Kam Sheung Road Station (KSR) & C&C Tunnel from Pat Heung Depot to KSR

Project : Consultancy Agreement No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Kam Sheung Road Station (KSR) & C&C Tunnel from PHD to KSR)
Scenario: Mitigated Scenario

		2025												2026												2027											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance, Preparation & Monitoring (KSR)	104				104	104	104	104	104	104																											
Site Formation (RE Wall Modification (KSR 14-16))	111									111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111										
Site Formation (TWR Underpass (KSR 12-14))	110																									110	110	110	110	110	110	110	110	110	110	110	110
D-wall, Piling and Excavation (KSR 1-12)	101								101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101
D-wall, Piling and Excavation (KSR 12-33)	110				110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110
D-wall, Piling and Excavation (KSR 33-39)	105												105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
RC Works (KSR 1-12)	103																																				
RC Works (KSR 1-12 Sub Zone 1)	97																																				
RC Works (KSR 1-12 Sub Zone 2)	97																																				
RC Works (KSR 1-12 Sub Zone 3)	97																																				
RC Works (KSR 12-33)	108																										108	108	108	108	108	108	108	108	108	108	108
RC Works (KSR 33-39)	104																																				
Structural Steel Works (KSR 16-33)	97																																				
UU and Road Works (KSR Ext A)	105																																				
Bicycle Parking Bays (KSR Ext B)	103																																				
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-1)	101								101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-2)	99								99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-3)	101								101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-4) (Eastern)	95								95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-4) (Western)	99								99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99
C&C Tunnel: Backfilling (PHDKSR-1 to PHDKSR-4)	101																																				
KSR - Backfilling (KSR 12-14)	101																																				

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
PHD-E1	55	0	0	0	0	0	0	0	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
PHDKSR-E1	57	0	0	0	0	0	0	0	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
PHDKSR-P1	66	0	0	0	0	0	0	0	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
PHDKSR-P2	67	0	0	0	50	50	50	50	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
PHDKSR-P3	67	0	0	0	52	52	52	52	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
KSR-P1	65																									65	65	64	64	64	64	64	64	64	64	64	64
KSR-P2	75																									73	74	73	73	73	73	73	73	73	73	73	73
KSR-P3	66																									66	66	65	65	65	65	65	65	65	65	65	65
KSR-P4	68																									67	68	66	66	66	66	66	66	66	66	66	66
KSR-P5	73																									72	73	71	71	71	71	71	71	71	71	71	71
KSR-P6	68																									67	68	68	68	68	68	68	68	68	68	68	68
KSR-P7	67																									66	67	66	66	66	66	66	66	66	66	66	66
KSR-P8	70																																				
KSR-E1	63	0	0	0	61	61	61	61	61	61	58	58	62	62	62	62	62	62	62	62	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "RC Works (KSR 12-33)" and "RC Works (KSR 33-39)" will not take place concurrently. The worst case is adopted for calculation.
3. "C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel" and "C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel - Backfilling" will not take place concurrently. The worst case is adopted for calculation.
4. Text in bold and underline denotes exceedance of relevant criterion (text in orange cell denotes exceedance for school during examination period).
5. Cell with shaded area denotes the unoccupancy of the NSR (i.e. before the population intake).

Project : Consultancy Agreement No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Kam Sheung Road Station (KSR) & C&C Tunnel from PHD to KSR)
Scenario: Mitigated Scenario

		2028												2029												2030											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance, Preparation & Monitoring (KSR)	104																																				
Site Formation (RE Wall Modification (KSR 14-16))	111																																				
Site Formation (TWR Underpass (KSR 12-14))	110	110																																			
D-wall, Piling and Excavation (KSR 1-12)	101	101	101	101	101	101	101	101	101	101	101	101																									
D-wall, Piling and Excavation (KSR 12-33)	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110																					
D-wall, Piling and Excavation (KSR 33-39)	105	105	105	105	105	105	105																														
RC Works (KSR 1-12)	103												103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103				
RC Works (KSR 1-12 Sub Zone 1)	97												97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97				
RC Works (KSR 1-12 Sub Zone 2)	97												97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97				
RC Works (KSR 1-12 Sub Zone 3)	97												97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97				
RC Works (KSR 12-33)	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108				
RC Works (KSR 33-39)	104						104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104												
Structural Steel Works (KSR 16-33)	97																				97	97	97	97	97	97											
UU and Road Works (KSR Ext A)	105																							105	105	105	105	105	105	105	105	105	105	105	105	105	105
Bicycle Parking Bays (KSR Ext B)	103																							103	103	103	103	103	103	103	103	103	103	103	103	103	103
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-1)	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101								
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-2)	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99								
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-3)	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101								
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-4) (Eastern)	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95								
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-4) (Western)	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99								
C&C Tunnel: Backfilling (PHDKSR-1 to PHDKSR-4)	101																		101	101	101	101	101	101	101	101	101	101									
KSR - Backfilling (KSR 12-14)	101																					101	101	101	101	101	101	101	101	101	101	101	101				

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
PHD-E1	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	0	0	0	0	0	0	0	0
PHDKSR-E1	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	0	0	0	0	0	0	0	0
PHDKSR-P1	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	0	0	0	0	0	0	0	0
PHDKSR-P2	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	50	50	50	50	0	0	0	0
PHDKSR-P3	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	54	54	54	54	0	0	0	0
KSR-P1	65	64	62	62	62	62	62	62	62	62	62	62	63	63	63	63	62	62	62	62	62	62	62	62	62	62	62	62	61	61	61	61	0	0	0	0
KSR-P2	75	73	72	72	72	72	72	72	72	72	72	72	75	75	75	75	74	74	74	74	75	75	75	75	75	75	75	75	75	75	75	74	0	0	0	0
KSR-P3	66	65	64	64	64	64	64	64	64	64	64	64	65	65	65	65	64	64	64	64	64	64	64	64	64	64	64	64	63	63	63	62	0	0	0	0
KSR-P4	68	66	63	63	63	63	63	63	63	63	63	63	64	64	64	64	62	62	62	62	62	63	63	63	63	63	63	63	62	62	62	62	0	0	0	0
KSR-P5	73	71	69	69	69	69	69	69	69	69	69	69	69	69	69	69	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	65	0	0	0	0
KSR-P6	68	68	67	67	67	67	67	67	67	67	67	67	67	67	67	67	64	64	64	64	65	65	65	65	63	63	63	63	63	63	63	63	54	54	54	54
KSR-P7	67	66	66	66	66	66	66	65	65	65	65	65	65	65	65	65	64	64	64	64	64	64	64	64	61	61	61	61	61	61	61	61	56	56	56	56
KSR-P8	70																									70	70	70	70	62	62	62	62	0	0	0	0
KSR-E1	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	61	61	61	61	61	61	61	62	59	59	59	59	59	59	59	59	54	54	54	54

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "RC Works (KSR 12-33)" and "RC Works (KSR 33-39)" will not take place concurrently. The worst case is adopted for calculation.
3. "C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel" and "C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel - Backfilling" will not take place concurrently. The worst case is adopted for calculation.
4. Text in bold and underline denotes exceedance of relevant criterion (text in orange cell denotes exceedance for school during examination period).
5. Cell with shaded area denotes the unoccupancy of the NSR (i.e. before the population intake).

Project : Consultancy Agreement No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Kam Sheung Road Station (KSR) & C&C Tunnel from PHD to KSR)
Scenario: Mitigated Scenario

		2031											
		1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance, Preparation & Monitoring (KSR)	104												
Site Formation (RE Wall Modification (KSR 14-16))	111												
Site Formation (TWR Underpass (KSR 12-14))	110												
D-wall, Piling and Excavation (KSR 1-12)	101												
D-wall, Piling and Excavation (KSR 12-33)	110												
D-wall, Piling and Excavation (KSR 33-39)	105												
RC Works (KSR 1-12)	103												
RC Works (KSR 1-12 Sub Zone 1)	97												
RC Works (KSR 1-12 Sub Zone 2)	97												
RC Works (KSR 1-12 Sub Zone 3)	97												
RC Works (KSR 12-33)	108												
RC Works (KSR 33-39)	104												
Structural Steel Works (KSR 16-33)	97												
UU and Road Works (KSR Ext A)	105	105	105										
Bicycle Parking Bays (KSR Ext B)	103	103	103										
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-1)	101												
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-2)	99												
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-3)	101												
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-4) (Eastern)	95												
C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel (PHDKSR-4) (Western)	99												
C&C Tunnel: Backfilling (PHDKSR-1 to PHDKSR-4)	101												
KSR - Backfilling (KSR 12-14)	101												

Predicted Construction Noise, dB(A)													
NAP	Max												
PHD-E1	55	0	0	0	0	0	0	0	0	0	0	0	0
PHDKSR-E1	57	0	0	0	0	0	0	0	0	0	0	0	0
PHDKSR-P1	66	0	0	0	0	0	0	0	0	0	0	0	0
PHDKSR-P2	67	0	0	0	0	0	0	0	0	0	0	0	0
PHDKSR-P3	67	0	0	0	0	0	0	0	0	0	0	0	0
KSR-P1	65	0	0	0	0	0	0	0	0	0	0	0	0
KSR-P2	75	0	0	0	0	0	0	0	0	0	0	0	0
KSR-P3	66	0	0	0	0	0	0	0	0	0	0	0	0
KSR-P4	68	0	0	0	0	0	0	0	0	0	0	0	0
KSR-P5	73	0	0	0	0	0	0	0	0	0	0	0	0
KSR-P6	68	54	54	0	0	0	0	0	0	0	0	0	0
KSR-P7	67	56	56	0	0	0	0	0	0	0	0	0	0
KSR-P8	70	0	0	0	0	0	0	0	0	0	0	0	0
KSR-E1	63	54	54	0	0	0	0	0	0	0	0	0	0

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "RC Works (KSR 12-33)" and "RC Works (KSR 33-39)" will not take place concurrently. The worst case is adopted for calculation.
3. "C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel" and "C&C Tunnel: PHD to KSR incl. Southern Extension Tunnel - Backfilling" will not take place concurrently. The worst case is adopted for calculation.
4. Text in bold and underline denotes exceedance of relevant criterion (text in orange cell denotes exceedance for school during examination period).
5. Cell with shaded area denotes the unoccupancy of the NSR (i.e. before the population intake).

Shui Mei Road Ancillary Building (EAP/EEP/VB)

Project : Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Shui Mei Road Ancillary Building (EAP/EEP/VB))
Scenario: Mitigated Scenario

		2025												2026												2027											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (AB5)	104				104	104	104																														
Retaining Walls and Site Formation Works (AB5-RW)	103						103	103	103	103	103	103	103																								
Cofferdam Works (AB5-a1)	103								103	103	103	103	103	103	103	103	103																				
Cofferdam Works (AB5-a2)	103								103	103	103	103	103	103	103	103	103																				
Cofferdam Works (AB5-a3)	103								103	103	103	103	103	103	103	103	103																				
Cofferdam Works (AB5-a)	91								91	91	91	91	91	91	91	91	91																				
Foundation Works (AB5-b)	105								105	105	105	105	105	105	105	105	105																				
Excavation Works (AB5-a)	99																				99	99	99	99	99	99	99	99	99	99							
RC Works (AB5-b)	106																																				
TBM Tunnel (AB5-TBM)	105																																105	105	105	105	105
Site Clearance and Establishment (CLP Substation)	100								100																												
Construct Temporary Substation (CLP Substation)	102								102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102					
Decommissioning, Demolition and Site Reinstatement Temporary Substation (CLP Substation)	99																																				
Contractor Site Office Construction (Contractor Site Office)	101								101	101	101																										
Removal and Reinstatement (Contractor Site Office)	100																																				

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
SMR-E1	75	0	0	0	68	68	71	71	75	75	75	75	75	74	74	74	74	0	0	0	63	63	63	63	63	63	63	63	63	63	0	0	71	71	71	71	71
SMR-E2	55	0	0	0	0	0	49	49	55	55	55	54	54	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	51	51	51	51	51

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Preliminary Works" and "Retaining Walls and Site Formation Works" will not take place concurrently. The worst case is adopted for calculation.
3. "TBM Tunnel (AB5-TBM)" and "Temporary CLP Decommissioning, Demolition and Site Reinstatement" will not take place concurrently. The worst case is adopted for calculation.
4. "Temporary CLP Sub-Station Site Clearance and Establishment", "Temporary CLP Sub-Station Construction", and "Contractor's Site Office Construction" will not take place concurrently. The worst case is adopted for calculation.
5. Text in bold and underline denotes exceedance of relevant criterion.

Project : Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Shui Mei Road Ancillary Building (EAP/EEP/VB))
Scenario: Mitigated Scenario

		2028												2029												2030											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (AB5)	104																																				
Retaining Walls and Site Formation Works (AB5-RW)	103																																				
Cofferdam Works (AB5-a1)	103																																				
Cofferdam Works (AB5-a2)	103																																				
Cofferdam Works (AB5-a3)	103																																				
Cofferdam Works (AB5-a)	91																																				
Foundation Works (AB5-b)	105																																				
Excavation Works (AB5-a)	99																																				
RC Works (AB5-b)	106															106	106	106	106	106	106	106	106														
TBM Tunnel (AB5-TBM)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105		
Site Clearance and Establishment (CLP Substation)	100																																				
Construct Temporary Substation (CLP Substation)	102																																				
Decommissioning, Demolition and Site Reinstatement Temporary Substation (CLP Substation)	99																																			99	99
Contractor Site Office Construction (Contractor Site Office)	101																																				
Removal and Reinstatement (Contractor Site Office)	100																																				
Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
SMR-E1	75	71	71	71	71	71	71	71	71	71	71	71	71	71	71	74	74	74	74	74	74	74	74	71	71	71	71	71	71	71	71	71	71	71	71	0	
SMR-E2	55	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	49	

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Preliminary Works" and "Retaining Walls and Site Formation Works" will not take place concurrently. The worst case is adopted for calculation.
3. "TBM Tunnel (AB5-TBM)" and "Temporary CLP Decommissioning, Demolition and Site Reinstatement" will not take place concurrently. The worst case is adopted for calculation.
4. "Temporary CLP Sub-Station Site Clearance and Establishment", "Temporary CLP Sub-Station Construction", and "Contractor's Site Office Construction" will not take place concurrently. The worst case is adopted for calculation.
5. Text in bold and underline denotes exceedance of relevant criterion.

Project : Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Shui Mei Road Ancillary Building (EAP/EEP/VB))
Scenario: Mitigated Scenario

		2031											
		1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (AB5)	104												
Retaining Walls and Site Formation Works (AB5-RW)	103												
Cofferdam Works (AB5-a1)	103												
Cofferdam Works (AB5-a2)	103												
Cofferdam Works (AB5-a3)	103												
Cofferdam Works (AB5-a)	91												
Foundation Works (AB5-b)	105												
Excavation Works (AB5-a)	99												
RC Works (AB5-b)	106												
TBM Tunnel (AB5-TBM)	105												
Site Clearance and Establishment (CLP Substation)	100												
Construct Temporary Substation (CLP Substation)	102												
Decommissioning, Demolition and Site Reinstatement Temporary Substation (CLP Substation)	99												
Contractor Site Office Construction (Contractor Site Office)	101												
Removal and Reinstatement (Contractor Site Office)	100			100	100	100							

Predicted Construction Noise, dB(A)													
NAP	Max												
SMR-E1	75	0	0	0	0	0	0	0	0	0	0	0	0
SMR-E2	55	0	0	48	48	48	0	0	0	0	0	0	0

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Preliminary Works" and "Retaining Walls and Site Formation Works" will not take place concurrently. The worst case is adopted for calculation.
3. "TBM Tunnel (AB5-TBM)" and "Temporary CLP Decommissioning, Demolition and Site Reinstatement" will not take place concurrently. The worst case is adopted for calculation.
4. "Temporary CLP Sub-Station Site Clearance and Establishment", "Temporary CLP Sub-Station Construction", and "Contractor's Site Office Construction" will not take place concurrently. The worst case is adopted for calculation.
5. Text in bold and underline denotes exceedance of relevant criterion.

Au Tau Station (AUT)

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Au Tau Station (AUT))
Scenario: Mitigated Scenario

		2026												2027												2028											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance, Preparation & Monitoring (AUT-A, AUT-B & AUT-C)	104										104	104	104	104	104	104																					
Site Formation Works, Backfilling (AUT-A, AUT-B & AUT-C)	106											106	106	106	106																						
D-wall & Piling Trial (AUT-A, AUT-B & AUT-C)	99										99	99	99	99	99																						
D-wall, Piling & Excavation (AUT-A)	108														108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108
D-wall, Piling & Excavation (AUT-B)	108														108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108
D-wall, Piling & Excavation (AUT-C)	111														111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
RC Works (AUT-A)	104																																				
RC Works (AUT-B)	106																																				
RC Works (AUT-C)	104																																				
Structural Steel Works (AUT-B)	97																																				
Park & Ride Facilities/ Bicycle Parking Bays (AUT-D)	103																																				

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
AUT-E1	69	0	0	0	0	0	0	0	0	0	61	64	64	64	69	69	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
AUT-E2	75	0	0	0	0	0	0	0	0	0	67	70	70	70	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
AUT-P1	53																																				
AUT-P2	57																																				
AUT-P3	51																																				

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "D-wall, Piling & Excavation" and "Site Formation Works (Backfilling)" will not take place concurrently. The worst case is adopted for calculation.
3. "D-wall, Piling & Excavation" and "D-wall, Piling Trial" will not take place concurrently. The worst case is adopted for calculation.
4. "D-wall, Piling & Excavation" and "RC Works" will not take place concurrently. The worst case is adopted for calculation.
5. "Strutural Steel Works" and "Park & Ride Facilities/ Bicycle Parking Bays" will not take place concurrently. The worst case is adopted for calculation.
6. Text in bold and underline denotes exceedance of relevant criterion.
7. Cell with shaded area denotes the unoccupancy of the NAP (i.e. before the population intake).

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Au Tau Station (AUT))
Scenario: Mitigated Scenario

		2029												2030												2031											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance, Preparation & Monitoring (AUT-A, AUT-B & AUT-C)	104																																				
Site Formation Works, Backfilling (AUT-A, AUT-B & AUT-C)	106																																				
D-wall & Piling Trial (AUT-A, AUT-B & AUT-C)	99																																				
D-wall, Piling & Excavation (AUT-A)	108	108	108	108																																	
D-wall, Piling & Excavation (AUT-B)	108	108	108	108																																	
D-wall, Piling & Excavation (AUT-C)	111	111	111	111																																	
RC Works (AUT-A)	104			104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104																
RC Works (AUT-B)	106			106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106																
RC Works (AUT-C)	104			104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104																
Structural Steel Works (AUT-B)	97															97	97	97	97	97	97																
Park & Ride Facilities/ Bicycle Parking Bays (AUT-D)	103																				103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
AUT-E1	69	68	68	68	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	0
AUT-E2	75	75	75	75	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	0
AUT-P1	53																									53	53	53	53	53	53	53	53	53	53	53	0
AUT-P2	57																									57	57	57	57	57	57	57	57	57	57	57	0
AUT-P3	51																									51	51	51	51	51	51	51	51	51	51	51	0

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "D-wall, Piling & Excavation" and "Site Formation Works (Backfilling)" will not take place concurrently. The worst case is adopted for calculation.
3. "D-wall, Piling & Excavation" and "D-wall, Piling Trial" will not take place concurrently. The worst case is adopted for calculation.
4. "D-wall, Piling & Excavation" and "RC Works" will not take place concurrently. The worst case is adopted for calculation.
5. "Strutural Steel Works" and "Park & Ride Facilities/ Bicycle Parking Bays" will not take place concurrently. The worst case is adopted for calculation.
6. Text in bold and underline denotes exceedance of relevant criterion.
7. Cell with shaded area denotes the unoccupancy of the NAP (i.e. before the population intake).

Pok Wai Ancillary Building
(EAP/EEP/VB)

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Pok Wai Ancillary Building (EAP/EEP/VB)) (for POW-E1)
Scenario: Mitigated Scenario

		2026												2027												2028											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (Whole Area)	98										98	98	98																								
Road Works (AB6-b)	101											101	101	101																							
Cofferdam Works (AB6-a (AB Area Only)) (Northeast)	96														96	96	96	96	96	96	96																
Cofferdam Works (AB6-a (AB Area Only)) (Northwest)	96														96	96	96	96	96	96	96																
Cofferdam Works (AB6-a (AB Area Only)) (Southeast)	96														96	96	96	96	96	96	96																
Cofferdam Works (AB6-a (AB Area Only)) (Southwest)	96														96	96	96	96	96	96	96																
Cofferdam Works (AB6-a (AB Area Only))	102														102	102	102	102	102	102	102																
Retaining Walls (AB6-a-RW)	103											103	103	103	103																						
Bored Pile Wall (AB6-a-BPW)	96											96	96	96	96																						
Foundation Works (AB6-a (AB Area Only))(North)	95																				95	95	95														
Foundation Works (AB6-a (AB Area Only))(Southwest)	95																				95	95	95														
Foundation Works (AB6-a (AB Area Only))(Southeast)	95																				95	95	95														
Excavation Works (AB6-a)	99																									99	99	99	99								
Adit and Underground Tunnel Works Works (AB6-a (AB Area Only))	103																												103	103	103	103	103	103	103	103	103
RC Works (AB6-a (AB Area Only))	106																																				

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
POW-E1	72	0	0	0	0	0	0	0	0	0	62	72	72	72	67	65	65	65	65	65	65	59	59	0	0	62	62	62	63	63	63	63	63	63	63	63	63

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Cofferdam Works" and "Foundation Works" will not take place concurrently. The worst case is adopted for calculation.
3. "Cofferdam Works", "Retaining Walls" and "Bored Pile Walls" will not take place concurrently. The worst case is adopted for calculation.
4. "Excavation Works" and "Adit and Underground Tunnel Works" will not take place concurrently. The worst case is adopted for calculation.
5. Text in bold and underline denotes exceedance of relevant criterion.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Pok Wai Ancillary Building (EAP/EEP/VB)) (for POW-E1)
Scenario: Mitigated Scenario

		2029												2030											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (Whole Area)	98																								
Road Works (AB6-b)	101																								
Cofferdam Works (AB6-a (AB Area Only)) (Northeast)	96																								
Cofferdam Works (AB6-a (AB Area Only)) (Northwest)	96																								
Cofferdam Works (AB6-a (AB Area Only)) (Southeast)	96																								
Cofferdam Works (AB6-a (AB Area Only)) (Southwest)	96																								
Cofferdam Works (AB6-a (AB Area Only))	102																								
Retaining Walls (AB6-a-RW)	103																								
Bored Pile Wall (AB6-a-BPW)	96																								
Foundation Works (AB6-a (AB Area Only))(North)	95																								
Foundation Works (AB6-a (AB Area Only))(Southwest)	95																								
Foundation Works (AB6-a (AB Area Only))(Southeast)	95																								
Excavation Works (AB6-a)	99																								
Adit and Underground Tunnel Works Works (AB6-a (AB Area Only))	103	103	103	103	103																				
RC Works (AB6-a (AB Area Only))	106						106	106	106	106	106	106	106	106											

Predicted Construction Noise, dB(A)																									
NAP	Max																								
POW-E1	72	63	63	63	63	0	65	65	65	65	65	65	65	65	0	0	0	0	0	0	0	0	0	0	0

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Cofferdam Works" and "Foundation Works" will not take place concurrently. The worst case is adopted for calculation.
3. "Cofferdam Works", "Retaining Walls" and "Bored Pile Walls" will not take place concurrently. The worst case is adopted for calculation.
4. "Excavation Works" and "Adit and Underground Tunnel Works" will not take place concurrently. The worst case is adopted for calculation.
5. Text in bold and underline denotes exceedance of relevant criterion.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Pok Wai Ancillary Building (EAP/EEP/VB)) (for POW-E2, E-3, and E-4)
Scenario: Mitigated Scenario

		2026												2027												2028											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (Whole Area)	98										98	98	98																								
Road Works (AB6-b)	101											101	101	101																							
Cofferdam Works (AB6-a (AB Area Only)) (Northeast)	96														96	96	96	96	96	96	96																
Cofferdam Works (AB6-a (AB Area Only)) (Northwest)	96														96	96	96	96	96	96	96																
Cofferdam Works (AB6-a (AB Area Only)) (Southeast)	96														96	96	96	96	96	96	96																
Cofferdam Works (AB6-a (AB Area Only)) (Southwest)	96														96	96	96	96	96	96	96																
Cofferdam Works (AB6-a (AB Area Only))	102														102	102	102	102	102	102	102																
Retaining Walls (AB6-a-RW)	108											108	108	108	108																						
Bored Pile Wall (AB6-a-BPW)	106											106	106	106	106																						
Foundation Works (AB6-a (AB Area Only))(North)	95																				95	95	95														
Foundation Works (AB6-a (AB Area Only))(Southwest)	95																				95	95	95														
Foundation Works (AB6-a (AB Area Only))(Southeast)	95																				95	95	95														
Excavation Works (AB6-a)	99																									99	99	99	99								
Adit and Underground Tunnel Works Works (AB6-a (AB Area Only))	103																												103	103	103	103	103	103	103	103	103
RC Works (AB6-a (AB Area Only))	106																																				

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
POW-E2	71	0	0	0	0	0	0	0	0	0	60	71	71	70	63	65	65	65	65	65	65	59	59	0	0	60	60	60	63	63	63	63	63	63	63	63	63
POW-E3	75	0	0	0	0	0	0	0	0	0	70	75	75	74	73	73	73	73	73	73	73	67	67	0	0	70	70	70	72	72	72	72	72	72	72	72	72
POW-E4	70	0	0	0	0	0	0	0	0	0	62	67	67	65	64	69	69	69	69	69	69	64	64	0	0	65	65	65	67	67	67	67	67	67	67	67	67

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Cofferdam Works" and "Foundation Works" will not take place concurrently. The worst case is adopted for calculation.
3. "Cofferdam Works", "Retaining Walls" and "Bored Pile Walls" will not take place concurrently. The worst case is adopted for calculation.
4. "Excavation Works and "Adit and Underground Tunnel Works" will not take place concurrently. The worst case is adopted for calculation.
5. A -8 dB(A) attenuation has been accounted for in predicting the noise levels at NAPs POW-E2 to POW-E4 due to the proposed 2.3m noise barrier for the activities "Retaining Walls" and "Bored Pile Wall". The attenuation from typical noise barriers/ acoustic mats, silencers, and noise enclosures are not double counted.
6. Text in bold and underline denotes exceedance of relevant criterion.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

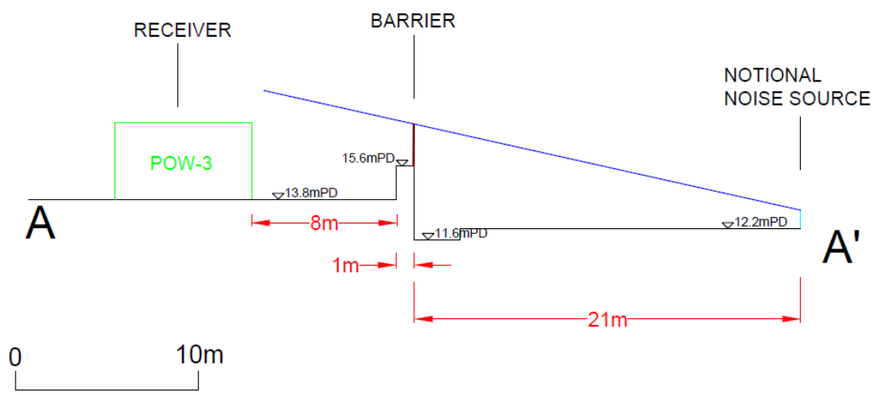
Title: Construction Noise Calculation (Pok Wai Ancillary Building (EAP/EEP/VB)) (for POW-E2, E-3, and E-4)
Scenario: Mitigated Scenario

		2029												2030											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (Whole Area)	98																								
Road Works (AB6-b)	101																								
Cofferdam Works (AB6-a (AB Area Only)) (Northeast)	96																								
Cofferdam Works (AB6-a (AB Area Only)) (Northwest)	96																								
Cofferdam Works (AB6-a (AB Area Only)) (Southeast)	96																								
Cofferdam Works (AB6-a (AB Area Only)) (Southwest)	96																								
Cofferdam Works (AB6-a (AB Area Only))	102																								
Retaining Walls (AB6-a-RW)	108																								
Bored Pile Wall (AB6-a-BPW)	106																								
Foundation Works (AB6-a (AB Area Only))(North)	95																								
Foundation Works (AB6-a (AB Area Only))(Southwest)	95																								
Foundation Works (AB6-a (AB Area Only))(Southeast)	95																								
Excavation Works (AB6-a)	99																								
Adit and Underground Tunnel Works Works (AB6-a (AB Area Only))	103	103	103	103	103																				
RC Works (AB6-a (AB Area Only))	106						106	106	106	106	106	106	106	106											

Predicted Construction Noise, dB(A)																									
NAP	Max																								
POW-E2	71	63	63	63	63	0	66	66	66	66	66	66	66	66	0	0	0	0	0	0	0	0	0	0	0
POW-E3	75	72	72	72	72	0	75	75	75	75	75	75	75	75	0	0	0	0	0	0	0	0	0	0	0
POW-E4	70	67	67	67	67	0	70	70	70	70	70	70	70	70	0	0	0	0	0	0	0	0	0	0	0

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Cofferdam Works" and "Foundation Works" will not take place concurrently. The worst case is adopted for calculation.
3. "Cofferdam Works", "Retaining Walls" and "Bored Pile Walls" will not take place concurrently. The worst case is adopted for calculation.
4. "Excavation Works and "Adit and Underground Tunnel Works" will not take place concurrently. The worst case is adopted for calculation.
5. A -8 dB(A) attenuation has been accounted for in predicting the noise levels at NAPs POW-E2 to POW-E4 due to the proposed 2.3m noise barrier for the activities "Retaining Walls" and "Bored Pile Wall". The attenuation from typical noise barriers/ acoustic mats, silencers, and noise enclosures are not double counted.
6. Text in bold and underline denotes exceedance of relevant criterion.

ASSUME SOURCE HEIGHT: 1m
RECEIVER HEIGHT: 4.2m
BARRIER HEIGHT 2.3m



Extent of the proposed of noise barrier

POW-E4
POW-E2
POW-E3
POW-E1
A
A'
AB6-b
AB6-a

0 100m

LEGEND

- PROPOSED NOL ALIGNMENT
- PROPOSED RAILWAY STATION OR OTHER RAILWAY FACILITIES
- PROPOSED RAILWAY STATION OR OTHER RAILWAY FACILITIES (UNDERGROUND)
- PLANNED DEVELOPMENT (BY OTHERS)
- WORKFRONTS
- REPRESENTATIVE NOISE ASSESSMENT POINT

Ngau Tam Mei Station (NTM), Ngau Tam Mei Depot (NTD), & Mined/ D&B/ C&C/ Tunnel: NTD > Underground Tunnel

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Ngau Tam Mei Station (NTM), Ngau Tam Mei, Depot (NTD),
Scenario : Mitigated Scenario

		2025												2026												2027											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance, Preparation & Monitoring (NTM)	104																						104	104	104	104	104	104									
Road Works (NTM R1-1)	98																								98	98	98	98	98									
Road Works (NTM R1-2)	98																								98	98	98	98	98									
NTM Site Formation Works - Cut and Fill Works (NTM)	107																									107	107	107	107	107	107	107					
D-wall and Piling Trial (NTM 1-8, 8-20 & 20-24)	102																						102	102	102	102	102	102									
D-wall, Piling and Excavation (NTM 1-8)	108																											108	108	108	108	108	108	108	108	108	108
D-wall, Piling and Excavation (NTM 8-20)	107																											107	107	107	107	107	107	107	107	107	107
D-wall, Piling and Excavation (NTM 20-24)	104																											104	104	104	104	104	104	104	104	104	104
RC Stuctures (NTM 1-8)	106																																				
RC Stuctures (NTM 8-20)	104																																				
RC Stuctures (NTM 20-24)	104																																				
Structural Steel Works (NTM 8-20)	97																																				
Site Clearance, Preparation & Monitoring (NTD-1)	104																						104	104	104	104	104	104									
Site Clearance, Preparation & Monitoring (NTD-2)	104																						104	104	104	104	104	104									
Site Clearance, Preparation & Monitoring (NTD-3)	104																						104	104	104	104	104	104									
UU and Haul Road (NTD R1)	102																								102	102	102	102	102									
UU and Roadworks (NTD R1)	103																																				
Backfilling Works (NTD-1)	110																																110	110	110	110	110
Open Excavation Works (NTD-2)	101																									101	101	101	101	101	101	101	101	101	101	101	101
Open Excavation Works (NTD-3)	101																									101	101	101	101	101	101	101	101	101	101	101	101
Retaining Wall Construction, South (NTD RW(S))	110																								110	110	110	110	110	110	110	110	110	110	110	110
Retaining Wall Construction,East (NTD RW(E))	105																										105	105	105	105	105	105	105	105	105	105	105
Retaining Wall Construction, North (NTD RW(N))	104																														104	104	104	104	104	104	
Bored Pile Wall Construction, West (NTD BPW(W))	112																									112	112	112	112	112	112	112	112	112	112	112	112
Foundation Works for Deck Enclosure (NTD-1)	106																										106	106	106	106	106	106	106	106	106	106	106
Foundation Works for Deck Enclosure (NTD-2)	106																										106	106	106	106	106	106	106	106	106	106	106
Foundation Works for Deck Enclosure (NTD-3)	106																										106	106	106	106	106	106	106	106	106	106	106
NTD RC Stuctures (NTD-1)	102																																				
NTD RC Stuctures (NTD-2)	105																																				
NTD RC Stuctures (NTD-3)	105																																				
Mined Tunnel NTD to Underground Tunnel (NTD > Underground Tunnel)	102																																102	102	102	102	102
NTD C&C Tunnel (NTD > Underground Tunnel)	108				108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108							
D&B Tunnel NTD to Underground Tunnel (NTD > Underground Tunnel)	102																																				102
NTD C&C Tunnel Remaining Works (NTD > Underground Tunnel)	108																																				
NTD C&C Tunnel Backfilling (NTD > Underrgound Tunnel)	101																										101	101	101	101	101	101	101	101	101	101	101

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
NTM-E1	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	65	67	69	70	74	73	73	73	73	72	72	72	72
NTM-E2	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	65	70	71	72	73	72	69	69	69	69	69	69	69
NTM-E3	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	59	60	63	64	64	63	62	62	62	61	61	61	61
NTM-E4	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	66	73	73	74	74	74	72	73	73	74	74	74	74
NTM-E5	70	0	0	0	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	63	63	66	68	69	69	68	70	70	70	70	70	70	70
NTM-E6	71	0	0	0	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	68	70	70	71	70	71	69	69	69	69	69	69
NTM-E7	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	60	61	64	64	64	62	62	62	62	59	59	59	59
NTM-E8	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	64	64	69	70	71	70	70	70	70	70	70	70	70

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the
2. "D-wall, Piling & Excavation (NTM 1-8)" and "RC Structures (NTM 1-8)" will not take place concurrently. The worst case is adopted for calculation.
3. "D-wall, Piling & Excavation (NTM 20-24)" and "RC Structures (NTM 20-24)" will not take place concurrently. The worst case is adopted for calculation.
4. "Mined Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" and "NTD C&C Tunnel (NTD > Underrgound Tunnel)" will not take place concurrently. The worst case is adopted for calculation.
5. "Mined Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" and "D&B Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" will not take place concurrently. The worst case is adopted for calculation.
6. D&B Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" and "NTD C&C Tunnel Remaining Works (NTD > Underrgound Tunnel)" will not take place concurrently. The worst case is adopted for calculation.
7. Text in bold and underline denotes exceedance of relevant criterion.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Ngau Tam Mei Station (NTM), Ngau Tam Mei, Depot (NTD),
Scenario : Mitigated Scenario

		2028												2029												2030											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance, Preparation & Monitoring (NTM)	104																																				
Road Works (NTM R1-1)	98																																				
Road Works (NTM R1-2)	98																																				
NTM Site Formation Works - Cut and Fill Works (NTM)	107																																				
D-wall and Piling Trial (NTM 1-8, 8-20 & 20-24)	102																																				
D-wall, Piling and Excavation (NTM 1-8)	108	108	108	108	108	108	108	108	108	108	108	108	108																								
D-wall, Piling and Excavation (NTM 8-20)	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107												
D-wall, Piling and Excavation (NTM 20-24)	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104												
RC Stuctures (NTM 1-8)	106												106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106				
RC Stuctures (NTM 8-20)	104																									104	104	104	104	104	104	104	104	104	104	104	
RC Stuctures (NTM 20-24)	104																								104	104	104	104	104	104	104	104	104	104	104	104	104
Structural Steel Works (NTM 8-20)	97																																97	97	97	97	97
Site Clearance, Preparation & Monitoring (NTD-1)	104																																				
Site Clearance, Preparation & Monitoring (NTD-2)	104																																				
Site Clearance, Preparation & Monitoring (NTD-3)	104																																				
UU and Haul Road (NTD R1)	102																																				
UU and Roadworks (NTD R1)	103															103	103	103	103	103	103	103	103														
Backfilling Works (NTD-1)	110	110	110	110	110	110	110	110	110																												
Open Excavation Works (NTD-2)	101	101	101	101	101	101	101	101	101	101	101																										
Open Excavation Works (NTD-3)	101	101	101	101	101	101	101	101	101	101	101																										
Retaining Wall Construction, South (NTD RW(S))	110	110	110	110	110	110	110	110																													
Retaining Wall Construction,East (NTD RW(E))	105																																				
Retaining Wall Construction, North (NTD RW(N))	104																																				
Bored Pile Wall Construction, West (NTD BPW(W))	112	112																																			
Foundation Works for Deck Enclosure (NTD-1)	106	106	106	106	106	106	106																														
Foundation Works for Deck Enclosure (NTD-2)	106	106	106	106	106	106	106																														
Foundation Works for Deck Enclosure (NTD-3)	106	106	106	106	106	106	106																														
NTD RC Stuctures (NTD-1)	102							102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102												
NTD RC Stuctures (NTD-2)	105							105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105												
NTD RC Stuctures (NTD-3)	105							105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105												
Mined Tunnel NTD to Underground Tunnel (NTD > Underground Tunnel)	102																																				
NTD C&C Tunnel (NTD > Underground Tunnel)	108																																				
D&B Tunnel NTD to Underground Tunnel (NTD > Underground Tunnel)	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102																	
NTD C&C Tunnel Remaining Works (NTD > Underground Tunnel)	108																		108	108	108	108	108															
NTD C&C Tunnel Backfilling (NTD > Underrgound Tunnel)	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101												

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
NTM-E1	74	72	72	72	72	72	72	72	72	71	71	71	71	70	70	70	70	70	70	70	70	70	70	70	69	69	69	69	69	69	69	69	69	60	60	60	54
NTM-E2	73	69	69	69	69	69	69	68	68	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	62	64	64	64	64	64	64	64	65	63	63	63	59
NTM-E3	64	61	61	61	61	61	61	60	60	57	57	57	57	57	57	58	58	58	58	58	58	58	58	57	55	55	55	55	55	55	55	55	55	55	55	55	54
NTM-E4	74	72	72	72	72	72	72	71	71	66	66	65	65	65	65	73	73	73	73	73	73	73	73	65	65	50	50	50	50	50	50	50	51	51	51	51	43
NTM-E5	70	68	67	67	67	67	67	66	65	64	64	63	63	63	63	63	63	63	64	64	64	64	64	62	62	0	0	0	0	0	0	0	0	0	0	0	0
NTM-E6	71	69	66	66	66	66	66	66	65	65	65	64	64	64	64	64	64	64	68	68	68	68	68	58	58	0	0	0	0	0	0	0	0	0	0	0	0
NTM-E7	64	59	59	59	59	59	59	58	58	54	54	54	54	54	54	55	55	55	55	55	55	55	55	54	54	52	52	52	52	52	52	52	52	52	52	52	52
NTM-E8	71	70	69	69	69	69	69	69	69	68	68	67	67	66	66	66	66	66	66	66	66	66	66	66	65	64	64	64	64	64	64	64	64	57	57	57	52

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the
2. "D-wall, Piling & Excavation (NTM 1-8)" and "RC Structures (NTM 1-8)" will not take place concurrently. The worst case is adopted for calculation.
3. "D-wall, Piling & Excavation (NTM 20-24)" and "RC Structures (NTM 20-24)" will not take place concurrently. The worst case is adopted for calculation.
4. "Mined Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" and "NTD C&C Tunnel (NTD > Underrgound Tunnel)" will not take place concurrently. The worst case is adopted for calculation.
5. "Mined Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" and "D&B Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" will not take place concurrently. The worst case is adopted for calculation.
6. D&B Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" and "NTD C&C Tunnel Remaining Works (NTD > Underrgound Tunnel)" will not take place concurrently. The worst case is adopted for calculation.
7. Text in bold and underline denotes exceedance of relevant criterion.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Ngau Tam Mei Station (NTM), Ngau Tam Mei, Depot (NTD),
Scenario : Mitigated Scenario

		2031											
		1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance, Preparation & Monitoring (NTM)	104												
Road Works (NTM R1-1)	98												
Road Works (NTM R1-2)	98												
NTM Site Formation Works - Cut and Fill Works (NTM)	107												
D-wall and Piling Trial (NTM 1-8, 8-20 & 20-24)	102												
D-wall, Piling and Excavation (NTM 1-8)	108												
D-wall, Piling and Excavation (NTM 8-20)	107												
D-wall, Piling and Excavation (NTM 20-24)	104												
RC Stuctures (NTM 1-8)	106												
RC Stuctures (NTM 8-20)	104												
RC Stuctures (NTM 20-24)	104	104	104										
Structural Steel Works (NTM 8-20)	97	97											
Site Clearance, Preparation & Monitoring (NTD-1)	104												
Site Clearance, Preparation & Monitoring (NTD-2)	104												
Site Clearance, Preparation & Monitoring (NTD-3)	104												
UU and Haul Road (NTD R1)	102												
UU and Roadworks (NTD R1)	103												
Backfilling Works (NTD-1)	110												
Open Excavation Works (NTD-2)	101												
Open Excavation Works (NTD-3)	101												
Retaining Wall Construction, South (NTD RW(S))	110												
Retaining Wall Construction,East (NTD RW(E))	105												
Retaining Wall Construction, North (NTD RW(N))	104												
Bored Pile Wall Construction, West (NTD BPW(W))	112												
Foundation Works for Deck Enclosure (NTD-1)	106												
Foundation Works for Deck Enclosure (NTD-2)	106												
Foundation Works for Deck Enclosure (NTD-3)	106												
NTD RC Stuctures (NTD-1)	102												
NTD RC Stuctures (NTD-2)	105												
NTD RC Stuctures (NTD-3)	105												
Mined Tunnel NTD to Underground Tunnel (NTD > Underground Tunnel)	102												
NTD C&C Tunnel (NTD > Underground Tunnel)	108												
D&B Tunnel NTD to Underground Tunnel (NTD > Underground Tunnel)	102												
NTD C&C Tunnel Remaining Works (NTD > Underground Tunnel)	108												
NTD C&C Tunnel Backfilling (NTD > Underrgound Tunnel)	101												

Predicted Construction Noise, dB(A)													
NAP	Max												
NTM-E1	74	54	51	0	0	0	0	0	0	0	0	0	0
NTM-E2	73	59	56	0	0	0	0	0	0	0	0	0	0
NTM-E3	64	54	53	0	0	0	0	0	0	0	0	0	0
NTM-E4	74	43	0	0	0	0	0	0	0	0	0	0	0
NTM-E5	70	0	0	0	0	0	0	0	0	0	0	0	0
NTM-E6	71	0	0	0	0	0	0	0	0	0	0	0	0
NTM-E7	64	52	52	0	0	0	0	0	0	0	0	0	0
NTM-E8	71	52	50	0	0	0	0	0	0	0	0	0	0

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the
2. "D-wall, Piling & Excavation (NTM 1-8)" and "RC Structures (NTM 1-8)" will not take place concurrently. The worst case is adopted for calculation.
3. "D-wall, Piling & Excavation (NTM 20-24)" and "RC Structures (NTM 20-24)" will not take place concurrently. The worst case is adopted for calculation.
4. "Mined Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" and "NTD C&C Tunnel (NTD > Underrgound Tunnel)" will not take place concurrently. The worst case is adopted for calculation.
5. "Mined Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" and "D&B Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" will not take place concurrently. The worst case is adopted for calculation.
6. D&B Tunnel NTD to Underrgound Tunnel (NTD > Underrgound Tunnel)" and "NTD C&C Tunnel Remaining Works (NTD > Underrgound Tunnel)" will not take place concurrently. The worst case is adopted for calculation.
7. Text in bold and underline denotes exceedance of relevant criterion.

San Tin Station (SAT) &
San Tin Ancillary Building (EEP/VB)

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (San Tin Station (SAT) & San Tin Ancillary Building (EEP/VB))
Scenario: Mitigated Scenario

		2026												2027												2028											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance, Preparation & Monitoring (SAT)	104										104	104	104	104	104	104																					
Site Clearance, Preparation & Monitoring (SAT R1)	104										104	104	104	104	104	104																					
Site Clearance, Preparation & Monitoring (SAT R2)	104										104	104	104	104	104	104																					
Site Clearance, Preparation & Monitoring (SAT Ex)	104										104	104	104	104	104	104																					
Site Formation Works (Backfilling) (SAT)	106																																				
Road Works (SAT R1)	102										102	102	102	102																							
Road Works (SAT R2)	102										102	102	102	102																							
D-wall & Piling Trial (SAT)	102										102	102	102	102	102	102	102																				
D-wall, Piling & Excavation (SAT N19-N27)	111																111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
D-wall, Piling & Excavation (SAT N1-N19)	113																113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113
D-wall, Piling & Excavation (SAT Station 1-32-a)	113																113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113
D-wall, Piling & Excavation (SAT Station 1-32-b)	113																113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113
D-wall, Piling & Excavation (SAT S9-1)	109																109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109
D-wall, Piling & Excavation (SAT S1-S9)	107																107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107
RC Works (SAT N19-N27)	103																																				
RC Works (SAT N1-N19)	108																																				
RC Works (SAT 1-32)	110																																				
RC Works (SAT S9-1)	108																																				
RC Works (SAT S1-S9)	103																																				
TBM Tunnel SAT to NTM (SAT S1-S9)	104																																				
Preliminary Works (SAT AB)	104										104	104																									
UU, Road Works & Site Formation (SAT AB)	103										103	103	103																								
Cofferdam Works (SAT AB)	103													103	103																						
Foundation Works (SAT AB)	105															105	105	105	105	105	105	105	105														
Excavation Works (SAT AB)	99																																				
RC Works (SAT AB)	106																																				
Construction Works for Concrete Batching Plant (CBP)	111										111	111	111																								
Operational Works for Concrete Batching Plant (CBP)	108													108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108
Demolition Works for Concrete Batching Plant (CBP)	95																																				
Other Concurrent Projects																																					
Predicted Construction Noise from CE20 at SAT-E4, dB(A)											65	65	64	64	64	64	64	64	64	66	66	66	66	66	66	66	66	66	65	65	65	65	65	65	65	65	65

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
SAT-E1	70	0	0	0	0	0	0	0	0	0	65	65	65	65	65	65	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
SAT-E2	72	0	0	0	0	0	0	0	0	0	67	67	67	67	67	67	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
SAT-E3	69	0	0	0	0	0	0	0	0	0	64	64	64	62	62	63	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
SAT-E4	74	0	0	0	0	0	0	0	0	0	74	74	74	73	73	73	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
SAT-E5	71	0	0	0	0	0	0	0	0	0	69	69	68	66	66	67	71	71	71	71	71	71	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
SAT-E6	71	0	0	0	0	0	0	0	0	0	65	65	65	65	65	65	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70

Notes:

1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Site Clearance, Preparation & Monitoring" and "Road Works" will not take place concurrently. The worst case is adopted for calculation.
3. "D-wall & Piling Trial" and "D-wall, Piling & Excavation" will not take place concurrently. The worst case is adopted for calculation.
4. "D-wall, Piling & Excavation (SAT N19-N27)" and "RC Works (SAT N19-N27)" will not take place concurrently. The worst case is adopted for calculation.
5. "Excavation Works (SAT AB)" and "RC Works (SAT AB)" will not take place concurrently. The worst case is adopted for calculation.
6. Noise from construction vehicles has been included in the calculation.
7. The cumulative impact from CE20 has been included in the calculation for SAT-E4.
8. Text in bold and underline denotes exceedance of relevant criterion.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (San Tin Station (SAT) & San Tin Ancillary Building (EEP/VB))
Scenario: Mitigated Scenario

		2029												2030												2031											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance, Preparation & Monitoring (SAT)	104																																				
Site Clearance, Preparation & Monitoring (SAT R1)	104																																				
Site Clearance, Preparation & Monitoring (SAT R2)	104																																				
Site Clearance, Preparation & Monitoring (SAT Ex)	104																																				
Site Formation Works (Backfilling) (SAT)	106							106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	
Road Works (SAT R1)	102																																				
Road Works (SAT R2)	102																																				
D-wall & Piling Trial (SAT)	102																																				
D-wall, Piling & Excavation (SAT N19-N27)	111	111																																			
D-wall, Piling & Excavation (SAT N1-N19)	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113																		
D-wall, Piling & Excavation (SAT Station 1-32-a)	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113																						
D-wall, Piling & Excavation (SAT Station 1-32-b)	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113																						
D-wall, Piling & Excavation (SAT S9-1)	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109													
D-wall, Piling & Excavation (SAT S1-S9)	107	107	107																																		
RC Works (SAT N19-N27)	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103												
RC Works (SAT N1-N19)	108																		108	108	108	108	108	108	108	108	108	108	108	108	108	108					
RC Works (SAT 1-32)	110															110	110	110	110	110	110	110	110	110	110	110	110	110	110								
RC Works (SAT S9-1)	108																					108	108	108	108	108	108	108	108	108							
RC Works (SAT S1-S9)	103		103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103					
TBM Tunnel SAT to NTM (SAT S1-S9)	104					104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104					
Preliminary Works (SAT AB)	104																																				
UU, Road Works & Site Formation (SAT AB)	103																																				
Cofferdam Works (SAT AB)	103																																				
Foundation Works (SAT AB)	105																																				
Excavation Works (SAT AB)	99					99	99	99	99																												
RC Works (SAT AB)	106								106	106	106	106	106	106	106																						
Construction Works for Concrete Batching Plant (CBP)	111																																				
Operational Works for Concrete Batching Plant (CBP)	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108
Demolition Works for Concrete Batching Plant (CBP)	95																																				
Other Concurrent Projects																																					
Predicted Construction Noise from CE20 at SAT-E4, dB(A)		65	65	65	65	65	65	64	64	64	64	64	64	64	64	64	69	69	69	72	72	72	72	72	72	72	72	72	72	72	72	71	71	71	71	71	71

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
SAT-E1	70	69	69	69	69	69	69	70	70	70	70	70	70	70	70	67	67	67	67	67	67	67	67	67	67	67	67	67	67	65	64	64	64	64	64	64	0
SAT-E2	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	70	70	70	70	69	69	69	69	69	69	69	69	69	69	67	67	67	66	66	66	66	0
SAT-E3	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	68	68	68	69	65	65	65	65	65	65	65	65	65	65	65	65	65	61	61	61	61	60
SAT-E4	74	71	70	70	70	70	70	70	70	70	70	70	70	70	70	70	72	72	72	74	74	74	74	74	74	74	74	74	73	73	73	73	73	73	73	73	73
SAT-E5	71	70	66	66	66	67	67	67	68	68	68	68	68	68	66	66	66	67	66	66	66	66	66	64	64	64	64	64	64	64	64	64	64	64	64	64	64
SAT-E6	71	70	70	70	70	70	70	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	67	65	65	65	65	65	65	0

Notes:

1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Site Clearance, Preparation & Monitoring" and "Road Works" will not take place concurrently. The worst case is adopted for calculation.
3. "D-wall & Piling Trial" and "D-wall, Piling & Excavation" will not take place concurrently. The worst case is adopted for calculation.
4. "D-wall, Piling & Excavation (SAT N19-N27)" and "RC Works (SAT N19-N27)" will not take place concurrently. The worst case is adopted for calculation.
5. "Excavation Works (SAT AB)" and "RC Works (SAT AB)" will not take place concurrently. The worst case is adopted for calculation.
6. Noise from construction vehicles has been included in the calculation.
7. The cumulative impact from CE20 has been included in the calculation for SAT-E4.
8. Text in bold and underline denotes exceedance of relevant criterion.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (San Tin Station (SAT) & San Tin Ancillary Building (EEP/VB))
Scenario: Mitigated Scenario

		2032												2033												2034											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance, Preparation & Monitoring (SAT)	104																																				
Site Clearance, Preparation & Monitoring (SAT R1)	104																																				
Site Clearance, Preparation & Monitoring (SAT R2)	104																																				
Site Clearance, Preparation & Monitoring (SAT Ex)	104																																				
Site Formation Works (Backfilling) (SAT)	106																																				
Road Works (SAT R1)	102																																				
Road Works (SAT R2)	102																																				
D-wall & Piling Trial (SAT)	102																																				
D-wall, Piling & Excavation (SAT N19-N27)	111																																				
D-wall, Piling & Excavation (SAT N1-N19)	113																																				
D-wall, Piling & Excavation (SAT Station 1-32-a)	113																																				
D-wall, Piling & Excavation (SAT Station 1-32-b)	113																																				
D-wall, Piling & Excavation (SAT S9-1)	109																																				
D-wall, Piling & Excavation (SAT S1-S9)	107																																				
RC Works (SAT N19-N27)	103																																				
RC Works (SAT N1-N19)	108																																				
RC Works (SAT 1-32)	110																																				
RC Works (SAT S9-1)	108																																				
RC Works (SAT S1-S9)	103																																				
TBM Tunnel SAT to NTM (SAT S1-S9)	104																																				
Preliminary Works (SAT AB)	104																																				
UU, Road Works & Site Formation (SAT AB)	103																																				
Cofferdam Works (SAT AB)	103																																				
Foundation Works (SAT AB)	105																																				
Excavation Works (SAT AB)	99																																				
RC Works (SAT AB)	106																																				
Construction Works for Concrete Batching Plant (CBP)	111																																				
Operational Works for Concrete Batching Plant (CBP)	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108						
Demolition Works for Concrete Batching Plant (CBP)	95																															95	95	95			
Other Concurrent Projects																																					
Predicted Construction Noise from CE20 at SAT-E4, dB(A)		71	71	71	72	72	72	73	73	73	72	72	72	72	72	72	71	71	71	71	71	71	71	71	71	71	71	71	68	68	68	68	68	68			

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
SAT-E1	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAT-E2	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAT-E3	69	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	57	57	57	0	0	0
SAT-E4	74	73	73	73	74	74	74	74	74	74	74	74	74	74	74	74	73	73	73	73	73	73	73	73	73	73	73	73	71	71	71	71	71	71	0	0	0
SAT-E5	71	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	58	58	58	0	0	0
SAT-E6	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Site Clearance, Preparation & Monitoring" and "Road Works" will not take place concurrently. The worst case is adopted for calculation.
3. "D-wall & Piling Trial" and "D-wall, Piling & Excavation" will not take place concurrently. The worst case is adopted for calculation.
4. "D-wall, Piling & Excavation (SAT N19-N27)" and "RC Works (SAT N19-N27)" will not take place concurrently. The worst case is adopted for calculation.
5. "Excavation Works (SAT AB)" and "RC Works (SAT AB)" will not take place concurrently. The worst case is adopted for calculation.
6. Noise from construction vehicles has been included in the calculation.
7. The cumulative impact from CE20 has been included in the calculation for SAT-E4.
8. Text in bold and underline denotes exceedance of relevant criterion.

Project : Consultancy Agreement No. C1603 EIA Study for Northern Link
Title : Noise from Haul Road (San Tin Station (SAT))
Subtitle :

NAP : SAT-E1

Source	Period	SWL / Unit dB(A)	Qty Nos	% Util	Total SWL dB(A)	Dist m	Speed kph	[2] Angle deg	Correction [1]						SPL
									Dist dB(A)	Facade dB(A)	Air dB(A)	Speed dB(A)	Angle dB(A)	Topo dB(A)	Daytime dB(A)
Lorry, 5.5 tonne < gross vehicle weight ≦ 38 tonne (Harl Road 1)	II	105	166	100	127	105	20	115	-20	3	0	-13	-2		62
														Noise Impacts from Haul Road, dB(A)	**62**

Note:
I - Daytime, evening and night-time operation
II - Daytime operation only
III - Evening operation only

[1] : Based on BS 5228 Pt 1: 1997 D3.5.2 Method for mobile plant using a regular well defined route (haul road)
$L_{eq} = L_w - 33 + 10 \log (Qty) - 10 \log (speed) - 10 \log (dist) + 10 \log (angle /180) + C_{facade}$

[2] : A view angle of 180 deg has been assumed for conservative assessment

Project : Consultancy Agreement No. C1603 EIA Study for Northern Link
Title : Noise from Haul Road (San Tin Station (SAT))
Subtitle :

NAP : SAT-E2

Source	Period	SWL / Unit dB(A)	Qty Nos	% Util	Total SWL dB(A)	Dist m	Speed kph	[2] Angle deg	Correction [1]						SPL
									Dist dB(A)	Facade dB(A)	Air dB(A)	Speed dB(A)	Angle dB(A)	Topo dB(A)	Daytime dB(A)
Lorry, 5.5 tonne < gross vehicle weight ≦ 38 tonne (Harl Road 1)	II	105	166	100	127	85	20	140	-19	3	0	-13	-1		64
														Noise Impacts from Haul Road, dB(A)	**64**

Note:
I - Daytime, evening and night-time operation
II - Daytime operation only
III - Evening operation only

[1] : Based on BS 5228 Pt 1: 1997 D3.5.2 Method for mobile plant using a regular well defined route (haul road)
$L_{eq} = L_w - 33 + 10 \log (Qty) - 10 \log (speed) - 10 \log (dist) + 10 \log (angle /180) + C_{facade}$

[2] : A view angle of 180 deg has been assumed for conservative assessment

Project : Consultancy Agreement No. C1603 EIA Study for Northern Link
Title : Noise from Haul Road (San Tin Station (SAT))
Subtitle :

NAP : SAT-E3

Source	Period	SWL / Unit dB(A)	Qty Nos	% Util	Total SWL dB(A)	Dist m	Speed kph	[2] Angle deg	Correction [1]						SPL
									Dist dB(A)	Facade dB(A)	Air dB(A)	Speed dB(A)	Angle dB(A)	Topo dB(A)	Daytime dB(A)
Lorry, 5.5 tonne < gross vehicle weight ≦ 38 tonne (Harl Road 1)	II	105	167	100	127	180	20	65	-23	3	-1	-13	-4		57
														Noise Impacts from Haul Road, dB(A)	**57**

Note:
I - Daytime, evening and night-time operation
II - Daytime operation only
III - Evening operation only

[1] : Based on BS 5228 Pt 1: 1997 D3.5.2 Method for mobile plant using a regular well defined route (haul road)
$L_{eq} = L_w - 33 + 10 \log (Qty) - 10 \log (speed) - 10 \log (dist) + 10 \log (angle /180) + C_{facade}$

[2] : A view angle of 180 deg has been assumed for conservative assessment

Project : Consultancy Agreement No. C1603 EIA Study for Northern Link
Title : Noise from Haul Road (San Tin Station (SAT))
Subtitle :

NAP : SAT-E4

Source	Period	SWL / Unit dB(A)	Qty Nos	% Util	Total SWL dB(A)	Dist m	Speed kph	[2] Angle deg	Correction [1]						SPL
									Dist dB(A)	Facade dB(A)	Air dB(A)	Speed dB(A)	Angle dB(A)	Topo dB(A)	Daytime dB(A)
Lorry, 5.5 tonne < gross vehicle weight ≦ 38 tonne (Harl Road 1)	II	105	167	100	127	40	20	180	-16	3	0	-13	0		68
														Noise Impacts from Haul Road, dB(A)	**68**

Note:
I - Daytime, evening and night-time operation
II - Daytime operation only
III - Evening operation only

[1] : Based on BS 5228 Pt 1: 1997 D3.5.2 Method for mobile plant using a regular well defined route (haul road)
$L_{eq} = L_w - 33 + 10 \log (Qty) - 10 \log (speed) - 10 \log (dist) + 10 \log (angle /180) + C_{facade}$

[2] : A view angle of 180 deg has been assumed for conservative assessment

Project : Consultancy Agreement No. C1603 EIA Study for Northern Link
Title : Noise from Haul Road (San Tin Station (SAT))
Subtitle :

NAP : SAT-E5

Source	Period	SWL / Unit dB(A)	Qty Nos	% Util	Total SWL dB(A)	Dist m	Speed kph	[2] Angle deg	Correction [1]						SPL
									Dist dB(A)	Facade dB(A)	Air dB(A)	Speed dB(A)	Angle dB(A)	Topo dB(A)	Daytime dB(A)
Lorry, 5.5 tonne < gross vehicle weight ≦ 38 tonne (Harl Road 1)	II	105	167	100	127	140	20	60	-21	3	0	-13	-5		58
														Noise Impacts from Haul Road, dB(A)	**58**

Note:
I - Daytime, evening and night-time operation
II - Daytime operation only
III - Evening operation only

[1] : Based on BS 5228 Pt 1: 1997 D3.5.2 Method for mobile plant using a regular well defined route (haul road)
$L_{eq} = L_w - 33 + 10 \log (Qty) - 10 \log (speed) - 10 \log (dist) + 10 \log (angle /180) + C_{facade}$

[2] : A view angle of 180 deg has been assumed for conservative assessment

Project : Consultancy Agreement No. C1603 EIA Study for Northern Link
Title : Noise from Haul Road (San Tin Station (SAT))
Subtitle :

NAP : SAT-E6

Source	Period	SWL / Unit dB(A)	Qty Nos	% Util	Total SWL dB(A)	Dist m	Speed kph	[2] Angle deg	Correction [1]						SPL
									Dist dB(A)	Facade dB(A)	Air dB(A)	Speed dB(A)	Angle dB(A)	Topo dB(A)	Daytime dB(A)
Lorry, 5.5 tonne < gross vehicle weight ≦ 38 tonne (Harl Road 1)	II	105	167	100	127	340	20	NA	The soure is located more than 300m away from NAP SAT-E6 and hence not included in the calculation.						
														Noise Impacts from Haul Road, dB(A)	-

Note:
I - Daytime, evening and night-time operation
II - Daytime operation only
III - Evening operation only

[1] : Based on BS 5228 Pt 1: 1997 D3.5.2 Method for mobile plant using a regular well defined route (haul road)
$L_{eq} = L_w - 33 + 10 \log (Qty) - 10 \log (speed) - 10 \log (dist) + 10 \log (angle /180) + C_{facade}$

[2] : A view angle of 180 deg has been assumed for conservative assessment

Ka Lung Road Ancillary Building (EAP/EEP)

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Ka Lung Road Ancillary Building (EAP/EEP))
Scenario: Scenario with Cumulative Impact from Concurrent Projects (No Mitigation Measures Required)

		2026												2027												2028											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (Whole Area)	117										117	117																									
UU, Road Works and Site Formation (AB11-b)	116											116	116	116	116																						
Site Formation (Bored Pile) (AB11-BPW)	117												117	117	117	117	117	117	117	117	117																
Cofferdam Works (AB11-a)	119																				119	119	119														
Foundation Works (AB11-a)	118																					118	118	118	118	118	118										
Excavation Works (AB11-a)	116																										116	116	116	116	116	116	116	116	116	116	
RC Works (AB11-a)	117																																			117	117
Retaining Wall Works (AB11-a)	116																																				
Other Concurrent Projects																																					
Predicted Construction Noise from CE20 at KLR-E1 for cumulative impact assessment, dB(A)											68	68	69	69	69	69	64	64	64	65	65	65	65	65	65	65	65	65	63	63	63	65	65	65	65	65	65

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
KLR-E1	71	0	0	0	0	0	0	0	0	0	70	70	71	71	71	69	66	66	66	67	67	68	68	67	67	67	67	66	65	65	65	66	66	66	66	66	66

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Preliminary Works" and "UU, Road Works and Site Formation" will not take place concurrently. The worst case is adopted for calculation.
3. "Site Formation (Bored Pile)" and "Cofferdam Works" will not take place concurrently. The worst case is adopted for calculation.
4. "Foundation Works" and "Excavation Works" will not take place concurrently. The worst case is adopted for calculation.
5. "Excavation Works" and "RC Works" will not take place concurrently. The worst case is adopted for calculation.
6. Text in bold and underline denotes exceedance of relevant criterion.
7. The cumulative impact from CE20 has been included in the calculation for KLR-E1.
8. No mitigation measures are required as construction noise exceedance is not anticipated.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Ka Lung Road Ancillary Building (EAP/EEP))
Scenario: Scenario with Cumulative Impact from Concurrent Projects (No Mitigation Measures Required)

		2029											
		1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (Whole Area)	117												
UU, Road Works and Site Formation (AB11-b)	116												
Site Formation (Bored Pile) (AB11-BPW)	117												
Cofferdam Works (AB11-a)	119												
Foundation Works (AB11-a)	118												
Excavation Works (AB11-a)	116												
RC Works (AB11-a)	117	117	117	117	117	117	117	117	117	117	117	117	117
Retaining Wall Works (AB11-a)	116					116	116	116	116				
Other Concurrent Projects													
Predicted Construction Noise from CE20 at KLR-E1 for cumulative impact assessment, dB(A)		65	65	65	65	65	65	64	64	64	64	64	64

Predicted Construction Noise, dB(A)													
NAP	Max												
KLR-E1	71	66	66	66	67	67	67	67	67	66	66	66	66

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Preliminary Works" and "UU, Road Works and Site Formation" will not take place concurrently. The worst case is adopted for calculation.
3. "Site Formation (Bored Pile)" and "Cofferdam Works" will not take place concurrently. The worst case is adopted for calculation.
4. "Foundation Works" and "Excavation Works" will not take place concurrently. The worst case is adopted for calculation.
5. "Excavation Works" and "RC Works" will not take place concurrently. The worst case is adopted for calculation.
6. Text in bold and underline denotes exceedance of relevant criterion.
7. The cumulative impact from CE20 has been included in the calculation for KLR-E1.
8. No mitigation measures are required as construction noise exceedance is not anticipated.

Kwu Tung Road Ancillary Building (EAP/EEP/VB)

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Kwu Tung Road Ancillary Building (EAP/EEP/VB))
Scenario: Mitigated Scenario

		2026												2027												2028											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (AB13)	104										104	104	104																								
UU, Road Works and Site Formation (AB13)	103											103	103																								
Cofferdam Works (AB13)	113														113	113	113	113	113	113	113	113	113	113	113	113	113	113									113
Foundation Works (AB13)	107													107	107	107	107																107	107	107	107	107
Excavation Works (AB13)	99																															99	99	99	99	99	99
Road Works (AB13)	100																														100	100	100				
RC Works (AB13)	106																																				

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
KTR-E1	67	0	0	0	0	0	0	0	0	0	64	67	67																								
KTR-E2	67	0	0	0	0	0	0	0	0	0	64	67	67																								
KTR-E3	59	0	0	0	0	0	0	0	0	0	49	51	51	52	58	58	58	57	57	57	57	57	57	57	57	57	57	57	0	0	45	48	53	53	53	53	59

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. Cell with shaded area denotes the unoccupancy of the NAP (i.e. being resumed under San Tin Lok Ma Chau Development Node).
3. Text in bold and underline denotes exceedance of relevant criterion.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Kwu Tung Road Ancillary Building (EAP/EEP/VB))
Scenario: Mitigated Scenario

		2029												2030											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (AB13)	104																								
UU, Road Works and Site Formation (AB13)	103																								
Cofferdam Works (AB13)	113	113	113	113	113	113																			
Foundation Works (AB13)	107																								
Excavation Works (AB13)	99	99																							
Road Works (AB13)	100																								
RC Works (AB13)	106		106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106						

Predicted Construction Noise, dB(A)																									
NAP	Max																								
KTR-E1	67																								
KTR-E2	67																								
KTR-E3	59	58	58	58	58	58	51	51	51	51	51	51	51	51	51	51	51	51	51	0	0	0	0	0	0

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. Cell with shaded area denotes the unoccupancy of the NAP (i.e. being resumed under San Tin Lok Ma Chau Development Node).
3. Text in bold and underline denotes exceedance of relevant criterion.

Pak Shek Au Ancillary Building (EAP/EEP)

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Pak Shek Au Ancillary Building (EAP/EEP))
Scenario: Mitigated Scenario

		2025												2026												2027											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (AB14)	104				104	104																															
UU, Road Works and Site Formation (AB14)	103					103	103	103	103	103																											
Cofferdam Works (AB Area)	110							110	110	110	110																											
Foundation Works (AB Area)	111										111	111	111	111	111	111																					
Excavation Works (AB14)	99																		99	99	99	99	99	99	99	99											
RC Works (AB14)	106																									106	106	106	106	106	106	106	106	106	106		
Site Clearance and Establishment (CLP Site Clearance)	100																									100											
Construction of Permanent Substation (CLP Substation Construction)	102																									102	102	102	102	102	102	102	102	102	102	102	102

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
PSA-E1	70	0	0	0	69	69	68	70	70	70	66	66	66	66	66	66	0	0	64	64	64	64	64	64	64	66	62	62	62	62	62	62	62	62	55	55

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. Preliminary Works and UU, Road Works and Site Formation will not take place concurrently. The worst case is adopted for calculation.
3. Cofferdam Works and Foundation Works will not take place concurrently. The worst case is adopted for calculation.
4. Site Clearance and Establishment (CLP) and Construction Temporary Substsation (CLP) will not take place concurrently. The worst case is adopted for calculation.
5. Text in bold and underline denotes exceedance of relevant criterion.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Pak Shek Au Ancillary Building (EAP/EEP))
Scenario: Mitigated Scenario

		2028											
		1	2	3	4	5	6	7	8	9	10	11	12
Preliminary Works (AB14)	104												
UU, Road Works and Site Formation (AB14)	103												
Cofferdam Works (AB Area)	110												
Foundation Works (AB Area)	111												
Excavation Works (AB14)	99												
RC Works (AB14)	106												
Site Clearance and Establishment (CLP Site Clearance)	100												
Construction of Permanent Substation (CLP Substation Construction)	102	102	102	102	102	102	102	102	102	102	102	102	

Predicted Construction Noise, dB(A)													
NAP	Max												
PSA-E1	70	55	55	55	55	55	55	55	55	55	55	55	0

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. Preliminary Works and UU, Road Works and Site Formation will not take place concurrently. The worst case is adopted for calculation.
3. Cofferdam Works and Foundation Works will not take place concurrently. The worst case is adopted for calculation.
4. Site Clearance and Establishment (CLP) and Construction Temporary Substsation (CLP) will not take place concurrently. The worst case is adopted for calculation.
5. Text in bold and underline denotes exceedance of relevant criterion.

Kwu Tung Station (KTU) (NOL)

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Kwu Tung Station (KTU) (NOL))
Scenario: Mitigated Scenario

		2025												2026												2027											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Mobilisation (KTU 1e)	108							108	108	108																											
Site Mobilisation (KTU 1a)	108													108	108	108	108	108	108																		
Site Mobilisation (KTU 1b)	108													108	108	108	108	108	108																		
Site Mobilisation (KTU 1c)	108													108	108	108	108	108	108																		
Site Mobilisation (KTU 1d)	108													108	108	108	108	108	108																		
Site Clearance (Remove KTU (EAL) Site Office) (KTU 2a)	112													112	112	112	112	112	112																		
GI and Foundation Works (KTU 3a)	105				105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105									
GI and Foundation Works (KTU 3b)	106				106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106			
GI and Foundation Works (KTU 3c)	105				105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
GI and Foundation Works (KTU 3d)	107																107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107
GI and Foundation Works (KTU 3f)	109																109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109
GI and Foundation Works (KTU 3g)	107																107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107
Excavation and Structural Works (KTU 5a)	106																																		106	106	106
Excavation and Structural Works (KTU 5b)	106																																		106	106	106
Excavation and Structural Works (KTU 5c)	106																																				
Excavation and Structural Works (KTU 5d)	106																																				
Excavation and Structural Works (KTU 5f)	106																																				
Excavation and Structural Works (KTU 5g)	106																																				
Breakthrough (at Councourse) (KTU 6a)	0																																				
Breakthrough (at Councourse) (KTU 6b)	0																																				
Breakthrough (at Councourse) (KTU 6c)	0																																				
Breakthrough (at Platform) (KTU 6a)	0																																				
Breakthrough (at Platform) (KTU 6b)	0																																				
Breakthrough (at Platform) (KTU 6c)	0																																				
ABWF, BS, Systemwide E&M Installations, SATs & SIT (KTU 7a)	103																																				
EAP4 Above-ground Structure Demolition Works (KTU 8a)	115																																		115	115	115
TBM Tunnel KTU to SAT (KTU-TBM)	105																																				
Other Concurrent Projects																																					
Predicted Construction Noise from NENT (S1022)	111																111	111	111	111	111	111															
Predicted Construction Noise from NENT (S1023)	111																111	111	111	111	111	111															
Predicted Construction Noise from NENT (S1024)	111																111	111	111	111	111	111															
Predicted Construction Noise from NENT (S1040)	107/111								107	107	107	107	107	107	107	107	107	107	107	107	111	111	111	111	111	111											
Predicted Construction Noise from NENT (S1054)	112				112	112	112	112	112	112	112	112																									

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
KTU-P1	64	0	0	0	58	58	58	58	59	59	59	59	59	59	59	59	63	63	63	63	63	63	61	61	61	61	59	59	58	58	58	58	58	58	64	64	64
KTU-P2	72	0	0	0	67	67	67	67	68	68	68	68	67	67	67	67	68	68	68	68	69	69	69	69	69	69	67	67	66	66	66	66	66	66	71	71	71
KTU-P3	65																																				
KTU-P4	60																																				
KTU-P5	59																																				
KTU-P6	75																																				
KTU-P7	74																																				
KTU-P8	74	0	0	0	72	72	72	72	73	73	73	73	72	72	72	72	73	73	73	73	73	73	73	73	73	73	72	72	67	67	67	67	67	67	74	74	74

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Site Mobilisation" and "Site Clearance (Remove KTU (EAL) Site Office)" will not take place concurrently. The worst case is adopted for calculation.
3. "Site Clearance (Remove KTU (EAL) Site Office)" and "GI and Foundation Works (KTU 3a, KTU 3b and KTU 3c)" will not take place concurrently. The worst case is adopted for calculation.
4. "Site Mobilisation" and "GI and Foundation Works" will not take place concurrently. The worst case is adopted for calculation.
5. The cumulative noise impacts from the construction of North East New Territories New Development Areas (NENT) are considered by making reference to the approved EIA report "North East New Territories New Development Areas" (AEIAR-175/2013). Only construction noise sources within 300m of the NAPs are included for calculating cumulative impacts.
6. There are no occupancy of the NAPs KTU-P3, KTU-P4, KTU-P5, KTU-P6, KTU-7 during the construction period of NENT.
7. Text in bold and underline denotes exceedance of relevant criterion.
8. Cell with shaded area denotes the unoccupancy of the NAPs (i.e. before the population intake).
9. All PME for breakthrough will operate underground and are not included in the calculation.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

Title: Construction Noise Calculation (Kwu Tung Station (KTU) (NOL))
Scenario: Mitigated Scenario

		2028												2029												2030											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Mobilisation (KTU 1e)	108																																				
Site Mobilisation (KTU 1a)	108																																				
Site Mobilisation (KTU 1b)	108																																				
Site Mobilisation (KTU 1c)	108																																				
Site Mobilisation (KTU 1d)	108																																				
Site Clearance (Remove KTU (EAL) Site Office) (KTU 2a)	112																																				
GI and Foundation Works (KTU 3a)	105																																				
GI and Foundation Works (KTU 3b)	106																																				
GI and Foundation Works (KTU 3c)	105																																				
GI and Foundation Works (KTU 3d)	107	107	107	107	107	107	107																														
GI and Foundation Works (KTU 3f)	109	109	109	109	109	109	109																														
GI and Foundation Works (KTU 3g)	107	107	107	107	107	107	107	107	107	107																											
Excavation and Structural Works (KTU 5a)	106	106	106	106	106	106	106	106	106	106																											
Excavation and Structural Works (KTU 5b)	106	106	106	106	106	106	106	106	106	106																						106	106	106	106	106	106
Excavation and Structural Works (KTU 5c)	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106						
Excavation and Structural Works (KTU 5d)	106							106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106
Excavation and Structural Works (KTU 5f)	106							106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106
Excavation and Structural Works (KTU 5g)	106							106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106
Breakthrough (at Councourse) (KTU 6a)	0																															0	0	0	0	0	0
Breakthrough (at Councourse) (KTU 6b)	0																															0	0	0	0	0	0
Breakthrough (at Councourse) (KTU 6c)	0																															0	0	0	0	0	0
Breakthrough (at Platform) (KTU 6a)	0																															0	0	0	0	0	0
Breakthrough (at Platform) (KTU 6b)	0																															0	0	0	0	0	0
Breakthrough (at Platform) (KTU 6c)	0																															0	0	0	0	0	0
ABWF, BS, Systemwide E&M Installations, SATs & SIT (KTU 7a)	103																																				
EAP4 Above-ground Structure Demolition Works (KTU 8a)	115	115	115	115	115	115	115																														
TBM Tunnel KTU to SAT (KTU-TBM)	105									105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	
Other Concurrent Projects																																					
Predicted Construction Noise from NENT (S1022)	111																																				
Predicted Construction Noise from NENT (S1023)	111																																				
Predicted Construction Noise from NENT (S1024)	111																																				
Predicted Construction Noise from NENT (S1040)	107/111																																				
Predicted Construction Noise from NENT (S1054)	112																																				

Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
KTU-P1	64	64	64	64	64	64	64	60	60	61	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	56
KTU-P2	72	72	72	72	72	72	72	68	68	70	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	64
KTU-P3	65																									64	64	64	64	64	64	64	64	64	64	64	64
KTU-P4	60																									58	58	58	58	58	58	58	58	58	58	58	58
KTU-P5	59																									58	58	58	58	58	58	58	58	58	58	58	58
KTU-P6	75																									72	72	72	72	72	72	72	72	72	72	72	72
KTU-P7	74																									71	71	71	71	71	71	71	71	71	71	71	71
KTU-P8	74	74	74	74	74	74	74	73	73	74	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	70	70	70	70	70	67

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Site Mobilisation" and "Site Clearance (Remove KTU (EAL) Site Office)" will not take place concurrently. The worst case is adopted for calculation.
3. "Site Clearance (Remove KTU (EAL) Site Office)" and "GI and Foundation Works (KTU 3a, KTU 3b and KTU 3c)" will not take place concurrently. The worst case is adopted for calculation.
4. "Site Mobilisation" and "GI and Foundation Works" will not take place concurrently. The worst case is adopted for calculation.
5. The cumulative noise impacts from the construction of North East New Territories New Development Areas (NENT) are considered by making referce to the approved EIA report "North East New Territories New Development Areas" (AEIAR-175/2013). Only construction noise sources within 300m of the NAPs are included for calculating cumulative impacts.
6. There are no occupancy of the NAPs KTU-P3, KTU-P4, KTU-P5, KTU-P6, KTU-7 during the construction period of NENT.
7. Text in bold and underline denotes exceedance of relevant criterion.
8. Cell with shaded area denotes the unoccupancy of the NAPs (i.e. before the population intake).
9. All PME for breakthrough will operate underground and are not included in the calculation.

Project: Environmental Consultancy No. C1603 EIA Study for Northern Link

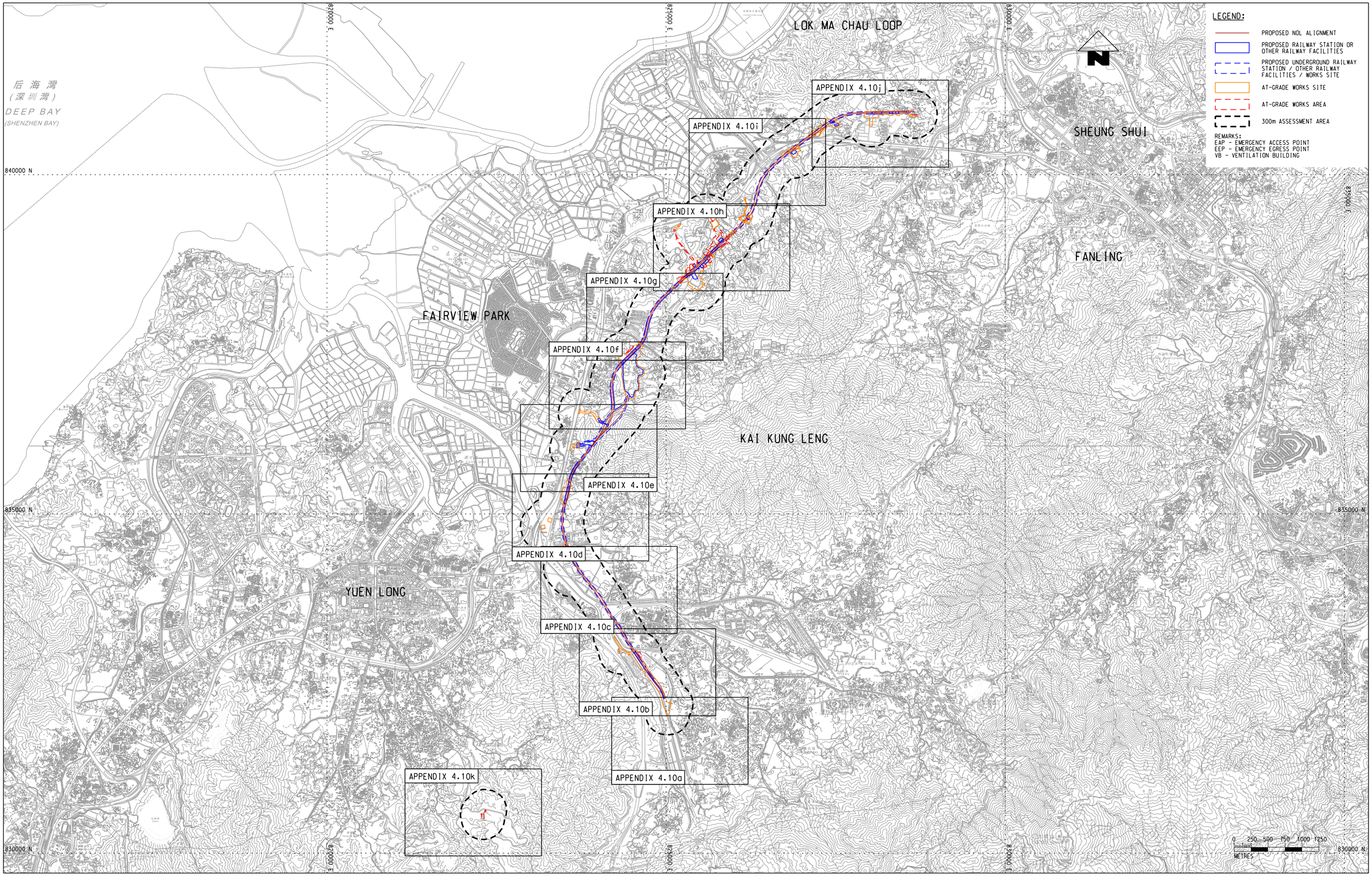
Title: Construction Noise Calculation (Kwu Tung Station (KTU) (NOL))
Scenario: Mitigated Scenario

		2031												2032												2033											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Mobilisation (KTU 1e)	108																																				
Site Mobilisation (KTU 1a)	108																																				
Site Mobilisation (KTU 1b)	108																																				
Site Mobilisation (KTU 1c)	108																																				
Site Mobilisation (KTU 1d)	108																																				
Site Clearance (Remove KTU (EAL) Site Office) (KTU 2a)	112																																				
GI and Foundation Works (KTU 3a)	105																																				
GI and Foundation Works (KTU 3b)	106																																				
GI and Foundation Works (KTU 3c)	105																																				
GI and Foundation Works (KTU 3d)	107																																				
GI and Foundation Works (KTU 3f)	109																																				
GI and Foundation Works (KTU 3g)	107																																				
Excavation and Structural Works (KTU 5a)	106																									106	106	106	106	106	106						
Excavation and Structural Works (KTU 5b)	106	106	106	106																																	
Excavation and Structural Works (KTU 5c)	106																																				
Excavation and Structural Works (KTU 5d)	106	106	106	106	106	106	106	106	106	106																											
Excavation and Structural Works (KTU 5f)	106	106	106	106	106	106	106	106	106	106																											
Excavation and Structural Works (KTU 5g)	106	106	106	106	106	106	106	106	106	106																											
Breakthrough (at Councourse) (KTU 6a)	0	0	0	0	0	0	0	0	0	0																											
Breakthrough (at Councourse) (KTU 6b)	0	0	0	0	0	0	0	0	0	0																											
Breakthrough (at Councourse) (KTU 6c)	0	0	0	0	0	0	0	0	0	0																											
Breakthrough (at Platform) (KTU 6a)	0	0	0	0	0	0	0	0	0	0	0	0	0																								
Breakthrough (at Platform) (KTU 6b)	0	0	0	0	0	0	0	0	0	0	0	0	0																								
Breakthrough (at Platform) (KTU 6c)	0	0	0	0	0	0	0	0	0	0	0	0	0																								
ABWF, BS, Systemwide E&M Installations, SATs & SIT (KTU 7a)	103				103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103											
EAP4 Above-ground Structure Demolition Works (KTU 8a)	115																																				
TBM Tunnel KTU to SAT (KTU-TBM)	105																																				
Other Concurrent Projects																																					
Predicted Construction Noise from NENT (S1022)	111																																				
Predicted Construction Noise from NENT (S1023)	111																																				
Predicted Construction Noise from NENT (S1024)	111																																				
Predicted Construction Noise from NENT (S1040)	107/111																																				
Predicted Construction Noise from NENT (S1054)	112																																				

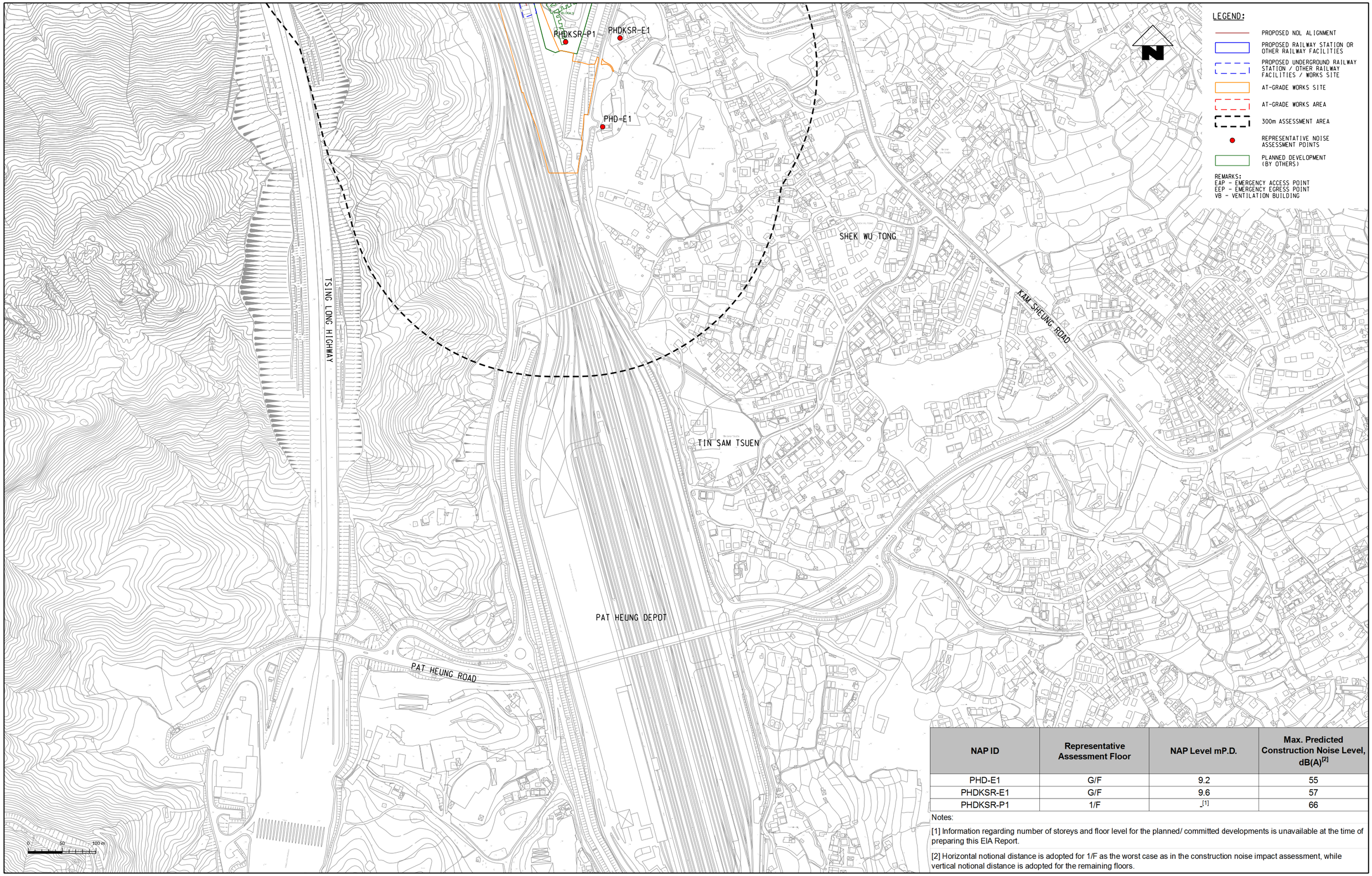
Predicted Construction Noise, dB(A)																																					
NAP	Max																																				
KTU-P1	64	56	56	56	54	54	54	54	54	54	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	54	54	54	54	54	54	0	0	0	0	0	0
KTU-P2	72	64	64	64	60	60	60	60	60	60	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	62	62	62	62	62	62	0	0	0	0	0	0
KTU-P3	65	64	64	64	65	65	65	65	65	65	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	0	0	0	0	0	0	0	0	0	0	0	0
KTU-P4	60	58	58	58	60	60	60	60	60	60	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	0	0	0	0	0	0	0	0	0	0	0	0
KTU-P5	59	58	58	58	59	59	59	59	59	59	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	0	0	0	0	0	0	0	0	0	0	0	0
KTU-P6	75	72	72	72	75	75	75	75	75	75	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	0	0	0	0	0	0	0	0	0	0	0	0
KTU-P7	74	71	71	71	74	74	74	74	74	74	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	54	54	54	54	54	54	0	0	0	0	0	0
KTU-P8	74	67	67	67	59	59	59	59	59	59	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	72	72	72	72	72	72	0	0	0	0	0	0

Notes:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront to the NAP.
- Distance Attenuation, in dB(A) = - 20 log D - 8 (where D is the distance in metres).
- A +3 dB(A) façade correction was added to the predicted noise level to account for the façade effect at the NAP.
2. "Site Mobilisation" and "Site Clearance (Remove KTU (EAL) Site Office)" will not take place concurrently. The worst case is adopted for calculation.
3. "Site Clearance (Remove KTU (EAL) Site Office)" and "GI and Foundation Works (KTU 3a, KTU 3b and KTU 3c)" will not take place concurrently. The worst case is adopted for calculation.
4. "Site Mobilisation" and "GI and Foundation Works" will not take place concurrently. The worst case is adopted for calculation.
5. The cumulative noise impacts from the construction of North East New Territories New Development Areas (NENT) are considered by making reference to the approved EIA report "North East New Territories New Development Areas" (AEIAR-175/2013). Only construction noise sources within 300m of the NAPs are included for calculating cumulative impacts.
6. There are no occupancy of the NAPs KTU-P3, KTU-P4, KTU-P5, KTU-P6, KTU-7 during the construction period of NENT.
7. Text in bold and underline denotes exceedance of relevant criterion.
8. Cell with shaded area denotes the unoccupancy of the NAPs (i.e. before the population intake).
9. All PME for breakthrough will operate underground and are not included in the calculation.

APPENDIX 4.10



APPENDIX 4.10a



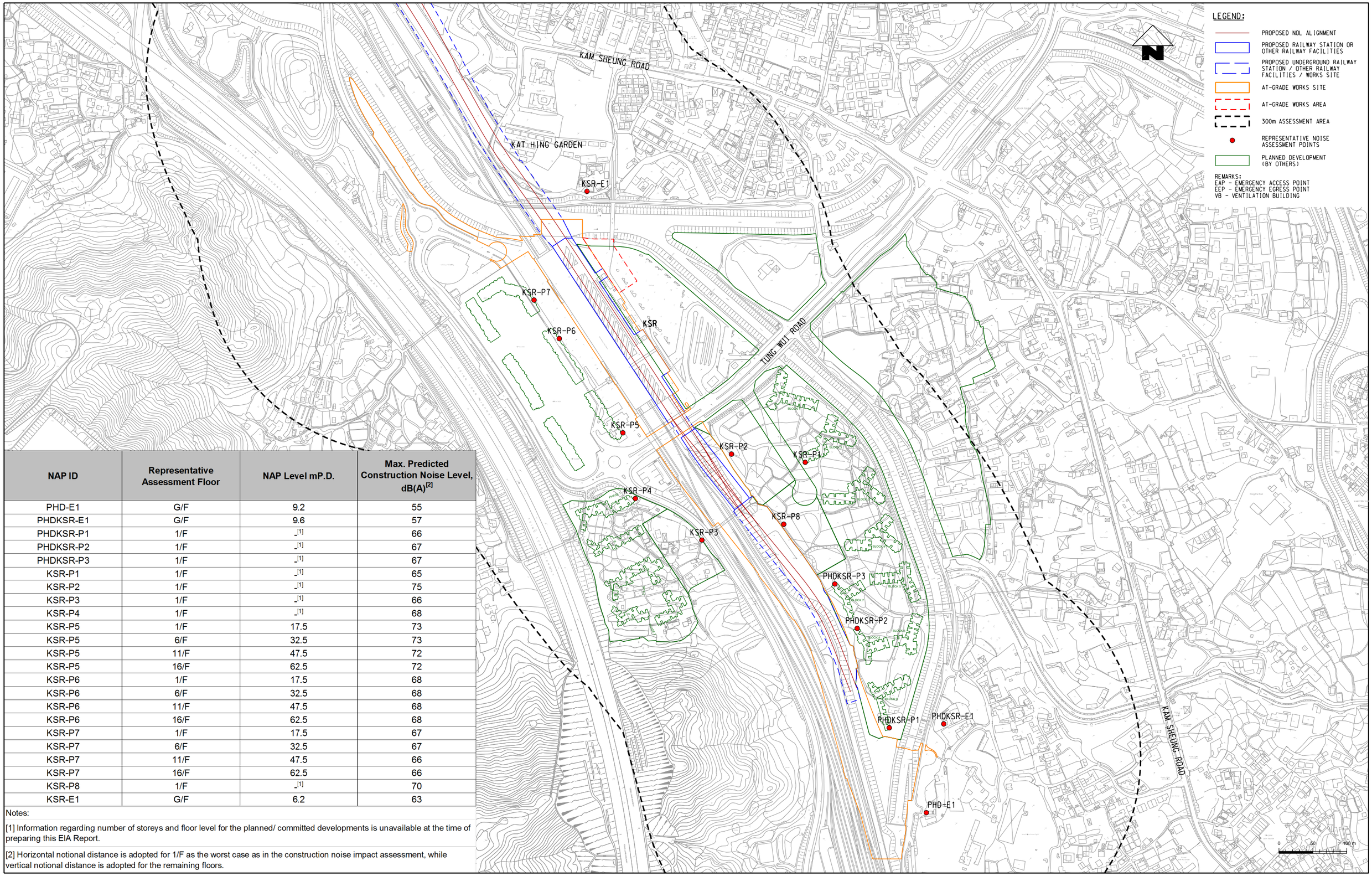
NAP ID	Representative Assessment Floor	NAP Level mP.D.	Max. Predicted Construction Noise Level, dB(A)[2]
PHD-E1	G/F	9.2	55
PHDKSR-E1	G/F	9.6	57
PHDKSR-P1	1/F	-[1]	66

Notes:

[1] Information regarding number of storeys and floor level for the planned/ committed developments is unavailable at the time of preparing this EIA Report.

[2] Horizontal notional distance is adopted for 1/F as the worst case as in the construction noise impact assessment, while vertical notional distance is adopted for the remaining floors.

APPENDIX 4.10b



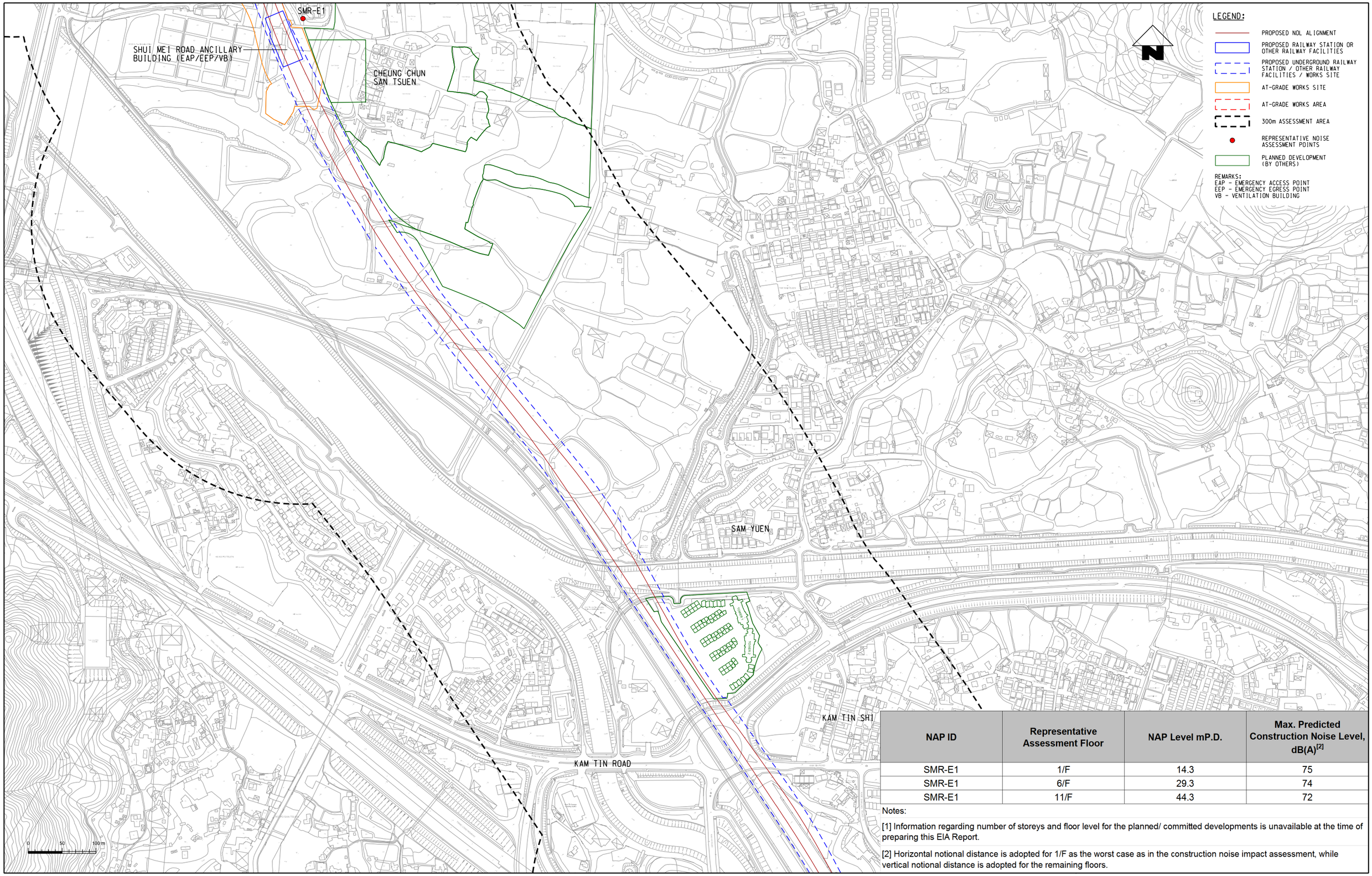
NAP ID	Representative Assessment Floor	NAP Level mP.D.	Max. Predicted Construction Noise Level, dB(A)[2]
PHD-E1	G/F	9.2	55
PHDKSR-E1	G/F	9.6	57
PHDKSR-P1	1/F	-[1]	66
PHDKSR-P2	1/F	-[1]	67
PHDKSR-P3	1/F	-[1]	67
KSR-P1	1/F	-[1]	65
KSR-P2	1/F	-[1]	75
KSR-P3	1/F	-[1]	66
KSR-P4	1/F	-[1]	68
KSR-P5	1/F	17.5	73
KSR-P5	6/F	32.5	73
KSR-P5	11/F	47.5	72
KSR-P5	16/F	62.5	72
KSR-P6	1/F	17.5	68
KSR-P6	6/F	32.5	68
KSR-P6	11/F	47.5	68
KSR-P6	16/F	62.5	68
KSR-P7	1/F	17.5	67
KSR-P7	6/F	32.5	67
KSR-P7	11/F	47.5	66
KSR-P7	16/F	62.5	66
KSR-P8	1/F	-[1]	70
KSR-E1	G/F	6.2	63

Notes:

[1] Information regarding number of storeys and floor level for the planned/ committed developments is unavailable at the time of preparing this EIA Report.

[2] Horizontal notional distance is adopted for 1/F as the worst case as in the construction noise impact assessment, while vertical notional distance is adopted for the remaining floors.

APPENDIX 4.10c



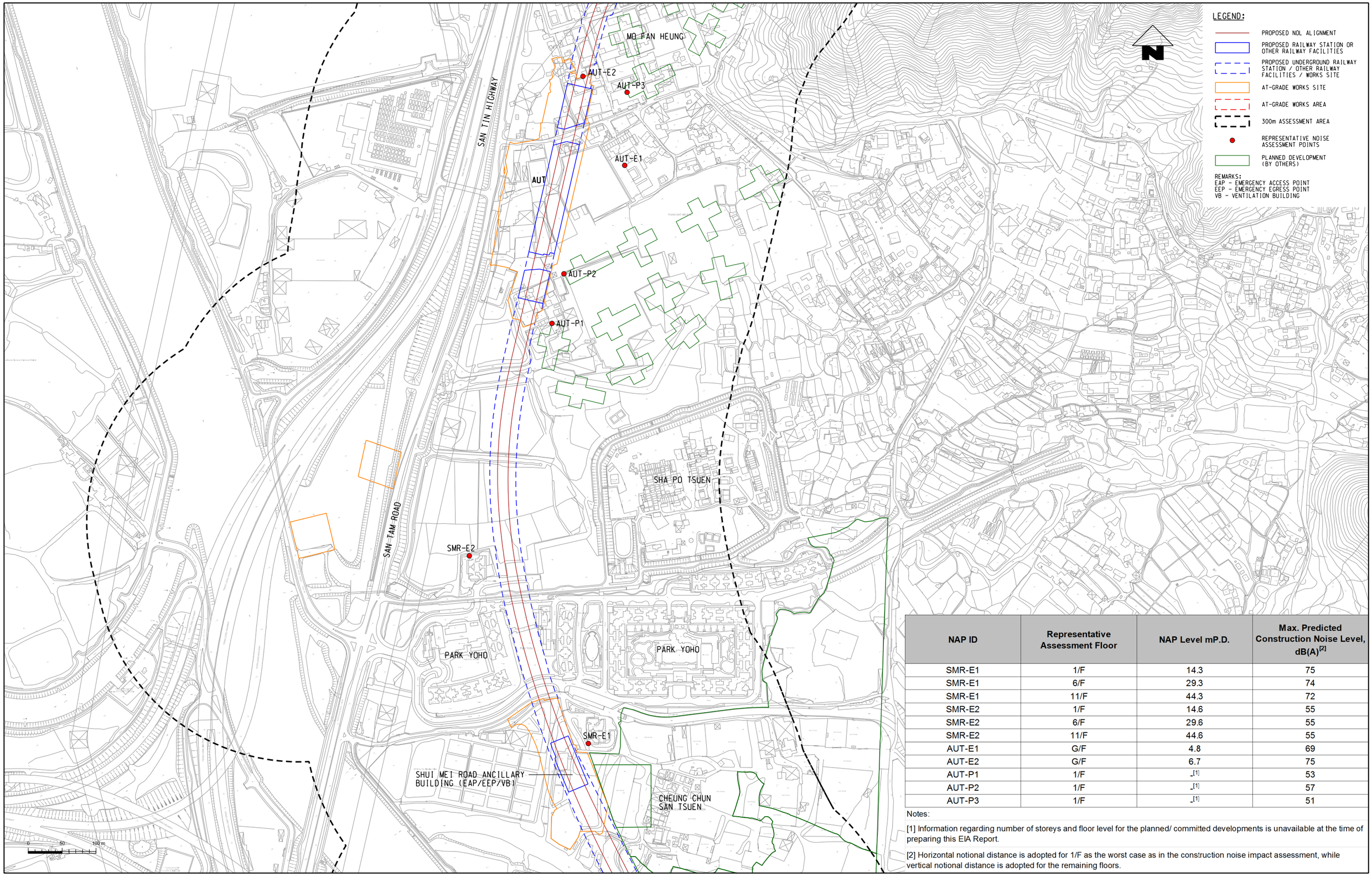
NAP ID	Representative Assessment Floor	NAP Level mP.D.	Max. Predicted Construction Noise Level, dB(A)[2]
SMR-E1	1/F	14.3	75
SMR-E1	6/F	29.3	74
SMR-E1	11/F	44.3	72

Notes:

[1] Information regarding number of storeys and floor level for the planned/ committed developments is unavailable at the time of preparing this EIA Report.

[2] Horizontal notional distance is adopted for 1/F as the worst case as in the construction noise impact assessment, while vertical notional distance is adopted for the remaining floors.

APPENDIX 4.10d



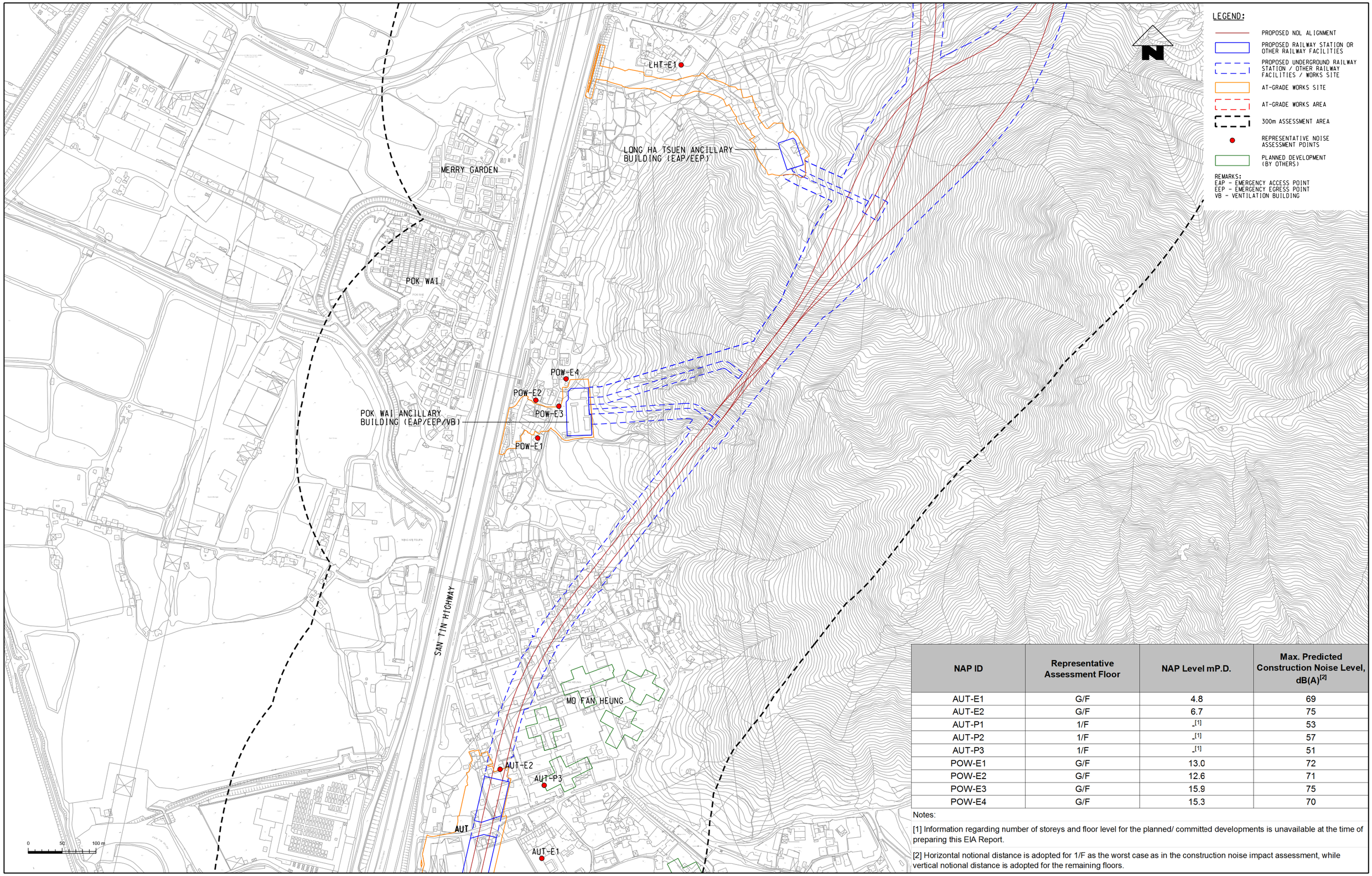
NAP ID	Representative Assessment Floor	NAP Level mP.D.	Max. Predicted Construction Noise Level, dB(A)[2]
SMR-E1	1/F	14.3	75
SMR-E1	6/F	29.3	74
SMR-E1	11/F	44.3	72
SMR-E2	1/F	14.6	55
SMR-E2	6/F	29.6	55
SMR-E2	11/F	44.6	55
AUT-E1	G/F	4.8	69
AUT-E2	G/F	6.7	75
AUT-P1	1/F	-[1]	53
AUT-P2	1/F	-[1]	57
AUT-P3	1/F	-[1]	51

Notes:

[1] Information regarding number of storeys and floor level for the planned/ committed developments is unavailable at the time of preparing this EIA Report.

[2] Horizontal notional distance is adopted for 1/F as the worst case as in the construction noise impact assessment, while vertical notional distance is adopted for the remaining floors.

APPENDIX 4.10e



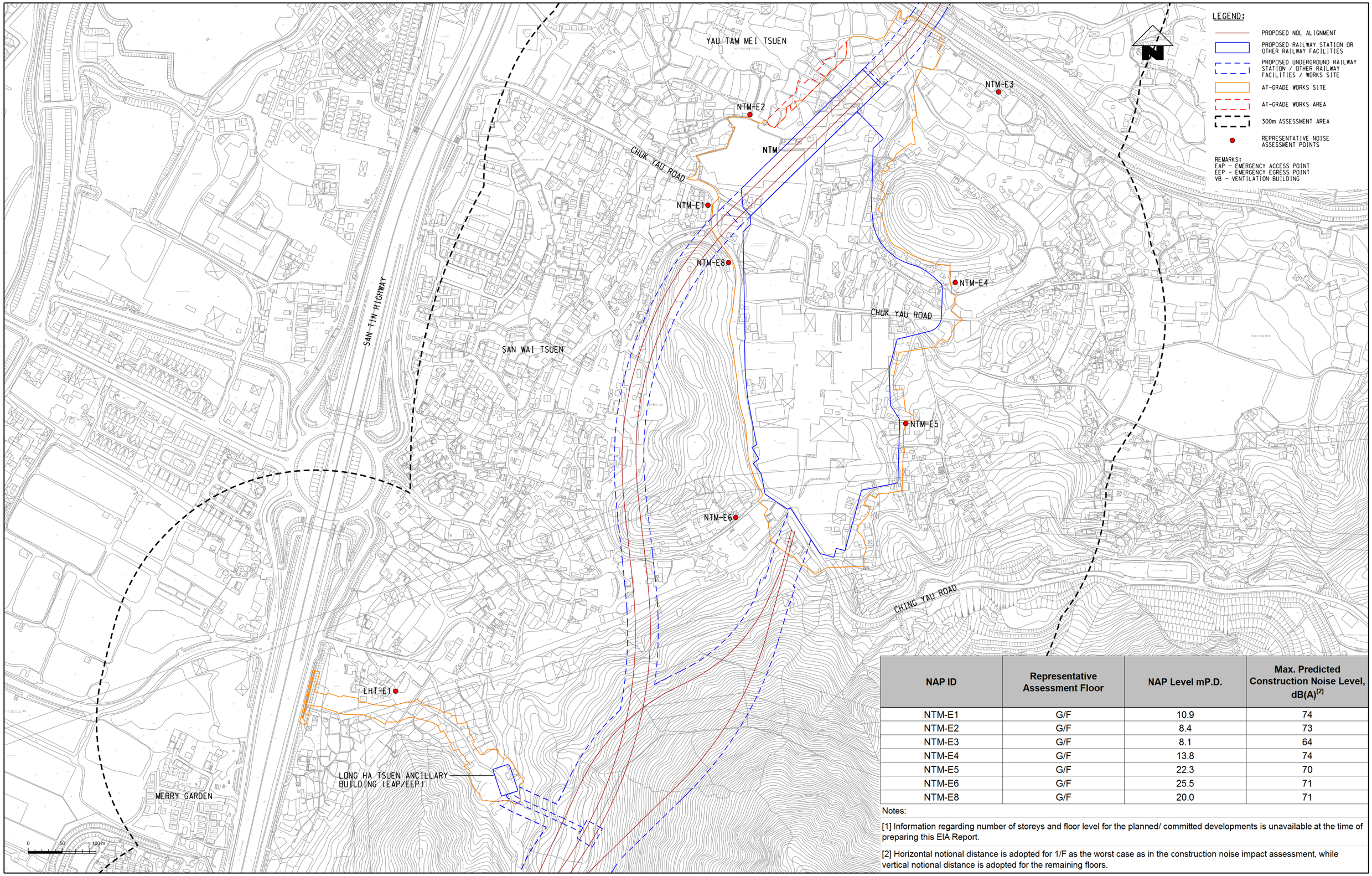
NAP ID	Representative Assessment Floor	NAP Level mP.D.	Max. Predicted Construction Noise Level, dB(A)[2]
AUT-E1	G/F	4.8	69
AUT-E2	G/F	6.7	75
AUT-P1	1/F	-[1]	53
AUT-P2	1/F	-[1]	57
AUT-P3	1/F	-[1]	51
POW-E1	G/F	13.0	72
POW-E2	G/F	12.6	71
POW-E3	G/F	15.9	75
POW-E4	G/F	15.3	70

Notes:

[1] Information regarding number of storeys and floor level for the planned/ committed developments is unavailable at the time of preparing this EIA Report.

[2] Horizontal notional distance is adopted for 1/F as the worst case as in the construction noise impact assessment, while vertical notional distance is adopted for the remaining floors.

APPENDIX 4.10f



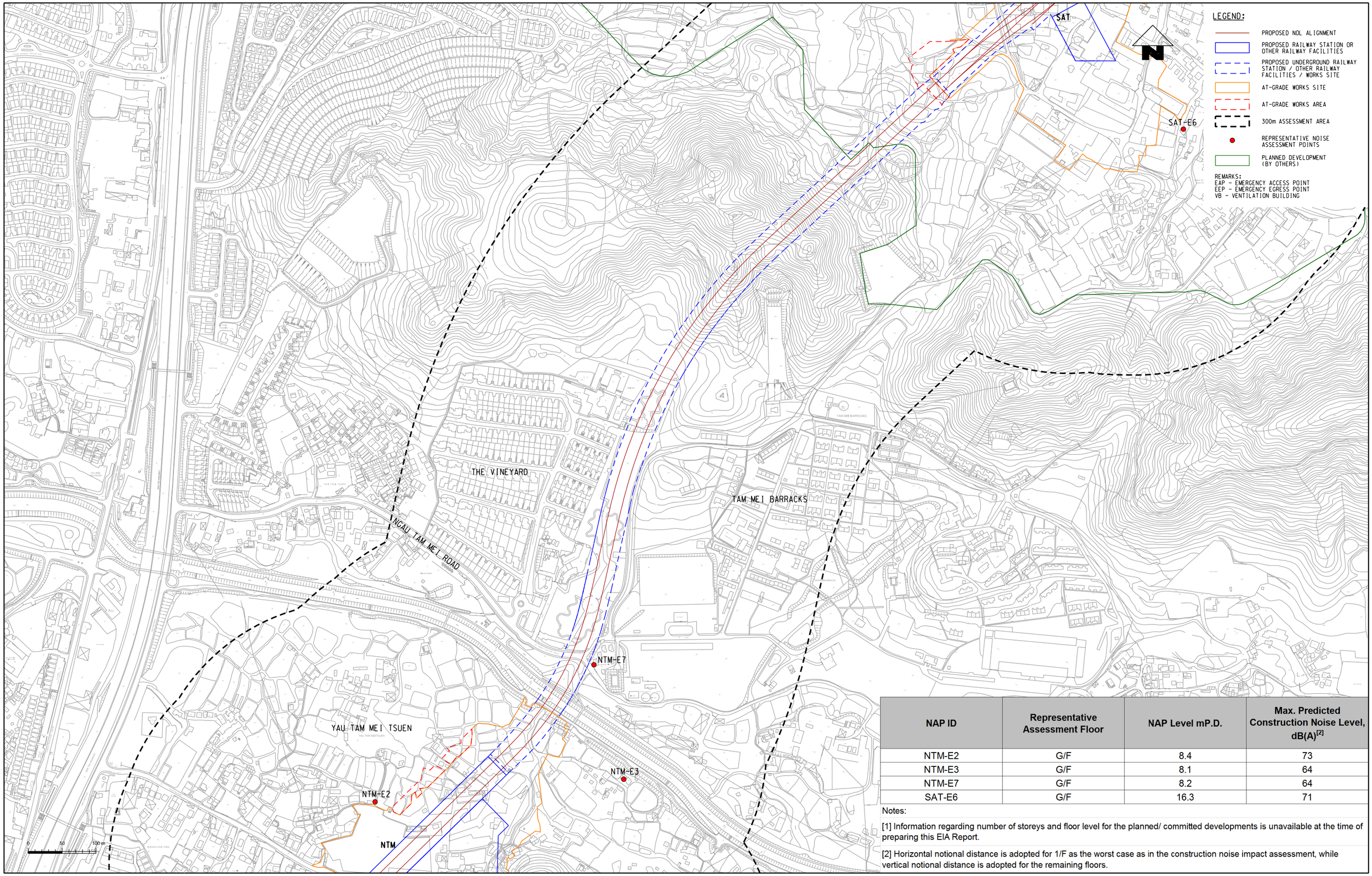
NAP ID	Representative Assessment Floor	NAP Level mP.D.	Max. Predicted Construction Noise Level, dB(A)[2]
NTM-E1	G/F	10.9	74
NTM-E2	G/F	8.4	73
NTM-E3	G/F	8.1	64
NTM-E4	G/F	13.8	74
NTM-E5	G/F	22.3	70
NTM-E6	G/F	25.5	71
NTM-E8	G/F	20.0	71

Notes:

[1] Information regarding number of storeys and floor level for the planned/ committed developments is unavailable at the time of preparing this EIA Report.

[2] Horizontal notional distance is adopted for 1/F as the worst case as in the construction noise impact assessment, while vertical notional distance is adopted for the remaining floors.

APPENDIX 4.10g



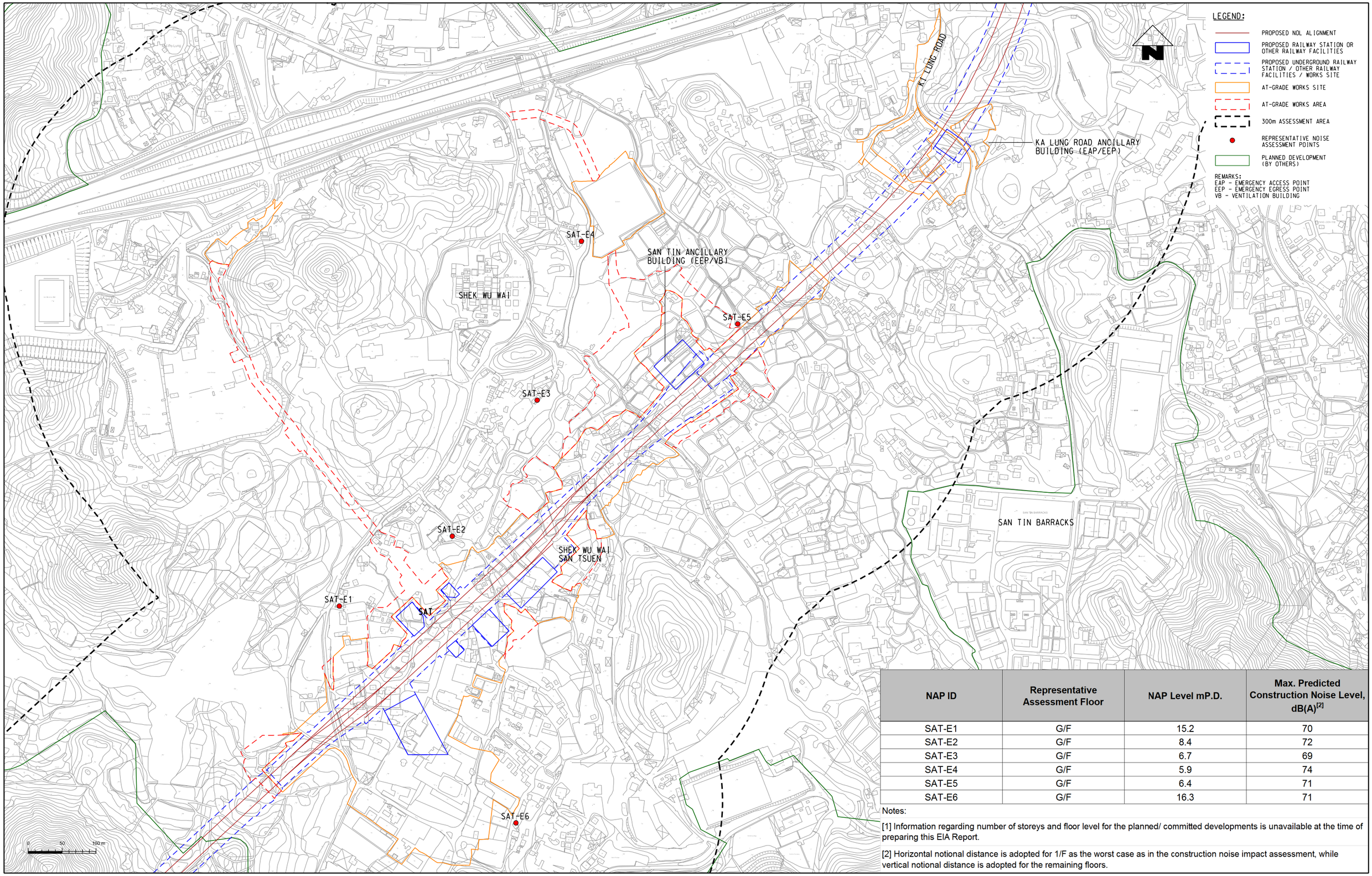
NAP ID	Representative Assessment Floor	NAP Level mP.D.	Max. Predicted Construction Noise Level, dB(A)[2]
NTM-E2	G/F	8.4	73
NTM-E3	G/F	8.1	64
NTM-E7	G/F	8.2	64
SAT-E6	G/F	16.3	71

Notes:

[1] Information regarding number of storeys and floor level for the planned/ committed developments is unavailable at the time of preparing this EIA Report.

[2] Horizontal notional distance is adopted for 1/F as the worst case as in the construction noise impact assessment, while vertical notional distance is adopted for the remaining floors.

APPENDIX 4.10h



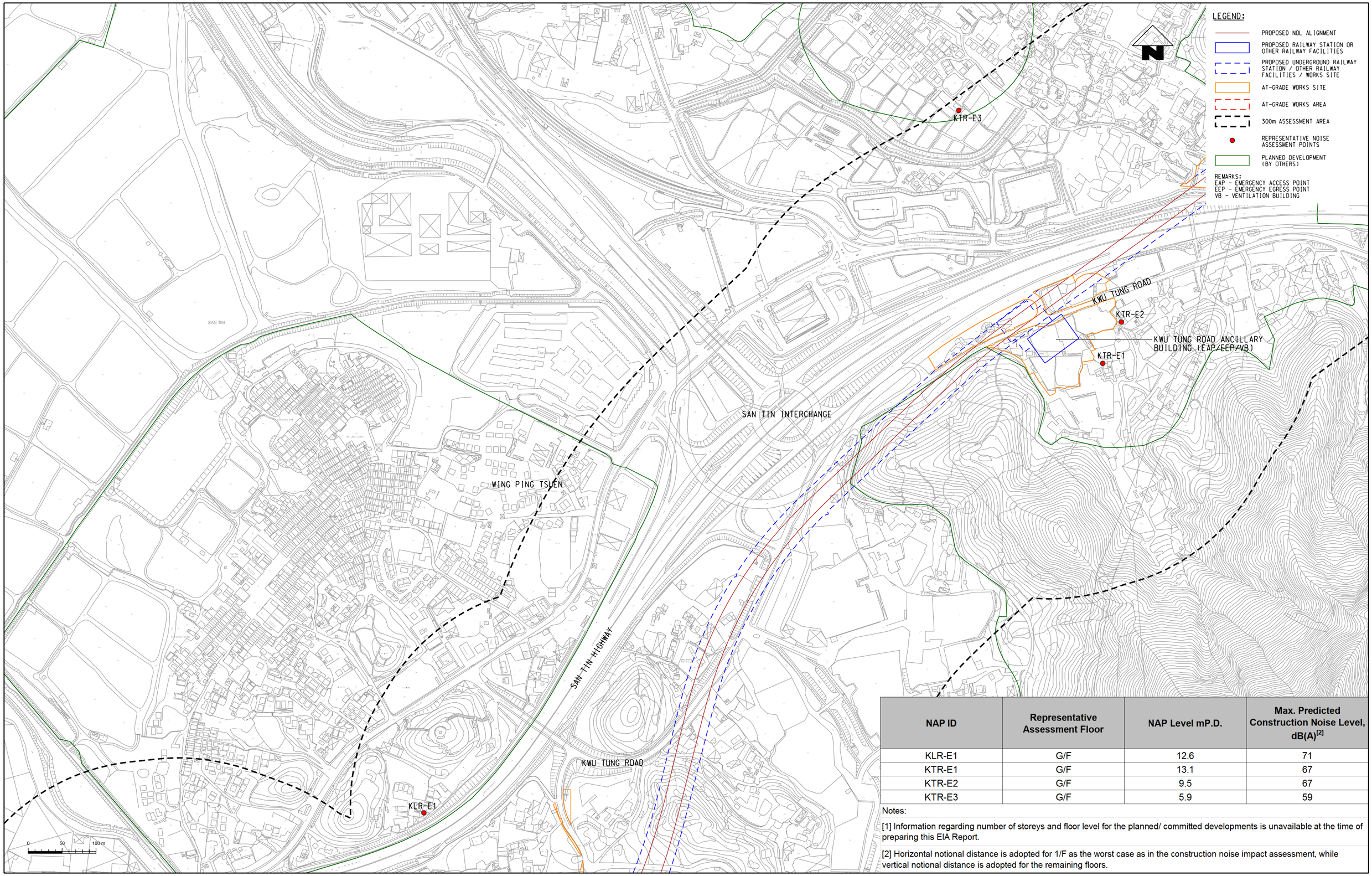
NAP ID	Representative Assessment Floor	NAP Level mP.D.	Max. Predicted Construction Noise Level, dB(A)[2]
SAT-E1	G/F	15.2	70
SAT-E2	G/F	8.4	72
SAT-E3	G/F	6.7	69
SAT-E4	G/F	5.9	74
SAT-E5	G/F	6.4	71
SAT-E6	G/F	16.3	71

Notes:

[1] Information regarding number of storeys and floor level for the planned/ committed developments is unavailable at the time of preparing this EIA Report.

[2] Horizontal notional distance is adopted for 1/F as the worst case as in the construction noise impact assessment, while vertical notional distance is adopted for the remaining floors.

APPENDIX 4.10i



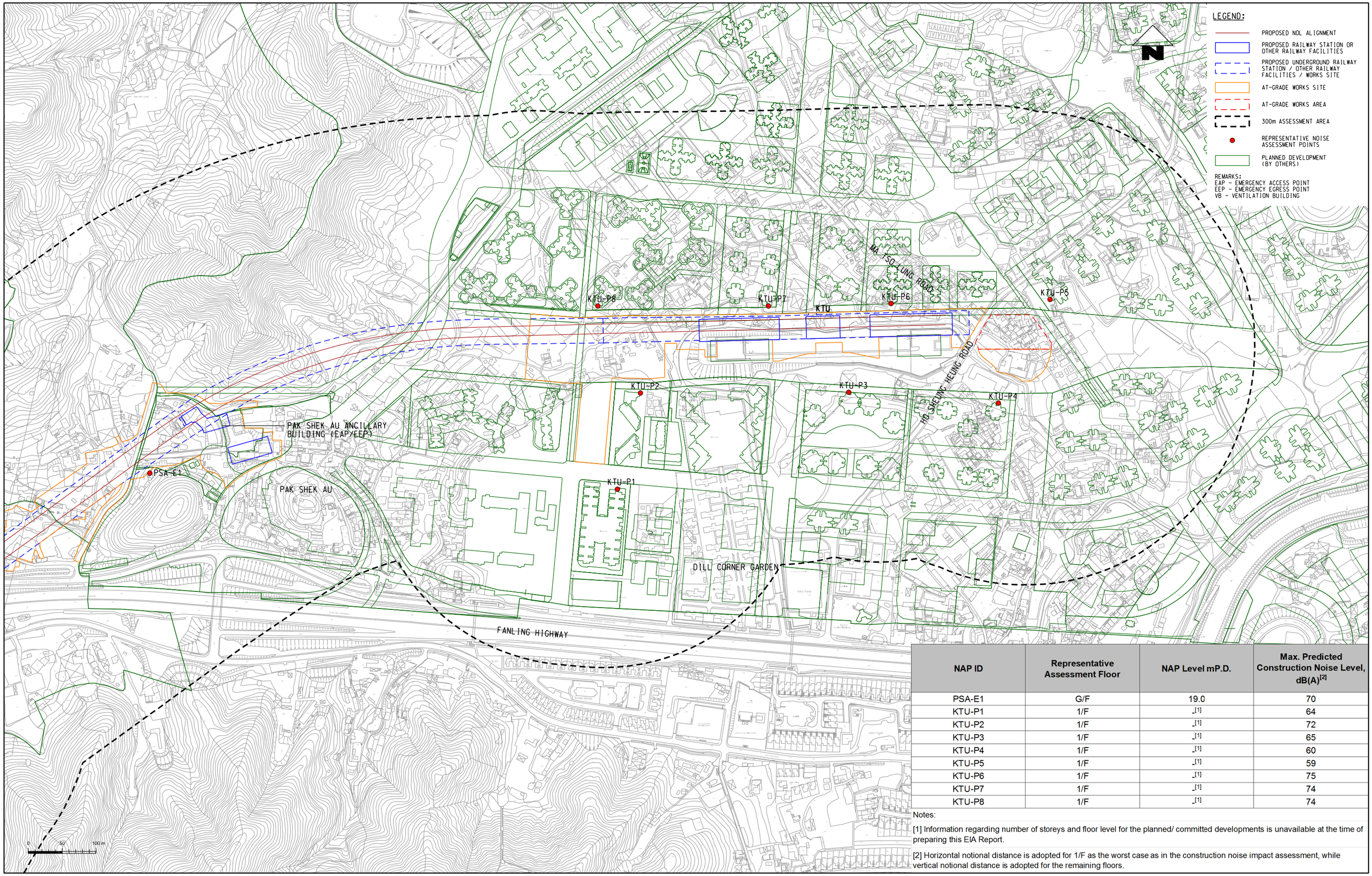
NAP ID	Representative Assessment Floor	NAP Level mP.D.	Max. Predicted Construction Noise Level, dB(A)[2]
KLR-E1	G/F	12.6	71
KTR-E1	G/F	13.1	67
KTR-E2	G/F	9.5	67
KTR-E3	G/F	5.9	59

Notes:

[1] Information regarding number of storeys and floor level for the planned/ committed developments is unavailable at the time of preparing this EIA Report.

[2] Horizontal notional distance is adopted for 1/F as the worst case as in the construction noise impact assessment, while vertical notional distance is adopted for the remaining floors.

APPENDIX 4.10j



NAP ID	Representative Assessment Floor	NAP Level mP.D.	Max. Predicted Construction Noise Level, dB(A)[2]
PSA-E1	G/F	19.0	70
KTU-P1	1/F	-[1]	64
KTU-P2	1/F	-[1]	72
KTU-P3	1/F	-[1]	65
KTU-P4	1/F	-[1]	60
KTU-P5	1/F	-[1]	59
KTU-P6	1/F	-[1]	75
KTU-P7	1/F	-[1]	74
KTU-P8	1/F	-[1]	74

Notes:

[1] Information regarding number of storeys and floor level for the planned/ committed developments is unavailable at the time of preparing this EIA Report.

[2] Horizontal notional distance is adopted for 1/F as the worst case as in the construction noise impact assessment, while vertical notional distance is adopted for the remaining floors.

APPENDIX 4.10k