Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Kowloon**

NAP ID: **EH1**

Assessment Floor 5/F

Floor mP.D. 87.3

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2025												2026												2027											
						J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Work Zone 7 - Kowloon Portal																																									
Site Clearance	117	272	-56.7	0	3			63	63																																
Construction of New Ventilation Building																																									
Site formation of New Vent. Bldg. at Kln. Portal (including Slope Formation Works)	123	266	-56.5	0	3					69	69	69	69	69	69	69	69	69	69																						
Construction of New Vent. Bldg at Kln. Portal	123	266	-56.5	0	3															70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Demolition of existing Shatin Bound Vent. Bldg and security booth at Kln Portal	119	293	-57.3	0	3																																				
Construction of Portal Structure																																									
Construction of Portal Structure and Slope Formation Works at Kln. Portal (Phase 1)	126	272	-56.7	0	3																			72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
Construction of Portal Structure and Slope Formation Works at Kln. Portal (Phase 2)	126	272	-56.7	0	3																																				
Lion Rock Tunnel Road Widening																																									
Work Zone 8 - Kowloon Side																																									
Site Clearance, tree felling / transplant, utilities diversion	117	44	-40.9	0	3																																				
Road Widening																																									
Pipe Pile Wall / L-Shape Retaining Wall Installation	120	44	-40.9	0	3																																				
Slope Formation Works	119	44	-40.9	0	3																																				
Demolition of Existing K7A Vehicular Bridge/Footbridge	120	74	-45.4	0	3																																				
Construction of K7A Concrete Upstand Bridge	122	74	-45.4	0	3																																				
Road works																																									
Roadworks (Flexible Pavement & Low Noise Road Surfacing), Signage, Drainage	120	44	-40.9	0	3																																				
Landscaping Works																																									
Landscape Works	114	44	-40.9	0	3																																				
Predicted Noise Level, Leq (30mins), dB(A)								63	63	69	69	69	69	69	69	69	69	69	69	70	70	70	70	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74

Construction Activity	2028												2029												2030												2031			
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
Work Zone 7 - Kowloon Portal																																								
Site Clearance																																								
Construction of New Ventilation Building																																								
Site formation of New Vent. Bldg. at Kln. Portal (including Slope Formation Works)																																								
Construction of New Vent. Bldg at Kln. Portal	70	70	70	70																																				
Demolition of existing Shatin Bound Vent. Bldg and security booth at Kln Portal									65	65																														
Construction of Portal Structure																																								
Construction of Portal Structure and Slope Formation Works at Kln. Portal (Phase 1)																																								
Construction of Portal Structure and Slope Formation Works at Kln. Portal (Phase 2)																	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72					
Lion Rock Tunnel Road Widening																																								
Work Zone 8 - Kowloon Side																																								
Site Clearance, tree felling / transplant, utilities diversion												79	79	79																										
Road Widening																																								
Pipe Pile Wall / L-Shape Retaining Wall Installation															82	82	82	82	82	82	82	82	82	82	82	82														
Slope Formation Works																											81	81	81	81	81	81								
Demolition of Existing K7A Vehicular Bridge/Footbridge															77	77																								
Construction of K7A Concrete Upstand Bridge																	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79									
Road works																																								
Roadworks (Flexible Pavement & Low Noise Road Surfacing), Signage, Drainage																																82	82	82	82	82	82	82	82	82
Landscaping Works																																								
Landscape Works																																							76	76
Predicted Noise Level, Leq (30mins), dB(A)	70	70	70	70	70	70	70	70	65	65		79	79	79	83	83	84	84	84	84	84	84	84	84	84	84	83	83	83	83	83	85	82	82	82	82	82	82	82	82
Predicted Noise Level, Leq (30mins), dB(A)																																							76	76

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Kowloon**

NAP ID: **MC1**

Assessment Floor 3/F
Floor mP.D. 84.9

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2028				2029												2030												2031							
						S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
						45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Lion Rock Tunnel Road Widening																																									
Work Zone 8 - Kowloon Side																																									
Site Clearance, tree felling / transplant, utilities diversion	117	88	-46.9	0	3				73	73	73																														
Road Widening																																									
Pipe Pile Wall / L-Shape Retaining Wall Installation	120	88	-46.9	0	3							76	76	76	76	76	76	76	76	76	76	76	76																		
Slope Formation Works	119	88	-46.9	0	3																			75	75	75	75	75	75												
Demolition of Existing K7A Vehicular Bridge/Footbridge	120	146	-51.3	0	3							71	71																												
Construction of K7A Concrete Upstand Bridge	122	146	-51.3	0	3									73	73	73	73	73	73	73	73	73	73	73	73	73	73	73													
Road works																																									
Roadworks (Flexible Pavement & Low Noise Road Surfacing), Signage, Drainage	120	88	-46.9	0	3																								76	76	76	76	76	76	76	76	76				
Landscaping Works																																									
Landscape Works	114	88	-46.9	0	3																																	70	70		
Predicted Noise Level, Leq (30mins), dB(A)									73	73	73	77	77	78	78	78	78	78	78	78	78	78	78	77	77	77	77	77	79	76	76	76	76	76	76	76	76	70	70		

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Kowloon**

NAP ID: **PH2**

Assessment Floor 1/F
Floor mP.D. 76.7

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2028				2029												2030												2031							
						S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
						45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Lion Rock Tunnel Road Widening																																									
Work Zone 8 - Kowloon Side																																									
Site Clearance, tree felling / transplant, utilities diversion	117	52	-42.3	0	3				78	78	78																														
Road Widening																																									
Pipe Pile Wall / L-Shape Retaining Wall Installation	120	52	-42.3	0	3							81	81	81	81	81	81	81	81	81	81	81	81																		
Slope Formation Works	119	52	-42.3	0	3																			80	80	80	80	80	80												
Demolition of Existing K7A Vehicular Bridge/Footbridge	120	172	-52.7	0	3							70	70																												
Construction of K7A Concrete Upstand Bridge	122	172	-52.7	0	3									72	72	72	72	72	72	72	72	72	72	72	72	72	72	72													
Road works																																									
Roadworks (Flexible Pavement & Low Noise Road Surfacing), Signage, Drainage	120	52	-42.3	0	3																								81	81	81	81	81	81	81	81	81				
Landscaping Works																																									
Landscape Works	114	52	-42.3	0	3																																	75	75		
Predicted Noise Level, Leq (30mins), dB(A)									78	78	78	81	81	82	82	82	82	82	82	82	82	82	82	81	81	81	81	81	84	81	81	81	81	81	81	81	81	75	75		

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Kowloon**

NAP ID: **PHD1**

Assessment Floor 1/F

Floor mP.D. 115.7

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2025												2026												2027											
						J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Work Zone 7 - Kowloon Portal																																									
Site Clearance	117	86	-46.7	0	3	73	73																																		
Construction of New Ventilation Building																																									
Site formation of New Vent. Bldg. at Kln. Portal (including Slope Formation Works)	123	78	-45.8	0	3					80	80	80	80	80	80	80	80	80	80																						
Construction of New Vent. Bldg at Kln. Portal	123	78	-45.8	0	3															80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Demolition of existing Shatin Bound Vent. Bldg and security booth at Kln Portal	119	119	-49.5	0	3																																				
Demolition of existing Kowrnloon Bound Vent. Bldg	119	162	-52.2	0	3																																				
Construction of Portal Structure																																									
Construction of Portal Structure and Slope Formation Works at Kln. Portal (Phase 1)	126	86	-46.7	0	3																	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Construction of Portal Structure and Slope Formation Works at Kln. Portal (Phase 2)	126	86	-46.7	0	3																																				
Tunneling and Tunnel E&M																																									
Work Zone 6 - Tunnel																																									
Enlargement of Existing Kowloon Bound Tunnel	129	162	-52.2	0	3																																				
Connection of 3 existing water mains to the new pipelines inside the 3rd tunnel																																									
Enlargement of tunnel by drill and break method																																									
Cross Passages (at 100m intervals) by drill and break method and lining construction																																									
Tunnel lining																																									
Tunnel internal structure (OHVD, walkway, road slab and pavement)																																									
Tunnel E&M and TCSS installation																																									
Demolition of Partition Wall in New Third Tunnel																																									
Decommission, Closure and Rehabilitation of existing Shatin bound Tunnel to 'E' Tunnel	122	122	-49.7	0	3																																				
Lion Rock Tunnel Road Widening																																									
Work Zone 8 - Kowloon Side																																									
Site Clearance, tree felling / transplant, utilities diversion	117	66	-44.4	0	3																																				
Road Widening																																									
Pipe Pile Wall / L-Shape Retaining Wall Installation	120	66	-44.4	0	3																																				
Slope Formation Works	119	66	-44.4	0	3																																				
Demolition of Existing K7A Vehicular Bridge/Footbridge	120	105	-48.4	0	3																																				
Construction of K7A Concrete Upstand Bridge	122	105	-48.4	0	3																																				
Road works																																									
Roadworks (Flexible Pavement & Low Noise Road Surfacing), Signage, Drainage	120	66	-44.4	0	3																																				
Landscaping Works																																									
Landscape Works	114	66	-44.4	0	3																																				
Predicted Noise Level, Leq (30mins), dB(A)						73	73	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84

Construction Activity	2028												2029												2030											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Work Zone 7 - Kowloon Portal																																				
Site Clearance																																				
Construction of New Ventilation Building																																				
Site formation of New Vent. Bldg. at Kln. Portal (including Slope Formation Works)																																				
Construction of New Vent. Bldg at Kln. Portal	80	80	80	80	80	80	80	80																												
Demolition of existing Shatin Bound Vent. Bldg and security booth at Kln Portal									73	73																										
Demolition of existing Kowrnloon Bound Vent. Bldg																																				
Construction of Portal Structure																																				
Construction of Portal Structure and Slope Formation Works at Kln. Portal (Phase 1)																																				
Construction of Portal Structure and Slope Formation Works at Kln. Portal (Phase 2)																	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Tunneling and Tunnel E&M																																				
Work Zone 6 - Tunnel																																				
Enlargement of Existing Kowloon Bound Tunnel																80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Connection of 3 existing water mains to the new pipelines inside the 3rd tunnel																																				
Enlargement of tunnel by drill and break method																																				
Cross Passages (at 100m intervals) by drill and break method and lining construction																																				
Tunnel lining																																				
Tunnel internal structure (OHVD, walkway, road slab and pavement)																																				
Tunnel E&M and TCSS installation																																				
Demolition of Partition Wall in New Third Tunnel																																				
Decommission, Closure and Rehabilitation of existing Shatin bound Tunnel to 'E' Tunnel																																				
Lion Rock Tunnel Road Widening																																				
Work Zone 8 - Kowloon Side																																				
Site Clearance, tree felling / transplant, utilities diversion												76	76	76																						
Road Widening																																				
Pipe Pile Wall / L-Shape Retaining Wall Installation															79	79	79	79	79	79	79	79	79	79	79	79										
Slope Formation Works																											77	77	77	77	77	77				
Demolition of Existing K7A Vehicular Bridge/Footbridge															74	74																				
Construction of K7A Concrete Upstand Bridge																	76	76	76	76	76	76	76	76	76	76	76	76	76	76						
Road works																																				
Roadworks (Flexible Pavement & Low Noise Road Surfacing), Signage, Drainage																														78	78	78	78	78	78	78
Landscaping Works																																				
Landscape Works																																				
Predicted Noise Level, Leq (30mins), dB(A)	80	80	80	80	80	80	80	80	73	73		76	76	76	80	83	83	86	86	86	86	86	86	86	86	86	85	85	85	85	86	85	85	85	85	82

Construction Activity	2031												2032												2033												2034											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Work Zone 7 - Kowloon Portal																																																
Site Clearance																																																
Construction of New Ventilation Building																																																
Site formation of New Vent. Bldg. at Kln. Portal (including Slope Formation Works)																																																
Construction of New Vent. Bldg at Kln. Portal																																																
Demolition of existing Shatin Bound Vent. Bldg and security booth at Kln Portal																																																
Demolition of existing Kowrnloon Bound Vent. Bldg						70																																										
Construction of Portal Structure																																																
Construction of Portal Structure and Slope Formation Works at Kln. Portal (Phase 1)																																																
Construction of Portal Structure and Slope Formation Works at Kln. Portal (Phase 2)																																																
Tunneling and Tunnel E&M																																																
Work Zone 6 - Tunnel																																																
Enlargement of Existing Kowloon Bound Tunnel	80	80	80	80	80	80	80	80	80	80													80	80	80																								
Connection of 3 existing water mains to the new pipelines inside the 3rd tunnel																																																
Enlargement of tunnel by drill and break method																																																
Cross Passages (at 100m intervals) by drill and break method and lining construction																																																
Tunnel lining																																																
Tunnel internal structure (OHVD, walkway, road slab and pavement)																																																
Tunnel E&M and TCSS installation																																																
Demolition of Partition Wall in New Third Tunnel																																																
Decommission, Closure and Rehabilitation of existing Shatin bound Tunnel to 'E' Tunnel																																					76	76	76	76	76	76	76	76	76	76	76	76
Lion Rock Tunnel Road Widening																																																	
Work Zone 8 - Kowloon Side																																																	
Site Clearance, tree felling / transplant, utilities diversion																																																	
Road Widening																																																	
Pipe Pile Wall / L-Shape Retaining Wall Installation																																																	
Slope Formation Works																																																	
Demolition of Existing K7A Vehicular Bridge/Footbridge																																																	
Construction of K7A Concrete Upstand Bridge																																																	
Road works																																																	
Roadworks (Flexible Pavement & Low Noise Road Surfacing), Signage, Drainage	78	78	78	78																																													
Landscaping Works																																																	
Landscape Works					72	72																																											
Predicted Noise Level, Leq (30mins), dB(A)	82	82	82	82	81	81	80	80	80	80	80												80	80	80												76	76	76	76	76	76	76	76	76	76	76	76

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **WSH2**

Assessment Floor 3/F
Floor mP.D. 30.3

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2028 S	2028 O	2028 N	2028 D
<u>Shartin Side</u>									
<u>Work Zone 1</u>									
Preparatory works									
Site Clearance and Tree felling / transplant	117	46	-41.2	0	3				79
Reprovisioning of Footbridge NF74				0	3				
Construction of temporary footbridge	117	99	-47.9	0	3				72
Demolition of existing foodbridge	117	99	-47.9	0	3				
Construction of new footbridge (including demolition of temporary footbridge)	117	99	-47.9	0	3				
Road Widening and Installtion of Noise Barrier				0	3				
<u>Widening works at north bound</u>				0	3				
Slope Formation / Upgrading Works	119	46	-41.2	0	3				
Foundation of Noise Barrier	121	46	-41.2	0	3				
Pile Cap, L-retaining Wall and Formation of new road	118	46	-41.2	0	3				
Utilities Diversion	117	46	-41.2	0	3				
Erection of structural steel post for noise barrier	116	46	-41.2	0	3				
<u>Widening works at central divider</u>									
Foundation of Noise Barrier	121	46	-41.2	0	3				
Pile Cap and Footing	118	46	-41.2	0	3				
Erection of structural steel post for noise barrier	116	46	-41.2	0	3				
<u>Widening works at south bound</u>									
Slope Formation / Upgrading Works	119	46	-41.2	0	3				
Foundation of Noise Barrier	121	46	-41.2	0	3				
Pile Cap and Formation of new road	118	46	-41.2	0	3				
Utilities Diversion	117	46	-41.2	0	3				
Erection of structural steel post for noise barrier	116	46	-41.2	0	3				
<u>Installation of steel member and noise barrier panel</u>									
Erection of steel member and noise barrier panel at north bound	116	46	-41.2	0	3				
Erection of steel member and noise barrier panel at south bound	116	46	-41.2	0	3				
Roadworks									
<u>Roadworks at north bound</u>									
Road Drainage	117	46	-41.2	0	3				
Road Surfacing	120	46	-41.2	0	3				
Roadlighting and E&M works	112	46	-41.2	0	3				
<u>Roadworks at south bound</u>									
Road Drainage	117	46	-41.2	0	3				
Road Surfacing	120	46	-41.2	0	3				
Roadlighting and E&M works	112	46	-41.2	0	3				
Landscaping Works									
Landscaping works at north bound	114	46	-41.2	0	3				
Landscaping works at south bound	114	46	-41.2	0	3				
Predicted Noise Level, Leq (30mins), dB(A)									80

Construction Activity (2029)	J	F	M	A	M	J	J	A	S	O	N	D
Site Clearance and Tree felling / transplant	79	79	79	79	79							
Construction of temporary footbridge	72	72	72	72	72	72	72	72	72			
Demolition of existing foodbridge										72	72	72
Slope Formation / Upgrading Works (north bound)						81	81	81	81	81	81	81
Predicted Noise Level, Leq (30mins), dB(A)	80	80	80	80	80	82	82	82	82	82	82	82

Construction Activity (2030)	J	F	M	A	M	J	J	A	S	O	N	D
Demolition of existing foodbridge	72	72										
Slope Formation / Upgrading Works (north bound)	81											
Foundation of Noise Barrier (north bound)		83	83	83	83	83	83	83	83	83	83	
Pile Cap, L-retaining Wall and Formation of new road				80	80	80	80	80	80	80	80	80
Utilities Diversion (north bound)						79	79	79	79	79	79	79
Erection of structural steel post for noise barrier (north bound)										78	78	78
Predicted Noise Level, Leq (30mins), dB(A)	82	83	83	85	85	86	86	86	86	86	86	84

Construction Activity (2031)	J	F	M	A	M	J	J	A	S	O	N	D
Construction of new footbridge (including demolition of temporary footbridge)		72	72	72	72	72	72	72	72	72	72	72
Pile Cap, L-retaining Wall and Formation of new road	80											
Utilities Diversion (north bound)	79											
Erection of structural steel post for noise barrier (north bound)	78											
Slope Formation / Upgrading Works (south bound)		81	81	81	81	81	81	81	81	81	81	81
Predicted Noise Level, Leq (30mins), dB(A)	84	82	82	82	82	82	82	82	82	82	82	82

Construction Activity (2032)	J	F	M	A	M	J	J	A	S	O	N	D
Foundation of Noise Barrier (central divider)											83	83
Slope Formation / Upgrading Works (south bound)	81	81	81	81	81							
Foundation of Noise Barrier (south bound)		83	83	83	83	83	83	83				
Pile Cap and Formation of new road				80	80	80	80	80	80	80		
Utilities Diversion (south bound)						79	79	79	79	79		
Erection of structural steel post for noise barrier (south bound)								78	78	78		
Predicted Noise Level, Leq (30mins), dB(A)	81	85	85	86	86	86	86	86	84	84	83	83

Construction Activity (2033)	J	F	M	A	M	J	J	A	S	O	N	D
Foundation of Noise Barrier (central divider)	83	83	83	83								
Pile Cap and Footing	80	80	80	80	80	80						
Erection of structural steel post for noise barrier (central divider)			78	78	78	78	78					
Erection of steel member and noise barrier panel at north bound						78	78	78	78	78		
Erection of steel member and noise barrier panel at south bound								78	78	78	78	78
Road Drainage (north bound)							78	78				
Road Surfacing (north bound)								82	82			
Roadlighting and E&M works (north bound)								74	74			
Road Drainage (south bound)										78	78	
Road Surfacing (south bound)											82	82
Roadlighting and E&M works (south bound)											74	74
Landscaping works at north bound							76	76	76			
Landscaping works at south bound										76	76	76
Predicted Noise Level, Leq (30mins), dB(A)	85	85	86	86	82	84	84	86	85	84	85	85

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: Shatin

NAP ID: STTNV1

Assessment Floor G/F

Floor mP.D. 35.2

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2028				2029												2030												2031												2032												2033											
						S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																																																					
Work Zone 1																																																																					
Preparatory works																																																																					
Site Clearance and Tree felling / transplant	117	45	-41	0	3				79	79	79	79	79	79																																																						
Reprovisioning of Footbridge NF74				0	3																																																																
Construction of temporary footbridge	117	96	-47.6	0	3				72	72	72	72	72	72	72	72	72	72																																																		
Demolition of existing foodbridge	117	96	-47.6	0	3														72	72	72	72	72																																												
Construction of new footbridge (including demolition of temporary footbridge)	117	96	-47.6	0	3																														72	72	72	72	72	72	72	72	72	72	72																								
Road Widening and Installtion of Noise Barrier				0	3																																																																
Widening works at north bound				0	3																																																																
Slope Formation / Upgrading Works	119	45	-41	0	3										81	81	81	81	81	81	81	81																																													
Foundation of Noise Barrier	121	45	-41	0	3																		83	83	83	83	83	83	83	83	83	83																																				
Pile Cap, L-retaining Wall and Formation of new road	118	45	-41	0	3																				80	80	80	80	80	80	80	80	80	80																																	
Utilities Diversion	117	45	-41	0	3																						79	79	79	79	79	79	79	79																																	
Erection of structural steel post for noise barrier	116	45	-41	0	3																										78	78	78	78																																	
Widening works at central divider																																																																					
Foundation of Noise Barrier	121	45	-41	0	3																																																		83	83	83	83	83	83												
Pile Cap and Footing	118	45	-41	0	3																																																				80	80	80	80	80	80						
Erection of structural steel post for noise barrier	116	45	-41	0	3																																																					78	78	78	78	78					
Widening works at south bound																																																																					
Slope Formation / Upgrading Works	119	45	-41	0	3																														81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81																
Foundation of Noise Barrier	121	45	-41	0	3																																									83	83	83	83	83	83	83																
Pile Cap and Formation of new road	118	45	-41	0	3																																											80	80	80	80	80	80	80														
Utilities Diversion	117	45	-41	0	3																																													79	79	79	79	79														
Erection of structural steel post for noise barrier	116	45	-41	0	3																																															78	78	78														
Installation of steel member and noise barrier panel																																																																					
Erection of steel member and noise barrier panel at north bound	116	45	-41	0	3																																																									78	78	78	78	78		
Erection of steel member and noise barrier panel at south bound	116	45	-41	0	3																																																											78	78	78	78	78
Roadworks																																																																					
Roadworks at north bound																																																																						
Road Drainage	117	45	-41	0	3																																																									79	79				
Road Surfacing	120	45	-41	0	3																																																										82	82			
Roadlighting and E&M works	112	45	-41	0	3																																																										74	74			
Roadworks at south bound																																																																					
Road Drainage	117	45	-41	0	3																																																												79	79	
Road Surfacing	120	45	-41	0	3																																																													82	82
Roadlighting and E&M works	112	45	-41	0	3																																																													74	74
Landscaping Works																																																																					
Landscaping works at north bound	114	45	-41	0	3																																																									76	76	76			
Landscaping works at south bound	114	45	-41	0	3																																																												76	76	76
Predicted Noise Level, Leq (30mins), dB(A)									80	80	80	80	80	80	82	82	82	82	82	82	82	82	83	83	85	85	86	86	86	86	86	86	84	84	82	82	82	82	82	82	82	82	82	82	82	81	85	85	86	86	86	86	86	84	84	83	83	85	85	86	86	82	84	84	86	85	84	86	85

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **STTNV2**

Assessment Floor G/F
Floor mP.D. 44

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2028				2029												2030												2031												2032												2033											
						S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																																																					
Work Zone 1																																																																					
Preparatory works																																																																					
Site Clearance and Tree felling / transplant	117	32	-38.1	0	3				82	82	82	82	82	82																																																										
Reprovisioning of Footbridge NF74				0	3																																																																			
Construction of temporary footbridge	117	67	-44.5	0	3				75	75	75	75	75	75	75	75	75	75																																																						
Demolition of existing foodbridge	117	67	-44.5	0	3														76	76	76	76	76																																																	
Construction of new footbridge (including demolition of temporary footbridge)	117	67	-44.5	0	3																													75	75	75	75	75	75	75	75	75	75	75																											
Road Widening and Installtion of Noise Barrier				0	3																																																																		
Widening works at north bound				0	3																																																																		
Slope Formation / Upgrading Works	119	32	-38.1	0	3									84	84	84		84	84	84	84	84																																																			
Foundation of Noise Barrier	121	32	-38.1	0	3																		86	86	86	86	86	86	86	86	86	86																																													
Pile Cap, L-retaining Wall and Formation of new road	118	32	-38.1	0	3																				83	83	83	83	83	83	83	83	83	83																																													
Utilities Diversion	117	32	-38.1	0	3																			82	82	82	82	82	82	82	82	82	82																																													
Erection of structural steel post for noise barrier	116	32	-38.1	0	3																									81	81	81	81	81																																													
Widening works at central divider																																																																											
Foundation of Noise Barrier	121	32	-38.1	0	3																																																																				
Pile Cap and Footing	118	32	-38.1	0	3																																																																				
Erection of structural steel post for noise barrier	116	32	-38.1	0	3																																																																			
Widening works at south bound																																																																											
Slope Formation / Upgrading Works	119	32	-38.1	0	3																													84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84																																							
Foundation of Noise Barrier	121	32	-38.1	0	3																																									86	86	86	86	86	86	86	86																																							
Pile Cap and Formation of new road	118	32	-38.1	0	3																																											83	83	83	83	83	83	83	83																																							
Utilities Diversion	117	32	-38.1	0	3																																													82	82	82	82	82	82																																							
Erection of structural steel post for noise barrier	116	32	-38.1	0	3																																														81	81	81	81	81	81																																					
Installation of steel member and noise barrier panel																																																																											
Erection of steel member and noise barrier panel at north bound	116	32	-38.1	0	3																																																																			
Erection of steel member and noise barrier panel at south bound	116	32	-38.1	0	3																																																																			
Roadworks																																																																											
Roadworks at north bound																																																																											
Road Drainage	117	32	-38.1	0	3																																																																			
Road Surfacing	120	32	-38.1	0	3																																																																				
Roadlighting and E&M works	112	32	-38.1	0	3																																																																			
Roadworks at south bound																																																																											
Road Drainage	117	32	-38.1	0	3																																																																			
Road Surfacing	120	32	-38.1	0	3																																																																			
Roadlighting and E&M works	112	32	-38.1	0	3																																																																			
Landscaping Works																																																																											
Landscaping works at north bound	114	32	-38.1	0	3																																																																			
Landscaping works at south bound	114	32	-38.1	0	3																																																																				
Predicted Noise Level, Leq (30mins), dB(A)									83	83	83	83	83	83	85	85	85	85	85	85	85	85	86	86	88	88	89	89	89	89	89	89	87	87	85	85	85	85	85	85	85	85	85	85	84	88	88	89	89	89	89	89	87	87	86	86	88	88	89	89	85	87	87	89	88	87	88	88

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **STTNV5**

Assessment Floor G/F
Floor mP.D. 79.8

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	###	2029												2030												2031												2032												2033											
						D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																																																		
Work Zone 1																																																																		
Preparatory works																																																																		
Site Clearance and Tree felling / transplant	117	34	-38.6	0	3	82	82	82	82	82	82																																																								
Reprovisioning of Footbridge NF74				0	3																																																														
Construction of temporary footbridge	117	143	-51.1	0	3	69	69	69	69	69	69	69	69	69	69																																																				
Demolition of existing foodbridge	117	143	-51.1	0	3											69	69	69	69	69																																															
Construction of new footbridge (including demolition of temporary footbridge)	117	143	-51.1	0	3																										69	69	69	69	69	69	69	69	69	69	69																										
Road Widening and Installtion of Noise Barrier				0	3																																																														
Widening works at north bound				0	3																																																														
Slope Formation / Upgrading Works	119	34	-38.6	0	3						84	84	84	84	84	84	84	84	84																																																		
Foundation of Noise Barrier	121	34	-38.6	0	3															86	86	86	86	86	86	86	86	86	86																																										
Pile Cap, L-retaining Wall and Formation of new road	118	34	-38.6	0	3																	83	83	83	83	83	83	83	83	83	83																																										
Utilities Diversion	117	34	-38.6	0	3																		81	81	81	81	81	81	81	81	81																																										
Erection of structural steel post for noise barrier	116	34	-38.6	0	3																						81	81	81	81	81																																													
Widening works at central divider																																																																								
Foundation of Noise Barrier	121	34	-38.6	0	3																																																																
Pile Cap and Footing	118	34	-38.6	0	3																																																															
Erection of structural steel post for noise barrier	116	34	-38.6	0	3																																																															
Widening works at south bound																																																																								
Slope Formation / Upgrading Works	119	34	-38.6	0	3																										84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84																																			
Foundation of Noise Barrier	121	34	-38.6	0	3																																						86	86	86	86	86	86	86	86																																									
Pile Cap and Formation of new road	118	34	-38.6	0	3																																								83	83	83	83	83	83																																									
Utilities Diversion	117	34	-38.6	0	3																																										81	81	81	81	81	81																																								
Erection of structural steel post for noise barrier	116	34	-38.6	0	3																																											81	81	81																																								
Installation of steel member and noise barrier panel																																																																								
Erection of steel member and noise barrier panel at north bound	116	34	-38.6	0	3																																																															
Erection of steel member and noise barrier panel at south bound	116	34	-38.6	0	3																																																														
Roadworks																																																																								
Roadworks at north bound																																																																								
Road Drainage	117	34	-38.6	0	3																																																															
Road Surfacing	120	34	-38.6	0	3																																																															
Roadlighting and E&M works	112	34	-38.6	0	3																																																															
Roadworks at south bound																																																																								
Road Drainage	117	34	-38.6	0	3																																																															
Road Surfacing	120	34	-38.6	0	3																																																															
Roadlighting and E&M works	112	34	-38.6	0	3																																																															
Landscaping Works																																																																								
Landscaping works at north bound	114	34	-38.6	0	3																																																															
Landscaping works at south bound	114	34	-38.6	0	3																																																															
Work Zone 2																																																																								
Preparatory works																																																																								
Site Clearance and Tree felling / transplant	117	218	-54.8	0	3																						65	65	65	65	65	65																																													
Road Widening and Installtion of Noise Barrier																																																																								
Widening works at north bound																																																																								
Slope Formation / Upgrading Works	119	218	-54.8	0	3																											67	67	67	67	67	67	67																																									
Foundation of Noise Barrier	120	218	-54.8	0	3																																		68	68	68	68	68	68																																									
Pile Cap and Formation of new road	118	218	-54.8	0	3																																				66	66	66	66	66	66	66	66																																								
Utilities Diversion	117	218	-54.8	0	3																																						65	65	65	65	65	65																																								
Erection of structural steel post for noise barrier	116	218	-54.8	0	3																																							64	64	64																																								
Widening works at south bound																																																																								
Slope Formation / Upgrading Works	119	218	-54.8	0	3																																										67	67	67	67	67	67	67	67																																			
Roadworks																																																																								
Roadworks at north bound																																																																								
Road Drainage	117	218	-54.8	0	3																																																															
Road Surfacing	120	218	-54.8	0	3																																																															
Roadlighting and E&M works	112	218	-54.8	0	3																																																															
Roadworks at south bound																																																																								
Road Drainage	117	218	-54.8	0	3																																																															
Road Surfacing	120	218	-54.8	0	3																																																															
Roadlighting and E&M works	112	218	-54.8	0	3																																																															
Landscaping Works																																																																								
Landscaping works at north bound	114	218	-54.8	0	3																																																															
Predicted Noise Level, Leq (30mins), dB(A)						82	82	82	82	82	82	84	84	84	84	84	84	84	84	86	86	88	88	89	89	89	89	89	89	87	87	84	84	84	84	84	84	84	84	84	84	84	84	88	88	89	89	89	89	89	89	87	87	87	86	86	88	88	89	89	85	86	86	88	87	86	88	87

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **STW2**

Assessment Floor 1/F
Floor mP.D. 44.8

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2028				2029												2030												2031												2032												2033											
						S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																																															
Work Zone 1																																																															
Preparatory works																																																															
Site Clearance and Tree felling / transplant	117	45	-41	0	3				79	79	79	79	79	79																																																	
Reprovisioning of Footbridge NF74				0	3																																																										
Construction of temporary footbridge	117	60	-43.5	0	3				76	76	76	76	76	76	76	76	76	76																																												
Demolition of existing foodbridge	117	60	-43.5	0	3														77	77	77	77	77																																								
Construction of new footbridge (including demolition of temporary footbridge)	117	60	-43.5	0	3																														76	76	76	76	76	76	76	76	76	76	76																								
Road Widening and Installtion of Noise Barrier				0	3																																																										
Widening works at north bound				0	3																																																										
Slope Formation / Upgrading Works	119	45	-41	0	3										81	81	81	81	81	81	81	81																																								
Foundation of Noise Barrier	121	45	-41	0	3																		83	83	83	83	83	83	83	83	83	83																																		
Pile Cap, L-retaining Wall and Formation of new road	118	45	-41	0	3																				80	80	80	80	80	80	80	80	80	80																																
Utilities Diversion	117	45	-41	0	3																						79	79	79	79	79	79	79	79																																
Erection of structural steel post for noise barrier	116	45	-41	0	3																										78	78	78	78																																
Widening works at central divider																																																																
Foundation of Noise Barrier	121	45	-41	0	3																																																		83	83	83	83	83	83								
Pile Cap and Footing	118	45	-41	0	3																																																			80	80	80	80	80	80						
Erection of structural steel post for noise barrier	116	45	-41	0	3																																																					78	78	78	78	78					
Widening works at south bound																																																																
Slope Formation / Upgrading Works	119	45	-41	0	3																														81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81																			
Foundation of Noise Barrier	121	45	-41	0	3																																										83	83	83	83	83	83	83																
Pile Cap and Formation of new road	118	45	-41	0	3																																												80	80	80	80	80	80	80														
Utilities Diversion	117	45	-41	0	3																																														79	79	79	79	79														
Erection of structural steel post for noise barrier	116	45	-41	0	3																																																78	78	78														
Installation of steel member and noise barrier panel																																																																
Erection of steel member and noise barrier panel at north bound	116	45	-41	0	3																																																							78	78	78	78	78		
Erection of steel member and noise barrier panel at south bound	116	45	-41	0	3																																																								78	78	78	78	78
Roadworks																																																																
Roadworks at north bound																																																																
Road Drainage	117	45	-41	0	3																																																						79	79					
Road Surfacing	120	45	-41	0	3																																																							82	82				
Roadlighting and E&M works	112	45	-41	0	3																																																							74	74				
Roadworks at south bound																																																																
Road Drainage	117	45	-41	0	3																																																									79	79	
Road Surfacing	120	45	-41	0	3																																																											82	82
Roadlighting and E&M works	112	45	-41	0	3																																																										74	74
Landscaping Works																																																																
Landscaping works at north bound	114	45	-41	0	3																																																					76	76	76			
Landscaping works at south bound	114	45	-41	0	3																																																									76	76	76
Predicted Noise Level, Leq (30mins), dB(A)									81	81	81	81	81	81	82	82	82	82	82	82	82	82	84	83	85	85	86	86	86	86	86	86	84	84	82	82	82	82	82	82	82	82	82	82	82	81	85	85	86	86	86	86	86	84	84	83	83	85	85	86	86	82	84	84	86	85	84	86	85

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **STW6**

Assessment Floor 1/F

Floor mP.D. 50.6

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2028				2029												2030												2031												2032												2033											
						S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																																																						
Work Zone 1																																																																						
Preparatory works																																																																						
Site Clearance and Tree felling / transplant	117	73	-45.2	0	3				75	75	75	75	75	75																																																									
Reprovisioning of Footbridge NF74				0	3																																																																			
Construction of temporary footbridge	117	212	-54.5	0	3				65	65	65	65	65	65	65	65	65	65																																																						
Demolition of existing foodbridge	117	212	-54.5	0	3														66	66	66	66	66																																																
Construction of new footbridge (including demolition of temporary footbridge)	117	212	-54.5	0	3																													65	65	65	65	65	65	65	65	65	65	65	65																										
Road Widening and Installtion of Noise Barrier				0	3																																																																		
Widening works at north bound				0	3																																																																		
Slope Formation / Upgrading Works	119	73	-45.2	0	3									77	77	77	77	77	77	77	77	77																																																	
Foundation of Noise Barrier	121	73	-45.2	0	3																		79	79	79	79	79	79	79	79	79	79																																											
Pile Cap, L-retaining Wall and Formation of new road	118	73	-45.2	0	3																				76	76	76	76	76	76	76	76	76	76																																											
Utilities Diversion	117	73	-45.2	0	3																			75	75	75	75	75	75	75	75	75	75																																											
Erection of structural steel post for noise barrier	116	73	-45.2	0	3																									74	74	74	74																																											
Widening works at central divider																																																																											
Foundation of Noise Barrier	121	73	-45.2	0	3																																																																			
Pile Cap and Footing	118	73	-45.2	0	3																																																																			
Erection of structural steel post for noise barrier	116	73	-45.2	0	3																																																																		
Widening works at south bound																																																																											
Slope Formation / Upgrading Works	119	73	-45.2	0	3																													77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77																																					
Foundation of Noise Barrier	121	73	-45.2	0	3																																									79	79	79	79	79	79	79	79																																											
Pile Cap and Formation of new road	118	73	-45.2	0	3																																											76	76	76	76	76	76	76																																											
Utilities Diversion	117	73	-45.2	0	3																																													75	75	75	75	75																																											
Erection of structural steel post for noise barrier	116	73	-45.2	0	3																																														74	74	74																																							
Installation of steel member and noise barrier panel																																																																											
Erection of steel member and noise barrier panel at north bound	116	73	-45.2	0	3																																																																		
Erection of steel member and noise barrier panel at south bound	116	73	-45.2	0	3																																																																		
Roadworks																																																																											
Roadworks at north bound																																																																											
Road Drainage	117	73	-45.2	0	3																																																																		
Road Surfacing	120	73	-45.2	0	3																																																																		
Roadlighting and E&M works	112	73	-45.2	0	3																																																																		
Roadworks at south bound																																																																											
Road Drainage	117	73	-45.2	0	3																																																																		
Road Surfacing	120	73	-45.2	0	3																																																																		
Roadlighting and E&M works	112	73	-45.2	0	3																																																																		
Landscaping Works																																																																											
Landscaping works at north bound	114	73	-45.2	0	3																																																																		
Landscaping works at south bound	114	73	-45.2	0	3																																																																			
Work Zone 2																																																																											
Preparatory works																																																																											
Site Clearance and Tree felling / transplant	117	174	-52.8	0	3																									67	67	67	67	67	67																																														
Road Widening and Installtion of Noise Barrier																																																																											
Widening works at north bound																																																																											
Slope Formation / Upgrading Works	119	174	-52.8	0	3																															69	69	69	69	69	69																																																	
Foundation of Noise Barrier	120	174	-52.8	0	3																																					70	70	70	70	70	70																																																	
Pile Cap and Formation of new road	118	174	-52.8	0	3																																							68	68	68	68	68	68																																																	
Utilities Diversion	117	174	-52.8	0	3																																									67	67	67	67																																																	
Erection of structural steel post for noise barrier	116	174	-52.8	0	3																																										66	66	66																																																	
Widening works at south bound																																																																											
Slope Formation / Upgrading Works	119	174	-52.8	0	3																																																																			
Roadworks																																																																											
Roadworks at north bound																																																																											
Road Drainage	117	174	-52.8	0	3																																																																		
Road Surfacing	120	174	-52.8	0	3																																																																		
Roadlighting and E&M works	112	174	-52.8	0	3																																																																		
Roadworks at south bound																																																																											
Road Drainage	117	174	-52.8	0	3																																																																		
Road Surfacing	120	174	-52.8	0	3																																																																		
Roadlighting and E&M works	112	174	-52.8	0	3																																																																		
Landscaping Works																																																																											
Landscaping works at north bound	114	174	-52.8	0	3																																																																		
Predicted Noise Level, Leq (30mins), dB(A)						75				75	75	75	75	75	77	77	77	77	77	77	77	77	79	79	81	81	82	82	82	82	83	83	80	80	78	78	78	78	78	78	78	78	78	78	79	82	82	83	82	82	82	83	80	80	79	79	81	81	82	82	78	80	80	83	82	80	82	81

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: Shatin

NAP ID: STGPS2

Assessment Floor 5/F

Floor mP.D. 46.9

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2028				2029												2030												2031												2032												2033											
						S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																																																				
Work Zone 1																																																																				
Preparatory works																																																																				
Site Clearance and Tree felling / transplant	117	81	-46.2	0	3				74	74	74	74	74	74																																																							
Reprovisioning of Footbridge NF74				0	3																																																																
Construction of temporary footbridge	117	278	-56.9	0	3				63	63	63	63	63	63	63	63	63	63																																																	
Demolition of existing foodbridge	117	278	-56.9	0	3														63	63	63	63	63																																												
Construction of new footbridge (including demolition of temporary footbridge)	117	278	-56.9	0	3																														63	63	63	63	63	63	63	63	63	63	63																								
Road Widening and Installtion of Noise Barrier				0	3																																																															
Widening works at north bound				0	3																																																																
Slope Formation / Upgrading Works	119	81	-46.2	0	3										76	76	76	76	76	76	76	76																																													
Foundation of Noise Barrier	121	81	-46.2	0	3																		78	78	78	78	78	78	78	78	78	78																																				
Pile Cap, L-retaining Wall and Formation of new road	118	81	-46.2	0	3																				75	75	75	75	75	75	75	75	75	75																																		
Utilities Diversion	117	81	-46.2	0	3																						74	74	74	74	74	74	74	74																																		
Erection of structural steel post for noise barrier	116	81	-46.2	0	3																										73	73	73	73																																		
Widening works at central divider																																																																				
Foundation of Noise Barrier	121	81	-46.2	0	3																																																					78	78	78	78	78	78											
Pile Cap and Footing	118	81	-46.2	0	3																																																							75	75	75	75	75	75									
Erection of structural steel post for noise barrier	116	81	-46.2	0	3																																																									73	73	73	73	73							
Widening works at south bound																																																																				
Slope Formation / Upgrading Works	119	81	-46.2	0	3																														76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76																				
Foundation of Noise Barrier	121	81	-46.2	0	3																																										78	78	78	78	78	78	78																			
Pile Cap and Formation of new road	118	81	-46.2	0	3																																												75	75	75	75	75	75	75																	
Utilities Diversion	117	81	-46.2	0	3																																														74	74	74	74	74																	
Erection of structural steel post for noise barrier	116	81	-46.2	0	3																																																73	73	73																	
Installation of steel member and noise barrier panel																																																																					
Erection of steel member and noise barrier panel at north bound	116	81	-46.2	0	3																																																										73	73	73	73	73		
Erection of steel member and noise barrier panel at south bound	116	81	-46.2	0	3																																																												73	73	73	73	73
Roadworks																																																																				
Roadworks at north bound																																																																				
Road Drainage	117	81	-46.2	0	3																																																											73	73				
Road Surfacing	120	81	-46.2	0	3																																																												77	77			
Roadlighting and E&M works	112	81	-46.2	0	3																																																												69	69			
Roadworks at south bound																																																																				
Road Drainage	117	81	-46.2	0	3																																																													73	73	
Road Surfacing	120	81	-46.2	0	3																																																															77	77
Roadlighting and E&M works	112	81	-46.2	0	3																																																															69	69
Landscaping Works																																																																				
Landscaping works at north bound	114	81	-46.2	0	3																																																											71	71	71			
Landscaping works at south bound	114	81	-46.2	0	3																																																													71	71	71
Work Zone 2																																																																				
Preparatory works																																																																				
Site Clearance and Tree felling / transplant	117	117	-49.3	0	3																										71	71	71	71	71	71																																		
Road Widening and Installtion of Noise Barrier																																																																				
Widening works at north bound																																																																				
Slope Formation / Upgrading Works	119	117	-49.3	0	3																																73	73	73	73	73	73																												
Foundation of Noise Barrier	120	117	-49.3	0	3																																						74	74	74	74	74	74																						
Pile Cap and Formation of new road	118	117	-49.3	0	3																																								72	72	72	72	72	72																				
Utilities Diversion	117	117	-49.3	0	3																																										71	71	71	71																				
Erection of structural steel post for noise barrier	116	117	-49.3	0	3																																											70	70	70																				
Widening works at south bound																																																																				
Slope Formation / Upgrading Works	119	117	-49.3	0	3																																														73	73	73	73	73	73	73	73												
Roadworks																																																																				
Roadworks at north bound																																																																				
Road Drainage	117	117	-49.3	0	3																																																							71	71	71											
Road Surfacing	120	117	-49.3	0	3																																																								73	73	73										
Roadlighting and E&M works	112	117	-49.3	0	3																																																									66	66	66									
Roadworks at south bound																																																																				
Road Drainage	117	117	-49.3	0	3																																																											71	71	71				
Road Surfacing	120	117	-49.3	0	3																																																												73	73	73			
Roadlighting and E&M works	112	117	-49.3	0	3																																																													66	66	66		
Landscaping Works																																																																				
Landscaping works at north bound	114	117	-49.3	0	3																																																														68	68	68
Predicted Noise Level, Leq (30mins), dB(A)									74	74	74	74	74	74	76	76	76	76	76	76	76	76	78	78	80	80	81	81	81	81	82	82	80	80	77	78	78	78	78	78	78	78	78	79	79	80	82	82	82	82	81	81	82	80	80	79	79	80	81	82	81	77	79	80	82	81	79	81	80

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **KTV2**

Assessment Floor G/F
Floor mP.D. 21.6

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2028				2029												2030												2031												2032												2033											
						S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																																																						
Work Zone 1																																																																						
Preparatory works																																																																						
Site Clearance and Tree felling / transplant	117	130	-50.3	0	3				70	70	70	70	70	70																																																									
Road Widening and Installtion of Noise Barrier				0	3																																																																			
Widening works at north bound				0	3																																																																		
Slope Formation / Upgrading Works	119	130	-50.3	0	3									72	72	72		72	72	72	72	72																																																		
Foundation of Noise Barrier	121	130	-50.3	0	3																		74	74	74	74	74	74	74	74	74	74																																														
Pile Cap, L-retaining Wall and Formation of new road	118	130	-50.3	0	3																				71	71	71	71	71	71	71	71	71																																															
Utilities Diversion	117	130	-50.3	0	3																			70	70	70	70	70	70	70	70	70																																															
Erection of structural steel post for noise barrier	116	130	-50.3	0	3																							69	69	69	69																																																	
Widening works at central divider																																																																											
Foundation of Noise Barrier	121	130	-50.3	0	3																																																																				
Pile Cap and Footing	118	130	-50.3	0	3																																																																				
Erection of structural steel post for noise barrier	116	130	-50.3	0	3																																																																			
Widening works at south bound																																																																											
Slope Formation / Upgrading Works	119	130	-50.3	0	3																													72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72																																									
Foundation of Noise Barrier	121	130	-50.3	0	3																														74	74	74	74	74	74	74	74																																																	
Pile Cap and Formation of new road	118	130	-50.3	0	3																																71	71	71	71	71	71	71	71																																																			
Utilities Diversion	117	130	-50.3	0	3																																			70	70	70	70	70	70																																																				
Erection of structural steel post for noise barrier	116	130	-50.3	0	3																																						69	69	69	69	69																																																				
Installation of steel member and noise barrier panel																																																																											
Erection of steel member and noise barrier panel at north bound	116	130	-50.3	0	3																																																																			
Erection of steel member and noise barrier panel at south bound	116	130	-50.3	0	3																																																																			
Roadworks																																																																											
Roadworks at north bound																																																																											
Road Drainage	117	130	-50.3	0	3																																																																			
Road Surfacing	120	130	-50.3	0	3																																																																				
Roadlighting and E&M works	112	130	-50.3	0	3																																																																			
Roadworks at south bound																																																																											
Road Drainage	117	130	-50.3	0	3																																																																			
Road Surfacing	120	130	-50.3	0	3																																																																				
Roadlighting and E&M works	112	130	-50.3	0	3																																																																			
Landscaping Works																																																																											
Landscaping works at north bound	114	130	-50.3	0	3																																																																			
Landscaping works at south bound	114	130	-50.3	0	3																																																																				
Work Zone 2																																																																											
Preparatory works																																																																											
Site Clearance and Tree felling / transplant	117	83	-46.4	0	3																									74	74	74	74	74	74																																																		
Road Widening and Installtion of Noise Barrier																																																																											
Widening works at north bound																																																																											
Slope Formation / Upgrading Works	119	83	-46.4	0	3																														75	75	75	75	75	75	75	75																																																			
Foundation of Noise Barrier	120	83	-46.4	0	3																																			77	77	77	77	77	77																																																				
Pile Cap and Formation of new road	118	83	-46.4	0	3																																					75	75	75	75	75	75	75	75																																																		
Utilities Diversion	117	83	-46.4	0	3																																					73	73	73	73	73	73	73	73																																																		
Erection of structural steel post for noise barrier	116	83	-46.4	0	3																																						72	72	72																																																													
Widening works at south bound																																																																											
Slope Formation / Upgrading Works	119	83	-46.4	0	3																																									75	75	75	75	75	75	75	75																																																		
Roadworks																																																																											
Roadworks at north bound																																																																											
Road Drainage	117	83	-46.4	0	3																																																																			
Road Surfacing	120	83	-46.4	0	3																																																																				
Roadlighting and E&M works	112	83	-46.4	0	3																																																																			
Roadworks at south bound																																																																											
Road Drainage	117	83	-46.4	0	3																																																																			
Road Surfacing	120	83	-46.4	0	3																																																																				
Roadlighting and E&M works	112	83	-46.4	0	3																																																																			
Landscaping Works																																																																											
Landscaping works at north bound	114	83	-46.4	0	3																																																																			
Predicted Noise Level, Leq (30mins), dB(A)									70	70	70	70	70	70	72	72	72	72	72	72	72	72	74	74	76	76	77	77	77	79	79	79	77	77	76	77	77	77	77	77	77	78	78	80	80	81	82	80	81	79	79	79	79	78	78	78	78	78	80	81	80	75	77	79	81	79	77	77	76

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **MWG1**

Assessment Floor 3/F
Floor mP.D. 31.6

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2030				2031												2032												2033											
						S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																													
Work Zone 2																																													
Preparatory works																																													
Site Clearance and Tree felling / transplant	117	62	-43.8	0	3	76	76	76	76	76	76																																		
Road Widening and Installtion of Noise Barrier																																													
Widening works at north bound																																													
Slope Formation / Upgrading Works	119	62	-43.8	0	3							78	78	78	78	78	78																												
Foundation of Noise Barrier	120	62	-43.8	0	3													79	79	79	79	79	79																						
Pile Cap and Formation of new road	118	62	-43.8	0	3															77	77	77	77	77	77																				
Utilities Diversion	117	62	-43.8	0	3																	76	76	76	76																				
Erection of structural steel post for noise barrier	116	62	-43.8	0	3																		75	75	75																				
Widening works at south bound																																													
Slope Formation / Upgrading Works	119	62	-43.8	0	3																					78	78	78	78	78	78	78	78												
Roadworks																																													
Roadworks at north bound																																													
Road Drainage	117	62	-43.8	0	3																													76	76	76									
Road Surfacing	120	62	-43.8	0	3																														79	79	79								
Roadlighting and E&M works	112	62	-43.8	0	3																															71	71	71							
Roadworks at south bound																																													
Road Drainage	117	62	-43.8	0	3																																	76	76	76					
Road Surfacing	120	62	-43.8	0	3																																		79	79	79				
Roadlighting and E&M works	112	62	-43.8	0	3																																			71	71	71			
Landscaping Works																																													
Landscaping works at north bound	114	62	-43.8	0	3																																						73	73	73
Predicted Noise Level, Leq (30mins), dB(A)						76	76	76	76	76	76	78	78	78	78	78	78	79	79	81	81	82	83	81	81	78	78	78	78	78	78	78	78	76	81	81	80	71	76	81	81	80	75	73	73

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **KTV5**

Assessment Floor 3/F

Floor mP.D. 43.5

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2025												2026												2027											
						J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																									
Work Zone 2																																									
Preparatory works																																									
Site Clearance and Tree felling / transplant	117	29	-37.2	0	3																																				
Road Widening and Installtion of Noise Barrier																																									
Widening works at north bound																																									
Slope Formation / Upgrading Works	119	29	-37.2	0	3																																				
Foundation of Noise Barrier	120	29	-37.2	0	3																																				
Pile Cap and Formation of new road	118	29	-37.2	0	3																																				
Utilities Diversion	117	29	-37.2	0	3																																				
Erection of structural steel post for noise barrier	116	29	-37.2	0	3																																				
Widening works at south bound																																									
Slope Formation / Upgrading Works	119	29	-37.2	0	3																																				
Roadworks																																									
Roadworks at north bound																																									
Road Drainage	117	29	-37.2	0	3																																				
Road Surfacing	120	29	-37.2	0	3																																				
Roadlighting and E&M works	112	29	-37.2	0	3																																				
Roadworks at south bound																																									
Road Drainage	117	29	-37.2	0	3																																				
Road Surfacing	120	29	-37.2	0	3																																				
Roadlighting and E&M works	112	29	-37.2	0	3																																				
Landscaping Works																																									
Landscaping works at north bound	114	29	-37.2	0	3																																				
Work Zone 3																																									
Preparatory works																																									
Site Clearance and Tree felling / transplant	117	246	-55.8	0	3	64	64	64	64	64	64																														
Road Widening and Installtion of Noise Barrier																																									
Widening works at north bound (including slip road)																																									
Slope Formation / Upgrading Works	119	246	-55.8	0	3									67	67	67	67	67	67	67	67																				
Foundation of Noise Barrier	120	246	-55.8	0	3															67	67	67	67	67	67	67	67	67	67	67	67	67	67	67							
Pile Cap, L-retaining Wall and Formation of new road	118	246	-55.8	0	3																	65	65	65	65	65	65	65	65	65	65	65	65	65	65						
Utilities Diversion	117	246	-55.8	0	3																			64	64	64	64	64	64	64	64	64	64	64	64						
Erection of structural steel post for noise barrier	116	246	-55.8	0	3																									63	63	63	63	63	63						
Widening works at central divider																																									
Foundation of Noise Barrier	120	246	-55.8	0	3																																				
Pile Cap and Footing	118	246	-55.8	0	3																																				
Erection of structural steel post for noise barrier	116	246	-55.8	0	3																																				
Widening works at south bound																																									
Slope Formation / Upgrading Works	119	246	-55.8	0	3																															67	67	67	67	67	67
Foundation of Noise Barrier	120	246	-55.8	0	3																																				
Pile Cap and Formation of new road	118	246	-55.8	0	3																																				
Utilities Diversion	117	246	-55.8	0	3																																				
Erection of structural steel post for noise barrier	116	246	-55.8	0	3																																				
Installation of steel member and noise barrier panel																																									
Erection of steel member and noise barrier panel at north bound	116	246	-55.8	0	3																																				
Erection of steel member and noise barrier panel at south bound	116	246	-55.8	0	3																																				
Roadworks																																									
Roadworks at north bound																																									
Road Drainage	117	246	-55.8	0	3																																				
Road Surfacing	120	246	-55.8	0	3																																				
Roadlighting and E&M works	112	246	-55.8	0	3																																				
Roadworks at south bound																																									
Road Drainage	117	246	-55.8	0	3																																				
Road Surfacing	120	246	-55.8	0	3																																				
Roadlighting and E&M works	112	246	-55.8	0	3																																				
Landscaping Works																																									
Landscaping works at north bound	114	246	-55.8	0	3																																				
Landscaping works at south bound	114	246	-55.8	0	3																																				
Predicted Noise Level, Leq (30mins), dB(A)						64	64	64	64	64	64	67	67	67	67	67	67	67	67	67	69	69	70	70	70	70	70	70	71	71	71	71	69	69	67	67	67	67	67	67	67

Construction Activity	2028												2029												2030											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																				
Work Zone 2																																				
Preparatory works																																				
Site Clearance and Tree felling / transplant																																				
Road Widening and Installtion of Noise Barrier																																				
Widening works at north bound																																				
Slope Formation / Upgrading Works																																				
Foundation of Noise Barrier																																				
Pile Cap and Formation of new road																																				
Utilities Diversion																																				
Erection of structural steel post for noise barrier																																				
Widening works at south bound																																				
Slope Formation / Upgrading Works																																				
Foundation of Noise Barrier																																				
Pile Cap and Formation of new road																																				
Utilities Diversion																																				
Erection of structural steel post for noise barrier																																				
Installation of steel member and noise barrier panel																																				
Erection of steel member and noise barrier panel at north bound																																				
Erection of steel member and noise barrier panel at south bound																																				
Roadworks																																				
Roadworks at north bound																																				
Road Drainage																																				
Road Surfacing																																				
Roadlighting and E&M works																																				
Roadworks at south bound																																				
Road Drainage																																				
Road Surfacing																																				
Roadlighting and E&M works																																				
Landscaping Works																																				
Landscaping works at north bound																																				
Landscaping works at south bound																																				
Predicted Noise Level, Leq (30mins), dB(A)	67	67	67	67	67	67	67	67	67	67	67	67	67	69	69	70	70	71	69	69	63	67	67	69	69	69	70	70	67	67	67	70	69	64	63	67

Construction Activity	2031												2032												2033											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																				
Work Zone 2																																				
Preparatory works																																				
Site Clearance and Tree felling / transplant	83	83																																		
Road Widening and Installtion of Noise Barrier																																				
Widening works at north bound																																				
Slope Formation / Upgrading Works	85	85																																		
Foundation of Noise Barrier													86	86																						
Pile Cap and Formation of new road													84	84																						
Utilities Diversion													83	83																						
Erection of structural steel post for noise barrier													82	82																						
Widening works at south bound																																				
Slope Formation / Upgrading Works																	85	85																		
Roadworks																																				
Roadworks at north bound																																				
Road Drainage																																				
Road Surfacing																																				
Roadlighting and E&M works																																				
Roadworks at south bound																																				
Road Drainage																																				
Road Surfacing																																				
Roadlighting and E&M works																																				
Landscaping Works																																				
Landscaping works at north bound					61	61	61	61	61																											
Landscaping works at south bound										61	61	61																								
Predicted Noise Level, Leq (30mins), dB(A)	83	83	85	85	85	85	85	85	86	86	88	88	89	90	88	88	85	85	85	85	85	85	85	85	83	88	88	87	78	83	88	88	87	82	80	80

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **HMKR1**

Assessment Floor G/F
Floor mP.D. 25.2

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2025												2026												2027											
						J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																									
Work Zone 2																																									
Preparatory works																																									
Site Clearance and Tree felling / transplant	117	187	-53.4	0	3																																				
Road Widening and Installtion of Noise Barrier																																									
Widening works at north bound																																									
Slope Formation / Upgrading Works	119	187	-53.4	0	3																																				
Foundation of Noise Barrier	120	187	-53.4	0	3																																				
Pile Cap and Formation of new road	118	187	-53.4	0	3																																				
Utilities Diversion	117	187	-53.4	0	3																																				
Erection of structural steel post for noise barrier	116	187	-53.4	0	3																																				
Widening works at south bound																																									
Slope Formation / Upgrading Works	119	187	-53.4	0	3																																				
Roadworks																																									
Roadworks at north bound																																									
Road Drainage	117	187	-53.4	0	3																																				
Road Surfacing	120	187	-53.4	0	3																																				
Roadlighting and E&M works	112	187	-53.4	0	3																																				
Roadworks at south bound																																									
Road Drainage	117	187	-53.4	0	3																																				
Road Surfacing	120	187	-53.4	0	3																																				
Roadlighting and E&M works	112	187	-53.4	0	3																																				
Landscaping Works																																									
Landscaping works at north bound	114	187	-53.4	0	3																																				
Work Zone 3																																									
Preparatory works																																									
Site Clearance and Tree felling / transplant	117	54	-42.6	0	3	78	78	78	78	78																															
Road Widening and Installtion of Noise Barrier																																									
Widening works at north bound (including slip road)																																									
Slope Formation / Upgrading Works	119	54	-42.6	0	3									80	80	80	80	80	80	80	80																				
Foundation of Noise Barrier	120	54	-42.6	0	3																	81	81	81	81	81	81	81	81	81	81	81	81	81								
Pile Cap, L-retaining Wall and Formation of new road	118	54	-42.6	0	3																78	78	78	78	78	78	78	78	78	78	78	78	78	78							
Utilities Diversion	117	54	-42.6	0	3																					77	77	77	77	77	77	77	77	77							
Erection of structural steel post for noise barrier	116	54	-42.6	0	3																					76	76	76	76	76	76	76	76	76							
Widening works at central divider																																									
Foundation of Noise Barrier	120	54	-42.6	0	3																																				
Pile Cap and Footing	118	54	-42.6	0	3																																				
Erection of structural steel post for noise barrier	116	54	-42.6	0	3																																				
Widening works at south bound																																									
Slope Formation / Upgrading Works	119	54	-42.6	0	3																																				
Foundation of Noise Barrier	120	54	-42.6	0	3																																				
Pile Cap and Formation of new road	118	54	-42.6	0	3																																				
Utilities Diversion	117	54	-42.6	0	3																																				
Erection of structural steel post for noise barrier	116	54	-42.6	0	3																																				
Installation of steel member and noise barrier panel																																									
Erection of steel member and noise barrier panel at north bound	116	54	-42.6	0	3																																				
Erection of steel member and noise barrier panel at south bound	116	54	-42.6	0	3																																				
Roadworks																																									
Roadworks at north bound																																									
Road Drainage	117	54	-42.6	0	3																																				
Road Surfacing	120	54	-42.6	0	3																																				
Roadlighting and E&M works	112	54	-42.6	0	3																																				
Roadworks at south bound																																									
Road Drainage	117	54	-42.6	0	3																																				
Road Surfacing	120	54	-42.6	0	3																																				
Roadlighting and E&M works	112	54	-42.6	0	3																																				
Landscaping Works																																									
Landscaping works at north bound	114	54	-42.6	0	3																																				
Landscaping works at south bound	114	54	-42.6	0	3																																				
Predicted Noise Level, Leq (30mins), dB(A)						78	78	78	78	78	78	78	78	80	80	80	80	80	80	80	80	81	81	83	83	84	84	84	84	84	84	84	84	80	80	80	80	80	80	80	80

Construction Activity	2028												2029												2030											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																				
Work Zone 2																																				
Preparatory works																																				
Site Clearance and Tree felling / transplant																																	67	67	67	67
Road Widening and Installtion of Noise Barrier																																				
Widening works at north bound																																				
Slope Formation / Upgrading Works																																				
Foundation of Noise Barrier																																				
Pile Cap and Formation of new road																																				
Utilities Diversion																																				
Erection of structural steel post for noise barrier																																				
Widening works at south bound																																				
Slope Formation / Upgrading Works																																				
Roadworks																																				
Roadworks at north bound																																				
Road Drainage																																				
Road Surfacing																																				
Roadlighting and E&M works																																				
Roadworks at south bound																																				
Road Drainage																																				
Road Surfacing																																				
Roadlighting and E&M works																																				
Landscaping Works																																				
Landscaping works at north bound																																				
Landscaping works at south bound																																				
Predicted Noise Level, Leq (30mins), dB(A)	80	80	80	80	80	80	80	80	80	80	80	81	81	83	83	84	84	84	82	82	76	81	81	83	83	83	84	84	80	80	80	83	82	77	76	80

Construction Activity	2031												2032												2033											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																				
Work Zone 2																																				
Preparatory works																																				
Site Clearance and Tree felling / transplant	67	67																																		
Road Widening and Installtion of Noise Barrier																																				
Widening works at north bound																																				
Slope Formation / Upgrading Works			68	68	68	68	68	68																												
Foundation of Noise Barrier									70	70	70	70	70	70																						
Pile Cap and Formation of new road											68	68	68	68	68	68																				
Utilities Diversion													66	66	66	66																				
Erection of structural steel post for noise barrier													65	65	65																					
Widening works at south bound																																				
Slope Formation / Upgrading Works																	68	68	68	68	68	68	68	68												
Roadworks																																				
Roadworks at north bound																																				
Road Drainage																									66	66	66									
Road Surfacing																										69	69	69								
Roadlighting and E&M works																										62	62	62	62							
Roadworks at south bound																																				
Road Drainage																													66	66	66					
Road Surfacing																														69	69	69				
Roadlighting and E&M works																															62	62	62			
Landscaping Works																																				
Landscaping works at north bound																																	63	63	63	63
Landscaping works at south bound																																				
Predicted Noise Level, Leq (30mins), dB(A)	67	67	68	68	75	75	75	75	75	75	76	76	73	74	71	71	68	68	68	68	68	68	68	68	66	71	71	70	62	66	71	71	70	66	63	63

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **WWG5**

Assessment Floor 1/F
Floor mP.D. 65

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2025												2026												2027												2028												2029												2030												2031											
						J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																																																																									
Work Zone 3																																																																																									
Preparatory works																																																																																									
Site Clearance and Tree felling / transplant	117	53	-42.5	0	3			78	78	78	78	78	78																																																																													
Road Widening and Installtion of Noise Barrier																																																																																								
Widening works at north bound (including slip road)																																																																																									
Slope Formation / Upgrading Works	119	53	-42.5	0	3									80	80	80	80	80	80	80	80																																																																			
Foundation of Noise Barrier	120	53	-42.5	0	3																	81	81	81	81	81	81	81	81	81	81	81	81	81																																																						
Pile Cap, L-retaining Wall and Formation of new road	118	53	-42.5	0	3																			78	78	78	78	78	78	78	78	78	78	78	78	78																																																				
Utilities Diversion	117	53	-42.5	0	3																					77	77	77	77	77	77	77	77	77	77	77																																																						
Erection of structural steel post for noise barrier	116	53	-42.5	0	3																										76	76	76	76	76	76																																																					
Widening works at central divider																																																																																											
Foundation of Noise Barrier	120	53	-42.5	0	3																																																									81	81	81	81	81	81	81																								
Pile Cap and Footing	118	53	-42.5	0	3																																																											78	78	78	78	78	78	78																						
Erection of structural steel post for noise barrier	116	53	-42.5	0	3																																																															76	76	76	76																						
Widening works at south bound																																																																																											
Slope Formation / Upgrading Works	119	53	-42.5	0	3																																80	80	80	80	80	80	80	80	80	80	80	80																																											
Foundation of Noise Barrier	120	53	-42.5	0	3																																														81	81	81	81	81	81	81																																					
Pile Cap and Formation of new road	118	53	-42.5	0	3																																															78	78	78	78	78	78	78																																		
Utilities Diversion	117	53	-42.5	0	3																																																	77	77	77	77	77																																		
Erection of structural steel post for noise barrier	116	53	-42.5	0	3																																																		76	76	76	76																															
Installation of steel member and noise barrier panel																																																																																											
Erection of steel member and noise barrier panel at north bound	116	53	-42.5	0	3																																																																	76	76	76	76	76																	
Erection of steel member and noise barrier panel at south bound	116	53	-42.5	0	3																																																																						76	76	76														
Roadworks																																																																																										
Roadworks at north bound																																																																																												
Road Drainage	117	53	-42.5	0	3																																																																77	77																						
Road Surfacing	120	53	-42.5	0	3																																																																	80	80																					
Roadlighting and E&M works	112	53	-42.5	0	3																																																																	73	73																				
Roadworks at south bound																																																																																											
Road Drainage	117	53	-42.5	0	3																																																																					77	77															
Road Surfacing	120	53	-42.5	0	3																																																																					80	80														
Roadlighting and E&M works	112	53	-42.5	0	3																																																																				73	73														
Landscaping Works																																																																																											
Landscaping works at north bound	114	53	-42.5	0	3																																																																													74	74	74	74	74			
Landscaping works at south bound	114	53	-42.5	0	3																																																																																	74	74	74
Predicted Noise Level, Leq (30mins), dB(A)								78	78	78	78	78	78	80	80	80	80	80	80	80	80	81	81	83	83	84	84	84	84	84	84	84	84	84	82	82	80	80	80	80	80	80	80	80	80	80	80	80	81	81	83	83	84	84	84	82	82	76	81	81	83	83	83	84	84	80	80	80	83	82	78	76	80	83	82							74	74	74	74	74	74	74	74

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **WWG8**

Assessment Floor 1/F

Floor mP.D. 65

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)
Shartin Side					
Work Zone 3					
Preparatory works					
Site Clearance and Tree felling / transplant	117	25	-35.9	0	3
Road Widening and Installtion of Noise Barrier					
Widening works at north bound (including slip road)					
Slope Formation / Upgrading Works	119	25	-35.9	0	3
Foundation of Noise Barrier	120	25	-35.9	0	3
Pile Cap, L-retaining Wall and Formation of new road	118	25	-35.9	0	3
Utilities Diversion	117	25	-35.9	0	3
Erection of structural steel post for noise barrier	116	25	-35.9	0	3
Widening works at central divider					
Foundation of Noise Barrier	120	25	-35.9	0	3
Pile Cap and Footing	118	25	-35.9	0	3
Erection of structural steel post for noise barrier	116	25	-35.9	0	3
Widening works at south bound					
Slope Formation / Upgrading Works	119	25	-35.9	0	3
Foundation of Noise Barrier	120	25	-35.9	0	3
Pile Cap and Formation of new road	118	25	-35.9	0	3
Utilities Diversion	117	25	-35.9	0	3
Erection of structural steel post for noise barrier	116	25	-35.9	0	3
Installation of steel member and noise barrier panel					
Erection of steel member and noise barrier panel at north bound	116	25	-35.9	0	3
Erection of steel member and noise barrier panel at south bound	116	25	-35.9	0	3
Roadworks					
Roadworks at north bound					
Road Drainage	117	25	-35.9	0	3
Road Surfacing	120	25	-35.9	0	3
Roadlighting and E&M works	112	25	-35.9	0	3
Roadworks at south bound					
Road Drainage	117	25	-35.9	0	3
Road Surfacing	120	25	-35.9	0	3
Roadlighting and E&M works	112	25	-35.9	0	3
Landscaping Works					
Landscaping works at north bound	114	25	-35.9	0	3
Landscaping works at south bound	114	25	-35.9	0	3
Work Zone 4					
Preparatory works					
Site Clearance and Tree felling / transplant	117	276	-56.8	0	3
Road Widening and Installtion of Noise Barrier					
Widening works at north bound					
Slope Formation / Upgrading Works	119	276	-56.8	0	3
Foundation of Noise Barrier	119	276	-56.8	0	3
Pile Cap, L-retaining Wall and Formation of new road	114	276	-56.8	0	3
Utilities Diversion	117	276	-56.8	0	3
Erection of structural steel post for noise barrier	116	276	-56.8	0	3
Widening works at central divider					
Foundation of Noise Barrier	119	276	-56.8	0	3
Pile Cap and Footing	114	276	-56.8	0	3
Erection of structural steel post for noise barrier	116	276	-56.8	0	3
Widening works at south bound					
Slope Formation / Upgrading Works	119	276	-56.8	0	3
Foundation of Noise Barrier	119	276	-56.8	0	3
Formation of new road	114	276	-56.8	0	3
Utilities Diversion	117	276	-56.8	0	3
Erection of structural steel post for noise barrier	116	276	-56.8	0	3
Installation of steel member and noise barrier panel					
Erection of steel member and noise barrier panel at north bound	116	276	-56.8	0	3
Erection of steel member and noise barrier panel at south bound	116	276	-56.8	0	3
Roadworks					
Roadworks at north bound					
Road Drainage	117	276	-56.8	0	3
Road Surfacing	120	276	-56.8	0	3
Roadlighting and E&M works	112	276	-56.8	0	3
Roadworks at south bound					
Road Drainage	117	276	-56.8	0	3
Road Surfacing	120	276	-56.8	0	3
Roadlighting and E&M works	112	276	-56.8	0	3
Landscaping Works					
Landscaping works at north bound	115	276	-56.8	0	3

2025

Construction Activity	J	F	M	A	M	J	J	A	S	O	N	D
Work Zone 3 – Site Clearance and Tree felling / transplant			84	84	84	84	84	84				
WZ3 north bound – Slope Formation / Upgrading Works									87	87	87	87
Predicted Noise Level, Leq (30mins), dB(A)			84	84	84	84	84	84	87	87	87	87

2026

Construction Activity	J	F	M	A	M	J	J	A	S	O	N	D
WZ3 north bound – Slope Formation / Upgrading Works	87	87	87	87								
WZ3 north bound – Foundation of Noise Barrier					87	87	87	87	87	87	87	87
WZ3 north bound – Pile Cap, L-retaining Wall and Formation of new road							85	85	85	85	85	85
WZ3 north bound – Utilities Diversion									84	84	84	84
Predicted Noise Level, Leq (30mins), dB(A)	87	87	87	87	87	87	89	89	90	90	90	90

2027

Construction Activity	J	F	M	A	M	J	J	A	S	O	N	D
WZ3 north bound – Foundation of Noise Barrier	87	87	87	87	87							
WZ3 north bound – Pile Cap, L-retaining Wall and Formation of new road	85	85	85	85	85	85	85					
WZ3 north bound – Utilities Diversion	84	84	84	84	84	84	84					
WZ3 north bound – Erection of structural steel post for noise barrier		83	83	83	83	83	83					
WZ3 south bound – Slope Formation / Upgrading Works								87	87	87	87	87
Work Zone 4 – Site Clearance and Tree felling / transplant						63	63	63				
WZ4 north bound – Slope Formation / Upgrading Works									65	65	65	65
Predicted Noise Level, Leq (30mins), dB(A)	90	91	91	91	91	89	89	87	87	87	87	87

2028

Construction Activity	J	F	M	A	M	J	J	A	S	O	N	D
WZ3 south bound – Slope Formation / Upgrading Works	87	87	87	87	87	87	87					
WZ3 south bound – Foundation of Noise Barrier								87	87	87	87	87
WZ3 south bound – Pile Cap and Formation of new road										85	85	85
WZ3 south bound – Utilities Diversion												84
WZ4 north bound – Slope Formation / Upgrading Works	65	65	65	65								
WZ4 north bound – Foundation of Noise Barrier					65	65	65	65	65			
WZ4 north bound – Pile Cap, L-retaining Wall and Formation of new road							60	60	60	60	60	
WZ4 north bound – Utilities Diversion									63	63	63	
WZ4 north bound – Erection of structural steel post for noise barrier										62	62	
WZ4 south bound – Slope Formation / Upgrading Works												65
Predicted Noise Level, Leq (30mins), dB(A)	87	87	87	87	87	87	87	87	87	89	89	90

2029

Construction Activity	J	F	M	A	M	J	J	A	S	O	N	D
WZ3 central divider – Foundation of Noise Barrier						87	87	87	87	87	87	87
WZ3 central divider – Pile Cap and Footing								85	85	85	85	85
WZ3 central divider – Erection of structural steel post for noise barrier											83	83
WZ3 south bound – Foundation of Noise Barrier	87	87										
WZ3 south bound – Pile Cap and Formation of new road	85	85	85	85								
WZ3 south bound – Utilities Diversion	84	84	84	84								
WZ3 south bound – Erection of structural steel post for noise barrier		83	83	83	83							
WZ4 south bound – Slope Formation / Upgrading Works	65	65	65	65	65	65	65					
WZ4 south bound – Foundation of Noise Barrier								65	65	65	65	65
WZ4 south bound – Formation of new road										60	60	60
WZ4 south bound – Utilities Diversion												63
Predicted Noise Level, Leq (30mins), dB(A)	90	91	89	89	83	87	87	89	89	89	90	90

2030

Construction Activity	J	F	M	A	M	J	J	A	S	O	N	D
WZ3 central divider – Pile Cap and Footing	85	85										
WZ3 central divider – Erection of structural steel post for noise barrier	83	83										
WZ3 – Erection of steel member and noise barrier panel at north bound			83	83	83	83	83					
WZ3 – Erection of steel member and noise barrier panel at south bound								83	83	83		
WZ3 roadworks north bound – Road Drainage			84	84								
WZ3 roadworks north bound – Road Surfacing				87	87							
WZ3 roadworks north bound – Roadlighting and E&M works					79	79						
WZ3 roadworks south bound – Road Drainage								84	84			
WZ3 roadworks south bound – Road Surfacing									87	87		
WZ3 roadworks south bound – Roadlighting and E&M works									79	79		
WZ4 central divider – Foundation of Noise Barrier			65	65	65	65	65					
WZ4 central divider – Pile Cap and Footing					60	60	60	60	60			
WZ4 central divider – Erection of structural steel post for noise barrier								62	62			
WZ4 south bound – Formation of new road	60	60										
WZ4 south bound – Utilities Diversion	63	63										
WZ4 south bound – Erection of structural steel post for noise barrier	62	62										
WZ4 – Erection of steel member and noise barrier panel at north bound										62	62	62
WZ4 roadworks north bound – Road Drainage										63	63	
WZ4 roadworks north bound – Road Surfacing											66	66
WZ4 roadworks north bound – Roadlighting and E&M works											58	58
Predicted Noise Level, Leq (30mins), dB(A)	87	87	87	90	89	85	83	87	90	89	69	68

2031

Construction Activity	J	F	M	A	M	J	J	A	S	O	N	D
WZ3 – Landscaping works at north bound					81	81	81	81	81			
WZ3 – Landscaping works at south bound										81	81	81
WZ4 – Erection of steel member and noise barrier panel at south bound	62	62										
WZ4 roadworks south bound – Road Drainage	63	63										
WZ4 roadworks south bound – Road Surfacing		66	66									
WZ4 roadworks south bound – Roadlighting and E&M works		58	58									
WZ4 – Landscaping works at north bound											62	62
Predicted Noise Level, Leq (30mins), dB(A)	66	69	67		81	81	81	81	81	81	81	81

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **JG4**

Assessment Floor 4/F

Floor mP.D. 75.3

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2025												2026												2027												2028												2029												2030												2031											
						J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Shartin Side																																																																																							
Work Zone 3																																																																																								
Preparatory works																																																																																							
Site Clearance and Tree felling / transplant	117	188	-53.5	0	3			67	67	67	67	67	67																																																																											
Road Widening and Installtion of Noise Barrier																																																																																							
Widening works at north bound (including slip road)																																																																																					
Slope Formation / Upgrading Works	119	188	-53.5	0	3									69	69	69	69	69	69	69	69																																																																				
Foundation of Noise Barrier	120	188	-53.5	0	3																	70	70	70	70	70	70	70	70	70	70	70	70	70																																																						
Pile Cap, L-retaining Wall and Formation of new road	118	188	-53.5	0	3																			67	67	67	67	67	67	67	67	67	67	67	67	67																																																		
Utilities Diversion	117	188	-53.5	0	3																					66	66	66	66	66	66	66	66	66	66	66																																																				
Erection of structural steel post for noise barrier	116	188	-53.5	0	3																										65	65	65	65	65	65																																																					
Widening works at central divider																																																																																							
Foundation of Noise Barrier	120	188	-53.5	0	3																																																						70	70	70	70	70	70	70																							
Pile Cap and Footing	118	188	-53.5	0	3																																																							67	67	67	67	67	67	67																						
Erection of structural steel post for noise barrier	116	188	-53.5	0	3																																																										65	65	65	65																						
Widening works at south bound																																																																																							
Slope Formation / Upgrading Works	119	188	-53.5	0	3																																69	69	69	69	69	69	69	69	69	69	69	69																																									
Foundation of Noise Barrier	120	188	-53.5	0	3																																												70	70	70	70	70	70	70																																				
Pile Cap and Formation of new road	118	188	-53.5	0	3																																														67	67	67	67	67	67	67																																		
Utilities Diversion	117	188	-53.5	0	3																																																66	66	66	66	66																																						
Erection of structural steel post for noise barrier	116	188	-53.5	0	3																																																	65	65	65	65																																					
Installation of steel member and noise barrier panel																																																																																								
Erection of steel member and noise barrier panel at north bound	116	188	-53.5	0	3																																																															65	65	65	65	65																		
Erection of steel member and noise barrier panel at south bound	116	188	-53.5	0	3																																																																				65	65	65																
Roadworks																																																																																							
Roadworks at north bound																																																																																								
Road Drainage	117	188	-53.5	0	3																																																															66	66																					
Road Surfacing	120	188	-53.5	0	3																																																																69	69																				
Roadlighting and E&M works	112	188	-53.5	0	3																																																																62	62																			
Roadworks at south bound																																																																																							
Road Drainage	117	188	-53.5	0	3																																																																				66	66																
Road Surfacing	120	188	-53.5	0	3																																																																					69	69															
Roadlighting and E&M works	112	188	-53.5	0	3																																																																					62	62															
Landscaping Works																																																																																								
Landscaping works at north bound	114	188	-53.5	0	3																																																																												63	63	63	63	63			
Landscaping works at south bound	114	188	-53.5	0	3																																																																																	63	63	63
Work Zone 4																																																																																							
Preparatory works																																																																																							
Site Clearance and Tree felling / transplant	117	37	-39.3	0	3																														81	81	81																																																									
Road Widening and Installtion of Noise Barrier																																																																																						
Widening works at north bound																																																																																								
Slope Formation / Upgrading Works	119	37	-39.3	0	3																																	83	83	83	83	83	83	83	83																																																
Foundation of Noise Barrier	119	37	-39.3	0	3																																									83	83	83	83	83																																										
Pile Cap, L-retaining Wall and Formation of new road	114	37	-39.3	0	3																																											78	78	78	78	78																																								
Utilities Diversion	117	37	-39.3	0	3																																													81	81	81																																								
Erection of structural steel post for noise barrier	116	37	-39.3	0	3																																														80	80																																								
Widening works at central divider																																																																																							
Foundation of Noise Barrier	119	37	-39.3	0	3																																																															83	83	83	83	83																		
Pile Cap and Footing	114	37	-39.3	0	3																																																																	78	78	78	78	78																
Erection of structural steel post for noise barrier	116	37	-39.3	0	3																																																																				80	80																
Widening works at south bound																																																																																							
Slope Formation / Upgrading Works	119	37	-39.3	0	3																																																83	83	83	83	83	83	83	83																														
Foundation of Noise Barrier	119	37	-39.3	0	3																																																							83	83	83	83	83																								
Formation of new road	114	37	-39.3	0	3																																																									78	78	78	78	78																						
Utilities Diversion	117	37	-39.3	0	3																																																										81	81	81																						
Erection of structural steel post for noise barrier	116	37	-39.3	0	3																																																											80	80																						
Installation of steel member and noise barrier panel																																																																																								
Erection of steel member and noise barrier panel at north bound	116	37	-39.3	0	3																																																																					80	80	80												
Erection of steel member and noise barrier panel at south bound	116	37	-39.3	0	3																																																																								80	80										
Roadworks																																																																																							
Roadworks at north bound																																																																																								
Road Drainage	117	37	-39.3	0	3																																																																					81	81													
Road Surfacing	120	37	-39.3	0	3																																																																						83	83												
Roadlighting and E&M works	112	37	-39.3	0	3																																																																					76	76												
Roadworks at south bound																																																																																							
Road Drainage	117	37	-39.3	0	3																																																																								81	81										
Road Surfacing	120	37	-39.3	0	3																																																																									83	83									
Roadlighting and E&M works	112	37	-39.3	0	3																																																																								76	76									
Landscaping Works																																																																																							
Landscaping works at north bound	115	37	-39.3	0	3																																																																																	79	79
Predicted Noise Level, Leq (30mins), dB(A)								67	67	67	67	67	67	69	69	69	69	69	69	69	69	70	70	72	72	73	73	73	73	73	73	73	73	73	81	81	81	83	83	83	83	83	83	83	83	83	83	84	84	86	85	85	83	83	83	83	83	83	83	83	83	83	84	84	86	85	85	83	83	84	84	84	82	83	84	87	85	84	87	84		63	63	63	63	63	63	79	79

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **HP1**

Assessment Floor 3/F

Floor mP.D. 76.2

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2025													2026													2027													2028													2029													2030													2031											
						J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Tunnel Buildings and Associated Road Works at Portals																																																																																										
Work Zone 5 - Shatin Portal																																																																																										
Site Clearance	117	106	-48.5	0	3			71	71																																																																																		
Construction of New Vehicular Bridge																																																																																										
Construction of New Vehicular-cum-Footbridge at Toll Plaza	123	106	-48.5	0	3					78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78																																																																
Roadworks (Flexible Pavement), Signage, Drainage for New Vehicular Bridge	125	106	-48.5	0	3																									79	79	79																																																												
Construction of New Administration Building																																																																																										
Partially demolition of existing toll plaza	121	106	-48.5	0	3					76																																																																															
Construction of New Administration Building	123	106	-48.5	0	3						78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78																																																		
Demolition of Existing Administration Building	121	295	-57.4	0	3																																				67	67																																														
Demolition of Existing E&M building next to Toll Plaza	121	295	-57.4	0	3																																				67																																															
Construction of New Ventilation Building																																																																																										
Demolition of existing Kowloon Bound Vent. Bldg at Shatin Portal and nearby structure	121	295	-57.4	0	3																																															67	67																																				
Demolition of Existing footbridge	121	295	-57.4	0	3																																															67																																						
Toll Plaza Formation																																																																																										
Road widening works at Toll Plaza	127	106	-48.5	0	3					82	82	82	82	82	82	82	82	82																																																																										
Construction of New Car Parking Facilities	125	106	-48.5	0	3																																																						79	79	79	79	79	79																									
Reconfiguration and Roadworks for Toll Plaza	125	106	-48.5	0	3																																																										79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79							
Construction of associated structure of new footbridge	125	106	-48.5	0	3																																																										79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79							
Relocation of Surge Tank																																																																																										
Construction of surge tank	115	106	-48.5	0	3									70	70	70	70	70	70	70	70	70	70	70	70																																																																
Connection of 3 existing water mains to surge tank	125	106	-48.5	0	3																									79	79	79																																																												
Demolition of existing surge tank	121	295	-57.4	0	3																										67	67	67																																																								
Associated Works for Tunneling																																																																																										
Construction of Conveyor Belt for Tunnelling Works	116	106	-48.5	0	3																		71	71	71																																																																
Demolition of Conveyor Belt	121	106	-48.5	0	3																																					76																																														
Shartin Side																																																																																										
Work Zone 4																																																																																										
Preparatory works																																																																																										
Site Clearance and Tree felling / transplant	117	59	-43.4	0	3																														77	77	77																																																				
Road Widening and Installtion of Noise Barrier																																																																																										
Widening works at north bound																																																																																										
Slope Formation / Upgrading Works	119	59	-43.4	0	3																																	78	78	78	78	78	78	78	78																																											
Foundation of Noise Barrier	119	59	-43.4	0	3																																									79	79	79	79	79																																						
Pile Cap, L-retaining Wall and Formation of new road	114	59	-43.4	0	3																																											74	74	74	74	74																																				
Utilities Diversion	117	59	-43.4	0	3																																													76	76	76																																				
Erection of structural steel post for noise barrier	116	59	-43.4	0	3																																														75	75																																				
Widening works at central divider																																																																																										
Foundation of Noise Barrier	119	59	-43.4	0	3																																																															79	79	79	79	79																	
Pile Cap and Footing	114	59	-43.4	0	3																																																																	74	74	74	74	74															
Erection of structural steel post for noise barrier	116	59	-43.4	0	3																																																																				75	75															
Widening works at south bound																																																																																										
Slope Formation / Upgrading Works	119	59	-43.4	0	3																																																78	78	78	78	78	78	78	78																																
Foundation of Noise Barrier	119	59	-43.4	0	3																																																								79	79	79	79	79																									
Formation of new road	114	59	-43.4	0	3																																																										74	74	74	74	74																					
Utilities Diversion	117	59	-43.4	0	3																																																												76	76	76																					
Erection of structural steel post for noise barrier	116	59	-43.4	0	3																																																													75	75																					
Installation of steel member and noise barrier panel																																																																																										
Erection of steel member and noise barrier panel at north bound	116	59	-43.4	0	3																																																																						75	75	75											
Erection of steel member and noise barrier panel at south bound	116	59	-43.4	0	3																																																																									75	75									
Roadworks																																																																																										
Roadworks at north bound																																																																																										
Road Drainage	117	59	-43.4	0	3																																																																						76	76												
Road Surfacing	120	59	-43.4	0	3																																																																							79	79											
Roadlighting and E&M works	112	59	-43.4	0	3																																																																							72	72											
Roadworks at south bound																																																																																										
Road Drainage	117	59	-43.4	0	3																																																																									76	76									
Road Surfacing	120	59	-43.4	0	3																																																																										79	79								
Roadlighting and E&M works	112	59	-43.4	0	3																																																																										72	72								
Landscaping Works																																																																																										
Landscaping works at north bound	115	59	-43.4	0	3																																																																																			75	75
Predicted Noise Level, Leq (30mins), dB(A)								71	71	84	85	85	85	85	85	85	85	85	81	81	81	81	82	82	82	81	81	83	83	83	78	78	78	78	81	81	81	81	81	81	79	80	78	78	78	79	79	80	80	82	80	80	78	78	78	78	78	78	82	82	82	82	83	83	85	84	84	84	84	84	84	84	83	83	84	85	85	84	85	84	82	82							75	75

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **UC1**

Assessment Floor 5/F

Floor mP.D. 84.1

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2025												2026												2027											
						J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Tunnel Buildings and Associated Road Works at Portals																																									
Work Zone 5 - Shatin Portal																																									
Site Clearance	117	101	-48.1	0	3			72	72																																
Construction of New Vehicular Bridge																																									
Construction of New Vehicular-cum-Footbridge at Toll Plaza	123	101	-48.1	0	3					78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78														
Roadworks (Flexible Pavement), Signage, Drainage for New Vehicular Bridge	125	101	-48.1	0	3																							80	80	80											
Construction of New Administration Building																																									
Partially demolition of existing toll plaza	121	101	-48.1	0	3					76																															
Construction of New Administration Building	123	101	-48.1	0	3						78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78			
Demolition of Existing Administration Building	121	274	-56.7	0	3																																	67	67		
Demolition of Existing E&M building next to Toll Plaza	121	274	-56.7	0	3																																	67			
Construction of New Ventilation Building																																									
Demolition of existing Kowloon Bound Vent. Bldg at Shatin Portal and nearby structure	121	274	-56.7	0	3																																				
Demolition of Existing footbridge	121	274	-56.7	0	3																																				
Toll Plaza Formation																																									
Road widening works at Toll Plaza	127	101	-48.1	0	3					82	82	82	82	82	82	82	82	82																							
Construction of New Car Parking Facilities	125	101	-48.1	0	3																																				
Reconfiguration and Roadworks for Toll Plaza	125	101	-48.1	0	3																																				
Construction of associated structure of new footbridge	125	101	-48.1	0	3																																				
Relocation of Surge Tank																																									
Construction of surge tank	115	101	-48.1	0	3									70	70	70	70	70	70	70	70	70	70	70	70																
Connection of 3 existing water mains to surge tank	125	101	-48.1	0	3																							80	80	80											
Demolition of existing surge tank	121	274	-56.7	0	3																										67	67	67								
Associated Works for Tunneling																																									
Construction of Conveyor Belt for Tunnelling Works	116	101	-48.1	0	3															71	71	71																			
Demolition of Conveyor Belt	121	101	-48.1	0	3																																				
Shartin Side																																									
Work Zone 4																																									
Preparatory works																																									
Site Clearance and Tree felling / transplant	117	94	-47.4	0	3																													73	73	73					
Road Widening and Installtion of Noise Barrier																																									
Widening works at north bound																																									
Slope Formation / Upgrading Works	119	94	-47.4	0	3																																74	74	74	74	
Foundation of Noise Barrier	119	94	-47.4	0	3																																				
Pile Cap, L-retaining Wall and Formation of new road	114	94	-47.4	0	3																																				
Utilities Diversion	117	94	-47.4	0	3																																				
Erection of structural steel post for noise barrier	116	94	-47.4	0	3																																				
Widening works at central divider																																									
Foundation of Noise Barrier	119	94	-47.4	0	3																																				
Pile Cap and Footing	114	94	-47.4	0	3																																				
Erection of structural steel post for noise barrier	116	94	-47.4	0	3																																				
Widening works at south bound																																									
Slope Formation / Upgrading Works	119	94	-47.4	0	3																																				
Foundation of Noise Barrier	119	94	-47.4	0	3																																				
Formation of new road	114	94	-47.4	0	3																																				
Utilities Diversion	117	94	-47.4	0	3																																				
Erection of structural steel post for noise barrier	116	94	-47.4	0	3																																				
Installation of steel member and noise barrier panel																																									
Erection of steel member and noise barrier panel at north bound	116	94	-47.4	0	3																																				
Erection of steel member and noise barrier panel at south bound	116	94	-47.4	0	3																																				
Roadworks																																									
Roadworks at north bound																																									
Road Drainage	117	94	-47.4	0	3																																				
Road Surfacing	120	94	-47.4	0	3																																				
Roadlighting and E&M works	112	94	-47.4	0	3																																				
Roadworks at south bound																																									
Road Drainage	117	94	-47.4	0	3																																				
Road Surfacing	120	94	-47.4	0	3																																				
Roadlighting and E&M works	112	94	-47.4	0	3																																				
Landscaping Works																																									
Landscaping works at north bound	115	94	-47.4	0	3																																				
Predicted Noise Level, Leq (30mins), dB(A)						72	72	84	85	85	85	85	85	85	85	85	85	85	81	81	81	81	82	82	82	81	81	84	84	84	78	78	78	78	79	79	79	79	79	79	75

Construction Activity	2028												2029												2030												2031							
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
Tunnel Buildings and Associated Road Works at Portals																																												
Work Zone 5 - Shatin Portal																																												
Site Clearance																																												
Construction of New Vehicular Bridge																																												
Construction of New Vehicular-cum-Footbridge at Toll Plaza																																												
Roadworks (Flexible Pavement), Signage, Drainage for New Vehicular Bridge																																												
Construction of New Administration Building																																												
Partially demolition of existing toll plaza																																												
Construction of New Administration Building																																												
Demolition of Existing Administration Building	67																																											
Demolition of Existing E&M building next to Toll Plaza																																												
Construction of New Ventilation Building																																												
Demolition of existing Kowloon Bound Vent. Bldg at Shatin Portal and nearby structure											67	67																																
Demolition of Existing footbridge											67																																	
Toll Plaza Formation																																												
Road widening works at Toll Plaza																																												
Construction of New Car Parking Facilities																	80	80	80	80	80	80																						
Reconfiguration and Roadworks for Toll Plaza																							80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80		
Construction of associated structure of new footbridge																							80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80		
Relocation of Surge Tank																																												
Construction of surge tank																																												
Connection of 3 existing water mains to surge tank																																												
Demolition of existing surge tank																																												
Associated Works for Tunneling																																												
Construction of Conveyor Belt for Tunnelling Works																																												
Demolition of Conveyor Belt	76																																											
Shartin Side																																												
Work Zone 4																																												
Preparatory works																																												
Site Clearance and Tree felling / transplant																																												
Road Widening and Installtion of Noise Barrier																																												
Widening works at north bound																																												
Slope Formation / Upgrading Works	74	74	74	74																																								
Foundation of Noise Barrier					75	75	75	75																																				
Pile Cap, L-retaining Wall and Formation of new road							70	70	70	70																																		
Utilities Diversion											72	72																																
Erection of structural steel post for noise barrier											71	71																																
Widening works at south bound																																												
Slope Formation / Upgrading Works																																												
Foundation of Noise Barrier																																												
Formation of new road																																												
Utilities Diversion																																												
Erection of structural steel post for noise barrier																																												
Installation of steel member and noise barrier panel																																												
Erection of steel member and noise barrier panel at north bound																																												
Erection of steel member and noise barrier panel at south bound																																												
Roadworks																																												
Roadworks at north bound																																												
Road Drainage																																												
Road Surfacing																																												
Roadlighting and E&M works																																												
Roadworks at south bound																																												
Road Drainage																																												
Road Surfacing																																												
Roadlighting and E&M works																																												
Landscaping Works																																												
Landscaping works at north bound																																												
Predicted Noise Level, Leq (30mins), dB(A)	78	74	74	74	75	75	76	76	78	76	77	75	74	74	74	74	74	81	81	81	81	82	82	84	84	84	84	84	84	84	84	83	83	84	84	84	84	84	84	83	83		

Construction Activity	2031												
	M	J	J	A	S	O	N	D					
Tunnel Buildings and Associated Road Works at Portals													
Work Zone 5 - Shatin Portal													
Site Clearance													
Construction of New Vehicular Bridge													
Construction of New Vehicular-cum-Footbridge at Toll Plaza													
Roadworks (Flexible Pavement), Signage, Drainage for New Vehicular Bridge													
Construction of New Administration Building													
Partially demolition of existing toll plaza													
Construction of New Administration Building													
Demolition of Existing Administration Building													
Demolition of Existing E&M building next to Toll Plaza													
Construction of New Ventilation Building													
Demolition of existing Kowloon Bound Vent. Bldg at Shatin Portal and nearby structure													
Demolition of Existing footbridge													
Toll Plaza Formation													
Road widening works at Toll Plaza													
Construction of New Car Parking Facilities													
Reconfiguration and Roadworks for Toll Plaza	80	80	80	80									
Construction of associated structure of new footbridge	80	80	80	80									
Relocation of Surge Tank													
Construction of surge tank													
Connection of 3 existing water mains to surge tank													
Demolition of existing surge tank													
Associated Works for Tunneling													
Construction of Conveyor Belt for Tunnelling Works													
Demolition of Conveyor Belt													
Shartin Side													
Work Zone 4													
Preparatory works													
Site Clearance and Tree felling / transplant													
Road Widening and Installtion of Noise Barrier													
Widening works at north bound													
Slope Formation / Upgrading Works													
Foundation of Noise Barrier													
Pile Cap, L-retaining Wall and Formation of new road													
Utilities Diversion													
Erection of structural steel post for noise barrier													
Widening works at south bound													
Slope Formation / Upgrading Works													
Foundation of Noise Barrier													
Formation of new road													
Utilities Diversion													
Erection of structural steel post for noise barrier													
Installation of steel member and noise barrier panel													
Erection of steel member and noise barrier panel at north bound					71	71	71						
Erection of steel member and noise barrier panel at south bound													
Roadworks													
Roadworks at north bound													
Road Drainage					72	72							
Road Surfacing							75	75					
Roadlighting and E&M works							68	68					
Roadworks at south bound													
Road Drainage													
Road Surfacing													
Roadlighting and E&M works													
Landscaping Works													
Landscaping works at north bound													
Predicted Noise Level, Leq (30mins), dB(A)	84	84	84	83	83	84	84	84	84	84	84	83	83

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **KSC1**

Assessment Floor 15/F
Floor mP.D. 77.8

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2025												2026											
						J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Tunnel Buildings and Associated Road Works at Portals																													
Work Zone 5 - Shatin Portal																													
Site Clearance	117	165	-52.3	0	3			67	67																				
Construction of New Vehicular Bridge																													
Construction of New Vehicular-cum-Footbridge at Toll Plaza	123	165	-52.3	0	3					74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74		
Roadworks (Flexible Pavement), Signage, Drainage for New Vehicular Bridge	125	165	-52.3	0	3																							75	75
Construction of New Administration Building																													
Partially demolition of existing toll plaza	121	165	-52.3	0	3					72																			
Construction of New Administration Building	123	165	-52.3	0	3						74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74
Demolition of Existing Administration Building	121	256	-56.1	0	3																								
Demolition of Existing E&M building next to Toll Plaza	121	256	-56.1	0	3																								
Construction of New Ventilation Building																													
Demolition of existing Kowloon Bound Vent. Bldg at Shatin Portal and nearby structure	121	256	-56.1	0	3																								
Demolition of Existing footbridge	121	256	-56.1	0	3																								
Toll Plaza Formation																													
Road widening works at Toll Plaza	127	165	-52.3	0	3					78	78	78	78	78	78	78	78	78											
Construction of New Car Parking Facilities	125	165	-52.3	0	3																								
Reconfiguration and Roadworks for Toll Plaza	125	165	-52.3	0	3																								
Construction of associated structure of new footbridge	125	165	-52.3	0	3																								
Relocation of Surge Tank																													
Construction of surge tank	115	165	-52.3	0	3									66	66	66	66	66	66	66	66	66	66	66	66				
Connection of 3 existing water mains to surge tank	125	165	-52.3	0	3																							75	75
Demolition of existing surge tank	121	256	-56.1	0	3																								
Associated Works for Tunneling																													
Construction of Conveyor Belt for Tunnelling Works	116	165	-52.3	0	3																		67	67	67				
Demolition of Conveyor Belt	121	165	-52.3	0	3																								
Shartin Side																													
Work Zone 4																													
Preparatory works																													
Site Clearance and Tree felling / transplant	117	163	-52.2	0	3																								
Road Widening and Installtion of Noise Barrier																													
Widening works at north bound																													
Slope Formation / Upgrading Works	119	163	-52.2	0	3																								
Foundation of Noise Barrier	119	163	-52.2	0	3																								
Pile Cap, L-retaining Wall and Formation of new road	114	163	-52.2	0	3																								
Utilities Diversion	117	163	-52.2	0	3																								
Erection of structural steel post for noise barrier	116	163	-52.2	0	3																								
Widening works at central divider																													
Foundation of Noise Barrier	119	163	-52.2	0	3																								
Pile Cap and Footing	114	163	-52.2	0	3																								
Erection of structural steel post for noise barrier	116	163	-52.2	0	3																								
Widening works at south bound																													
Slope Formation / Upgrading Works	119	163	-52.2	0	3																								
Foundation of Noise Barrier	119	163	-52.2	0	3																								
Formation of new road	114	163	-52.2	0	3																								
Utilities Diversion	117	163	-52.2	0	3																								
Erection of structural steel post for noise barrier	116	163	-52.2	0	3																								
Installation of steel member and noise barrier panel																													
Erection of steel member and noise barrier panel at north bound	116	163	-52.2	0	3																								
Erection of steel member and noise barrier panel at south bound	116	163	-52.2	0	3																								
Roadworks																													
Roadworks at north bound																													
Road Drainage	117	163	-52.2	0	3																								
Road Surfacing	120	163	-52.2	0	3																								
Roadlighting and E&M works	112	163	-52.2	0	3																								
Roadworks at south bound																													
Road Drainage	117	163	-52.2	0	3																								
Road Surfacing	120	163	-52.2	0	3																								
Roadlighting and E&M works	112	163	-52.2	0	3																								
Landscaping Works																													
Landscaping works at north bound	115	163	-52.2	0	3																								
Predicted Noise Level, Leq (30mins), dB(A)								67	67	80	81	81	81	81	81	81	81	81	77	77	77	77	78	78	78	77	77	79	79

Construction Activity	2027												2028											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Tunnel Buildings and Associated Road Works at Portals																								
Work Zone 5 - Shatin Portal																								
Site Clearance																								
Construction of New Vehicular Bridge																								
Construction of New Vehicular-cum-Footbridge at Toll Plaza																								
Roadworks (Flexible Pavement), Signage, Drainage for New Vehicular Bridge	75																							
Construction of New Administration Building																								
Partially demolition of existing toll plaza																								
Construction of New Administration Building	74	74	74	74	74	74	74	74	74	74	74													
Demolition of Existing Administration Building												68	68											
Demolition of Existing E&M building next to Toll Plaza												68												
Construction of New Ventilation Building																								
Demolition of existing Kowloon Bound Vent. Bldg at Shatin Portal and nearby structure																							68	68
Demolition of Existing footbridge																							68	
Toll Plaza Formation																								
Road widening works at Toll Plaza																								
Construction of New Car Parking Facilities																								
Reconfiguration and Roadworks for Toll Plaza																								
Construction of associated structure of new footbridge																								
Relocation of Surge Tank																								
Construction of surge tank																								
Connection of 3 existing water mains to surge tank	75																							
Demolition of existing surge tank		68	68	68																				
Associated Works for Tunneling																								
Construction of Conveyor Belt for Tunnelling Works																								
Demolition of Conveyor Belt													72											
Shartin Side																								
Work Zone 4																								
Preparatory works																								
Site Clearance and Tree felling / transplant						68	68	68																
Road Widening and Installtion of Noise Barrier																								
Widening works at north bound																								
Slope Formation / Upgrading Works									70	70	70	70	70	70	70	70								
Foundation of Noise Barrier																	70	70	70	70	70			
Pile Cap, L-retaining Wall and Formation of new road																			65	65	65	65	65	
Utilities Diversion																					68	68	68	
Erection of structural steel post for noise barrier																						67	67	
Widening works at central divider																								
Foundation of Noise Barrier																								
Pile Cap and Footing																								
Erection of structural steel post for noise barrier																								
Widening works at south bound																								
Slope Formation / Upgrading Works																								70
Foundation of Noise Barrier																								
Formation of new road																								
Utilities Diversion																								
Erection of structural steel post for noise barrier																								
Installation of steel member and noise barrier panel																								
Erection of steel member and noise barrier panel at north bound																								
Erection of steel member and noise barrier panel at south bound																								
Roadworks																								
Roadworks at north bound																								
Road Drainage																								
Road Surfacing																								
Roadlighting and E&M works																								
Roadworks at south bound																								
Road Drainage																								
Road Surfacing																								
Roadlighting and E&M works																								
Landscaping Works																								
Landscaping works at north bound																								
Predicted Noise Level, Leq (30mins), dB(A)	79	75	75	75	74	75	75	75	75	75	75	74	75	70	70	70	70	70	71	71	73	72	74	72

Construction Activity	2029												2030												2031											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Tunnel Buildings and Associated Road Works at Portals																																				
Work Zone 5 - Shatin Portal																																				
Site Clearance																																				
Construction of New Vehicular Bridge																																				
Construction of New Vehicular-cum-Footbridge at Toll Plaza																																				
Roadworks (Flexible Pavement), Signage, Drainage for New Vehicular Bridge																																				
Construction of New Administration Building																																				
Partially demolition of existing toll plaza																																				
Construction of New Administration Building																																				
Demolition of Existing Administration Building																																				
Demolition of Existing E&M building next to Toll Plaza																																				
Construction of New Ventilation Building																																				
Demolition of existing Kowloon Bound Vent. Bldg at Shatin Portal and nearby structure																																				
Demolition of Existing footbridge																																				
Toll Plaza Formation																																				
Road widening works at Toll Plaza																																				
Construction of New Car Parking Facilities						75	75	75	75	75	75																									
Reconfiguration and Roadworks for Toll Plaza												75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75							
Construction of associated structure of new footbridge												75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75							
Relocation of Surge Tank																																				
Construction of surge tank																																				
Connection of 3 existing water mains to surge tank																																				
Demolition of existing surge tank																																				
Associated Works for Tunneling																																				
Construction of Conveyor Belt for Tunnelling Works																																				
Demolition of Conveyor Belt																																				
Shartin Side																																				
Work Zone 4																																				
Preparatory works																																				
Site Clearance and Tree felling / transplant																																				
Road Widening and Installtion of Noise Barrier																																				
Widening works at north bound																																				
Slope Formation / Upgrading Works																																				
Foundation of Noise Barrier																																				
Pile Cap, L-retaining Wall and Formation of new road																																				
Utilities Diversion																																				
Erection of structural steel post for noise barrier																																				
Widening works at central divider																																				
Foundation of Noise Barrier															70	70	70	70	70																	
Pile Cap and Footing																	65	65	65	65	65															
Erection of structural steel post for noise barrier																				67	67															
Widening works at south bound																																				
Slope Formation / Upgrading Works	70	70	70	70	70	70	70																													
Foundation of Noise Barrier								70	70	70	70	70																								
Formation of new road										65	65	65	65	65																						
Utilities Diversion												68	68	68																						
Erection of structural steel post for noise barrier													67	67																						
Installation of steel member and noise barrier panel																																				
Erection of steel member and noise barrier panel at north bound																						67	67	67												
Erection of steel member and noise barrier panel at south bound																									67	67										
Roadworks																																				
Roadworks at north bound																																				
Road Drainage																						68	68													
Road Surfacing																							71	71												
Roadlighting and E&M works																							63	63												
Roadworks at south bound																																				
Road Drainage																									68	68										
Road Surfacing																										71	71									
Roadlighting and E&M works																										63	63									
Landscaping Works																																				
Landscaping works at north bound																																			66	66
Predicted Noise Level, Leq (30mins), dB(A)	70	70	70	70	70	76	76	76	76	77	77	79	79	79	79	79	79	79	79	79	79	79	80	79	79	80	79	78	78						66	66

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs

Appendix 4.5a Construction Noise Assessment (Unmitigated Scenario)

Location: **Shatin**

NAP ID: **KATC1**

Assessment Floor 20/F
Floor mP.D. 93

Construction Activity	SWL, dB(A)	Distance, m [1]	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2025												2026												2027											
						J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Tunnel Buildings and Associated Road Works at Portals																																									
Work Zone 5 - Shatin Portal																																									
Site Clearance	117	160	-52.1	0	3	68	68																																		
Construction of New Vehicular Bridge																																									
Construction of New Vehicular-cum-Footbridge at Toll Plaza	123	160	-52.1	0	3			74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74														
Roadworks (Flexible Pavement), Signage, Drainage for New Vehicular Bridge	125	160	-52.1	0	3																							76	76	76											
Construction of New Administration Building																																									
Partially demolition of existing toll plaza	121	160	-52.1	0	3			72																																	
Construction of New Administration Building	123	160	-52.1	0	3				74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74
Demolition of Existing Administration Building	121	233	-55.3	0	3																																				
Demolition of Existing E&M building next to Toll Plaza	121	233	-55.3	0	3																																				
Construction of New Ventilation Building																																									
Site Formation for TBM launching area at Shatin Portal (including Slope Formation Works)	128	390	-59.8	0	3			71	71	71	71	71	71	71	71																										
Site Formation of Vent. Bldg at Shatin Portal	127	390	-59.8	0	3													70	70	70																					
Construction of Vent. Bldg at Shatin Portal	124	390	-59.8	0	3																67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
Demolition of existing Kowloon Bound Vent. Bldg at Shatin Portal and nearby structure	121	233	-55.3	0	3																																				
Demolition of Existing footbridge	121	233	-55.3	0	3																																				
Toll Plaza Formation																																									
Road widening works at Toll Plaza	127	160	-52.1	0	3			78	78	78	78	78	78	78	78																										
Construction of New Car Parking Facilities	125	160	-52.1	0	3																																				
Reconfiguration and Roadworks for Toll Plaza	125	160	-52.1	0	3																																				
Construction of associated structure of new footbridge	125	160	-52.1	0	3																																				
Relocation of Surge Tank																																									
Construction of surge tank	115	160	-52.1	0	3									66	66	66	66	66	66	66	66	66	66	66	66																
Connection of 3 existing water mains to surge tank	125	160	-52.1	0	3																							76	76	76											
Demolition of existing surge tank	121	233	-55.3	0	3																										69	69	69								
Associated Works for Tunneling																																									
Construction of Conveyor Belt for Tunnelling Works	116	160	-52.1	0	3																67	67	67																		
Demolition of Conveyor Belt	121	160	-52.1	0	3																																				
Tunneling and Tunnel E&M																																									
Work Zone 6 - Tunnel																																									
Construction of New Middle Third Tunnel	126	391	-59.8	0	3													69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
60m mined tunnel for TBM launching at Shatin Portal																																									
TBM site set up and power supply for TBM launching																																									
TBM Assembly																																									
TBM Excavation - learning curve (incl. ground treatment)																																									
TBM Excavation - Remaining (incl. ground treatment)																																									
TBM Dismantling																																									
100m Mined Tunnel for TBM break out at Kln Portal																																									
Cross Passages (at 100m interval) by drill and break method and lining construction																																									
1200/1400mm dia. watermain laying inside tunnel																																									
Watermain diversion planning																																									
Tunnel internal structure (OHVD, walkway, road slab and pavement, Partition Wall)																																									
Tunnel E&M and TCSS installation																																									
Enlargement of Existing Kowloon Bound Tunnel	129	378	-59.5	0	3																																				
Connection of 3 existing water mains to the new pipelines inside the 3rd tunnel																																									
Enlargement of tunnel by drill and break method																																									
Cross Passages (at 100m intervals) by drill and break method and lining construction																																									
Tunnel lining																																									
Tunnel internal structure (OHVD, walkway, road slab and pavement)																																									
Tunnel E&M and TCSS installation																																									
Demolition of Partition Wall in New Third Tunnel																																									
Decommission, Closure and Rehabilitation of existing Shatin bound Tunnel to 'E' Tunnel	122	428	-60.6	0	3																																				
Predicted Noise Level, Leq (30mins), dB(A)						68	68	81	81	81	81	81	81	81	81	81	81	81	79	79	79	78	79	79	79	78	78	81	81	81	77	77	77	76	76	76	76	76	76	76	75

Construction Activity	2028												2029												2030												2031											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Tunnel Buildings and Associated Road Works at Portals																																																
Work Zone 5 - Shatin Portal																																																
Site Clearance																																																
Construction of New Vehicular Bridge																																																
Construction of New Vehicular-cum-Footbridge at Toll Plaza																																																
Roadworks (Flexible Pavement), Signage, Drainage for New Vehicular Bridge																																																
Construction of New Administration Building																																																
Partially demolition of existing toll plaza																																																
Construction of New Administration Building																																																
Demolition of Existing Administration Building	69	69																																														
Demolition of Existing E&M building next to Toll Plaza	69																																															
Construction of New Ventilation Building																																																
Site Formation for TBM launching area at Shatin Portal (including Slope Formation Works)																																																
Site Formation of Vent. Bldg at Shatin Portal																																																
Construction of Vent. Bldg at Shatin Portal	67	67	67	67	67	67	67	67	67	67	67	67																																				
Demolition of existing Kowloon Bound Vent. Bldg at Shatin Portal and nearby structure																																																
Demolition of Existing footbridge																																																
Toll Plaza Formation																																																
Road widening works at Toll Plaza																																																
Construction of New Car Parking Facilities													76	76	76	76	76	76																														
Reconfiguration and Roadworks for Toll Plaza																			76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76							
Construction of associated structure of new footbridge																			76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76							
Relocation of Surge Tank																																																
Construction of surge tank																																																
Connection of 3 existing water mains to surge tank																																																
Demolition of existing surge tank																																																
Associated Works for Tunneling																																																
Construction of Conveyor Belt for Tunnelling Works																																																
Demolition of Conveyor Belt	72																																															
Tunneling and Tunnel E&M																																																
Work Zone 6 - Tunnel																																																
Construction of New Middle Third Tunnel	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69																																	
60m mined tunnel for TBM launching at Shatin Portal																																																
TBM site set up and power supply for TBM launching																																																
TBM Assembly																																																
TBM Excavation - learning curve (incl. ground treatment)																																																
TBM Excavation - Remaining (incl. ground treatment)																																																
TBM Dismantling																																																
100m Mined Tunnel for TBM break out at Kln Portal																																																
Cross Passages (at 100m interval) by drill and break method and lining construction																																																
1200/1400mm dia. watermain laying inside tunnel																																																
Watermain diversion planning																																																
Tunnel internal structure (OHVD, walkway, road slab and pavement, Partition Wall)																																																
Tunnel E&M and TCSS installation																																																
Enlargement of Existing Kowloon Bound Tunnel													72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72							
Connection of 3 existing water mains to the new pipelines inside the 3rd tunnel																																																
Enlargement of tunnel by drill and break method																																																
Cross Passages (at 100m intervals) by drill and break method and lining construction																																																
Tunnel lining																																																
Tunnel internal structure (OHVD, walkway, road slab and pavement)																																																
Tunnel E&M and TCSS installation																																																
Demolition of Partition Wall in New Third Tunnel																																																
Decommission, Closure and Rehabilitation of existing Shatin bound Tunnel to 'E' Tunnel																																																
Predicted Noise Level, Leq (30mins), dB(A)	76	71	71	71	71	71	71	71	71	71	74	72	69	69	69	72	72	77	77	77	77	77	77	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	72	72	72	72	72	72	

Construction Activity	2032												2033												2034											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Tunnel Buildings and Associated Road Works at Portals																																				
Work Zone 5 - Shatin Portal																																				
Site Clearance																																				
Construction of New Vehicular Bridge																																				
Construction of New Vehicular-cum-Footbridge at Toll Plaza																																				
Roadworks (Flexible Pavement), Signage, Drainage for New Vehicular Bridge																																				
Construction of New Administration Building																																				
Partially demolition of existing toll plaza																																				
Construction of New Administration Building																																				
Demolition of Existing Administration Building																																				
Demolition of Existing E&M building next to Toll Plaza																																				
Construction of New Ventilation Building																																				
Site Formation for TBM launching area at Shatin Portal (including Slope Formation Works)																																				
Site Formation of Vent. Bldg at Shatin Portal																																				
Construction of Vent. Bldg at Shatin Portal																																				
Demolition of existing Kowloon Bound Vent. Bldg at Shatin Portal and nearby structure																																				
Demolition of Existing footbridge																																				
Toll Plaza Formation																																				
Road widening works at Toll Plaza																																				
Construction of New Car Parking Facilities																																				
Reconfiguration and Roadworks for Toll Plaza																																				
Construction of associated structure of new footbridge																																				
Relocation of Surge Tank																																				
Construction of surge tank																																				
Connection of 3 existing water mains to surge tank																																				
Demolition of existing surge tank																																				
Associated Works for Tunneling																																				
Construction of Conveyor Belt for Tunnelling Works																																				
Demolition of Conveyor Belt																																				
Tunneling and Tunnel E&M																																				
Work Zone 6 - Tunnel																																				
Construction of New Middle Third Tunnel																																				
60m mined tunnel for TBM launching at Shatin Portal																																				
TBM site set up and power supply for TBM launching																																				
TBM Assembly																																				
TBM Excavation - learning curve (incl. ground treatment)																																				
TBM Excavation - Remaining (incl. ground treatment)																																				
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100m Mined Tunnel for TBM break out at Kln Portal																																				
Cross Passages (at 100m interval) by drill and break method and lining construction																																				
1200/1400mm dia. watermain laying inside tunnel																																				
Watermain diversion planning																																				
Tunnel internal structure (OHVD, walkway, road slab and pavement, Partition Wall)																																				
Tunnel E&M and TCSS installation																																				
Enlargement of Existing Kowloon Bound Tunnel											72	72	72																							
Connection of 3 existing water mains to the new pipelines inside the 3rd tunnel																																				
Enlargement of tunnel by drill and break method																																				
Cross Passages (at 100m intervals) by drill and break method and lining construction																																				
Tunnel lining																																				
Tunnel internal structure (OHVD, walkway, road slab and pavement)																																				
Tunnel E&M and TCSS installation																																				
Demolition of Partition Wall in New Third Tunnel																																				
Decommission, Closure and Rehabilitation of existing Shatin bound Tunnel to 'E' Tunnel																									65	65	65	65	65	65	65	65	65	65	65	65
Predicted Noise Level, Leq (30mins), dB(A)											72	72	72												65	65	65	65	65	65	65	65	65	65	65	65

[1] The distances refer to the horizontal distances between the notional source positions in work zones and the concerned NSRs