	35	116.6	A1-2	-	51.3	0	52	61.2	52.6	62.8	0	65.5	65.7	70	N	-	-	14.4	Y	N	N	N
N2509	36	119.3	A1-2	-	51.4	0	52.3	61.2	52.5	63.1	0	65.7	65.9	70	N	-	-	14.5	Y	N	N	N
N2510	1	24.8	A1-2	-	22.4	0	23.6	66.9	59.9	43	0	67.7	67.7	70	N	-	-	45.3	Y	N	N	N
N2510	2	27.5	A1-2	-	23.2	0	24	66.6	59.6	43.7	0	67.4	67.4	70	N	-	-	44.2	Y	N	N	N
N2510	3	30.2	A1-2	-	24	0	24.4	66.3	59.3	44.4	0	67.1	67.1	70	N	-	-	43.1	Y	N	N	N
N2510	4	32.9	A1-2	-	25	0	24.9	66	59	45	0	66.8	66.8	70	N	-	-	41.8	Y	N	N	N
N2510	5	35.6	A1-2	-	25.9	0	25.3	65.7	58.7	45.6	0	66.5	66.5	70	N	-	-	40.6	Y	N	N	N
N2510	6	38.3	A1-2	-	26.9	0	25.9	65.4	58.3	46.2	0	66.2	66.2	70	N	-	-	39.3	Y	N	N	N
N2510	7	41	A1-2	-	27.7	0	26.4	65.1	58	46.9	0	65.9	65.9	70	N	-	-	38.2	Y	N	N	N
N2510	8	43.7	A1-2	-	28.5	0	26.9	64.8	57.7	47.4	0	65.6	65.6	70	N	-	-	37.1	Y	N	N	N
N2510	9	46.4	A1-2	-	29.3	0	27.4	64.5	57.4	48.1	0	65.3	65.3	70	N	-	-	36.0	Y	N	N	N
N2510	10	49.1	A1-2	-	30.2	0	28	64.2	57.1	48.7	0	65.1	65.1	70	N	-	-	34.9	Y	N	N	N
N2510	11	51.8	A1-2	-	31	0	28.6	63.9	56.8	49.4	0	64.8	64.8	70	N	-	-	33.8	Y	N	N	N
N2510	12	54.5	A1-2	-	32.1	0	29.3	63.6	56.5	50	0	64.6	64.6	70	N	-	-	32.5	Y	N	N	N
N2510	13	57.2	A1-2	-	33.1	0	30	63.4	56.3	50.5	0	64.4	64.4	70	N	-	-	31.3	Y	N	N	N
N2510	14	59.9	A1-2	-	34.4	0	30.7	63.1	56	51.1	0	64.1	64.1	70	N	-	-	29.7	Y	N	N	N
N2510	15	62.6	A1-2	-	35.9	0	31.6	62.9	55.8	51.6	0	64	64.0	70	N	-	-	28.1	Y	N	N	N
N2510	16	65.3	A1-2	-	37.8	0	32.5	62.8	55.6	52	0	63.8	63.8	70	N	-	-	26.0	Y	N	N	N
N2510	17	68	A1-2	-	40.6	0	33.6	62.6	55.4	52.5	0	63.7	63.7	70	N	-	-	23.1	Y	N	N	N
N2510	18	70.7	A1-2	-	42.8	0	35	62.4	55.2	52.9	0	63.5	63.6	70	N	-	-	20.8	Y	N	N	N
N2510	19	73.4	A1-2	-	43.7	0	36.7	62.2	55	53.4	0	63.4	63.5	70	N	-	-	19.8	Y	N	N	N
N2510	20	76.1	A1-2	-	44.1	0	38.8	62	54.8	53.8	0	63.3	63.3	70	N	-	-	19.2	Y	N	N	N
N2510	21	78.8	A1-2	-	44.2	0	40.8	61.8	54.6	54.1	0	63.2	63.3	70	N	-	-	19.1	Y	N	N	N
N2510	22	81.5	A1-2	-	44.4	0	41.9	61.7	54.4	54.5	0	63.1	63.2	70	N	-	-	18.8	Y	N	N	N
N2510	23	84.2	A1-2	-	44.6	0	42.4	61.7	54.3	54.8	0	63.1	63.2	70	N	-	-	18.6	Y	N	N	N
N2510	24	86.9	A1-2	-	45	0	42.7	61.5	54.1	55.2	0	63	63.1	70	N	-	-	18.1	Y	N	N	N
N2510	25	89.6	A1-2	-	45.4	0	42.8	61.3	53.9	55.5	0	63	63.0	70	N	-	-	17.6	Y	N	N	N
N2510	26	92.3	A1-2	-	45.9	0	42.9	61.3	53.8	55.8	0	63	63.1	70	N	-	-	17.2	Y	N	N	N
N2510	27	95	A1-2	-	46.4	0	43	61.1	53.6	56.2	0	62.9	63.0	70	N	-	-	16.6	Y	N	N	N
N2510	28	97.7	A1-2	-	47.2	0	43.1	61	53.5	56.6	0	62.9	63.0	70	N	-	-	15.8	Y	N	N	N
N2510	29	100.4	A1-2	-	47.7	0	43.1	61	53.4	56.9	0	63	63.1	70	N	-	-	15.4	Y	N	N	N
N2510	30	103.1	A1-2	-	48.2	0	43.3	60.8	53.2	57.2	0	62.9	63.1	70	N	-	-	14.9	Y	N	N	N
N2510	31	105.8	A1-2	-	48.7	0	43.4	60.7	53.1	57.6	0	63	63.1	70	N	-	-	14.4	Y	N	N	N
N2510	32	108.5	A1-2	-	49	0	43.5	60.6	53	58	0	63	63.2	70	N	-	-	14.2	Y	N	N	N
N2510	33	111.2	A1-2	-	49.2	0	43.6	60.5	52.8	58.4	0	63	63.2	70	N	-	-	14.0	Y	N	N	N
N2510	34	113.9	A1-2	-	49.3	0	43.7	60.4	52.7	58.8	0	63.1	63.3	70	N	-	-	14.0	Y	N	N	N
N2510	35	116.6	A1-2	-	49.4	0	43.8	60.3	52.6	59.2	0	63.2	63.4	70	N	-	-	14.0	Y	N	N	N
N2510	36	119.3	A1-2	-	49.6	0	44	60.2	52.5	59.6	0	63.3	63.5	70								

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A)		Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required [Y/N]	
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) [1]	New Roads [2]					New Roads in 2044 dB(A) [3] [B]	C - A dB(A) [D]	D ≥ 1dB(A)					New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)			PD	DD	LD	EX	TR																
N2542	19	90.5	A1-4	-	37.7	0	50.2	51.3	62.5	59.3	0	64.6	64.6	70	N	-	-	-	-	-	-	26.9	Y	N	N
N2542	20	93.6	A1-4	-	39.1	0	50.4	51.4	62.3	59.9	0	64.7	64.7	70	N	-	-	-	-	-	-	25.6	Y	N	N
N2542	21	96.7	A1-4	-	41	0	50.6	51.6	62.2	60.5	0	64.8	64.8	70	N	-	-	-	-	-	-	23.8	Y	N	N
N2542	22	99.8	A1-4	-	42.4	0	50.7	51.8	62.1	60.9	0	64.9	65.0	70	N	-	-	-	-	-	-	22.6	Y	N	N
N2542	23	102.9	A1-4	-	44.5	0	50.8	52.2	61.9	61.4	0	65.1	65.1	70	N	-	-	-	-	-	-	20.6	Y	N	N
N2542	24	106	A1-4	-	45.6	0	51	52.5	61.8	61.9	0	65.3	65.3	70	N	-	-	-	-	-	-	19.7	Y	N	N
N2542	25	109.1	A1-4	-	46.4	0	51	52.7	61.6	62.2	0	65.3	65.4	70	N	-	-	-	-	-	-	19.0	Y	N	N
N2542	26	112.2	A1-4	-	46.9	0	51.1	52.9	61.5	62.6	0	65.5	65.5	70	N	-	-	-	-	-	-	18.6	Y	N	N
N2542	27	115.3	A1-4	-	47.3	0	51.2	53	61.4	62.8	0	65.6	65.7	70	N	-	-	-	-	-	-	18.4	Y	N	N
N2543	1	34.7	A1-5	-	22.2	0	44.4	51.6	66.6	48.3	0	66.8	66.8	70	N	-	-	-	-	-	-	44.6	Y	N	N
N2543	2	37.8	A1-5	-	22.9	0	45.2	52.1	66.3	49	0	66.6	66.6	70	N	-	-	-	-	-	-	43.7	Y	N	N
N2543	3	40.9	A1-5	-	23.6	0	45.8	52	66	49.6	0	66.3	66.3	70	N	-	-	-	-	-	-	42.7	Y	N	N
N2543	4	44	A1-5	-	24.2	0	46.2	51.8	65.8	50.3	0	66.1	66.1	70	N	-	-	-	-	-	-	41.9	Y	N	N
N2543	5	47.1	A1-5	-	24.9	0	46.6	51.5	65.5	50.9	0	65.9	65.9	70	N	-	-	-	-	-	-	41.0	Y	N	N
N2543	6	50.2	A1-5	-	25.6	0	46.9	51.3	65.2	51.5	0	65.6	65.6	70	N	-	-	-	-	-	-	40.0	Y	N	N
N2543	7	53.3	A1-5	-	26.4	0	47	51.1	64.9	52.1	0	65.4	65.4	70	N	-	-	-	-	-	-	39.0	Y	N	N
N2543	8	56.4	A1-5	-	27.1	0	47.2	50.9	64.7	52.7	0	65.2	65.2	70	N	-	-	-	-	-	-	38.1	Y	N	N
N2543	9	59.5	A1-5	-	27.8	0	47.3	50.8	64.4	53.3	0	65	65.0	70	N	-	-	-	-	-	-	37.2	Y	N	N
N2543	10	62.6	A1-5	-	28.6	0	47.5	50.6	64.2	53.8	0	64.8	64.9	70	N	-	-	-	-	-	-	36.3	Y	N	N
N2543	11	65.7	A1-5	-	29.4	0	47.6	50.5	64	54.3	0	64.7	64.7	70	N	-	-	-	-	-	-	35.3	Y	N	N
N2543	12	68.8	A1-5	-	30.2	0	47.8	50.5	63.8	54.9	0	64.6	64.6	70	N	-	-	-	-	-	-	34.4	Y	N	N
N2543	13	71.9	A1-5	-	31.1	0	47.9	50.5	63.5	55.5	0	64.4	64.4	70	N	-	-	-	-	-	-	33.3	Y	N	N
N2543	14	75	A1-5	-	32	0	48.1	50.5	63.3	56.1	0	64.4	64.4	70	N	-	-	-	-	-	-	32.4	Y	N	N
N2543	15	78.1	A1-5	-	32.9	0	48.4	50.5	63.1	56.8	0	64.3	64.3	70	N	-	-	-	-	-	-	31.4	Y	N	N
N2543	16	81.2	A1-5	-	33.9	0	48.7	50.6	63	57.5	0	64.4	64.4	70	N	-	-	-	-	-	-	30.5	Y	N	N
N2543	17	84.3	A1-5	-	34.9	0	49.1	50.8	62.8	58.1	0	64.4	64.4	70	N	-	-	-	-	-	-	29.5	Y	N	N
N2543	18	87.4	A1-5	-	36.1	0	49.5	51.1	62.6	58.7	0	64.4	64.5	70	N	-	-	-	-	-	-	28.4	Y	N	N
N2543	19	90.5	A1-5	-	37.4	0	50	51.4	62.4	59.3	0	64.5	64.5	70	N	-	-	-	-	-	-	27.1	Y	N	N
N2543	20	93.6	A1-5	-	39	0	50.3	51.7	62.3	60	0	64.7	64.7	70	N	-	-	-	-	-	-	25.7	Y	N	N
N2543	21	96.7	A1-5	-	40.5	0	50.5	51.8	62.1	60.5	0	64.8	64.8	70	N	-	-	-	-	-	-	24.3	Y	N	N
N2543	22	99.8	A1-5	-	42.2	0	50.7	52.2	62	61	0	65	65.0	70	N	-	-	-	-	-	-	22.8	Y	N	N
N2543	23	102.9	A1-5	-	43.8	0	50.8	52.4	61.9	61.4	0	65.1	65.1	70	N	-	-	-	-	-	-	21.3	Y	N	N
N2543	24	106	A1-5	-	45.2	0	50.9	52.6	61.8	61.8	0	65.2	65.3	70	N	-	-	-	-	-	-	20.1	Y	N	N
N2543	25	109.1	A1-5	-	46	0	51	52.8	61.6	62.2	0	65.3	65.4	70	N	-	-	-	-	-	-	19.4	Y	N	N
N2543	26	112.2	A1-5	-	46.5	0	51.1	52.9	61.5	62.5	0	65.4	65.5	70	N	-	-	-	-	-	-	19.0	Y	N	N
N2543	27	115.3	A1-5	-	46.9	0	51.2	53	61.4	62.8	0	65.6	65.6	70	N	-	-	-	-	-	-	18.7	Y	N	N
N2544	1	34.7	A1-5	-	0	0	0	47.9	64.3	46.3	0	64.5	64.5	70	N	-	-	-	-	-	-	61.5	Y	N	N
N2544	2	37.8	A1-5	-	0	0	0	47.9	64.1	46.8	0	64.3	64.3	70	N	-	-	-	-	-	-	61.3	Y	N	N
N2544	3	40.9	A1-5	-	0	0	0	47.7	63.9	47.4	0	64	64.0	70	N	-	-	-	-	-	-	61.0	Y	N	N
N2544	4	44	A1-5	-	0	0	0	47.5	63.6	48	0	63.9	63.9	70	N	-	-	-	-	-	-	60.9	Y	N	N
N2544	5	47.1	A1-5	-	0	0	0	47.3	63.4	48.6	0	63.6	63.6	70	N	-	-	-	-	-	-	60.6	Y	N	N
N2544	6	50.2	A1-5	-	0	0	0	47.2	63.1	49.2	0	63.4	63.4	70	N	-	-	-	-	-	-	60.4	Y	N	N
N2544	7	53.3	A1-5	-	0	0	0	47	62.9	49.8	0	63.2	63.2	70	N	-	-	-	-	-	-	60.2	Y	N	N
N2544	8	56.4	A1-5	-	0	0	0	46.9	62.7	50.3	0	63	63.0	70	N	-	-	-	-	-	-	60.0	Y	N	N
N2544	9	59.5	A1-5	-	0	0	0	46.9	62.4	50.8	0	62.8	62.8	70	N	-	-	-	-	-	-	59.8	Y	N	N
N2544	10	62.6	A1-5	-	0	0	0	46.9	62.2	51.2	0	62.7	62.7	70	N	-	-	-	-	-	-	59.7	Y	N	N
N2544	11	65.7	A1-5	-	0	0	0	46.9	61.9	51.6	0	62.5	62.5	70	N	-	-	-	-	-	-	59.5	Y	N	N
N2544	12	68.8	A1-5	-	0	0	0	47	61.7	52.1	0	62.3	62.3	70	N	-	-	-	-	-	-	59.3	Y	N	N
N2544	13	71.9	A1-5	-	0	0	0	47	61.5	52.5	0	62.2	62.2	70	N	-	-	-	-	-	-	59.2	Y	N	N
N2544	14	75	A1-5	-	0	0	0	47.2	61.3	53.1	0	62.1	62.1	70	N	-	-	-	-	-	-	59.1	Y	N	N
N2544	15	78.1	A1-5	-	0	0	0	47.3	61.2	53.6	0	62	62.0	70	N	-	-	-	-	-	-	59.0	Y	N	N
N2544	16	81.2	A1-5	-	0	0	0	47.8	61	54.2	0	62	62.0	70	N	-	-	-	-	-	-	59.0	Y	N	N
N2544	17	84.3	A1-5	-	0	0	0	48.2	60.8	54.7	0	62	62.0	70	N	-	-	-	-	-	-	59.0	Y	N	N
N2544	18	87.4	A1-5	-	0	0	0	48.9	60.6	55.4	0	62	62.0	70	N	-	-	-	-	-	-	59.0	Y	N	N
N2544	19	90.5	A1-5	-	0	0	0	49.4	60.5	56.3	0	62.2	62.2	70	N	-	-	-	-	-	-	59.2	Y	N	N
N2544	20	93.6	A1-5	-	0	0	0	49.8	60.3	57	0	62.3	62.3	70	N	-	-	-	-	-	-	59.3	Y	N	N
N2544	21	96.7	A1-5	-	0	0	0	50	60.2	57.7	0	62.4	62.4	70	N	-	-	-	-	-	-	59.4	Y	N	N
N2544	22	99.8	A1-5	-	0	0	0	50.3	60	58.3	0	62.5	62.5	70	N	-	-	-	-	-	-	59.5	Y	N	N
N2544	23	102.9	A1-5	-	0	0	0	50.7	59.9	58.7	0	62.7	62.7	70	N	-	-	-	-	-	-	59.7	Y	N	N
N2544	24	106	A1-5	-	0	0	0	50.9	59.7	59.1	0	62.8	62.8	70	N	-	-	-	-	-	-	59.8	Y	N	N
N2544	25	109.1	A1-5	-	0	0	0	51.1	59.6	59.4	0	62.9	62.9	70	N	-	-	-	-	-	-	59.9	Y	N	N
N2544	26	112.2	A1-5	-	0	0	0	51.3	59.5	59.7	0	62.9	62.9	70	N	-	-	-	-	-	-	59.9	Y	N	N
N2544	27	115.3	A1-5	-	0	0	0	51.4	59.3	59.9	0	63	63.0	70	N	-	-	-	-	-	-	60.0	Y	N	N
N2545	1	34.7	A1-4	-	22.9	0	40.1	52.1	64	45.2	0	64.3	64.3	70	N	-	-	-	-	-	-	41.4	Y	N	N
N2545	2	37.8	A1-4	-	23.5	0	40.7	52.6	64.5	46	0	64.8	64.8	70	N	-	-	-	-	-	-	41.3	Y	N	N
N2545	3	40.9	A1-4	-																					

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point				Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required [4] (Y/N)
					Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) [1]	New Roads [2]					New Roads in 2044 dB(A) [3] [B]	C - A dB(A) [D]	D ≥ 1dB(A)				New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			
								PD	DD	LD	EX	TR												
N2545	26	112.2	A1-4	-	47	0	49.2	50.4	60	60.1	0	63.5	63.6	70	N	-	-	16.6	Y	N	N	N		
N2545	27	115.3	A1-4	-	47.3	0	49.4	50.6	59.9	60.4	0	63.6	63.7	70	N	-	-	16.4	Y	N	N	N		
N2581	1	25	A1-8	-	30.6	0	17.3	62.7	38.9	51.7	0	63.1	63.1	70	N	-	-	32.5	Y	N	N	N		
N2581	2	27.7	A1-8	-	32.1	0	17.3	62.9	39.3	51.8	0	63.2	63.2	70	N	-	-	31.1	Y	N	N	N		
N2581	3	30.4	A1-8	-	33.2	0	17.3	62.8	39.7	52.1	0	63.2	63.2	70	N	-	-	30.0	Y	N	N	N		
N2581	4	33.1	A1-8	-	34	0	17.3	62.7	40	52.4	0	63.1	63.1	70	N	-	-	29.1	Y	N	N	N		
N2581	5	35.8	A1-8	-	35	0	17.3	62.6	40.1	52.7	0	63	63.0	70	N	-	-	28.0	Y	N	N	N		
N2581	6	38.5	A1-8	-	35.8	0	17.3	62.5	40.1	53	0	63	63.0	70	N	-	-	27.2	Y	N	N	N		
N2581	7	41.2	A1-8	-	36.8	0	17.2	62.3	40.2	53.3	0	62.8	62.9	70	N	-	-	26.1	Y	N	N	N		
N2581	8	43.9	A1-8	-	37.5	0	17.6	62.2	40.2	53.8	0	62.8	62.8	70	N	-	-	25.3	Y	N	N	N		
N2581	9	46.6	A1-8	-	38.2	0	17.7	62	40.2	54.2	0	62.7	62.7	70	N	-	-	24.5	Y	N	N	N		
N2581	10	49.3	A1-8	-	38.6	0	17.7	61.9	40.3	54.6	0	62.7	62.7	70	N	-	-	24.1	Y	N	N	N		
N2581	11	52	A1-8	-	39	0	17.5	61.8	40.4	55.1	0	62.6	62.7	70	N	-	-	23.7	Y	N	N	N		
N2581	12	54.7	A1-8	-	39.5	0	18.2	61.7	40.4	55.6	0	62.7	62.7	70	N	-	-	23.2	Y	N	N	N		
N2581	13	57.4	A1-8	-	40.1	0	18.2	61.5	40.5	56.4	0	62.7	62.7	70	N	-	-	22.6	Y	N	N	N		
N2581	14	60.1	A1-8	-	40.9	0	18.2	61.4	40.6	57.1	0	62.8	62.8	70	N	-	-	21.9	Y	N	N	N		
N2581	15	62.8	A1-8	-	42.3	0	18.4	61.3	40.8	57.8	0	63	63.0	70	N	-	-	20.7	Y	N	N	N		
N2581	16	65.5	A1-8	-	44.2	0	18.4	61.3	41	58.7	0	63.2	63.2	70	N	-	-	19.0	Y	N	N	N		
N2581	17	68.2	A1-8	-	45.3	0	18.3	61.2	41.4	59.3	0	63.4	63.5	70	N	-	-	18.2	Y	N	N	N		
N2581	18	70.9	A1-8	-	45.9	0	18.4	61.1	42	60.1	0	63.7	63.7	70	N	-	-	17.8	Y	N	N	N		
N2581	19	73.6	A1-8	-	46.1	0	18.4	61	42.7	60.7	0	63.9	64.0	70	N	-	-	17.9	Y	N	N	N		
N2581	20	76.3	A1-8	-	46.2	0	18.4	60.9	43.7	61.3	0	64.2	64.3	70	N	-	-	18.1	Y	N	N	N		
N2581	21	79	A1-8	-	46.2	0	18.4	60.8	44.4	61.8	0	64.4	64.4	70	N	-	-	18.2	Y	N	N	N		
N2581	22	81.7	A1-8	-	46.2	0	18.4	60.7	45	62.2	0	64.6	64.6	70	N	-	-	18.4	Y	N	N	N		
N2581	23	84.4	A1-8	-	46.2	0	18.3	60.6	45.5	62.4	0	64.7	64.7	70	N	-	-	18.5	Y	N	N	N		
N2581	24	87.1	A1-8	-	46.2	0	18.4	60.6	45.9	62.7	0	64.8	64.9	70	N	-	-	18.7	Y	N	N	N		
N2581	25	89.8	A1-8	-	46.2	0	18.4	60.4	46.2	62.9	0	64.9	65.0	70	N	-	-	18.8	Y	N	N	N		
N2581	26	92.5	A1-8	-	46.2	0	18.4	60.3	46.5	63.1	0	65	65.0	70	N	-	-	18.8	Y	N	N	N		
N2581	27	95.2	A1-8	-	46.1	0	18.4	60.3	46.8	63.3	0	65.1	65.2	70	N	-	-	19.1	Y	N	N	N		
N2581	28	97.9	A1-8	-	46.1	0	18.4	60.2	47.1	63.4	0	65.2	65.2	70	N	-	-	19.1	Y	N	N	N		
N2581	29	100.6	A1-8	-	46.1	0	18.4	60.1	47.6	63.6	0	65.3	65.4	70	N	-	-	19.3	Y	N	N	N		
N2581	30	103.3	A1-8	-	46.1	0	18.2	60.1	48.1	63.8	0	65.4	65.4	70	N	-	-	19.3	Y	N	N	N		
N2581	31	106	A1-8	-	46.1	0	18.2	60	48.8	63.9	0	65.5	65.5	70	N	-	-	19.4	Y	N	N	N		
N2581	32	108.7	A1-8	-	46.1	0	18.3	60	49.4	64	0	65.6	65.6	70	N	-	-	19.5	Y	N	N	N		
N2581	33	111.4	A1-8	-	46.1	0	18.5	59.9	49.8	64.2	0	65.7	65.7	70	N	-	-	19.6	Y	N	N	N		
N2581	34	114.1	A1-8	-	46.1	0	18.7	59.9	50	64.3	0	65.8	65.8	70	N	-	-	19.7	Y	N	N	N		
N2581	35	116.8	A1-8	-	46	0	18.8	59.9	50.1	64.4	0	65.9	65.9	70	N	-	-	19.9	Y	N	N	N		
N2582	1	25	A1-8	-	33.3	0	12.3	67.9	49.4	53.3	0	68.1	68.1	70	N	-	-	34.8	Y	N	N	N		
N2582	2	27.7	A1-8	-	34.6	0	12.4	67.7	49.1	53.6	0	68	68.0	70	N	-	-	33.4	Y	N	N	N		
N2582	3	30.4	A1-8	-	35.7	0	12.5	67.5	48.9	53.8	0	67.8	67.8	70	N	-	-	32.1	Y	N	N	N		
N2582	4	33.1	A1-8	-	36.8	0	12.3	67.3	48.8	54.1	0	67.6	67.6	70	N	-	-	30.8	Y	N	N	N		
N2582	5	35.8	A1-8	-	38.2	0	12.3	67.1	48.6	54.4	0	67.4	67.4	70	N	-	-	29.2	Y	N	N	N		
N2582	6	38.5	A1-8	-	39.2	0	12.5	66.9	48.4	54.7	0	67.3	67.3	70	N	-	-	28.1	Y	N	N	N		
N2582	7	41.2	A1-8	-	40.6	0	12.9	66.7	48.2	55.1	0	67.1	67.1	70	N	-	-	26.5	Y	N	N	N		
N2582	8	43.9	A1-8	-	41.6	0	13.3	66.5	47.9	55.4	0	66.9	66.9	70	N	-	-	25.3	Y	N	N	N		
N2582	9	46.6	A1-8	-	42.3	0	13.8	66.3	47.7	55.9	0	66.7	66.7	70	N	-	-	24.4	Y	N	N	N		
N2582	10	49.3	A1-8	-	43	0	14.4	66.1	47.5	56.3	0	66.6	66.6	70	N	-	-	23.9	Y	N	N	N		
N2582	11	52	A1-8	-	43.3	0	15	65.9	47.4	56.8	0	66.5	66.5	70	N	-	-	23.5	Y	N	N	N		
N2582	12	54.7	A1-8	-	43.3	0	15.8	65.7	47.3	57.4	0	66.4	66.4	70	N	-	-	23.1	Y	N	N	N		
N2582	13	57.4	A1-8	-	43.7	0	16.6	65.6	47.1	58	0	66.3	66.4	70	N	-	-	22.7	Y	N	N	N		
N2582	14	60.1	A1-8	-	44.2	0	17.3	65.5	46.9	58.7	0	66.4	66.4	70	N	-	-	22.2	Y	N	N	N		
N2582	15	62.8	A1-8	-	44.9	0	18	65.3	46.8	59.3	0	66.3	66.4	70	N	-	-	21.5	Y	N	N	N		
N2582	16	65.5	A1-8	-	45.7	0	18.7	65.2	46.8	60	0	66.4	66.4	70	N	-	-	20.7	Y	N	N	N		
N2582	17	68.2	A1-8	-	46	0	19.5	65	46.8	60.6	0	66.4	66.4	70	N	-	-	20.4	Y	N	N	N		
N2582	18	70.9	A1-8	-	46.2	0	20.2	64.9	47	61.2	0	66.5	66.6	70	N	-	-	20.4	Y	N	N	N		
N2582	19	73.6	A1-8	-	46.3	0	21.1	64.8	47.1	61.9	0	66.6	66.7	70	N	-	-	20.4	Y	N	N	N		
N2582	20	76.3	A1-8	-	46.2	0	21.9	64.7	47.3	62.4	0	66.8	66.8	70	N	-	-	20.6	Y	N	N	N		
N2582	21	79	A1-8	-	46.2	0	22.8	64.5	47.5	62.9	0	66.8	66.9	70	N	-	-	20.7	Y	N	N	N		
N2582	22	81.7	A1-8	-	46.2	0	23.8	64.4	47.7	63.3	0	67	67.0	70	N	-	-	20.8	Y	N	N	N		
N2582	23	84.4	A1-8	-	46.2	0	24.6	64.3	47.9	63.6	0	67	67.0	70	N	-	-	20.8	Y	N	N	N		
N2582	24	87.1	A1-8	-	46.2	0	25.3	64.2	48	63.8	0	67.1	67.1	70	N	-	-	20.9	Y	N	N	N		
N2582	25	89.8	A1-8	-	46.2	0	26	64.1	48	64.1	0	67.2	67.2	70	N	-	-	21.0	Y	N	N	N		
N2582	26	92.5	A1-8	-	46.2	0	26.5	64	48.1	64.3	0	67.2	67.3	70	N	-	-	21.1	Y	N	N	N		
N2582	27	95.2	A1-8	-	46.2	0	27	63.9	48.3	64.5	0	67.3	67.3	70	N	-	-	21.1	Y	N	N	N		
N2582	28	97.9	A1-8	-	46.2	0	27.4	63.9	48.3	64.7	0	67.4	67.4	70	N	-	-	21.2	Y	N	N	N		
N2582	29	100.6	A1-8	-	46.2	0	27.9	63.8	48.6	64.8	0	67.4	67.5	70	N	-	-	21.3	Y	N	N	N		
N2582	30	103.3	A1-8	-	46.1	0	28.3	63.8	48.6	65	0	67.5	67.5	70	N	-	-	21.4	Y	N	N	N		
N2582	31	106	A1-8	-	46.1	0	28.9	63.7	49.2	65.2	0	67.6	67.6	70	N	-	-	21.5	Y	N	N	N		
N2582	32	108.7	A1-8	-	46.1	0	29.5	63.6	49.6	65.4	0	67.7	67.7	70	N	-	-	21.6	Y	N	N	N		
N2582	33	111.4	A1-8	-	46.1	0	30	63.5	50.2	65.6	0	67.8	67.8	70	N	-	-	21.7	Y	N	N	N		
N2582	34	114.1	A1-8	-	46.1	0	30.7	63.5																

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point				WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)
ID	Floor	Floor Level (mPD)	Location	Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
				[A]			PD	DD	LD	EX	TR		[C]									
N2583	17	68.2	A1-8	-	44.7	0	23	64.9	52.3	58.8	0	66.1	66.1	70	N	-	-	21.4	Y	N	N	
N2583	18	70.9	A1-8	-	44.7	0	23.8	64.8	52.3	59.3	0	66.1	66.1	70	N	-	-	21.4	Y	N	N	
N2583	19	73.6	A1-8	-	44.7	0	24.6	64.8	52.1	59.8	0	66.1	66.2	70	N	-	-	21.5	Y	N	N	
N2583	20	76.3	A1-8	-	44.7	0	25.4	64.6	52	60.4	0	66.2	66.2	70	N	-	-	21.5	Y	N	N	
N2583	21	79	A1-8	-	44.7	0	26.4	64.6	51.8	61	0	66.3	66.3	70	N	-	-	21.6	Y	N	N	
N2583	22	81.7	A1-8	-	44.7	0	27.3	64.4	51.8	61.5	0	66.4	66.4	70	N	-	-	21.7	Y	N	N	
N2583	23	84.4	A1-8	-	44.7	0	28.4	64.3	51.6	62.1	0	66.5	66.5	70	N	-	-	21.9	Y	N	N	
N2583	24	87.1	A1-8	-	44.6	0	29.5	64.3	51.6	62.6	0	66.7	66.7	70	N	-	-	22.1	Y	N	N	
N2583	25	89.8	A1-8	-	44.6	0	30.8	64.1	51.6	63	0	66.7	66.8	70	N	-	-	22.2	Y	N	N	
N2583	26	92.5	A1-8	-	44.6	0	32.1	64.1	51.4	63.3	0	66.9	66.9	70	N	-	-	22.3	Y	N	N	
N2583	27	95.2	A1-8	-	44.6	0	33.1	64	51.4	63.6	0	67	67.0	70	N	-	-	22.4	Y	N	N	
N2583	28	97.9	A1-8	-	44.6	0	34.1	64	51.3	63.8	0	67	67.1	70	N	-	-	22.5	Y	N	N	
N2583	29	100.6	A1-8	-	44.5	0	34.4	63.9	51.3	64.1	0	67.1	67.1	70	N	-	-	22.6	Y	N	N	
N2583	30	103.3	A1-8	-	44.5	0	34.9	63.8	51.2	64.3	0	67.2	67.2	70	N	-	-	22.7	Y	N	N	
N2583	31	106	A1-8	-	44.5	0	35.8	63.8	51.1	64.4	0	67.2	67.3	70	N	-	-	22.8	Y	N	N	
N2583	32	108.7	A1-8	-	44.5	0	36.5	63.7	51	64.6	0	67.3	67.3	70	N	-	-	22.8	Y	N	N	
N2583	33	111.4	A1-8	-	44.5	0	37.2	63.7	50.9	64.8	0	67.4	67.4	70	N	-	-	22.9	Y	N	N	
N2583	34	114.1	A1-8	-	44.5	0	37.5	63.7	50.9	65	0	67.5	67.5	70	N	-	-	23.0	Y	N	N	
N2583	35	116.8	A1-8	-	44.4	0	37.9	63.6	50.8	65.1	0	67.5	67.6	70	N	-	-	23.2	Y	N	N	
N2612	1	11.5	A1-9	-	15.7	0	0	53.5	66.4	11.3	0	66.6	66.6	70	N	-	-	50.8	Y	N	N	
N2612	2	14.2	A1-9	-	16.3	0	0	53.5	66.3	11.3	0	66.5	66.5	70	N	-	-	50.1	Y	N	N	
N2612	3	16.9	A1-9	-	16.9	0	0	53.5	66.1	11.3	0	66.4	66.4	70	N	-	-	49.4	Y	N	N	
N2612	4	19.6	A1-9	-	17.7	0	0	53.5	66	11.3	0	66.3	66.3	70	N	-	-	48.5	Y	N	N	
N2612	5	22.3	A1-9	-	18.6	0	0	53.5	65.8	11.3	0	66.1	66.1	70	N	-	-	47.4	Y	N	N	
N2612	6	25	A1-9	-	19.6	0	0	53.5	65.6	11.3	0	65.8	65.8	70	N	-	-	46.2	Y	N	N	
N2612	7	27.7	A1-9	-	20.5	0	0	53.5	65.3	11.3	0	65.6	65.6	70	N	-	-	45.1	Y	N	N	
N2612	8	30.4	A1-9	-	21.6	0	0	53.4	65.1	11.3	0	65.4	65.4	70	N	-	-	43.8	Y	N	N	
N2612	9	33.1	A1-9	-	22.6	0	0	53.4	64.9	11.3	0	65.2	65.2	70	N	-	-	42.6	Y	N	N	
N2612	10	35.8	A1-9	-	23.8	0	0	53.4	64.6	11.3	0	64.9	64.9	70	N	-	-	41.1	Y	N	N	
N2612	11	38.5	A1-9	-	25	0	0	53.3	64.4	11.3	0	64.8	64.8	70	N	-	-	39.8	Y	N	N	
N2612	12	41.2	A1-9	-	26.1	0	0	53.3	64.2	11.3	0	64.6	64.6	70	N	-	-	38.5	Y	N	N	
N2612	13	43.9	A1-9	-	27.5	0	0	53.3	63.9	11.2	0	64.3	64.3	70	N	-	-	36.8	Y	N	N	
N2612	14	46.6	A1-9	-	28.8	0	0	53.2	63.7	11	0	64.1	64.1	70	N	-	-	35.3	Y	N	N	
N2612	15	49.3	A1-9	-	30.4	0	0	53.2	63.5	11.3	0	63.9	63.9	70	N	-	-	33.5	Y	N	N	
N2612	16	52	A1-9	-	32.1	0	0	53.1	63.4	11.3	0	63.7	63.7	70	N	-	-	31.6	Y	N	N	
N2612	17	54.7	A1-9	-	34.1	0	0	53.1	63.2	11.3	0	63.6	63.6	70	N	-	-	29.5	Y	N	N	
N2612	18	57.4	A1-9	-	36.7	0	0	53	63	11.4	0	63.4	63.4	70	N	-	-	26.7	Y	N	N	
N2612	19	60.1	A1-9	-	40.2	0	0	53	62.8	11.4	0	63.2	63.2	70	N	-	-	23.1	Y	N	N	
N2612	20	62.8	A1-9	-	42.5	0	0	52.9	62.7	11.4	0	63.2	63.2	70	N	-	-	20.7	Y	N	N	
N2621	1	31	A2-2	-	32.6	0	68.4	48.9	0	40.7	0	68.5	68.5	70	N	-	-	35.9	Y	N	N	
N2621	2	33.8	A2-2	-	33.6	0	68.4	49	0	41.1	0	68.4	68.4	70	N	-	-	34.8	Y	N	N	
N2621	3	36.6	A2-2	-	34.5	0	68.3	49	0	41.4	0	68.4	68.4	70	N	-	-	33.9	Y	N	N	
N2621	4	39.4	A2-2	-	35.5	0	68.3	49.1	0	41.8	0	68.3	68.3	70	N	-	-	32.8	Y	N	N	
N2621	5	42.2	A2-2	-	36.7	0	68.2	49.1	0	42.3	0	68.3	68.3	70	N	-	-	31.6	Y	N	N	
N2621	6	45	A2-2	-	37.9	0	68.1	49.1	0	42.7	0	68.2	68.2	70	N	-	-	30.3	Y	N	N	
N2621	7	47.8	A2-2	-	38.7	0	68	49.2	0	43.1	0	68.1	68.1	70	N	-	-	29.4	Y	N	N	
N2621	8	50.6	A2-2	-	39.5	0	67.9	49.2	0	43.4	0	68	68.0	70	N	-	-	28.5	Y	N	N	
N2621	9	53.4	A2-2	-	40.3	0	67.8	49.2	0	44	0	67.9	67.9	70	N	-	-	27.6	Y	N	N	
N2621	10	56.2	A2-2	-	41	0	67.7	49.2	0	44.5	0	67.8	67.8	70	N	-	-	26.8	Y	N	N	
N2621	11	59	A2-2	-	41.5	0	67.6	49.2	0	45.1	0	67.7	67.7	70	N	-	-	26.2	Y	N	N	
N2621	12	61.8	A2-2	-	42	0	67.4	49.3	0	45.6	0	67.5	67.5	70	N	-	-	25.5	Y	N	N	
N2621	13	64.6	A2-2	-	42.4	0	67.3	49.3	0	45.8	0	67.4	67.4	70	N	-	-	25.0	Y	N	N	
N2621	14	67.4	A2-2	-	42.9	0	67.2	49.3	0	46.4	0	67.3	67.3	70	N	-	-	24.4	Y	N	N	
N2621	15	70.2	A2-2	-	43.3	0	67.1	49.3	0	47.1	0	67.2	67.2	70	N	-	-	23.9	Y	N	N	
N2621	16	73	A2-2	-	43.6	0	67	49.3	0	47.5	0	67.1	67.1	70	N	-	-	23.5	Y	N	N	
N2621	17	75.8	A2-2	-	43.9	0	66.8	49.3	0	48	0	67	67.0	70	N	-	-	23.1	Y	N	N	
N2621	18	78.6	A2-2	-	44.3	0	66.7	49.3	0	48.5	0	66.9	66.9	70	N	-	-	22.6	Y	N	N	
N2621	19	81.4	A2-2	-	44.5	0	66.6	49.4	0	49	0	66.8	66.8	70	N	-	-	22.3	Y	N	N	
N2621	20	84.2	A2-2	-	44.9	0	66.5	49.4	0	49.6	0	66.7	66.7	70	N	-	-	21.8	Y	N	N	
N2621	21	87	A2-2	-	45.1	0	66.4	49.7	0	50.1	0	66.6	66.6	70	N	-	-	21.5	Y	N	N	
N2621	22	89.8	A2-2	-	45.5	0	66.2	50	0	50.7	0	66.5	66.5	70	N	-	-	21.0	Y	N	N	
N2621	23	92.6	A2-2	-	45.8	0	66.1	50.1	0	51.2	0	66.4	66.4	70	N	-	-	20.6	Y	N	N	
N2621	24	95.4	A2-2	-	46.1	0	66	50.2	0	51.7	0	66.3	66.3	70	N	-	-	20.2	Y	N	N	
N2621	25	98.2	A2-2	-	46.5	0	65.9	50.2	0	52	0	66.2	66.2	70	N	-	-	19.8	Y	N	N	
N2621	26	101	A2-2	-	46.8	0	65.8	50.2	0	52.3	0	66.1	66.2	70	N	-	-	19.4	Y	N	N	
N2621	27	103.8	A2-2	-	47.1	0	65.7	50.2	0	52.5	0	66	66.1	70	N	-	-	19.0	Y	N	N	
N2621	28	106.6	A2-2	-	47.3	0	65.6	50.3	0	52.7	0	66	66.0	70	N	-	-	18.7	Y	N	N	
N2621	29	109.4	A2-2	-	47.5	0	65.5	50.3	0	53	0	65.9	65.9	70	N	-	-	18.4	Y	N	N	
N2621	30	112.2	A2-2	-	47.6	0	65.4	50.3	0	53.1	0	65.8	65.9	70	N	-	-	18.3	Y	N	N	
N2621	31	115	A2-2	-	47.7	0	65.3	50.3	0	53.2	0	65.7	65.8	70	N	-	-	18.1	Y	N	N	
N2621	32	117.8	A2-2	-	47.8	0	65.2	50.4	0	53.4	0	65.6	65.7	70	N	-	-	17.9	Y	N	N	
N2621	33	120.6	A2-2	-	47.8	0	65.1	50.5	0	53.5	0	65.5	65.6	70	N	-	-	17.8	Y	N	N	
N2621	34	123.4	A2-2	-	47.8	0	65	50.5	0	53.6	0	65.5	65.5	70	N	-	-	17.7	Y	N	N	
N2621	35	12																				

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required [4.5] (Y/N)
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) [1]	New Roads [2]				New Roads in 2044 dB(A) [3] [B]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]				New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)			PD	DD	LD	EX	TR														
N2622	10	56.2	A2-2	-	0	0	65.8	52.1	0	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N	
N2622	11	59	A2-2	-	0	0	66	52.2	0	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N	
N2622	12	61.8	A2-2	-	0	0	66.2	52.3	0	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N	
N2622	13	64.6	A2-2	-	0	0	66.3	52.5	0	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N	
N2622	14	67.4	A2-2	-	0	0	66.4	52.7	0	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N	
N2622	15	70.2	A2-2	-	0	0	66.3	53	0	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N	
N2622	16	73	A2-2	-	0	0	66.3	53.3	0	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N	
N2622	17	75.8	A2-2	-	0	0	66.3	53.4	0	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N	
N2622	18	78.6	A2-2	-	0	0	66.2	53.5	0	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N	
N2622	19	81.4	A2-2	-	0	0	66.2	53.6	0	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N	
N2622	20	84.2	A2-2	-	0	0	66.1	53.7	0	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N	
N2622	21	87	A2-2	-	0	0	66	53.8	0	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N	
N2622	22	89.8	A2-2	-	0	0	66	54	0	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N	
N2622	23	92.6	A2-2	-	0	0	65.9	54.1	0	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N	
N2622	24	95.4	A2-2	-	0	0	65.7	54.3	0	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N	
N2622	25	98.2	A2-2	-	0	0	65.7	54.5	0	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N	
N2622	26	101	A2-2	-	0	0	65.5	54.6	0	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N	
N2622	27	103.8	A2-2	-	0	0	65.5	54.7	0	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N	
N2622	28	106.6	A2-2	-	0	0	65.4	54.9	0	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N	
N2622	29	109.4	A2-2	-	0	0	65.2	55	0	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	
N2622	30	112.2	A2-2	-	0	0	65.2	55.1	0	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	
N2622	31	115	A2-2	-	0	0	65	55.2	0	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N	
N2622	32	117.8	A2-2	-	0	0	64.9	55.3	0	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N	
N2622	33	120.6	A2-2	-	0	0	64.8	55.4	0	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N	
N2622	34	123.4	A2-2	-	0	0	64.8	55.5	0	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N	
N2622	35	126.2	A2-2	-	0	0	64.7	55.5	0	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N	
N2622	36	129	A2-2	-	0	0	64.6	55.6	0	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N	
N2622	37	131.8	A2-2	-	0	0	64.5	55.6	0	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N	
N2622	38	134.6	A2-2	-	0	0	64.4	55.6	0	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N	
N2622	39	137.4	A2-2	-	0	0	64.3	55.7	0	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N	
N2622	40	140.2	A2-2	-	0	0	64.2	55.7	0	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N	
N2623	1	31	A2-2	-	0	0	40.3	63.6	47.1	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N	N	
N2623	2	33.8	A2-2	-	0	0	41.6	63.6	51.7	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	N	
N2623	3	36.6	A2-2	-	0	0	42.8	63.6	52.5	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N	
N2623	4	39.4	A2-2	-	0	0	44.2	63.6	52.6	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N	
N2623	5	42.2	A2-2	-	0	0	45.7	63.6	52.5	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N	
N2623	6	45	A2-2	-	0	0	47.3	63.6	52.4	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N	N	
N2623	7	47.8	A2-2	-	0	0	49.3	63.7	52.5	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N	
N2623	8	50.6	A2-2	-	0	0	51.3	63.7	52.5	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N	
N2623	9	53.4	A2-2	-	0	0	52.9	63.7	52.4	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N	
N2623	10	56.2	A2-2	-	0	0	53.9	63.8	52.3	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N	
N2623	11	59	A2-2	-	0	0	55	64	52.1	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N	
N2623	12	61.8	A2-2	-	0	0	56	64.1	52	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N	
N2623	13	64.6	A2-2	-	0	0	57	64.2	51.8	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N	
N2623	14	67.4	A2-2	-	0	0	57.9	64.3	51.6	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N	
N2623	15	70.2	A2-2	-	0	0	58.6	64.3	51.4	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N	
N2623	16	73	A2-2	-	0	0	59.1	64.3	51.3	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	
N2623	17	75.8	A2-2	-	0	0	59.3	64.3	51.1	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	
N2623	18	78.6	A2-2	-	0	0	59.6	64.2	51	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	
N2623	19	81.4	A2-2	-	0	0	59.8	64.1	50.8	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	
N2623	20	84.2	A2-2	-	0	0	60	64.1	50.6	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	
N2623	21	87	A2-2	-	0	0	60.1	64	50.5	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	
N2623	22	89.8	A2-2	-	0	0	60.3	63.9	50.4	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	
N2623	23	92.6	A2-2	-	0	0	60.3	63.8	50.2	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N	
N2623	24	95.4	A2-2	-	0	0	60.4	63.7	50.1	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N	
N2623	25	98.2	A2-2	-	0	0	60.4	63.6	50	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N	
N2623	26	101	A2-2	-	0	0	60.4	63.5	49.9	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N	
N2623	27	103.8	A2-2	-	0	0	60.4	63.4	49.7	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N	
N2623	28	106.6	A2-2	-	0	0	60.3	63.3	49.6	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N	
N2623	29	109.4	A2-2	-	0	0	60.3	63.2	49.5	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N	
N2623	30	112.2	A2-2	-	0	0	60.2	63.1	49.4	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N	
N2623	31	115	A2-2	-	0	0	60.1	63.1	49.3	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N	
N2623	32	117.8	A2-2	-	0	0	60.1	63	49.1	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N	
N2623	33	120.6	A2-2	-	0	0	60	62.9	49	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N	
N2623	34	123.4	A2-2	-	0	0	60	62.8	48.9	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N	
N2623	35	126.2	A2-2	-	0	0	59.9	62.7	48.9	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N	
N2623	36	129	A2-2	-	0	0	59.8	62.7	48.8	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N	
N2623	37	131.8	A2-2	-	0	0	59.7	62.5	48.7	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N	
N2623	38	134.6	A2-2	-	0	0	59.7	62.5	48.6	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N	
N2623	39	137.4	A2-2	-	0	0	59.6	62.4	48.5	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N	
N2623	40	140.2	A2-2	-	0	0	59.5	62.3	48.4	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N	
N2624	1	31	A2-2	-	0	0	52.4	68	52.4	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N	
N2624	2	33.8	A2-2	-	0	0	52.5	68	53.8	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N</	



Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	New Roads <sup>[2]</sup>					New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)							
						PD	DD	LD	EX	TR											
N2624	18	78.6	A2-2	-	0	58.3	66.1	51.9	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
N2624	19	81.4	A2-2	-	0	58.6	65.9	51.8	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
N2624	20	84.2	A2-2	-	0	58.9	65.9	51.6	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
N2624	21	87	A2-2	-	0	59.1	65.7	51.5	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
N2624	22	89.8	A2-2	-	0	59.2	65.7	51.3	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
N2624	23	92.6	A2-2	-	0	59.3	65.5	51.2	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
N2624	24	95.4	A2-2	-	0	59.4	65.4	51	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2624	25	98.2	A2-2	-	0	59.5	65.3	50.9	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2624	26	101	A2-2	-	0	59.6	65.2	50.8	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
N2624	27	103.8	A2-2	-	0	59.6	65.1	50.7	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
N2624	28	106.6	A2-2	-	0	59.7	65	50.5	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2624	29	109.4	A2-2	-	0	59.7	64.9	50.4	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2624	30	112.2	A2-2	-	0	59.8	64.8	50.3	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
N2624	31	115	A2-2	-	0	59.8	64.7	50.2	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
N2624	32	117.8	A2-2	-	0	59.8	64.6	50.1	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
N2624	33	120.6	A2-2	-	0	59.8	64.5	50	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
N2624	34	123.4	A2-2	-	0	59.8	64.4	49.9	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
N2624	35	126.2	A2-2	-	0	59.8	64.3	49.8	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
N2624	36	129	A2-2	-	0	59.8	64.2	49.7	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2624	37	131.8	A2-2	-	0	59.7	64.1	49.6	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
N2624	38	134.6	A2-2	-	0	59.7	64	49.5	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
N2624	39	137.4	A2-2	-	0	59.6	63.9	49.4	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
N2624	40	140.2	A2-2	-	0	59.6	63.8	49.3	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2625	1	31	A2-2	-	0	61.3	39.6	0	0	61.3	61.3	70	N	-	-	58.3	Y	N	N	N	
N2625	2	33.8	A2-2	-	0	61.2	42.2	0	0	61.3	61.3	70	N	-	-	58.3	Y	N	N	N	
N2625	3	36.6	A2-2	-	0	61.2	44.8	0	0	61.3	61.3	70	N	-	-	58.3	Y	N	N	N	
N2625	4	39.4	A2-2	-	0	61.2	47	0	0	61.3	61.3	70	N	-	-	58.3	Y	N	N	N	
N2625	5	42.2	A2-2	-	0	61.1	48.3	0	0	61.3	61.3	70	N	-	-	58.3	Y	N	N	N	
N2625	6	45	A2-2	-	0	61	48.7	0	0	61.3	61.3	70	N	-	-	58.3	Y	N	N	N	
N2625	7	47.8	A2-2	-	0	60.9	48.8	0	0	61.2	61.2	70	N	-	-	58.2	Y	N	N	N	
N2625	8	50.6	A2-2	-	0	60.9	48.7	0	0	61.1	61.1	70	N	-	-	58.1	Y	N	N	N	
N2625	9	53.4	A2-2	-	0	60.8	48.6	0	0	61	61.0	70	N	-	-	58.0	Y	N	N	N	
N2625	10	56.2	A2-2	-	0	60.7	48.4	0	0	60.9	60.9	70	N	-	-	57.9	Y	N	N	N	
N2625	11	59	A2-2	-	0	60.6	48.2	0	0	60.8	60.8	70	N	-	-	57.8	Y	N	N	N	
N2625	12	61.8	A2-2	-	0	60.5	48.1	0	0	60.7	60.7	70	N	-	-	57.7	Y	N	N	N	
N2625	13	64.6	A2-2	-	0	60.4	47.9	0	0	60.6	60.6	70	N	-	-	57.6	Y	N	N	N	
N2625	14	67.4	A2-2	-	0	60.3	47.7	0	0	60.6	60.6	70	N	-	-	57.6	Y	N	N	N	
N2625	15	70.2	A2-2	-	0	60.2	47.5	0	0	60.5	60.5	70	N	-	-	57.5	Y	N	N	N	
N2625	16	73	A2-2	-	0	60.1	47.3	0	0	60.4	60.4	70	N	-	-	57.4	Y	N	N	N	
N2625	17	75.8	A2-2	-	0	60.1	47.1	0	0	60.3	60.3	70	N	-	-	57.3	Y	N	N	N	
N2625	18	78.6	A2-2	-	0	60	47	0	0	60.3	60.3	70	N	-	-	57.3	Y	N	N	N	
N2625	19	81.4	A2-2	-	0	60.1	46.8	0	0	60.3	60.3	70	N	-	-	57.3	Y	N	N	N	
N2625	20	84.2	A2-2	-	0	60	46.7	0	0	60.2	60.2	70	N	-	-	57.2	Y	N	N	N	
N2625	21	87	A2-2	-	0	59.9	46.5	0	0	60.1	60.1	70	N	-	-	57.1	Y	N	N	N	
N2625	22	89.8	A2-2	-	0	59.9	46.4	0	0	60.1	60.1	70	N	-	-	57.1	Y	N	N	N	
N2625	23	92.6	A2-2	-	0	59.9	46.2	0	0	60.1	60.1	70	N	-	-	57.1	Y	N	N	N	
N2625	24	95.4	A2-2	-	0	59.9	46.1	0	0	60.1	60.1	70	N	-	-	57.1	Y	N	N	N	
N2625	25	98.2	A2-2	-	0	59.9	46	0	0	60.1	60.1	70	N	-	-	57.1	Y	N	N	N	
N2625	26	101	A2-2	-	0	59.9	45.9	0	0	60.1	60.1	70	N	-	-	57.1	Y	N	N	N	
N2625	27	103.8	A2-2	-	0	59.9	45.7	0	0	60.1	60.1	70	N	-	-	57.1	Y	N	N	N	
N2625	28	106.6	A2-2	-	0	59.8	45.6	0	0	60	60.0	70	N	-	-	57.0	Y	N	N	N	
N2625	29	109.4	A2-2	-	0	59.8	45.4	0	0	60	60.0	70	N	-	-	57.0	Y	N	N	N	
N2625	30	112.2	A2-2	-	0	59.8	45.3	0	0	59.9	59.9	70	N	-	-	56.9	Y	N	N	N	
N2625	31	115	A2-2	-	0	59.7	45.2	0	0	59.9	59.9	70	N	-	-	56.9	Y	N	N	N	
N2625	32	117.8	A2-2	-	0	59.7	45.1	0	0	59.8	59.8	70	N	-	-	56.8	Y	N	N	N	
N2625	33	120.6	A2-2	-	0	59.6	45	0	0	59.8	59.8	70	N	-	-	56.8	Y	N	N	N	
N2625	34	123.4	A2-2	-	0	59.6	44.9	0	0	59.7	59.7	70	N	-	-	56.7	Y	N	N	N	
N2625	35	126.2	A2-2	-	0	59.5	44.8	0	0	59.6	59.6	70	N	-	-	56.6	Y	N	N	N	
N2625	36	129	A2-2	-	0	59.4	44.7	0	0	59.5	59.5	70	N	-	-	56.5	Y	N	N	N	
N2625	37	131.8	A2-2	-	0	59.3	44.6	0	0	59.5	59.5	70	N	-	-	56.5	Y	N	N	N	
N2625	38	134.6	A2-2	-	0	59.2	44.5	0	0	59.4	59.4	70	N	-	-	56.4	Y	N	N	N	
N2625	39	137.4	A2-2	-	0	59.2	44.4	0	0	59.3	59.3	70	N	-	-	56.3	Y	N	N	N	
N2625	40	140.2	A2-2	-	0	59.1	44.3	0	0	59.2	59.2	70	N	-	-	56.2	Y	N	N	N	
N2626	1	31	A2-2	-	0	53.4	67.3	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N	
N2626	2	33.8	A2-2	-	0	53.4	67.3	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N	
N2626	3	36.6	A2-2	-	0	53.5	67.1	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N	
N2626	4	39.4	A2-2	-	0	53.5	66.9	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N	
N2626	5	42.2	A2-2	-	0	53.6	66.8	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N	
N2626	6	45	A2-2	-	0	53.7	66.7	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N	
N2626	7	47.8	A2-2	-	0	53.8	66.8	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N	
N2626	8	50.6	A2-2	-	0	53.9	66.7	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N	
N2626	9	53.4	A2-2	-	0	54	66.9	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N	
N2626	10	56.2	A2-2	-	0	54	67	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N	
N2626	11	59	A2-2	-	0	54.1	66.9	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N	
N2626	12	61.8	A2-2	-	0	54.2	66.9	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N	
N2626	13	64.6	A2-2	-	0	54.2	66.7	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N	
N2626	14	67.4	A2-2	-	0	54.3	66.6	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N	
N2626	15	70.2	A2-2	-	0	54.4	66.5	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N	
N2626	16	73	A2-2	-	0	54.5	66.3	0	0	66.6	66.6	70	N	-	-	63.6	Y	N			



Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>				New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			
							PD	DD	LD	EX										TR	C	
N2628	34	117.4	A2-2	-	0	0	26.6	63.6	59.2	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2628	35	120.2	A2-2	-	0	0	26.6	63.5	59.2	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
N2628	36	123	A2-2	-	0	0	26.6	63.5	59.1	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2628	37	125.8	A2-2	-	0	0	26.5	63.4	59	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
N2628	38	128.6	A2-2	-	0	0	26.5	63.3	58.9	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
N2628	39	131.4	A2-2	-	0	0	26.6	63.2	58.8	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N
N2628	40	134.2	A2-2	-	0	0	26.6	63.1	58.7	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
N2629	1	25	A2-2	-	15.4	0	23.4	66	57.2	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2629	2	27.8	A2-2	-	15.4	0	23.4	66	59.5	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
N2629	3	30.6	A2-2	-	15.4	0	23.4	65.9	60.7	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
N2629	4	33.4	A2-2	-	15.4	0	23.4	65.8	61.3	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
N2629	5	36.2	A2-2	-	15.4	0	23.4	65.7	61.5	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
N2629	6	39	A2-2	-	15.4	0	23.4	65.7	61.6	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
N2629	7	41.8	A2-2	-	15.4	0	23.4	65.5	61.7	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
N2629	8	44.6	A2-2	-	15.4	0	23.4	65.4	61.6	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
N2629	9	47.4	A2-2	-	15.4	0	23.4	65.3	61.6	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
N2629	10	50.2	A2-2	-	15.4	0	23.4	65.2	61.5	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
N2629	11	53	A2-2	-	15.4	0	23.4	65.1	61.4	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
N2629	12	55.8	A2-2	-	15.4	0	23.4	65	61.4	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
N2629	13	58.6	A2-2	-	15.4	0	23.4	64.9	61.3	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2629	14	61.4	A2-2	-	15.4	0	23.4	64.8	61.2	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
N2629	15	64.2	A2-2	-	15.4	0	23.4	64.8	61.1	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
N2629	16	67	A2-2	-	15.4	0	23.4	64.7	61	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
N2629	17	69.8	A2-2	-	15.4	0	23.4	64.7	60.9	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2629	18	72.6	A2-2	-	15.4	0	23.4	64.7	60.8	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2629	19	75.4	A2-2	-	15.4	0	23.4	64.7	60.8	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2629	20	78.2	A2-2	-	15.4	0	23.4	64.7	60.7	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
N2629	21	81	A2-2	-	15.4	0	23.4	64.7	60.6	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
N2629	22	83.8	A2-2	-	15.4	0	23.3	64.5	60.5	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
N2629	23	86.6	A2-2	-	15.4	0	23.3	64.5	60.4	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
N2629	24	89.4	A2-2	-	15.4	0	23.3	64.4	60.3	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
N2629	25	92.2	A2-2	-	15.4	0	23.3	64.3	60.2	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
N2629	26	95	A2-2	-	15.4	0	23.3	64.3	60.1	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
N2629	27	97.8	A2-2	-	15.4	0	23.3	64.1	60	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2629	28	100.6	A2-2	-	15.4	0	23.2	64	60	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
N2629	29	103.4	A2-2	-	15.4	0	23.2	63.9	59.9	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
N2629	30	106.2	A2-2	-	15.4	0	23.2	63.9	59.8	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2629	31	109	A2-2	-	15.4	0	23.2	63.8	59.7	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
N2629	32	111.8	A2-2	-	15.4	0	23.1	63.6	59.6	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
N2629	33	114.6	A2-2	-	15.4	0	23.1	63.5	59.5	0	0	65	65	70	N	-	-	62.0	Y	N	N	N
N2629	34	117.4	A2-2	-	15.4	0	23.1	63.4	59.4	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
N2629	35	120.2	A2-2	-	15.4	0	23.1	63.4	59.3	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2629	36	123	A2-2	-	15.4	0	23.1	63.3	59.3	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
N2629	37	125.8	A2-2	-	15.4	0	23	63.2	59.2	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
N2629	38	128.6	A2-2	-	15.4	0	23	63.1	59.1	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N
N2629	39	131.4	A2-2	-	15.4	0	23	63	59	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
N2629	40	134.2	A2-2	-	15.4	0	22.9	62.9	58.9	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
N2630	1	25	A2-2	-	15.4	0	44.6	68.3	58.7	0	0	68.8	68.8	70	N	-	-	53.3	Y	N	N	N
N2630	2	27.8	A2-2	-	15.4	0	44.6	68.2	60.9	0	0	69	69.0	70	N	-	-	53.5	Y	N	N	N
N2630	3	30.6	A2-2	-	15.4	0	44.6	68.1	61.7	0	0	69	69.0	70	N	-	-	53.4	Y	N	N	N
N2630	4	33.4	A2-2	-	15.4	0	44.7	67.9	62	0	0	68.9	68.9	70	N	-	-	53.4	Y	N	N	N
N2630	5	36.2	A2-2	-	15.4	0	44.8	67.7	62	0	0	68.7	68.7	70	N	-	-	53.2	Y	N	N	N
N2630	6	39	A2-2	-	15.5	0	44.9	67.5	62	0	0	68.6	68.6	70	N	-	-	53.0	Y	N	N	N
N2630	7	41.8	A2-2	-	15.5	0	45.1	67.2	62	0	0	68.4	68.4	70	N	-	-	52.8	Y	N	N	N
N2630	8	44.6	A2-2	-	15.5	0	45.3	67.1	62	0	0	68.3	68.3	70	N	-	-	52.7	Y	N	N	N
N2630	9	47.4	A2-2	-	15.5	0	45.5	66.9	61.9	0	0	68.1	68.1	70	N	-	-	52.5	Y	N	N	N
N2630	10	50.2	A2-2	-	15.5	0	45.6	66.7	61.8	0	0	68	68.0	70	N	-	-	52.4	Y	N	N	N
N2630	11	53	A2-2	-	15.5	0	45.8	66.5	61.8	0	0	67.8	67.8	70	N	-	-	52.2	Y	N	N	N
N2630	12	55.8	A2-2	-	15.5	0	45.9	66.4	61.7	0	0	67.7	67.7	70	N	-	-	52.1	Y	N	N	N
N2630	13	58.6	A2-2	-	15.5	0	46	66.3	61.7	0	0	67.6	67.6	70	N	-	-	52.0	Y	N	N	N
N2630	14	61.4	A2-2	-	15.6	0	46.1	66.2	61.6	0	0	67.5	67.5	70	N	-	-	51.8	Y	N	N	N
N2630	15	64.2	A2-2	-	15.6	0	46.2	65.9	61.5	0	0	67.3	67.3	70	N	-	-	51.6	Y	N	N	N
N2630	16	67	A2-2	-	15.6	0	46.2	65.8	61.4	0	0	67.2	67.2	70	N	-	-	51.5	Y	N	N	N
N2630	17	69.8	A2-2	-	15.5	0	46.2	65.6	61.4	0	0	67	67.0	70	N	-	-	51.4	Y	N	N	N
N2630	18	72.6	A2-2	-	15.5	0	46.3	65.4	61.3	0	0	66.9	66.9	70	N	-	-	51.3	Y	N	N	N
N2630	19	75.4	A2-2	-	15.5	0	46.3	65.3	61.2	0	0	66.8	66.8	70	N	-	-	51.2	Y	N	N	N
N2630	20	78.2	A2-2	-	15.5	0	46.3	65.1	61.1	0	0	66.6	66.6	70	N	-	-	51.0	Y	N	N	N
N2630	21	81	A2-2	-	15.5	0	46.3	65	61	0	0	66.5	66.5	70	N	-	-	50.9	Y	N	N	N
N2630	22	83.8	A2-2	-	15.5	0	46.3	64.8	61	0	0	66.3	66.3	70	N	-	-	50.7	Y	N	N	N
N2630	23	86.6	A2-2	-	15.5	0	46.4	64.7	60.9	0	0	66.2	66.2	70	N	-	-	50.6	Y	N	N	N
N2630	24	89.4	A2-2	-	15.5	0	46.4	64.5	60.8	0	0	66.1	66.1	70	N	-	-	50.5	Y	N	N	N
N2630	25	92.2	A2-2	-	15.5	0	46.3	64.4	60.7	0	0	66	66.0	70</								

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)	
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)								
						PD	DD	LD	EX	TR												
N2631	2	27.8	A2-2	-	0	0	0	69.1	57.9	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N
N2631	3	30.6	A2-2	-	0	0	0	68.9	58.3	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N	N
N2631	4	33.4	A2-2	-	0	0	0	68.8	58.3	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N
N2631	5	36.2	A2-2	-	0	0	0	68.6	58.3	0	0	69.0	69.0	70	N	-	-	66.0	Y	N	N	N
N2631	6	39	A2-2	-	0	0	0	68.3	58.2	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
N2631	7	41.8	A2-2	-	0	0	0	68.1	58.2	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N
N2631	8	44.6	A2-2	-	0	0	0	67.8	58.2	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N
N2631	9	47.4	A2-2	-	0	0	0	67.6	58.1	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N
N2631	10	50.2	A2-2	-	0	0	0	67.3	58.1	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N
N2631	11	53	A2-2	-	0	0	0	67.1	58	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
N2631	12	55.8	A2-2	-	0	0	0	66.9	58	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
N2631	13	58.6	A2-2	-	0	0	0	66.7	57.9	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N
N2631	14	61.4	A2-2	-	0	0	0	66.5	57.9	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
N2631	15	64.2	A2-2	-	0	0	0	66.3	57.8	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
N2631	16	67	A2-2	-	0	0	0	66.1	57.8	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
N2631	17	69.8	A2-2	-	0	0	0	65.9	57.7	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2631	18	72.6	A2-2	-	0	0	0	65.7	57.6	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
N2631	19	75.4	A2-2	-	0	0	0	65.5	57.6	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
N2631	20	78.2	A2-2	-	0	0	0	65.3	57.5	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
N2631	21	81	A2-2	-	0	0	0	65.2	57.4	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
N2631	22	83.8	A2-2	-	0	0	0	65	57.4	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
N2631	23	86.6	A2-2	-	0	0	0	64.8	57.3	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
N2631	24	89.4	A2-2	-	0	0	0	64.7	57.2	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
N2631	25	92.2	A2-2	-	0	0	0	64.5	57.1	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
N2631	26	95	A2-2	-	0	0	0	64.4	57.1	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
N2631	27	97.8	A2-2	-	0	0	0	64.2	57	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2631	28	100.6	A2-2	-	0	0	0	64.1	56.9	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2631	29	103.4	A2-2	-	0	0	0	64	56.8	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
N2631	30	106.2	A2-2	-	0	0	0	63.8	56.8	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
N2631	31	109	A2-2	-	0	0	0	63.7	56.7	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N
N2631	32	111.8	A2-2	-	0	0	0	63.6	56.6	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
N2631	33	114.6	A2-2	-	0	0	0	63.5	56.5	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N
N2631	34	117.4	A2-2	-	0	0	0	63.3	56.5	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N	N
N2631	35	120.2	A2-2	-	0	0	0	63.2	56.4	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N
N2631	36	123	A2-2	-	0	0	0	63.1	56.3	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	N
N2631	37	125.8	A2-2	-	0	0	0	63	56.2	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N	N
N2631	38	128.6	A2-2	-	0	0	0	62.9	56.2	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	N
N2631	39	131.4	A2-2	-	0	0	0	62.8	56.1	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N	N
N2631	40	134.2	A2-2	-	0	0	0	62.7	56	0	0	63.5	63.5	70	N	-	-	60.5	Y	N	N	N
N2632	1	25	A2-2	-	0	0	0	68.1	54.6	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N
N2632	2	27.8	A2-2	-	0	0	0	68	56.9	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	N
N2632	3	30.6	A2-2	-	0	0	0	67.9	57.7	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N
N2632	4	33.4	A2-2	-	0	0	0	67.8	57.9	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N
N2632	5	36.2	A2-2	-	0	0	0	67.7	58.1	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
N2632	6	39	A2-2	-	0	0	0	67.7	58	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N
N2632	7	41.8	A2-2	-	0	0	0	67.5	58	0	0	67.9	67.9	70	N	-	-	65.0	Y	N	N	N
N2632	8	44.6	A2-2	-	0	0	0	67.4	58	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
N2632	9	47.4	A2-2	-	0	0	0	67.2	58	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
N2632	10	50.2	A2-2	-	0	0	0	67.1	57.9	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
N2632	11	53	A2-2	-	0	0	0	67	57.9	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
N2632	12	55.8	A2-2	-	0	0	0	66.8	57.9	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
N2632	13	58.6	A2-2	-	0	0	0	66.7	57.8	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N
N2632	14	61.4	A2-2	-	0	0	0	66.5	57.8	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
N2632	15	64.2	A2-2	-	0	0	0	66.4	57.8	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
N2632	16	67	A2-2	-	0	0	0	66.2	57.7	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
N2632	17	69.8	A2-2	-	0	0	0	66.1	57.7	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
N2632	18	72.6	A2-2	-	0	0	0	65.9	57.6	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2632	19	75.4	A2-2	-	0	0	0	65.8	57.6	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
N2632	20	78.2	A2-2	-	0	0	0	65.6	57.5	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2632	21	81	A2-2	-	0	0	0	65.5	57.5	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2632	22	83.8	A2-2	-	0	0	0	65.3	57.4	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
N2632	23	86.6	A2-2	-	0	0	0	65.2	57.4	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
N2632	24	89.4	A2-2	-	0	0	0	65.1	57.3	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
N2632	25	92.2	A2-2	-	0	0	0	64.9	57.2	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2632	26	95	A2-2	-	0	0	0	64.8	57.2	0	0	65.5	65.5	70	N	-						

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)		
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>				New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)							New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)
ID	Floor	Floor Level (mPD)	[A]			PD	DD	LD	EX	TR					[C]	[A]	[D]	[E]	[A]	[Y/N]		
N2633	11	50.2	A2-2	-	0	0	0	67.5	58.2	0	0	68	68.0	70	N	-	-	65.0	Y	N	N	N
N2633	10	53	A2-2	-	0	0	0	67.3	58.1	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N
N2633	12	55.8	A2-2	-	0	0	0	67.2	58.1	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
N2633	13	58.6	A2-2	-	0	0	0	67	58.1	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
N2633	14	61.4	A2-2	-	0	0	0	66.9	58	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
N2633	15	64.2	A2-2	-	0	0	0	66.8	58	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
N2633	16	67	A2-2	-	0	0	0	66.6	58	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
N2633	17	69.8	A2-2	-	0	0	0	66.5	57.9	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
N2633	18	72.6	A2-2	-	0	0	0	66.3	57.9	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
N2633	19	75.4	A2-2	-	0	0	0	66.2	57.8	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
N2633	20	78.2	A2-2	-	0	0	0	66	57.8	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
N2633	21	81	A2-2	-	0	0	0	65.9	57.7	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2633	22	83.8	A2-2	-	0	0	0	65.7	57.7	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
N2633	23	86.6	A2-2	-	0	0	0	65.6	57.6	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2633	24	89.4	A2-2	-	0	0	0	65.5	57.6	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
N2633	25	92.2	A2-2	-	0	0	0	65.3	57.5	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
N2633	26	95	A2-2	-	0	0	0	65.2	57.5	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
N2633	27	97.8	A2-2	-	0	0	0	65.1	57.4	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
N2633	28	100.6	A2-2	-	0	0	0	64.9	57.4	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2633	29	103.4	A2-2	-	0	0	0	64.8	57.3	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
N2633	30	106.2	A2-2	-	0	0	0	64.7	57.2	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
N2633	31	109	A2-2	-	0	0	0	64.6	57.2	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2633	32	111.8	A2-2	-	0	0	0	64.5	57.1	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
N2633	33	114.6	A2-2	-	0	0	0	64.4	57.1	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
N2633	34	117.4	A2-2	-	0	0	0	64.3	57	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
N2633	35	120.2	A2-2	-	0	0	0	64.1	57	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
N2633	36	123	A2-2	-	0	0	0	64	56.9	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2633	37	125.8	A2-2	-	0	0	0	63.9	56.8	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
N2633	38	128.6	A2-2	-	0	0	0	63.8	56.8	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
N2633	39	131.4	A2-2	-	0	0	0	63.7	56.7	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N
N2633	40	134.2	A2-2	-	0	0	0	63.6	56.7	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
N2634	1	25	A2-2	-	0	0	0	68.5	54.6	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
N2634	2	27.8	A2-2	-	0	0	0	68.5	56.5	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
N2634	3	30.6	A2-2	-	0	0	0	68.4	57.5	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
N2634	4	33.4	A2-2	-	0	0	0	68.3	57.9	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
N2634	5	36.2	A2-2	-	0	0	0	68.2	57.9	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N
N2634	6	39	A2-2	-	0	0	0	68.1	58	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N
N2634	7	41.8	A2-2	-	0	0	0	68	58	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	N
N2634	8	44.6	A2-2	-	0	0	0	67.8	58	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N
N2634	9	47.4	A2-2	-	0	0	0	67.7	58	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
N2634	10	50.2	A2-2	-	0	0	0	67.6	58	0	0	68	68.0	70	N	-	-	65.0	Y	N	N	N
N2634	11	53	A2-2	-	0	0	0	67.4	58	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
N2634	12	55.8	A2-2	-	0	0	0	67.3	58	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N
N2634	13	58.6	A2-2	-	0	0	0	67.1	58	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
N2634	14	61.4	A2-2	-	0	0	0	67	57.9	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
N2634	15	64.2	A2-2	-	0	0	0	66.8	57.9	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
N2634	16	67	A2-2	-	0	0	0	66.7	57.8	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
N2634	17	69.8	A2-2	-	0	0	0	66.6	57.8	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
N2634	18	72.6	A2-2	-	0	0	0	66.4	57.8	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
N2634	19	75.4	A2-2	-	0	0	0	66.3	57.7	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
N2634	20	78.2	A2-2	-	0	0	0	66.2	57.7	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
N2634	21	81	A2-2	-	0	0	0	66	57.6	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
N2634	22	83.8	A2-2	-	0	0	0	65.9	57.6	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2634	23	86.6	A2-2	-	0	0	0	65.8	57.5	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
N2634	24	89.4	A2-2	-	0	0	0	65.6	57.5	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2634	25	92.2	A2-2	-	0	0	0	65.5	57.4	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
N2634	26	95	A2-2	-	0	0	0	65.4	57.4	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
N2634	27	97.8	A2-2	-	0	0	0	65.2	57.3	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
N2634	28	100.6	A2-2	-	0	0	0	65.1	57.3	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
N2634	29	103.4	A2-2	-	0	0	0	65	57.2	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2634	30	106.2	A2-2	-	0	0	0	64.9	57.2	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2634	31	109	A2-2	-	0	0	0	64.8	57.1	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
N2634	32	111.8	A2-2	-	0	0	0	64.6	57.1	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2634	33	114.6	A2-2	-	0	0	0	64.5	57	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
N2634	34	117.4	A2-2	-	0	0	0	64.4	57	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
N2634	35	120.2	A2-2	-	0	0	0	64.2	56.9	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2634	36	123	A2-2	-	0	0	0	64.2	56.9	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
N2634	37	125.8	A2-2	-	0	0	0	64.1	56.8	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2634	38	128.6	A2-2	-	0	0	0	64	56.8	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2634	39	131.4	A2-2	-	0	0	0	63.9	56.7	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
N2634	40	134.2	A2-2	-	0	0	0	63.8	56.6	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
N2635	1	25	A2-2	-	0	0	0	68	53.6	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N
N2635	2	27.8	A2-2	-	0	0	0	68	55.6	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
N2635	3	30.6	A2-2	-	0	0	0	67.9	56.1	0	0	68.2	68.2	70	N	-	-	65.2	Y	N		

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)	
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>				New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)		[A]			PD	DD	LD	EX	TR		[C]										
N2635	18	72.6	A2-2	-	0	0	0	66	56.2	0	0	66.5	66.5	70	N	-	-	-	63.5	Y	N	N	N
N2635	19	75.4	A2-2	-	0	0	0	65.9	56.1	0	0	66.3	66.3	70	N	-	-	-	63.3	Y	N	N	N
N2635	20	78.2	A2-2	-	0	0	0	65.7	56.1	0	0	66.2	66.2	70	N	-	-	-	63.2	Y	N	N	N
N2635	21	81	A2-2	-	0	0	0	65.6	56	0	0	66.1	66.1	70	N	-	-	-	63.1	Y	N	N	N
N2635	22	83.8	A2-2	-	0	0	0	65.4	56	0	0	65.9	65.9	70	N	-	-	-	62.9	Y	N	N	N
N2635	23	86.6	A2-2	-	0	0	0	65.3	56	0	0	65.8	65.8	70	N	-	-	-	62.8	Y	N	N	N
N2635	24	89.4	A2-2	-	0	0	0	65.2	55.9	0	0	65.7	65.7	70	N	-	-	-	62.7	Y	N	N	N
N2635	25	92.2	A2-2	-	0	0	0	65.1	55.9	0	0	65.6	65.6	70	N	-	-	-	62.6	Y	N	N	N
N2635	26	95	A2-2	-	0	0	0	64.9	55.8	0	0	65.4	65.4	70	N	-	-	-	62.4	Y	N	N	N
N2635	27	97.8	A2-2	-	0	0	0	64.9	55.8	0	0	65.4	65.4	70	N	-	-	-	62.4	Y	N	N	N
N2635	28	100.6	A2-2	-	0	0	0	64.7	55.7	0	0	65.2	65.2	70	N	-	-	-	62.2	Y	N	N	N
N2635	29	103.4	A2-2	-	0	0	0	64.6	55.7	0	0	65.2	65.2	70	N	-	-	-	62.2	Y	N	N	N
N2635	30	106.2	A2-2	-	0	0	0	64.5	55.6	0	0	65	65.0	70	N	-	-	-	62.0	Y	N	N	N
N2635	31	109	A2-2	-	0	0	0	64.4	55.6	0	0	64.9	64.9	70	N	-	-	-	61.9	Y	N	N	N
N2635	32	111.8	A2-2	-	0	0	0	64.3	55.5	0	0	64.8	64.8	70	N	-	-	-	61.8	Y	N	N	N
N2635	33	114.6	A2-2	-	0	0	0	64.2	55.5	0	0	64.7	64.7	70	N	-	-	-	61.7	Y	N	N	N
N2635	34	117.4	A2-2	-	0	0	0	64.1	55.4	0	0	64.6	64.6	70	N	-	-	-	61.6	Y	N	N	N
N2635	35	120.2	A2-2	-	0	0	0	64	55.4	0	0	64.5	64.5	70	N	-	-	-	61.5	Y	N	N	N
N2635	36	123	A2-2	-	0	0	0	63.9	55.3	0	0	64.4	64.4	70	N	-	-	-	61.4	Y	N	N	N
N2635	37	125.8	A2-2	-	0	0	0	63.8	55.3	0	0	64.3	64.3	70	N	-	-	-	61.3	Y	N	N	N
N2635	38	128.6	A2-2	-	0	0	0	63.7	55.2	0	0	64.2	64.2	70	N	-	-	-	61.2	Y	N	N	N
N2635	39	131.4	A2-2	-	0	0	0	63.6	55.1	0	0	64.1	64.1	70	N	-	-	-	61.1	Y	N	N	N
N2635	40	134.2	A2-2	-	0	0	0	63.5	55.1	0	0	64.1	64.1	70	N	-	-	-	61.1	Y	N	N	N
N2636	1	25	A2-2	-	0	0	15.7	66.6	51.9	0	0	66.8	66.8	70	N	-	-	-	63.8	Y	N	N	N
N2636	2	27.8	A2-2	-	0	0	15.7	66.6	53.5	0	0	66.8	66.8	70	N	-	-	-	63.8	Y	N	N	N
N2636	3	30.6	A2-2	-	0	0	15.7	66.6	54.5	0	0	66.8	66.8	70	N	-	-	-	63.8	Y	N	N	N
N2636	4	33.4	A2-2	-	0	0	15.7	66.5	55	0	0	66.8	66.8	70	N	-	-	-	63.8	Y	N	N	N
N2636	5	36.2	A2-2	-	0	0	15.7	66.4	55.3	0	0	66.7	66.7	70	N	-	-	-	63.7	Y	N	N	N
N2636	6	39	A2-2	-	0	0	15.7	66.4	55.4	0	0	66.7	66.7	70	N	-	-	-	63.7	Y	N	N	N
N2636	7	41.8	A2-2	-	0	0	15.7	66.3	55.5	0	0	66.7	66.7	70	N	-	-	-	63.7	Y	N	N	N
N2636	8	44.6	A2-2	-	0	0	15.7	66.2	55.6	0	0	66.6	66.6	70	N	-	-	-	63.6	Y	N	N	N
N2636	9	47.4	A2-2	-	0	0	15.7	66.1	55.6	0	0	66.5	66.5	70	N	-	-	-	63.5	Y	N	N	N
N2636	10	50.2	A2-2	-	0	0	15.7	66	55.5	0	0	66.4	66.4	70	N	-	-	-	63.4	Y	N	N	N
N2636	11	53	A2-2	-	0	0	15.7	65.9	55.5	0	0	66.3	66.3	70	N	-	-	-	63.3	Y	N	N	N
N2636	12	55.8	A2-2	-	0	0	15.7	65.8	55.5	0	0	66.2	66.2	70	N	-	-	-	63.2	Y	N	N	N
N2636	13	58.6	A2-2	-	0	0	15.7	65.7	55.5	0	0	66.1	66.1	70	N	-	-	-	63.0	Y	N	N	N
N2636	14	61.4	A2-2	-	0	0	15.7	65.6	55.5	0	0	66	66	70	N	-	-	-	63.0	Y	N	N	N
N2636	15	64.2	A2-2	-	0	0	15.7	65.5	55.4	0	0	65.9	65.9	70	N	-	-	-	62.9	Y	N	N	N
N2636	16	67	A2-2	-	0	0	15.7	65.4	55.4	0	0	65.8	65.8	70	N	-	-	-	62.8	Y	N	N	N
N2636	17	69.8	A2-2	-	0	0	15.6	65.3	55.4	0	0	65.7	65.7	70	N	-	-	-	62.7	Y	N	N	N
N2636	18	72.6	A2-2	-	0	0	15.6	65.2	55.4	0	0	65.6	65.6	70	N	-	-	-	62.6	Y	N	N	N
N2636	19	75.4	A2-2	-	0	0	15.6	65.1	55.3	0	0	65.5	65.5	70	N	-	-	-	62.5	Y	N	N	N
N2636	20	78.2	A2-2	-	0	0	15.6	65	55.3	0	0	65.4	65.4	70	N	-	-	-	62.4	Y	N	N	N
N2636	21	81	A2-2	-	0	0	15.6	64.9	55.3	0	0	65.3	65.3	70	N	-	-	-	62.3	Y	N	N	N
N2636	22	83.8	A2-2	-	0	0	15.6	64.8	55.2	0	0	65.2	65.2	70	N	-	-	-	62.2	Y	N	N	N
N2636	23	86.6	A2-2	-	0	0	15.6	64.7	55.2	0	0	65.1	65.1	70	N	-	-	-	62.1	Y	N	N	N
N2636	24	89.4	A2-2	-	0	0	15.6	64.5	55.2	0	0	65	65.0	70	N	-	-	-	62.0	Y	N	N	N
N2636	25	92.2	A2-2	-	0	0	15.6	64.4	55.2	0	0	64.9	64.9	70	N	-	-	-	61.9	Y	N	N	N
N2636	26	95	A2-2	-	0	0	15.6	64.3	55.1	0	0	64.8	64.8	70	N	-	-	-	61.8	Y	N	N	N
N2636	27	97.8	A2-2	-	0	0	15.6	64.2	55.1	0	0	64.7	64.7	70	N	-	-	-	61.7	Y	N	N	N
N2636	28	100.6	A2-2	-	0	0	15.6	64.1	55	0	0	64.6	64.6	70	N	-	-	-	61.6	Y	N	N	N
N2636	29	103.4	A2-2	-	0	0	15.6	64	55	0	0	64.5	64.5	70	N	-	-	-	61.5	Y	N	N	N
N2636	30	106.2	A2-2	-	0	0	15.5	63.9	55	0	0	64.4	64.4	70	N	-	-	-	61.4	Y	N	N	N
N2636	31	109	A2-2	-	0	0	15.5	63.8	54.9	0	0	64.3	64.3	70	N	-	-	-	61.3	Y	N	N	N
N2636	32	111.8	A2-2	-	0	0	15.5	63.7	54.9	0	0	64.2	64.2	70	N	-	-	-	61.2	Y	N	N	N
N2636	33	114.6	A2-2	-	0	0	15.5	63.6	54.9	0	0	64.1	64.1	70	N	-	-	-	61.1	Y	N	N	N
N2636	34	117.4	A2-2	-	0	0	15.4	63.5	54.8	0	0	64	64.0	70	N	-	-	-	61.0	Y	N	N	N
N2636	35	120.2	A2-2	-	0	0	15.6	63.4	54.8	0	0	64	64.0	70	N	-	-	-	61.0	Y	N	N	N
N2636	36	123	A2-2	-	0	0	15.7	63.4	54.7	0	0	63.9	63.9	70	N	-	-	-	60.9	Y	N	N	N
N2636	37	125.8	A2-2	-	0	0	15.7	63.3	54.7	0	0	63.8	63.8	70	N	-	-	-	60.8	Y	N	N	N
N2636	38	128.6	A2-2	-	0	0	15.9	63.2	54.6	0	0	63.8	63.8	70	N	-	-	-	60.8	Y	N	N	N
N2636	39	131.4	A2-2	-	0	0	15.9	63.1	54.6	0	0	63.7	63.7	70	N	-	-	-	60.7	Y	N	N	N
N2636	40	134.2	A2-2	-	0	0	16	63	54.6	0	0	63.6	63.6	70	N	-	-	-	60.6	Y	N	N	N
N2637	1	25	A2-2	-	0	0	8.7	66.7	51.8	0	0	66.8	66.8	70	N	-	-	-	63.8	Y	N	N	N
N2637	2	27.8	A2-2	-	0	0	8.7	66.6	53.4	0	0	66.8	66.8	70	N	-	-	-	63.8	Y	N	N	N
N2637	3	30.6	A2-2	-	0	0	8.7	66.6	54.3	0	0	66.8	66.8	70	N	-	-	-	63.8	Y	N	N	N
N2637	4	33.4	A2-2	-	0	0	8.7	66.5	54.8	0	0	66.8	66.8	70	N	-	-	-	63.8	Y	N	N	N
N2637	5	36.2	A2-2	-	0	0	8.7	66.4	55.1	0	0	66.7	66.7	70	N	-	-	-	63.7	Y	N	N	N
N2637	6	39	A2-2	-	0	0	8.7	66.4	55.3	0	0	66.7	66.7	70	N	-	-	-	63.7	Y	N	N	N
N2637	7	41.8	A2-2	-	0	0	8.7	66.3	55.3	0	0	66.6	66.6	70	N	-	-	-	63.6	Y	N	N	N
N2637	8	44.6	A2-2	-	0	0	8.7	66.2	55.4	0	0	66.5	66.5										

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)							
						PD	DD	LD	EX	TR											
N2637	26	95	A2-2	-	0	8.5	64.2	55	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	
N2637	27	97.8	A2-2	-	0	8.5	64.1	55	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	
N2637	28	100.6	A2-2	-	0	8.5	64	55	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	
N2637	29	103.4	A2-2	-	0	8.5	63.9	54.9	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	
N2637	30	106.2	A2-2	-	0	8.4	63.8	54.9	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	
N2637	31	109	A2-2	-	0	8.4	63.7	54.8	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	
N2637	32	111.8	A2-2	-	0	8.4	63.6	54.8	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N	
N2637	33	114.6	A2-2	-	0	8.4	63.5	54.8	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	
N2637	34	117.4	A2-2	-	0	8.3	63.4	54.7	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	
N2637	35	120.2	A2-2	-	0	8.3	63.3	54.7	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	
N2637	36	123	A2-2	-	0	8.3	63.2	54.7	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N	
N2637	37	125.8	A2-2	-	0	8.4	63.2	54.6	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	
N2637	38	128.6	A2-2	-	0	8.5	63.1	54.6	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	
N2637	39	131.4	A2-2	-	0	8.6	63	54.5	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N	
N2637	40	134.2	A2-2	-	0	8.7	62.9	54.5	0	0	63.5	63.5	70	N	-	-	60.5	Y	N	N	
N2638	1	25	A2-2	-	0	8.4	67.4	52	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	
N2638	2	27.8	A2-2	-	0	8.4	67.4	53.3	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	
N2638	3	30.6	A2-2	-	0	8.4	67.3	54	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	
N2638	4	33.4	A2-2	-	0	8.4	67.2	54.4	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	
N2638	5	36.2	A2-2	-	0	8.4	67.1	54.6	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	
N2638	6	39	A2-2	-	0	8.4	67	54.8	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	
N2638	7	41.8	A2-2	-	0	8.4	66.8	54.9	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	
N2638	8	44.6	A2-2	-	0	8.4	66.7	54.9	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
N2638	9	47.4	A2-2	-	0	8.4	66.6	54.9	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	
N2638	10	50.2	A2-2	-	0	8.4	66.4	54.9	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	
N2638	11	53	A2-2	-	0	8.4	66.3	54.9	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	
N2638	12	55.8	A2-2	-	0	8.4	66.1	54.9	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	
N2638	13	58.6	A2-2	-	0	8.4	66	54.9	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	
N2638	14	61.4	A2-2	-	0	8.4	65.8	54.9	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	
N2638	15	64.2	A2-2	-	0	8.3	65.7	54.9	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	
N2638	16	67	A2-2	-	0	8.3	65.5	54.8	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	
N2638	17	69.8	A2-2	-	0	8.3	65.4	54.8	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	
N2638	18	72.6	A2-2	-	0	8.3	65.3	54.8	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	
N2638	19	75.4	A2-2	-	0	8.3	65.1	54.8	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	
N2638	20	78.2	A2-2	-	0	8.3	65	54.8	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	
N2638	21	81	A2-2	-	0	8.3	64.9	54.7	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	
N2638	22	83.8	A2-2	-	0	8.3	64.7	54.7	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	
N2638	23	86.6	A2-2	-	0	8.2	64.6	54.7	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	
N2638	24	89.4	A2-2	-	0	8.2	64.5	54.7	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	
N2638	25	92.2	A2-2	-	0	8.2	64.3	54.6	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	
N2638	26	95	A2-2	-	0	8.2	64.2	54.6	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	
N2638	27	97.8	A2-2	-	0	8.2	64.1	54.6	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	
N2638	28	100.6	A2-2	-	0	8.2	64	54.5	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	
N2638	29	103.4	A2-2	-	0	8.1	63.9	54.5	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	
N2638	30	106.2	A2-2	-	0	8.1	63.8	54.5	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	
N2638	31	109	A2-2	-	0	8.1	63.6	54.4	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N	
N2638	32	111.8	A2-2	-	0	8.1	63.5	54.4	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	
N2638	33	114.6	A2-2	-	0	8.1	63.4	54.4	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	
N2638	34	117.4	A2-2	-	0	8	63.3	54.3	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	
N2638	35	120.2	A2-2	-	0	8	63.3	54.3	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N	
N2638	36	123	A2-2	-	0	8	63.2	54.2	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	
N2638	37	125.8	A2-2	-	0	8	63.1	54.2	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N	
N2638	38	128.6	A2-2	-	0	7.8	63	54.2	0	0	63.5	63.5	70	N	-	-	60.5	Y	N	N	
N2638	39	131.4	A2-2	-	0	8	62.9	54.1	0	0	63.4	63.4	70	N	-	-	60.4	Y	N	N	
N2638	40	134.2	A2-2	-	0	8.1	62.8	54.1	0	0	63.3	63.3	70	N	-	-	60.3	Y	N	N	
N2639	1	25	A2-2	-	0	0	66.7	45.9	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	
N2639	2	27.8	A2-2	-	0	0	66.6	45.9	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	
N2639	3	30.6	A2-2	-	0	0	66.5	45.9	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	
N2639	4	33.4	A2-2	-	0	0	66.4	45.9	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	
N2639	5	36.2	A2-2	-	0	0	66.4	45.9	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	
N2639	6	39	A2-2	-	0	0	66.3	45.9	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	
N2639	7	41.8	A2-2	-	0	0	66.3	45.9	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	
N2639	8	44.6	A2-2	-	0	0	66.2	45.9	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	
N2639	9	47.4	A2-2	-	0	0	66.1	45.9	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	
N2639	10	50.2	A2-2	-	0	0	66	45.8	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	
N2639	11	53	A2-2	-	0	0	66	45.8	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	
N2639	12	55.8	A2-2	-	0	0	65.9	45.8	0	0	66.0	66.0	70	N	-	-	63.0	Y	N	N	
N2639	13	58.6	A2-2	-	0	0	65.8	45.8	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	
N2639	14	61.4	A2-2	-	0	0	65.7	45.8	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	
N2639	15	64.2	A2-2	-	0	0	65.6	45.8	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	
N2639	16	67	A2-2	-	0	0	65.5	45.7	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	
N2639	17	69.8	A2-2	-	0	0	65.4	45.7	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	
N2639	18	72.6	A2-2	-	0	0	65.3	45.7	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	
N2639	19	75.4	A2-2	-	0	0	65.1	45.7	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	
N2639	20	78.2	A2-2	-	0	0	65	45.7	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	
N2639	21	81	A2-2	-	0	0	64.9	45.6	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	
N2639	22	83.8	A2-2	-	0	0	64.7	45.6	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	
N2639	23	86.6	A2-2	-	0	0	64.6	45.6	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	
N2639	24	89.4	A2-2	-	0	0	64.5	45.6	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	
N2639	25	92.2	A2-2	-	0	0	64.4	45.5	0	0	64.4	6									

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A)		Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>					New Roads in 2044 dB(A) <sup>[3]</sup> [B]	C - A dB(A) [D]						D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
							PD	DD	LD	EX	TR		TR	D ≥ 1dB(A)										
N2639	34	117.4	A2-2	-	0	0	0	63.4	45.2	0	0	63.5	63.5	70	N	-	-	60.5	Y	N	N	N		
N2639	35	120.2	A2-2	-	0	0	0	63.3	45.2	0	0	63.4	63.4	70	N	-	-	60.4	Y	N	N	N		
N2639	36	123	A2-2	-	0	0	0	63.2	45.2	0	0	63.3	63.3	70	N	-	-	60.3	Y	N	N	N		
N2639	37	125.8	A2-2	-	0	0	0	63.1	45.1	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N	N		
N2639	38	128.6	A2-2	-	0	0	0	63	45.1	0	0	63.1	63.1	70	N	-	-	60.1	Y	N	N	N		
N2639	39	131.4	A2-2	-	0	0	0	62.9	45.1	0	0	63	63.0	70	N	-	-	60.0	Y	N	N	N		
N2639	40	134.2	A2-2	-	0	0	0	62.8	45	0	0	62.9	62.9	70	N	-	-	59.9	Y	N	N	N		
N2640	1	25	A2-2	-	0	0	0	65.2	46.1	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N		
N2640	2	27.8	A2-2	-	0	0	0	65.1	46.5	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N		
N2640	3	30.6	A2-2	-	0	0	0	65.2	46.7	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N		
N2640	4	33.4	A2-2	-	0	0	0	65.1	46.8	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N		
N2640	5	36.2	A2-2	-	0	0	0	65	46.7	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N		
N2640	6	39	A2-2	-	0	0	0	65	46.7	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N		
N2640	7	41.8	A2-2	-	0	0	0	64.9	46.7	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N		
N2640	8	44.6	A2-2	-	0	0	0	64.9	46.7	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N		
N2640	9	47.4	A2-2	-	0	0	0	64.8	46.7	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N		
N2640	10	50.2	A2-2	-	0	0	0	64.8	46.7	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N		
N2640	11	53	A2-2	-	0	0	0	64.8	46.7	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N		
N2640	12	55.8	A2-2	-	0	0	0	64.7	46.7	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N		
N2640	13	58.6	A2-2	-	0	0	0	64.7	46.7	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N		
N2640	14	61.4	A2-2	-	0	0	0	64.6	46.7	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N		
N2640	15	64.2	A2-2	-	0	0	0	64.6	46.6	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N		
N2640	16	67	A2-2	-	0	0	0	64.6	46.6	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N		
N2640	17	69.8	A2-2	-	0	0	0	64.5	46.6	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N		
N2640	18	72.6	A2-2	-	0	0	0	64.5	46.6	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N		
N2640	19	75.4	A2-2	-	0	0	0	64.4	46.6	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N		
N2640	20	78.2	A2-2	-	0	0	0	64.4	46.6	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N		
N2640	21	81	A2-2	-	0	0	0	64.2	46.5	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N		
N2640	22	83.8	A2-2	-	0	0	0	64.1	46.5	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N		
N2640	23	86.6	A2-2	-	0	0	0	64	46.5	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N	N		
N2640	24	89.4	A2-2	-	0	0	0	64	46.5	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N		
N2640	25	92.2	A2-2	-	0	0	0	63.9	46.4	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N		
N2640	26	95	A2-2	-	0	0	0	63.8	46.4	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	N		
N2640	27	97.8	A2-2	-	0	0	0	63.7	46.4	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N	N		
N2640	28	100.6	A2-2	-	0	0	0	63.6	46.4	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	N		
N2640	29	103.4	A2-2	-	0	0	0	63.5	46.3	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N	N		
N2640	30	106.2	A2-2	-	0	0	0	63.4	46.3	0	0	63.5	63.5	70	N	-	-	60.5	Y	N	N	N		
N2640	31	109	A2-2	-	0	0	0	63.3	46.3	0	0	63.4	63.4	70	N	-	-	60.4	Y	N	N	N		
N2640	32	111.8	A2-2	-	0	0	0	63.2	46.3	0	0	63.3	63.3	70	N	-	-	60.3	Y	N	N	N		
N2640	33	114.6	A2-2	-	0	0	0	63.1	46.2	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N	N		
N2640	34	117.4	A2-2	-	0	0	0	63	46.2	0	0	63.1	63.1	70	N	-	-	60.1	Y	N	N	N		
N2640	35	120.2	A2-2	-	0	0	0	62.9	46.2	0	0	63	63.0	70	N	-	-	60.0	Y	N	N	N		
N2640	36	123	A2-2	-	0	0	0	62.8	46.1	0	0	62.9	62.9	70	N	-	-	59.9	Y	N	N	N		
N2640	37	125.8	A2-2	-	0	0	0	62.7	46.1	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N	N		
N2640	38	128.6	A2-2	-	0	0	0	62.7	46.1	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N	N		
N2640	39	131.4	A2-2	-	0	0	0	62.6	46.1	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N	N		
N2640	40	134.2	A2-2	-	0	0	0	62.5	46	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N	N		
N2641	1	22.5	A2-4	-	0	0	0	67.5	45.3	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N		
N2641	2	25.3	A2-4	-	0	0	0	67.7	46.3	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N		
N2641	3	28.1	A2-4	-	0	0	0	68.4	47	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N		
N2641	4	30.9	A2-4	-	0	0	0	68.8	47.5	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N		
N2641	5	33.7	A2-4	-	0	0	0	69.6	47.9	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N		
N2641	6	36.5	A2-4	-	0	0	0	69.9	48.1	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	N		
N2641	7	39.3	A2-4	-	0	0	0	69.8	48.3	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	N		
N2641	8	42.1	A2-4	-	0	0	0	69.7	48.4	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N		
N2641	9	44.9	A2-4	-	0	0	0	69.6	48.5	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N		
N2641	10	47.7	A2-4	-	0	0	0	69.5	48.5	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N		
N2641	11	50.5	A2-4	-	0	0	0	69.2	48.6	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	N		
N2641	12	53.3	A2-4	-	0	0	0	69.1	48.5	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N		
N2641	13	56.1	A2-4	-	0	0	0	68.9	48.6	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N		
N2641	14	58.9	A2-4	-	0	0	0	68.6	48.5	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N		
N2641	15	61.7	A2-4	-	0	0	0	68.4	48.5	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	N		
N2641	16	64.5	A2-4	-	0	0	0	68.2	48.5	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N		
N2641	17	67.3	A2-4	-	0	0	0	68	48.5	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N		
N2641	18	70.1	A2-4	-	0	0	0	67.8	48.5	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N		
N2641	19	72.9	A2-4	-	0	0	0	67.6	48.5	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N		
N2641	20	75.7	A2-4	-	0	0	0	67.5	48.5	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N		
N2641	21	78.5	A2-4	-	0	0	0	67.3	48.5	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N		
N2641	22	81.3	A2-4	-	0	0	0	67.1	48.5	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N		
N2641	23	84.1	A2-4	-	0	0	0	67	48.5	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N		
N2641	24	86.9	A2-4	-	0	0	0	66.8	48.4	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N		
N2641	25	89.7	A2-4	-	0	0	0	66.6	48.4	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N		
N2641	26	92.5	A2-4	-	0	0	0	66.5	48.4	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N		
N2641	27	95.3	A2-4	-	0	0	0	66.4	48.4	0	0	66.5	66.5	70	N	-	-	63.5	Y					



Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>[1,4]</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>					New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
							PD	DD	LD	EX	TR											
N2681	10	44.3	A2-7	-	0	0	13.3	67.6	55.6	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
N2681	11	47.1	A2-7	-	0	0	13.4	67.4	55.6	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
N2681	12	49.9	A2-7	-	0	0	13.5	67.2	55.5	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
N2681	13	52.7	A2-7	-	0	0	13.5	66.9	55.5	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
N2681	14	55.5	A2-7	-	0	0	13.6	66.8	55.5	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
N2681	15	58.3	A2-7	-	0	0	13.3	66.6	55.5	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
N2681	16	61.1	A2-7	-	0	0	13.6	66.4	55.5	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
N2681	17	63.9	A2-7	-	0	0	13.5	66.2	55.4	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2681	18	66.7	A2-7	-	0	0	13.4	66	55.4	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
N2681	19	69.5	A2-7	-	0	0	13.4	65.9	55.4	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2681	20	72.3	A2-7	-	0	0	13.7	65.7	55.4	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
N2681	21	75.1	A2-7	-	0	0	14	65.5	55.3	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
N2681	22	77.9	A2-7	-	0	0	14.4	65.4	55.3	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
N2681	23	80.7	A2-7	-	0	0	14.7	65.2	55.3	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2681	24	83.5	A2-7	-	0	0	15.2	65.1	55.3	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
N2681	25	86.3	A2-7	-	0	0	15.6	64.9	55.2	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2681	26	89.1	A2-7	-	0	0	16	64.8	55.1	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
N2681	27	91.9	A2-7	-	0	0	16.2	64.6	55.1	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
N2681	28	94.7	A2-7	-	0	0	16.6	64.5	55.1	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2681	29	97.5	A2-7	-	0	0	17	64.4	55.1	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
N2681	30	100.3	A2-7	-	0	0	17.4	64.3	55	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2681	31	103.1	A2-7	-	0	0	17.8	64.1	55	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
N2681	32	105.9	A2-7	-	0	0	18.1	64	55	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N
N2681	33	108.7	A2-7	-	0	0	18.5	63.9	54.9	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
N2681	34	111.5	A2-7	-	0	0	18.9	63.8	54.9	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N
N2681	35	114.3	A2-7	-	0	0	19.4	63.7	54.9	-5	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N
N2681	36	117.1	A2-7	-	0	0	19.8	63.6	54.9	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N	N
N2681	37	119.9	A2-7	-	0	0	20.1	63.4	54.8	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N
N2681	38	122.7	A2-7	-	0	0	20.5	63.4	54.9	-5	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	N
N2681	39	125.5	A2-7	-	0	0	21	63.3	54.8	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N	N
N2681	40	128.3	A2-7	-	0	0	21.4	63.2	54.8	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	N
N2682	1	19.1	A2-7	-	12.9	0	30.5	51.4	60.5	0	0	61	61.0	70	N	-	-	47.9	Y	N	N	N
N2682	2	21.9	A2-7	-	12.9	0	30.7	52	60.3	0	0	60.9	60.9	70	N	-	-	47.8	Y	N	N	N
N2682	3	24.7	A2-7	-	13	0	30.9	52.4	60.1	0	0	60.8	60.8	70	N	-	-	47.6	Y	N	N	N
N2682	4	27.5	A2-7	-	13	0	31.1	52.5	59.9	0	0	60.6	60.6	70	N	-	-	47.4	Y	N	N	N
N2682	5	30.3	A2-7	-	13	0	31.3	52.6	59.7	0	0	60.5	60.5	70	N	-	-	47.3	Y	N	N	N
N2682	6	33.1	A2-7	-	13.1	0	31.6	52.6	59.4	0	0	60.2	60.2	70	N	-	-	46.9	Y	N	N	N
N2682	7	35.9	A2-7	-	13.1	0	31.8	52.6	59.2	0	0	60	60.0	70	N	-	-	46.7	Y	N	N	N
N2682	8	38.7	A2-7	-	13.1	0	32.1	52.6	58.9	0	0	59.9	59.9	70	N	-	-	46.6	Y	N	N	N
N2682	9	41.5	A2-7	-	13.1	0	32.4	52.7	58.7	0	0	59.7	59.7	70	N	-	-	46.4	Y	N	N	N
N2682	10	44.3	A2-7	-	13.1	0	32.7	52.7	58.5	0	0	59.5	59.5	70	N	-	-	46.2	Y	N	N	N
N2682	11	47.1	A2-7	-	13.1	0	33	52.7	58.2	0	0	59.3	59.3	70	N	-	-	46.0	Y	N	N	N
N2682	12	49.9	A2-7	-	13.1	0	33.4	52.7	58	0	0	59.2	59.2	70	N	-	-	45.9	Y	N	N	N
N2682	13	52.7	A2-7	-	13.1	0	33.8	52.9	57.8	0	0	59.1	59.1	70	N	-	-	45.8	Y	N	N	N
N2682	14	55.5	A2-7	-	13.1	0	34.2	53.1	57.6	0	0	59	59.0	70	N	-	-	45.7	Y	N	N	N
N2682	15	58.3	A2-7	-	13.2	0	34.7	53.3	57.5	0	0	58.9	58.9	70	N	-	-	45.5	Y	N	N	N
N2682	16	61.1	A2-7	-	13.2	0	35	53.4	57.4	0	0	58.8	58.8	70	N	-	-	45.4	Y	N	N	N
N2682	17	63.9	A2-7	-	13.2	0	35.5	53.4	57.3	0	0	58.8	58.8	70	N	-	-	45.3	Y	N	N	N
N2682	18	66.7	A2-7	-	13.3	0	36.1	53.6	57.2	0	0	58.8	58.8	70	N	-	-	45.3	Y	N	N	N
N2682	19	69.5	A2-7	-	13.2	0	36.6	53.8	57.1	0	0	58.8	58.8	70	N	-	-	45.4	Y	N	N	N
N2682	20	72.3	A2-7	-	13.6	0	37.2	53.9	57	0	0	58.8	58.8	70	N	-	-	45.0	Y	N	N	N
N2682	21	75.1	A2-7	-	13.9	0	37.8	54.1	56.9	0	0	58.8	58.8	70	N	-	-	44.7	Y	N	N	N
N2682	22	77.9	A2-7	-	14.1	0	38.5	54.4	56.8	0	0	58.8	58.8	70	N	-	-	44.5	Y	N	N	N
N2682	23	80.7	A2-7	-	14.5	0	39.3	54.7	56.6	0	0	58.8	58.8	70	N	-	-	44.1	Y	N	N	N
N2682	24	83.5	A2-7	-	15	0	40.3	55	56.5	0	0	58.9	58.9	70	N	-	-	43.8	Y	N	N	N
N2682	25	86.3	A2-7	-	15.4	0	40.9	55.2	56.4	0	0	58.9	58.9	70	N	-	-	43.4	Y	N	N	N
N2682	26	89.1	A2-7	-	15.9	0	41.6	55.6	56.3	0	0	59.1	59.1	70	N	-	-	43.1	Y	N	N	N
N2682	27	91.9	A2-7	-	16.4	0	42.7	55.8	56.2	0	0	59.1	59.1	70	N	-	-	42.6	Y	N	N	N
N2682	28	94.7	A2-7	-	16.9	0	43.6	56.1	56.1	0	0	59.2	59.2	70	N	-	-	42.2	Y	N	N	N
N2682	29	97.5	A2-7	-	17.4	0	44.2	56.2	56	0	0	59.2	59.2	70	N	-	-	41.7	Y	N	N	N
N2682	30	100.3	A2-7	-	17.9	0	44.8	56.2	55.9	0	0	59.2	59.2	70	N	-	-	41.2	Y	N	N	N
N2682	31	103.1	A2-7	-	18.4	0	45.4	56.3	55.8	0	0	59.2	59.2	70	N	-	-	40.7	Y	N	N	N
N2682	32	105.9	A2-7	-	18.9	0	45.9	56.3	55.7	0	0	59.2	59.2	70	N	-	-	40.2	Y	N	N	N
N2682	33	108.7	A2-7	-	19.5	0	46.3	56.3	55.6	0	0	59.2	59.2	70	N	-	-	39.7	Y	N	N	N
N2682	34	111.5	A2-7	-	20	0	46.6	56.3	55.5	0	0	59.2	59.2	70	N	-	-	39.2	Y	N	N	N
N2682	35	114.3	A2-7	-	20.6	0	47.1	56.3	55.4	0	0	59.2	59.2	70	N	-	-	38.6	Y	N	N	N
N2682	36	117.1	A2-7	-	21.2	0	47.6	56.3	55.3	0	0	59.2	59.2	70	N	-	-	38.0	Y	N	N	N
N2682	37	119.9	A2-7	-	21.7	0	48.2	56.3	55.2	0	0	59.2	59.2	70	N	-	-	37.5	Y	N	N	N
N2682	38	122.7	A2-7	-	22.3	0	48.6	56.3	55.2	0	0	59.2	59.2	70	N	-	-	36.9	Y	N	N	N
N2682	39	125.5	A2-7	-	22.9	0	49.1	56.3	55.1	0	0	59.2	59.2	70	N	-	-	36.3	Y	N	N	N
N2682	40	128.3	A2-7	-	23.5	0	49.4	56.3	55	0	0	59.2	59.2	70	N	-	-	35.7	Y	N	N	N
N2683	1	19.1	A2-7	-	10.9	0	17.6	46.4	59.6	0	0	59.8	59.8	70	N	-	-	48.6</				

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)		
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>					New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)							Exceedance C > Criteria (Y/N)	New Road Contribution dB(A) [E]
							PD	DD	LD	EX	TR											
N2683	18	66.7	A2-7	-	11.9	0	19.6	55.7	57.2	0	0	59.5	59.5	70	N	-	-	47.3	Y	N	N	N
N2683	19	69.5	A2-7	-	11.9	0	20.2	56	57.1	0	0	59.6	59.6	70	N	-	-	47.4	Y	N	N	N
N2683	20	72.3	A2-7	-	11.9	0	20.8	56.4	57	0	0	59.8	59.8	70	N	-	-	47.6	Y	N	N	N
N2683	21	75.1	A2-7	-	11.6	0	21.5	56.7	57	0	0	59.9	59.9	70	N	-	-	48.0	Y	N	N	N
N2683	22	77.9	A2-7	-	12.1	0	22.1	56.9	57	0	0	60	60.0	70	N	-	-	47.6	Y	N	N	N
N2683	23	80.7	A2-7	-	12.5	0	22.7	57.2	57	0	0	60.1	60.1	70	N	-	-	47.4	Y	N	N	N
N2683	24	83.5	A2-7	-	13	0	23.3	57.5	57	0	0	60.3	60.3	70	N	-	-	47.1	Y	N	N	N
N2683	25	86.3	A2-7	-	13.5	0	24.1	57.7	57.1	0	0	60.4	60.4	70	N	-	-	46.7	Y	N	N	N
N2683	26	89.1	A2-7	-	14.1	0	24.7	57.8	57.1	0	0	60.5	60.5	70	N	-	-	46.2	Y	N	N	N
N2683	27	91.9	A2-7	-	14.6	0	25.3	57.9	57.1	0	0	60.5	60.5	70	N	-	-	45.8	Y	N	N	N
N2683	28	94.7	A2-7	-	15.2	0	26.1	58	57.1	0	0	60.6	60.6	70	N	-	-	45.3	Y	N	N	N
N2683	29	97.5	A2-7	-	15.7	0	26.8	58.1	57	0	0	60.6	60.6	70	N	-	-	44.8	Y	N	N	N
N2683	30	100.3	A2-7	-	16.3	0	27.4	58.1	57	0	0	60.6	60.6	70	N	-	-	44.2	Y	N	N	N
N2683	31	103.1	A2-7	-	16.9	0	28.2	58.2	56.9	0	0	60.6	60.6	70	N	-	-	43.6	Y	N	N	N
N2683	32	105.9	A2-7	-	17.5	0	28.9	58.1	56.7	0	0	60.5	60.5	70	N	-	-	42.9	Y	N	N	N
N2683	33	108.7	A2-7	-	18.1	0	29.6	58.2	56.7	0	0	60.5	60.5	70	N	-	-	42.3	Y	N	N	N
N2683	34	111.5	A2-7	-	18.8	0	30.3	58.2	56.6	0	0	60.5	60.5	70	N	-	-	41.6	Y	N	N	N
N2683	35	114.3	A2-7	-	19.4	0	31.2	58.3	56.5	0	0	60.5	60.5	70	N	-	-	41.1	Y	N	N	N
N2683	36	117.1	A2-7	-	20.1	0	31.9	58.3	56.4	0	0	60.5	60.5	70	N	-	-	40.4	Y	N	N	N
N2683	37	119.9	A2-7	-	20.8	0	32.7	58.3	56.3	0	0	60.4	60.4	70	N	-	-	39.6	Y	N	N	N
N2683	38	122.7	A2-7	-	21.4	0	33.5	58.3	56.2	0	0	60.4	60.4	70	N	-	-	39.0	Y	N	N	N
N2683	39	125.5	A2-7	-	22.1	0	34.4	58.4	56.1	0	0	60.5	60.5	70	N	-	-	38.4	Y	N	N	N
N2683	40	128.3	A2-7	-	22.8	0	35.4	58.5	56.1	0	0	60.4	60.4	70	N	-	-	37.6	Y	N	N	N
N2721	1	23.5	A3-3	-	0	0	35.5	57.9	43	0	0	58.1	58.1	70	N	-	-	55.1	Y	N	N	N
N2721	2	26.3	A3-3	-	0	0	35.6	57.9	43	0	0	58.1	58.1	70	N	-	-	55.1	Y	N	N	N
N2721	3	29.1	A3-3	-	0	0	35.7	57.9	43.1	0	0	58.1	58.1	70	N	-	-	55.1	Y	N	N	N
N2721	4	31.9	A3-3	-	0	0	36	57.9	43	0	0	58.1	58.1	70	N	-	-	55.1	Y	N	N	N
N2721	5	34.7	A3-3	-	0	0	36.2	57.9	43.1	0	0	58.1	58.1	70	N	-	-	55.1	Y	N	N	N
N2721	6	37.5	A3-3	-	0	0	36.4	57.9	43.1	0	0	58	58.0	70	N	-	-	55.0	Y	N	N	N
N2721	7	40.3	A3-3	-	0	0	36.7	57.8	43.2	0	0	58	58.0	70	N	-	-	55.0	Y	N	N	N
N2721	8	43.1	A3-3	-	0	0	37	57.8	43.2	0	0	58	58.0	70	N	-	-	55.0	Y	N	N	N
N2721	9	45.9	A3-3	-	0	0	37.3	57.8	43.3	0	0	58	58.0	70	N	-	-	55.0	Y	N	N	N
N2721	10	48.7	A3-3	-	0	0	37.7	57.8	43.4	0	0	58	58.0	70	N	-	-	55.0	Y	N	N	N
N2721	11	51.5	A3-3	-	0	0	38.2	57.8	43.5	0	0	58	58.0	70	N	-	-	55.0	Y	N	N	N
N2721	12	54.3	A3-3	-	0	0	39.1	57.7	43.5	0	0	57.9	57.9	70	N	-	-	54.9	Y	N	N	N
N2721	13	57.1	A3-3	-	0	0	39.2	57.7	43.5	0	0	57.9	57.9	70	N	-	-	54.9	Y	N	N	N
N2721	14	59.9	A3-3	-	0	0	39.6	57.7	43.6	0	0	57.9	57.9	70	N	-	-	54.9	Y	N	N	N
N2721	15	62.7	A3-3	-	0	0	40.3	57.6	43.6	0	0	57.9	57.9	70	N	-	-	54.9	Y	N	N	N
N2721	16	65.5	A3-3	-	0	0	40.8	57.6	43.5	0	0	57.9	57.9	70	N	-	-	54.9	Y	N	N	N
N2721	17	68.3	A3-3	-	0	0	41.3	57.6	43.5	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	N
N2721	18	71.1	A3-3	-	0	0	41.7	57.6	43.5	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	N
N2721	19	73.9	A3-3	-	0	0	42	57.5	43.6	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	N
N2721	20	76.7	A3-3	-	0	0	42.2	57.5	43.6	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	N
N2721	21	79.5	A3-3	-	0	0	42.3	57.5	43.5	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	N
N2721	22	82.3	A3-3	-	0	0	42.6	57.5	43.5	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	N
N2721	23	85.1	A3-3	-	0	0	42.7	57.5	43.5	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	N
N2721	24	87.9	A3-3	-	0	0	42.8	57.4	43.5	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	N
N2721	25	90.7	A3-3	-	0	0	43	57.4	43.5	0	0	57.8	57.8	70	N	-	-	54.8	Y	N	N	N
N2721	26	93.5	A3-3	-	0	0	43	57.4	43.5	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	N
N2721	27	96.3	A3-3	-	0	0	43.2	57.4	43.4	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	N
N2721	28	99.1	A3-3	-	0	0	43.2	57.4	43.4	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	N
N2721	29	101.9	A3-3	-	0	0	43.2	57.4	43.4	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	N
N2721	30	104.7	A3-3	-	0	0	43.3	57.4	43.4	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	N
N2721	31	107.5	A3-3	-	0	0	43.3	57.4	43.4	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	N
N2721	32	110.3	A3-3	-	0	0	43.3	57.4	43.4	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	N
N2721	33	113.1	A3-3	-	0	0	43.3	57.3	43.4	0	0	57.7	57.7	70	N	-	-	54.7	Y	N	N	N
N2721	34	115.9	A3-3	-	0	0	43.3	57.3	43.3	0	0	57.6	57.6	70	N	-	-	54.6	Y	N	N	N
N2721	35	118.7	A3-3	-	0	0	43.3	57.3	43.3	0	0	57.6	57.6	70	N	-	-	54.6	Y	N	N	N
N2721	36	121.5	A3-3	-	0	0	43.3	57.2	43.3	0	0	57.6	57.6	70	N	-	-	54.6	Y	N	N	N
N2721	37	124.3	A3-3	-	0	0	43.3	57.2	43.3	0	0	57.5	57.5	70	N	-	-	54.5	Y	N	N	N
N2721	38	127.1	A3-3	-	0	0	43.3	57.2	43.3	0	0	57.5	57.5	70	N	-	-	54.5	Y	N	N	N
N2721	39	129.9	A3-3	-	0	0	43.3	57.1	43.2	0	0	57.5	57.5	70	N	-	-	54.5	Y	N	N	N
N2722	1	23.6	A3-3	-	0	0	23	56	64.4	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2722	2	26.4	A3-3	-	0	0	23	56	64.4	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2722	3	29.2	A3-3	-	0	0	23	56	64.3	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
N2722	4	32	A3-3	-	0	0	23	56	64.2	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2722	5	34.8	A3-3	-	0	0	22.9	56	64.1	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
N2722	6	37.6	A3-3	-	0	0	23	55.9	64	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
N2722	7	40.4	A3-3	-	0	0	23	55.9	63.8	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N
N2722	8	43.2	A3-3	-	0	0	23	55.9	63.7	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
N2722	9	46	A3-3	-	0	0	23.3	55.9	63.6	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N
N2722	10	48.8	A3-3	-	0	0	23.7	55.9	63.5	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N
N2722	11	51.6	A3-3	-	0	0	24	55.9	63.3	0	0											

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required [Y/N]
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) [1]	New Roads [2]				New Roads in 2044 dB(A) [B]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]				New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
ID	Floor	Floor Level (mPD)			PD	DD	LD	EX	TR														
N2722	27	96.4	A3-3	-	-	0	0	32.9	56.4	61.3	0	0	62.5	62.5	70	N	-	-	59.5	Y	N	N	N
N2722	28	99.2	A3-3	-	-	0	0	33.7	56.4	61.2	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N	N
N2722	29	102	A3-3	-	-	0	0	34.5	56.5	61.1	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N	N
N2722	30	104.8	A3-3	-	-	0	0	35.3	56.5	60.9	0	0	62.3	62.3	70	N	-	-	59.3	Y	N	N	N
N2722	31	107.6	A3-3	-	-	0	0	36.2	56.4	60.8	0	0	62.2	62.2	70	N	-	-	59.2	Y	N	N	N
N2722	32	110.4	A3-3	-	-	0	0	37.2	56.5	60.8	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N	N
N2722	33	113.2	A3-3	-	-	0	0	38.2	56.4	60.7	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N	N
N2722	34	116	A3-3	-	-	0	0	39.5	56.4	60.6	0	0	62	62	70	N	-	-	59.0	Y	N	N	N
N2722	35	118.8	A3-3	-	-	0	0	41.3	56.4	60.5	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N	N
N2722	36	121.6	A3-3	-	-	0	0	42.7	56.4	60.4	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N	N
N2722	37	124.4	A3-3	-	-	0	0	44.2	56.3	60.3	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	N
N2722	38	127.2	A3-3	-	-	0	0	44.9	56.3	60.2	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	N
N2722	39	130	A3-3	-	-	0	0	45.4	56.3	60.1	0	0	61.7	61.7	70	N	-	-	58.7	Y	N	N	N
N2722	40	132.8	A3-3	-	-	0	0	45.6	56.3	60	0	0	61.7	61.7	70	N	-	-	58.7	Y	N	N	N
N2723	1	23.6	A3-3	-	-	0	0	26	64.8	64.5	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
N2723	2	26.4	A3-3	-	-	0	0	26.1	64.8	64.4	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
N2723	3	29.2	A3-3	-	-	0	0	26.2	64.7	64.3	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
N2723	4	32	A3-3	-	-	0	0	26.3	64.6	64.2	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
N2723	5	34.8	A3-3	-	-	0	0	26.3	64.5	64.1	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
N2723	6	37.6	A3-3	-	-	0	0	26.5	64.5	63.9	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N
N2723	7	40.4	A3-3	-	-	0	0	26.6	64.4	63.8	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
N2723	8	43.2	A3-3	-	-	0	0	26.8	64.2	63.6	0	0	67	67	70	N	-	-	64.0	Y	N	N	N
N2723	9	46	A3-3	-	-	0	0	27	64.2	63.5	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
N2723	10	48.8	A3-3	-	-	0	0	27.3	64.1	63.4	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
N2723	11	51.6	A3-3	-	-	0	0	27.5	64.1	63.3	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
N2723	12	54.4	A3-3	-	-	0	0	27.8	64	63.1	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
N2723	13	57.2	A3-3	-	-	0	0	28.1	63.9	63	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2723	14	60	A3-3	-	-	0	0	28.5	63.9	62.8	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
N2723	15	62.8	A3-3	-	-	0	0	28.9	63.7	62.7	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
N2723	16	65.6	A3-3	-	-	0	0	29.3	63.7	62.5	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
N2723	17	68.4	A3-3	-	-	0	0	29.7	63.6	62.4	0	0	66	66	70	N	-	-	63.0	Y	N	N	N
N2723	18	71.2	A3-3	-	-	0	0	30.2	63.5	62.3	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
N2723	19	74	A3-3	-	-	0	0	30.8	63.3	62.1	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
N2723	20	76.8	A3-3	-	-	0	0	31.3	63.3	62	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
N2723	21	79.6	A3-3	-	-	0	0	31.9	63.2	61.9	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2723	22	82.4	A3-3	-	-	0	0	32.6	63	61.7	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
N2723	23	85.2	A3-3	-	-	0	0	33.3	62.9	61.6	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2723	24	88	A3-3	-	-	0	0	34	62.8	61.5	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
N2723	25	90.8	A3-3	-	-	0	0	34.8	62.7	61.4	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
N2723	26	93.6	A3-3	-	-	0	0	35.7	62.6	61.3	0	0	65	65	70	N	-	-	62.0	Y	N	N	N
N2723	27	96.4	A3-3	-	-	0	0	36.7	62.5	61.2	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
N2723	28	99.2	A3-3	-	-	0	0	38.1	62.4	61.1	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2723	29	102	A3-3	-	-	0	0	39.7	62.3	61	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
N2723	30	104.8	A3-3	-	-	0	0	41.4	62.2	60.9	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
N2723	31	107.6	A3-3	-	-	0	0	43	62.1	60.8	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
N2723	32	110.4	A3-3	-	-	0	0	43.8	62	60.7	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N
N2723	33	113.2	A3-3	-	-	0	0	44.3	62	60.6	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
N2723	34	116	A3-3	-	-	0	0	44.5	61.9	60.5	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N
N2723	35	118.8	A3-3	-	-	0	0	44.8	61.8	60.4	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N
N2723	36	121.6	A3-3	-	-	0	0	44.9	61.7	60.3	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N
N2723	37	124.4	A3-3	-	-	0	0	44.9	61.7	60.2	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N	N
N2723	38	127.2	A3-3	-	-	0	0	45.1	61.7	60.1	0	0	64	64	70	N	-	-	61.0	Y	N	N	N
N2723	39	130	A3-3	-	-	0	0	45.3	61.6	60.1	0	0	64	64	70	N	-	-	61.0	Y	N	N	N
N2723	40	132.8	A3-3	-	-	0	0	45.4	61.6	60	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	N
N2724a	1	23.6	A3-3	-	-	0	0	6.4	70.1	20.3	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	N
N2724a	2	26.4	A3-3	-	-	0	0	6.4	69.8	20.3	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N
N2724a	3	29.2	A3-3	-	-	0	0	6.4	69.5	20.3	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N
N2724a	4	32	A3-3	-	-	0	0	6.4	69.2	20.4	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	N
N2724a	5	34.8	A3-3	-	-	0	0	6.4	68.9	20.4	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N
N2724a	6	37.6	A3-3	-	-	0	0	6.4	68.5	20.4	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N
N2724a	7	40.4	A3-3	-	-	0	0	6.4	68.2	20.4	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
N2724a	8	43.2	A3-3	-	-	0	0	6.4	67.9	20.3	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
N2724a	9	46	A3-3	-	-	0	0	6.4	67.7	20.3	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
N2724a	10	48.8	A3-3	-	-	0	0	6.4	67.4	20.3	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
N2724a	11	51.6	A3-3	-	-	0	0	6.4	67.1	20.3	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
N2724a	12	54.4	A3-3	-	-	0	0	6.4	66.9	20.3	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
N2724a	13	57.2	A3-3	-	-	0	0	6.4	66.6	20.3	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
N2724a	14	60	A3-3	-	-	0	0	6.4	66.4	20.3	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
N2724a	15	62.8	A3-3	-	-	0	0	6.4	66.2	20.3	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2724a	16	65.6	A3-3	-	-	0	0	6.4	66	20.2	0	0	66	66	70	N	-	-	63.0	Y	N	N	N
N2724a	17	68.4	A3-3	-	-	0	0																

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>					New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
							PD	DD	LD	EX	TR										C	
N2724a	35	118.8	A3-3	-	0	0	15.2	63.2	20.4	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N	N
N2724a	36	121.6	A3-3	-	0	0	16.2	63	20.6	0	0	63	63.0	70	N	-	-	60.0	Y	N	N	N
N2724a	37	124.4	A3-3	-	0	0	17.2	62.9	21	0	0	62.9	62.9	70	N	-	-	59.9	Y	N	N	N
N2724a	38	127.2	A3-3	-	0	0	18.4	62.8	21.2	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N	N
N2724a	39	130	A3-3	-	0	0	19.5	62.7	21.6	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N	N
N2724a	40	132.8	A3-3	-	0	0	20.8	62.6	22.2	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N	N
N2724b	1	23.6	A3-3	-	0	0	6.4	70.1	20.3	0	0	70.1	70.1	70	N	-	-	67.1	Y	N	N	N
N2724b	2	26.4	A3-3	-	0	0	6.4	69.8	20.3	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N
N2724b	3	29.2	A3-3	-	0	0	6.4	69.5	20.3	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N
N2724b	4	32	A3-3	-	0	0	6.4	69.1	20.4	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N
N2724b	5	34.8	A3-3	-	0	0	6.4	68.8	20.4	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	N
N2724b	6	37.6	A3-3	-	0	0	6.4	68.5	20.4	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N
N2724b	7	40.4	A3-3	-	0	0	6.4	68.2	20.4	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
N2724b	8	43.2	A3-3	-	0	0	6.4	67.9	20.3	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
N2724b	9	46	A3-3	-	0	0	6.4	67.6	20.3	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
N2724b	10	48.8	A3-3	-	0	0	6.4	67.3	20.3	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
N2724b	11	51.6	A3-3	-	0	0	6.4	67	20.3	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
N2724b	12	54.4	A3-3	-	0	0	6.4	66.8	20.3	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
N2724b	13	57.2	A3-3	-	0	0	6.4	66.5	20.3	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2724b	14	60	A3-3	-	0	0	6.4	66.3	20.3	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
N2724b	15	62.8	A3-3	-	0	0	6.4	66.1	20.3	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
N2724b	16	65.6	A3-3	-	0	0	6.4	65.9	20.2	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
N2724b	17	68.4	A3-3	-	0	0	6.4	65.7	20.2	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
N2724b	18	71.2	A3-3	-	0	0	6.4	65.5	20.2	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
N2724b	19	74	A3-3	-	0	0	6.4	65.3	20.2	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2724b	20	76.8	A3-3	-	0	0	6.4	65.1	20.2	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
N2724b	21	79.6	A3-3	-	0	0	6.4	65	20.2	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2724b	22	82.4	A3-3	-	0	0	6.4	64.8	20.2	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2724b	23	85.2	A3-3	-	0	0	6.4	64.6	20.1	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
N2724b	24	88	A3-3	-	0	0	6.2	64.5	20.1	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N
N2724b	25	90.8	A3-3	-	0	0	6.8	64.3	20.1	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N
N2724b	26	93.6	A3-3	-	0	0	7.4	64.2	20.1	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N
N2724b	27	96.4	A3-3	-	0	0	8.1	64	20.1	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N
N2724b	28	99.2	A3-3	-	0	0	8.9	63.9	20.1	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	N
N2724b	29	102	A3-3	-	0	0	9.7	63.8	20.1	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N	N
N2724b	30	104.8	A3-3	-	0	0	10.5	63.7	20.1	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	N
N2724b	31	107.6	A3-3	-	0	0	11.5	63.5	20.1	0	0	63.5	63.5	70	N	-	-	60.5	Y	N	N	N
N2724b	32	110.4	A3-3	-	0	0	12.3	63.4	20.1	0	0	63.4	63.4	70	N	-	-	60.4	Y	N	N	N
N2724b	33	113.2	A3-3	-	0	0	13.3	63.3	20	0	0	63.3	63.3	70	N	-	-	60.3	Y	N	N	N
N2724b	34	116	A3-3	-	0	0	14.2	63.2	20.2	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N	N
N2724b	35	118.8	A3-3	-	0	0	15.3	63.1	20.4	0	0	63.1	63.1	70	N	-	-	60.1	Y	N	N	N
N2724b	36	121.6	A3-3	-	0	0	16.2	63	20.6	0	0	63	63.0	70	N	-	-	60.0	Y	N	N	N
N2724b	37	124.4	A3-3	-	0	0	17.3	62.8	21	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N	N
N2724b	38	127.2	A3-3	-	0	0	18.4	62.7	21.2	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N	N
N2724b	39	130	A3-3	-	0	0	19.6	62.6	21.6	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N	N
N2724b	40	132.8	A3-3	-	0	0	20.8	62.5	22.2	0	0	62.5	62.5	70	N	-	-	59.5	Y	N	N	N
N2724c	1	23.6	A3-3	-	0	0	13.4	69.8	54.2	0	0	69.8	69.8	70	N	-	-	66.9	Y	N	N	N
N2724c	2	26.4	A3-3	-	0	0	13.4	69.6	54.2	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	N
N2724c	3	29.2	A3-3	-	0	0	13.4	69.3	54.2	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N
N2724c	4	32	A3-3	-	0	0	13.4	69	54.1	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N
N2724c	5	34.8	A3-3	-	0	0	13.4	68.7	54.1	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N
N2724c	6	37.6	A3-3	-	0	0	13.4	68.5	54.1	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N
N2724c	7	40.4	A3-3	-	0	0	13.2	68.2	54	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	N
N2724c	8	43.2	A3-3	-	0	0	13.4	68	54	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N
N2724c	9	46	A3-3	-	0	0	13.4	67.7	53.9	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
N2724c	10	48.8	A3-3	-	0	0	13.5	67.5	53.8	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
N2724c	11	51.6	A3-3	-	0	0	13.4	67.3	53.8	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
N2724c	12	54.4	A3-3	-	0	0	13.4	67	53.7	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N
N2724c	13	57.2	A3-3	-	0	0	13.5	66.8	53.6	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
N2724c	14	60	A3-3	-	0	0	13.2	66.7	53.6	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
N2724c	15	62.8	A3-3	-	0	0	13.3	66.5	53.5	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
N2724c	16	65.6	A3-3	-	0	0	13.3	66.3	53.5	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2724c	17	68.4	A3-3	-	0	0	13.6	66.1	53.4	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
N2724c	18	71.2	A3-3	-	0	0	13.9	65.9	53.4	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
N2724c	19	74	A3-3	-	0	0	14.2	65.7	53.3	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
N2724c	20	76.8	A3-3	-	0	0	14.6	65.6	53.2	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
N2724c	21	79.6	A3-3	-	0	0	14.9	65.4	53.2	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2724c	22	82.4	A3-3	-	0	0	15.2	65.3	53.1	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
N2724c	23	85.2	A3-3	-	0	0	15.6	65.1	53.1	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2724c	24	88	A3-3	-	0	0	15.9	65	53	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
N2724c	25	90.8	A3-3	-	0	0	16.2	64.8	53.1	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
N2724c	26	93.6	A3-3	-	0	0	16.5	64.7	53.1	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2724c	27	96.4	A3-3	-	0	0	16.9	64.5	53	0												

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			WITHOUT PROJECT		WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)	
					Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>					New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A) [C]			Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	New Road Contribution dB(A) [E]		New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)
PD	DD	LD	EX	TR				C - A dB(A) [D]	D ≥ 1dB(A)												
ID	Floor	Floor Level (mPD)	Location																		
N2724d	3	29.2	A3-3	-	0	0	13.3	70.1	55.6	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N
N2724d	4	32	A3-3	-	0	0	13.3	69.8	55.6	0	0	70	70.0	70	N	-	-	67.0	Y	N	N
N2724d	5	34.8	A3-3	-	0	0	13.3	69.5	55.6	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N
N2724d	6	37.6	A3-3	-	0	0	13.3	69.2	55.6	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N
N2724d	7	40.4	A3-3	-	0	0	13.2	68.9	55.6	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
N2724d	8	43.2	A3-3	-	0	0	13.4	68.6	55.5	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
N2724d	9	46	A3-3	-	0	0	13.4	68.4	55.5	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N
N2724d	10	48.8	A3-3	-	0	0	13.5	68.2	55.4	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N
N2724d	11	51.6	A3-3	-	0	0	13.4	68	55.4	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N
N2724d	12	54.4	A3-3	-	0	0	13.4	67.8	55.3	0	0	68	68.0	70	N	-	-	65.0	Y	N	N
N2724d	13	57.2	A3-3	-	0	0	13.5	67.5	55.2	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N
N2724d	14	60	A3-3	-	0	0	13.2	67.3	55.2	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N
N2724d	15	62.8	A3-3	-	0	0	13.3	67.1	55.1	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N
N2724d	16	65.6	A3-3	-	0	0	13.3	67	55	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N
N2724d	17	68.4	A3-3	-	0	0	13.6	66.8	55	0	0	67	67.0	70	N	-	-	64.0	Y	N	N
N2724d	18	71.2	A3-3	-	0	0	13.9	66.6	54.9	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
N2724d	19	74	A3-3	-	0	0	14.2	66.4	54.9	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
N2724d	20	76.8	A3-3	-	0	0	14.6	66.2	54.8	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N
N2724d	21	79.6	A3-3	-	0	0	14.9	66.1	54.7	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
N2724d	22	82.4	A3-3	-	0	0	15.2	65.9	54.7	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
N2724d	23	85.2	A3-3	-	0	0	15.6	65.7	54.6	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
N2724d	24	88	A3-3	-	0	0	15.9	65.6	54.6	0	0	66	66.0	70	N	-	-	63.0	Y	N	N
N2724d	25	90.8	A3-3	-	0	0	16.3	65.5	54.5	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
N2724d	26	93.6	A3-3	-	0	0	16.5	65.4	54.6	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N
N2724d	27	96.4	A3-3	-	0	0	16.9	65.2	54.5	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N
N2724d	28	99.2	A3-3	-	0	0	17.3	65.1	54.5	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N
N2724d	29	102	A3-3	-	0	0	17.6	65	54.5	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N
N2724d	30	104.8	A3-3	-	0	0	18	64.8	54.5	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N
N2724d	31	107.6	A3-3	-	0	0	18.4	64.7	54.5	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N
N2724d	32	110.4	A3-3	-	0	0	18.8	64.6	54.5	0	0	65	65.0	70	N	-	-	62.0	Y	N	N
N2724d	33	113.2	A3-3	-	0	0	19	64.5	54.4	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N
N2724d	34	116	A3-3	-	0	0	19.4	64.4	54.4	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N
N2724d	35	118.8	A3-3	-	0	0	19.8	64.3	54.4	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N
N2724d	36	121.6	A3-3	-	0	0	20.2	64.2	54.4	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N
N2724d	37	124.4	A3-3	-	0	0	20.6	64.1	54.4	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N
N2724d	38	127.2	A3-3	-	0	0	21	64	54.4	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N
N2724d	39	130	A3-3	-	0	0	21.3	63.9	54.4	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N
N2724d	40	132.8	A3-3	-	0	0	21.7	63.8	54.3	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N
N2724e	1	23.6	A3-3	-	0	0	13.4	70	56.4	0	0	70.2	70.2	70	N	-	-	67.2	Y	N	N
N2724e	2	26.4	A3-3	-	0	0	13.4	69.8	56.4	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N
N2724e	3	29.2	A3-3	-	0	0	13.4	69.5	56.4	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N
N2724e	4	32	A3-3	-	0	0	13.4	69.2	56.3	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N
N2724e	5	34.8	A3-3	-	0	0	13.4	68.9	56.3	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N
N2724e	6	37.6	A3-3	-	0	0	13.4	68.7	56.3	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
N2724e	7	40.4	A3-3	-	0	0	13.3	68.4	56.3	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N
N2724e	8	43.2	A3-3	-	0	0	13.4	68.2	56.2	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N
N2724e	9	46	A3-3	-	0	0	13.5	68	56.2	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N
N2724e	10	48.8	A3-3	-	0	0	13.5	67.7	56.1	0	0	68	68.0	70	N	-	-	65.0	Y	N	N
N2724e	11	51.6	A3-3	-	0	0	13.5	67.5	56.1	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N
N2724e	12	54.4	A3-3	-	0	0	13.4	67.3	56	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N
N2724e	13	57.2	A3-3	-	0	0	13.5	67.1	55.9	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N
N2724e	14	60	A3-3	-	0	0	13.3	66.9	55.9	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N
N2724e	15	62.8	A3-3	-	0	0	13.4	66.7	55.8	0	0	67	67.0	70	N	-	-	64.0	Y	N	N
N2724e	16	65.6	A3-3	-	0	0	13.4	66.5	55.7	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
N2724e	17	68.4	A3-3	-	0	0	13.7	66.3	55.6	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
N2724e	18	71.2	A3-3	-	0	0	13.9	66.2	55.6	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N
N2724e	19	74	A3-3	-	0	0	14.3	66	55.5	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
N2724e	20	76.8	A3-3	-	0	0	14.6	65.8	55.4	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
N2724e	21	79.6	A3-3	-	0	0	14.9	65.7	55.4	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
N2724e	22	82.4	A3-3	-	0	0	15.2	65.6	55.3	0	0	66	66.0	70	N	-	-	63.0	Y	N	N
N2724e	23	85.2	A3-3	-	0	0	15.6	65.4	55.3	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
N2724e	24	88	A3-3	-	0	0	15.8	65.3	55.2	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N
N2724e	25	90.8	A3-3	-	0	0	16.2	65.1	55.2	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N
N2724e	26	93.6	A3-3	-	0	0	16.5	65	55.2	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N
N2724e	27	96.4	A3-3	-	0	0	16.9	64.8	55.1	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N
N2724e	28	99.2	A3-3	-	0	0	17.3	64.7	55.1	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N
N2724e	29	102	A3-3	-	0	0	17.6	64.6	55.1	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N
N2724e	30	104.8	A3-3	-	0	0	17.9	64.4	55.1	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N
N2724e	31	107.6	A3-3	-	0	0	18.3	64.3	55.1	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N
N2724e	32	110.4	A3-3	-	0	0	18.6	64.2	55.1	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N
N2724e	33	113.2	A3-3	-	0	0	19	64.1	55	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N
N2724e	34	116	A3-3	-	0	0	19.4	64	55	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N
N2724e	35	118.8	A3-3	-	0	0	19.8	63.9	54.9	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N
N2724e	36	121.6	A3-3	-	0	0	20.1	63.8	54.9	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)		
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	New Roads <sup>[2]</sup>					New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)									
						PD	DD	LD	EX	TR					C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
N2725	11	51.6	A3-3	-	0	0	0	17.2	68.1	42.7	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N	N
N2725	12	54.4	A3-3	-	0	0	0	17.1	67.8	42.7	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N	N
N2725	13	57.2	A3-3	-	0	0	0	17.2	67.6	42.7	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
N2725	14	60	A3-3	-	0	0	0	17.2	67.4	42.7	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
N2725	15	62.8	A3-3	-	0	0	0	17.2	67.1	42.7	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
N2725	16	65.6	A3-3	-	0	0	0	17.2	66.9	42.7	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
N2725	17	68.4	A3-3	-	0	0	0	17.2	66.7	42.6	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
N2725	18	71.2	A3-3	-	0	0	0	17.3	66.5	42.6	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
N2725	19	74	A3-3	-	0	0	0	17.3	66.4	42.6	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
N2725	20	76.8	A3-3	-	0	0	0	17.4	66.2	42.6	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
N2725	21	79.6	A3-3	-	0	0	0	17.6	66	42.6	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
N2725	22	82.4	A3-3	-	0	0	0	17.7	65.8	42.6	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
N2725	23	85.2	A3-3	-	0	0	0	17.8	65.7	42.6	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
N2725	24	88	A3-3	-	0	0	0	18	65.5	42.7	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2725	25	90.8	A3-3	-	0	0	0	18	65.4	42.7	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
N2725	26	93.6	A3-3	-	0	0	0	18.3	65.2	42.7	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2725	27	96.4	A3-3	-	0	0	0	18.5	65.1	42.8	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
N2725	28	99.2	A3-3	-	0	0	0	18.7	65	42.8	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2725	29	102	A3-3	-	0	0	0	18.8	64.9	42.8	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
N2725	30	104.8	A3-3	-	0	0	0	19	64.8	42.9	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2725	31	107.6	A3-3	-	0	0	0	19.2	64.6	42.9	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
N2725	32	110.4	A3-3	-	0	0	0	19.4	64.5	43	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N
N2725	33	113.2	A3-3	-	0	0	0	19.6	64.4	43.1	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
N2725	34	116	A3-3	-	0	0	0	19.9	64.3	43.2	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N
N2725	35	118.8	A3-3	-	0	0	0	20	64.2	43.3	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N
N2725	36	121.6	A3-3	-	0	0	0	20.2	64.1	43.4	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N	N
N2725	37	124.4	A3-3	-	0	0	0	20.5	64	43.5	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N
N2725	38	127.2	A3-3	-	0	0	0	20.6	63.9	43.6	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	N
N2725	39	130	A3-3	-	0	0	0	21	63.8	43.7	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N	N
N2725	40	132.8	A3-3	-	0	0	0	21.5	63.7	43.8	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	N
N2726a	1	21.5	A3-3	-	7.6	0	0	17.7	53.8	35	0	0	53.8	53.8	70	N	-	-	45.5	Y	N	N	N
N2726a	2	24.3	A3-3	-	7.6	0	0	17.7	56.6	40.3	0	0	56.7	56.7	70	N	-	-	48.4	Y	N	N	N
N2726a	3	27.1	A3-3	-	7.6	0	0	17.7	59.7	42	0	0	59.8	59.8	70	N	-	-	51.5	Y	N	N	N
N2726a	4	29.9	A3-3	-	7.6	0	0	17.7	62.7	42.8	0	0	62.7	62.7	70	N	-	-	54.4	Y	N	N	N
N2726a	5	32.7	A3-3	-	7.6	0	0	17.7	65.3	43	0	0	65.3	65.3	70	N	-	-	57.0	Y	N	N	N
N2726a	6	35.5	A3-3	-	7.6	0	0	17.7	66.5	43.1	0	0	66.5	66.5	70	N	-	-	58.2	Y	N	N	N
N2726a	7	38.3	A3-3	-	7.6	0	0	17.7	67	43.1	0	0	67.1	67.1	70	N	-	-	58.8	Y	N	N	N
N2726a	8	41.1	A3-3	-	7.6	0	0	17.7	67.2	43.1	0	0	67.2	67.2	70	N	-	-	58.9	Y	N	N	N
N2726a	9	43.9	A3-3	-	7.6	0	0	17.7	67.2	43.1	0	0	67.2	67.2	70	N	-	-	58.9	Y	N	N	N
N2726a	10	46.7	A3-3	-	7.6	0	0	17.7	67.1	43.1	0	0	67.1	67.1	70	N	-	-	58.8	Y	N	N	N
N2726a	11	49.5	A3-3	-	7.5	0	0	17.7	66.9	43.1	0	0	66.9	66.9	70	N	-	-	58.7	Y	N	N	N
N2726a	12	52.3	A3-3	-	7.5	0	0	17.7	66.7	43.1	0	0	66.8	66.8	70	N	-	-	58.6	Y	N	N	N
N2726a	13	55.1	A3-3	-	7.5	0	0	17.7	66.5	43	0	0	66.5	66.5	70	N	-	-	58.3	Y	N	N	N
N2726a	14	57.9	A3-3	-	7.5	0	0	17.7	66.3	43	0	0	66.3	66.3	70	N	-	-	58.1	Y	N	N	N
N2726a	15	60.7	A3-3	-	7.5	0	0	17.7	66.1	43	0	0	66.1	66.1	70	N	-	-	57.9	Y	N	N	N
N2726a	16	63.5	A3-3	-	7.5	0	0	17.6	65.9	43	0	0	65.9	65.9	70	N	-	-	57.7	Y	N	N	N
N2726a	17	66.3	A3-3	-	7.5	0	0	17.6	65.7	43	0	0	65.7	65.7	70	N	-	-	57.5	Y	N	N	N
N2726a	18	69.1	A3-3	-	7.5	0	0	17.6	65.5	42.9	0	0	65.5	65.5	70	N	-	-	57.3	Y	N	N	N
N2726a	19	71.9	A3-3	-	7.5	0	0	17.6	65.3	42.9	0	0	65.3	65.3	70	N	-	-	57.1	Y	N	N	N
N2726a	20	74.7	A3-3	-	7.5	0	0	17.6	65.1	42.9	0	0	65.1	65.1	70	N	-	-	56.9	Y	N	N	N
N2726a	21	77.5	A3-3	-	7.5	0	0	17.6	65	42.9	0	0	65	65.0	70	N	-	-	56.8	Y	N	N	N
N2726a	22	80.3	A3-3	-	7.4	0	0	17.5	64.8	42.8	0	0	64.8	64.8	70	N	-	-	56.7	Y	N	N	N
N2726a	23	83.1	A3-3	-	7.4	0	0	17.5	64.6	42.8	0	0	64.6	64.6	70	N	-	-	56.5	Y	N	N	N
N2726a	24	85.9	A3-3	-	7.4	0	0	17.5	64.5	42.8	0	0	64.5	64.5	70	N	-	-	56.4	Y	N	N	N
N2726a	25	88.7	A3-3	-	7.4	0	0	17.4	64.3	42.8	0	0	64.3	64.3	70	N	-	-	56.2	Y	N	N	N
N2726a	26	91.5	A3-3	-	7.4	0	0	17.4	64.1	42.7	0	0	64.1	64.1	70	N	-	-	56.0	Y	N	N	N
N2726a	27	94.3	A3-3	-	7.4	0	0	17.4	64	42.7	0	0	64	64.0	70	N	-	-	55.9	Y	N	N	N
N2726a	28	97.1	A3-3	-	7.4	0	0	17.3	63.9	42.7	0	0	63.9	63.9	70	N	-	-	55.8	Y	N	N	N
N2726a	29	99.9	A3-3	-	7.4	0	0	17.3	63.7	42.6	0	0	63.7	63.7	70	N	-	-	55.6	Y	N	N	N
N2726a	30	102.7	A3-3	-	7.3	0	0	17.3	63.6	42.6	0	0	63.6	63.6	70	N	-	-	55.6	Y	N	N	N
N2726a	31	105.5	A3-3	-	7.3	0	0	17.3	63.5	42.6	0	0	63.5	63.5	70	N	-	-	55.5	Y	N	N	N
N2726a	32	108.3	A3-3	-	7.3	0	0	17.2	63.3	42.6	0	0	63.3	63.3	70	N	-	-	55.3	Y	N	N	N
N2726a	33	111.1	A3-3	-	7.3	0	0	17.2	63.2	42.5	0	0	63.2	63.2	70	N	-	-	55.2	Y	N	N	N
N2726a	34	113.9	A3-3	-	7.3	0	0	17.1	63.1	42.5	0	0	63.1	63.1	70	N	-	-	55.1	Y	N	N	N
N2726a	35	116.7	A3-3	-	7.3	0	0	17.1	63	42.5	0	0	63	63.0	70	N	-	-	55.0	Y	N	N	N
N2726a	36	119.5	A3-3	-	7.3	0	0	17.1	62.9	42.4	0	0	62.9	62.9	70	N	-	-	54.9	Y	N	N	N
N2726a	37	122.3	A3-3	-	7.3	0	0	17.1	62.7	42.4	0	0	62.7	62.7	70	N	-	-	54.7	Y	N	N	N
N2726a	38	125.1	A3-3	-	7.3	0	0	17	62.6	42.4	0	0	62.6	62.6	70	N	-	-	54.6	Y	N	N	N
N2726a	39	127.9	A3-3	-	7.1	0	0	17	62.5	42.3	0	0	62.6	62.6	70	N	-	-	54.7	Y	N	N	N
N2726a	40	130.7	A3-3	-	7.5	0	0	17	62.4	42.3	0	0	62.5	62.5									

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>					New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)						
ID	Floor	Floor Level (mPD)	[A]			PD	DD	LD	EX	TR								D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)
N2726b	19	71.9	A3-3	-	0	0	12.4	63.9	30.6	0	0	63.9	63.9	70	N	-	60.9	Y	N	N
N2726b	20	74.7	A3-3	-	0	0	12.4	63.7	30.6	0	0	63.7	63.7	70	N	-	60.7	Y	N	N
N2726b	21	77.5	A3-3	-	0	0	12.4	63.6	30.6	0	0	63.6	63.6	70	N	-	60.6	Y	N	N
N2726b	22	80.3	A3-3	-	0	0	12.3	63.4	30.6	0	0	63.4	63.4	70	N	-	60.4	Y	N	N
N2726b	23	83.1	A3-3	-	0	0	12.3	63.2	30.6	0	0	63.2	63.2	70	N	-	60.2	Y	N	N
N2726b	24	85.9	A3-3	-	0	0	12.3	63.1	30.6	0	0	63.1	63.1	70	N	-	60.1	Y	N	N
N2726b	25	88.7	A3-3	-	0	0	12.3	62.9	30.6	0	0	62.9	62.9	70	N	-	59.9	Y	N	N
N2726b	26	91.5	A3-3	-	0	0	12.2	62.7	30.6	0	0	62.7	62.7	70	N	-	59.7	Y	N	N
N2726b	27	94.3	A3-3	-	0	0	12.2	62.6	30.6	0	0	62.6	62.6	70	N	-	59.6	Y	N	N
N2726b	28	97.1	A3-3	-	0	0	12.1	62.5	30.5	0	0	62.5	62.5	70	N	-	59.5	Y	N	N
N2726b	29	99.9	A3-3	-	0	0	12.1	62.3	30.5	0	0	62.3	62.3	70	N	-	59.3	Y	N	N
N2726b	30	102.7	A3-3	-	0	0	12.1	62.3	30.5	0	0	62.3	62.3	70	N	-	59.3	Y	N	N
N2726b	31	105.5	A3-3	-	0	0	12	62.1	30.5	0	0	62.1	62.1	70	N	-	59.1	Y	N	N
N2726b	32	108.3	A3-3	-	0	0	12	62	30.5	0	0	62	62.0	70	N	-	59.0	Y	N	N
N2726b	33	111.1	A3-3	-	0	0	11.9	61.9	30.5	0	0	61.9	61.9	70	N	-	58.9	Y	N	N
N2726b	34	113.9	A3-3	-	0	0	11.9	61.8	30.5	0	0	61.8	61.8	70	N	-	58.8	Y	N	N
N2726b	35	116.7	A3-3	-	0	0	11.9	61.7	30.5	0	0	61.7	61.7	70	N	-	58.7	Y	N	N
N2726b	36	119.5	A3-3	-	0	0	11.8	61.5	30.5	0	0	61.5	61.5	70	N	-	58.5	Y	N	N
N2726b	37	122.3	A3-3	-	0	0	11.8	61.4	30.5	0	0	61.4	61.4	70	N	-	58.4	Y	N	N
N2726b	38	125.1	A3-3	-	0	0	11.9	61.3	30.5	0	0	61.3	61.3	70	N	-	58.3	Y	N	N
N2726b	39	127.9	A3-3	-	0	0	12.2	61.2	30.6	0	0	61.2	61.2	70	N	-	58.2	Y	N	N
N2726b	40	130.7	A3-3	-	0	0	12.2	61.1	30.6	0	0	61.1	61.1	70	N	-	58.1	Y	N	N
N2727a	1	23.5	A3-3	-	0	0	44.5	55	49.8	0	0	56.4	56.4	70	N	-	53.4	Y	N	N
N2727a	2	26.3	A3-3	-	0	0	45.9	56.2	51.4	0	0	57.8	57.8	70	N	-	54.8	Y	N	N
N2727a	3	29.1	A3-3	-	0	0	46.5	57.1	51.6	0	0	58.5	58.5	70	N	-	55.5	Y	N	N
N2727a	4	31.9	A3-3	-	0	0	47	58.2	51.6	0	0	59.3	59.3	70	N	-	56.3	Y	N	N
N2727a	5	34.7	A3-3	-	0	0	47.4	59.4	51.6	0	0	60.3	60.3	70	N	-	57.3	Y	N	N
N2727a	6	37.5	A3-3	-	0	0	47.7	60.7	51.6	0	0	61.4	61.4	70	N	-	58.4	Y	N	N
N2727a	7	40.3	A3-3	-	0	0	47.9	62.5	51.5	0	0	63	63.0	70	N	-	60.0	Y	N	N
N2727a	8	43.1	A3-3	-	0	0	48	63.2	51.5	0	0	63.6	63.6	70	N	-	60.6	Y	N	N
N2727a	9	45.9	A3-3	-	0	0	48.1	64.6	51.5	0	0	64.9	64.9	70	N	-	61.9	Y	N	N
N2727a	10	48.7	A3-3	-	0	0	48.1	65.2	51.4	0	0	65.5	65.5	70	N	-	62.5	Y	N	N
N2727a	11	51.5	A3-3	-	0	0	48.2	65.5	51.4	0	0	65.7	65.7	70	N	-	62.7	Y	N	N
N2727a	12	54.3	A3-3	-	0	0	48.3	65.5	51.4	0	0	65.7	65.7	70	N	-	62.7	Y	N	N
N2727a	13	57.1	A3-3	-	0	0	48.3	65.4	51.3	0	0	65.7	65.7	70	N	-	62.7	Y	N	N
N2727a	14	59.9	A3-3	-	0	0	48.3	65.4	51.3	0	0	65.7	65.7	70	N	-	62.7	Y	N	N
N2727a	15	62.7	A3-3	-	0	0	48.4	65.2	51.2	0	0	65.5	65.5	70	N	-	62.5	Y	N	N
N2727a	16	65.5	A3-3	-	0	0	48.4	65.1	51.2	0	0	65.3	65.3	70	N	-	62.3	Y	N	N
N2727a	17	68.3	A3-3	-	0	0	48.4	64.9	51.1	0	0	65.2	65.2	70	N	-	62.2	Y	N	N
N2727a	18	71.1	A3-3	-	0	0	48.4	64.8	51.1	0	0	65.1	65.1	70	N	-	62.1	Y	N	N
N2727a	19	73.9	A3-3	-	0	0	48.4	64.6	51	0	0	64.9	64.9	70	N	-	61.9	Y	N	N
N2727a	20	76.7	A3-3	-	0	0	48.4	64.5	50.9	0	0	64.7	64.7	70	N	-	61.7	Y	N	N
N2727a	21	79.5	A3-3	-	0	0	48.4	64.3	50.9	0	0	64.6	64.6	70	N	-	61.6	Y	N	N
N2727a	22	82.3	A3-3	-	0	0	48.4	64.2	50.8	0	0	64.5	64.5	70	N	-	61.5	Y	N	N
N2727a	23	85.1	A3-3	-	0	0	48.5	64	50.8	0	0	64.3	64.3	70	N	-	61.3	Y	N	N
N2727a	24	87.9	A3-3	-	0	0	48.5	63.8	50.7	0	0	64.1	64.1	70	N	-	61.1	Y	N	N
N2727a	25	90.7	A3-3	-	0	0	48.4	63.7	50.6	0	0	64	64.0	70	N	-	61.0	Y	N	N
N2727a	26	93.5	A3-3	-	0	0	48.4	63.6	50.6	0	0	63.9	63.9	70	N	-	60.9	Y	N	N
N2727a	27	96.3	A3-3	-	0	0	48.4	63.5	50.5	0	0	63.8	63.8	70	N	-	60.8	Y	N	N
N2727a	28	99.1	A3-3	-	0	0	48.4	63.3	50.4	0	0	63.7	63.7	70	N	-	60.7	Y	N	N
N2727a	29	101.9	A3-3	-	0	0	48.5	63.2	50.4	0	0	63.6	63.6	70	N	-	60.6	Y	N	N
N2727a	30	104.7	A3-3	-	0	0	48.4	63.1	50.3	0	0	63.5	63.5	70	N	-	60.5	Y	N	N
N2727a	31	107.5	A3-3	-	0	0	48.5	62.9	50.3	0	0	63.3	63.3	70	N	-	60.3	Y	N	N
N2727a	32	110.3	A3-3	-	0	0	48.5	62.8	50.2	0	0	63.2	63.2	70	N	-	60.2	Y	N	N
N2727a	33	113.1	A3-3	-	0	0	48.5	62.7	50.1	0	0	63.1	63.1	70	N	-	60.1	Y	N	N
N2727a	34	115.9	A3-3	-	0	0	48.5	62.6	50.1	0	0	63	63.0	70	N	-	60.0	Y	N	N
N2727a	35	118.7	A3-3	-	0	0	48.5	62.5	50	0	0	62.9	62.9	70	N	-	59.9	Y	N	N
N2727a	36	121.5	A3-3	-	0	0	48.5	62.3	50	0	0	62.8	62.8	70	N	-	59.8	Y	N	N
N2727a	37	124.3	A3-3	-	0	0	48.5	62.2	49.9	0	0	62.7	62.7	70	N	-	59.7	Y	N	N
N2727a	38	127.1	A3-3	-	0	0	48.5	62.1	49.8	0	0	62.6	62.6	70	N	-	59.6	Y	N	N
N2727a	39	129.9	A3-3	-	0	0	48.6	62.1	49.8	0	0	62.5	62.5	70	N	-	59.5	Y	N	N
N2727b	1	23.5	A3-3	-	9.5	0	17.8	53.1	0	0	0	53.1	53.1	70	N	-	43.1	Y	N	N
N2727b	2	26.3	A3-3	-	9.5	0	17.8	55.6	0	0	0	55.6	55.6	70	N	-	45.6	Y	N	N
N2727b	3	29.1	A3-3	-	9.5	0	17.8	58	0	0	0	58	58.0	70	N	-	48.0	Y	N	N
N2727b	4	31.9	A3-3	-	9.5	0	17.8	60.1	0	0	0	60.1	60.1	70	N	-	50.1	Y	N	N
N2727b	5	34.7	A3-3	-	9.5	0	17.8	61.8	0	0	0	61.8	61.8	70	N	-	51.8	Y	N	N
N2727b	6	37.5	A3-3	-	9.5	0	17.8	62.9	0	0	0	62.9	62.9	70	N	-	52.9	Y	N	N
N2727b	7	40.3	A3-3	-	9.5	0	17.8	63.7	0	0	0	63.7	63.7	70	N	-	53.7	Y	N	N
N2727b	8	43.1	A3-3	-	9.5	0	17.8	64.1	0	0	0	64.1	64.1	70	N	-	54.1	Y	N	N
N2727b	9	45.9	A3-3	-	9.5	0	17.8	64.7	0	0	0	64.7	64.7	70	N	-	54.7	Y	N	N
N2727b	10	48.7	A3-3	-	9.5	0	17.8	65	0	0	0	65	65.0	70	N	-	55.0	Y	N	N
N2727b	11	51.5	A3-3	-	9.5	0	17.7	65.2	0	0	0	65.2	65.2	70	N	-	55.2	Y	N	N
N2727b	12	54.3	A3-3	-	9.5	0	17.7	65.2	0	0	0	65.2	65.2	70	N	-	55.2	Y	N	N
N2727b	13	57.1	A3-3	-	9.5	0	17.7	65.1	0	0	0	65.1	65.1	70	N	-	55.1	Y	N	N
N2727b	14	59.9	A3-3	-	9.5	0	17.7	64.9	0	0	0	64.9	64.9	70	N	-	54.9	Y	N	N
N2727b	15	62.7	A3-3	-	9.5	0	17.7	64.8	0	0	0	64.8	64.8	70	N	-	54.8	Y	N	N
N2727b	16	65.5	A3-3	-	9.5	0	17.7	64.7	0	0	0	64.7	64.7							

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)		
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)							Exceedance C > Criteria (Y/N)	New Road Contribution dB(A)
ID	Floor	Floor Level (mPD)	[A]			PD	DD	LD	EX	TR	[C]					[D]	≥ 1dB(A)					
N2727b	28	99.1	A3-3	-	9.4	0	17.3	62.8	0	0	0	62.8	62.8	70	N	-	-	52.9	Y	N	N	N
N2727b	29	101.9	A3-3	-	9.4	0	17.3	62.7	0	0	0	62.7	62.7	70	N	-	-	52.8	Y	N	N	N
N2727b	30	104.7	A3-3	-	9.4	0	17.3	62.6	0	0	0	62.6	62.6	70	N	-	-	52.7	Y	N	N	N
N2727b	31	107.5	A3-3	-	9.4	0	17.2	62.5	0	0	0	62.5	62.5	70	N	-	-	52.6	Y	N	N	N
N2727b	32	110.3	A3-3	-	9.4	0	17.2	62.4	0	0	0	62.4	62.4	70	N	-	-	52.5	Y	N	N	N
N2727b	33	113.1	A3-3	-	9.4	0	17.2	62.3	0	0	0	62.3	62.3	70	N	-	-	52.4	Y	N	N	N
N2727b	34	115.9	A3-3	-	9.4	0	17.2	62.2	0	0	0	62.2	62.2	70	N	-	-	52.3	Y	N	N	N
N2727b	35	118.7	A3-3	-	9.4	0	17.2	62	0	0	0	62	62	70	N	-	-	52.1	Y	N	N	N
N2727b	36	121.5	A3-3	-	9.4	0	17.2	61.9	0	0	0	61.9	61.9	70	N	-	-	52.0	Y	N	N	N
N2727b	37	124.3	A3-3	-	9.4	0	17.7	61.8	0	0	0	61.8	61.8	70	N	-	-	51.9	Y	N	N	N
N2727b	38	127.1	A3-3	-	9.5	0	17.9	61.7	0	0	0	61.7	61.7	70	N	-	-	51.7	Y	N	N	N
N2727b	39	129.9	A3-3	-	10.3	0	17.9	61.6	0	0	0	61.6	61.6	70	N	-	-	50.9	Y	N	N	N
N2728	1	23.5	A3-3	-	0	0	41.3	56.4	37.3	0	0	56.6	56.6	70	N	-	-	53.6	Y	N	N	N
N2728	2	26.3	A3-3	-	0	0	41.3	56.4	37.3	0	0	56.6	56.6	70	N	-	-	53.6	Y	N	N	N
N2728	3	29.1	A3-3	-	0	0	41.4	56.4	37.3	0	0	56.6	56.6	70	N	-	-	53.6	Y	N	N	N
N2728	4	31.9	A3-3	-	0	0	41.5	56.4	37.3	0	0	56.6	56.6	70	N	-	-	53.6	Y	N	N	N
N2728	5	34.7	A3-3	-	0	0	41.6	56.4	37.3	0	0	56.6	56.6	70	N	-	-	53.6	Y	N	N	N
N2728	6	37.5	A3-3	-	0	0	41.7	56.4	37.3	0	0	56.5	56.5	70	N	-	-	53.5	Y	N	N	N
N2728	7	40.3	A3-3	-	0	0	41.8	56.3	37.3	0	0	56.5	56.5	70	N	-	-	53.5	Y	N	N	N
N2728	8	43.1	A3-3	-	0	0	42	56.3	37.3	0	0	56.5	56.5	70	N	-	-	53.5	Y	N	N	N
N2728	9	45.9	A3-3	-	0	0	42.2	56.3	37.3	0	0	56.5	56.5	70	N	-	-	53.5	Y	N	N	N
N2728	10	48.7	A3-3	-	0	0	42.5	56.3	37.3	0	0	56.5	56.5	70	N	-	-	53.5	Y	N	N	N
N2728	11	51.5	A3-3	-	0	0	42.8	56.3	37.3	0	0	56.5	56.5	70	N	-	-	53.5	Y	N	N	N
N2728	12	54.3	A3-3	-	0	0	43	56.3	37.3	0	0	56.5	56.5	70	N	-	-	53.5	Y	N	N	N
N2728	13	57.1	A3-3	-	0	0	43.4	56.3	37.3	0	0	56.5	56.5	70	N	-	-	53.5	Y	N	N	N
N2728	14	59.9	A3-3	-	0	0	43.8	56.3	37.3	0	0	56.6	56.6	70	N	-	-	53.6	Y	N	N	N
N2728	15	62.7	A3-3	-	0	0	44.2	56.3	37.3	0	0	56.6	56.6	70	N	-	-	53.6	Y	N	N	N
N2728	16	65.5	A3-3	-	0	0	44.5	56.3	37.3	0	0	56.6	56.6	70	N	-	-	53.6	Y	N	N	N
N2728	17	68.3	A3-3	-	0	0	44.8	56.3	37.3	0	0	56.6	56.6	70	N	-	-	53.6	Y	N	N	N
N2728	18	71.1	A3-3	-	0	0	44.9	56.3	37.3	0	0	56.7	56.7	70	N	-	-	53.7	Y	N	N	N
N2728	19	73.9	A3-3	-	0	0	45	56.4	37.3	0	0	56.7	56.7	70	N	-	-	53.7	Y	N	N	N
N2728	20	76.7	A3-3	-	0	0	45.2	56.4	37.2	0	0	56.8	56.8	70	N	-	-	53.8	Y	N	N	N
N2728	21	79.5	A3-3	-	0	0	45.3	56.4	37.2	0	0	56.8	56.8	70	N	-	-	53.8	Y	N	N	N
N2728	22	82.3	A3-3	-	0	0	45.4	56.4	37.2	0	0	56.8	56.8	70	N	-	-	53.8	Y	N	N	N
N2728	23	85.1	A3-3	-	0	0	45.4	56.4	37.2	0	0	56.8	56.8	70	N	-	-	53.8	Y	N	N	N
N2728	24	87.9	A3-3	-	0	0	45.5	56.4	37.2	0	0	56.8	56.8	70	N	-	-	53.8	Y	N	N	N
N2728	25	90.7	A3-3	-	0	0	45.6	56.4	37.2	0	0	56.8	56.8	70	N	-	-	53.8	Y	N	N	N
N2728	26	93.5	A3-3	-	0	0	45.6	56.4	37.1	0	0	56.8	56.8	70	N	-	-	53.8	Y	N	N	N
N2728	27	96.3	A3-3	-	0	0	45.7	56.4	37.1	0	0	56.8	56.8	70	N	-	-	53.8	Y	N	N	N
N2728	28	99.1	A3-3	-	0	0	45.6	56.5	37.1	0	0	56.8	56.8	70	N	-	-	53.8	Y	N	N	N
N2728	29	101.9	A3-3	-	0	0	45.7	56.5	37.1	0	0	56.9	56.9	70	N	-	-	53.9	Y	N	N	N
N2728	30	104.7	A3-3	-	0	0	45.7	56.6	37.1	0	0	56.9	56.9	70	N	-	-	53.9	Y	N	N	N
N2728	31	107.5	A3-3	-	0	0	45.7	56.6	37.1	0	0	57	57.0	70	N	-	-	54.0	Y	N	N	N
N2728	32	110.3	A3-3	-	0	0	45.7	56.6	37	0	0	57	57.0	70	N	-	-	54.0	Y	N	N	N
N2728	33	113.1	A3-3	-	0	0	45.6	56.7	37	0	0	57	57.0	70	N	-	-	54.0	Y	N	N	N
N2728	34	115.9	A3-3	-	0	0	45.6	56.7	37	0	0	57	57.0	70	N	-	-	54.0	Y	N	N	N
N2728	35	118.7	A3-3	-	0	0	45.6	56.7	37	0	0	57	57.0	70	N	-	-	54.0	Y	N	N	N
N2728	36	121.5	A3-3	-	0	0	45.6	56.7	37	0	0	57	57.0	70	N	-	-	54.0	Y	N	N	N
N2728	37	124.3	A3-3	-	0	0	45.6	56.7	37	0	0	57	57.0	70	N	-	-	54.0	Y	N	N	N
N2728	38	127.1	A3-3	-	0	0	45.6	56.6	36.9	0	0	57	57.0	70	N	-	-	54.0	Y	N	N	N
N2728	39	129.9	A3-3	-	0	0	45.6	56.6	36.9	0	0	57	57.0	70	N	-	-	54.0	Y	N	N	N
N2729a	1	23.6	A3-3	-	0	0	19.5	46.6	62.3	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N	N
N2729a	2	26.4	A3-3	-	0	0	19.5	46.6	62.3	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N	N
N2729a	3	29.2	A3-3	-	0	0	19.5	46.6	62.3	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N	N
N2729a	4	32	A3-3	-	0	0	19.5	46.6	62.2	0	0	62.3	62.3	70	N	-	-	59.3	Y	N	N	N
N2729a	5	34.8	A3-3	-	0	0	19.4	46.6	62.1	0	0	62.2	62.2	70	N	-	-	59.2	Y	N	N	N
N2729a	6	37.6	A3-3	-	0	0	19.6	46.6	62	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N	N
N2729a	7	40.4	A3-3	-	0	0	19.5	46.7	62	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N	N
N2729a	8	43.2	A3-3	-	0	0	19.5	46.7	61.9	0	0	62	62.0	70	N	-	-	59.0	Y	N	N	N
N2729a	9	46	A3-3	-	0	0	19.6	46.9	61.8	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N	N
N2729a	10	48.8	A3-3	-	0	0	19.5	47.4	61.7	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	N
N2729a	11	51.6	A3-3	-	0	0	19.7	48.7	61.6	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	N
N2729a	12	54.4	A3-3	-	0	0	19.8	49.8	61.5	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	N
N2729a	13	57.2	A3-3	-	0	0	20	50.2	61.3	0	0	61.7	61.7	70	N	-	-	58.7	Y	N	N	N
N2729a	14	60	A3-3	-	0	0	20.1	50.3	61.2	0	0	61.6	61.6	70	N	-	-	58.6	Y	N	N	N
N2729a	15	62.8	A3-3	-	0	0	20.3	50.3	61.1	0	0	61.5	61.5	70	N	-	-	58.5	Y	N	N	N
N2729a	16	65.6	A3-3	-	0	0	20.6	50.3	61.1	0	0	61.4	61.4	70	N	-	-	58.4	Y	N	N	N
N2729a	17	68.4	A3-3	-	0	0	20.8	50.2	61.1	0	0	61.4	61.4	70	N	-	-	58.4	Y	N	N	N
N2729a	18	71.2	A3-3	-	0	0	21	50.2	61.1	0	0	61.4	61.4	70	N	-	-	58.4	Y	N	N	N
N2729a	19	74	A3-3	-	0	0	21	50.2	61.2	0	0	61.5	61.5	70	N	-	-	58.5	Y	N	N	N
N2729a	20	76.8	A3-3	-	0	0	21.4	50.2	61.1	0	0	61.5	61.5	70	N	-	-	58.5	Y	N	N	N
N2729a	21	79.6	A3-3	-	0	0	21.6	50.2	61.3	0	0	61.6	61.6	70	N	-	-	58.6	Y	N	N	N
N2729a	22	82.4	A3-3	-	0																	



Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)				
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>				New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)							New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
ID	Floor	Floor Level (mPD)	[A]			PD	DD	LD	EX	TR														
N2729a	39	127.2	A3-3	-	0	0	28.1	50.1	59.8	0	0	60.3	60.3	70	N	-	-	57.3	Y	N	N	N	N	
N2729a	39	130	A3-3	-	0	0	28.6	50.2	59.7	0	0	60.2	60.2	70	N	-	-	57.2	Y	N	N	N	N	
N2729a	40	132.8	A3-3	-	0	0	29.1	50.1	59.6	0	0	60.1	60.1	70	N	-	-	57.1	Y	N	N	N	N	
N2729b	1	23.6	A3-3	-	0	0	21.6	55.1	64	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N	N	
N2729b	2	26.4	A3-3	-	0	0	21.6	55.1	63.9	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N	N	
N2729b	3	29.2	A3-3	-	0	0	21.6	55.1	63.9	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N	N	
N2729b	4	32	A3-3	-	0	0	21.5	55.1	63.8	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N	N	
N2729b	5	34.8	A3-3	-	0	0	21.5	55.1	63.8	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N	N	
N2729b	6	37.6	A3-3	-	0	0	21.6	55	63.7	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N	N	
N2729b	7	40.4	A3-3	-	0	0	21.6	55.1	63.6	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N	N	N	
N2729b	8	43.2	A3-3	-	0	0	21.7	55	63.5	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N	N	
N2729b	9	46	A3-3	-	0	0	21.8	55	63.4	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N	N	
N2729b	10	48.8	A3-3	-	0	0	21.9	55	63.3	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N	N	N	
N2729b	11	51.6	A3-3	-	0	0	22	55.1	63.1	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	N	N	
N2729b	12	54.4	A3-3	-	0	0	22.2	55.3	63	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	N	N	
N2729b	13	57.2	A3-3	-	0	0	22.5	55.3	62.9	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N	N	N	
N2729b	14	60	A3-3	-	0	0	22.8	55.4	62.8	0	0	63.5	63.5	70	N	-	-	60.5	Y	N	N	N	N	
N2729b	15	62.8	A3-3	-	0	0	23.1	55.4	62.6	0	0	63.4	63.4	70	N	-	-	60.4	Y	N	N	N	N	
N2729b	16	65.6	A3-3	-	0	0	23.4	55.3	62.5	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N	N	N	
N2729b	17	68.4	A3-3	-	0	0	23.8	55.3	62.4	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N	N	N	
N2729b	18	71.2	A3-3	-	0	0	24.1	55.3	62.3	0	0	63.1	63.1	70	N	-	-	60.1	Y	N	N	N	N	
N2729b	19	74	A3-3	-	0	0	24.4	55.3	62.2	0	0	63	63.0	70	N	-	-	60.0	Y	N	N	N	N	
N2729b	20	76.8	A3-3	-	0	0	24.9	55.3	62	0	0	62.9	62.9	70	N	-	-	59.9	Y	N	N	N	N	
N2729b	21	79.6	A3-3	-	0	0	25.3	55.2	61.9	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N	N	N	
N2729b	22	82.4	A3-3	-	0	0	25.7	55.2	61.8	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N	N	N	
N2729b	23	85.2	A3-3	-	0	0	26.1	55.2	61.7	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N	N	N	
N2729b	24	88	A3-3	-	0	0	26.5	55.2	61.6	0	0	62.5	62.5	70	N	-	-	59.5	Y	N	N	N	N	
N2729b	25	90.8	A3-3	-	0	0	26.9	55.2	61.5	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N	N	N	
N2729b	26	93.6	A3-3	-	0	0	27.3	55.2	61.4	0	0	62.3	62.3	70	N	-	-	59.3	Y	N	N	N	N	
N2729b	27	96.4	A3-3	-	0	0	27.7	55.2	61.2	0	0	62.2	62.2	70	N	-	-	59.2	Y	N	N	N	N	
N2729b	28	99.2	A3-3	-	0	0	28.2	55.2	61.1	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N	N	N	
N2729b	29	102	A3-3	-	0	0	28.6	55.3	61.1	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N	N	N	
N2729b	30	104.8	A3-3	-	0	0	29.1	55.4	61	0	0	62	62.0	70	N	-	-	59.0	Y	N	N	N	N	
N2729b	31	107.6	A3-3	-	0	0	29.6	55.5	60.9	0	0	62	62.0	70	N	-	-	59.0	Y	N	N	N	N	
N2729b	32	110.4	A3-3	-	0	0	29.9	55.5	60.8	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N	N	N	
N2729b	33	113.2	A3-3	-	0	0	30.4	55.5	60.7	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N	N	N	
N2729b	34	116	A3-3	-	0	0	30.9	55.5	60.6	0	0	61.7	61.7	70	N	-	-	58.7	Y	N	N	N	N	
N2729b	35	118.8	A3-3	-	0	0	31.4	55.5	60.5	0	0	61.7	61.7	70	N	-	-	58.7	Y	N	N	N	N	
N2729b	36	121.6	A3-3	-	0	0	31.9	55.5	60.4	0	0	61.6	61.6	70	N	-	-	58.6	Y	N	N	N	N	
N2729b	37	124.4	A3-3	-	0	0	32.4	55.5	60.3	0	0	61.5	61.5	70	N	-	-	58.5	Y	N	N	N	N	
N2729b	38	127.2	A3-3	-	0	0	32.9	55.4	60.2	0	0	61.4	61.4	70	N	-	-	58.4	Y	N	N	N	N	
N2729b	39	130	A3-3	-	0	0	33.4	55.4	60.1	0	0	61.4	61.4	70	N	-	-	58.4	Y	N	N	N	N	
N2729b	40	132.8	A3-3	-	0	0	33.9	55.4	60	0	0	61.3	61.3	70	N	-	-	58.3	Y	N	N	N	N	
N2730	1	23.5	A3-3	-	0	0	37.9	57.6	65.8	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N	N	
N2730	2	26.3	A3-3	-	0	0	38.8	57.6	65.8	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N	N	
N2730	3	29.1	A3-3	-	0	0	40	57.7	65.7	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N	N	
N2730	4	31.9	A3-3	-	0	0	41.3	57.7	65.7	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N	N	
N2730	5	34.7	A3-3	-	0	0	42.6	57.8	65.6	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N	N	
N2730	6	37.5	A3-3	-	0	0	43.9	57.9	65.5	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N	N	
N2730	7	40.3	A3-3	-	0	0	44.8	58	65.4	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N	N	
N2730	8	43.1	A3-3	-	0	0	45.3	58.2	65.3	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N	N	
N2730	9	45.9	A3-3	-	0	0	45.8	58.4	65.2	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N	N	
N2730	10	48.7	A3-3	-	0	0	46.2	58.5	65.1	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N	N	
N2730	11	51.5	A3-3	-	0	0	46.4	58.6	65	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N	N	
N2730	12	54.3	A3-3	-	0	0	46.6	58.7	64.8	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N	N	
N2730	13	57.1	A3-3	-	0	0	46.8	58.8	64.7	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N	N	
N2730	14	59.9	A3-3	-	0	0	46.9	58.9	64.5	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	N	
N2730	15	62.7	A3-3	-	0	0	47.1	59	64.4	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N	N	
N2730	16	65.5	A3-3	-	0	0	47.3	59.2	64.2	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N	N	
N2730	17	68.3	A3-3	-	0	0	47.5	59.5	64.1	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N	N	
N2730	18	71.1	A3-3	-	0	0	47.7	59.9	64	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N	N	
N2730	19	73.9	A3-3	-	0	0	48.2	60	63.8	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N	N	
N2730	20	76.7	A3-3	-	0	0	48.5	60.2	63.7	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N	N	
N2730	21	79.5	A3-3	-	0	0	48.7	60.5	63.5	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N	N	
N2730	22	82.3	A3-3	-	0	0	48.8	60.8	63.4	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N	N	
N2730	23	85.1	A3-3	-	0	0	48.9	60.9	63.3	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N	N	
N2730	24	87.9	A3-3	-	0	0	49	61.1	63.1	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N	N	
N2730	25	90.7	A3-3	-	0	0	49	61.2	63	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N	N	
N2730	26	93.5	A3-3	-	0	0	49	61.2	62.9	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N	N	
N2730	27	96.3	A3-3	-	0	0	49.1	61.2	62.7	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N			

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)	
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>				New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)			C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]		New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)
ID	Floor	Floor Level (mPD)		[A]			PD	DD	LD	EX	TR		[C]								
N2731a	7	36.3	A3-3	-	0	0	17.9	64.7	39.3	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N
N2731a	8	39.1	A3-3	-	0	0	17.9	65.2	39.4	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N
N2731a	9	41.9	A3-3	-	0	0	17.9	65.8	39.4	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
N2731a	10	44.7	A3-3	-	0	0	17.9	66.2	39.4	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
N2731a	11	47.5	A3-3	-	0	0	17.9	66.4	39.4	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
N2731a	12	50.3	A3-3	-	0	0	17.9	66.4	39.4	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
N2731a	13	53.1	A3-3	-	0	0	17.9	66.3	39.4	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N
N2731a	14	55.9	A3-3	-	0	0	17.9	66.2	39.4	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
N2731a	15	58.7	A3-3	-	0	0	17.9	66.1	39.4	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
N2731a	16	61.5	A3-3	-	0	0	17.9	66	39.4	0	0	66	66.0	70	N	-	-	63.0	Y	N	N
N2731a	17	64.3	A3-3	-	0	0	17.9	65.7	39.4	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N
N2731a	18	67.1	A3-3	-	0	0	17.9	65.5	39.4	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N
N2731a	19	69.9	A3-3	-	0	0	17.9	65.4	39.4	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N
N2731a	20	72.7	A3-3	-	0	0	17.9	65.3	39.3	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N
N2731a	21	75.5	A3-3	-	0	0	17.9	65.1	39.3	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N
N2731a	22	78.3	A3-3	-	0	0	17.8	64.9	39.3	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N
N2731a	23	81.1	A3-3	-	0	0	17.8	64.7	39.3	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N
N2731a	24	83.9	A3-3	-	0	0	17.8	64.6	39.3	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N
N2731a	25	86.7	A3-3	-	0	0	17.8	64.4	39.3	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N
N2731a	26	89.5	A3-3	-	0	0	17.8	64.3	39.3	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N
N2731a	27	92.3	A3-3	-	0	0	17.7	64.1	39.3	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N
N2731a	28	95.1	A3-3	-	0	0	17.7	64.1	39.2	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N
N2731a	29	97.9	A3-3	-	0	0	17.7	63.9	39.2	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N
N2731a	30	100.7	A3-3	-	0	0	17.7	63.8	39.2	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N
N2731a	31	103.5	A3-3	-	0	0	17.7	63.7	39.2	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N
N2731a	32	106.3	A3-3	-	0	0	17.7	63.5	39.2	0	0	63.5	63.5	70	N	-	-	60.5	Y	N	N
N2731a	33	109.1	A3-3	-	0	0	17.6	63.4	39.2	0	0	63.4	63.4	70	N	-	-	60.4	Y	N	N
N2731a	34	111.9	A3-3	-	0	0	17.6	63.3	39.1	0	0	63.3	63.3	70	N	-	-	60.3	Y	N	N
N2731a	35	114.7	A3-3	-	0	0	17.6	63.2	39.1	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N
N2731a	36	117.5	A3-3	-	0	0	17.6	63.1	39.1	0	0	63.1	63.1	70	N	-	-	60.1	Y	N	N
N2731a	37	120.3	A3-3	-	0	0	17.6	63	39.1	0	0	63	63.0	70	N	-	-	60.0	Y	N	N
N2731a	38	123.1	A3-3	-	0	0	17.5	62.8	39	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N
N2731a	39	125.9	A3-3	-	0	0	17.5	62.7	39	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N
N2731a	40	128.7	A3-3	-	0	0	17.5	62.6	39	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N
N2731b	1	19.5	A3-3	-	0	0	0	56.1	24.5	0	0	56.1	56.1	70	N	-	-	53.1	Y	N	N
N2731b	2	22.3	A3-3	-	0	0	0	62.4	25.4	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N
N2731b	3	25.1	A3-3	-	0	0	0	65.1	26.5	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N
N2731b	4	27.9	A3-3	-	0	0	0	65.7	28.1	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N
N2731b	5	30.7	A3-3	-	0	0	0	66.3	30.3	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N
N2731b	6	33.5	A3-3	-	0	0	0	66.5	32.1	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N
N2731b	7	36.3	A3-3	-	0	0	0	66.5	34	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N
N2731b	8	39.1	A3-3	-	0	0	0	66.4	34.9	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
N2731b	9	41.9	A3-3	-	0	0	0	66.2	35.3	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
N2731b	10	44.7	A3-3	-	0	0	0	66	35.5	0	0	66	66.0	70	N	-	-	63.0	Y	N	N
N2731b	11	47.5	A3-3	-	0	0	0	65.8	35.6	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
N2731b	12	50.3	A3-3	-	0	0	0	65.6	35.6	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N
N2731b	13	53.1	A3-3	-	0	0	0	65.3	35.7	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N
N2731b	14	55.9	A3-3	-	0	0	0	65.1	35.7	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N
N2731b	15	58.7	A3-3	-	0	0	0	64.9	35.6	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N
N2731b	16	61.5	A3-3	-	0	0	0	64.7	35.6	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N
N2731b	17	64.3	A3-3	-	0	0	0	64.5	35.6	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N
N2731b	18	67.1	A3-3	-	0	0	0	64.3	35.6	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N
N2731b	19	69.9	A3-3	-	0	0	0	64.1	35.6	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N
N2731b	20	72.7	A3-3	-	0	0	0	63.9	35.6	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N
N2731b	21	75.5	A3-3	-	0	0	0	63.7	35.6	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N
N2731b	22	78.3	A3-3	-	0	0	0	63.6	35.6	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N
N2731b	23	81.1	A3-3	-	0	0	0	63.4	35.6	0	0	63.4	63.4	70	N	-	-	60.4	Y	N	N
N2731b	24	83.9	A3-3	-	0	0	0	63.2	35.6	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N
N2731b	25	86.7	A3-3	-	0	0	0	63.1	35.6	0	0	63.1	63.1	70	N	-	-	60.1	Y	N	N
N2731b	26	89.5	A3-3	-	0	0	0	62.9	35.6	0	0	62.9	62.9	70	N	-	-	59.9	Y	N	N
N2731b	27	92.3	A3-3	-	0	0	0	62.8	35.6	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N
N2731b	28	95.1	A3-3	-	0	0	0	62.6	35.6	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N
N2731b	29	97.9	A3-3	-	0	0	0	62.5	35.6	0	0	62.5	62.5	70	N	-	-	59.5	Y	N	N
N2731b	30	100.7	A3-3	-	0	0	0	62.4	35.6	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N
N2731b	31	103.5	A3-3	-	0	0	0	62.2	35.6	0	0	62.2	62.2	70	N	-	-	59.3	Y	N	N
N2731b	32	106.3	A3-3	-	0	0	0	62.1	35.6	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N
N2731b	33	109.1	A3-3	-	0	0	0	62	35.7	0	0	62	62.0	70	N	-	-	59.0	Y	N	N
N2731b	34	111.9	A3-3	-	0	0	0	61.9	35.7	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N
N2731b	35	114.7	A3-3	-	0	0	0	61.8	35.7	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N
N2731b	36	117.5	A3-3	-	0	0	0	61.7	35.8	0	0	61.7	61.7	70	N	-	-	58.7	Y	N	N
N2731b	37	120.3	A3-3	-	0	0	0	61.5	35.9	0	0	61.5	61.5	70	N	-	-	58.5	Y	N	N
N2731b	38	123.1	A3-3	-	0	0	0	61.4	36	0	0	61.4	61.4	70	N	-	-	58.4	Y	N	N
N2731b	39	125.9	A3-3	-	0	0	0	61.3	36.1	0	0	61.3	61.3	70	N	-	-	58.3	Y	N	N
N2731b	40	128.7	A3-3	-	0	0	0	61.2	36.2	0	0	61.2	61.2	70	N	-	-	58.2	Y	N	N
N2784	1	14	D1-7	-	16.3	0	0	63.1	44.7	50.5	0	0	63.4								

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required [A1] (Y/N)
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) [1]	New Roads [2]					New Roads in 2044 dB(A) [3] [B]	C - A dB(A) [D]	D ≥ 1dB(A)				New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			
							PD	DD	LD	EX	TR												
N2784	15	56	D1-7	-	39.3	0	66.8	55.8	53.3	0	0	67.3	67.4	70	N	-	-	28.1	Y	N	N	N	
N2784	16	59	D1-7	-	40.7	0	66.9	55.7	53.4	0	0	67.4	67.4	70	N	-	-	26.7	Y	N	N	N	
N2784	17	62	D1-7	-	41.4	0	67	55.6	53.5	0	0	67.5	67.5	70	N	-	-	26.1	Y	N	N	N	
N2784	18	65	D1-7	-	41.7	0	67.1	55.5	53.6	0	0	67.5	67.6	70	N	-	-	25.9	Y	N	N	N	
N2784	19	68	D1-7	-	41.8	0	67.1	55.4	53.8	0	0	67.6	67.6	70	N	-	-	25.8	Y	N	N	N	
N2784	20	71	D1-7	-	41.8	0	67.1	55.3	54.1	0	0	67.6	67.6	70	N	-	-	25.8	Y	N	N	N	
N2784	21	74	D1-7	-	41.8	0	67.1	55.3	54.2	0	0	67.6	67.6	70	N	-	-	25.8	Y	N	N	N	
N2784	22	77	D1-7	-	41.8	0	67.1	55.2	54.4	0	0	67.6	67.6	70	N	-	-	25.8	Y	N	N	N	
N2784	23	80	D1-7	-	41.7	0	67.1	55.1	54.5	0	0	67.6	67.6	70	N	-	-	25.9	Y	N	N	N	
N2784	24	83	D1-7	-	41.7	0	67.1	55	54.5	0	0	67.6	67.6	70	N	-	-	25.9	Y	N	N	N	
N2784	25	86	D1-7	-	41.7	0	67.1	54.9	54.5	0	0	67.6	67.6	70	N	-	-	25.9	Y	N	N	N	
N2785	1	14	D1-7	-	25.5	0	68.2	54.9	33	0	0	68.4	68.4	70	N	-	-	42.9	Y	N	N	N	
N2785	2	17	D1-7	-	29.9	0	68.8	55.3	33.6	0	0	69	69.0	70	N	-	-	39.1	Y	N	N	N	
N2785	3	20	D1-7	-	31.1	0	69.4	56	34.3	0	0	69.6	69.6	70	N	-	-	38.5	Y	N	N	N	
N2785	4	23	D1-7	-	31.3	0	69.6	56.8	34.9	0	0	69.8	69.8	70	N	-	-	38.5	Y	N	N	N	
N2785	5	26	D1-7	-	31.3	0	69.7	57.5	35.8	0	0	70	70.0	70	N	-	-	38.7	Y	N	N	N	
N2785	6	29	D1-7	-	31.3	0	69.7	57.8	36.5	0	0	70	70.0	70	N	-	-	38.7	Y	N	N	N	
N2785	7	32	D1-7	-	31.3	0	69.7	57.9	37.1	0	0	70	70.0	70	N	-	-	38.7	Y	N	N	N	
N2785	8	35	D1-7	-	31.5	0	69.6	57.9	37.9	0	0	69.9	69.9	70	N	-	-	38.4	Y	N	N	N	
N2785	9	38	D1-7	-	31.5	0	69.6	57.9	38.8	0	0	69.9	69.9	70	N	-	-	38.4	Y	N	N	N	
N2785	10	41	D1-7	-	31.7	0	69.5	57.9	39.1	0	0	69.8	69.8	70	N	-	-	38.1	Y	N	N	N	
N2785	11	44	D1-7	-	31.8	0	69.5	57.9	40.1	0	0	69.8	69.8	70	N	-	-	38.0	Y	N	N	N	
N2785	12	47	D1-7	-	32.1	0	69.5	57.9	40.7	0	0	69.8	69.8	70	N	-	-	37.7	Y	N	N	N	
N2785	13	50	D1-7	-	32.6	0	69.5	57.9	41.2	0	0	69.8	69.8	70	N	-	-	37.2	Y	N	N	N	
N2785	14	53	D1-7	-	33.4	0	69.4	57.9	41.8	0	0	69.7	69.7	70	N	-	-	36.3	Y	N	N	N	
N2785	15	56	D1-7	-	34	0	69.4	57.8	42.3	0	0	69.7	69.7	70	N	-	-	35.7	Y	N	N	N	
N2785	16	59	D1-7	-	34.6	0	69.3	57.9	43.4	0	0	69.6	69.6	70	N	-	-	35.0	Y	N	N	N	
N2785	17	62	D1-7	-	35.5	0	69.3	57.8	44.9	0	0	69.6	69.6	70	N	-	-	34.1	Y	N	N	N	
N2785	18	65	D1-7	-	36.7	0	69.2	57.8	46.6	0	0	69.5	69.5	70	N	-	-	32.8	Y	N	N	N	
N2785	19	68	D1-7	-	37.6	0	69.1	57.8	48	0	0	69.4	69.4	70	N	-	-	31.8	Y	N	N	N	
N2785	20	71	D1-7	-	37.9	0	69	57.7	48.6	0	0	69.4	69.4	70	N	-	-	31.5	Y	N	N	N	
N2785	21	74	D1-7	-	38.1	0	69	57.7	49.1	0	0	69.3	69.3	70	N	-	-	31.2	Y	N	N	N	
N2785	22	77	D1-7	-	38.1	0	68.9	57.6	49.2	0	0	69.2	69.2	70	N	-	-	31.1	Y	N	N	N	
N2785	23	80	D1-7	-	38.1	0	68.8	57.5	49.3	0	0	69.2	69.2	70	N	-	-	31.1	Y	N	N	N	
N2785	24	83	D1-7	-	38.1	0	68.7	57.4	49.4	0	0	69.1	69.1	70	N	-	-	31.0	Y	N	N	N	
N2785	25	86	D1-7	-	38	0	68.6	57.4	49.4	0	0	69	69.0	70	N	-	-	31.0	Y	N	N	N	
N2786	1	14	D1-7	-	16.7	0	66.5	55.3	49.3	0	0	66.9	66.9	70	N	-	-	50.1	Y	N	N	N	
N2786	2	17	D1-7	-	17.7	0	67.2	55.4	49.6	0	0	67.5	67.6	70	N	-	-	49.8	Y	N	N	N	
N2786	3	20	D1-7	-	18.9	0	68.1	56	50	0	0	68.5	68.5	70	N	-	-	49.5	Y	N	N	N	
N2786	4	23	D1-7	-	20.1	0	68.8	56.7	50.5	0	0	69.1	69.1	70	N	-	-	49.0	Y	N	N	N	
N2786	5	26	D1-7	-	21.2	0	69.2	57.2	51	0	0	69.5	69.5	70	N	-	-	48.3	Y	N	N	N	
N2786	6	29	D1-7	-	22.4	0	69.4	57.4	51.6	0	0	69.7	69.7	70	N	-	-	47.3	Y	N	N	N	
N2786	7	32	D1-7	-	23.6	0	69.4	57.6	52	0	0	69.8	69.8	70	N	-	-	46.2	Y	N	N	N	
N2786	8	35	D1-7	-	24.9	0	69.4	57.7	52.4	0	0	69.7	69.7	70	N	-	-	44.8	Y	N	N	N	
N2786	9	38	D1-7	-	26.4	0	69.3	57.7	52.6	0	0	69.7	69.7	70	N	-	-	43.3	Y	N	N	N	
N2786	10	41	D1-7	-	28.1	0	69.3	57.7	52.7	0	0	69.6	69.6	70	N	-	-	41.5	Y	N	N	N	
N2786	11	44	D1-7	-	30	0	69.2	57.7	52.8	0	0	69.6	69.6	70	N	-	-	39.6	Y	N	N	N	
N2786	12	47	D1-7	-	32.5	0	69.2	57.7	53	0	0	69.6	69.6	70	N	-	-	37.1	Y	N	N	N	
N2786	13	50	D1-7	-	35	0	69.2	57.6	53	0	0	69.6	69.6	70	N	-	-	34.6	Y	N	N	N	
N2786	14	53	D1-7	-	37.2	0	69.1	57.6	53.2	0	0	69.5	69.5	70	N	-	-	32.3	Y	N	N	N	
N2786	15	56	D1-7	-	39.1	0	69.1	57.5	53.3	0	0	69.5	69.5	70	N	-	-	30.4	Y	N	N	N	
N2786	16	59	D1-7	-	40.7	0	69.1	57.4	53.4	0	0	69.5	69.5	70	N	-	-	28.8	Y	N	N	N	
N2786	17	62	D1-7	-	41.4	0	69.1	57.3	53.5	0	0	69.5	69.5	70	N	-	-	28.1	Y	N	N	N	
N2786	18	65	D1-7	-	41.7	0	69	57.2	53.8	0	0	69.4	69.4	70	N	-	-	27.7	Y	N	N	N	
N2786	19	68	D1-7	-	41.9	0	69	57.1	54.2	0	0	69.4	69.4	70	N	-	-	27.5	Y	N	N	N	
N2786	20	71	D1-7	-	41.9	0	68.9	57	54.4	0	0	69.3	69.4	70	N	-	-	27.5	Y	N	N	N	
N2786	21	74	D1-7	-	41.9	0	68.9	57	54.6	0	0	69.3	69.3	70	N	-	-	27.4	Y	N	N	N	
N2786	22	77	D1-7	-	41.9	0	68.8	56.9	54.7	0	0	69.3	69.3	70	N	-	-	27.4	Y	N	N	N	
N2786	23	80	D1-7	-	41.9	0	68.8	56.8	54.7	0	0	69.2	69.2	70	N	-	-	27.3	Y	N	N	N	
N2786	24	83	D1-7	-	41.9	0	68.7	56.7	54.7	0	0	69.2	69.2	70	N	-	-	27.3	Y	N	N	N	
N2786	25	86	D1-7	-	41.9	0	68.7	56.6	54.7	0	0	69.1	69.1	70	N	-	-	27.2	Y	N	N	N	
N2787	1	16	D1-7	-	0	0	63.7	52.7	49.8	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N	N	
N2787	2	19	D1-7	-	0	0	63.7	53	50.6	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N	
N2787	3	22	D1-7	-	0	0	63.7	53.7	51.6	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N	
N2787	4	25	D1-7	-	0	0	63.7	54.6	51.6	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N	
N2787	5	28	D1-7	-	0	0	63.7	55.7	51.6	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N	
N2787	6	31	D1-7	-	0	0	63.7	56.8	51.6	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N	
N2787	7	34	D1-7	-	0	0	63.7	57.5	51.4	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N	
N2787	8	37	D1-7	-	0	0	63.6	58.2	51.3	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N	
N2787	9	40	D1-7	-	0	0	63.5	58.6	51.3	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N	
N2787	10	43	D1-7	-	0	0	63.5	58.9	51.2	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N	
N2787	11	46	D1-7	-	0	0	63.4	59.1	51.2	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N	
N2787	12	49	D1-7	-	0	0	63.4	59.2	51.1	0	0	65	65.0	70	N</								

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(14)</sup> (Y/N)		
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)									
						PD	DD	LD	EX	TR													
N2788	3	22	D1-7	-	0	0	0	60.8	62	51.7	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
N2788	4	25	D1-7	-	0	0	0	60.8	62.2	51.9	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2788	5	28	D1-7	-	0	0	0	60.7	62.4	51.8	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
N2788	6	31	D1-7	-	0	0	0	60.7	62.7	51.8	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2788	7	34	D1-7	-	0	0	0	60.7	62.9	51.7	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
N2788	8	37	D1-7	-	0	0	0	60.9	63.1	51.6	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2788	9	40	D1-7	-	0	0	0	61.1	63.1	51.5	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
N2788	10	43	D1-7	-	0	0	0	61.5	63.2	51.4	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2788	11	46	D1-7	-	0	0	0	61.8	63.1	51.3	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
N2788	12	49	D1-7	-	0	0	0	61.9	63.1	51.2	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
N2788	13	52	D1-7	-	0	0	0	61.8	63	51.1	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2788	14	55	D1-7	-	0	0	0	61.8	62.9	51	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
N2788	15	58	D1-7	-	0	0	0	61.7	62.9	50.9	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
N2788	16	61	D1-7	-	0	0	0	61.6	62.8	50.9	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
N2788	17	64	D1-7	-	0	0	0	61.5	62.8	50.8	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2788	18	67	D1-7	-	0	0	0	61.4	62.7	50.7	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
N2788	19	70	D1-7	-	0	0	0	61.3	62.7	50.6	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
N2788	20	73	D1-7	-	0	0	0	61.1	62.6	50.5	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
N2788	21	76	D1-7	-	0	0	0	61	62.6	50.4	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
N2788	22	79	D1-7	-	0	0	0	61	62.6	50.3	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2788	23	82	D1-7	-	0	0	0	60.9	62.6	50.2	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
N2788	24	85	D1-7	-	0	0	0	60.8	62.5	50.1	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
N2788	25	88	D1-7	-	0	0	0	60.7	62.5	50	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
N2789	1	16	D1-7	-	0	0	0	67.4	64.2	58.4	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N
N2789	2	19	D1-7	-	0	0	0	67.4	64.2	58.4	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N
N2789	3	22	D1-7	-	0	0	0	67.4	64.2	58.5	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N
N2789	4	25	D1-7	-	0	0	0	67.3	64.6	58.5	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N
N2789	5	28	D1-7	-	0	0	0	67.3	65.1	58.4	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	N
N2789	6	31	D1-7	-	0	0	0	67.2	65.4	58.3	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N
N2789	7	34	D1-7	-	0	0	0	67.2	65.5	58.2	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	N
N2789	8	37	D1-7	-	0	0	0	67	65.4	58.1	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N
N2789	9	40	D1-7	-	0	0	0	66.9	65.4	58	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N
N2789	10	43	D1-7	-	0	0	0	66.9	65.4	57.9	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N
N2789	11	46	D1-7	-	0	0	0	66.7	65.3	57.7	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N
N2789	12	49	D1-7	-	0	0	0	66.6	65.4	57.6	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N	N
N2789	13	52	D1-7	-	0	0	0	66.5	65.3	57.4	0	0	69.3	69.3	70	N	-	-	66.3	Y	N	N	N
N2789	14	55	D1-7	-	0	0	0	66.3	65.3	57.3	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N	N
N2789	15	58	D1-7	-	0	0	0	66.3	65.3	57.2	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N
N2789	16	61	D1-7	-	0	0	0	66.1	65.2	57	0	0	69	69.0	70	N	-	-	66.0	Y	N	N	N
N2789	17	64	D1-7	-	0	0	0	66	65.3	56.9	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N	N
N2789	18	67	D1-7	-	0	0	0	65.9	65.2	56.8	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	N
N2789	19	70	D1-7	-	0	0	0	65.8	65.2	56.6	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	N
N2789	20	73	D1-7	-	0	0	0	65.6	65.2	56.5	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
N2789	21	76	D1-7	-	0	0	0	65.5	65.2	56.3	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N
N2789	22	79	D1-7	-	0	0	0	65.4	65.2	56.2	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N
N2789	23	82	D1-7	-	0	0	0	65.3	65.1	56.1	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N
N2789	24	85	D1-7	-	0	0	0	65.1	65.1	56	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	N
N2789	25	88	D1-7	-	0	0	0	65	65	55.9	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N
N2790	1	16	D1-7	-	35.6	0	0	60.1	64.1	66.2	0	0	68.9	68.9	70	N	-	-	33.3	Y	N	N	N
N2790	2	19	D1-7	-	38.2	0	0	60	64.1	66.3	0	0	69	69.0	70	N	-	-	30.8	Y	N	N	N
N2790	3	22	D1-7	-	39.2	0	0	60	64.3	66.6	0	0	69.1	69.1	70	N	-	-	29.9	Y	N	N	N
N2790	4	25	D1-7	-	39.7	0	0	60	64.8	67	0	0	69.5	69.5	70	N	-	-	29.8	Y	N	N	N
N2790	5	28	D1-7	-	39.9	0	0	59.9	65.3	67.3	0	0	69.9	69.9	70	N	-	-	30.0	Y	N	N	N
N2790	6	31	D1-7	-	40	0	0	59.9	65.5	67.6	0	0	70.1	70.1	70	N	-	-	30.1	Y	N	N	N
N2790	7	34	D1-7	-	40.1	0	0	59.9	65.5	67.8	0	0	70.2	70.2	70	N	-	-	30.1	Y	N	N	N
N2790	8	37	D1-7	-	40.4	0	0	59.8	65.4	67.8	0	0	70.2	70.2	70	N	-	-	29.8	Y	N	N	N
N2790	9	40	D1-7	-	40.6	0	0	59.7	65.3	67.6	0	0	70	70.0	70	N	-	-	29.4	Y	N	N	N
N2790	10	43	D1-7	-	40.9	0	0	59.6	65.2	67.4	0	0	69.9	69.9	70	N	-	-	29.0	Y	N	N	N
N2790	11	46	D1-7	-	41.2	0	0	59.5	65.1	67.2	0	0	69.8	69.8	70	N	-	-	28.6	Y	N	N	N
N2790	12	49	D1-7	-	41.7	0	0	59.4	65.1	67.1	0	0	69.6	69.6	70	N	-	-	27.9	Y	N	N	N
N2790	13	52	D1-7	-	42.3	0	0	59.4	65.1	66.8	0	0	69.5	69.5	70	N	-	-	27.2	Y	N	N	N
N2790	14	55	D1-7	-	43.1	0	0	59.3	65.1	66.6	0	0	69.4	69.4	70	N	-	-	26.3	Y	N	N	N
N2790	15	58	D1-7	-	44.1	0	0	59.2	65.1	66.4	0	0	69.2	69.3	70	N	-	-	25.2	Y	N	N	N
N2790	16	61	D1-7	-	44.9	0	0	59.1	65.1	66.2	0	0	69.2	69.2	70	N	-	-	24.3	Y	N	N	N
N2790	17	64	D1-7	-	45.6	0	0	59.1	65.1	66	0	0	69.1	69.1	70	N	-	-	23.5	Y	N	N	N
N2790	18	67	D1-7	-	46.3	0	0	59	65.2	65.8	0	0	69	69.0	70	N	-	-	22.7	Y	N	N	N
N2790	19	70	D1-7	-	47	0	0	59	65.1	65.7	0	0	68.9	68.9	70	N	-	-	21.9	Y	N	N	N
N2790	20	73	D1-7	-	47.5	0	0	58.8	65.1	65.5	0	0	68.8	68.8	70	N	-	-	21.3	Y	N	N	N
N2790	21	76	D1-7	-	48	0	0	58.7	65.1	65.3	0	0	68.7	68.7	70	N	-	-	20.7	Y	N	N	N
N2790	22	79	D1-7	-	48.5	0	0	58.6	65.1	65.1	0	0	68.5	68.6	70	N	-	-	20.1	Y	N	N	N
N2790	23	82																					

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A)		Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(14)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>				New Roads in 2044 dB(A) <sup>(3)</sup> [B]	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]					New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
							PD	DD	LD	EX					TR	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]			New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
N2791	16	61	D1-7	-	49.3	0	28.4	57.6	66.3	0	0	66.9	67.0	70	N	-	-	17.7	Y	N	N	N		
N2791	17	64	D1-7	-	49.8	0	28.4	57.6	66.1	0	0	66.7	66.8	70	N	-	-	17.0	Y	N	N	N		
N2791	18	67	D1-7	-	50.2	0	28.3	57.6	65.9	0	0	66.5	66.6	70	N	-	-	16.4	Y	N	N	N		
N2791	19	70	D1-7	-	50.5	0	28.3	57.6	65.7	0	0	66.4	66.5	70	N	-	-	16.0	Y	N	N	N		
N2791	20	73	D1-7	-	50.9	0	28.3	57.5	65.6	0	0	66.2	66.3	70	N	-	-	15.4	Y	N	N	N		
N2791	21	76	D1-7	-	51.2	0	28.2	57.5	65.4	0	0	66	66.2	70	N	-	-	15.0	Y	N	N	N		
N2791	22	79	D1-7	-	51.5	0	28.2	57.5	65.2	0	0	65.9	66.1	70	N	-	-	14.6	Y	N	N	N		
N2791	23	82	D1-7	-	51.7	0	28.1	57.5	65.1	0	0	65.8	65.9	70	N	-	-	14.2	Y	N	N	N		
N2791	24	85	D1-7	-	51.8	0	28	57.5	64.9	0	0	65.6	65.8	70	N	-	-	14.0	Y	N	N	N		
N2791	25	88	D1-7	-	51.8	0	28.1	57.5	64.7	0	0	65.5	65.7	70	N	-	-	13.9	Y	N	N	N		
N2792	1	16	D1-7	-	41.8	0	0	16.9	66.4	0	0	66.4	66.4	70	N	-	-	24.6	Y	N	N	N		
N2792	2	19	D1-7	-	42.7	0	0	16.9	67.4	0	0	67.4	67.4	70	N	-	-	24.7	Y	N	N	N		
N2792	3	22	D1-7	-	43.1	0	0	16.9	67.7	0	0	67.7	67.7	70	N	-	-	24.6	Y	N	N	N		
N2792	4	25	D1-7	-	43.5	0	0	16.9	67.7	0	0	67.7	67.8	70	N	-	-	24.3	Y	N	N	N		
N2792	5	28	D1-7	-	44.1	0	0	16.9	67.6	0	0	67.6	67.7	70	N	-	-	23.6	Y	N	N	N		
N2792	6	31	D1-7	-	44.7	0	0	16.9	67.5	0	0	67.5	67.5	70	N	-	-	22.8	Y	N	N	N		
N2792	7	34	D1-7	-	45.7	0	0	16.9	67.3	0	0	67.3	67.3	70	N	-	-	21.6	Y	N	N	N		
N2792	8	37	D1-7	-	46.5	0	0	16.8	67.1	0	0	67.1	67.1	70	N	-	-	20.6	Y	N	N	N		
N2792	9	40	D1-7	-	47.5	0	0	16.8	66.9	0	0	66.9	66.9	70	N	-	-	19.4	Y	N	N	N		
N2792	10	43	D1-7	-	48.5	0	0	16.7	66.7	0	0	66.7	66.7	70	N	-	-	18.2	Y	N	N	N		
N2792	11	46	D1-7	-	49.3	0	0	16.9	66.4	0	0	66.4	66.5	70	N	-	-	17.2	Y	N	N	N		
N2792	12	49	D1-7	-	49.9	0	0	17	66.2	0	0	66.2	66.3	70	N	-	-	16.4	Y	N	N	N		
N2792	13	52	D1-7	-	50.6	0	0	17.1	66	0	0	66	66.1	70	N	-	-	15.5	Y	N	N	N		
N2792	14	55	D1-7	-	51.4	0	0	17.3	65.8	0	0	65.8	65.9	70	N	-	-	14.5	Y	N	N	N		
N2792	15	58	D1-7	-	52.1	0	0	17.4	65.6	0	0	65.6	65.8	70	N	-	-	13.7	Y	N	N	N		
N2792	16	61	D1-7	-	52.6	0	0	17.7	65.4	0	0	65.4	65.6	70	N	-	-	13.0	Y	N	N	N		
N2792	17	64	D1-7	-	53.1	0	0	18	65.2	0	0	65.2	65.5	70	N	-	-	12.4	Y	N	N	N		
N2792	18	67	D1-7	-	53.5	0	0	18.3	65	0	0	65	65.3	70	N	-	-	11.8	Y	N	N	N		
N2792	19	70	D1-7	-	53.9	0	0	18.7	64.9	0	0	64.9	65.2	70	N	-	-	11.3	Y	N	N	N		
N2792	20	73	D1-7	-	54.3	0	0	19.1	64.7	0	0	64.7	65.1	70	N	-	-	10.8	Y	N	N	N		
N2792	21	76	D1-7	-	54.7	0	0	19.5	64.5	0	0	64.5	65.0	70	N	-	-	10.3	Y	N	N	N		
N2792	22	79	D1-7	-	55	0	0	20	64.4	0	0	64.4	64.8	70	N	-	-	9.8	Y	N	N	N		
N2792	23	82	D1-7	-	55.3	0	0	20.5	64.2	0	0	64.2	64.7	70	N	-	-	9.4	Y	N	N	N		
N2792	24	85	D1-7	-	55.5	0	0	21.1	64.1	0	0	64.1	64.6	70	N	-	-	9.1	Y	N	N	N		
N2792	25	88	D1-7	-	55.7	0	0	21.7	63.9	0	0	63.9	64.5	70	N	-	-	8.8	Y	N	N	N		
N2793	1	16	D1-7	-	40.5	0	0	0	67.6	0	0	67.6	67.6	70	N	-	-	27.1	Y	N	N	N		
N2793	2	19	D1-7	-	42.1	0	0	0	68.1	0	0	68.1	68.1	70	N	-	-	26.0	Y	N	N	N		
N2793	3	22	D1-7	-	44.1	0	0	0	68.2	0	0	68.2	68.2	70	N	-	-	24.1	Y	N	N	N		
N2793	4	25	D1-7	-	46.5	0	0	0	68.1	0	0	68.1	68.1	70	N	-	-	21.6	Y	N	N	N		
N2793	5	28	D1-7	-	49.1	0	0	0	67.9	0	0	67.9	67.9	70	N	-	-	18.8	Y	N	N	N		
N2793	6	31	D1-7	-	50.7	0	0	0	67.6	0	0	67.6	67.7	70	N	-	-	17.0	Y	N	N	N		
N2793	7	34	D1-7	-	51.6	0	0	0	67.3	0	0	67.3	67.4	70	N	-	-	15.8	Y	N	N	N		
N2793	8	37	D1-7	-	52.3	0	0	0	67	0	0	67	67.2	70	N	-	-	14.9	Y	N	N	N		
N2793	9	40	D1-7	-	52.9	0	0	0	66.7	0	0	66.7	66.9	70	N	-	-	14.0	Y	N	N	N		
N2793	10	43	D1-7	-	53.3	0	0	0	66.5	0	0	66.5	66.7	70	N	-	-	13.4	Y	N	N	N		
N2793	11	46	D1-7	-	53.5	0	0	0	66.2	0	0	66.2	66.5	70	N	-	-	13.0	Y	N	N	N		
N2793	12	49	D1-7	-	53.8	0	0	0	66	0	0	66	66.2	70	N	-	-	12.4	Y	N	N	N		
N2793	13	52	D1-7	-	54	0	0	0	65.7	0	0	65.7	66.0	70	N	-	-	12.0	Y	N	N	N		
N2793	14	55	D1-7	-	54.3	0	0	0	65.5	0	0	65.5	65.9	70	N	-	-	11.6	Y	N	N	N		
N2793	15	58	D1-7	-	54.7	0	0	0	65.3	0	0	65.3	65.6	70	N	-	-	10.9	Y	N	N	N		
N2793	16	61	D1-7	-	55	0	0	0	65.1	0	0	65.1	65.5	70	N	-	-	10.5	Y	N	N	N		
N2793	17	64	D1-7	-	55.2	0	0	0	64.9	0	0	64.9	65.3	70	N	-	-	10.1	Y	N	N	N		
N2793	18	67	D1-7	-	55.4	0	0	0	64.7	0	0	64.7	65.1	70	N	-	-	9.7	Y	N	N	N		
N2793	19	70	D1-7	-	55.6	0	0	0	64.5	0	0	64.5	65.0	70	N	-	-	9.4	Y	N	N	N		
N2793	20	73	D1-7	-	55.7	0	0	0	64.3	0	0	64.3	64.9	70	N	-	-	9.2	Y	N	N	N		
N2793	21	76	D1-7	-	55.8	0	0	0	64.1	0	0	64.1	64.7	70	N	-	-	8.9	Y	N	N	N		
N2793	22	79	D1-7	-	55.9	0	0	0	64	0	0	64	64.6	70	N	-	-	8.7	Y	N	N	N		
N2793	23	82	D1-7	-	56	0	0	0	63.8	0	0	63.8	64.5	70	N	-	-	8.5	Y	N	N	N		
N2793	24	85	D1-7	-	56	0	0	0	63.7	0	0	63.7	64.4	70	N	-	-	8.4	Y	N	N	N		
N2793	25	88	D1-7	-	56	0	0	0	63.5	0	0	63.5	64.2	70	N	-	-	8.2	Y	N	N	N		
N2794	1	16	D1-7	-	51.2	0	0	7.4	64.5	0	0	64.5	64.7	70	N	-	-	13.5	Y	N	N	N		
N2794	2	19	D1-7	-	51.4	0	0	7.4	64.5	0	0	64.5	64.7	70	N	-	-	13.3	Y	N	N	N		
N2794	3	22	D1-7	-	51.5	0	0	7.4	64.4	0	0	64.4	64.6	70	N	-	-	13.1	Y	N	N	N		
N2794	4	25	D1-7	-	51.7	0	0	7.4	64.3	0	0	64.3	64.5	70	N	-	-	12.8	Y	N	N	N		
N2794	5	28	D1-7	-	52	0	0	7.4	64.2	0	0	64.2	64.4	70	N	-	-	12.4	Y	N	N	N		
N2794	6	31	D1-7	-	52.4	0	0	7.4	63.9	0	0	63.9	64.2	70	N	-	-	11.8	Y	N	N	N		
N2794	7	34	D1-7	-	52.9	0	0	7.4	63.7	0	0	63.7	64.1	70	N	-	-	11.2	Y	N	N	N		
N2794	8	37	D1-7	-	53.6	0	0	7.4	63.5	0	0	63.5	64.0	70	N	-	-	10.4	Y	N	N	N		
N2794	9	40	D1-7	-	54.3	0	0	7.4	63.3	0	0	63.3	63.8	70	N	-	-	9.5	Y	N	N	N		
N2794	10	43	D1-7	-	54.6	0	0	7.4	63.1	0	0	63.1	63.7	70	N	-	-	9.1	Y	N	N	N		
N2794	11	46	D1-7	-	54.8	0	0	7.3	62.9	0	0	62.9	63.5	70	N	-	-	8.7	Y	N	N	N		
N2794	12	49	D1-7	-	54.9	0	0	7.3	62.8	0	0	62.8	63.4	70	N	-	-	8.5	Y	N	N	N		
N2794	13	52	D1-7	-	54.9	0	0	7.3	62.6	0	0	62.6	63.3	70	N	-	-	8.4	Y	N	N	N		
N2794	14	55	D1-7	-	54.9	0	0	7.3	62.4	0	0	62.4	63.1											



Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	C - A dB(A) [D]	D ≥ 1dB(A)				New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			
							PD	DD	LD	EX	TR												
N2835	12	52	D1-11	-	47.7	0	23.7	0	65.3	0	0	65.3	65.3	70	N	-	-	17.6	Y	N	N	N	
N2835	13	55	D1-11	-	48.9	0	23.7	0	65.1	0	0	65.1	65.2	70	N	-	-	16.3	Y	N	N	N	
N2835	14	58	D1-11	-	49.9	0	23.7	0	64.9	0	0	64.9	65.0	70	N	-	-	15.1	Y	N	N	N	
N2835	15	61	D1-11	-	51	0	23.6	0	64.7	0	0	64.7	64.9	70	N	-	-	13.9	Y	N	N	N	
N2835	16	64	D1-11	-	51.9	0	23.6	0	64.5	0	0	64.5	64.8	70	N	-	-	12.9	Y	N	N	N	
N2835	17	67	D1-11	-	52.5	0	23.6	0	64.4	0	0	64.4	64.4	70	N	-	-	12.1	Y	N	N	N	
N2835	18	70	D1-11	-	52.8	0	23.6	0	64.2	0	0	64.2	64.5	70	N	-	-	11.7	Y	N	N	N	
N2835	19	73	D1-11	-	52.9	0	23.6	0	64	0	0	64	64.4	70	N	-	-	11.5	Y	N	N	N	
N2835	20	76	D1-11	-	53.1	0	24	0	63.9	0	0	63.9	64.2	70	N	-	-	11.1	Y	N	N	N	
N3001	1	18.8	B1-1	-	57.2	0	40.9	48.3	35.9	57.5	0	58.1	60.7	65	N	-	-	3.5	Y	N	N	N	
N3001	2	22.8	B1-1	-	57.5	0	42.4	48.7	37.5	58.2	0	58.8	61.2	65	N	-	-	3.7	Y	N	N	N	
N3001	3	26.8	B1-1	-	57.9	0	44	49.3	39.3	58.9	0	59.5	61.8	65	N	-	-	3.9	Y	N	N	N	
N3001	4	30.8	B1-1	-	58.1	0	46	49.8	41.3	59.8	0	60.4	62.4	65	N	-	-	4.3	Y	N	N	N	
N3001	5	34.8	B1-1	-	58.4	0	48.5	50.7	43.8	60.5	0	61.3	63.1	65	N	-	-	4.7	Y	N	N	N	
N3001	6	38.8	B1-1	-	58.7	0	50.7	51.7	46.5	61.5	0	62.3	63.9	65	N	-	-	5.2	Y	N	N	N	
N3001	7	42.8	B1-1	-	59	0	52.4	53.1	49.4	62.1	0	63.2	64.6	65	N	-	-	5.6	Y	N	N	N	
N3001	8	46.8	B1-1	-	59.2	0	54.2	54	50.5	62.9	0	64.1	65.3	65	N	-	-	6.1	Y	N	N	N	
N3002	1	18.8	B1-1	-	29.2	0	61.8	42.9	43.6	0	0	61.9	61.9	65	N	-	-	32.7	Y	N	N	N	
N3002	2	22.8	B1-1	-	30.2	0	62.4	43	0	44.3	0	62.5	62.5	65	N	-	-	32.3	Y	N	N	N	
N3002	3	26.8	B1-1	-	31.4	0	62.9	43.1	0	45	0	63	63.0	65	N	-	-	31.6	Y	N	N	N	
N3002	4	30.8	B1-1	-	32.7	0	63.1	43.2	0	45.8	0	63.3	63.3	65	N	-	-	30.6	Y	N	N	N	
N3002	5	34.8	B1-1	-	34.2	0	63.3	43.3	0	46.9	0	63.4	63.4	65	N	-	-	29.2	Y	N	N	N	
N3002	6	38.8	B1-1	-	36	0	63.4	43.8	0	48.2	0	63.6	63.6	65	N	-	-	27.6	Y	N	N	N	
N3002	7	42.8	B1-1	-	37.8	0	63.5	44.3	0	48.9	0	63.7	63.7	65	N	-	-	25.9	Y	N	N	N	
N3002	8	46.8	B1-1	-	38.6	0	63.6	45.2	0	49.3	0	63.8	63.8	65	N	-	-	25.2	Y	N	N	N	
N3003	1	18.8	B1-1	-	31.3	0	57.9	44	0	51	0	58.9	58.9	65	N	-	-	27.6	Y	N	N	N	
N3003	2	22.8	B1-1	-	32.7	0	58.5	46.5	0	51.5	0	59.5	59.5	65	N	-	-	26.8	Y	N	N	N	
N3003	3	26.8	B1-1	-	34.5	0	59.1	49	0	52	0	60.2	60.2	65	N	-	-	25.7	Y	N	N	N	
N3003	4	30.8	B1-1	-	36.7	0	59.4	50.2	0	52.4	0	60.6	60.7	65	N	-	-	24.0	Y	N	N	N	
N3003	5	34.8	B1-1	-	38.3	0	59.7	50.8	0	52.9	0	61	61.0	65	N	-	-	22.7	Y	N	N	N	
N3003	6	38.8	B1-1	-	38.9	0	59.8	51	0	53.4	0	61.2	61.2	65	N	-	-	22.3	Y	N	N	N	
N3003	7	42.8	B1-1	-	39.1	0	59.9	51.1	0	54.1	0	61.4	61.4	65	N	-	-	22.3	Y	N	N	N	
N3003	8	46.8	B1-1	-	39.5	0	60.1	51.3	0	55	0	61.7	61.7	65	N	-	-	22.2	Y	N	N	N	
N3301	1	26.5	A3-2	-	0	0	30.3	47.6	49.6	0	0	51.7	51.7	65	N	-	-	48.7	Y	N	N	N	
N3301	2	30.5	A3-2	-	0	0	31.6	57.1	59.5	0	0	61.5	61.5	65	N	-	-	58.5	Y	N	N	N	
N3301	3	34.5	A3-2	-	0	0	32.9	58.1	62.2	0	0	63.6	63.6	65	N	-	-	60.6	Y	N	N	N	
N3301	4	38.5	A3-2	-	0	0	34.4	58.1	62.6	0	0	63.9	63.9	65	N	-	-	60.9	Y	N	N	N	
N3301	5	42.5	A3-2	-	0	0	35.8	58.1	63.2	0	0	64.4	64.4	65	N	-	-	61.4	Y	N	N	N	
N3301	6	46.5	A3-2	-	0	0	37.2	58.1	63.3	0	0	64.5	64.5	65	N	-	-	61.5	Y	N	N	N	
N3301	7	50.5	A3-2	-	0	0	38.7	58.1	63.2	0	0	64.4	64.4	65	N	-	-	61.4	Y	N	N	N	
N3301	8	54.5	A3-2	-	0	0	40.3	58	62.9	0	0	64.2	64.2	65	N	-	-	61.2	Y	N	N	N	
N3302	1	26.5	A3-2	-	0	0	30.7	54.6	0	0	0	54.6	54.6	65	N	-	-	51.6	Y	N	N	N	
N3302	2	30.5	A3-2	-	0	0	31.2	55.7	0	0	0	55.7	55.7	65	N	-	-	52.7	Y	N	N	N	
N3302	3	34.5	A3-2	-	0	0	31.4	57.6	0	0	0	57.6	57.6	65	N	-	-	54.6	Y	N	N	N	
N3302	4	38.5	A3-2	-	0	0	31.7	60.9	0	0	0	60.9	60.9	65	N	-	-	57.9	Y	N	N	N	
N3302	5	42.5	A3-2	-	0	0	31.9	63.8	0	0	0	63.8	63.8	65	N	-	-	60.8	Y	N	N	N	
N3302	6	46.5	A3-2	-	0	0	32.1	64.2	0	0	0	64.2	64.2	65	N	-	-	61.2	Y	N	N	N	
N3302	7	50.5	A3-2	-	0	0	32.5	64	0	0	0	64	64.0	65	N	-	-	61.0	Y	N	N	N	
N3302	8	54.5	A3-2	-	0	0	32.7	63.7	0	0	0	63.7	63.7	65	N	-	-	60.7	Y	N	N	N	
N3381	1	18	A3-4	-	0	0	50.1	61.3	0	0	0	61.6	61.6	65	N	-	-	58.6	Y	N	N	N	
N3381	2	22	A3-4	-	0	0	50.1	61.3	0	0	0	61.6	61.6	65	N	-	-	58.6	Y	N	N	N	
N3381	3	26	A3-4	-	0	0	50.1	61.2	0	0	0	61.5	61.5	65	N	-	-	58.5	Y	N	N	N	
N3381	4	30	A3-4	-	0	0	50.1	61.1	0	0	0	61.5	61.5	65	N	-	-	58.5	Y	N	N	N	
N3381	5	34	A3-4	-	0	0	50.1	61	0	0	0	61.3	61.3	65	N	-	-	58.3	Y	N	N	N	
N3381	6	38	A3-4	-	0	0	50.1	60.8	0	0	0	61.2	61.2	65	N	-	-	58.2	Y	N	N	N	
N3381	7	42	A3-4	-	0	0	50.1	60.6	0	0	0	61	61.0	65	N	-	-	58.0	Y	N	N	N	
N3381	8	46	A3-4	-	0	0	50.1	60.4	0	0	0	60.8	60.8	65	N	-	-	57.8	Y	N	N	N	
N3382	1	18	A3-4	-	0	0	24.5	48.8	59.5	0	0	59.8	59.8	65	N	-	-	56.8	Y	N	N	N	
N3382	2	22	A3-4	-	0	0	24.5	48.8	59.4	0	0	59.8	59.8	65	N	-	-	56.8	Y	N	N	N	
N3382	3	26	A3-4	-	0	0	24.5	48.8	59.4	0	0	59.8	59.8	65	N	-	-	56.8	Y	N	N	N	
N3382	4	30	A3-4	-	0	0	24.5	48.8	59.3	0	0	59.7	59.7	65	N	-	-	56.7	Y	N	N	N	
N3382	5	34	A3-4	-	0	0	24.4	48.8	59.2	0	0	59.6	59.6	65	N	-	-	56.6	Y	N	N	N	
N3382	6	38	A3-4	-	0	0	24.4	48.8	59	0	0	59.4	59.4	65	N	-	-	56.4	Y	N	N	N	
N3382	7	42	A3-4	-	0	0	24.4	48.8	58.9	0	0	59.3	59.3	65	N	-	-	56.3	Y	N	N	N	
N3382	8	46	A3-4	-	0	0	24.4	48.8	58.7	0	0	59.1	59.1	65	N	-	-	56.1	Y	N	N	N	
N3401	1	20.5	B2-8	-	0	0	11.8	42.7	59.8	0	0	59.9	59.9	65	N	-	-	56.9	Y	N	N	N	
N3401	2	24.5	B2-8	-	0	0	13	42.7	59.8	0	0	59.8	59.8	65	N	-	-	56.8	Y	N	N	N	
N3401	3	28.5	B2-8	-	0	0	14	42.8	59.7	0	0	59.8	59.8	65	N	-	-	56.8	Y	N	N	N	
N3401	4	32.5	B2-8	-	0	0	14.9	42.8	59.7	0	0	59.7	59.7	65	N	-	-	56.7	Y	N	N	N	
N3401	5	36.5	B2-8	-	0	0	15.8	42.7	59.6	0	0	59.7	59.7	65	N	-	-	56.7	Y	N	N	N	
N3401	6	40.5	B2-8	-	0	0	16.7	42.6	59.5	0	0	59.6	59.6	65	N	-	-	56.6	Y	N	N	N	
N3401	7	44.5	B2-8	-	0	0	17.5	42.5	59.6	0	0	59.7	59.7	65	N	-	-	56.7	Y	N	N	N	
N3401	8	48.5	B2-8	-	0	0	18.2	42.4	59.5	0	0	59.6	59.6	65	N	-	-	56.6	Y	N	N	N	
N340																							





Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Mitigated Case on Proposed Roads)

Assessment Point				WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance					Check Direct Mitigation			Mitigation Measures Required <sup>(A)</sup> (Y/N)		
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	C - A dB(A) [D]		New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria					
							PD	DD	LD	EX	TR					D ≥ 1dB(A)	D > 1dB(A)								
ID	Floor	Floor Level (mPD)	Location	[A]									[C]												
R1086	2	15.6	Valais	63.3	27.6	0	0	44	30.7	62.4	0	62.5	62.5	70	N	-0.8	N	34.9	Y	N	N	N	N	N	N
R1086	3	19.6	Valais	68.7	28.9	0	0	47.7	34.7	67.6	0	67.7	67.7	70	N	-1.0	N	38.8	Y	N	N	N	N	N	N
R1087	1	11.6	Valais	56.9	46.5	0	0	37.6	26.8	55.7	0	55.7	56.2	70	N	-0.7	N	9.7	Y	N	N	N	N	N	N
R1087	2	15.6	Valais	59.9	48.4	0	0	41	30	59	0	59.1	59.4	70	N	-0.5	N	11.0	Y	N	N	N	N	N	N
R1087	3	19.6	Valais	64.7	51.2	0	0	45.2	35.7	64.1	0	64.2	64.4	70	N	-0.3	N	13.2	Y	N	N	N	N	N	N
R1088	1	11.6	Valais	56.2	42.6	0	0	36.9	21.1	55.2	0	55.3	55.5	70	N	-0.7	N	12.9	Y	N	N	N	N	N	N
R1088	2	15.6	Valais	60	45.9	0	0	40.8	23	59.1	0	59.2	59.4	70	N	-0.6	N	13.5	Y	N	N	N	N	N	N
R1088	3	19.6	Valais	66	50.4	0	0	45.8	26	65.2	0	65.2	65.4	70	N	-0.6	N	15.0	Y	N	N	N	N	N	N
R1089	1	11.6	Valais	57.4	40.2	0	27.6	36.8	22	56.1	0	57.6	57.7	70	N	0.3	N	17.5	Y	N	N	N	N	N	N
R1089	2	15.6	Valais	60.9	44.2	0	31.1	40.6	52.5	60	0	60.8	60.9	70	N	0.0	N	16.7	Y	N	N	N	N	N	N
R1089	3	19.6	Valais	69.5	45.6	0	36.7	47.2	53.9	68.8	0	68.9	68.9	70	N	-0.6	N	23.3	Y	N	N	N	N	N	N
R1090	1	11.6	Valais	64.5	61.2	0	32.5	37.6	61.6	54.8	0	62.4	64.9	70	N	0.4	N	3.7	Y	N	N	N	N	N	N
R1090	2	15.6	Valais	67	62.2	0	34.8	40.8	61.9	58	0	63.4	65.9	70	N	-1.1	N	3.7	Y	N	N	N	N	N	N
R1090	3	19.6	Valais	69.6	62.4	0	38.3	44.7	62.4	62.2	0	65.4	67.1	70	N	-2.5	N	4.7	Y	N	N	N	N	N	N
R1102	1	15.6	Europa Garden	73.9	57.5	0	47.8	42.3	33.8	58.7	0	59.2	61.4	70	N	-12.5	N	3.9	Y	N	N	N	N	N	N
R1102	2	18.6	Europa Garden	76.1	63.3	0	53.1	44.8	48.9	61.1	0	62	65.7	70	N	-10.4	N	2.4	Y	N	N	N	N	N	N
R1102	3	21.6	Europa Garden	79.1	67.8	0	55.7	46.8	49.7	62.4	0	63.5	69.2	70	N	-9.9	N	1.4	Y	N	N	N	N	N	N
R1103	1	15.6	Europa Garden	82.8	41.8	0	49.7	45.7	34.9	43.2	0	63.5	63.5	70	N	-19.3	N	18.7	Y	N	N	N	N	N	N
R1103	2	18.6	Europa Garden	82.8	55.2	0	52.9	47.2	43.8	64.5	0	64.9	65.4	70	N	-17.4	N	10.2	Y	N	N	N	N	N	N
R1103	3	21.6	Europa Garden	82.7	58.5	0	55.8	49.3	46	65.8	0	66.4	67.0	70	N	-15.7	N	8.5	Y	N	N	N	N	N	N
R1104	1	15.4	Europa Garden	83.1	49	0	44.3	45	27.6	62.8	0	63	63.1	70	N	-20.0	N	14.1	Y	N	N	N	N	N	N
R1104	2	18.4	Europa Garden	83	49	0	46.6	46.2	28.2	63.7	0	63.8	64.0	70	N	-19.0	N	15.0	Y	N	N	N	N	N	N
R1104	3	21.4	Europa Garden	82.9	48.9	0	49.5	47.6	28.8	64.3	0	64.6	64.7	70	N	-18.2	N	15.8	Y	N	N	N	N	N	N
R1105	1	15.7	Europa Garden	83.2	20.5	0	41.1	48.1	28.3	66.2	0	66.2	66.2	70	N	-17.0	N	45.7	Y	N	N	N	N	N	N
R1105	2	18.7	Europa Garden	83.2	20.8	0	43.2	49.6	29	69.1	0	69.2	69.2	70	N	-14.0	N	48.4	Y	N	N	N	N	N	N
R1105 [6]	3	21.7	Europa Garden	83	21.1	0	45.1	51.5	29.8	65.3	0	70.4	70.4	70	N	-12.6	N	49.3	Y	N	N	N	N	N	N
R1106	1	15.7	Europa Garden	77.2	49	0	0	45.8	25.4	61.5	0	61.6	61.8	70	N	-15.4	N	12.8	Y	N	N	N	N	N	N
R1106	2	18.7	Europa Garden	78.9	54.3	0	0	49	26.3	68.3	0	68.3	68.5	70	N	-10.4	N	14.2	Y	N	N	N	N	N	N
R1106 [6]	3	21.7	Europa Garden	79.1	56	0	0	51.4	27.3	64.8	0	69.9	70.1	70	N	-9.0	N	14.1	Y	N	N	N	N	N	N
R1107	1	15.7	Europa Garden	67.8	47.5	0	0	42.2	0	57	0	57.2	57.6	70	N	-10.2	N	10.1	Y	N	N	N	N	N	N
R1107	2	18.7	Europa Garden	72.9	54.3	0	0	47.2	0	64.5	0	64.5	64.9	70	N	-8.0	N	10.6	Y	N	N	N	N	N	N
R1107	3	21.7	Europa Garden	76	58.2	0	0	49.4	0	66.7	0	66.8	67.3	70	N	-8.7	N	9.1	Y	N	N	N	N	N	N
R1121	1	20.3	Luen Shen Area	75.7	65.7	0	55.9	45.3	0	59.8	0	61.4	67.1	70	N	-8.6	N	1.4	Y	N	N	N	N	N	N
R1121	2	23.3	Luen Shen Area	76.2	65.7	0	58.2	46.6	0	60.5	0	62.6	67.4	70	N	-8.8	N	1.7	Y	N	N	N	N	N	N
R1161	1	33.2	Ma Tso Lung	33.5	0	0	0	21.2	0	0	0	21.2	21.2	70	N	-12.3	N	18.2	Y	N	N	N	N	N	N
R1161	2	36.2	Ma Tso Lung	34.3	0	0	0	22	0	0	0	22	22.0	70	N	-12.3	N	19.0	Y	N	N	N	N	N	N
R1161	3	39.2	Ma Tso Lung	35.2	0	0	0	22.8	0	0	0	22.8	22.8	70	N	-12.4	N	19.8	Y	N	N	N	N	N	N
R1162	1	33.2	Ma Tso Lung	0	0	0	0	21.7	0	0	0	21.7	21.7	70	N	-11.7	N	18.7	Y	N	N	N	N	N	N
R1162	2	36.2	Ma Tso Lung	0	0	0	0	22.4	0	0	0	22.4	22.4	70	N	-11.4	N	19.4	Y	N	N	N	N	N	N
R1162	3	39.2	Ma Tso Lung	0	0	0	0	23.3	0	0	0	23.3	23.3	70	N	-11.0	N	20.3	Y	N	N	N	N	N	N
R1181	1	6.3	Hak Ka Wai	76.2	52.3	0	0	28.1	54	63.1	0	63.6	64.0	70	N	-12.2	N	11.7	Y	N	N	N	N	N	N
R1181	2	9.3	Hak Ka Wai	77.5	52.6	0	0	28.3	53.9	64	0	64.4	64.7	70	N	-12.8	N	12.1	Y	N	N	N	N	N	N
R1181	3	12.3	Hak Ka Wai	78.6	53.2	0	0	28.6	53.8	65	0	65.3	65.6	70	N	-13.0	N	12.4	Y	N	N	N	N	N	N
R1182	1	8.9	Hak Ka Wai	73.3	54.6	0	0	56	63.8	60	0	64.6	65.0	70	N	-8.3	N	10.4	Y	N	N	N	N	N	N
R1182	2	11.9	Hak Ka Wai	73.9	54.7	0	0	50	56	64.2	0	64.9	65.3	70	N	-8.6	N	10.6	Y	N	N	N	N	N	N
R1182	3	14.9	Hak Ka Wai	74.3	54.8	0	0	50	56	64.6	0	65.3	65.6	70	N	-8.7	N	10.8	Y	N	N	N	N	N	N
R1183	1	6.4	Tsung Pak long	64.7	40.8	0	0	36.3	35	59.2	0	59.2	59.3	70	N	-5.4	N	18.5	Y	N	N	N	N	N	N
R1183	2	9.4	Tsung Pak long	69.6	42.9	0	0	42.8	39.4	63.6	0	63.6	63.6	70	N	-6.0	N	20.7	Y	N	N	N	N	N	N
R1183	3	12.4	Tsung Pak long	72.9	46.5	0	0	43.4	46.3	64.8	0	64.8	64.9	70	N	-8.0	N	18.4	Y	N	N	N	N	N	N
R1184	1	7	Tsung Pak long	74.6	44.5	0	0	0	0	64.5	0	64.5	64.6	70	N	-10.0	N	20.1	Y	N	N	N	N	N	N
R1184	2	10	Tsung Pak long	75.8	46.1	0	0	0	0	64.8	0	64.8	64.8	70	N	-11.0	N	18.7	Y	N	N	N	N	N	N
R1184	3	13	Tsung Pak long	76.6	48	0	0	0	0	65	0	65	65.1	70	N	-11.5	N	17.1	Y	N	N	N	N	N	N
R1185	1	7	Tsung Pak long	78.1	44.8	0	0	0	0	63.7	0	63.7	63.7	70	N	-14.4	N	18.9	Y	N	N	N	N	N	N
R1185	2	10	Tsung Pak long	80.1	47.7	0	0	0	0	64.9	0	64.9	65.0	70	N	-15.1	N	17.3	Y	N	N	N	N	N	N
R1185	3	13	Tsung Pak long	80.9	51.3	0	0	0	0	66.3	0	66.3	66.4	70	N	-14.5	N	15.1	Y	N	N	N	N	N	

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN (Mitigated Case on Proposed Roads)

Assessment Point				WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>(A)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
							PD	DD	LD	EX	TR											
ID	Floor	Floor level (mPD)	Location	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]	[O]				
R1287	2	12.2	Fanling Highway A100	83.7	30.6	0	0	0	28.1	66.1	0	66.1	66.1	70	N	-17.6	N	35.5	Y	N	N	N
R1287	3	15.2	Fanling Highway A100	83.6	31.3	0	0	0	28.6	68.2	0	68.2	68.2	70	N	-15.4	N	36.9	Y	N	N	N
R1287	4	18.2	Fanling Highway A100	83.4	32.1	0	0	0	29.1	70.3	0	70.3	70.3	70	N	-13.1	N	38.2	Y	N	N	N
R1288	1	9.2	Fanling Highway A100	74.6	29.1	0	0	16.6	32.3	58.7	0	58.7	58.7	70	N	-15.9	N	29.6	Y	N	N	N
R1288	2	12.2	Fanling Highway A100	76.1	30	0	0	18	33	59.6	0	59.6	59.6	70	N	-16.5	N	29.6	Y	N	N	N
R1288	3	15.2	Fanling Highway A100	78.1	31	0	0	19.7	33.8	60.4	0	60.5	60.5	70	N	-17.6	N	29.5	Y	N	N	N
R1288	4	18.2	Fanling Highway A100	79.3	32.5	0	0	22	34.6	61.3	0	61.4	61.4	70	N	-17.9	N	28.9	Y	N	N	N
R1289	1	10	Fanling Highway A100	79.7	15.9	0	0	0	31.2	65.2	0	65.2	65.2	70	N	-14.5	N	49.2	Y	N	N	N
R1289	2	13	Fanling Highway A100	80.2	18.4	0	0	0	31.7	65.6	0	65.6	65.6	70	N	-14.6	N	47.1	Y	N	N	N
R1289	3	16	Fanling Highway A100	80.5	21.1	0	0	0	32.2	66	0	66	66.0	70	N	-14.5	N	44.9	Y	N	N	N
R1289	4	19	Fanling Highway A100	80.7	25.1	0	0	0	32.8	66.5	0	66.5	66.5	70	N	-14.2	N	41.4	Y	N	N	N
R1290	1	9.2	Fanling Highway A100	80.4	0	0	0	0	27.9	67.3	0	67.3	67.3	70	N	-13.1	N	64.3	Y	N	N	N
R1290	2	12.2	Fanling Highway A100	80.6	0	0	0	0	28.4	67.7	0	67.7	67.7	70	N	-12.9	N	64.7	Y	N	N	N
R1290	3	15.2	Fanling Highway A100	80.7	0	0	0	0	28.8	68	0	68	68.0	70	N	-12.7	N	65.0	Y	N	N	N
R1290	4	18.2	Fanling Highway A100	80.7	0	0	0	0	29.3	68.4	0	68.4	68.4	70	N	-12.3	N	65.4	Y	N	N	N
R1301	1	9	Pak Shek Au	71	52.7	0	54	57.2	43	54.6	0	60.3	61.0	70	N	-10.0	N	8.3	Y	N	N	N
R1301	2	12	Pak Shek Au	71.1	52.9	0	54.2	57.6	44.6	55.2	0	60.8	61.4	70	N	-9.7	N	8.5	Y	N	N	N
R1501	1	11.8	Ma Tso Lung	0	63.3	0	63.8	22	0	0	0	63.8	66.5	70	N	3.2	Y	3.2	Y	N	N	N
R1501	2	14.8	Ma Tso Lung	0	63.2	0	63.7	22.4	0	0	0	63.7	66.5	70	N	3.3	Y	3.3	Y	N	N	N
R1502	1	11.8	Ma Tso Lung	0	63.8	0	61.7	0	0	0	0	61.7	65.9	70	N	65.9	Y	2.1	Y	N	N	N
R1502	2	14.8	Ma Tso Lung	0	63.8	0	61.6	0	0	0	0	61.6	65.8	70	N	65.8	Y	2.0	Y	N	N	N
R1504	1	10.4	Ma Tso Lung	48.1	0	0	68.1	45.8	0	0	0	68.1	68.1	70	N	20.0	Y	65.1	Y	N	N	N
R1506	1	13.9	Ma Tso Lung	62.1	0	20.2	65.9	49.8	0	0	0	66	66.0	70	N	3.9	Y	63.0	Y	N	N	N
R1521	1	5.4	OZP Planned Dev	68	67.9	58.8	0	0	0	0	0	68.4	70	N	0.4	N	0.0	N	0.0	N	N	N
R1521	2	8.4	OZP Planned Dev	68	67.9	58.8	0	0	0	0	0	68.4	70	N	0.4	N	0.0	N	0.0	N	N	N
R1521	3	11.4	OZP Planned Dev	68	68	58.9	0	0	0	0	0	68.5	70	N	0.5	N	0.0	N	0.0	N	N	N
R1521	4	14.4	OZP Planned Dev	68.1	68	58.9	0	0	0	0	0	68.5	70	N	0.4	N	0.0	N	0.0	N	N	N
R1523	1	5.4	OZP Planned Dev	61.2	62.4	0	0	0	0	0	0	62.4	70	N	1.2	Y	0.0	N	0.0	N	N	N
R1523	2	8.4	OZP Planned Dev	61.2	62.4	0	0	0	0	0	0	62.4	70	N	1.2	Y	0.0	N	0.0	N	N	N
R1523	3	11.4	OZP Planned Dev	61.2	62.4	0	0	0	0	0	0	62.4	70	N	1.2	Y	0.0	N	0.0	N	N	N
R1523	4	14.4	OZP Planned Dev	61.2	62.4	0	0	0	0	0	0	62.4	70	N	1.2	Y	0.0	N	0.0	N	N	N
R1524	1	5.4	OZP Planned Dev	68.2	66.5	58.8	23.8	41.3	0	49	0	49.7	67.3	70	N	-0.9	N	0.1	N	N	N	N
R1524	2	8.4	OZP Planned Dev	68.2	66.5	58.8	24.3	41.3	0	49.3	0	49.9	67.3	70	N	-0.9	N	0.1	N	N	N	N
R1524	3	11.4	OZP Planned Dev	68.3	66.6	58.8	24.7	41.4	0	49.5	0	50.1	67.4	70	N	-0.9	N	0.1	N	N	N	N
R1524	4	14.4	OZP Planned Dev	68.3	66.7	58.9	25.1	41.5	0	49.8	0	50.4	67.4	70	N	-0.9	N	0.0	N	N	N	N
R1525	1	3.5	OZP Planned Dev	73.7	64.2	58.6	34.5	46.9	31.6	60.1	0	60.3	66.4	70	N	-7.3	N	1.1	Y	N	N	N
R1525	2	6.5	OZP Planned Dev	73.8	64.9	59.3	34.7	47	33.5	60.4	0	60.6	66.4	70	N	-5.4	N	0.8	Y	N	N	N
R1525	3	10.5	OZP Planned Dev	73.9	65.6	59.6	34.9	47.1	34.7	60.8	0	61	69.8	70	N	-4.1	N	0.7	N	N	N	N
R1525	4	14.5	OZP Planned Dev	74.1	69.3	59.8	35.2	47.2	35.7	61.2	0	61.4	70.4	70	N	-3.7	N	0.6	N	N	N	N
R1526	1	3.5	OZP Planned Dev	71.1	64.2	59.3	0	0	0	55.4	0	55.4	65.9	70	N	-5.2	N	0.5	N	N	N	N
R1526	2	6.5	OZP Planned Dev	71.2	67.1	60	0	0	0	55.7	0	55.7	68.1	70	N	-3.1	N	0.2	N	N	N	N
R1526	3	10.5	OZP Planned Dev	71.3	68.8	60.3	0	0	0	56.1	0	56.1	69.6	70	N	-1.7	N	0.2	N	N	N	N
R1526	4	14.5	OZP Planned Dev	71.4	69.4	60.4	0	0	0	56.4	0	56.4	70.1	70	N	-1.3	N	0.2	N	N	N	N
R1527	1	3.5	OZP Planned Dev	70.3	55.2	0	35	47	31.7	58.1	0	58.4	60.1	70	N	-10.2	N	4.9	Y	N	N	N
R1527	2	6.5	OZP Planned Dev	70.4	56	0	35.2	47.1	33.5	58.5	0	58.8	60.6	70	N	-9.8	N	4.6	Y	N	N	N
R1527	3	10.5	OZP Planned Dev	70.5	57.2	0	35.4	47.1	34.8	58.9	0	59.2	61.4	70	N	-9.1	N	4.2	Y	N	N	N
R1527	4	14.5	OZP Planned Dev	70.7	58	0	35.7	47.2	35.8	59.3	0	59.6	61.9	70	N	-8.8	Y	3.9	Y	N	N	N
R1541	1	10.7	OZP Planned Dev	82.6	27.2	0	51.2	48.6	51.3	64.4	0	64.9	64.9	70	N	-17.7	N	37.7	Y	N	N	N
R1541	2	14.7	OZP Planned Dev	82.6	30.8	0	53.8	50.3	53.8	66	0	66.6	66.6	70	N	-16.0	N	35.8	Y	N	N	N
R1541	3	18.7	OZP Planned Dev	82.5	35.7	0	57.4	51.8	56.3	67.7	0	68.4	68.4	70	N	-14.1	N	32.7	Y	N	N	N
R1542	1	10.7	OZP Planned Dev	79.1	59	0	26.7	43.7	54.9	63	0	63.7	64.9	70	N	-14.2	N	5.9	Y	N	N	N
R1542	2	14.7	OZP Planned Dev	79.2	59.1	0	27.3	45.3	56.3	64.5	0	65.2	66.1	70	N	-13.1	N	7.0	Y	N	N	N
R1542	3	18.7	OZP Planned Dev	79.1	59.2	0	28	46.7	58	66.2	0	66.9	67.5	70	N	-11.6	N	8.3	Y	N	N	N
R1543	1	10.7	OZP Planned Dev	79.3	57.5	0	51.3	46.6	6.7	57.9	0	59	61.3	70	N	-18.0	N	3.8	Y	N	N	N
R1543	2	14.7	OZP Planned Dev	79.4	57.5	0	53.8	48.2	7.2	59.2	0	60.6	62.3	70	N	-17.1	N	4.8	Y	N	N	N
R1543	3	18.7	OZP Planned Dev	79.3	57.5	0	57.2	49.7	8.2	60.7	0	62.5	63.7	70	N	-15.6	N	6.2	Y	N	N	N
R1544	1	9.8	OZP Planned Dev	82.5	30.3	0	53.5	46.5	46.2	62	0	62.8	62.8	70	N	-19.7	N	32.5	Y	N	N	N
R1544	2	13.8	OZP Planned Dev	82.5	33.2	0	55.8	48.8	47.7	63.7	0	64.6	64.6	70	N	-17.9	N	31.4	Y	N	N	N
R1544	3	17.8	OZP Planned Dev	82.6	37	0	59	51	50.1	65.4	0	66.5	66.5	70	N	-16.1	N	29.5	Y	N	N	N
R1545	1	9.8	OZP Planned Dev	79.4	57.4	0	30.6	43.8	50.6	60.6	0	61.1	62.6									



Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)		
				Overall Noise Level in 2044 dB(A)	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A) [D]							D ≥ 1dB(A)	New Road Contribution dB(A) [E]
ID	Floor	Floor Level (mPD)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	PD	DD	LD	EX	TR						Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]		
R2541	10	48	A1-5	-	28.8	0	41.8	55.1	61.2	51.8	0	62.6	62.6	70	N	-	-	33.8	Y	N	N	N
R2541	11	51	A1-5	-	29.7	0	42.2	55.1	61	52.2	0	62.5	62.5	70	N	-	-	32.8	Y	N	N	N
R2541	12	54	A1-5	-	30.8	0	42.4	55	60.8	52.6	0	62.4	62.4	70	N	-	-	31.6	Y	N	N	N
R2541	13	57	A1-5	-	31.9	0	42.6	54.9	60.6	53	0	62.2	62.2	70	N	-	-	30.3	Y	N	N	N
R2541	14	60	A1-5	-	33.3	0	42.8	54.8	60.4	53.4	0	62.1	62.1	70	N	-	-	28.8	Y	N	N	N
R2541	15	63	A1-5	-	34.6	0	42.9	54.8	60.2	53.8	0	62	62	70	N	-	-	27.4	Y	N	N	N
R2541	16	66	A1-5	-	36.3	0	43	54.7	60	54.2	0	62	62	70	N	-	-	25.7	Y	N	N	N
R2541	17	69	A1-5	-	37.6	0	43.1	54.6	59.8	54.7	0	61.9	61.9	70	N	-	-	24.3	Y	N	N	N
R2541	18	72	A1-5	-	39.1	0	43.2	54.6	59.6	55.1	0	61.9	61.9	70	N	-	-	22.8	Y	N	N	N
R2541	19	75	A1-5	-	40.1	0	43.4	54.5	59.4	55.6	0	61.9	61.9	70	N	-	-	21.8	Y	N	N	N
R2541	20	78	A1-5	-	40.8	0	43.6	54.5	59.2	56.1	0	61.9	61.9	70	N	-	-	21.1	Y	N	N	N
R2541	21	81	A1-5	-	41.4	0	43.9	54.4	59.1	56.6	0	62	62	70	N	-	-	20.6	Y	N	N	N
R2541	22	84	A1-5	-	42.4	0	44.3	54.4	58.9	57.2	0	62	62	70	N	-	-	19.7	Y	N	N	N
R2541	23	87	A1-5	-	43.4	0	44.7	54.3	58.7	57.9	0	62.2	62.2	70	N	-	-	18.8	Y	N	N	N
R2541	24	90	A1-5	-	43.9	0	45.3	54.3	58.6	58.6	0	62.5	62.5	70	N	-	-	18.6	Y	N	N	N
R2541	25	93	A1-5	-	44.1	0	46.1	54.2	58.4	59.4	0	62.7	62.8	70	N	-	-	18.7	Y	N	N	N
R2541	26	96	A1-5	-	44.4	0	46.8	54.2	58.3	60	0	63	63.1	70	N	-	-	18.7	Y	N	N	N
R2541	27	99	A1-5	-	44.8	0	47.3	54.3	58.2	60.5	0	63.2	63.3	70	N	-	-	18.5	Y	N	N	N
R2541	28	102	A1-5	-	45.2	0	47.6	54.3	58	60.9	0	63.4	63.5	70	N	-	-	18.3	Y	N	N	N
R2541	29	105	A1-5	-	45.8	0	48	54.4	58	61.2	0	63.6	63.6	70	N	-	-	17.8	Y	N	N	N
R2541	30	108	A1-5	-	46.2	0	48.1	54.4	57.9	61.5	0	63.7	63.8	70	N	-	-	17.6	Y	N	N	N
R2561	1	26	A1-6	-	14.4	0	19.1	65	62.5	50.8	0	67	67.0	70	N	-	-	52.4	Y	N	N	N
R2561	2	29	A1-6	-	15.6	0	19.7	64.8	62.3	51.2	0	66.8	66.8	70	N	-	-	51.1	Y	N	N	N
R2561	3	32	A1-6	-	16.9	0	20.2	64.5	62.1	51.6	0	66.6	66.6	70	N	-	-	49.6	Y	N	N	N
R2561	4	35	A1-6	-	18.4	0	20.8	64.2	61.9	51.9	0	66.4	66.4	70	N	-	-	47.9	Y	N	N	N
R2561	5	38	A1-6	-	20.1	0	21.5	64	61.7	52.3	0	66.2	66.2	70	N	-	-	46.1	Y	N	N	N
R2561	6	41	A1-6	-	21.8	0	22.2	63.7	61.5	52.7	0	66	66.0	70	N	-	-	44.2	Y	N	N	N
R2561	7	44	A1-6	-	23.2	0	22.9	63.5	61.3	53.1	0	65.8	65.8	70	N	-	-	42.6	Y	N	N	N
R2561	8	47	A1-6	-	24.8	0	23.5	63.3	61.1	53.5	0	65.6	65.6	70	N	-	-	40.8	Y	N	N	N
R2561	9	50	A1-6	-	26.4	0	24.3	63.1	60.9	54	0	65.4	65.4	70	N	-	-	39.0	Y	N	N	N
R2561	10	53	A1-6	-	28.3	0	24.9	62.9	60.7	54.5	0	65.3	65.3	70	N	-	-	37.0	Y	N	N	N
R2561	11	56	A1-6	-	30.5	0	25.6	62.7	60.5	55	0	65.2	65.2	70	N	-	-	34.7	Y	N	N	N
R2561	12	59	A1-6	-	32.8	0	26.4	62.5	60.3	55.5	0	65	65.0	70	N	-	-	32.2	Y	N	N	N
R2561	13	62	A1-6	-	35.7	0	27.2	62.3	60.1	56.1	0	64.9	64.9	70	N	-	-	29.2	Y	N	N	N
R2561	14	65	A1-6	-	39.5	0	28	62.1	60	56.7	0	64.9	64.9	70	N	-	-	25.4	Y	N	N	N
R2561	15	68	A1-6	-	42.2	0	28.9	62	59.8	57.2	0	64.9	64.9	70	N	-	-	22.7	Y	N	N	N
R2561	16	71	A1-6	-	43.5	0	29.5	61.9	59.6	57.8	0	64.9	64.9	70	N	-	-	21.4	Y	N	N	N
R2561	17	74	A1-6	-	43.8	0	30.4	61.7	59.4	58.3	0	64.8	64.9	70	N	-	-	21.1	Y	N	N	N
R2561	18	77	A1-6	-	43.9	0	31.3	61.6	59.3	58.9	0	64.9	64.9	70	N	-	-	21.0	Y	N	N	N
R2561	19	80	A1-6	-	44	0	32	61.5	59.1	59.5	0	64.9	65.0	70	N	-	-	21.0	Y	N	N	N
R2561	20	83	A1-6	-	43.9	0	32.8	61.4	59	60	0	65	65.0	70	N	-	-	21.1	Y	N	N	N
R2561	21	86	A1-6	-	43.9	0	33.7	61.3	58.8	60.6	0	65.1	65.1	70	N	-	-	21.2	Y	N	N	N
R2561	22	89	A1-6	-	43.9	0	34.7	61.2	58.7	61.1	0	65.2	65.3	70	N	-	-	21.4	Y	N	N	N
R2561	23	92	A1-6	-	43.9	0	34.9	61.1	58.5	61.7	0	65.4	65.4	70	N	-	-	21.5	Y	N	N	N
R2561	24	95	A1-6	-	43.9	0	35.3	61	58.4	62.1	0	65.6	65.6	70	N	-	-	21.7	Y	N	N	N
R2561	25	98	A1-6	-	43.8	0	36	60.9	58.3	62.6	0	65.7	65.8	70	N	-	-	22.0	Y	N	N	N
R2561	26	101	A1-6	-	43.8	0	36.6	60.9	58.1	63	0	65.9	65.9	70	N	-	-	22.1	Y	N	N	N
R2561	27	104	A1-6	-	43.8	0	37.3	60.8	58	63.3	0	66	66.0	70	N	-	-	22.2	Y	N	N	N
R2561	28	107	A1-6	-	43.7	0	37.8	60.8	57.9	63.5	0	66.1	66.1	70	N	-	-	22.4	Y	N	N	N
R2561	29	110	A1-6	-	43.7	0	38.4	60.6	57.7	63.7	0	66.1	66.2	70	N	-	-	22.5	Y	N	N	N
R2561	30	113	A1-6	-	43.7	0	38.7	60.6	57.6	64	0	66.3	66.3	70	N	-	-	22.6	Y	N	N	N
R2601	1	11.5	A1-9	-	22.4	0	59.8	37.4	38.3	0	0	59.8	59.8	70	N	-	-	37.4	Y	N	N	N
R2601	2	14.2	A1-9	-	24.1	0	61.4	37.7	41.8	0	0	61.4	61.4	70	N	-	-	37.3	Y	N	N	N
R2601	3	16.9	A1-9	-	28.4	0	63.5	38.1	46.1	0	0	63.6	63.6	70	N	-	-	35.2	Y	N	N	N
R2601	4	19.6	A1-9	-	30.9	0	66.1	38.5	48.7	0	0	66.2	66.2	70	N	-	-	35.3	Y	N	N	N
R2601	5	22.3	A1-9	-	31.1	0	67.7	38.9	49.9	0	0	67.7	67.7	70	N	-	-	36.6	Y	N	N	N
R2601	6	25	A1-9	-	31.3	0	68.4	39.3	50.2	0	0	68.5	68.5	70	N	-	-	37.2	Y	N	N	N
R2601	7	27.7	A1-9	-	31.5	0	68.8	39.9	50.3	0	0	68.9	68.9	70	N	-	-	37.4	Y	N	N	N
R2601	8	30.4	A1-9	-	31.7	0	69.2	40.3	50.2	0	0	69.2	69.2	70	N	-	-	37.5	Y	N	N	N
R2601	9	33.1	A1-9	-	32	0	69.4	40.9	50.2	0	0	69.4	69.4	70	N	-	-	37.4	Y	N	N	N
R2601	10	35.8	A1-9	-	32.3	0	69.6	41.4	50.1	0	0	69.7	69.7	70	N	-	-	37.4	Y	N	N	N
R2601	11	38.5	A1-9	-	32.8	0	69.9	41.9	50.1	0	0	69.9	69.9	70	N	-	-	37.1	Y	N	N	N
R2601	12	41.2	A1-9	-	33	0	70	42.3	50.1	0	0	70.1	70.1	70	N	-	-	37.1	Y	N	N	N
R2601	13	43.9	A1-9	-	33.5	0	70.2	42.7	50	0	0	70.3	70.3	70	N	-	-	36.8	Y	N	N	N
R2601	14	46.6	A1-9	-	34.3	0	70.3	43.1	49.9	0	0	70.4	70.4	70	N	-	-	36.1	Y	N	N	N
R2601	15	49.3	A1-9	-	34.9	0	70.3	43.4	49.9	0	0	70.4	70.4	70	N	-	-	35.5	Y	N	N	N
R2601	16	52	A1-9	-	35.6	0	70.3	43.8	49.8	0	0	70.3	70.4	70	N	-	-	34.8	Y	N	N	N
R2601	17	54.7	A1-9	-	36.3	0	70.3	44.1	49.8	0	0	70.3	70.3	70	N	-	-	34.0	Y	N	N	N
R2601	18	57.4	A1-9	-	36.7	0	70.2	44.4	49.7	0	0	70.3	70.3	70	N	-	-	33.6	Y	N	N	N
R2601	19	60.1	A1-9	-	36.9	0	70.2	44.8	49.7	0	0	70.2	70.2	70	N	-	-	33.3	Y	N	N	N
R2601	20	62.8	A1-9	-	37.1	0	70.1	45														

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A)		Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	C - A dB(A) [D]						D ≥ 1dB(A)		New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria	
							PD	DD	LD	EX	TR		≥ 1dB(A)	≥ 1dB(A)	≥ 1dB(A)	≥ 1dB(A)	≥ 1dB(A)							
R2602	18	57.4	A1-9	-	39.4	0	69.1	58.1	54.2	0	0	69.5	69.5	70	N	-	-	30.1	Y	N	N	N		
R2602	19	60.1	A1-9	-	41	0	69.1	58.1	54.3	0	0	69.5	69.5	70	N	-	-	28.5	Y	N	N	N		
R2602	20	62.8	A1-9	-	41.6	0	69	58	54.4	0	0	69.5	69.5	70	N	-	-	27.9	Y	N	N	N		
R2603	1	11.5	A1-9	-	14	0	55.6	62	50.7	0	0	63.1	63.1	70	N	-	-	48.9	Y	N	N	N		
R2603	2	14.2	A1-9	-	14.7	0	57.6	61.9	51.8	0	0	63.6	63.6	70	N	-	-	48.8	Y	N	N	N		
R2603	3	16.9	A1-9	-	15.5	0	60.1	61.9	52.7	0	0	64.4	64.4	70	N	-	-	48.8	Y	N	N	N		
R2603	4	19.6	A1-9	-	16.4	0	61.7	61.8	53.4	0	0	65.1	65.1	70	N	-	-	48.6	Y	N	N	N		
R2603	5	22.3	A1-9	-	17.4	0	62.7	61.8	53.8	0	0	65.5	65.5	70	N	-	-	48.0	Y	N	N	N		
R2603	6	25	A1-9	-	18.5	0	63.3	61.7	54.1	0	0	65.9	65.9	70	N	-	-	47.3	Y	N	N	N		
R2603	7	27.7	A1-9	-	19.7	0	63.8	61.7	54.2	0	0	66.2	66.2	70	N	-	-	46.5	Y	N	N	N		
R2603	8	30.4	A1-9	-	20.9	0	64.1	61.7	54.3	0	0	66.3	66.3	70	N	-	-	45.4	Y	N	N	N		
R2603	9	33.1	A1-9	-	22.2	0	64.3	61.7	54.3	0	0	66.5	66.5	70	N	-	-	44.3	Y	N	N	N		
R2603	10	35.8	A1-9	-	23.7	0	64.5	61.7	54.3	0	0	66.6	66.6	70	N	-	-	42.9	Y	N	N	N		
R2603	11	38.5	A1-9	-	25.1	0	64.6	61.7	54.3	0	0	66.7	66.7	70	N	-	-	41.6	Y	N	N	N		
R2603	12	41.2	A1-9	-	26.6	0	64.8	61.8	54.4	0	0	66.8	66.8	70	N	-	-	40.2	Y	N	N	N		
R2603	13	43.9	A1-9	-	28.2	0	64.9	61.8	54.5	0	0	66.9	66.9	70	N	-	-	38.7	Y	N	N	N		
R2603	14	46.6	A1-9	-	30	0	65	61.7	54.5	0	0	66.9	66.9	70	N	-	-	36.9	Y	N	N	N		
R2603	15	49.3	A1-9	-	32.2	0	65	61.7	54.6	0	0	67	67.0	70	N	-	-	34.8	Y	N	N	N		
R2603	16	52	A1-9	-	35.1	0	65.1	61.7	54.7	0	0	67	67.0	70	N	-	-	31.9	Y	N	N	N		
R2603	17	54.7	A1-9	-	38.5	0	65.2	61.6	54.9	0	0	67.1	67.1	70	N	-	-	28.6	Y	N	N	N		
R2603	18	57.4	A1-9	-	41.2	0	65.4	61.5	55	0	0	67.1	67.1	70	N	-	-	25.9	Y	N	N	N		
R2603	19	60.1	A1-9	-	42.5	0	65.5	61.5	55.2	0	0	67.2	67.2	70	N	-	-	24.7	Y	N	N	N		
R2603	20	62.8	A1-9	-	43.1	0	65.6	61.3	55.6	0	0	67.3	67.3	70	N	-	-	24.2	Y	N	N	N		
R2604	1	11.5	A1-9	-	22	0	53.7	66.7	64	53.6	0	68.3	68.3	70	N	-	-	46.3	Y	N	N	N		
R2604	2	14.2	A1-9	-	22.8	0	54	66.8	64.2	54.5	0	68.5	68.5	70	N	-	-	45.7	Y	N	N	N		
R2604	3	16.9	A1-9	-	23.8	0	54.4	66.9	64.1	54.7	0	68.6	68.6	70	N	-	-	44.7	Y	N	N	N		
R2604	4	19.6	A1-9	-	24.7	0	55.1	66.2	64	55	0	68.6	68.6	70	N	-	-	43.9	Y	N	N	N		
R2604	5	22.3	A1-9	-	25.8	0	55.8	66.7	63.9	55.2	0	68.9	68.9	70	N	-	-	43.1	Y	N	N	N		
R2604	6	25	A1-9	-	26.9	0	56.8	67.3	63.8	55.5	0	69.3	69.3	70	N	-	-	42.4	Y	N	N	N		
R2604	7	27.7	A1-9	-	28	0	57.4	67.8	63.6	55.7	0	69.7	69.7	70	N	-	-	41.7	Y	N	N	N		
R2604	8	30.4	A1-9	-	29.2	0	57.7	68	63.5	56	0	69.8	69.8	70	N	-	-	40.6	Y	N	N	N		
R2604	9	33.1	A1-9	-	30.4	0	58	68.1	63.4	56.3	0	69.9	69.9	70	N	-	-	39.5	Y	N	N	N		
R2604	10	35.8	A1-9	-	31.9	0	58.2	68	63.2	56.7	0	69.8	69.8	70	N	-	-	37.9	Y	N	N	N		
R2604	11	38.5	A1-9	-	33.3	0	58.4	67.9	63	57	0	69.7	69.7	70	N	-	-	36.4	Y	N	N	N		
R2604	12	41.2	A1-9	-	35.2	0	58.6	67.7	62.9	57.4	0	69.6	69.6	70	N	-	-	34.4	Y	N	N	N		
R2604	13	43.9	A1-9	-	37.5	0	58.8	67.6	62.8	57.5	0	69.5	69.5	70	N	-	-	32.0	Y	N	N	N		
R2604	14	46.6	A1-9	-	40.1	0	59	67.4	62.7	57.9	0	69.4	69.4	70	N	-	-	29.3	Y	N	N	N		
R2604	15	49.3	A1-9	-	42.8	0	59.4	67.2	62.6	58.2	0	69.3	69.3	70	N	-	-	26.5	Y	N	N	N		
R2604	16	52	A1-9	-	44.6	0	59.7	67.1	62.5	58.5	0	69.3	69.3	70	N	-	-	24.7	Y	N	N	N		
R2604	17	54.7	A1-9	-	46.2	0	60.4	66.9	62.4	58.9	0	69.3	69.3	70	N	-	-	23.1	Y	N	N	N		
R2604	18	57.4	A1-9	-	47	0	61	66.7	62.3	59.2	0	69.3	69.3	70	N	-	-	22.3	Y	N	N	N		
R2604	19	60.1	A1-9	-	47.2	0	61.3	66.6	62.3	59.4	0	69.3	69.3	70	N	-	-	22.1	Y	N	N	N		
R2604	20	62.8	A1-9	-	47.2	0	61.4	66.4	62.2	59.7	0	69.2	69.2	70	N	-	-	22.0	Y	N	N	N		
R2605	1	11.5	A1-9	-	15.5	0	63.8	68.9	53.7	0	70.1	70.1	70	N	-	-	54.5	Y	N	N	N			
R2605	2	14.2	A1-9	-	15.8	0	63.7	68.6	53.9	0	69.9	69.9	70	N	-	-	54.0	Y	N	N	N			
R2605	3	16.9	A1-9	-	16.4	0	63.7	68.2	54.2	0	69.6	69.6	70	N	-	-	53.1	Y	N	N	N			
R2605	4	19.6	A1-9	-	17.2	0	63.6	67.8	54.4	0	69.3	69.3	70	N	-	-	52.0	Y	N	N	N			
R2605	5	22.3	A1-9	-	18	0	63.5	67.3	54.5	0	69	69.0	70	N	-	-	50.9	Y	N	N	N			
R2605	6	25	A1-9	-	19	0	63.4	67	54.8	0	68.7	68.7	70	N	-	-	49.6	Y	N	N	N			
R2605	7	27.7	A1-9	-	20.1	0	63.2	66.6	55	0	68.4	68.4	70	N	-	-	48.3	Y	N	N	N			
R2605	8	30.4	A1-9	-	21.4	0	63.1	66.2	55.3	0	68.1	68.1	70	N	-	-	46.7	Y	N	N	N			
R2605	9	33.1	A1-9	-	22.7	0	63	65.8	55.5	0	67.9	67.9	70	N	-	-	45.2	Y	N	N	N			
R2605	10	35.8	A1-9	-	24.1	0	62.8	65.5	55.9	0	67.7	67.7	70	N	-	-	43.6	Y	N	N	N			
R2605	11	38.5	A1-9	-	25.7	0	62.6	65.2	56.2	0	67.5	67.5	70	N	-	-	41.8	Y	N	N	N			
R2605	12	41.2	A1-9	-	27.4	0	62.5	64.9	56.7	0	67.3	67.3	70	N	-	-	39.9	Y	N	N	N			
R2605	13	43.9	A1-9	-	29.1	0	62.4	64.7	56.8	0	67.1	67.1	70	N	-	-	38.0	Y	N	N	N			
R2605	14	46.6	A1-9	-	31	0	62.2	64.4	57.1	0	66.9	66.9	70	N	-	-	35.9	Y	N	N	N			
R2605	15	49.3	A1-9	-	33.3	0	62.1	64.2	57.6	0	66.8	66.8	70	N	-	-	33.5	Y	N	N	N			
R2605	16	52	A1-9	-	36.4	0	61.9	64	58	0	66.7	66.7	70	N	-	-	30.3	Y	N	N	N			
R2605	17	54.7	A1-9	-	40.7	0	61.8	63.9	58.3	0	66.6	66.7	70	N	-	-	26.0	Y	N	N	N			
R2605	18	57.4	A1-9	-	43.8	0	61.7	63.7	58.6	0	66.6	66.6	70	N	-	-	22.8	Y	N	N	N			
R2605	19	60.1	A1-9	-	45.2	0	61.5	63.5	58.7	0	66.5	66.5	70	N	-	-	21.3	Y	N	N	N			
R2605	20	62.8	A1-9	-	45.6	0	61.4	63.4	59	0	66.4	66.4	70	N	-	-	20.8	Y	N	N	N			
R2606	1	12.5	A1-9	-	7.9	0	35.1	61.8	67.2	46.5	0	68.3	68.3	70	N	-	-	59.7	Y	N	N	N		
R2606	2	15.2	A1-9	-	7.8	0	35.5	61.7	67	47	0	68.2	68.2	70	N	-	-	59.3	Y	N	N	N		
R2606	3	17.9	A1-9	-	8.1	0	36	61.7	66.8	47.4	0	68	68.0	70	N	-	-	58.3	Y	N	N	N		
R2606	4	20.6	A1-9	-	8.4	0	36.4	61.7	66.6	48	0	67.8	67.8	70	N	-	-	58	Y	N	N	N		
R2606	5	23.3	A1-9	-	8.9	0	37	61.6	66.3	48.4	0	67.6	67.6	70	N	-	-	58.2	Y	N	N	N		
R2606	6	26	A1-9	-	9.4	0	37.6	61.7	66	48.9	0	67.4	67.4	70	N	-	-	57.5	Y	N	N	N		
R2606	7	28.7	A1-9	-	10.1	0	38.2	61.6	65.8	49.4	0	67.3	67.3	70	N	-	-	56.8	Y	N	N	N		
R2606	8	31.4	A1-9	-	10.9	0	38.9	61.6	65.5	49.9	0	67.1	67.1	70	N	-	-	55.9	Y	N	N	N		
R2606	9	34.1	A1-9	-	11.8	0	39.6	61.7	65.2	50.4	0	66.9	66.9	70	N									

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required [A] (Y/N)
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) [1]	New Roads [2]					New Roads in 2044 dB(A) [3] [B]	C - A dB(A) [D]	D ≥ 1dB(A)				New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			
							PD	DD	LD	EX	TR												
R2607	6	26	A1-9	-	20.5	0	38.7	65.6	61.9	50.5	0	67.2	67.2	70	N	-	-	46.7	Y	N	N	N	
R2607	7	28.7	A1-9	-	21.7	0	39.3	65.4	61.8	51.1	0	67.1	67.1	70	N	-	-	45.4	Y	N	N	N	
R2607	8	31.4	A1-9	-	23.1	0	39.9	65.4	61.7	51.8	0	67	67.0	70	N	-	-	43.9	Y	N	N	N	
R2607	9	34.1	A1-9	-	24.6	0	40.5	65.2	61.5	52.4	0	66.9	66.9	70	N	-	-	42.3	Y	N	N	N	
R2607	10	36.8	A1-9	-	26.3	0	41	65.1	61.4	53.1	0	66.9	66.9	70	N	-	-	40.6	Y	N	N	N	
R2607	11	39.5	A1-9	-	28.1	0	41.6	65	61.3	53.8	0	66.8	66.8	70	N	-	-	38.7	Y	N	N	N	
R2607	12	42.2	A1-9	-	30	0	42.1	64.9	61.1	54.5	0	66.7	66.7	70	N	-	-	36.7	Y	N	N	N	
R2607	13	44.9	A1-9	-	32.1	0	42.7	64.8	61	55.3	0	66.6	66.6	70	N	-	-	34.5	Y	N	N	N	
R2607	14	47.6	A1-9	-	34.4	0	43.3	64.6	60.9	56.1	0	66.6	66.6	70	N	-	-	32.2	Y	N	N	N	
R2607	15	50.3	A1-9	-	37.2	0	44	64.5	60.8	56.9	0	66.6	66.6	70	N	-	-	29.4	Y	N	N	N	
R2607	16	53	A1-9	-	41.3	0	44.8	64.4	60.7	57.9	0	66.6	66.6	70	N	-	-	25.3	Y	N	N	N	
R2607	17	55.7	A1-9	-	45.4	0	45.8	64.2	60.7	59	0	66.7	66.7	70	N	-	-	21.3	Y	N	N	N	
R2607	18	58.4	A1-9	-	47.1	0	47.1	64.1	60.8	60.3	0	66.9	66.9	70	N	-	-	19.8	Y	N	N	N	
R2607	19	61.1	A1-9	-	47.5	0	48.7	64	61	61.6	0	67.2	67.3	70	N	-	-	19.8	Y	N	N	N	
R2607	20	63.8	A1-9	-	47.7	0	50.7	63.9	61	62.7	0	67.6	67.6	70	N	-	-	19.9	Y	N	N	N	
R2608	1	12.8	A1-9	-	17.3	0	15.3	51.3	46.1	40.8	0	52.7	52.7	70	N	-	-	35.3	Y	N	N	N	
R2608	2	15.5	A1-9	-	17.2	0	16.1	51.3	46.1	40.9	0	52.7	52.7	70	N	-	-	35.4	Y	N	N	N	
R2608	3	18.2	A1-9	-	17.3	0	17	51.3	46.1	41.1	0	52.7	52.7	70	N	-	-	35.3	Y	N	N	N	
R2608	4	20.9	A1-9	-	17.4	0	17.9	51.2	46.1	41.3	0	52.7	52.7	70	N	-	-	35.2	Y	N	N	N	
R2608	5	23.6	A1-9	-	17.4	0	18.9	51.2	46.1	41.4	0	52.7	52.7	70	N	-	-	35.2	Y	N	N	N	
R2608	6	26.3	A1-9	-	17.4	0	19.9	51.2	46.2	41.7	0	52.8	52.8	70	N	-	-	35.3	Y	N	N	N	
R2608	7	29	A1-9	-	17.4	0	21	51.3	46.1	41.9	0	52.8	52.8	70	N	-	-	35.3	Y	N	N	N	
R2608	8	31.7	A1-9	-	17.4	0	22.2	51.4	46.1	42.2	0	52.9	52.9	70	N	-	-	35.4	Y	N	N	N	
R2608	9	34.4	A1-9	-	17.5	0	23.3	51.7	46.1	42.5	0	53.2	53.2	70	N	-	-	35.6	Y	N	N	N	
R2608	10	37.1	A1-9	-	17.4	0	24.5	52.2	46.1	42.9	0	53.5	53.5	70	N	-	-	36.0	Y	N	N	N	
R2608	11	39.8	A1-9	-	17.5	0	25.9	52.3	46.1	43.3	0	53.7	53.7	70	N	-	-	36.1	Y	N	N	N	
R2608	12	42.5	A1-9	-	17.5	0	27.3	52.4	46	43.7	0	53.7	53.7	70	N	-	-	36.1	Y	N	N	N	
R2608	13	45.2	A1-9	-	17.5	0	28.8	52.4	46	44.2	0	53.8	53.8	70	N	-	-	36.2	Y	N	N	N	
R2608	14	47.9	A1-9	-	17.5	0	30.6	52.4	46	44.8	0	53.9	53.9	70	N	-	-	36.3	Y	N	N	N	
R2608	15	50.6	A1-9	-	17.5	0	32.6	52.3	45.9	45.4	0	53.9	53.9	70	N	-	-	36.3	Y	N	N	N	
R2608	16	53.3	A1-9	-	17.5	0	35.2	52.2	46	46.2	0	54	54.0	70	N	-	-	36.4	Y	N	N	N	
R2608	17	56	A1-9	-	17.5	0	38.1	52.2	46	47.2	0	54.2	54.2	70	N	-	-	36.6	Y	N	N	N	
R2608	18	58.7	A1-9	-	18.1	0	40.8	52.2	46	48.3	0	54.5	54.5	70	N	-	-	36.3	Y	N	N	N	
R2608	19	61.4	A1-9	-	19.6	0	41.5	52.3	46.1	49.6	0	55	55.0	70	N	-	-	35.4	Y	N	N	N	
R2608	20	64.1	A1-9	-	21.9	0	42	52.5	46.1	51.1	0	55.6	55.6	70	N	-	-	33.7	Y	N	N	N	
R2609	1	12.8	A1-9	-	11.5	0	0	60.5	20.2	47.5	0	60.7	60.7	70	N	-	-	48.9	Y	N	N	N	
R2609	2	15.5	A1-9	-	11.5	0	0	60.4	20.2	47.7	0	60.7	60.7	70	N	-	-	48.9	Y	N	N	N	
R2609	3	18.2	A1-9	-	11.5	0	0	60.4	20.2	47.9	0	60.6	60.6	70	N	-	-	48.8	Y	N	N	N	
R2609	4	20.9	A1-9	-	11.5	0	0	60.4	20.2	48	0	60.6	60.6	70	N	-	-	48.8	Y	N	N	N	
R2609	5	23.6	A1-9	-	11.6	0	0	60.4	20.2	48.2	0	60.7	60.7	70	N	-	-	48.8	Y	N	N	N	
R2609	6	26.3	A1-9	-	11.6	0	0	60.3	20.1	48.3	0	60.6	60.6	70	N	-	-	48.7	Y	N	N	N	
R2609	7	29	A1-9	-	11.6	0	0	60.3	20.1	48.4	0	60.6	60.6	70	N	-	-	48.7	Y	N	N	N	
R2609	8	31.7	A1-9	-	11.6	0	0	60.3	20.1	48.5	0	60.6	60.6	70	N	-	-	48.7	Y	N	N	N	
R2609	9	34.4	A1-9	-	11.6	0	0	60.3	20	48.7	0	60.6	60.6	70	N	-	-	48.7	Y	N	N	N	
R2609	10	37.1	A1-9	-	11.7	0	0	60.3	20	48.8	0	60.6	60.6	70	N	-	-	48.6	Y	N	N	N	
R2609	11	39.8	A1-9	-	11.7	0	0	60.3	19.9	49	0	60.6	60.6	70	N	-	-	48.6	Y	N	N	N	
R2609	12	42.5	A1-9	-	11.7	0	0	60.4	19.9	49.1	0	60.7	60.7	70	N	-	-	48.7	Y	N	N	N	
R2609	13	45.2	A1-9	-	11.7	0	0	60.3	19.8	49.3	0	60.6	60.6	70	N	-	-	48.6	Y	N	N	N	
R2609	14	47.9	A1-9	-	11.7	0	0	60.2	19.8	49.5	0	60.6	60.6	70	N	-	-	48.6	Y	N	N	N	
R2609	15	50.6	A1-9	-	11.7	0	0	60.2	19.7	49.7	0	60.6	60.6	70	N	-	-	48.6	Y	N	N	N	
R2609	16	53.3	A1-9	-	11.8	0	0	60.1	19.6	49.8	0	60.5	60.5	70	N	-	-	48.4	Y	N	N	N	
R2609	17	56	A1-9	-	12.9	0	0	60	19.5	50.1	0	60.4	60.4	70	N	-	-	47.3	Y	N	N	N	
R2609	18	58.7	A1-9	-	14.6	0	0	59.9	19.5	50.4	0	60.4	60.4	70	N	-	-	45.7	Y	N	N	N	
R2609	19	61.4	A1-9	-	16.5	0	0	59.9	19.5	50.5	0	60.4	60.4	70	N	-	-	43.8	Y	N	N	N	
R2609	20	64.1	A1-9	-	19	0	0	59.8	19.4	50.9	0	60.4	60.4	70	N	-	-	41.3	Y	N	N	N	
R2610	1	12.5	A1-9	-	18.3	0	13.4	66.5	56.5	47.4	0	66.9	66.9	70	N	-	-	48.5	Y	N	N	N	
R2610	2	15.2	A1-9	-	18.3	0	14.2	66.4	56.5	47.8	0	66.9	66.9	70	N	-	-	48.5	Y	N	N	N	
R2610	3	17.9	A1-9	-	18.3	0	15.1	66.3	56.5	48.2	0	66.8	66.8	70	N	-	-	48.4	Y	N	N	N	
R2610	4	20.6	A1-9	-	18.4	0	16.2	66.1	56.5	48.7	0	66.7	66.7	70	N	-	-	48.2	Y	N	N	N	
R2610	5	23.3	A1-9	-	18.8	0	17.3	66	56.4	49.3	0	66.5	66.5	70	N	-	-	47.6	Y	N	N	N	
R2610	6	26	A1-9	-	19.7	0	18.5	65.8	56.5	49.9	0	66.4	66.4	70	N	-	-	46.7	Y	N	N	N	
R2610	7	28.7	A1-9	-	20.9	0	19.7	65.7	56.5	50.5	0	66.3	66.3	70	N	-	-	45.4	Y	N	N	N	
R2610	8	31.4	A1-9	-	22.3	0	21.1	65.5	56.4	51.2	0	66.1	66.1	70	N	-	-	43.8	Y	N	N	N	
R2610	9	34.1	A1-9	-	23.9	0	22.6	65.3	56.4	51.9	0	66	66.0	70	N	-	-	42.1	Y	N	N	N	
R2610	10	36.8	A1-9	-	25.7	0	24.2	65.2	56.3	52.7	0	65.9	65.9	70	N	-	-	40.2	Y	N	N	N	
R2610	11	39.5	A1-9	-	27.7	0	26	65	56.3	53.5	0	65.8	65.8	70	N	-	-	38.1	Y	N	N	N	
R2610	12	42.2	A1-9	-	29.9	0	27.9	64.8	56.2	54.4	0	65.7	65.7	70	N	-	-	35.8	Y	N	N	N	
R2610	13	44.9	A1-9	-	32.1	0	29.9	64.6	56.3	55.2	0	65.6	65.7	70	N	-	-	33.6	Y	N	N	N	
R2610	14	47.6	A1-9	-	34.7	0	32.3	64.5	56.2	56.1	0	65.6	65.6	70	N	-	-	30.9	Y	N	N	N	
R2610	15	50.3	A1-9	-	38.2	0	35.4	64.4	56.2	57	0	65.6	65.6	70	N	-	-	27.4	Y	N	N	N	
R2610	16	53	A1-9	-	43.3	0	39.5	64.2	56.4	58	0	65.7	65.7	70	N	-	-	22.4	Y				

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>					New Roads in 2044 dB(A) <sup>[3]</sup>	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	C - A dB(A)	D ≥ 1dB(A)	New Road Contribution dB(A)	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
							PD	DD	LD	EX	TR										New Road Contribution dB(A)	
R2611	14	46.6	A1-9	-	42.3	0	62.2	67.5	59.2	43.1	0	69.1	69.1	70	N	-	-	26.8	Y	N	N	N
R2611	15	49.3	A1-9	-	43.9	0	62.4	67.3	59.2	43.6	0	69	69.0	70	N	-	-	25.1	Y	N	N	N
R2611	16	52	A1-9	-	45.1	0	62.5	67.1	59.2	44.3	0	68.9	69.0	70	N	-	-	23.9	Y	N	N	N
R2611	17	54.7	A1-9	-	45.6	0	62.5	67	59.3	45.3	0	68.8	68.9	70	N	-	-	23.3	Y	N	N	N
R2611	18	57.4	A1-9	-	45.9	0	62.5	66.8	59.4	46.1	0	68.7	68.8	70	N	-	-	22.9	Y	N	N	N
R2611	19	60.1	A1-9	-	46.1	0	62.5	66.6	59.6	46.8	0	68.6	68.7	70	N	-	-	22.6	Y	N	N	N
R2611	20	62.8	A1-9	-	46.1	0	62.4	66.4	59.7	47.3	0	68.5	68.6	70	N	-	-	22.5	Y	N	N	N
R2661	1	27	A2-5	-	0	0	0	62.3	52.3	0	0	62.7	62.7	70	N	-	-	59.7	Y	N	N	N
R2661	2	30	A2-5	-	0	0	0	65.7	52.7	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
R2661	3	33	A2-5	-	0	0	0	67.1	52.7	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
R2661	4	36	A2-5	-	0	0	0	67.3	52.8	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
R2661	5	39	A2-5	-	0	0	0	67.3	52.8	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
R2661	6	42	A2-5	-	0	0	0	67.2	52.9	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
R2661	7	45	A2-5	-	0	0	0	67.1	52.9	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
R2661	8	48	A2-5	-	0	0	0	67	52.9	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N
R2661	9	51	A2-5	-	0	0	0	66.9	52.9	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
R2661	10	54	A2-5	-	0	0	0	66.8	52.9	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
R2661	11	57	A2-5	-	0	0	0	66.6	53	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
R2661	12	60	A2-5	-	0	0	0	66.5	53	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
R2661	13	63	A2-5	-	0	0	0	66.4	53	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
R2661	14	66	A2-5	-	0	0	0	66.2	52.9	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
R2661	15	69	A2-5	-	0	0	0	66.1	52.9	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
R2661	16	72	A2-5	-	0	0	0	65.9	52.9	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
R2661	17	75	A2-5	-	0	0	0	65.8	52.9	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
R2661	18	78	A2-5	-	0	0	0	65.6	52.9	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
R2661	19	81	A2-5	-	0	0	0	65.5	52.9	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
R2661	20	84	A2-5	-	0	0	0	65.4	52.9	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
R2661	21	87	A2-5	-	0	0	0	65.3	52.8	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
R2661	22	90	A2-5	-	0	0	0	65.1	52.8	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
R2661	23	93	A2-5	-	0	0	0	65	52.8	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
R2661	24	96	A2-5	-	0	0	0	64.9	52.8	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
R2661	25	99	A2-5	-	0	0	0	64.8	52.8	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
R2661	26	102	A2-5	-	0	0	0	64.7	52.7	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
R2661	27	105	A2-5	-	0	0	0	64.6	52.7	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
R2661	28	108	A2-5	-	0	0	0	64.4	52.7	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
R2661	29	111	A2-5	-	0	0	0	64.3	52.6	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N
R2661	30	114	A2-5	-	0	0	0	64.2	52.6	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
R2701	1	13	A2-9	-	10	0	0	50.2	58.6	0	0	59.2	59.2	70	N	-	-	48.8	Y	N	N	N
R2701	2	15.7	A2-9	-	10.1	0	0	50.4	58.5	0	0	59.1	59.1	70	N	-	-	48.6	Y	N	N	N
R2701	3	18.4	A2-9	-	10.1	0	0	50.7	58.4	0	0	59.1	59.1	70	N	-	-	48.6	Y	N	N	N
R2701	4	21.1	A2-9	-	10.1	0	0	50.8	58.3	0	0	59	59.0	70	N	-	-	48.5	Y	N	N	N
R2701	5	23.8	A2-9	-	10.1	0	0	50.9	58.1	0	0	58.9	58.9	70	N	-	-	48.4	Y	N	N	N
R2701	6	26.5	A2-9	-	10.1	0	0	51	58	0	0	58.8	58.8	70	N	-	-	48.3	Y	N	N	N
R2701	7	29.2	A2-9	-	10.1	0	0	51	57.9	0	0	58.7	58.7	70	N	-	-	48.2	Y	N	N	N
R2701	8	31.9	A2-9	-	10.1	0	0	51	57.7	0	0	58.5	58.5	70	N	-	-	48.0	Y	N	N	N
R2701	9	34.6	A2-9	-	10.1	0	0	51	57.5	0	0	58.4	58.4	70	N	-	-	47.9	Y	N	N	N
R2701	10	37.3	A2-9	-	10.1	0	0	50.9	57.3	0	0	58.2	58.2	70	N	-	-	47.7	Y	N	N	N
R2701	11	40	A2-9	-	10.1	0	0	50.9	57.1	0	0	58	58.0	70	N	-	-	47.5	Y	N	N	N
R2701	12	42.7	A2-9	-	10.2	0	0	50.9	56.9	0	0	57.9	57.9	70	N	-	-	47.3	Y	N	N	N
R2701	13	45.4	A2-9	-	10.8	0	0	50.9	56.7	0	0	57.7	57.7	70	N	-	-	46.6	Y	N	N	N
R2701	14	48.1	A2-9	-	11.3	0	0	50.9	56.5	0	0	57.6	57.6	70	N	-	-	46.0	Y	N	N	N
R2701	15	50.8	A2-9	-	11.9	0	0	51	56.4	0	0	57.5	57.5	70	N	-	-	45.7	Y	N	N	N
R2701	16	53.5	A2-9	-	12.4	0	0	51	56.2	0	0	57.3	57.3	70	N	-	-	44.3	Y	N	N	N
R2701	17	56.2	A2-9	-	13.1	0	0	50.9	56	0	0	57.2	57.2	70	N	-	-	43.9	Y	N	N	N
R2701	18	58.9	A2-9	-	13.8	0	0	50.9	55.8	0	0	57	57.0	70	N	-	-	43.0	Y	N	N	N
R2701	19	61.6	A2-9	-	14.4	0	0	51	55.7	0	0	56.9	56.9	70	N	-	-	42.3	Y	N	N	N
R2701	20	64.3	A2-9	-	15.2	0	0	51	55.5	0	0	56.8	56.8	70	N	-	-	41.5	Y	N	N	N
R2702	1	13	A2-9	-	13.7	0	27.7	47.4	63.3	0	0	63.5	63.5	70	N	-	-	49.6	Y	N	N	N
R2702	2	15.7	A2-9	-	13.7	0	28.2	47.8	63.3	0	0	63.4	63.4	70	N	-	-	49.5	Y	N	N	N
R2702	3	18.4	A2-9	-	13.8	0	28.6	48.4	63.2	0	0	63.3	63.3	70	N	-	-	49.3	Y	N	N	N
R2702	4	21.1	A2-9	-	13.8	0	29.1	48.8	63	0	0	63.2	63.2	70	N	-	-	49.2	Y	N	N	N
R2702	5	23.8	A2-9	-	13.8	0	29.6	49	62.8	0	0	63	63.0	70	N	-	-	49.0	Y	N	N	N
R2702	6	26.5	A2-9	-	13.8	0	30.2	49.1	62.6	0	0	62.8	62.8	70	N	-	-	48.8	Y	N	N	N
R2702	7	29.2	A2-9	-	13.8	0	30.7	49.2	62.5	0	0	62.7	62.7	70	N	-	-	48.7	Y	N	N	N
R2702	8	31.9	A2-9	-	13.8	0	31.2	49.2	62.3	0	0	62.5	62.5	70	N	-	-	48.5	Y	N	N	N
R2702	9	34.6	A2-9	-	13.8	0	31.7	49.3	62	0	0	62.3	62.3	70	N	-	-	48.3	Y	N	N	N
R2702	10	37.3	A2-9	-	13.8	0	32.3	49.3	61.9	0	0	62.1	62.1	70	N	-	-	48.1	Y	N	N	N
R2702	11	40	A2-9	-	13.8	0	32.9	49.4	61.7	0	0	62	62.0	70	N	-	-	48.0	Y	N	N	N
R2702	12	42.7	A2-9	-	13.9	0	33.4	49.4	61.5	0	0	61.7	61.7	70	N	-	-	47.6	Y	N	N	N
R2702	13	45.4	A2-9	-	13.9	0	34	49.6	61.3	0	0	61.6	61.6	70	N	-	-	47.5	Y	N	N	N
R2702	14	48.1	A2-9	-	13.9	0	34.5	49.8	61.1	0	0	61.4	61.4	70	N	-	-	47.3	Y	N	N	N
R2702	15	50.8	A2-9	-	13.9	0	35	50.1	61	0	0	61.3	61.3	70	N	-	-	47.2	Y	N	N	N
R2702	16	53.5	A2-9	-	13.9	0	35.6	50.5	60.8	0	0	61.2	61.2	70	N	-	-	47.1	Y	N	N	N
R2702	17	56.2	A2-9	-	13.8	0																

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location		WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A)		Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)
					Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>				New Roads in 2044 dB(A) <sup>[3]</sup> [B]	C - A dB(A)	D ≥ 1dB(A)	New Road Contribution dB(A)					New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria				
								PD	DD	LD	EX											TR			
R2703	12	42.7	A2-9	-	15.5	0	44	51.1	60.6	0	0	61.1	61.1	70	N	-	-	45.5	Y	N	N	N			
R2703	13	45.4	A2-9	-	15.5	0	44.5	52.3	60.4	0	0	61.1	61.1	70	N	-	-	45.5	Y	N	N	N			
R2703	14	48.1	A2-9	-	15.5	0	45.3	53.2	60.2	0	0	61.1	61.1	70	N	-	-	45.5	Y	N	N	N			
R2703	15	50.8	A2-9	-	15.5	0	46	54.1	60	0	0	61.1	61.1	70	N	-	-	45.5	Y	N	N	N			
R2703	16	53.5	A2-9	-	15.5	0	47.2	54.9	59.9	0	0	61.3	61.3	70	N	-	-	45.7	Y	N	N	N			
R2703	17	56.2	A2-9	-	15.4	0	47.8	55.9	59.8	0	0	61.4	61.4	70	N	-	-	45.9	Y	N	N	N			
R2703	18	58.9	A2-9	-	15.5	0	48.6	56.7	59.6	0	0	61.6	61.6	70	N	-	-	46.0	Y	N	N	N			
R2703	19	61.6	A2-9	-	15.4	0	49.6	57.3	59.5	0	0	61.8	61.8	70	N	-	-	46.3	Y	N	N	N			
R2703	20	64.3	A2-9	-	15.6	0	50.3	57.9	59.5	0	0	62.1	62.1	70	N	-	-	46.4	Y	N	N	N			
R2704	1	13	A2-9	-	20.6	0	40.7	44.6	56.6	0	0	57	57.0	70	N	-	-	36.4	Y	N	N	N			
R2704	2	15.7	A2-9	-	20.9	0	41.3	45.4	56.6	0	0	57	57.0	70	N	-	-	36.1	Y	N	N	N			
R2704	3	18.4	A2-9	-	21.2	0	41.8	46.5	56.6	0	0	57.1	57.1	70	N	-	-	35.9	Y	N	N	N			
R2704	4	21.1	A2-9	-	21.5	0	42.5	47.6	56.5	0	0	57.2	57.2	70	N	-	-	35.7	Y	N	N	N			
R2704	5	23.8	A2-9	-	21.9	0	43.3	49.1	56.5	0	0	57.4	57.4	70	N	-	-	35.5	Y	N	N	N			
R2704	6	26.5	A2-9	-	22.2	0	44	50.7	56.4	0	0	57.7	57.7	70	N	-	-	35.5	Y	N	N	N			
R2704	7	29.2	A2-9	-	22.6	0	44.7	52.5	56.4	0	0	58.1	58.1	70	N	-	-	35.5	Y	N	N	N			
R2704	8	31.9	A2-9	-	23	0	45.6	53.9	56.4	0	0	58.6	58.6	70	N	-	-	35.6	Y	N	N	N			
R2704	9	34.6	A2-9	-	23.4	0	46.6	55.2	56.3	0	0	59.1	59.1	70	N	-	-	35.7	Y	N	N	N			
R2704	10	37.3	A2-9	-	23.8	0	48	56.2	56.3	0	0	59.6	59.6	70	N	-	-	35.8	Y	N	N	N			
R2704	11	40	A2-9	-	24.2	0	49	57	56.2	0	0	60	60.0	70	N	-	-	35.8	Y	N	N	N			
R2704	12	42.7	A2-9	-	24.6	0	50.4	57.7	56	0	0	60.4	60.4	70	N	-	-	35.8	Y	N	N	N			
R2704	13	45.4	A2-9	-	24.9	0	51.2	58.1	55.9	0	0	60.7	60.7	70	N	-	-	35.8	Y	N	N	N			
R2704	14	48.1	A2-9	-	25.3	0	51.9	58.4	55.8	0	0	60.9	60.9	70	N	-	-	35.6	Y	N	N	N			
R2704	15	50.8	A2-9	-	25.7	0	52.4	58.6	55.7	0	0	61	61.0	70	N	-	-	35.3	Y	N	N	N			
R2704	16	53.5	A2-9	-	26.1	0	52.9	58.8	55.6	0	0	61.2	61.2	70	N	-	-	35.1	Y	N	N	N			
R2704	17	56.2	A2-9	-	26.5	0	53.4	59	55.6	0	0	61.4	61.4	70	N	-	-	34.9	Y	N	N	N			
R2704	18	58.9	A2-9	-	26.9	0	54.4	59.1	55.5	0	0	61.6	61.6	70	N	-	-	34.7	Y	N	N	N			
R2704	19	61.6	A2-9	-	27.4	0	54.6	59.3	55.4	0	0	61.7	61.7	70	N	-	-	34.3	Y	N	N	N			
R2704	20	64.3	A2-9	-	27.9	0	55.4	59.4	55.4	0	0	62	62.0	70	N	-	-	34.1	Y	N	N	N			
R2705	1	13	A2-9	-	31.1	0	64.3	50	48.4	0	0	64.6	64.6	70	N	-	-	33.5	Y	N	N	N			
R2705	2	15.7	A2-9	-	31.6	0	64.4	50.3	49.1	0	0	64.6	64.6	70	N	-	-	33.0	Y	N	N	N			
R2705	3	18.4	A2-9	-	32.1	0	64.3	50.6	50.1	0	0	64.7	64.7	70	N	-	-	32.6	Y	N	N	N			
R2705	4	21.1	A2-9	-	32.7	0	64.3	51.1	51.1	0	0	64.7	64.7	70	N	-	-	32.0	Y	N	N	N			
R2705	5	23.8	A2-9	-	33.2	0	64.3	51.8	51.9	0	0	64.8	64.8	70	N	-	-	31.6	Y	N	N	N			
R2705	6	26.5	A2-9	-	33.8	0	64.3	52.7	52.4	0	0	64.8	64.8	70	N	-	-	31.0	Y	N	N	N			
R2705	7	29.2	A2-9	-	34.4	0	64.3	53.9	52.9	0	0	65	65.0	70	N	-	-	30.6	Y	N	N	N			
R2705	8	31.9	A2-9	-	35.1	0	64.3	54.8	53.2	0	0	65.1	65.1	70	N	-	-	30.0	Y	N	N	N			
R2705	9	34.6	A2-9	-	36	0	64.3	55.7	53.5	0	0	65.2	65.2	70	N	-	-	29.2	Y	N	N	N			
R2705	10	37.3	A2-9	-	36.5	0	64.3	56.4	53.6	0	0	65.2	65.2	70	N	-	-	28.7	Y	N	N	N			
R2705	11	40	A2-9	-	37.2	0	64.2	56.9	53.7	0	0	65.3	65.3	70	N	-	-	28.1	Y	N	N	N			
R2705	12	42.7	A2-9	-	38.1	0	64.2	57.3	53.8	0	0	65.3	65.3	70	N	-	-	27.2	Y	N	N	N			
R2705	13	45.4	A2-9	-	38.9	0	64.1	57.7	53.9	0	0	65.3	65.3	70	N	-	-	26.4	Y	N	N	N			
R2705	14	48.1	A2-9	-	39.5	0	64.1	57.9	53.9	0	0	65.3	65.3	70	N	-	-	25.8	Y	N	N	N			
R2705	15	50.8	A2-9	-	40.1	0	64	58.1	54	0	0	65.3	65.4	70	N	-	-	25.3	Y	N	N	N			
R2705	16	53.5	A2-9	-	40.6	0	64	58.2	54	0	0	65.4	65.4	70	N	-	-	24.8	Y	N	N	N			
R2705	17	56.2	A2-9	-	40.9	0	64	58.3	54	0	0	65.4	65.4	70	N	-	-	24.5	Y	N	N	N			
R2705	18	58.9	A2-9	-	41.3	0	64	58.4	54	0	0	65.4	65.4	70	N	-	-	24.1	Y	N	N	N			
R2705	19	61.6	A2-9	-	41.6	0	64	58.5	54	0	0	65.4	65.4	70	N	-	-	23.8	Y	N	N	N			
R2705	20	64.3	A2-9	-	41.9	0	64	58.6	54.1	0	0	65.4	65.5	70	N	-	-	23.6	Y	N	N	N			
R2706	1	13	A2-9	-	27.2	0	66.9	43.5	51.1	0	0	67	67.0	70	N	-	-	39.8	Y	N	N	N			
R2706	2	15.7	A2-9	-	27.7	0	66.9	43.6	51.3	0	0	67.1	67.1	70	N	-	-	39.4	Y	N	N	N			
R2706	3	18.4	A2-9	-	28.2	0	67.2	43.7	51.5	0	0	67.4	67.4	70	N	-	-	39.2	Y	N	N	N			
R2706	4	21.1	A2-9	-	28.7	0	67.5	43.9	51.7	0	0	67.7	67.7	70	N	-	-	39.0	Y	N	N	N			
R2706	5	23.8	A2-9	-	29.3	0	67.7	44.1	51.9	0	0	67.9	67.9	70	N	-	-	38.6	Y	N	N	N			
R2706	6	26.5	A2-9	-	29.9	0	67.8	44.4	52	0	0	67.9	67.9	70	N	-	-	38.0	Y	N	N	N			
R2706	7	29.2	A2-9	-	30.5	0	67.8	44.8	52.1	0	0	68	68.0	70	N	-	-	37.5	Y	N	N	N			
R2706	8	31.9	A2-9	-	31.1	0	67.8	45.2	52.3	0	0	67.9	67.9	70	N	-	-	36.8	Y	N	N	N			
R2706	9	34.6	A2-9	-	31.8	0	67.8	45.7	52.4	0	0	67.9	67.9	70	N	-	-	36.1	Y	N	N	N			
R2706	10	37.3	A2-9	-	32.5	0	67.7	46.1	52.5	0	0	67.9	67.9	70	N	-	-	35.4	Y	N	N	N			
R2706	11	40	A2-9	-	33.2	0	67.7	46.4	52.5	0	0	67.8	67.8	70	N	-	-	34.6	Y	N	N	N			
R2706	12	42.7	A2-9	-	34	0	67.6	46.8	52.6	0	0	67.8	67.8	70	N	-	-	33.8	Y	N	N	N			
R2706	13	45.4	A2-9	-	34.8	0	67.6	47.2	52.6	0	0	67.8	67.8	70	N	-	-	33.0	Y	N	N	N			
R2706	14	48.1	A2-9	-	35.8	0	67.5	47.6	52.7	0	0	67.7	67.7	70	N	-	-	31.9	Y	N	N	N			
R2706	15	50.8	A2-9	-	36.8	0	67.4	47.8	52.7	0	0	67.6	67.6	70	N	-	-	30.8	Y	N	N	N			
R2706	16	53.5	A2-9	-	37.9	0	67.4	48	52.8	0	0	67.6	67.6	70	N	-	-	29.7	Y	N	N	N			
R2706	17	56.2	A2-9	-	39.1	0	67.3	48.2	52.8	0	0	67.5	67.5	70	N	-	-	28.4	Y	N	N	N			
R2706	18	58.9	A2-9	-	40.1	0	67.2	48.4	52.8	0	0	67.4	67.4	70	N	-	-	27.3	Y	N	N	N			
R2706	19	61.6	A2-9	-	41.2	0	67.2	48.6	52.8	0	0	67.4	67.4	70	N	-	-	26.2	Y	N	N	N			
R2706	20	64.3	A2-9	-	41.9	0	67.1	48.8	52.8	0	0	67.3	67.3	70	N	-	-	25.4	Y	N	N	N			
R2707	1	13	A2-9	-	10.4	0	53.7	31.5	40.7	0	0	54	54.0	70	N	-	-	43.2	Y	N	N	N			
R2707	2	15.7	A2-9	-	11.1	0	55.3	31.7	41.2	0	0	55.5	55.5	70	N	-	-	44.1	Y	N	N	N			
R2707	3	18.4	A2-9	-	11.8	0	58.3	31.9	41.9	0	0	58.4	58.4												





Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>				New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria			
							PD	DD	LD	EX										TR		
R2745	8	38.4	A3-6	-	0	0	0	63.5	64.9	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
R2745	9	41.1	A3-6	-	0	0	0	63.3	64.6	0	0	67	67.0	70	N	-	-	64.0	Y	N	N	N
R2745	10	43.8	A3-6	-	0	0	0	63.1	64.3	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N	N
R2745	11	46.5	A3-6	-	0	0	0	62.9	64	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
R2745	12	49.2	A3-6	-	0	0	0	62.7	63.7	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
R2745	13	51.9	A3-6	-	0	0	0	62.5	63.4	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
R2745	14	54.6	A3-6	-	0	0	0	62.3	63.2	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
R2745	15	57.3	A3-6	-	0	0	0	62.2	62.9	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
R2745	16	60	A3-6	-	0	0	0	62	62.7	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
R2745	17	62.7	A3-6	-	0	0	0	61.8	62.4	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
R2745	18	65.4	A3-6	-	0	0	0	61.7	62.2	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
R2745	19	68.1	A3-6	-	0	0	0	61.5	62	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
R2745	20	70.8	A3-6	-	0	0	0	61.3	61.8	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
R2746	1	19.5	A3-6	-	0	0	12.3	58.8	68.5	0	0	69	69.0	70	N	-	-	66.0	Y	N	N	N
R2746	2	22.2	A3-6	-	0	0	12.3	58.8	68.3	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	N
R2746	3	24.9	A3-6	-	0	0	12.3	58.8	68	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N
R2746	4	27.6	A3-6	-	0	0	12.4	58.8	67.4	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
R2746	5	30.3	A3-6	-	0	0	12.4	58.8	67.4	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
R2746	6	33	A3-6	-	0	0	12.4	58.7	67	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
R2746	7	35.7	A3-6	-	0	0	12.4	58.7	66.7	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
R2746	8	38.4	A3-6	-	0	0	12.4	58.7	66.4	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
R2746	9	41.1	A3-6	-	0	0	12.4	58.6	66.1	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
R2746	10	43.8	A3-6	-	0	0	12.4	58.6	65.8	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
R2746	11	46.5	A3-6	-	0	0	12.4	58.6	65.5	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N	N
R2746	12	49.2	A3-6	-	0	0	12.4	58.5	65.2	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
R2746	13	51.9	A3-6	-	0	0	12.4	58.5	64.9	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
R2746	14	54.6	A3-6	-	0	0	12.3	58.5	64.7	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
R2746	15	57.3	A3-6	-	0	0	12.3	58.4	64.4	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
R2746	16	60	A3-6	-	0	0	12.3	58.3	64.2	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N	N
R2746	17	62.7	A3-6	-	0	0	12.3	58.3	64	0	0	65	65.0	70	N	-	-	62.0	Y	N	N	N
R2746	18	65.4	A3-6	-	0	0	12.3	58.2	63.8	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
R2746	19	68.1	A3-6	-	0	0	12.3	58.2	63.6	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
R2746	20	70.8	A3-6	-	0	0	12.3	58.1	63.4	0	0	64.5	64.5	70	N	-	-	61.5	Y	N	N	N
R2747	1	19.5	A3-6	-	0	0	8.9	55.9	68.9	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N	N
R2747	2	22.2	A3-6	-	0	0	8.9	55.9	68.6	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	N
R2747	3	24.9	A3-6	-	0	0	8.9	55.9	68.3	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N
R2747	4	27.6	A3-6	-	0	0	8.9	55.9	68	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
R2747	5	30.3	A3-6	-	0	0	8.9	55.9	67.7	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N	N
R2747	6	33	A3-6	-	0	0	8.9	55.9	67.3	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
R2747	7	35.7	A3-6	-	0	0	8.9	55.9	67	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N	N
R2747	8	38.4	A3-6	-	0	0	8.9	55.9	66.6	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
R2747	9	41.1	A3-6	-	0	0	8.9	55.8	66.3	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
R2747	10	43.8	A3-6	-	0	0	8.9	55.9	66	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
R2747	11	46.5	A3-6	-	0	0	8.9	55.8	65.7	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
R2747	12	49.2	A3-6	-	0	0	8.9	55.8	65.4	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
R2747	13	51.9	A3-6	-	0	0	8.9	55.8	65.1	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
R2747	14	54.6	A3-6	-	0	0	8.9	55.8	64.9	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
R2747	15	57.3	A3-6	-	0	0	8.9	55.7	64.6	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
R2747	16	60	A3-6	-	0	0	8.9	55.7	64.4	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N	N
R2747	17	62.7	A3-6	-	0	0	8.9	55.7	64.2	0	0	64.7	64.7	70	N	-	-	61.7	Y	N	N	N
R2747	18	65.4	A3-6	-	0	0	8.9	55.6	64	0	0	64.6	64.6	70	N	-	-	61.6	Y	N	N	N
R2747	19	68.1	A3-6	-	0	0	8.9	55.7	63.8	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N	N
R2747	20	70.8	A3-6	-	0	0	8.8	55.6	63.6	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N	N
R2761	1	29.5	B2-10	-	0	0	0	35.3	29.6	0	0	36.3	36.3	70	N	-	-	33.3	Y	N	N	N
R2761	2	32.5	B2-10	-	0	0	0	35.3	29.5	0	0	36.4	36.4	70	N	-	-	33.4	Y	N	N	N
R2761	3	35.5	B2-10	-	0	0	0	35.4	29.5	0	0	36.4	36.4	70	N	-	-	33.4	Y	N	N	N
R2761	4	38.5	B2-10	-	0	0	0	35.3	29.4	0	0	36.3	36.3	70	N	-	-	33.3	Y	N	N	N
R2761	5	41.5	B2-10	-	0	0	0	35.3	29.3	0	0	36.3	36.3	70	N	-	-	33.3	Y	N	N	N
R2761	6	44.5	B2-10	-	0	0	0	35.3	29.3	0	0	36.2	36.2	70	N	-	-	33.2	Y	N	N	N
R2761	7	47.5	B2-10	-	0	0	0	35.2	29.2	0	0	36.2	36.2	70	N	-	-	33.2	Y	N	N	N
R2761	8	50.5	B2-10	-	0	0	0	35.2	29.1	0	0	36.2	36.2	70	N	-	-	33.2	Y	N	N	N
R2761	9	53.5	B2-10	-	0	0	0	35.1	29	0	0	36.1	36.1	70	N	-	-	33.1	Y	N	N	N
R2761	10	56.5	B2-10	-	0	0	0	35.1	28.9	0	0	36	36.0	70	N	-	-	33.0	Y	N	N	N
R2761	11	59.5	B2-10	-	0	0	0	35	28.9	0	0	36	36.0	70	N	-	-	33.0	Y	N	N	N
R2761	12	62.5	B2-10	-	0	0	0	35.4	29.5	0	0	36.4	36.4	70	N	-	-	33.4	Y	N	N	N
R2761	13	65.5	B2-10	-	0	0	0	35.3	30.7	0	0	37.4	37.4	70	N	-	-	34.4	Y	N	N	N
R2761	14	68.5	B2-10	-	0	0	0	35.8	32.7	0	0	39.9	39.9	70	N	-	-	36.9	Y	N	N	N
R2761	15	71.5	B2-10	-	0	0	0	50.1	34.9	0	0	50.3	50.3	70	N	-	-	47.3	Y	N	N	N
R2761	16	74.5	B2-10	-	0	0	0	53.9	37.5	0	0	54	54.0	70	N	-	-	51.0	Y	N	N	N
R2761	17	77.5	B2-10	-	0	0	0	53.9	40.8	0	0	54.1	54.1	70	N	-	-	51.1	Y	N	N	N
R2761	18	80.5	B2-10	-	0	0	0	54	45.1	0	0	54.5	54.5	70	N	-	-	51.5	Y	N	N	N
R2761	19	83.5	B2-10	-	0	0	0	54.1	47.9	0	0	55.1	55.1	70	N	-	-	52.1	Y	N	N	N
R2761	20	86.5	B2-10	-	0	0	0	54.2	49.4	0	0	55.4	55.4	70	N	-	-	52.4	Y	N	N	N

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(4)</sup> (Y/N)		
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)							Exceedance C > Criteria (Y/N)	New Road Contribution dB(A) [E]
ID	Floor	Floor Level (mPD)	[A]			PD	DD	LD	EX	TR												
R2762	13	65.5	B2-10	-	46.6	0	0	62.7	32.1	62.2	0	65.4	65.5	70	N	-	-	18.9	Y	N	N	N
R2762	14	68.5	B2-10	-	47.6	0	0	62.6	32.2	62.9	0	65.8	65.8	70	N	-	-	18.2	Y	N	N	N
R2762	15	71.5	B2-10	-	48.1	0	0	62.6	32.3	63.5	0	66.1	66.1	70	N	-	-	18.0	Y	N	N	N
R2762	16	74.5	B2-10	-	48.6	0	0	62.6	32.5	63.9	0	66.3	66.4	70	N	-	-	17.8	Y	N	N	N
R2762	17	77.5	B2-10	-	48.8	0	0	62.6	32.9	64.3	0	66.5	66.6	70	N	-	-	17.8	Y	N	N	N
R2762	18	80.5	B2-10	-	48.8	0	0	62.5	33.3	64.7	0	66.7	66.8	70	N	-	-	18.0	Y	N	N	N
R2762	19	83.5	B2-10	-	48.9	0	0	62.5	33.8	65	0	66.9	67.0	70	N	-	-	18.1	Y	N	N	N
R2762	20	86.5	B2-10	-	49.1	0	0	62.5	34.4	65.3	0	67.2	67.2	70	N	-	-	18.1	Y	N	N	N
R2763	1	29.5	B2-10	-	49.8	0	24.9	55.7	0	59.4	0	60.9	61.3	70	N	-	-	11.5	Y	N	N	N
R2763	2	32.5	B2-10	-	51.4	0	25.7	57.5	0	59.9	0	61.9	62.2	70	N	-	-	10.8	Y	N	N	N
R2763	3	35.5	B2-10	-	52.1	0	26.4	59	0	60.3	0	62.7	63.1	70	N	-	-	11.0	Y	N	N	N
R2763	4	38.5	B2-10	-	53	0	27.2	59.9	0	60.9	0	63.4	63.8	70	N	-	-	10.8	Y	N	N	N
R2763	5	41.5	B2-10	-	53.6	0	28.1	60.7	0	61.3	0	64	64.4	70	N	-	-	10.8	Y	N	N	N
R2763	6	44.5	B2-10	-	54.1	0	29.1	61	0	61.8	0	64.4	64.8	70	N	-	-	10.7	Y	N	N	N
R2763	7	47.5	B2-10	-	54.4	0	30.4	61.1	0	62.3	0	64.8	65.1	70	N	-	-	10.7	Y	N	N	N
R2763	8	50.5	B2-10	-	54.6	0	31.8	61.2	0	62.7	0	65	65.4	70	N	-	-	10.8	Y	N	N	N
R2763	9	53.5	B2-10	-	54.8	0	33.1	61.2	0	63.2	0	65.3	65.7	70	N	-	-	10.9	Y	N	N	N
R2763	10	56.5	B2-10	-	54.9	0	33.9	61.1	0	63.7	0	65.6	66.0	70	N	-	-	11.1	Y	N	N	N
R2763	11	59.5	B2-10	-	55.2	0	34.5	61.2	0	64.1	0	65.9	66.3	70	N	-	-	11.1	Y	N	N	N
R2763	12	62.5	B2-10	-	55.4	0	35.1	61.2	0	64.7	0	66.3	66.6	70	N	-	-	11.2	Y	N	N	N
R2763	13	65.5	B2-10	-	55.6	0	35.8	61.3	0	65.2	0	66.7	67.0	70	N	-	-	11.4	Y	N	N	N
R2763	14	68.5	B2-10	-	55.7	0	36.4	61.4	0	65.8	0	67.1	67.4	70	N	-	-	11.7	Y	N	N	N
R2763	15	71.5	B2-10	-	55.8	0	37.2	61.4	0	66.3	0	67.5	67.8	70	N	-	-	12.0	Y	N	N	N
R2763	16	74.5	B2-10	-	55.9	0	38	61.4	0	66.7	0	67.8	68.1	70	N	-	-	12.2	Y	N	N	N
R2763	17	77.5	B2-10	-	56	0	39	61.4	0	67.2	0	68.2	68.5	70	N	-	-	12.5	Y	N	N	N
R2763	18	80.5	B2-10	-	56.1	0	40	61.3	0	67.6	0	68.5	68.8	70	N	-	-	12.7	Y	N	N	N
R2763	19	83.5	B2-10	-	56.2	0	40.8	61.3	0	68.2	0	69	69.2	70	N	-	-	13.0	Y	N	N	N
R2763	20	86.5	B2-10	-	56.3	0	41.1	61.3	0	68.7	0	69.4	69.6	70	N	-	-	13.3	Y	N	N	N
R2764	1	29.5	B2-10	-	48.7	0	20	58.2	0	58.6	0	61.4	61.7	70	N	-	-	13.0	Y	N	N	N
R2764	2	32.5	B2-10	-	49.8	0	21.5	58.5	0	59.1	0	61.8	62.1	70	N	-	-	12.3	Y	N	N	N
R2764	3	35.5	B2-10	-	50.6	0	23.2	58.7	0	59.5	0	62.1	62.4	70	N	-	-	11.8	Y	N	N	N
R2764	4	38.5	B2-10	-	51.2	0	25	59	0	59.9	0	62.5	62.8	70	N	-	-	11.6	Y	N	N	N
R2764	5	41.5	B2-10	-	51.6	0	27	59.2	0	60.2	0	62.8	63.1	70	N	-	-	11.5	Y	N	N	N
R2764	6	44.5	B2-10	-	51.9	0	29.2	59.3	0	60.6	0	63	63.4	70	N	-	-	11.5	Y	N	N	N
R2764	7	47.5	B2-10	-	52.2	0	31.4	59.4	0	61.1	0	63.4	63.7	70	N	-	-	11.5	Y	N	N	N
R2764	8	50.5	B2-10	-	52.4	0	33.8	59.5	0	61.6	0	63.7	64.0	70	N	-	-	11.6	Y	N	N	N
R2764	9	53.5	B2-10	-	52.9	0	35.9	59.6	0	62.3	0	64.1	64.5	70	N	-	-	11.8	Y	N	N	N
R2764	10	56.5	B2-10	-	53	0	37.5	59.8	0	62.7	0	64.5	64.8	70	N	-	-	11.8	Y	N	N	N
R2764	11	59.5	B2-10	-	53.2	0	38.5	59.9	0	63.2	0	64.9	65.2	70	N	-	-	12.0	Y	N	N	N
R2764	12	62.5	B2-10	-	53.4	0	39.3	60	0	63.7	0	65.3	65.5	70	N	-	-	12.1	Y	N	N	N
R2764	13	65.5	B2-10	-	53.5	0	39.9	60.2	0	64.3	0	65.8	66.0	70	N	-	-	12.5	Y	N	N	N
R2764	14	68.5	B2-10	-	53.7	0	40.5	60.2	0	65	0	66.3	66.5	70	N	-	-	12.8	Y	N	N	N
R2764	15	71.5	B2-10	-	53.8	0	41.1	60.3	0	65.6	0	66.7	67.0	70	N	-	-	13.2	Y	N	N	N
R2764	16	74.5	B2-10	-	53.9	0	41.8	60.3	0	66.1	0	67.1	67.3	70	N	-	-	13.4	Y	N	N	N
R2764	17	77.5	B2-10	-	54	0	42.5	60.3	0	66.6	0	67.5	67.7	70	N	-	-	13.7	Y	N	N	N
R2764	18	80.5	B2-10	-	54.1	0	43.1	60.3	0	67	0	67.8	68.0	70	N	-	-	13.9	Y	N	N	N
R2764	19	83.5	B2-10	-	54.2	0	43.5	60.3	0	67.5	0	68.2	68.4	70	N	-	-	14.2	Y	N	N	N
R2764	20	86.5	B2-10	-	54.4	0	43.6	60.3	0	68	0	68.7	68.8	70	N	-	-	14.4	Y	N	N	N
R2781	1	10	D1-7	-	28.8	0	54.4	0	64.8	0	0	65.2	65.2	70	N	-	-	36.4	Y	N	N	N
R2781	2	13	D1-7	-	32.5	0	55.4	0	64.7	0	0	65.2	65.2	70	N	-	-	32.7	Y	N	N	N
R2781	3	16	D1-7	-	36.1	0	56.5	0	64.5	0	0	65.1	65.1	70	N	-	-	29.0	Y	N	N	N
R2781	4	19	D1-7	-	37.1	0	57.2	0	64.2	0	0	65	65.0	70	N	-	-	27.9	Y	N	N	N
R2781	5	22	D1-7	-	37.5	0	57.6	0	64	0	0	64.9	64.9	70	N	-	-	27.4	Y	N	N	N
R2781	6	25	D1-7	-	37.6	0	57.9	0	63.7	0	0	64.7	64.7	70	N	-	-	27.1	Y	N	N	N
R2781	7	28	D1-7	-	37.6	0	58.2	0	63.4	0	0	64.5	64.5	70	N	-	-	26.9	Y	N	N	N
R2781	8	31	D1-7	-	37.6	0	58.4	0	63.1	0	0	64.4	64.4	70	N	-	-	26.8	Y	N	N	N
R2781	9	34	D1-7	-	37.6	0	58.6	0	62.9	0	0	64.3	64.3	70	N	-	-	26.7	Y	N	N	N
R2781	10	37	D1-7	-	37.6	0	58.7	0	62.6	0	0	64.1	64.1	70	N	-	-	26.5	Y	N	N	N
R2781	11	40	D1-7	-	37.6	0	58.9	0	62.3	0	0	63.9	64.0	70	N	-	-	26.4	Y	N	N	N
R2781	12	43	D1-7	-	37.6	0	59	0	62.1	0	0	63.8	63.9	70	N	-	-	26.3	Y	N	N	N
R2781	13	46	D1-7	-	37.6	0	59.2	0	61.8	0	0	63.7	63.7	70	N	-	-	26.1	Y	N	N	N
R2781	14	49	D1-7	-	37.5	0	59.3	0	61.6	0	0	63.6	63.6	70	N	-	-	26.1	Y	N	N	N
R2781	15	52	D1-7	-	37.5	0	59.4	0	61.4	0	0	63.5	63.5	70	N	-	-	26.0	Y	N	N	N
R2781	16	55	D1-7	-	37.5	0	59.5	0	61.2	0	0	63.4	63.4	70	N	-	-	25.9	Y	N	N	N
R2781	17	58	D1-7	-	37.4	0	59.6	0	60.9	0	0	63.3	63.4	70	N	-	-	26.0	Y	N	N	N
R2781	18	61	D1-7	-	37.4	0	59.7	0	60.8	0	0	63.3	63.3	70	N	-	-	26.8	Y	N	N	N
R2781	3	16	D1-7	-	37.3	0	59.9	0	60.6	0	0	63.3	63.3	70	N	-	-	26.0	Y	N	N	N
R2781	4	19	D1-7	-	37.3	0	60.1	0	60.4	0	0	63.2	63.3	70	N	-	-	26.0	Y	N	N	N
R2781	5	22	D1-7	-	37.3	0	60.3	0	60.2	0	0	63.3	63.3	70	N	-	-	26.0	Y	N	N	N
R2781	3	16	D1-7	-	37.3	0	60.6	0	60	0	0	63.3	63.3	70	N	-	-	26.0	Y	N	N	N
R2781	4	19	D1-7	-	37.3	0	60.9	0	59.8	0	0	63.4	63.4	70	N	-	-	26.1	Y	N	N	N
R2781	5	22	D1-7	-	37.2	0	61.4	0	59.7	0	0	63.7										

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(A)</sup> (Y/N)
ID	Floor	Floor Level (mPD)		Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>				New Roads in 2044 dB(A) <sup>(3)</sup> [B]												
							PD	DD	LD	EX	TR								C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	
R2782	16	55	D1-7	-	40	0	65	42.4	59.8	0	0	66.2	66.2	70	N	-	-	26.2	Y	N	N		
R2782	17	58	D1-7	-	40.6	0	65.3	42.5	59.7	0	0	66.4	66.4	70	N	-	-	25.8	Y	N	N		
R2782	18	61	D1-7	-	41.2	0	65.7	42.5	59.6	0	0	66.6	66.7	70	N	-	-	25.5	Y	N	N		
R2782	19	64	D1-7	-	41.3	0	66	42.6	59.4	0	0	66.9	66.9	70	N	-	-	25.6	Y	N	N		
R2782	20	67	D1-7	-	41.4	0	66.3	42.7	59.3	0	0	67.1	67.1	70	N	-	-	25.7	Y	N	N		
R2782	21	70	D1-7	-	41.3	0	66.6	42.8	59.1	0	0	67.3	67.3	70	N	-	-	26.0	Y	N	N		
R2782	22	73	D1-7	-	41.3	0	66.8	42.8	59	0	0	67.4	67.5	70	N	-	-	26.2	Y	N	N		
R2782	23	76	D1-7	-	41.3	0	66.9	42.8	58.9	0	0	67.5	67.5	70	N	-	-	26.2	Y	N	N		
R2782	24	79	D1-7	-	41.3	0	66.9	42.9	58.7	0	0	67.6	67.6	70	N	-	-	26.3	Y	N	N		
R2782	25	82	D1-7	-	41.2	0	67	43	58.6	0	0	67.6	67.6	70	N	-	-	26.4	Y	N	N		
R2783	1	10	D1-7	-	31	0	60.3	36.5	46.3	0	0	60.5	60.5	70	N	-	-	29.5	Y	N	N		
R2783	2	13	D1-7	-	34.5	0	62.2	40.1	47.8	0	0	62.4	62.4	70	N	-	-	27.9	Y	N	N		
R2783	3	16	D1-7	-	34.8	0	63.6	45	50	0	0	63.8	63.8	70	N	-	-	29.0	Y	N	N		
R2783	4	19	D1-7	-	34.8	0	64.3	50.5	51.8	0	0	64.7	64.7	70	N	-	-	29.9	Y	N	N		
R2783	5	22	D1-7	-	34.8	0	64.9	52.4	53.7	0	0	65.4	65.4	70	N	-	-	30.6	Y	N	N		
R2783	6	25	D1-7	-	34.8	0	65.3	52.5	54.6	0	0	65.8	65.8	70	N	-	-	31.0	Y	N	N		
R2783	7	28	D1-7	-	34.9	0	65.6	52.3	55	0	0	66.2	66.2	70	N	-	-	31.3	Y	N	N		
R2783	8	31	D1-7	-	34.9	0	65.9	52	55.3	0	0	66.4	66.4	70	N	-	-	31.5	Y	N	N		
R2783	9	34	D1-7	-	35.1	0	66.1	51.8	55.5	0	0	66.6	66.6	70	N	-	-	31.5	Y	N	N		
R2783	10	37	D1-7	-	35.3	0	66.2	51.7	55.7	0	0	66.7	66.7	70	N	-	-	31.4	Y	N	N		
R2783	11	40	D1-7	-	36.2	0	66.3	51.5	55.8	0	0	66.8	66.8	70	N	-	-	30.6	Y	N	N		
R2783	12	43	D1-7	-	37.7	0	66.4	51.3	56	0	0	66.9	66.9	70	N	-	-	29.2	Y	N	N		
R2783	13	46	D1-7	-	38.3	0	66.5	51.2	56.1	0	0	67	67.0	70	N	-	-	28.7	Y	N	N		
R2783	14	49	D1-7	-	38.5	0	66.7	51.1	56.2	0	0	67.1	67.1	70	N	-	-	28.6	Y	N	N		
R2783	15	52	D1-7	-	38.7	0	66.8	51	56.2	0	0	67.2	67.2	70	N	-	-	28.5	Y	N	N		
R2783	16	55	D1-7	-	39	0	67	50.8	56.2	0	0	67.4	67.4	70	N	-	-	28.4	Y	N	N		
R2783	17	58	D1-7	-	39.8	0	67.2	50.8	56.2	0	0	67.7	67.7	70	N	-	-	27.9	Y	N	N		
R2783	18	61	D1-7	-	40.5	0	67.5	50.6	56	0	0	67.9	67.9	70	N	-	-	27.4	Y	N	N		
R2783	19	64	D1-7	-	40.7	0	67.7	50.5	56	0	0	68.1	68.1	70	N	-	-	27.4	Y	N	N		
R2783	20	67	D1-7	-	40.7	0	67.8	50.4	55.8	0	0	68.2	68.2	70	N	-	-	27.5	Y	N	N		
R2783	21	70	D1-7	-	40.7	0	67.9	50.3	55.8	0	0	68.3	68.3	70	N	-	-	27.6	Y	N	N		
R2783	22	73	D1-7	-	40.7	0	68	50.2	55.7	0	0	68.3	68.3	70	N	-	-	27.6	Y	N	N		
R2783	23	76	D1-7	-	40.7	0	68	50	55.5	0	0	68.4	68.4	70	N	-	-	27.7	Y	N	N		
R2783	24	79	D1-7	-	40.7	0	68.1	50	55.4	0	0	68.4	68.4	70	N	-	-	27.7	Y	N	N		
R2783	25	82	D1-7	-	40.6	0	68.1	49.9	55.4	0	0	68.4	68.4	70	N	-	-	27.8	Y	N	N		
R2821	1	19	D1-11	-	28.6	0	45.1	47	67	0	0	67.1	67.1	70	N	-	-	38.5	Y	N	N		
R2821	2	22	D1-11	-	29.3	0	47.7	46.5	67	0	0	67.1	67.1	70	N	-	-	37.8	Y	N	N		
R2821	3	25	D1-11	-	30	0	51.4	50.6	67	0	0	67.2	67.2	70	N	-	-	37.2	Y	N	N		
R2821	4	28	D1-11	-	30.7	0	55.9	53.9	66.8	0	0	67.4	67.4	70	N	-	-	36.7	Y	N	N		
R2821	5	31	D1-11	-	31.4	0	57.9	53.9	66.7	0	0	67.5	67.5	70	N	-	-	36.1	Y	N	N		
R2821	6	34	D1-11	-	32.2	0	58.3	57.1	66.5	0	0	67.5	67.5	70	N	-	-	35.3	Y	N	N		
R2821	7	37	D1-11	-	33.1	0	58.4	58	66.3	0	0	67.5	67.5	70	N	-	-	34.4	Y	N	N		
R2821	8	40	D1-11	-	34	0	58.4	58.5	66.2	0	0	67.5	67.5	70	N	-	-	33.5	Y	N	N		
R2821	9	43	D1-11	-	35.1	0	58.4	58.8	66.1	0	0	67.4	67.4	70	N	-	-	32.3	Y	N	N		
R2821	10	46	D1-11	-	36.2	0	58.4	59.2	66	0	0	67.4	67.4	70	N	-	-	31.2	Y	N	N		
R2821	11	49	D1-11	-	37.4	0	58.4	59.4	65.8	0	0	67.3	67.3	70	N	-	-	29.9	Y	N	N		
R2821	12	52	D1-11	-	38.2	0	58.5	59.5	65.7	0	0	67.3	67.3	70	N	-	-	29.1	Y	N	N		
R2821	13	55	D1-11	-	39	0	58.5	59.6	65.6	0	0	67.2	67.2	70	N	-	-	28.2	Y	N	N		
R2821	14	58	D1-11	-	39.8	0	58.5	59.6	65.5	0	0	67.1	67.1	70	N	-	-	27.3	Y	N	N		
R2821	15	61	D1-11	-	40.5	0	58.5	59.6	65.4	0	0	67.1	67.1	70	N	-	-	26.6	Y	N	N		
R2821	16	64	D1-11	-	41	0	58.5	59.6	65.3	0	0	67	67.0	70	N	-	-	26.0	Y	N	N		
R2821	17	67	D1-11	-	41.4	0	58.5	59.6	65.2	0	0	66.9	67.0	70	N	-	-	25.6	Y	N	N		
R2821	18	70	D1-11	-	41.9	0	58.4	59.6	65.2	0	0	66.9	67.0	70	N	-	-	25.0	Y	N	N		
R2821	19	73	D1-11	-	42.3	0	58.4	59.6	65.2	0	0	66.9	66.9	70	N	-	-	24.6	Y	N	N		
R2821	20	76	D1-11	-	42.9	0	58.4	59.6	65.1	0	0	66.9	66.9	70	N	-	-	24.0	Y	N	N		
R2822	1	19	D1-11	-	16.7	0	47	49.4	59.7	0	0	60.3	60.3	70	N	-	-	43.5	Y	N	N		
R2822	2	22	D1-11	-	17.1	0	51.3	52.8	59.8	0	0	61.1	61.1	70	N	-	-	43.9	Y	N	N		
R2822	3	25	D1-11	-	17.5	0	58.3	57.9	60.2	0	0	63.7	63.7	70	N	-	-	46.1	Y	N	N		
R2822	4	28	D1-11	-	18	0	60.4	60.9	60.7	0	0	65.4	65.4	70	N	-	-	47.3	Y	N	N		
R2822	5	31	D1-11	-	18.5	0	60.6	62.5	61.7	0	0	66.4	66.4	70	N	-	-	47.8	Y	N	N		
R2822	6	34	D1-11	-	19	0	60.6	63.1	63.1	0	0	67.2	67.2	70	N	-	-	48.1	Y	N	N		
R2822	7	37	D1-11	-	19.4	0	60.7	63.5	64	0	0	67.7	67.7	70	N	-	-	48.3	Y	N	N		
R2822	8	40	D1-11	-	20	0	60.9	63.7	64.3	0	0	68	68.0	70	N	-	-	48.0	Y	N	N		
R2822	9	43	D1-11	-	20.5	0	60.9	63.8	64.7	0	0	68.2	68.2	70	N	-	-	47.7	Y	N	N		
R2822	10	46	D1-11	-	21	0	61	63.8	65.1	0	0	68.4	68.4	70	N	-	-	47.4	Y	N	N		
R2822	11	49	D1-11	-	21.6	0	61	63.8	65.7	0	0	68.7	68.7	70	N	-	-	47.1	Y	N	N		
R2822	12	52	D1-11	-	22.2	0	61	63.8	65.8	0	0	68.8	68.8	70	N	-	-	46.6	Y	N	N		
R2822	13	55	D1-11	-	22.8	0	61	63.9	66.1	0	0	68.9	68.9	70	N	-	-	46.1	Y	N	N		
R2822	14	58	D1-11	-	23.4	0	61	63.8	66.2	0	0	68.9	68.9	70	N	-	-	45.5	Y	N	N		
R2822	15	61	D1-11	-	24.1	0	60.9	63.7	66.2	0	0	68.9	68.9	70	N	-	-	44.8	Y	N	N		
R2822	16	64	D1-11	-	24.8	0	60.9	63.6	66.2	0	0	68.9	68.9	70	N	-	-	44.1	Y	N	N		
R2822	17	67	D1-11	-	25.5	0	60.9	63.6	66.1	0	0	68.8	68.8	70	N	-	-	43.3	Y	N	N		
R2822	18	70	D1-11	-	26.3	0	60.8	63.5	66	0	0	68.7	68.7	70	N	-	-	42.4	Y	N	N		
R2822	19	73	D1-11	-	27	0	60.8	63.4	65.9	0	0	68.6	68.6	70	N	-	-	41.6	Y	N	N		
R2822	20	76	D1-11	-	27.9	0	60.8	63.															

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point				WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance				Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
							PD	DD	LD	EX	TR											
R2823	14	58	D1-11	-	0	0	61.5	68.6	60	0	0	69.9	69.9	70	N	-	-	66.9	Y	N	N	N
R2823	15	61	D1-11	-	0	0	61.4	68.6	60.1	0	0	69.8	69.8	70	N	-	-	66.8	Y	N	N	N
R2823	16	64	D1-11	-	0	0	61.4	68.5	60.2	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	N
R2823	17	67	D1-11	-	0	0	61.3	68.4	60.4	0	0	69.7	69.7	70	N	-	-	66.7	Y	N	N	N
R2823	18	70	D1-11	-	0	0	61.2	68.3	60.4	0	0	69.6	69.6	70	N	-	-	66.6	Y	N	N	N
R2823	19	73	D1-11	-	0	0	61.1	68.1	60.6	0	0	69.5	69.5	70	N	-	-	66.5	Y	N	N	N
R2823	20	76	D1-11	-	0	0	61	68	60.6	0	0	69.4	69.4	70	N	-	-	66.4	Y	N	N	N
R2824	1	19	D1-11	-	0	0	0	58.8	24.5	0	0	58.8	58.8	70	N	-	-	55.8	Y	N	N	N
R2824	2	22	D1-11	-	0	0	0	59.8	26.1	0	0	59.8	59.8	70	N	-	-	56.8	Y	N	N	N
R2824	3	25	D1-11	-	0	0	0	62	27.9	0	0	62	62.0	70	N	-	-	59.0	Y	N	N	N
R2824	4	28	D1-11	-	0	0	0	64	29.7	0	0	64	64.0	70	N	-	-	61.0	Y	N	N	N
R2824	5	31	D1-11	-	0	0	0	65.1	32.2	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
R2824	6	34	D1-11	-	0	0	0	65.9	34	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
R2824	7	37	D1-11	-	0	0	0	66.8	35.7	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
R2824	8	40	D1-11	-	0	0	0	67.6	36.4	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N	N
R2824	9	43	D1-11	-	0	0	0	68.2	36.9	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N	N
R2824	10	46	D1-11	-	0	0	0	68.4	37.1	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	N
R2824	11	49	D1-11	-	0	0	0	68.6	37.2	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N
R2824	12	52	D1-11	-	0	0	0	68.7	37.1	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
R2824	13	55	D1-11	-	0	0	0	68.7	37.1	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
R2824	14	58	D1-11	-	0	0	0	68.7	37.2	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
R2824	15	61	D1-11	-	0	0	0	68.8	37.2	0	0	68.8	68.8	70	N	-	-	65.8	Y	N	N	N
R2824	16	64	D1-11	-	0	0	0	68.7	37.2	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N	N
R2824	17	67	D1-11	-	0	0	0	68.6	37.2	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N	N
R2824	18	70	D1-11	-	0	0	0	68.5	37.2	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N	N
R2824	19	73	D1-11	-	0	0	0	68.4	37.2	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N	N
R2824	20	76	D1-11	-	0	0	0	68.3	37.2	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N	N
R2825	1	21	D1-11	-	16.6	0	28.6	59.7	48.4	0	0	60	60.0	70	N	-	-	43.3	Y	N	N	N
R2825	2	24	D1-11	-	17	0	28.6	60	48.8	0	0	60.3	60.3	70	N	-	-	43.2	Y	N	N	N
R2825	3	27	D1-11	-	17.5	0	28.6	60.3	49.1	0	0	60.6	60.6	70	N	-	-	43.0	Y	N	N	N
R2825	4	30	D1-11	-	18.1	0	28.5	60.5	49.4	0	0	60.8	60.8	70	N	-	-	42.6	Y	N	N	N
R2825	5	33	D1-11	-	18.7	0	28.5	60.7	49.5	0	0	61	61.0	70	N	-	-	42.2	Y	N	N	N
R2825	6	36	D1-11	-	19.3	0	28.5	60.9	49.7	0	0	61.3	61.3	70	N	-	-	41.9	Y	N	N	N
R2825	7	39	D1-11	-	19.9	0	28.5	61.1	49.8	0	0	61.4	61.4	70	N	-	-	41.5	Y	N	N	N
R2825	8	42	D1-11	-	20.4	0	28.5	61.2	49.9	0	0	61.5	61.5	70	N	-	-	41.1	Y	N	N	N
R2825	9	45	D1-11	-	21.1	0	28.4	61.3	50	0	0	61.6	61.6	70	N	-	-	40.5	Y	N	N	N
R2825	10	48	D1-11	-	21.7	0	28.4	61.3	50	0	0	61.6	61.6	70	N	-	-	39.9	Y	N	N	N
R2825	11	51	D1-11	-	22.3	0	28.4	61.3	50	0	0	61.7	61.7	70	N	-	-	39.4	Y	N	N	N
R2825	12	54	D1-11	-	22.9	0	28.4	61.4	50.1	0	0	61.7	61.7	70	N	-	-	38.8	Y	N	N	N
R2825	13	57	D1-11	-	23.6	0	28.3	61.4	50	0	0	61.7	61.7	70	N	-	-	38.1	Y	N	N	N
R2825	14	60	D1-11	-	24.3	0	28.2	61.4	50	0	0	61.7	61.7	70	N	-	-	37.4	Y	N	N	N
R2825	15	63	D1-11	-	25	0	28.2	61.4	50	0	0	61.7	61.7	70	N	-	-	36.7	Y	N	N	N
R2825	16	66	D1-11	-	25.7	0	28.3	61.4	50	0	0	61.7	61.7	70	N	-	-	36.0	Y	N	N	N
R2825	17	69	D1-11	-	26.5	0	28.6	61.3	50	0	0	61.7	61.7	70	N	-	-	35.2	Y	N	N	N
R2825	18	72	D1-11	-	27.2	0	28.9	61.3	50	0	0	61.6	61.6	70	N	-	-	34.4	Y	N	N	N
R2825	19	75	D1-11	-	28.2	0	29.3	61.3	50	0	0	61.6	61.6	70	N	-	-	33.4	Y	N	N	N
R2825	20	78	D1-11	-	29.2	0	29.8	61.3	50	0	0	61.6	61.6	70	N	-	-	32.4	Y	N	N	N
R2826	1	21	D1-11	-	0	0	0	67.5	19.5	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
R2826	2	24	D1-11	-	0	0	0	67.7	20.1	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
R2826	3	27	D1-11	-	0	0	0	67.7	20.8	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
R2826	4	30	D1-11	-	0	0	0	67.7	21.6	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N	N
R2826	5	33	D1-11	-	0	0	0	67.5	22.4	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N	N
R2826	6	36	D1-11	-	0	0	0	67.4	23.3	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N	N
R2826	7	39	D1-11	-	0	0	0	67.2	24.7	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N	N
R2826	8	42	D1-11	-	0	0	0	67.1	25.4	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N	N
R2826	9	45	D1-11	-	0	0	0	66.9	26.7	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N	N
R2826	10	48	D1-11	-	0	0	0	66.8	27.8	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N	N
R2826	11	51	D1-11	-	0	0	0	66.6	28.4	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N	N
R2826	12	54	D1-11	-	0	0	0	66.5	28.9	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N	N
R2826	13	57	D1-11	-	0	0	0	66.4	29	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N	N
R2826	14	60	D1-11	-	0	0	0	66.2	29.3	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N	N
R2826	15	63	D1-11	-	0	0	0	66.1	29.4	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N	N
R2826	16	66	D1-11	-	0	0	0	65.9	29.5	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
R2826	17	69	D1-11	-	0	0	0	65.8	29.7	0	0	65.8	65.8	70	N	-	-	62.				

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point				WITHOUT PROJECT		WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(14)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)						
							PD	DD	LD	EX	TR										
ID	Floor	Floor Level (mPD)	Location	[A]											C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
R2828	2	24	D1-11	-	21.4	0	0	64.3	23.1	0	0	64.3	64.3	70	N	-	-	42.9	Y	N	N
R2828	3	27	D1-11	-	21.4	0	0	64.5	23.9	0	0	64.5	64.5	70	N	-	-	43.1	Y	N	N
R2828	4	30	D1-11	-	21.4	0	0	64.4	24.4	0	0	64.4	64.4	70	N	-	-	43.0	Y	N	N
R2828	5	33	D1-11	-	21.4	0	0	64.4	25.2	0	0	64.4	64.4	70	N	-	-	43.0	Y	N	N
R2828	6	36	D1-11	-	21.4	0	0	64.2	25.8	0	0	64.2	64.2	70	N	-	-	42.8	Y	N	N
R2828	7	39	D1-11	-	21.4	0	0	64.1	26.6	0	0	64.1	64.1	70	N	-	-	42.7	Y	N	N
R2828	8	42	D1-11	-	21.4	0	0	63.9	27.3	0	0	63.9	63.9	70	N	-	-	42.5	Y	N	N
R2828	9	45	D1-11	-	21.4	0	0	63.7	28.1	0	0	63.7	63.7	70	N	-	-	42.3	Y	N	N
R2828	10	48	D1-11	-	21.4	0	0	63.5	28.9	0	0	63.5	63.5	70	N	-	-	42.1	Y	N	N
R2828	11	51	D1-11	-	21.4	0	0	63.3	30	0	0	63.3	63.3	70	N	-	-	41.9	Y	N	N
R2828	12	54	D1-11	-	21.4	0	0	63.1	31.1	0	0	63.1	63.1	70	N	-	-	41.7	Y	N	N
R2828	13	57	D1-11	-	21.4	0	0	63	31.5	0	0	63	63.0	70	N	-	-	41.6	Y	N	N
R2828	14	60	D1-11	-	21.4	0	0	62.8	32.6	0	0	62.8	62.8	70	N	-	-	41.4	Y	N	N
R2828	15	63	D1-11	-	21.6	0	0	62.6	33.5	0	0	62.6	62.6	70	N	-	-	41.0	Y	N	N
R2828	16	66	D1-11	-	21.9	0	0	62.5	34.2	0	0	62.5	62.5	70	N	-	-	40.6	Y	N	N
R2828	17	69	D1-11	-	22.3	0	0	62.3	34.7	0	0	62.3	62.3	70	N	-	-	40.0	Y	N	N
R2828	18	72	D1-11	-	22.9	0	0	62.1	35	0	0	62.1	62.1	70	N	-	-	39.2	Y	N	N
R2828	19	75	D1-11	-	23.6	0	0	62	35.3	0	0	62	62.0	70	N	-	-	38.4	Y	N	N
R2828	20	78	D1-11	-	24.4	0	0	61.8	35.5	0	0	61.8	61.8	70	N	-	-	37.4	Y	N	N
R2829	1	21	D1-11	-	0	0	25.6	68.5	43.1	0	0	68.5	68.5	70	N	-	-	65.5	Y	N	N
R2829	2	24	D1-11	-	0	0	25.6	69	43.6	0	0	69	69.0	70	N	-	-	66.0	Y	N	N
R2829	3	27	D1-11	-	0	0	25.6	69	44	0	0	69	69.0	70	N	-	-	66.0	Y	N	N
R2829	4	30	D1-11	-	0	0	25.6	68.8	44.4	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
R2829	5	33	D1-11	-	0	0	25.6	68.6	44.7	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N
R2829	6	36	D1-11	-	0	0	25.6	68.3	44.9	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N
R2829	7	39	D1-11	-	0	0	25.5	68	45.1	0	0	68	68.0	70	N	-	-	65.0	Y	N	N
R2829	8	42	D1-11	-	0	0	25.5	67.7	45.3	0	0	67.7	67.7	70	N	-	-	64.7	Y	N	N
R2829	9	45	D1-11	-	0	0	25.5	67.4	45.4	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N
R2829	10	48	D1-11	-	0	0	25.5	67.1	45.5	0	0	67.1	67.1	70	N	-	-	64.1	Y	N	N
R2829	11	51	D1-11	-	0	0	25.5	66.8	45.6	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
R2829	12	54	D1-11	-	0	0	25.4	66.6	45.7	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N
R2829	13	57	D1-11	-	0	0	25.5	66.3	45.8	0	0	66.3	66.3	70	N	-	-	63.3	Y	N	N
R2829	14	60	D1-11	-	0	0	25.4	66.1	45.9	0	0	66.1	66.1	70	N	-	-	63.1	Y	N	N
R2829	15	63	D1-11	-	0	0	25.4	65.9	45.9	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N
R2829	16	66	D1-11	-	0	0	25.5	65.6	45.9	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N
R2829	17	69	D1-11	-	0	0	25.5	65.4	45.9	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N
R2829	18	72	D1-11	-	0	0	25.7	65.2	45.9	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N
R2829	19	75	D1-11	-	0	0	25.8	65.1	45.9	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N
R2829	20	78	D1-11	-	0	0	25.9	64.9	45.9	0	0	64.9	64.9	70	N	-	-	61.9	Y	N	N
R2830	1	21	D1-11	-	0	0	0	68.2	23.8	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N
R2830	2	24	D1-11	-	0	0	0	68.9	24.3	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
R2830	3	27	D1-11	-	0	0	0	69	24.9	0	0	69	69.0	70	N	-	-	66.0	Y	N	N
R2830	4	30	D1-11	-	0	0	0	68.9	25.5	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
R2830	5	33	D1-11	-	0	0	0	68.6	26.1	0	0	68.6	68.6	70	N	-	-	65.6	Y	N	N
R2830	6	36	D1-11	-	0	0	0	68.3	26.9	0	0	68.3	68.3	70	N	-	-	65.3	Y	N	N
R2830	7	39	D1-11	-	0	0	0	68.1	27.6	0	0	68.1	68.1	70	N	-	-	65.1	Y	N	N
R2830	8	42	D1-11	-	0	0	0	67.8	28.4	0	0	67.8	67.8	70	N	-	-	64.8	Y	N	N
R2830	9	45	D1-11	-	0	0	0	67.5	29.2	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N
R2830	10	48	D1-11	-	0	0	0	67.2	30.2	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N
R2830	11	51	D1-11	-	0	0	0	67	31.9	0	0	67	67.0	70	N	-	-	64.0	Y	N	N
R2830	12	54	D1-11	-	0	0	0	66.7	32	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
R2830	13	57	D1-11	-	0	0	0	66.4	33.2	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
R2830	14	60	D1-11	-	0	0	0	66.2	34.2	0	0	66.2	66.2	70	N	-	-	63.2	Y	N	N
R2830	15	63	D1-11	-	0	0	0	66	34.9	0	0	66	66.0	70	N	-	-	63.0	Y	N	N
R2830	16	66	D1-11	-	0	0	0	65.7	35.4	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N
R2830	17	69	D1-11	-	0	0	0	65.5	35.8	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N
R2830	18	72	D1-11	-	0	0	0	65.3	36.1	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N
R2830	19	75	D1-11	-	0	0	0	65.1	36.2	0	0	65.2	65.2	70	N	-	-	62.2	Y	N	N
R2830	20	78	D1-11	-	0	0	0	65	36.4	0	0	65	65.0	70	N	-	-	62.0	Y	N	N
R2841	1	17	F1-3	-	0	0	0	43.1	60.3	0	0	60.4	60.4	70	N	-	-	57.4	Y	N	N
R2841	2	21	F1-3	-	0	0	0	45.6	60.4	0	0	60.5	60.5	70	N	-	-	57.5	Y	N	N
R2841	3	25	F1-3	-	0	0	0	49.1	60.4	0	0	60.7	60.7	70	N	-	-	57.7	Y	N	N
R2841	4	29	F1-3	-	0	0	0	52.3	60.5	0	0	61.1	61.1	70	N	-	-	58.1	Y	N	N
R2841	5	33	F1-3	-	0	0	0	54.7	60.8	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N
R2841	6	37	F1-3	-	0	0	0	56.9	61.5	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N
R2841	7	41	F1-3	-	0	0	0	57.8	61.9	0	0	63.3	63.3	70	N	-	-	60.3	Y	N	N
R2841	8	45	F1-3	-	0	0	0	58.3	62.2	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N
R2841	9	49	F1-3	-	0	0	0	58.7	62.5	0	0	64	64.0	70	N	-	-	61.0	Y	N	N
R2841	10	53	F1-3	-	0	0	0	58.9	62.6	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N
R2842	1	17	F1-3	-	0	32.3	0	51.3	61.5	0	0	61.9	61.9	70	N	-	-	29.6	Y	N	N
R2842	2	21	F1-3	-	0	33.3	0	51.9	61.6	0	0	62	62.0	70	N	-	-	28.7	Y	N	N
R2842	3	25	F1-3	-	0	34.5	0	53	61.6	0	0	62.1	62.1	70	N	-	-	27.6	Y	N	N
R2842	4	29	F1-3	-	0	35.7	0	54.9	61.6	0	0	62.4	62.4	70	N	-	-	26.7	Y	N	N
R2842	5	33	F1-3	-	0	37.1	0	56.6	61.5	0	0	62.7	62.7	70	N	-	-	25.6	Y	N	N
R2842	6	37	F1-3	-	0	38.7	0	57.6	61.5	0	0	63	63.0	70	N	-	-	24.3	Y	N	N
R2842	7	41	F1-3	-	0	40.6	0	58.6	61.4	0	0	63.2	63.2	70	N	-	-	23.2			

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT	WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)</sup> (Y/N)	
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>				New Roads in 2044 dB(A) <sup>(3)</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)			New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
ID	Floor	Floor Level (mPD)		[A]			PD	DD	LD	EX	TR		[C]			[D]	D ≥ 1dB(A)				
R2843	10	53	F1-3	-	0	0	0	57.9	66.4	0	0	67	67.0	70	N	-	-	64.0	Y	N	N
R2844	1	18	F1-3	-	0	0	0	59.4	68.7	0	0	69.2	69.2	70	N	-	-	66.2	Y	N	N
R2844	2	22	F1-3	-	0	0	0	59.5	68.6	0	0	69.1	69.1	70	N	-	-	66.1	Y	N	N
R2844	3	26	F1-3	-	0	0	0	59.9	68.5	0	0	69	69.0	70	N	-	-	66.0	Y	N	N
R2844	4	30	F1-3	-	0	0	0	60.6	68.2	0	0	68.9	68.9	70	N	-	-	65.9	Y	N	N
R2844	5	34	F1-3	-	0	0	0	60.9	67.9	0	0	68.7	68.7	70	N	-	-	65.7	Y	N	N
R2844	6	38	F1-3	-	0	0	0	61	67.6	0	0	68.4	68.4	70	N	-	-	65.4	Y	N	N
R2844	7	42	F1-3	-	0	0	0	61.1	67.2	0	0	68.2	68.2	70	N	-	-	65.2	Y	N	N
R2844	8	46	F1-3	-	0	0	0	61.1	66.8	0	0	67.9	67.9	70	N	-	-	64.9	Y	N	N
R2844	9	50	F1-3	-	0	0	0	61.1	66.5	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N
R2844	10	54	F1-3	-	0	0	0	61	66.2	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N
R2845	1	18	F1-3	-	0	0	0	66.3	58.1	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
R2845	2	22	F1-3	-	0	0	0	66.3	58.1	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
R2845	3	26	F1-3	-	0	0	0	66.3	58.1	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
R2845	4	30	F1-3	-	0	0	0	66.2	58.1	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N
R2845	5	34	F1-3	-	0	0	0	66.1	58	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N
R2845	6	38	F1-3	-	0	0	0	66.1	57.9	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
R2845	7	42	F1-3	-	0	0	0	66	57.8	0	0	66.7	66.7	70	N	-	-	63.7	Y	N	N
R2845	8	46	F1-3	-	0	0	0	66	57.7	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N
R2845	9	50	F1-3	-	0	0	0	65.9	57.6	0	0	66.5	66.5	70	N	-	-	63.5	Y	N	N
R2845	10	54	F1-3	-	0	0	0	65.8	57.5	0	0	66.4	66.4	70	N	-	-	63.4	Y	N	N
R2846	1	10	F1-3	-	0	0	0	65.6	26.6	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N
R2846	2	14	F1-3	-	0	0	0	65.6	28.2	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N
R2846	3	18	F1-3	-	0	0	0	65.6	30	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N
R2846	4	22	F1-3	-	0	0	0	65.6	32.1	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N
R2846	5	26	F1-3	-	0	0	0	65.5	34.3	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N
R2846	6	30	F1-3	-	0	0	0	65.5	37.1	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N
R2846	7	34	F1-3	-	0	0	0	65.5	41.6	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N
R2846	8	38	F1-3	-	0	0	0	65.6	44.3	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N
R2846	9	42	F1-3	-	0	0	0	65.7	46.9	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N
R2846	10	46	F1-3	-	0	0	0	65.7	49	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N
R2847	1	10	F1-3	-	0	0	0	63.9	29.2	0	0	64	64.0	70	N	-	-	61.0	Y	N	N
R2847	2	14	F1-3	-	0	0	0	64	30.4	0	0	64	64.0	70	N	-	-	61.0	Y	N	N
R2847	3	18	F1-3	-	0	0	0	63.9	31.6	0	0	63.9	63.9	70	N	-	-	60.9	Y	N	N
R2847	4	22	F1-3	-	0	0	0	64	32.7	0	0	64	64.0	70	N	-	-	61.0	Y	N	N
R2847	5	26	F1-3	-	0	0	0	64.1	33.9	0	0	64.1	64.1	70	N	-	-	61.1	Y	N	N
R2847	6	30	F1-3	-	0	0	0	64.3	36.4	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N
R2847	7	34	F1-3	-	0	0	0	64.4	37.8	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N
R2847	8	38	F1-3	-	0	0	0	64.4	40.7	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N
R2847	9	42	F1-3	-	0	0	0	64.4	41.8	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N
R2847	10	46	F1-3	-	0	0	0	64.4	43.1	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N
R2848	1	10	F1-3	-	0	0	0	67.6	27.4	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N
R2848	2	14	F1-3	-	0	0	0	67.6	28.3	0	0	67.6	67.6	70	N	-	-	64.6	Y	N	N
R2848	3	18	F1-3	-	0	0	0	67.5	29.2	0	0	67.5	67.5	70	N	-	-	64.5	Y	N	N
R2848	4	22	F1-3	-	0	0	0	67.4	30	0	0	67.4	67.4	70	N	-	-	64.4	Y	N	N
R2848	5	26	F1-3	-	0	0	0	67.3	30.7	0	0	67.3	67.3	70	N	-	-	64.3	Y	N	N
R2848	6	30	F1-3	-	0	0	0	67.2	31.4	0	0	67.2	67.2	70	N	-	-	64.2	Y	N	N
R2848	7	34	F1-3	-	0	0	0	67	32.1	0	0	67	67.0	70	N	-	-	64.0	Y	N	N
R2848	8	38	F1-3	-	0	0	0	66.9	32.9	0	0	66.9	66.9	70	N	-	-	63.9	Y	N	N
R2848	9	42	F1-3	-	0	0	0	66.8	33.8	0	0	66.8	66.8	70	N	-	-	63.8	Y	N	N
R2848	10	46	F1-3	-	0	0	0	66.6	34.8	0	0	66.6	66.6	70	N	-	-	63.6	Y	N	N
R2862	1	28.5	E1-2	-	0	0	25.1	62.5	38.7	0	0	62.5	62.5	65	N	-	-	59.5	Y	N	N
R2862	2	32.5	E1-2	-	0	0	25.2	62.5	38.8	0	0	62.5	62.5	65	N	-	-	59.5	Y	N	N
R2862	3	36.5	E1-2	-	0	0	25.3	62.3	38.9	0	0	62.4	62.4	65	N	-	-	59.4	Y	N	N
R2862	4	40.5	E1-2	-	0	0	25.9	62.2	39	0	0	62.2	62.2	65	N	-	-	59.2	Y	N	N
R2862	5	44.5	E1-2	-	0	0	27.3	62	39.3	0	0	62	62.0	65	N	-	-	59.0	Y	N	N
R2862	6	48.5	E1-2	-	0	0	30	61.7	39.8	0	0	61.7	61.7	65	N	-	-	58.7	Y	N	N
R2862	7	52.5	E1-2	-	0	0	33.4	61.4	41.2	0	0	61.5	61.5	65	N	-	-	58.5	Y	N	N
R2862	8	56.5	E1-2	-	0	0	37.8	61.2	42.6	0	0	61.3	61.3	65	N	-	-	58.3	Y	N	N
R2863	1	28.5	E1-2	-	0	0	0	61.5	22.2	0	0	61.5	61.5	65	N	-	-	58.5	Y	N	N
R2863	2	32.5	E1-2	-	0	0	0	61.5	22.4	0	0	61.5	61.5	65	N	-	-	58.5	Y	N	N
R2863	3	36.5	E1-2	-	0	0	0	61.3	22.5	0	0	61.3	61.3	65	N	-	-	58.3	Y	N	N
R2863	4	40.5	E1-2	-	0	0	0	61.2	22.7	0	0	61.2	61.2	65	N	-	-	58.2	Y	N	N
R2863	5	44.5	E1-2	-	0	0	0	60.9	23	0	0	60.9	60.9	65	N	-	-	57.9	Y	N	N
R2863	6	48.5	E1-2	-	0	0	0	60.7	23.4	0	0	60.7	60.7	65	N	-	-	57.7	Y	N	N
R2863	7	52.5	E1-2	-	0	0	0	60.4	23.9	0	0	60.4	60.4	65	N	-	-	57.4	Y	N	N
R2863	8	56.5	E1-2	-	0	0	0	60.1	24.5	0	0	60.1	60.1	65	N	-	-	57.1	Y	N	N
R3222	1	11	A2-11	-	0	0	0	59.2	61.8	0	0	63.7	63.7	65	N	-	-	60.7	Y	N	N
R3222	2	15	A2-11	-	0	0	0	59.2	61.8	0	0	63.7	63.7	65	N	-	-	60.7	Y	N	N
R3222	3	19	A2-11	-	0	0	0	59.1	61.9	0	0	63.8	63.8	65	N	-	-	60.8	Y	N	N
R3222	4	23	A2-11	-	0	0	0	59.1	62.5	0	0	64.1	64.1	65	N	-	-	61.1	Y	N	N
R3222	5	27	A2-11	-	0	0	0	59.1	63.1	0	0	64.6	64.6	65	N	-	-	61.6	Y	N	N
R3222	6	31	A2-11	-	0	0	0	59	63.4	0	0	64.7	64.7	65	N	-	-	61.7	Y	N	N
R3222	7	35	A2-11	-	0	0	0	58.9	63.2	0	0	64.6	64.6	65	N	-	-	61.6	Y	N	N
R3222	8	39	A2-11	-	0	0	0	58.9	62.9	0	0	64.4	64.4	65	N	-	-	61.4	Y	N	N
R3223	1	11	A2-11	-	9.5	0	29.1	15.7	63.6	0	0	63.6	63.6	65	N	-	-	53.6	Y	N	N
R3223	2	15	A2-11	-	9.5	0	29.1	15.7	63.6	0	0	63.6	63.6	65	N	-	-	53.6	Y	N	N
R3223																					

Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>[4]</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	New Roads <sup>[2]</sup>					New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A)	Noise Criteria dB(A)	Excessance C > Criteria (Y/N)	C - A dB(A) [D]	D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)	New Road > Criteria B > Criteria		
						PD	DD	LD	EX	TR											
ID	Floor	Floor level (mPD)		[A]	[A]							[B]	[C]								
R3241	6	31	A2-12	-	0	0	30.7	14.3	62.1	0	0	62.1	62.1	65	N	-	-	59.1	Y	N	N
R3241	7	35	A2-12	-	0	0	30.7	14.3	61.7	0	0	61.7	61.7	65	N	-	-	58.7	Y	N	N
R3241	8	39	A2-12	-	0	0	30.7	14	61.3	0	0	61.3	61.3	65	N	-	-	58.3	Y	N	N
R3264	1	11.5	A2-13	-	24.5	0	54.3	48.5	39.8	0	0	55.4	55.4	65	N	-	-	30.9	Y	N	N
R3264	2	15.5	A2-13	-	27	0	54.3	50	41.7	0	0	55.8	55.9	65	N	-	-	28.9	Y	N	N
R3264	3	19.5	A2-13	-	32	0	54.4	52.1	43.9	0	0	56.7	56.7	65	N	-	-	24.7	Y	N	N
R3264	4	23.5	A2-13	-	35.3	0	54.6	56.1	46.7	0	0	58.7	58.7	65	N	-	-	23.4	Y	N	N
R3264	5	27.5	A2-13	-	38.4	0	54.7	60.3	50	0	0	61.6	61.7	65	N	-	-	26.3	Y	N	N
R3264	6	31.5	A2-13	-	35.7	0	54.9	62.4	52.1	0	0	63.5	63.5	65	N	-	-	27.8	Y	N	N
R3264	7	35.5	A2-13	-	35.8	0	55.1	63.4	52.9	0	0	64.3	64.3	65	N	-	-	28.5	Y	N	N
R3264	8	39.5	A2-13	-	35.8	0	55.7	63.9	53.3	0	0	64.8	64.9	65	N	-	-	29.1	Y	N	N
R3265	1	11.5	A2-13	-	24.9	0	39.6	61.7	47	0	0	61.9	61.9	65	N	-	-	37.0	Y	N	N
R3265	2	15.5	A2-13	-	27.3	0	40.6	61.8	47.7	0	0	62	62.0	65	N	-	-	34.7	Y	N	N
R3265	3	19.5	A2-13	-	31.9	0	41.5	62.1	49.2	0	0	62.4	62.4	65	N	-	-	30.5	Y	N	N
R3265	4	23.5	A2-13	-	34.7	0	42.6	62.8	50.5	0	0	63.1	63.1	65	N	-	-	28.4	Y	N	N
R3265	5	27.5	A2-13	-	35.4	0	43.8	63.7	52.5	0	0	64.1	64.1	65	N	-	-	28.7	Y	N	N
R3265	6	31.5	A2-13	-	35.6	0	45.1	64.3	53.9	0	0	64.7	64.7	65	N	-	-	29.1	Y	N	N
R3265	7	35.5	A2-13	-	35.8	0	46.5	64.7	54.3	0	0	65.1	65.1	65	N	-	-	29.3	Y	N	N
R3265	8	39.5	A2-13	-	35.9	0	48.3	64.9	54.5	0	0	65.4	65.4	65	N	-	-	29.5	Y	N	N
R3282	1	20	A3-1	-	0	0	50.2	58	0	0	0	58.7	58.7	65	N	-	-	55.7	Y	N	N
R3282	2	24	A3-1	-	0	0	50.4	58.3	0	0	0	58.9	58.9	65	N	-	-	55.9	Y	N	N
R3282	3	28	A3-1	-	0	0	50.9	58.5	0	0	0	59.2	59.2	65	N	-	-	56.2	Y	N	N
R3282	4	32	A3-1	-	0	0	52.2	58.9	0	0	0	59.7	59.7	65	N	-	-	56.7	Y	N	N
R3282	5	36	A3-1	-	0	0	53.6	59.5	0	0	0	60.5	60.5	65	N	-	-	57.5	Y	N	N
R3282	6	40	A3-1	-	0	0	54.8	60.5	0	0	0	61.5	61.5	65	N	-	-	58.5	Y	N	N
R3282	7	44	A3-1	-	0	0	55.4	61.9	0	0	0	62.8	62.8	65	N	-	-	59.8	Y	N	N
R3282	8	48	A3-1	-	0	0	55.7	62.4	0	0	0	63.4	63.4	65	N	-	-	60.4	Y	N	N
R3481	1	7.5	D1-5	-	43	0	53	10.2	62	0	0	62.5	62.5	70	N	-	-	19.5	Y	N	N
R3481	2	10.5	D1-5	-	43.3	0	54.1	10.2	61.9	0	0	62.6	62.6	70	N	-	-	19.3	Y	N	N
R3481	3	13.5	D1-5	-	43.4	0	55	10.2	61.8	0	0	62.6	62.6	70	N	-	-	19.2	Y	N	N
R3701	1	34.5	E1-3	-	0	0	59.6	0	20.6	0	0	59.6	59.6	70	N	-	-	56.6	Y	N	N
R3701	2	37.5	E1-3	-	0	0	59.6	0	21.4	0	0	59.6	59.6	70	N	-	-	56.6	Y	N	N
R3701	3	40.5	E1-3	-	0	0	59.6	0	22.2	0	0	59.6	59.6	70	N	-	-	56.6	Y	N	N
R3701	4	43.5	E1-3	-	0	0	59.6	0	23.1	0	0	59.6	59.6	70	N	-	-	56.6	Y	N	N
R3701	5	46.5	E1-3	-	0	0	59.5	0	24	0	0	59.5	59.5	70	N	-	-	56.5	Y	N	N
R3701	6	49.5	E1-3	-	0	0	59.4	0	24.9	0	0	59.4	59.4	70	N	-	-	56.4	Y	N	N
R3701	7	52.5	E1-3	-	0	0	59.4	0	25.9	0	0	59.4	59.4	70	N	-	-	56.4	Y	N	N
R3701	8	55.5	E1-3	-	0	0	59.4	0	26.8	0	0	59.4	59.4	70	N	-	-	56.4	Y	N	N
R3701	9	58.5	E1-3	-	0	0	59.3	0	27.8	0	0	59.3	59.3	70	N	-	-	56.3	Y	N	N
R3701	10	61.5	E1-3	-	0	0	59.3	0	28.9	0	0	59.4	59.4	70	N	-	-	56.4	Y	N	N
R3701	11	64.5	E1-3	-	0	0	59.4	0	30.1	0	0	59.4	59.4	70	N	-	-	56.4	Y	N	N
R3701	12	67.5	E1-3	-	0	0	59.5	0	31.3	0	0	59.5	59.5	70	N	-	-	56.5	Y	N	N
R3701	13	70.5	E1-3	-	0	0	59.5	0	32.5	0	0	59.6	59.6	70	N	-	-	56.6	Y	N	N
R3701	14	73.5	E1-3	-	0	0	59.5	0	33.9	0	0	59.6	59.6	70	N	-	-	56.6	Y	N	N
R3701	15	76.5	E1-3	-	0	0	59.5	0	35.3	0	0	59.6	59.6	70	N	-	-	56.6	Y	N	N
R3701	16	79.5	E1-3	-	0	0	59.5	0	36.8	0	0	59.6	59.6	70	N	-	-	56.6	Y	N	N
R3701	17	82.5	E1-3	-	0	0	59.5	0	38.6	0	0	59.5	59.5	70	N	-	-	56.5	Y	N	N
R3701	18	85.5	E1-3	-	0	0	59.4	0	40.6	0	0	59.5	59.5	70	N	-	-	56.5	Y	N	N
R3701	19	88.5	E1-3	-	0	0	59.4	0	42.8	0	0	59.5	59.5	70	N	-	-	56.5	Y	N	N
R3701	20	91.5	E1-3	-	0	0	59.3	0	44.8	0	0	59.4	59.4	70	N	-	-	56.4	Y	N	N
R3702	1	34.5	E1-3	-	0	0	64.4	0	23.8	0	0	64.4	64.4	70	N	-	-	61.4	Y	N	N
R3702	2	37.5	E1-3	-	0	0	64.3	0	24.6	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N
R3702	3	40.5	E1-3	-	0	0	64.2	0	25.4	0	0	64.2	64.2	70	N	-	-	61.2	Y	N	N
R3702	4	43.5	E1-3	-	0	0	64	0	26.3	0	0	64	64.0	70	N	-	-	61.0	Y	N	N
R3702	5	46.5	E1-3	-	0	0	63.8	0	27.2	0	0	63.8	63.8	70	N	-	-	60.8	Y	N	N
R3702	6	49.5	E1-3	-	0	0	63.6	0	28.2	0	0	63.6	63.6	70	N	-	-	60.6	Y	N	N
R3702	7	52.5	E1-3	-	0	0	63.3	0	29.1	0	0	63.3	63.3	70	N	-	-	60.3	Y	N	N
R3702	8	55.5	E1-3	-	0	0	63.1	0	30.1	0	0	63.1	63.1	70	N	-	-	60.1	Y	N	N
R3702	9	58.5	E1-3	-	0	0	62.8	0	31.2	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N
R3702	10	61.5	E1-3	-	0	0	62.6	0	32.4	0	0	62.6	62.6	70	N	-	-	59.6	Y	N	N
R3702	11	64.5	E1-3	-	0	0	62.4	0	33.5	0	0	62.4	62.4	70	N	-	-	59.4	Y	N	N
R3702	12	67.5	E1-3	-	0	0	62.2	0	34.6	0	0	62.2	62.2	70	N	-	-	59.2	Y	N	N
R3702	13	70.5	E1-3	-	0	0	62	0	36	0	0	62	62.0	70	N	-	-	59.0	Y	N	N
R3702	14	73.5	E1-3	-	0	0	61.8	0	37.3	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N
R3702	15	76.5	E1-3	-	0	0	61.6	0	38.7	0	0	61.6	61.6	70	N	-	-	58.6	Y	N	N
R3702	16	79.5	E1																		



Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
Scenario: KTN ( Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>[4,5]</sup> (Y/N)	
				Overall Noise Level in 2044 dB(A) [A]	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>[1]</sup>	New Roads <sup>[2]</sup>				New Roads in 2044 dB(A) <sup>[3]</sup> [B]	Overall Noise Level in 2044 dB(A) [C]	Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	C - A dB(A) [D]			D ≥ 1dB(A)	New Road Contribution dB(A) [E]	New Road Contribution ≥ 1dB(A) E ≥ 1dB(A)		New Road > Criteria B > Criteria
							PD	DD	LD	EX												
R3703	19	88.5	E1-3	-	0	0	60.6	64.4	0	47.7	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
R3703	20	91.5	E1-3	-	0	0	60.4	64.3	0	47.9	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
R3704	1	34.5	E1-3	-	0	0	57.6	57.8	47.9	0	0	60.9	60.9	70	N	-	-	57.9	Y	N	N	N
R3704	2	37.5	E1-3	-	0	0	59.8	58.2	47.9	0	0	62.2	62.2	70	N	-	-	59.2	Y	N	N	N
R3704	3	40.5	E1-3	-	0	0	60.5	58.7	47.9	0	0	62.8	62.8	70	N	-	-	59.8	Y	N	N	N
R3704	4	43.5	E1-3	-	0	0	60.6	59.5	47.9	0	0	63.2	63.2	70	N	-	-	60.2	Y	N	N	N
R3704	5	46.5	E1-3	-	0	0	60.6	60.5	47.9	0	0	63.7	63.7	70	N	-	-	60.7	Y	N	N	N
R3704	6	49.5	E1-3	-	0	0	60.6	61.7	47.9	0	0	64.3	64.3	70	N	-	-	61.3	Y	N	N	N
R3704	7	52.5	E1-3	-	0	0	60.6	62.5	47.9	0	0	64.8	64.8	70	N	-	-	61.8	Y	N	N	N
R3704	8	55.5	E1-3	-	0	0	60.6	63	47.9	0	0	65.1	65.1	70	N	-	-	62.1	Y	N	N	N
R3704	9	58.5	E1-3	-	0	0	60.6	63.3	48	0	0	65.3	65.3	70	N	-	-	62.3	Y	N	N	N
R3704	10	61.5	E1-3	-	0	0	60.6	63.6	48	0	0	65.4	65.4	70	N	-	-	62.4	Y	N	N	N
R3704	11	64.5	E1-3	-	0	0	60.6	63.7	48.2	0	0	65.5	65.5	70	N	-	-	62.5	Y	N	N	N
R3704	12	67.5	E1-3	-	0	0	60.6	63.9	48.3	0	0	65.6	65.6	70	N	-	-	62.6	Y	N	N	N
R3704	13	70.5	E1-3	-	0	0	60.6	64	48.7	0	0	65.7	65.7	70	N	-	-	62.7	Y	N	N	N
R3704	14	73.5	E1-3	-	0	0	60.5	64.1	49.3	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
R3704	15	76.5	E1-3	-	0	0	60.5	64.1	50.2	0	0	65.8	65.8	70	N	-	-	62.8	Y	N	N	N
R3704	16	79.5	E1-3	-	0	0	60.4	64.2	51	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
R3704	17	82.5	E1-3	-	0	0	60.4	64.3	51.3	0	0	65.9	65.9	70	N	-	-	62.9	Y	N	N	N
R3704	18	85.5	E1-3	-	0	0	60.3	64.4	51.5	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
R3704	19	88.5	E1-3	-	0	0	60.2	64.4	51.7	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
R3704	20	91.5	E1-3	-	0	0	60.2	64.4	52	0	0	66	66.0	70	N	-	-	63.0	Y	N	N	N
R3721	1	28	E1-4	-	0	0	0	59.5	40.3	0	0	59.6	59.6	65	N	-	-	56.6	Y	N	N	N
R3721	2	32	E1-4	-	0	0	0	59.5	40.3	0	0	59.6	59.6	65	N	-	-	56.6	Y	N	N	N
R3721	3	36	E1-4	-	0	0	0	59.5	40.3	0	0	59.6	59.6	65	N	-	-	56.6	Y	N	N	N
R3721	4	40	E1-4	-	0	0	0	59.5	40.4	0	0	59.5	59.5	65	N	-	-	56.5	Y	N	N	N
R3721	5	44	E1-4	-	0	0	0	59.5	40.4	0	0	59.5	59.5	65	N	-	-	56.5	Y	N	N	N
R3721	6	48	E1-4	-	0	0	0	59.4	40.9	0	0	59.5	59.5	65	N	-	-	56.5	Y	N	N	N
R3721	7	52	E1-4	-	0	0	0	59.4	41.9	0	0	59.5	59.5	65	N	-	-	56.5	Y	N	N	N
R3721	8	56	E1-4	-	0	0	0	59.5	41.9	0	0	59.6	59.6	65	N	-	-	56.6	Y	N	N	N

Note:

[1] Other Roads refer to planned road projects carried out by others such as Development of Lok Ma Chau Loop, Liantang / Heung Yuen Wai Boundary Control Point and Associated Works, Widening of Tolo Highway/Fanling Highway etc.

[2] PD - Primary Distributor Road; DD - District Distributor Road; LD - Local Distributor Road; EX - Expressway; TR - Trunk Roads.

[3] New Roads refer to the proposed road networks including planned internal roads within PC/TKL NDA and modification of connecting roads to NDA.

[4] For landuse planned under NDA project, mitigation measures are required to mitigate the noise level to within noise criteria.

[5] For existing and planned NSRs outside and within the non-development area of NDA, Direct Mitigation Measures will be required when "With Project Overall Noise Level exceeds Noise Criteria" AND either "With Project - Without Project Overall Noise Level ≥ 1 dB(A)" or "New Roads exceeds Noise Criteria" or "New Roads Contribution ≥ 1 dB(A)".

[6] The view from Level 3 for R1105 and R1106 to Fanling Highway is blocked by the proposed semi enclosure at Fanling Highway, a 5 dB(A) correction is applied to the contribution from "New roads (expressway way).

[7] The ex-Lady Ho Tung Welfare Centre at KTN-7 (R1061) is closed. A revitalisation project is proposed to turn the building into Lady Ho Tung Welfare Centre Eco-learn Institute, subject to the funding approval of the Finance Committee.

















Title: Detailed Calculation of Road Traffic Noise on Direct Mitigation Measures  
 Scenario: KTN Social Welfares & Kindergartens (Mitigated Case on Proposed Roads)

Assessment Point			Location	WITHOUT PROJECT		WITH PROJECT										Noise Criteria dB(A)	Exceedance C > Criteria (Y/N)	Check Project Impact Significance		Check Direct Mitigation			Mitigation Measures Required <sup>(1)(4)</sup> (Y/N)
				Overall Noise Level in 2044 dB(A)	Existing Road in 2044 dB(A)	Other Roads in 2044 dB(A) <sup>(1)</sup>	New Roads <sup>(2)</sup>					New Roads in 2044 dB(A) <sup>(1)</sup>	Overall Noise Level in 2044 dB(A)	C - A dB(A)	D ≥ 1dB(A)			New Road Contribution dB(A)	New Road Contribution E ≥ 1dB(A)	New Road > Criteria B > Criteria			
ID	Floor	Floor Level (mPD)		[A]			PD	DD	LD	EX	TR	[B]	[C]		[D]								
NI-2	5	35.1	B2-5 RCHE	-	0	0	0	0	62.2	0	0	62.2	62.2	70	N	-	-	59.2	Y	N	N		
NI-2	6	38.2	B2-5 RCHE	-	0	0	0	0	62.1	0	0	62.1	62.1	70	N	-	-	59.1	Y	N	N		
NI-2	7	41.3	B2-5 RCHE	-	0	0	0	0	61.9	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N		
NI-5	1	22.7	B2-5 RCHE	-	0	0	20.8	2.9	62	0	0	62	62	70	N	-	-	59.0	Y	N	N		
NI-5	2	25.8	B2-5 RCHE	-	0	0	21	2.9	61.9	0	0	61.9	61.9	70	N	-	-	58.9	Y	N	N		
NI-5	3	28.9	B2-5 RCHE	-	0	0	21.1	2.9	61.8	0	0	61.8	61.8	70	N	-	-	58.8	Y	N	N		
NI-5	4	32	B2-5 RCHE	-	0	0	21.2	2.9	61.7	0	0	61.7	61.7	70	N	-	-	58.7	Y	N	N		
NI-5	5	35.1	B2-5 RCHE	-	0	0	21.4	2.9	61.5	0	0	61.5	61.5	70	N	-	-	58.5	Y	N	N		
NI-5	6	38.2	B2-5 RCHE	-	0	0	21.6	2.9	61.4	0	0	61.4	61.4	70	N	-	-	58.4	Y	N	N		
NI-5	7	41.3	B2-5 RCHE	-	0	0	21.8	2.9	61.2	0	0	61.2	61.2	70	N	-	-	58.2	Y	N	N		
NI-3	1	22.7	B2-5 RCHE	-	0	0	0	0	60	0	0	60	60	70	N	-	-	57.0	Y	N	N		
NI-3	2	25.8	B2-5 RCHE	-	0	0	0	0	60	0	0	60	60	70	N	-	-	57.0	Y	N	N		
NI-3	3	28.9	B2-5 RCHE	-	0	0	0	0	59.9	0	0	59.9	59.9	70	N	-	-	56.9	Y	N	N		
NI-3	4	32	B2-5 RCHE	-	0	0	0	0	59.8	0	0	59.8	59.8	70	N	-	-	56.8	Y	N	N		
NI-3	5	35.1	B2-5 RCHE	-	0	0	0	0	59.7	0	0	59.7	59.7	70	N	-	-	56.7	Y	N	N		
NI-3	6	38.2	B2-5 RCHE	-	0	0	0	0	59.6	0	0	59.6	59.6	70	N	-	-	56.6	Y	N	N		
NI-3	7	41.3	B2-5 RCHE	-	0	0	0	0	59.5	0	0	59.5	59.5	70	N	-	-	56.5	Y	N	N		
NI-4	1	22.7	B2-5 RCHE	-	0	0	0	-0.9	59.3	0	0	59.3	59.3	70	N	-	-	56.3	Y	N	N		
NI-4	2	25.8	B2-5 RCHE	-	0	0	0	-0.9	59.3	0	0	59.3	59.3	70	N	-	-	56.3	Y	N	N		
NI-4	3	28.9	B2-5 RCHE	-	0	0	0	-0.9	59.2	0	0	59.2	59.2	70	N	-	-	56.2	Y	N	N		
NI-4	4	32	B2-5 RCHE	-	0	0	0	-0.9	59.1	0	0	59.1	59.1	70	N	-	-	56.1	Y	N	N		
NI-4	5	35.1	B2-5 RCHE	-	0	0	0	-0.9	59	0	0	59	59	70	N	-	-	56.0	Y	N	N		
NI-4	6	38.2	B2-5 RCHE	-	0	0	0	-0.9	58.9	0	0	58.9	58.9	70	N	-	-	55.9	Y	N	N		
NI-4	7	41.3	B2-5 RCHE	-	0	0	0	-0.9	58.8	0	0	58.8	58.8	70	N	-	-	55.8	Y	N	N		

Note:  
 [1] Other Roads refer to planned road projects carried out by others such as Development of Lok Ma Chau Loop, Liantang / Heung Yuen Wai Boundary Control Point and Associated Works, Widening of Tolo Highway/Fairing Highway etc.  
 [2] PD - Primary Distributor Road; DD - District Distributor Road; LD - Local Distributor Road; EX - Expressway; TR - Trunk Roads.  
 [3] New Roads refer to the proposed road networks including planned internal roads within PC/TKL NDA and modification of connecting roads to NDA.  
 [4] For landsuse planned under NDA project, mitigation measures are required to mitigate the noise level to within noise criteria.  
 [5] For existing and planned NSRs outside and within the non-development area of NDA, Direct Mitigation Measures will be required when "With Project Overall Noise Level exceeds Noise Criteria" AND, either "With Project - Without Project Overall Noise Level ≥ 1 dB(A)" or "New Roads exceeds Noise Criteria" or "New Roads Contribution ≥ 1 dB(A)".  
 \* The noise mitigation measures to be adopted would be subject to the final layout design of RCHE.

***Appendix 2.5***

---

***Details of Noise Mitigation Measures at RCHE***

Scenario: KTN B2-5 RCHE in Year 2029 (Mitigated Case on Proposed Roads and With noise mitigation measures at RCHE)

NSR	Floor Level	Floor	Existing Road dB(A)	New Roads dB(A)		New Roads Total dB(A)	Overall Noise Level dB(A)
				District	Local		
E-1	22.7	1	53.4	0	63.2	63.2	63.7
E-1	25.8	2	54	0	63.1	63.1	63.6
E-1	28.9	3	54.7	0	62.9	62.9	63.6
E-1	32	4	55.5	0	62.7	62.7	63.5
E-1	35.1	5	56.3	0	62.4	62.4	63.4
E-1	38.2	6	57.5	0	62.2	62.2	63.5
E-1	41.3	7	57.8	0	61.9	61.9	63.4
E-2	22.7	1	53.6	0	60	60	60.9
E-2	25.8	2	54.3	0	59.9	59.9	61
E-2	28.9	3	55	0	59.9	59.9	61.2
E-2	32	4	55.8	0	59.8	59.8	61.3
E-2	35.1	5	57	0	59.7	59.7	61.6
E-2	38.2	6	57.7	0	59.6	59.6	61.8
E-2	41.3	7	58.6	0	59.4	59.4	62
E-3	22.7	1	47.9	0	57.1	57.1	57.6
E-3	25.8	2	48.8	0	57.1	57.1	57.7
E-3	28.9	3	49.8	0	57.1	57.1	57.8
E-3	32	4	50.8	0	57.1	57.1	58
E-3	35.1	5	51.8	0	57	57	58.1
E-3	38.2	6	52.9	0	57	57	58.4
E-3	41.3	7	54	0	56.9	56.9	58.7
E-4	22.7	1	57.5	0	55.2	55.2	59.5
E-4	25.8	2	58.6	0	55.2	55.2	60.3
E-4	28.9	3	60.1	0	55.2	55.2	61.4
E-4	32	4	61.1	0	55.2	55.2	62.1
E-4	35.1	5	62.6	0	55.2	55.2	63.3
E-4	38.2	6	63.8	0	55.1	55.1	64.3
E-4	41.3	7	64.7	0	55.2	55.2	65.1
E-5	22.7	1	61.6	0	53.2	53.2	62.2
E-5	25.8	2	63.2	0	53.2	53.2	63.6
E-5	28.9	3	64.6	0	53.2	53.2	64.9
E-5	32	4	66.5	0	53.2	53.2	66.7
E-5	35.1	5	67.9	0	53.2	53.2	68
E-5	38.2	6	69	0	53.2	53.2	69.1
E-5	41.3	7	69.8	0	53.2	53.2	69.9
N-1	22.7	1	0	62.8	63.2	66	66
N-1	25.8	2	0	62.9	63.1	66	66
N-1	28.9	3	0	62.7	62.8	65.8	65.8
N-1	32	4	0	62.5	62.5	65.5	65.5
N-1	35.1	5	0	62.2	62.2	65.2	65.2
N-1	38.2	6	0	61.9	61.9	64.9	64.9
N-1	41.3	7	0	61.6	61.6	64.6	64.6
N-2	22.7	1	0	60.6	66.1	67.2	67.2
N-2	25.8	2	0	60.6	65.9	67	67
N-2	28.9	3	0	60.5	65.5	66.7	66.7
N-2	32	4	0	60.3	65.2	66.4	66.4
N-2	35.1	5	0	60	64.8	66.1	66.1
N-2	38.2	6	0	59.7	64.4	65.7	65.7
N-2	41.3	7	0	59.4	64	65.3	65.3
N-3	22.7	1	0	0	65.4	65.4	65.4
N-3	25.8	2	0	0	65.3	65.3	65.3
N-3	28.9	3	0	0	65	65	65
N-3	32	4	0	0	64.7	64.7	64.7
N-3	35.1	5	0	0	64.4	64.4	64.4
N-3	38.2	6	0	0	64	64	64
N-3	41.3	7	0	0	63.7	63.7	63.7

NSR	Floor Level	Floor	Existing Road	New Roads dB(A)		New Roads	Overall Noise
				District	Local		
N-4	22.7	1	0	54.8	65.3	65.7	65.7
N-4	25.8	2	0	54.9	65.2	65.6	65.6
N-4	28.9	3	0	54.7	64.9	65.3	65.3
N-4	32	4	0	54.5	64.6	65	65
N-4	35.1	5	0	54.3	64.3	64.7	64.7
N-4	38.2	6	0	54.1	63.9	64.3	64.3
N-4	41.3	7	0	53.8	63.6	64	64
N-5	22.7	1	0	54.1	66.7	66.9	66.9
N-5	25.8	2	0	54	66.4	66.7	66.7
N-5	28.9	3	0	53.9	66.1	66.4	66.4
N-5	32	4	0	53.6	65.8	66.1	66.1
N-5	35.1	5	0	53.4	65.4	65.7	65.7
N-5	38.2	6	0	53.2	65	65.3	65.3
N-5	41.3	7	0	52.9	64.6	64.9	64.9
N-6	22.7	1	0	0	64.8	64.8	64.8
N-6	25.8	2	0	0	64.6	64.6	64.6
N-6	28.9	3	0	0	64.4	64.4	64.4
N-6	32	4	0	0	64.1	64.1	64.1
N-6	35.1	5	0	0	63.8	63.8	63.8
N-6	38.2	6	0	0	63.5	63.5	63.5
N-6	41.3	7	0	0	63.2	63.2	63.2
NI-1	22.7	1	0	0	63.3	63.3	63.3
NI-1	25.8	2	0	0	63.2	63.2	63.2
NI-1	28.9	3	0	0	63	63	63
NI-1	32	4	0	0	62.8	62.8	62.8
NI-1	35.1	5	0	0	62.5	62.5	62.5
NI-1	38.2	6	0	0	62.3	62.3	62.3
NI-1	41.3	7	0	0	62	62	62
NI-2	22.7	1	0	0	59.5	59.5	59.5
NI-2	25.8	2	0	0	59.4	59.4	59.4
NI-2	28.9	3	0	0	59.3	59.3	59.3
NI-2	32	4	0	0	59.2	59.2	59.2
NI-2	35.1	5	0	0	59	59	59
NI-2	38.2	6	0	0	58.9	58.9	58.9
NI-2	41.3	7	0	0	58.7	58.7	58.7
NI-3	22.7	1	0	0	56.8	56.8	56.8
NI-3	25.8	2	0	0	56.8	56.8	56.8
NI-3	28.9	3	0	0	56.7	56.7	56.7
NI-3	32	4	0	0	56.6	56.6	56.6
NI-3	35.1	5	0	0	56.5	56.5	56.5
NI-3	38.2	6	0	0	56.4	56.4	56.4
NI-3	41.3	7	0	0	56.3	56.3	56.3
NI-4	22.7	1	0	0	56.8	56.8	56.8
NI-4	25.8	2	0	0	56.8	56.8	56.8
NI-4	28.9	3	0	0	56.7	56.7	56.7
NI-4	32	4	0	0	56.6	56.6	56.6
NI-4	35.1	5	0	0	56.5	56.5	56.5
NI-4	38.2	6	0	0	56.4	56.4	56.4
NI-4	41.3	7	0	0	56.3	56.3	56.3
NI-5	22.7	1	0	0	59.5	59.5	59.5
NI-5	25.8	2	0	0	59.4	59.4	59.4
NI-5	28.9	3	0	0	59.3	59.3	59.3
NI-5	32	4	0	0	59.2	59.2	59.2
NI-5	35.1	5	0	0	59	59	59
NI-5	38.2	6	0	0	58.9	58.9	58.9
NI-5	41.3	7	0	0	58.7	58.7	58.7

NSR	Floor Level	Floor	Existing Road dB(A)	New Roads dB(A)		New Roads Total dB(A)	Overall Noise Level dB(A)
				District	Local		
NI-6	22.7	1	0	52.9	62.7	63.1	63.1
NI-6	25.8	2	0	53	62.6	63.1	63.1
NI-6	28.9	3	0	53	62.4	62.9	62.9
NI-6	32	4	0	52.8	62.2	62.7	62.7
NI-6	35.1	5	0	52.6	61.9	62.4	62.4
NI-6	38.2	6	0	52.4	61.6	62.1	62.1
NI-6	41.3	7	0	52.3	61.4	61.9	61.9
SI-1	22.7	1	66	50.3	0	50.3	66.1
SI-1	25.8	2	67.2	51.2	0	51.2	67.3
SI-1	28.9	3	68.3	52.2	0	52.2	68.4
SI-1	32	4	69.4	52.8	0	52.8	69.5
SI-1	35.1	5	70.4	53.1	0	53.1	70.5
SI-1	38.2	6	71.1	53.3	0	53.3	71.2
SI-1	41.3	7	71.7	53.3	0	53.3	71.8
SI-2	22.7	1	63.6	42.2	0	42.2	63.6
SI-2	25.8	2	64.8	44	0	44	64.8
SI-2	28.9	3	65.7	46.2	0	46.2	65.8
SI-2	32	4	66.3	47.2	0	47.2	66.4
SI-2	35.1	5	67.1	47.8	0	47.8	67.2
SI-2	38.2	6	67.7	48.1	0	48.1	67.8
SI-2	41.3	7	68.4	48.2	0	48.2	68.5
SI-3	22.7	1	60.4	33	0	33	60.4
SI-3	25.8	2	61.7	35.4	0	35.4	61.7
SI-3	28.9	3	62.8	37	0	37	62.8
SI-3	32	4	63.6	38.5	0	38.5	63.6
SI-3	35.1	5	64.3	39.2	0	39.2	64.3
SI-3	38.2	6	65.1	39.6	0	39.6	65.1
SI-3	41.3	7	65.7	39.9	0	39.9	65.7
SI-4	22.7	1	60.6	0	0	0	60.6
SI-4	25.8	2	62.1	0	0	0	62.1
SI-4	28.9	3	63.9	0	0	0	63.9
SI-4	32	4	65.8	0	0	0	65.8
SI-4	35.1	5	67.8	0	0	0	67.8
SI-4	38.2	6	69.4	0	0	0	69.4
SI-4	41.3	7	70.4	0	0	0	70.4
SI-5	22.7	1	57	0	0	0	57
SI-5	25.8	2	58.4	0	0	0	58.4
SI-5	28.9	3	60.1	0	0	0	60.1
SI-5	32	4	61.5	0	0	0	61.5
SI-5	35.1	5	63.3	0	0	0	63.3
SI-5	38.2	6	65.2	0	0	0	65.2
SI-5	41.3	7	66.8	0	0	0	66.8
SI-6	22.7	1	54.3	0	0	0	54.3
SI-6	25.8	2	55.5	0	0	0	55.5
SI-6	28.9	3	56.7	0	0	0	56.7
SI-6	32	4	58	0	0	0	58
SI-6	35.1	5	59.6	0	0	0	59.6
SI-6	38.2	6	61.3	0	0	0	61.3
SI-6	41.3	7	62.9	0	0	0	62.9

NSR	Floor Level	Floor	Existing Road	New Roads dB(A)		New Roads	Overall Noise
				District	Local		
W-1	22.7	1	68.4	60	44.8	60.1	69
W-1	25.8	2	69.5	60.1	44.9	60.2	70
W-1	28.9	3	70.1	60.6	44.9	60.7	70.6
W-1	32	4	71	61.7	44.9	61.8	71.5
W-1	35.1	5	71.6	63.2	45	63.3	72.2
W-1	38.2	6	72.1	63.5	45	63.6	72.7
W-1	41.3	7	72.5	63.4	44.9	63.4	73
W-2	22.7	1	65.5	59.5	47.9	59.8	66.5
W-2	25.8	2	66.4	59.6	48	59.9	67.3
W-2	28.9	3	67.2	60.1	48	60.3	68
W-2	32	4	67.8	61.5	48	61.7	68.8
W-2	35.1	5	68.7	63	48	63.2	69.7
W-2	38.2	6	69.4	63.6	48	63.7	70.4
W-2	41.3	7	69.8	63.5	48	63.6	70.8
W-3	22.7	1	56.5	63.7	49.9	63.9	64.6
W-3	25.8	2	58.4	63.8	50	63.9	65
W-3	28.9	3	59.6	63.5	50	63.7	65.2
W-3	32	4	61.1	63.3	49.9	63.5	65.5
W-3	35.1	5	61.9	63.2	50	63.4	65.7
W-3	38.2	6	63.1	63.1	49.9	63.3	66.2
W-3	41.3	7	64.2	63.2	49.9	63.4	66.8
W-4	22.7	1	60.1	65.1	55	65.5	66.6
W-4	25.8	2	61.2	65.2	55.1	65.6	66.9
W-4	28.9	3	62.2	64.9	55	65.4	67.1
W-4	32	4	63.1	64.6	54.9	65	67.2
W-4	35.1	5	63.7	64.4	54.8	64.8	67.3
W-4	38.2	6	64.1	64.1	54.7	64.6	67.4
W-4	41.3	7	64.6	63.9	54.6	64.4	67.5
W-5	22.7	1	59	65.2	60.6	66.5	67.2
W-5	25.8	2	59.9	65.2	60.5	66.5	67.4
W-5	28.9	3	60.9	65.1	60.3	66.3	67.4
W-5	32	4	61.8	64.8	60.1	66.1	67.5
W-5	35.1	5	62.5	64.5	59.8	65.8	67.5
W-5	38.2	6	63.1	64.2	59.6	65.5	67.5
W-5	41.3	7	63.4	63.9	59.3	65.2	67.4
W-G	22.7	1	60.9	65	53.2	65.3	66.6
W-G	25.8	2	62.1	64.9	53.1	65.2	66.9
W-G	28.9	3	63.1	64.7	53.1	65	67.2
W-G	32	4	63.8	64.5	53.1	64.8	67.3
W-G	35.1	5	64.5	64.3	53.1	64.6	67.5
W-G	38.2	6	64.8	64	53	64.3	67.6
W-G	41.3	7	65.4	63.8	52.9	64.2	67.8

Note:

Lilac : >55dB(A)

Yellow: >70dB(A)

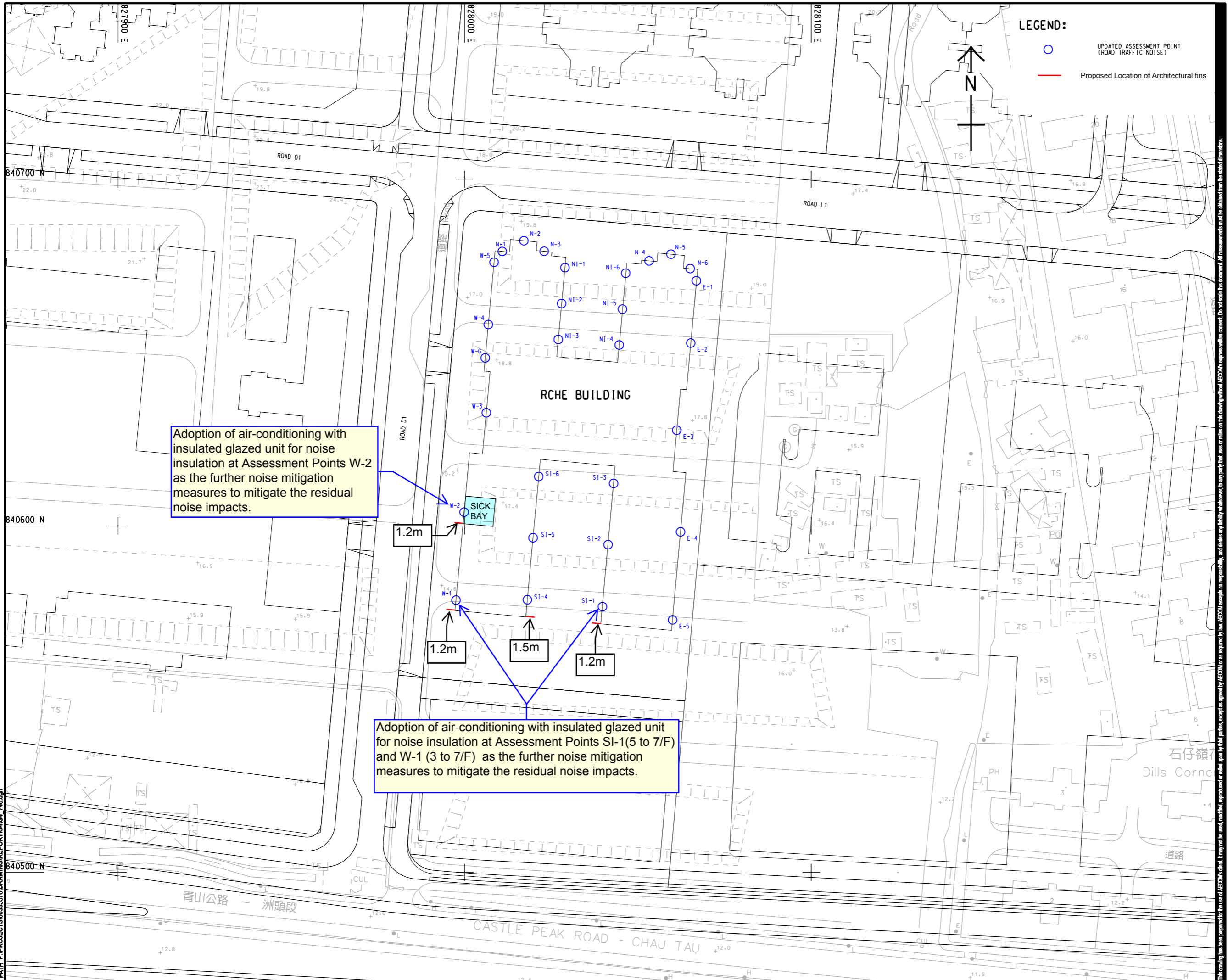
[1] Architectural fins of 1.2m long applies at Assessment Point W-1 and SI-1, and 1.5m long applies at Assessment Point SI-4. Adoption of air-conditioning with insulated glazed unit for noise insulation at Assessment Points SI-1(5/F to 7/F) and W-1 (3/F to 7/F) as the further noise mitigation measures to mitigate the residual noise impacts.

[2] Architectural fins of 1.2m long applies at Assessment Point W-2. Adoption of air-conditioning with insulated glazed unit for noise insulation at Assessment Points W-2 as the further noise mitigation measures to mitigate the residual noise impacts.

\* 5.5m Hoarding along existing Castle Peak Road as the temporary noise mitigation measures prior to the erection of any noise barrier / semi-enclosure / enclosure under NENT NDA projects.

\*\* The noise mitigation measures to be adopted would be subject to the final layout design of RCHC.

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:  
 Pld File by: ZHONGDY 2016/04/6  
 PATH: P:\PROJECTS\60335576\DRAWING\REPORT\G4G4\_746.dgn



**AECOM**

**PROJECT**  
 項目

**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 業主

**CEDD** 土木工程拓展署  
 Civil Engineering and Development Department

**CONSULTANT**  
 顧問公司

AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**  
 修訂

NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 階段

**SCALE**  
 比例

A1 1 : 500

**DIMENSION UNIT**  
 尺寸單位

METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號

60335576

**CONTRACT NO.**  
 合約編號

CE 13/2014 (CE)

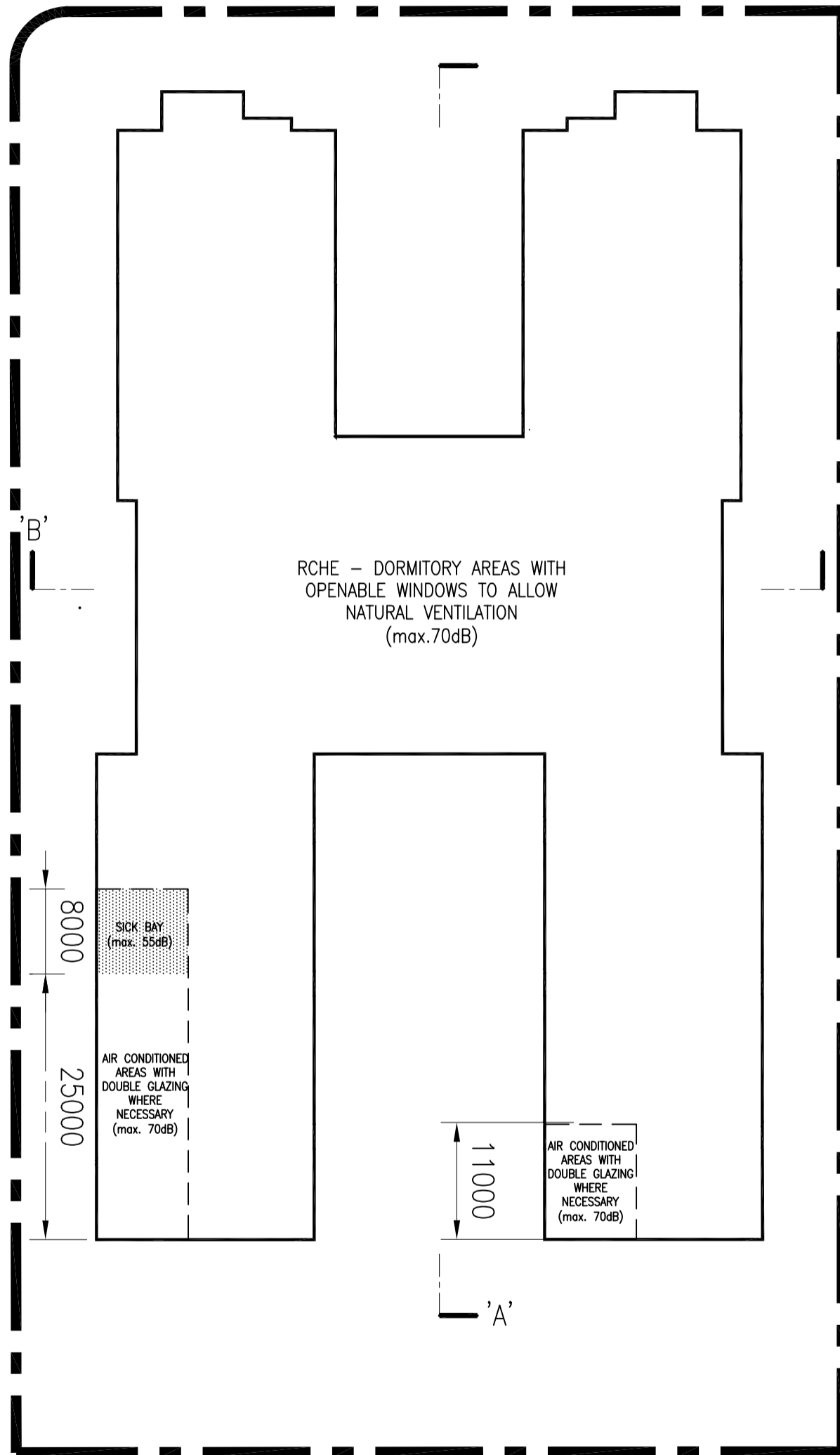
**SHEET TITLE**  
 圖紙名稱

LOCATIONS OF ASSESSMENT POINTS - ROAD TRAFFIC NOISE (SOCIAL WELFARE - RCHE)

**SHEET NUMBER**  
 圖紙編號

60335576/G4/FIGURE 4.2.4g

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and disclaims any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.



TYPICAL FLOOR PLAN

***Appendix 2.6***

---

***Details Breakdown of Protected and Benefitted Land Uses***

**Appendix 2.6 - Number of Dwellings / Classrooms Protected by and Benefited from Noise Mitigation Measures**

NSE <sup>[1]</sup>	NSR	No. of Dwellings / Classrooms Represented	Total Number of Dwellings / Classrooms Exceeded		No. of Dwellings / Classrooms Protected By Noise Mitigation Measures	No. of Dwellings / Classrooms Benefited From Noise Mitigation Measures
			Unmitigated	Mitigated		
School	KTN-1	31	31	0	31	31
Dwelling	KTN-2	122	122	0	122	122
Dwelling	KTN-4	105	0	0	0	0
School	KTN-7	2	2	0	2	2
Dwelling	KTN-9	270	0	0	0	0
Dwelling	KTN-11	51	47	0	47	47
Dwelling	KTN-12	12	12	0	12	12
Dwelling	KTN-20	12	0	0	0	0
Dwelling	KTN-32	105	90	0	90	90
Dwelling	KTN-33	60	0	0	0	0
Dwelling	KTN-45	4	0	0	0	0
Dwelling	KTN-46	30	0	0	0	0
Dwelling	KTN-48	52	52	0	52	52
Dwelling	KTN-49	10	0	0	0	0
Dwelling	KTN-50	38	38	0	38	38
Dwelling	KTN-P1	24	24	0	24	24
Dwelling	KTN-P2	240	240	0	240	240
Dwelling	KTN-P6	8	4	0	4	4
Dwelling	A1-2	3020	947	0	947	947
Dwelling	A1-4	1365	316	0	316	316
Dwelling	A1-5	1125	259	0	259	259
Dwelling	A1-6	1920	576	0	576	576
Dwelling	A1-8	1680	944	0	944	944
Dwelling	A1-9	1920	1136	0	1136	1136
Dwelling	A2-2	6240	622	0	622	622
Dwelling	A2-4	1152	612	0	612	612
Dwelling	A2-5	960	0	0	0	0
Dwelling	A2-7	3360	396	0	396	396
Dwelling	A2-9	1920	480	0	480	480
School	A2-11	48	39	0	39	39
School	A2-12	48	42	0	42	42
School	A2-13	48	48	0	48	48
School	A3-1	48	48	0	48	48
School	A3-2	48	18	0	18	18
Dwelling	A3-3	7128	412	0	412	412
School	A3-4	48	0	0	0	0
Dwelling	A3-6	1440	712	0	712	712
Dwelling	A3-7	30	0	0	0	0
School	B1-1	48	26	0	26	26
Dwelling	B2-10	320	230	0	230	230
School	B2-6	48	48	0	48	48
School	B2-7	48	48	0	48	48
School	B2-8	48	32	0	32	32
Dwelling	C1-3	110	110	0	110	110
Dwelling	C1-4	63	33	0	33	33
Dwelling	D1-5	57	0	0	0	0
Dwelling	D1-7	2600	944	0	944	936
Dwelling	D1-9	96	42	0	42	42
Dwelling	D1-11	2880	574	0	574	574
School	E1-2	48	0	0	0	0
Dwelling	E1-3	640	0	0	0	0
School	E1-4	48	0	0	0	0
Dwelling	F1-3	1400	0	0	0	0
Dwelling	H1-1	3	1	0	1	1
<b>Total</b>		<b>43181</b>	<b>10357</b>	<b>0</b>	<b>10357</b>	<b>10349</b>

Note:

[1] NSE - Noise sensitive element

[2] As the layout details showing classroom for primary school is not presently available, six classrooms will be assumed for each floor.



***Appendix 2.7***

---

***Summary of Road Traffic Noise Mitigation Proposal for  
the Project***

**Appendix 2.7**  
**Summary of Road Traffic Noise Mitigation Proposal for the Project**

Project Area	Road where Mitigation Measures in Place	Mitigation Measure ID	Approximate Chainage [Hong Kong Grid Coordinates]	Type and Approximate Extent of Mitigation Measures				Implementation Programme - Mitigation Measures in Place before Population Intake at Site(s)	Corresponding Figure No.
				Type <sup>[2]</sup>	Length, m	Height, m	Area, m <sup>2</sup>		
<b>KTN – DP4</b>									
KTN NDA Road D1 to D5	D3	KTN-NB08	D3-1 CH 121 – D3-1 CH 263 [(827859, 841148) – (827998, 841154)]	NB	135	5	-	A3-1, E1-3	2.2b, 2.2c & 2.2d
	D3	KTN-NB20	Not available <sup>[1]</sup> [(828565, 841135) – (828622, 841172)]	NB	70	5	-	A3-6	2.2c & 2.2d
	Roundabout connecting D3 and D5	KTN-NB23	Not available <sup>[1]</sup> [(828734, 841256) – (828753, 841325)]	NB	80	5	-	A3-6	2.2c & 2.2d
	D3	KTN-NB24	Not available <sup>[1]</sup> [(828789, 841236) – (828735, 841217)]	CNB2	60	7+3	-	A2-9, A2-13	2.2c & 2.2d
	Roundabout connecting D3 and D5	KTN-NB25	Not available <sup>[1]</sup> [(828816, 841297) – (828815, 841269)]	CNB	30	5+3	-	D1-7	2.2c & 2.2d
	D1	KTN-NB35	D1-1 CH 181 – D1-1 CH 235 [(827989, 840621) – (827984, 840569)]	CNB	55	5+3	-	B2-5	2.2b
	D2	KTN-NB37	Not available <sup>[1]</sup> [(828884, 840695) – (828944, 840734)]	NB	80	3	-	A1-9	2.2d
	D1	KTN-NB69	D1-2 CH 272 – D1-2 CH 330 [(827832, 840727) – (827888, 840722)]	NB	60	5	-	A1-2	2.2b
	Roundabout connecting D3 and D5	KTN-NB70	Not available <sup>[1]</sup> [(828779, 841334) – (828808, 841318)]	CNB2	30	7+3	-	D1-11	2.2c & 2.2d
	D3	KTN-NB75	D3-1 CH 233 – D3-1 CH 305 [(827970, 841128) – (828041, 841123)]	NB	75	5	-	A2-2	2.2b, 2.2c & 2.2d
	D5	KTN-NB82	Not available <sup>[1]</sup> [(828769, 841427) – (828779, 841334)]	CNB2	95	7+3	-	D1-11	2.2c & 2.2d
	D3	KTN-NB85	Advance stage: D3-1 CH 311 – D3-1 CH 425 [(828049, 841132) – (828161, 841122)]	NB	230	5	-	A3-1, A3-2, A3-3	2.2b, 2.2c & 2.2d
			Remaining stage: Not available <sup>[1]</sup> [(828161, 841120) – (828280, 841108)]						
	D3	KTN-NB86	Not available <sup>[1]</sup> [(828235, 841105) – (828279, 841101)]	NB	45	3	-	A2-2, A2-4	2.2c & 2.2d
	D3	KTN-NB87	Not available <sup>[1]</sup> [(828289, 841100) – (828354, 841094)]	NB	65	3	-	A2-4, A2-5	2.2c & 2.2d
	D3	KTN-NB88	Not available <sup>[1]</sup> [(828289, 841107) – (828355, 841102)]	NB	65	3	-	A3-3	2.2c & 2.2d
	D1	KTN-SE05	D1-2 CH 197– D1-2 CH 278 [(827755, 840726) – (827835, 840718)]	SE with opening to the south	80	-	-	A1-2	2.2b
	D2	KTN-SE07	Not available <sup>[1]</sup> [(828975, 840756) – (829039, 840818)]	SE with opening to the southeast	95	-	-	A1-9	2.2d
	D3	KTN-FE02	Not available <sup>[1]</sup> [(828626, 841166) – (828731, 841236)]	FE	130	-	-	A2-12, A2-13, A3-6	2.2c & 2.2d
D4	KTN-LNS11	D4-1 CH 137 – D4-1 CH 388 [(827847, 841177) – (827937, 841406)]	LNS	245	-	2162	E1-2, E1-3	2.2b & 2.2c	

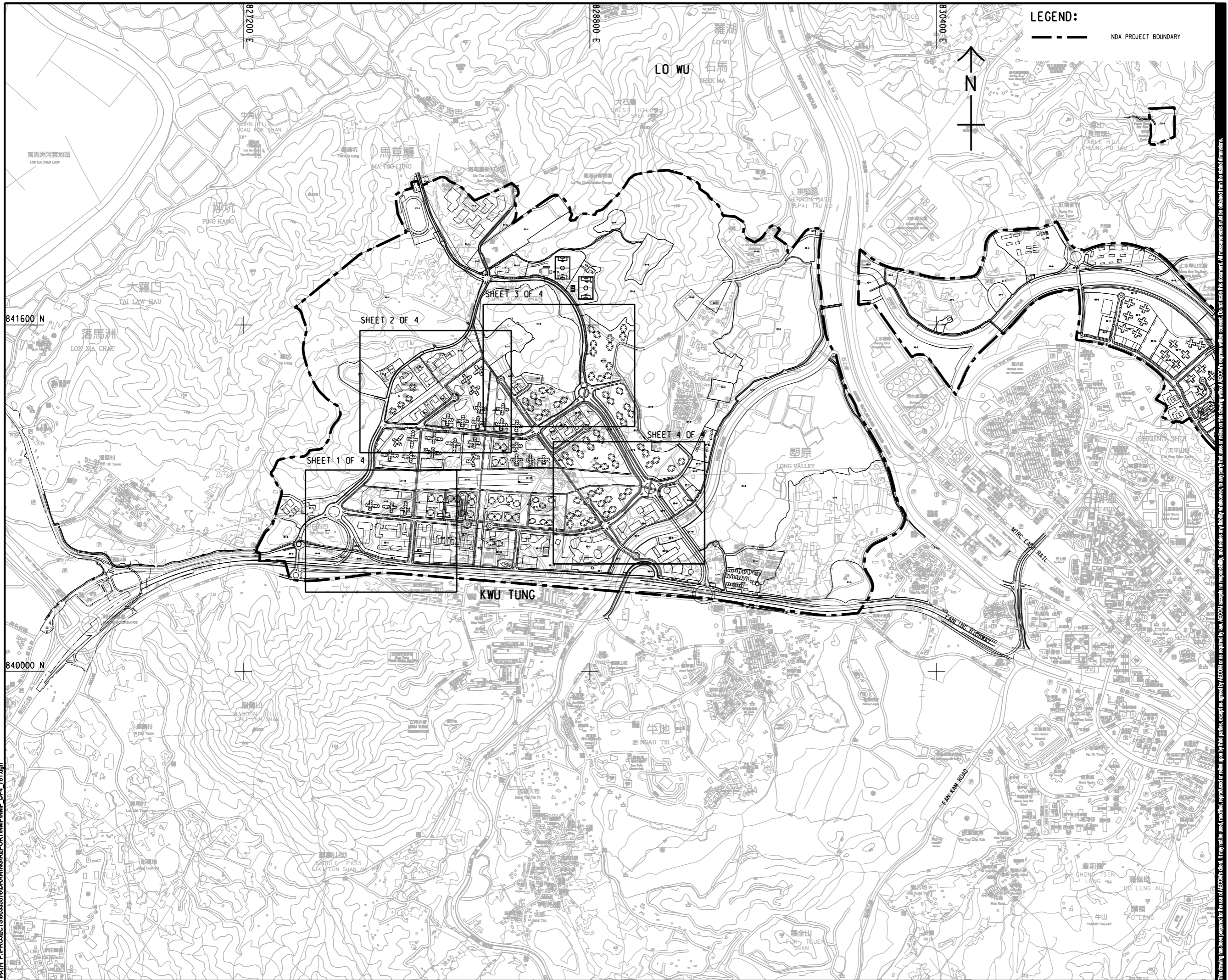
Project Area	Road where Mitigation Measures in Place	Mitigation Measure ID	Approximate Chainage [Hong Kong Grid Coordinates]	Type and Approximate Extent of Mitigation Measures				Implementation Programme - Mitigation Measures in Place before Population Intake at Site(s)	Corresponding Figure No.
				Type <sup>[2]</sup>	Length, m	Height, m	Area, m <sup>2</sup>		
D3	KTN-LNS12	Advance stage: D3-1 CH 116 – D3-1 CH 463 [(827852, 841140) – (828199, 841113)]		LNS	790	-	9204	A2-2, A2-4, A2-5, A2-6, A2-7, A2-11, A2-12, A3-1, A3-3, A3-6, E1-3	2.2b, 2.2c & 2.2d
		Remaining stage: Not available <sup>[1]</sup> [(828199, 841113) – (828627, 841167)]							
D5	KTN-LNS13	Not available <sup>[1]</sup> [(828764, 841377) – (828766, 841590)]		LNS	215	-	1825	D1-11	2.2c
D1	KTN-LNS14	D1-2 CH 278 – D1-2 CH 433 [(827835, 840718) – (827994, 840703)]		LNS	160	-	1272	A1-2, B2-5	2.2b
D1	KTN-LNS15	D1-1 CH 104 – D1-1 CH 303 [(827989, 840699) – (827972, 840500)]		LNS	200	-	1970	A1-2, A1-4, B2-5	2.2b
D2	KTN-LNS16	Not available <sup>[1]</sup> [(828755, 840641) – (828975, 840756)]		LNS	255	-	2951	A1-9	2.2d

Notes:

- [1] These noise mitigation measures will be implemented during the remaining phase. The Project Proponent will engage Detailed Design Consultant to supplement the approximate chainage of the noise mitigation measures for the remaining phase. The TNMP will be further revised to supplement these design information, and submitted for EPD's approval no later than one month before the commencement of the construction of noise mitigation measures under remaining phase.
- [2] CNB – 5m vertical noise barrier with 3m cantilevered arm at 45°  
 CNB2 – 7m vertical noise barrier with 3m cantilevered arm at 45°  
 FE – Full enclosure  
 LNS – Low noise road surfacing  
 NB – Noise Barrier  
 SE – Semi-enclosure  
 All the proposed noise barriers are absorptive in terms of acoustic characteristic.

841600 N

840000 N



LEGEND:  
 - - - - - NDA PROJECT BOUNDARY

**AECOM**

**PROJECT**  
 項目  
**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 業主  
 土木工程拓展署  
 CEDD Civil Engineering and Development Department

**CONSULTANT**  
 工程顧問公司  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**  
 修訂

IR	DATE	DESCRIPTION	CHK.
修訂	日期	內容摘要	核對

**STATUS**  
 階段

**SCALE**  
 比例  
 A1 1 : 8000

**DIMENSION UNIT**  
 尺寸單位  
 METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號  
 60335576

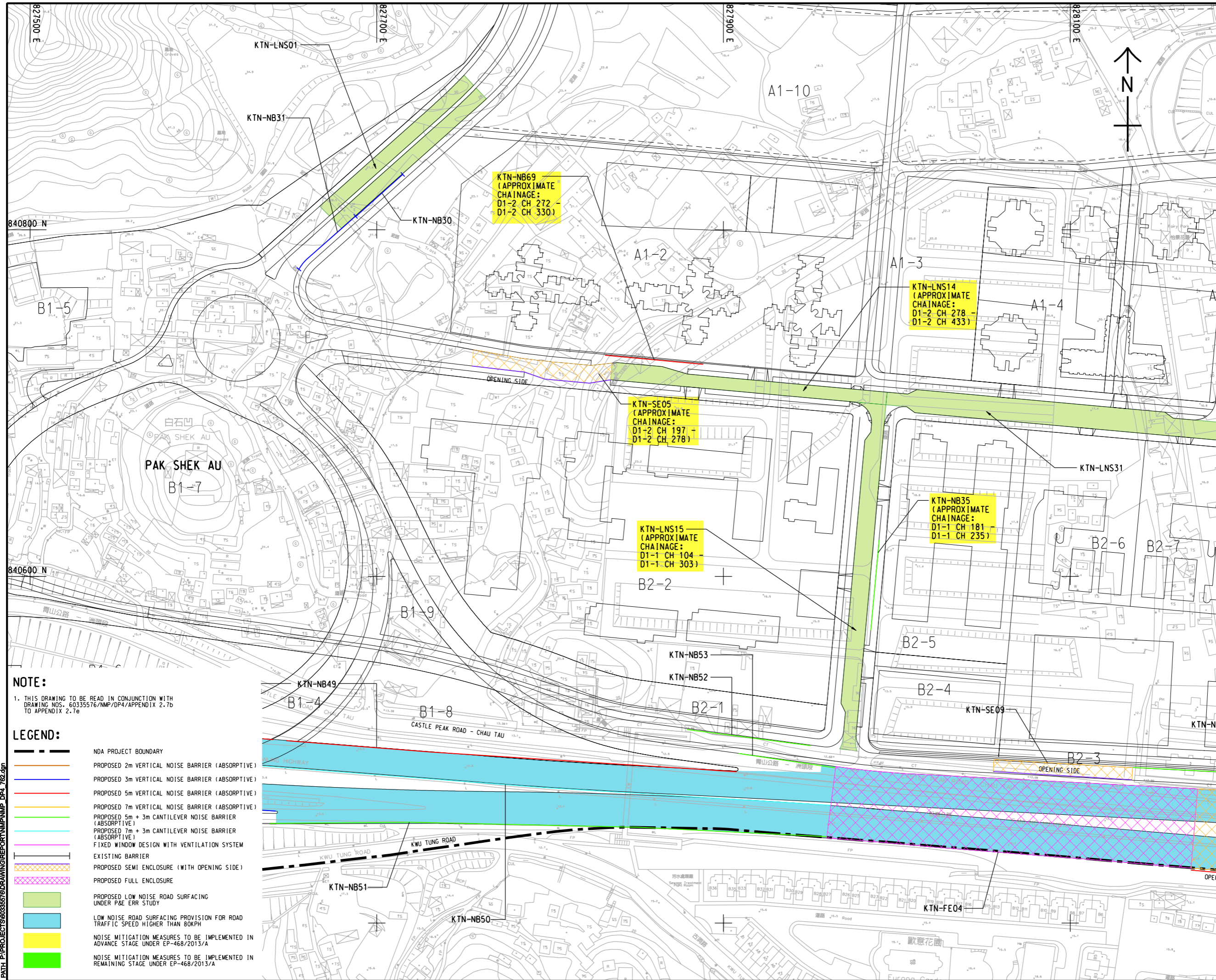
**CONTRACT NO.**  
 合約編號  
 CE 13/2014 (CE)

**SHEET TITLE**  
 圖紙名稱  
 LATEST PROPOSAL OF TRAFFIC NOISE MITIGATION MEASURES (ZOOM IN) - KEY PLAN

**SHEET NUMBER**  
 圖紙編號  
 60335576/NMP/DP4/APPENDIX 2.7a

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as required by law. AECOM accepts no responsibility, and disclaims any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the related dimensions.

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:



**NOTE:**  
 1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/APPENDIX 2.7b TO APPENDIX 2.7e

**LEGEND:**

	NDA PROJECT BOUNDARY
	PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
	PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
	PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
	FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
	EXISTING BARRIER
	PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
	PROPOSED FULL ENCLOSURE
	PROPOSED LOW NOISE ROAD SURFACING UNDER P&E ERR STUDY
	LOW NOISE ROAD SURFACING PROVISION FOR ROAD TRAFFIC SPEED HIGHER THAN 80KPH
	NOISE MITIGATION MEASURES TO BE IMPLEMENTED IN ADVANCE STAGE UNDER EP-468/2013/A
	NOISE MITIGATION MEASURES TO BE IMPLEMENTED IN REMAINING STAGE UNDER EP-468/2013/A

**AECOM**

**PROJECT**  
 DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION

**CLIENT**  
 土木工程拓展署  
 CEDD Civil Engineering and Development Department

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 宏利工程顧問有限公司

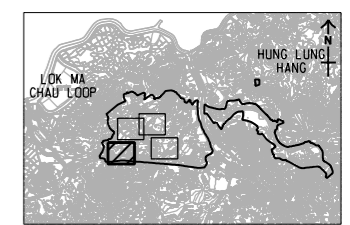
**ISSUE/REVISION**

NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 預覽

**SCALE**  
 1:1000 METRES

**KEY PLAN** A1:100000



**PROJECT NO.** 60335576  
**CONTRACT NO.** CE 13/2014 (CE)

**SHEET TITLE**  
 LATEST PROPOSAL OF TRAFFIC NOISE MITIGATION MEASURES (ZOOM IN)

**SHEET NUMBER**  
 60335576/NMP/DP4/APPENDIX 2.7b

SHEET 1 OF 4

Pld File by: TungBo 2019/7/29  
 PATH: P:\PROJECTS\60335576\DRAWING\REPORT\NMP\DP4\_762.dgn

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the related dimensions.

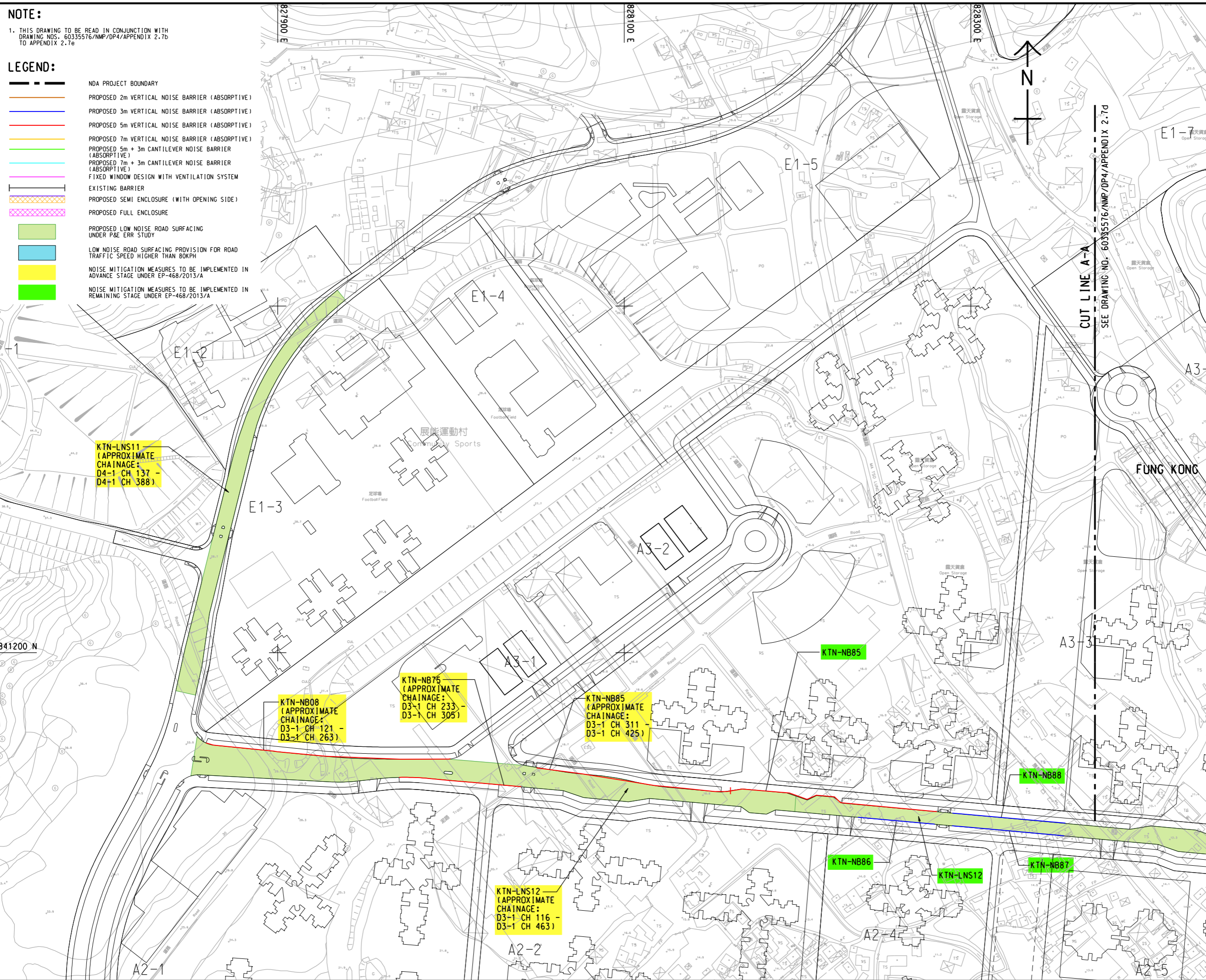
ISO A1 594mm x 841mm  
Approved:  
Checked:  
Designer:  
Project Management Initials:  
Pld File by: jance.vu 10/07/2019  
PATH: P:\PROJECTS\60335576\DRAWING\REPORT\NMP\DP4\_783.dgn

**NOTE:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/APPENDIX 2.7b TO APPENDIX 2.7e

**LEGEND:**

- NDA PROJECT BOUNDARY
- PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
- EXISTING BARRIER
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- PROPOSED LOW NOISE ROAD SURFACING UNDER P&E ERR STUDY
- LOW NOISE ROAD SURFACING PROVISION FOR ROAD TRAFFIC SPEED HIGHER THAN 80KPH
- NOISE MITIGATION MEASURES TO BE IMPLEMENTED IN ADVANCE STAGE UNDER EP-468/2013/A
- NOISE MITIGATION MEASURES TO BE IMPLEMENTED IN REMAINING STAGE UNDER EP-468/2013/A



**PROJECT**  
 DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION

**CLIENT**  
 土木工程拓展署  
 CEDD Civil Engineering and Development Department

**CONSULTANT**  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程師有限公司

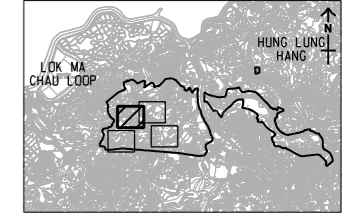
**ISSUE/REVISION**

NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 核准

**SCALE**  
 比例: A1 1: 1000

**DIMENSION UNIT**  
 尺寸單位: METRES



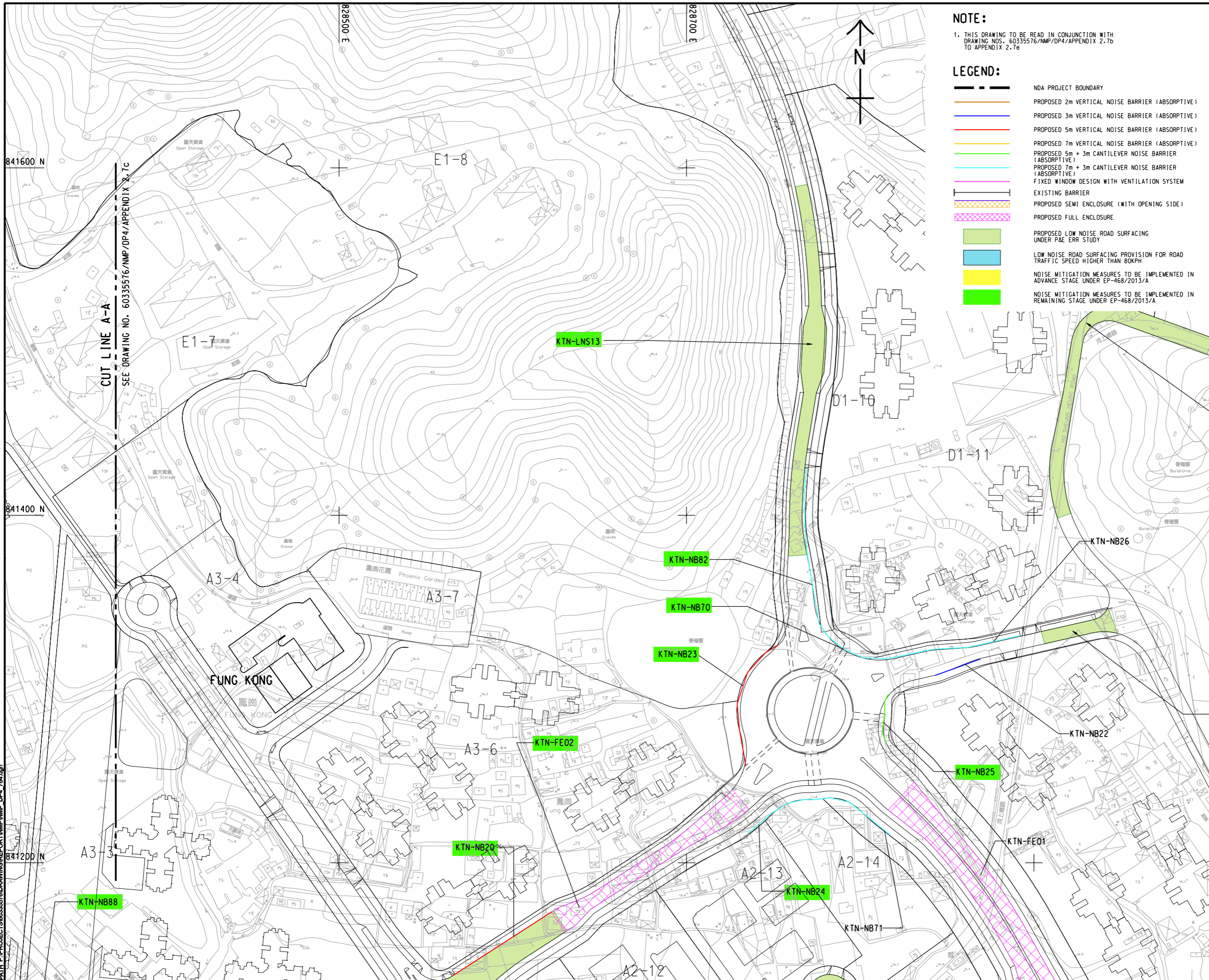
**PROJECT NO.** 60335576  
**CONTRACT NO.** CE 13/2014 (CE)

**SHEET TITLE**  
 LATEST PROPOSAL OF TRAFFIC NOISE MITIGATION MEASURES (ZOOM IN)

**SHEET NUMBER**  
 60335576/NMP/DP4/APPENDIX 2.7c

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and disclaims any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. All measurements must be obtained from the related dimensions.

ISO A1 594mm x 841mm  
 Approved:  
 Checked: 841600 N  
 Designer:  
 Project Management Initials: 841400 N  
 841200 N  
 2019/7/5  
 PATH: P:\PROJECTS\60335576\DRAWING\REPORT\NMP\_DP4\_764.dgn



**NOTE:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/APPENDIX 2.7b TO APPENDIX 2.7c

**LEGEND:**

- NDA PROJECT BOUNDARY
- PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
- PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
- FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
- EXISTING BARRIER
- PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
- PROPOSED FULL ENCLOSURE
- PROPOSED LOW NOISE ROAD SURFACING UNDER P&E ERR STUDY
- LOW NOISE ROAD SURFACING PROVISION FOR ROAD TRAFFIC SPEED HIGHER THAN 80KPH
- NOISE MITIGATION MEASURES TO BE IMPLEMENTED IN ADVANCE STAGE UNDER EP-468/2013/A
- NOISE MITIGATION MEASURES TO BE IMPLEMENTED IN REMAINING STAGE UNDER EP-468/2013/A



**PROJECT**

**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**



**CONSULTANT**

AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**

**ISSUE/REVISION**

NO.	DATE	DESCRIPTION	CHK.

**STATUS**

**SCALE**

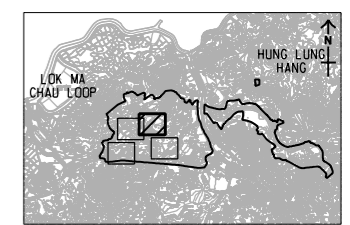
A1 1: 1000

**DIMENSION UNIT**

METRES

**KEY PLAN**

A1 1: 100000



**PROJECT NO.**

60335576

**CONTRACT NO.**

CE 13/2014 (CE)

**SHEET TITLE**

LATEST PROPOSAL OF TRAFFIC NOISE MITIGATION MEASURES (ZOOM IN)

SHEET 3 OF 4

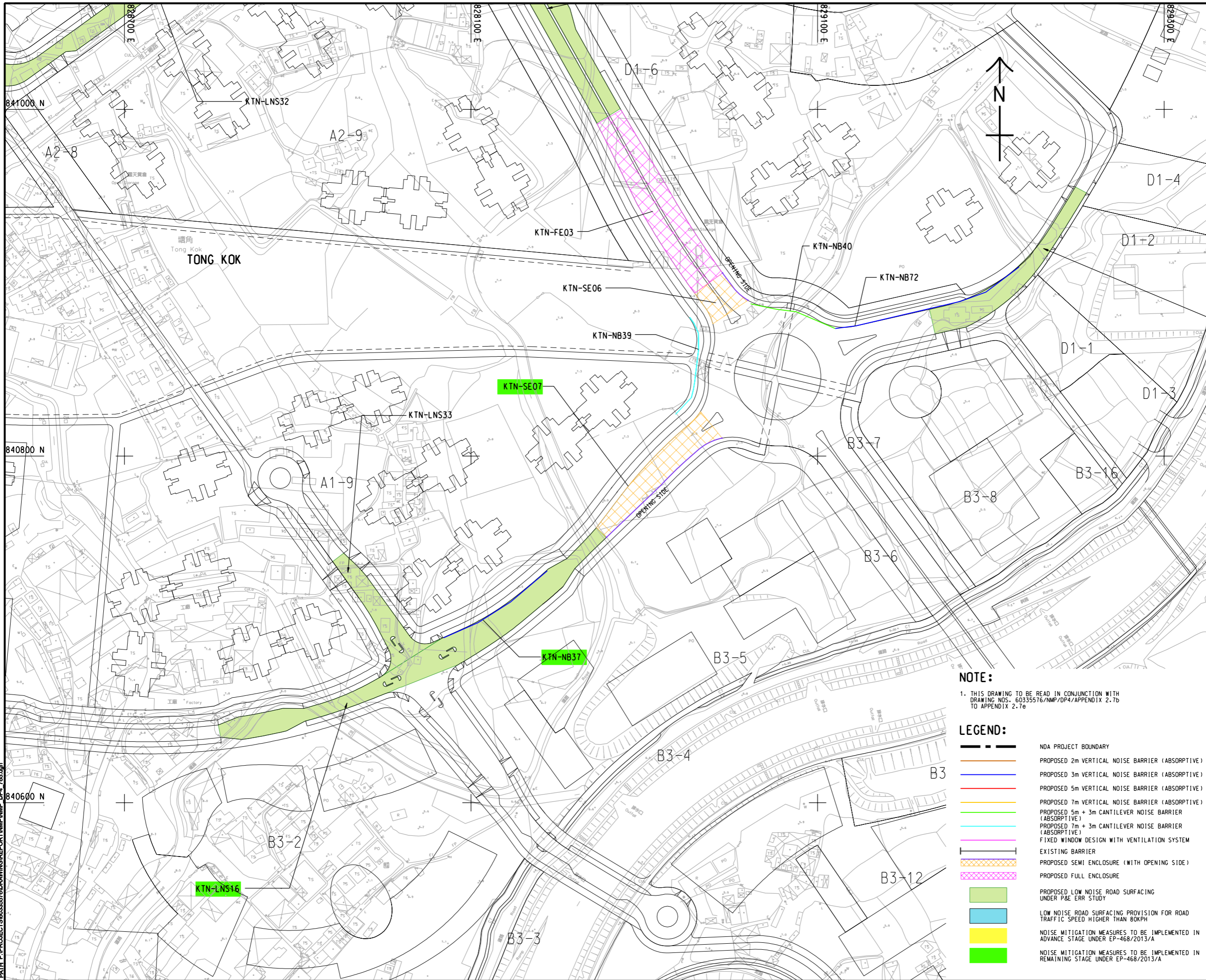
**SHEET NUMBER**

60335576/NMP/DP4/APPENDIX 2.7d

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the related dimensions.

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:

Pld File by: LIAH2 2019/7/5  
 PATH: P:\PROJECTS\60335576\DRAWING\REPORT\NMP\_DP4\_785.dgn



**PROJECT**  
 項目  
**DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 - DESIGN AND CONSTRUCTION**

**CLIENT**  
 業主  
 土木工程拓展署  
 Civil Engineering and Development Department

**CONSULTANT**  
 工程顧問公司  
 AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**  
 修訂

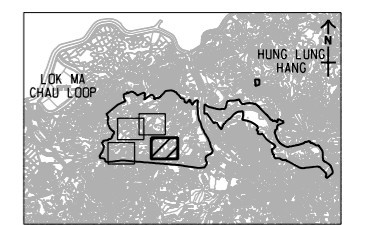
NO.	DATE	DESCRIPTION	CHK.

**STATUS**  
 階段

**SCALE**  
 比例  
 A1 1: 1000

**DIMENSION UNIT**  
 尺寸單位  
 METRES

**KEY PLAN** A1 1: 100000  
 索引圖



**PROJECT NO.**  
 項目編號  
 60335576

**CONTRACT NO.**  
 合約編號  
 CE 13/2014 (CE)

**SHEET TITLE**  
 圖紙名稱  
**LATEST PROPOSAL OF TRAFFIC NOISE MITIGATION MEASURES (ZOOM IN)**

SHEET 4 OF 4

**SHEET NUMBER**  
 圖紙編號  
 60335576/NMP/DP4/APPENDIX 2.7e

**NOTE:**  
 1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/NMP/DP4/APPENDIX 2.7b TO APPENDIX 2.7e

- LEGEND:**
- NDA PROJECT BOUNDARY
  - PROPOSED 2m VERTICAL NOISE BARRIER (ABSORPTIVE)
  - PROPOSED 3m VERTICAL NOISE BARRIER (ABSORPTIVE)
  - PROPOSED 5m VERTICAL NOISE BARRIER (ABSORPTIVE)
  - PROPOSED 7m VERTICAL NOISE BARRIER (ABSORPTIVE)
  - PROPOSED 5m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
  - PROPOSED 7m + 3m CANTILEVER NOISE BARRIER (ABSORPTIVE)
  - FIXED WINDOW DESIGN WITH VENTILATION SYSTEM
  - EXISTING BARRIER
  - PROPOSED SEMI ENCLOSURE (WITH OPENING SIDE)
  - PROPOSED FULL ENCLOSURE
  - PROPOSED LOW NOISE ROAD SURFACING UNDER P&E ERR STUDY
  - LOW NOISE ROAD SURFACING PROVISION FOR ROAD TRAFFIC SPEED HIGHER THAN 80KPH
  - NOISE MITIGATION MEASURES TO BE IMPLEMENTED IN ADVANCE STAGE UNDER EP-468/2013/A
  - NOISE MITIGATION MEASURES TO BE IMPLEMENTED IN REMAINING STAGE UNDER EP-468/2013/A

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as approved by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, for any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the related dimensions.