Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: OM1 - Shun Man House, Oi Man Estate

Scenario: Mitigated

Package	Construction Activity	Work [1] Site No.	SWL	Dist [2] (m)	SPL [3]	Shielding Effect
Hung Hom Station, SAT & Related Work	***Hung Hom Station Sub-Location Area***					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Project Office Construction	PSO	104	1348	37	0
	Hoarding Erection	HUH1	112	818	48	0
	Pre-drilling	HUH1	90	818	27	0
	Dwall Plants Setting up	HUH1	114	818	51	0
	A&A/ Modification Works					
	Concourse Level HUH					
	Stage 1 - Re-construct M/F, ABWF & BS	HUH2	123	866	59	0
	Stage 2 - Re-construct M/F, ABWF & BS	HUH2	123	866	59	0
	Area H1					
	Modification/ Enabling Works/ Utilities Diversions					
	Podium to NOV					
	Cooling mains diversion	H1	115	1151	49	0
	Dia 1650 Sewer diversion (SCL (MKK - HUH) part)	H1	118	1151	51	0
	Tentative CLP cable tunnels strengthening	H1	111	1151	45	0
	IMC Building & Carpark areas					
	IMC Hoarding & Catch Fan Erection	IMC	114	1162	47	0
	IMC Demolition and site clearance	IMC	123	1162	57	0
	Dia 1650 Sewer diversion	IMC	115	1162	49	0
	Modification to Existing EVA structures	HWPR	119	1123	53	0
	Temporary Cofferdam					
	Podium to NOV					
	Dwall construction (SCL (MKK - HUH)) for sewer diversion	H1	120	1151	54	0
	Dwall construction (SCL (MKK - HUH)) remaining	H1	120	1151	54	0
	IMC Building & Carpark areas					
	Temporary Cofferdam after demolition	IMC	118	1162	51	0
	Excavation					
	Podium to NOV					
	Excavation & Strutting to SCL (MKK - HUH) roof	H1	114	1151	48	0
	Excavation & Strutting to SCL (MKK - HUH) base	H1	124	1151	58	0
	IMC Building & Carpark areas					
	Pump test, Excavation & Strutting	IMC	82	1162	16	0
	Structure Works					
	Podium to NOV					
	Concrete Structure SCL (MKK - HUH) roof	H1	120	1151	53	0
	Concrete Support to CLP Tunnel	H1	118	1151	52	0
	Concrete Structure SCL (MKK - HUH) roof	H1	124	1151	58	0
	Waterfront EVA structure (SCL (MKK - HUH))	H1	118	1151	51	0
	IMC Building & Carpark areas					
	Cooling Tower Raft	CT	115	1160	49	0
	Cooling Tower Ground Slab	CT	115	1160	49	0
	Cooling Tower wall & roof	CT	115	1160	49	0
	Waterfront EVA structure (SCL (TAW - HUH))	IMC	118	1162	51	0
	Area H2					
	Modification/ Enabling Works/ Utilities Diversions					
	Podium to Coliseum					
	Modification of Traversa	H2	116	1106	50	0
	Utilities Diversion/ Services relocate (GL 0 - GL 7)	H2	124	1106	58	0
	Temporary Cofferdam					
	Podium to Coliseum					
	Ground Treatment to GL 1 to GL 7	H2	94	1106	28	0
	Dwall & Barrette GL 0 to GL 7	H2	119	1106	53	0
	Pump test GL 0 to GL 7	H2	82	1106	16	0
	Underpinning beam & columns	H2	114	1106	48	0
	Demolish existing columns	H2	122	1106	57	0
	Excavation					
	Podium to Coliseum					
	Excavation & Strutting GL 0 to GL 7	H2	121	1106	56	0
	Final Excavation & Strutting to NSL base Gl 0 to GL 7	H2	121	1106	55	0
	Structure Works					
	Podium to Coliseum					
	SCL (TAW - HUH) Base GL 0 to GL 7	H2	116	1106	50	0
	SCL (MKK - HUH) Slab & props to existing foundation GL 0 to GL 7	H2	116	1106	50	0
	SCL (MKK - HUH) Base & Wall GL 0 to GL 7	H2	122	1106	56	0
	SCL (TAW - HUH) & other Structures GL 0 to GL 7	H2	116	1106	50	0
	Vent Shaft Structures GL 0	H2	117	1106	51	0
	Area H3					
	Modification/ Enabling Works/ Utilities Diversions					
	Coliseum Area					
	Utilities Diversion/ Services relocate (GL 7 - GL 15)	H3	119	1051	54	0
	Temporary Cofferdam					
	Coliseum Area					
	Dwall GL 7 to GL 15	H3	119	1051	54	0
	Excavation					
	Coliseum Area					
	Pump test GL 7 to GL 15	H3	82	1051	17	0
	Excavation to SCL (TAW - HUH) slab Gl 7 to GL 15	H3	124	1051	59	0
	Excavation & Strutting to intermediate slab GL 7 to GL 15	H3	124	1051	59	0
	Excavation & Strutting to SCL (MKK - HUH) base Gl 7 to GL 15	H3	124	1051	59	0
	Structure Works					
	Podium to Coliseum					
	SCL (TAW - HUH) Track Slab & Structures GL 7 to GL 15	H3	116	1051	51	0
	SCL (MKK - HUH) Structures Intermediate Slab & props GL 7 to GL 15	H3	116	1051	51	0
	SCL (MKK - HUH) Structure Base & Wall GL 7 to GL 15	H3	116	1051	51	0
	SCL (TAW - HUH) Structures Wall & Roof GL 7 to GL 15	H3	116	1051	51	0
	SCL (TAW - HUH) & other Structures GL 7 to GL 15	H3	116	1051	51	0
	Area H4					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Utilities Diversion/ Services relocate (GL 15 - GL 28)	H4	119	975	54	0
	Temporary Cofferdam					
	Hung Hom Station					
	Underpinning GL K	H4	119	975	55	0
	Dwall GL 15 to GL 31 / GL N	H4	118	975	54	0
	Dwall GL 15 to GL 31 / GL K1	H4	118	975	54	0
	Excavation					
	Hung Hom Station					
	Pump test GL 15 to GL 28	H4	85	975	20	0
	Excavation & Strutting 1st Layer GL 15 to GL 28	H4	124	975	59	0
	Excavation & Strutting GL 15 to GL 28	H4	123	975	59	0
	Excavation & Strutting to SCL (MKK - HUH) base Gl 7 to GL 15	H4	124	975	60	0
	Structure Works					
	Hung Hom Station					
	SCL (TAW - HUH) Track Slab GL 15 to GL 28	H4	116	975	52	0
	Install Temporary Steel Tower Column GL 15 to GL 22	H4	114	975	49	0
	Demolish existing Column & Pier Cap GL 15 to GL 22	H4	117	975	53	0
	SCL (MKK - HUH) Base Structure GL 15 to GL 28	H4	116	975	52	0
	SCL (TAW - HUH) & other Structures GL 15 to GL 28	H4	121	975	56	0
	SCL (MKK - HUH) Internal Structures GL 15 to GL 28	H4	119	975	54	0

2012												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
-5	-4	-3	-2	-1	1	2	3	4	5	6	7	

2013												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
8	9	10	11	12	13	14	15	16	17	18	19	

2014												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
20	21	22	23	24	25	26	27	28	29	30	31	

2015												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
32	33	34	35	36	37	38	39	40	41	42	43	

2016												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
44	45	46	47	48	49	50	51	52	53	54	55	

2017												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
56	57	58	59	60	61	62	63	64	65	66	67	

2018												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
68	69	70	71	72	73	74	75	76	77	78	79	

Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: OM1 - Shun Man House, Oi Man Estate

Scenario: Mitigated

Package	Construction Activity	Work [1] Site No.	SWL	Dist [2] (m)	SPL [3]	Shielding Effect
	Area H5					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Utilities Diversion/ Services relocate (GL 28 - GL 38)	H5	119	889	55	0
	Temporary Storm Drain@ 1875 Diversion (GL 31)	H5	114	889	50	0
	Redivert Storm Drain@ 1875 Diversion (GL 32)	H5	125	889	61	0
	Temporary Cofferdam					
	Hung Hom Station					
	Underpinning GL K & L	H5	119	889	55	0
	Dwall GL 31 to GL 38 / GL K1	H5	118	889	54	0
	Dwall GL 31 to GL 38 / GL N	H5	118	889	54	0
	Excavation					
	Hung Hom Station					
	Pump test GL 28 to GL 38	H5	85	889	21	0
	Excavation & Strutting 1st Layer GL 28 to GL 38	H5	124	889	60	0
	Excavation & Strutting GL 28 to GL 38	H5	124	889	60	0
	Structure Works					
	Hung Hom Station					
	SCL (TAW - HUH) Track Slab GL 28 to GL 38	H5	116	889	52	0
	SCL (MKK - HUH) Base Structure GL 28 to GL 38	H5	116	889	52	0
	SCL (MKK - HUH) Internal Structures GL 28 to GL 38	H5	116	889	52	0
	Underpinning Columns to Podium Soffit GL 28 to GL 38	H5	114	889	50	0
	SCL (TAW - HUH) & other Structures GL 28 to GL 38	H5	121	889	57	0
	Area H6					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Utilities Diversion/ Services relocate (GL 38 - GL 48)	H6	119	818	56	0
	Temporary Cofferdam					
	Hung Hom Station					
	Underpinning GL K & L	H6	119	818	55	0
	Underpinning Mid-level walkway	H6	114	818	51	0
	Dwall GL 38 to GL 48 / Interface / GL N	H6	118	818	55	0
	Dwall GL 38 to GL 48 / Interface / GL K1	H6	118	818	55	0
	Excavation					
	Hung Hom Station					
	Pump test GL 38 to GL 48 / Interface	H6	85	818	22	0
	Excavation & Strutting 1st Layer GL 38 to GL 48	H6	121	818	58	0
	Excavation & Strutting GL 38 to GL 48 / Interface	H6	121	818	58	0
	Structure Works					
	Hung Hom Station					
	SCL (TAW - HUH) Track Slab GL 38 to GL 48 / Interface	H6	123	818	60	0
	SCL (MKK - HUH) Base Structure GL 38 to GL 48	H6	116	818	53	0
	SCL (MKK - HUH) Internal Structures GL 38 to GL 48	H6	116	818	53	0
	Underpinning Columns to Podium Soffit GL 38 to GL 48	H6	114	818	51	0
	SCL (TAW - HUH) & other Structures GL 38 to GL 48	H6	121	818	58	0
NAT & Related Work	***North Approach Tunnel Sub-Location Area***					
	Reprovisioning Facilities					
	Reprovisioned at Hung Hom Station Area					
	Building Works for Intercity Train Crew Facilities	ITCF	112	875	48	0
	Building Works for Signal Equipment Room	SER	110	749	48	0
	Building Works for Telecom Equipment Room	TER	110	1088	44	0
	Building Works for S&C Depot	S&C	110	1031	45	0
	Area C1					
	Demolish Existing Facilities					
	Demolish Existing Loco Running Shed	LRS	109	781	46	0
	Demolish Existing Ways & Works Workshop	W&W	109	720	47	0
	Modification/ Enabling Works/ Utilities Diversions					
	Cheung Wan Road Viaduct					
	Site Clearance and Hoarding and Utility diversion	NCWR	110	718	48	0
	Foundations	NCWR	113	718	51	0
	Construction of Substructure and Superstructure for New Diversion Bridge					
	Stage 1	NCWR	106	718	43	0
	Stage 2	NCWR	106	718	43	0
	Demolish of Existing Viaduct	ECWR	114	739	52	0
	DSD Culvert Diversion					
	Construct New Box Culvert - Loco Shed area	BC1	110	775	47	0
	Construct New Box Culvert - Ways & Works Workshop area	BC3	110	712	48	0
	Construct New Box Culvert - above SCL (MKK - HUH) Tunnels	BC2	110	757	47	0
	Temporary Cofferdam					
	Podium to Existing Culverts					
	Cofferdam Construction	C1a	106	747	44	0
	At Existing Culverts					
	Cofferdam Construction (existing culvert)	C1b	106	703	44	0
	Excavation					
	Podium to Existing Culverts					
	Excavation & Shoring	C1a	102	747	40	0
	At Existing Culverts					
	Excavation & Shoring (existing culvert)	C1b	102	703	40	0
	Structure Works					
	Podium to Existing Culverts					
	Concrete Structures SCL (MKK - HUH)	C1a	108	747	46	0
	Concrete Structures SCL (TAW - HUH)	C1a	106	747	44	0
	At Existing Culverts					
	Concrete Structures SCL (MKK - HUH) (existing culvert)	C1b	108	703	46	0
	Concrete Structures SCL (TAW - HUH) (existing culvert)	C1b	106	703	45	0
	Backfilling					
	Backfill	C1	105	703	43	0
	Area C2					
	Demolish Existing Facilities					
	Demolish Existing STA Building	STA	105	622	44	0
	Temporary Cofferdam					
	Hung Hom Bypass Pier C2/5					
	Install Diaphragm Wall	PierC2/5	101	583	41	0
	Underpinning foundation	PierC2/5	101	583	41	0
	Existing Culverts to STA Building					
	Cofferdam Construction	C2	106	521	47	0
	Excavation					
	Existing Culverts to STA Building					
	Excavation & Shoring	C2	102	521	43	0
	Structure Works					
	Existing Culverts to STA Building					
	Concrete Structures SCL (MKK - HUH)	C2	108	521	49	0
	Concrete Structures SCL (TAW - HUH)	C2	109	521	49	0

Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: OM1 - Shun Man House, Oi Man Estate

Scenario: Mitigated

Package	Construction Activity	Work [1] Site No.	SWL	Dist [2] (m)	SPL [3]	Shielding Effect
	Area C3A					
	Temporary Cofferdam					
	STA Building to Chatham Road North (OB2)					
	Cofferdam Construction	C3A	105	460	47	0
	Excavation					
	STA Building to Chatham Road North (OB2)					
	Excavation & Shoring	C3A	102	460	44	0
	Structure Works					
	STA Building to Chatham Road North (OB2)					
	Concrete Structures SCL (MKK - HUH)	C3A	108	460	49	0
	Backfilling					
	STA Building to Chatham Road North (OB2)					
	Backfill	C3A	105	460	47	0
	Area C4A					
	Temporary Cofferdam					
	Chatham Road North (OB2) to Slip Road (OB2A)					
	Cofferdam Construction	C4A	105	394	48	0
	Excavation					
	Chatham Road North (OB2) to Slip Road (OB2A)					
	Excavation & Shoring	C4A	102	394	45	0
	Structure Works					
	Chatham Road North (OB2) to Slip Road (OB2A)					
	Concrete Structures SCL (MKK - HUH)	C4A	106	394	49	0
	Backfilling					
	Chatham Road North (OB2) to Slip Road (OB2A)					
	Backfill	C4A	105	394	48	0
	Area C6					
	Modification/ Enabling Works/ Utilities Diversions					
	Existing CLP Substation					
	Modify Existing CLP Substation	CLP	104	242	51	0
	Oi Sen Path Temporary Footbridge					
	Construct Temporary Working Platform (GL G-J)	TFB4	84	134	36	0
	Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL G-J)	TFB4	103	134	55	0
	Construct Temporary Working Platform (GL E-G)	TFB3	84	105	38	0
	Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL E-G)	TFB3	103	105	57	0
	Construct Temporary Working Platform (GL C-E)	TFB2	84	77	41	0
	Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL C-E)	TFB2	103	77	60	0
	Construct Temporary Working Platform (GL A-C)	TFB1	84	62	43	0
	Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL A-C)	TFB1	103	62	62	0
	Construct Temporary Footbridge Structure and Finishes (GL A-J)	GL A-J	102	62	61	0
	Install Mini Piles (Pier K)	Pier K	101	162	52	0
	Construct Pile Cap (Pier K)	Pier K	98	162	48	0
	Construct Truss Structure (Pier K)	Pier K	99	162	50	0
	Install Mini Piles (Pier L)	Pier L	101	186	51	0
	Construct Pile Cap (Pier L)	Pier L	98	186	47	0
	Construct Truss Structure (Pier L)	Pier L	99	186	49	0
	Install Mini Piles (Pier M)	Pier M	101	209	50	0
	Construct Pile Cap (Pier M)	Pier M	98	209	46	0
	Construct Truss Structure (Pier M)	Pier M	99	209	48	0
	Install Mini Piles (Pier N)	Pier N	101	231	49	0
	Construct Pile Cap (Pier N)	Pier N	98	231	45	0
	Construct Truss Structure (Pier N)	Pier N	99	231	47	0
	Install Mini Piles (Pier P)	Pier P	101	275	47	0
	Construct Pile Cap (Pier P)	Pier P	98	275	44	0
	Construct Truss Structure (Pier P)	Pier P	99	275	46	0
	Construct Temporary Footbridge Structure and Finishes (GL J-O)	GL J-O	103	155	54	0
	Construct Pile Cap (GL O-R)	TFB12	98	286	44	0
	Construct Truss Structure (GL O-R)	TFB12	103	286	49	0
	Construct Temporary Footbridge Structure and Finishes (GL O-R)	TFB12	98	286	44	0
	Complete Footpath and Finishes (GL R-T)	TFB13	95	288	41	0
	Chatham Road North Slip Road Overbridge (OB2A)					
	Site Clearance and Hoarding and Utility diversion	TOB2A	104	305	50	0
	Foundations for Temporary OB2A (Piling & Pier)	TOB2A	105	305	51	0
	Deck Construction for Temporary OB2A	TOB2A	100	305	45	0
	Demolish Deck of Existing OB2A	OOB2A	105	331	49	0
	Construction of New OB2A Pile & Pile Cap	OOB2A	107	331	51	0
	Construction of New OB2A Abutment & Bridge Deck	OOB2A	110	331	54	0
	OB2A Reinstatement	OOB2A	106	331	50	0
	Temporary OB2A Removal	TOB2A	106	305	51	0
	OB2A Pedestrian Subway					
	Site Clearance and Hoarding and Utility diversion	OB2APS	104	350	48	0
	Demolish Existing Box Structure of OB2A Pedestrian Subway	OB2APS	108	350	52	0
	OB2A Pedestrian Subway Reinstatement	OB2APS	103	350	47	0
	Oi Sen Path Works					
	Pedestrian Diversion Works	OSPPS	107	40	69	0
	Relocate CLP cable	OSPPS	107	40	70	0
	Soil Nailing	OSPPS	101	40	64	0
	Retaining wall	OSPPS	105	40	68	0
	Slope Cut	OSPPS	105	40	68	0
	Reinstate Oi Sen Path	OSPPS	105	40	68	0
	Temporary Cofferdam					
	Between OB2 and OB2A					
	Temporary Retaining Wall	C6a	104	350	49	0
	North of OB2A					
	Sheet Piled Wall	C6b	108	314	53	0
	At Temporary OB2A					
	Sheet Piled Wall	C6c	108	216	56	0
	Excavation					
	Between OB2 and OB2A					
	Excavation & Shoring	C6a	102	350	46	0
	North of OB2A					
	Excavation & Shoring (existing culvert)	C6b	102	314	47	0
	At Temporary OB2A					
	Excavation & Shoring (existing culvert)	C6c	102	216	50	0
	Structure Works					
	Between OB2 and OB2A					
	Concrete Structures	C6a	108	350	52	0
	North of OB2A					
	Concrete Structures	C6b	105	314	50	0
	At Temporary OB2A					
	Concrete Structures	C6c	105	216	54	0
	Backfilling					
	OB2 to Temporary OB2A					
	Backfill	C6	105	216	53	0
Homantin Siding	***Homantin Siding***					
	Loco Siding @HKPolyU Building					
	Removal of Existing Tracks	ETR	102	75	59	0
	Decking Across Culvert	CUV	99	327	44	0
	Office / Store construction	OFF	100	439	42	0
	EVA construction	EVA	100	164	51	0
	Track Laying to HKPolyU	NTL	102	170	52	0

Construction Activity	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2016 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2017 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	-5	-4	-3	-2	-1	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	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	77	78	79
Cofferdam Construction																																																																																				
Excavation & Shoring																																																																																				
Concrete Structures SCL (MKK - HUH)																																																																																				
Backfill																																																																																				
Temporary Cofferdam (Chatham Road North (OB2) to Slip Road (OB2A))																																																																																				
Excavation & Shoring (Chatham Road North (OB2) to Slip Road (OB2A))																																																																																				
Concrete Structures SCL (MKK - HUH) (Chatham Road North (OB2) to Slip Road (OB2A))																																																																																				
Backfill (Chatham Road North (OB2) to Slip Road (OB2A))																																																																																				
Temporary Cofferdam (Existing CLP Substation)																													51	51	51	51	51	51																																																				
Construct Temporary Working Platform (GL G-J)																									36																																																								
Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL G-J)																										55																																																							
Construct Temporary Working Platform (GL E-G)																											38																																																					
Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL E-G)																												57																																																					
Construct Temporary Working Platform (GL C-E)																													41																																																				
Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL C-E)																														60																																																				
Construct Temporary Working Platform (GL A-C)																															43																																																				
Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL A-C)																																62																																																				
Construct Temporary Footbridge Structure and Finishes (GL A-J)																															61	61	61																																																				
Install Mini Piles (Pier K)																													52																																																				
Construct Pile Cap (Pier K)																														48																																																				
Construct Truss Structure (Pier K)																															50																																																			
Install Mini Piles (Pier L)																														51																																																				
Construct Pile Cap (Pier L)																															47																																																				
Construct Truss Structure (Pier L)																																49																																																			
Install Mini Piles (Pier M)																															50																																																				
Construct Pile Cap (Pier M)																																46																																																				
Construct Truss Structure (Pier M)																																	48																																																				
Install Mini Piles (Pier N)																																49																																																				
Construct Pile Cap (Pier N)																																	45																																																				
Construct Truss Structure (Pier N)																																		47																																																				
Install Mini Piles (Pier P)																																	47																																																				
Construct Pile Cap (Pier P)																																		44																																																				
Construct Truss Structure (Pier P)																																			46																																																				
Construct Temporary Footbridge Structure and Finishes (GL J-O)																																		54	54	54																																																		
Construct Pile Cap (GL O-R)																																		44	44																																																		
Construct Truss Structure (GL O-R)																																			49	49																																																			
Construct Temporary Footbridge Structure and Finishes (GL O-R)																																			44	44																																																				
Complete Footpath and Finishes (GL R-T)																																											41	41																																												
Site Clearance and Hoarding and Utility diversion (Chatham Road North Slip Road Overbridge (OB2A))																																																																																					
Foundations for Temporary OB2A (Piling & Pier)																																																																																					
Deck Construction for Temporary OB2A																																																																																					
Demolish Deck of Existing OB2A																																																																																					
Construction of New OB2A Pile & Pile Cap																																																																																					
Construction of New OB2A Abutment & Bridge Deck																																																																																					
OB2A Reinstatement																																																																																									
Temporary OB2A Removal																																																																																									
Site Clearance and Hoarding and Utility diversion (OB2A Pedestrian Subway)																																																																																					
Demolish Existing Box Structure of OB2A Pedestrian Subway																																																																																					
OB2A Pedestrian Subway Reinstatement																																																																																									
Pedestrian Diversion Works																																		69	69	69	69	69	69	69	69	69	69																																																										
Relocate CLP cable																																											70	70	70	70																																																					
Soil Nailing																																											64	64	64	64	64																																																									
Retaining wall																																																	68	68	68	68	68	68																																																			
Slope Cut																																																							68	68	68	68																																								
Reinstate Oi Sen Path																																																																																									
Temporary Retaining Wall (Between OB2 and OB2A)																																																																																									
Sheet Piled Wall (North of OB2A)																																																																																									
Sheet Piled Wall (At Temporary OB2A)																																																						56	56	56																																							
Excavation & Shoring (Between OB2 and OB2A)																																																																																									
Excavation & Shoring (existing culvert) (North of OB2A)																																																																																									
Excavation & Shoring (existing culvert) (At Temporary OB2A)																																																																																									
Concrete Structures (Between OB2 and OB2A)																																																																																									
Concrete Structures (North of OB2A)																																																																																									
Concrete Structures (At Temporary OB2A)																																																																																									
OB2 to Temporary OB2A																																																																																									
Backfill																																																																																									
Removal of Existing Tracks (Homantin Siding)									59	59																																																																									
Decking Across Culvert																																																																																									
Office / Store construction																																																																																									
EVA construction															51	51	51																																																																						
Track Laying to HKPolyU															52	52																																																																									

Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: OM1 - Shun Man House, Oi Man Estate

Scenario: Mitigated

Package	Construction Activity	Work [1] Site No.	SWL	Dist [2] (m)	SPL [3]	Shielding Effect
New EVA	***New EVA***					
	1112 EVA Construction (subarea 1)	EVA16	106	1155	40	0
	1112 EVA Construction (subarea 2)	EVA17	106	1090	40	-10
	1112 EVA Construction (subarea 3)	EVA18	106	781	43	0
	1111 EVA at NAT Construction (subarea 1)	EVA19	106	758	44	0
	1111 EVA at NAT Construction (subarea 2)	EVA20	106	731	44	0
	1111 EVA at NAT Construction (subarea 3)	EVA21	106	706	45	0
	1111 EVA at NAT Construction (subarea 4)	EVA22	106	679	45	0
	1111 EVA at NAT Construction (subarea 5)	EVA23	106	652	45	0
	1111 EVA at NAT Construction (subarea 6)	EVA24	106	628	46	0
	1111 EVA at NAT Construction (subarea 7)	EVA25	106	608	46	0
	1111 EVA at NAT Construction (subarea 8)	EVA26	106	590	46	0
	1111 EVA at NAT Construction (subarea 9)	EVA27	106	575	46	0
	1111 EVA at NAT Construction (subarea 10)	EVA28	106	541	47	0
	1111 EVA at NAT Construction (subarea 11)	EVA29	106	515	47	0
	1111 EVA at NAT Construction (subarea 12)	EVA30	106	502	47	0
Hung Hom Freight Pier	***Hung Hom Freight Pier***					
	Barging Activities					
	At the Freight Pier					
	Loading Activities	FP1	111	1383	43	0
	At Tip of the Freight Pier					
	Loading Activities	FP2	111	1466	42	0
	Trucks Travelling					
	Travelling to Barging Points by Haul Roads					
	Trucks Travelling to the Freight Pier by haul road (segment 1) [4]	HR1-1	70	-		0
	Trucks Travelling to the Freight Pier by haul road (segment 2) [4]	HR1-2	71	-		0
	Trucks Travelling away from the Freight Pier by haul road [4]	HR2	75	-		0
	Trucks at Buffer Zone During Peak Periods					
	Trucks Travelling at Buffer Zone [4]	BZL1	69	-		0
	[4] Calculation of total SWL for Haul Road is based on BS 5228: Part 1: 2009 (Equation F.6)					
Concurrent Work from SCL (HUH - ADM)						
15 Hung Hom SAT	**Demolish Existing Facilities**					
	Demolition of Freight Buidling	803	121	1202	55	0
12 Hung Hom Landfall	**Hung Hom Landfall**					
	Cofferdam Wall Construction and Shear Pining	801	117	1239	50	0
	Soft Ground Excavation	801	117	1239	51	0
	Excavation Work	801	121	1239	54	0
	Tunnel Box Construction	801	115	1239	48	0
	E&M Installation	801	114	1239	47	0
	Cofferdam Wall Removal	801	119	1239	52	0
	Backfilling and Reinstatement	801	116	1239	49	0
	Hung Hom Freight Pier					
	Demolition of Existing Tip of Freight Pier	804	116	1465	48	0
	Piling Construction	804	118	1465	50	0
	Concrete Deck Construction and Marine Furniture	804	115	1465	47	0
13 NOV	**North Ventilation Building, Plant Rooms and Emergency Access (NOV)**					
	Site Clearance, Fencing & Hoarding	802	118	1187	52	0
	Excavate Soft Material (+4.0mPD to -17.5mPD)	802	120	1187	54	0
	Construct North Flood Gate Building	802	114	1187	47	0

	2012												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	-5	-4	-3	-2	-1	1	2	3	4	5	6	7	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	59	59	-	-	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	59	59	-	-	

	2013												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	8	9	10	11	12	13	14	15	16	17	18	19	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	-	-	55	55	51	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	-	-	55	55	51	-	-	-	-	-	-	-	

	2014												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	20	21	22	23	24	25	26	27	28	29	30	31	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	36	55	38	57	55	61	62	65	62	69	69	69	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	36	55	38	57	55	61	62	65	62	69	69	69	

	2015												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	32	33	34	35	36	37	38	39	40	41	42	43	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	69	69	69	69	69	69	69	71	71	71	71	64	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	69	69	69	69	69	69	69	71	71	71	71	64	

	2016												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	44	45	46	47	48	49	50	51	52	53	54	55	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	68	68	68	68	68	68	68	68	68	68	-	-	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	54	54	50	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	68	68	68	68	68	68	68	68	68	68	-	-	

	2017												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	56	57	58	59	60	61	62	63	64	65	66	67	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	68	68	68	68	68	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	-	-	-	-	-	-	-	68	68	68	68	68	

	2018												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	68	69	70	71	72	73	74	75	76	77	78	79	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	54	54	54	53	53	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	54	54	54	53	53	-	-	-	-	-	-	-	

Remarks:
[1] The Works Area with length to width ratio exceeding 5 : 1 is divided into Subareas.
[2] Noise source at more than 300m from the sensitive receiver are not considered in the noise assessment due to large distance attenuation effect.
[3] For the calculation of sound pressure levels (SPL), the PMEs are assumed to be placed at the notional source position according to the "Technical Memorandum on Noise from Construction Work other than Percussive Piling" by EPD.

Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: OM4a - Carmel Secondary School (South Blk)

Scenario: Mitigated

Package	Construction Activity	Work [1] Site No.	SWL	Dist [2] (m)	SPL [3]	Shielding Effect
Hung Hom Station, SAT & Related Work	***Hung Hom Station Sub-Location Area***					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Project Office Construction	PSO	104	1183	38	0
	Hoarding Erection	HUH1	112	650	50	0
	Pre-drilling	HUH1	90	650	29	0
	Dwall Plants Setting up	HUH1	114	650	53	0
	A&A/ Modification Works					
	Concourse Level HUH					
	Stage 1 - Re-construct M/F, ABWF & BS	HUH2	123	713	61	0
	Stage 2 - Re-construct M/F, ABWF & BS	HUH2	123	713	61	0
	Area H1					
	Modification/ Enabling Works/ Utilities Diversions					
	Podium to NOV					
	Cooling mains diversion	H1	115	1002	50	0
	Dia 1650 Sewer diversion (SCL (MKK - HUH) part)	H1	118	1002	53	0
	Tentative CLP cable tunnels strengthening	H1	111	1002	46	0
	IMC Building & Carpark areas					
	IMC Hoarding & Catch Fan Erection	IMC	114	1018	49	0
	IMC Demolition and site clearance	IMC	123	1018	58	0
	Dia 1650 Sewer diversion	IMC	115	1018	50	0
	Modification to Existing EVA structures	HWPR	119	981	54	0
	Temporary Cofferdam					
	Podium to NOV					
	Dwall construction (SCL (MKK - HUH)) for sewer diversion	H1	120	1002	55	0
	Dwall construction (SCL (MKK - HUH)) remaining	H1	120	1002	55	0
	IMC Building & Carpark areas					
	Temporary Cofferdam after demolition	IMC	118	1018	52	0
	Excavation					
	Podium to NOV					
	Excavation & Strutting to SCL (MKK - HUH) roof	H1	114	1002	49	0
	Excavation & Strutting to SCL (MKK - HUH) base	H1	124	1002	59	0
	IMC Building & Carpark areas					
	Pump test, Excavation & Strutting	IMC	82	1018	17	0
	Structure Works					
	Podium to NOV					
	Concrete Structure SCL (MKK - HUH) roof	H1	120	1002	55	0
	Concrete Support to CLP Tunnel	H1	118	1002	53	0
	Concrete Structure SCL (MKK - HUH) roof	H1	124	1002	59	0
	Waterfront EVA structure (SCL (MKK - HUH))	H1	118	1002	53	0
	IMC Building & Carpark areas					
	Cooling Tower Raft	CT	115	1018	50	0
	Cooling Tower Ground Slab	CT	115	1018	50	0
	Cooling Tower wall & roof	CT	115	1018	50	0
	Waterfront EVA structure (SCL (TAW - HUH))	IMC	118	1018	52	0
	Area H2					
	Modification/ Enabling Works/ Utilities Diversions					
	Podium to Coliseum					
	Modification of Traversa	H2	116	956	52	0
	Utilities Diversion/ Services relocate (GL 0 - GL 7)	H2	124	956	59	0
	Temporary Cofferdam					
	Podium to Coliseum					
	Ground Treatment to GL 1 to GL 7	H2	94	956	29	0
	Dwall & Barrette GL 0 to GL 7	H2	119	956	54	0
	Pump test GL 0 to GL 7	H2	82	956	17	0
	Underpinning beam & columns	H2	114	956	49	0
	Demolish existing columns	H2	122	956	58	0
	Excavation					
	Podium to Coliseum					
	Excavation & Strutting GL 0 to GL 7	H2	121	956	57	0
	Final Excavation & Strutting to NSL base Gl 0 to GL 7	H2	121	956	56	0
	Structure Works					
	Podium to Coliseum					
	SCL (TAW - HUH) Base GL 0 to GL 7	H2	116	956	51	0
	SCL (MKK - HUH) Slab & props to existing foundation GL 0 to GL 7	H2	116	956	51	0
	SCL (MKK - HUH) Base & Wall GL 0 to GL 7	H2	122	956	58	0
	SCL (TAW - HUH) & other Structures GL 0 to GL 7	H2	116	956	51	0
	Vent Shaft Structures GL 0	H2	117	956	52	0
	Area H3					
	Modification/ Enabling Works/ Utilities Diversions					
	Coliseum Area					
	Utilities Diversion/ Services relocate (GL 7 - GL 15)	H3	119	896	55	0
	Temporary Cofferdam					
	Coliseum Area					
	Dwall GL 7 to GL 15	H3	119	896	55	0
	Excavation					
	Coliseum Area					
	Pump test GL 7 to GL 15	H3	82	896	18	0
	Excavation to SCL (TAW - HUH) slab Gl 7 to GL 15	H3	124	896	60	0
	Excavation & Strutting to intermediate slab GL 7 to GL 15	H3	124	896	60	0
	Excavation & Strutting to SCL (MKK - HUH) base Gl 7 to GL 15	H3	124	896	60	0
	Structure Works					
	Podium to Coliseum					
	SCL (TAW - HUH) Track Slab & Structures GL 7 to GL 15	H3	116	896	52	0
	SCL (MKK - HUH) Structures Intermediate Slab & props GL 7 to GL 15	H3	116	896	52	0
	SCL (MKK - HUH) Structure Base & Wall GL 7 to GL 15	H3	116	896	52	0
	SCL (TAW - HUH) Structures Wall & Roof GL 7 to GL 15	H3	116	896	52	0
	SCL (TAW - HUH) & other Structures GL 7 to GL 15	H3	116	896	52	0
	Area H4					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Utilities Diversion/ Services relocate (GL 15 - GL 28)	H4	119	814	55	0
	Temporary Cofferdam					
	Hung Hom Station					
	Underpinning GL K	H4	119	814	56	0
	Dwall GL 15 to GL 31 / GL N	H4	118	814	55	0
	Dwall GL 15 to GL 31 / GL K1	H4	118	814	55	0
	Excavation					
	Hung Hom Station					
	Pump test GL 15 to GL 28	H4	85	814	22	0
	Excavation & Strutting 1st Layer GL 15 to GL 28	H4	124	814	60	0
	Excavation & Strutting GL 15 to GL 28	H4	123	814	60	0
	Excavation & Strutting to SCL (MKK - HUH) base Gl 7 to GL 15	H4	124	814	61	0
	Structure Works					
	Hung Hom Station					
	SCL (TAW - HUH) Track Slab GL 15 to GL 28	H4	116	814	53	0
	Install Temporary Steel Tower Column GL 15 to GL 22	H4	114	814	51	0
	Demolish existing Column & Pier Cap GL 15 to GL 22	H4	117	814	54	0
	SCL (MKK - HUH) Base Structure GL 15 to GL 28	H4	116	814	53	0
	SCL (TAW - HUH) & other Structures GL 15 to GL 28	H4	121	814	58	0
	SCL (MKK - HUH) Internal Structures GL 15 to GL 28	H4	119	814	56	0

2012												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
-5	-4	-3	-2	-1	1	2	3	4	5	6	7	

2013												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
8	9	10	11	12	13	14	15	16	17	18	19	

2014												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
20	21	22	23	24	25	26	27	28	29	30	31	

2015												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
32	33	34	35	36	37	38	39	40	41	42	43	

2016												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
44	45	46	47	48	49	50	51	52	53	54	55	

2017												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
56	57	58	59	60	61	62	63	64	65	66	67	

2018												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
68	69	70	71	72	73	74	75	76	77	78	79	

Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: OM4a - Carmel Secondary School (South Blk)

Scenario: Mitigated

Package	Construction Activity	Work [1] Site No.	SWL	Dist [2] (m)	SPL [3]	Shielding Effect
	Area H5					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Utilities Diversion/ Services relocate (GL 28 - GL 38)	H5	119	724	57	0
	Temporary Storm Drain@ 1875 Diversion (GL 31)	H5	114	724	52	0
	Redivert Storm Drain@ 1875 Diversion (GL 32)	H5	125	724	63	0
	Temporary Cofferdam					
	Hung Hom Station					
	Underpinning GL K & L	H5	119	724	56	0
	Dwall GL 31 to GL 38 / GL K1	H5	118	724	56	0
	Dwall GL 31 to GL 38 / GL N	H5	118	724	56	0
	Excavation					
	Hung Hom Station					
	Pump test GL 28 to GL 38	H5	85	724	23	0
	Excavation & Strutting 1st Layer GL 28 to GL 38	H5	124	724	61	0
	Excavation & Strutting GL 28 to GL 38	H5	124	724	62	0
	Structure Works					
	Hung Hom Station					
	SCL (TAW - HUH) Track Slab GL 28 to GL 38	H5	116	724	54	0
	SCL (MKK - HUH) Base Structure GL 28 to GL 38	H5	116	724	54	0
	SCL (MKK - HUH) Internal Structures GL 28 to GL 38	H5	116	724	54	0
	Underpinning Columns to Podium Soffit GL 28 to GL 38	H5	114	724	52	0
	SCL (TAW - HUH) & other Structures GL 28 to GL 38	H5	121	724	59	0
	Area H6					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Utilities Diversion/ Services relocate (GL 38 - GL 48)	H6	119	650	58	0
	Temporary Cofferdam					
	Hung Hom Station					
	Underpinning GL K & L	H6	119	650	57	0
	Underpinning Mid-level walkway	H6	114	650	53	0
	Dwall GL 38 to GL 48 / Interface / GL N	H6	118	650	57	0
	Dwall GL 38 to GL 48 / Interface / GL K1	H6	118	650	57	0
	Excavation					
	Hung Hom Station					
	Pump test GL 38 to GL 48 / Interface	H6	85	650	24	0
	Excavation & Strutting 1st Layer GL 38 to GL 48	H6	121	650	60	0
	Excavation & Strutting GL 38 to GL 48 / Interface	H6	121	650	60	0
	Structure Works					
	Hung Hom Station					
	SCL (TAW - HUH) Track Slab GL 38 to GL 48 / Interface	H6	123	650	62	0
	SCL (MKK - HUH) Base Structure GL 38 to GL 48	H6	116	650	55	0
	SCL (MKK - HUH) Internal Structures GL 38 to GL 48	H6	116	650	55	0
	Underpinning Columns to Podium Soffit GL 38 to GL 48	H6	114	650	53	0
	SCL (TAW - HUH) & other Structures GL 38 to GL 48	H6	121	650	60	0
NAT & Related Work	***North Approach Tunnel Sub-Location Area***					
	Reprovisioning Facilities					
	Reprovisioned at Hung Hom Station Area					
	Building Works for Intercity Train Crew Facilities	ITCF	112	728	50	0
	Building Works for Signal Equipment Room	SER	110	595	50	0
	Building Works for Telecom Equipment Room	TER	110	946	46	0
	Building Works for S&C Depot	S&C	110	891	46	0
	Area C1					
	Demolish Existing Facilities					
	Demolish Existing Loco Running Shed	LRS	109	609	48	0
	Demolish Existing Ways & Works Workshop	W&W	109	553	49	0
	Modification/ Enabling Works/ Utilities Diversions					
	Cheung Wan Road Viaduct					
	Site Clearance and Hoarding and Utility diversion	NCWR	110	547	50	0
	Foundations	NCWR	113	547	53	0
	Construction of Substructure and Superstructure for New Diversion Bridge					
	Stage 1	NCWR	106	547	46	0
	Stage 2	NCWR	106	547	46	0
	Demolish of Existing Viaduct	ECWR	114	567	54	0
	DSD Culvert Diversion					
	Construct New Box Culvert - Loco Shed area	BC1	110	603	49	0
	Construct New Box Culvert - Ways & Works Workshop area	BC3	110	539	50	0
	Construct New Box Culvert - above SCL (MKK - HUH) Tunnels	BC2	110	589	49	0
	Temporary Cofferdam					
	Podium to Existing Culverts					
	Cofferdam Construction	C1a	106	574	46	0
	At Existing Culverts					
	Cofferdam Construction (existing culvert)	C1b	106	532	47	0
	Excavation					
	Podium to Existing Culverts					
	Excavation & Shoring	C1a	102	574	42	0
	At Existing Culverts					
	Excavation & Shoring (existing culvert)	C1b	102	532	43	0
	Structure Works					
	Podium to Existing Culverts					
	Concrete Structures SCL (MKK - HUH)	C1a	108	574	48	0
	Concrete Structures SCL (TAW - HUH)	C1a	106	574	46	0
	At Existing Culverts					
	Concrete Structures SCL (MKK - HUH) (existing culvert)	C1b	108	532	49	0
	Concrete Structures SCL (TAW - HUH) (existing culvert)	C1b	106	532	47	0
	Backfilling					
	Backfill	C1	105	532	46	0
	Area C2					
	Demolish Existing Facilities					
	Demolish Existing STA Building	STA	105	446	47	0
	Temporary Cofferdam					
	Hung Hom Bypass Pier C2/5					
	Install Diaphragm Wall	PierC2/5	101	409	44	0
	Underpinning foundation	PierC2/5	101	409	44	0
	Existing Culverts to STA Building					
	Cofferdam Construction	C2	106	340	51	0
	Excavation					
	Existing Culverts to STA Building					
	Excavation & Shoring	C2	102	340	47	0
	Structure Works					
	Existing Culverts to STA Building					
	Concrete Structures SCL (MKK - HUH)	C2	108	340	53	0
	Concrete Structures SCL (TAW - HUH)	C2	109	340	53	0

Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: OM4a - Carmel Secondary School (South Blk)

Scenario: Mitigated

| Package | Construction Activity | Work [1] Site No. | SWL | Dist [2] (m) | SPL [3] | Shielding Effect | 2012 Jan -5 | Feb -4 | Mar -3 | Apr -2 | May -1 | Jun 1 | Jul 2 | Aug 3 | Sep 4 | Oct 5 | Nov 6 | Dec 7 | 2013 Jan 8 | Feb 9 | Mar 10 | Apr 11 | May 12 | Jun 13 | Jul 14 | Aug 15 | Sep 16 | Oct 17 | Nov 18 | Dec 19 | 2014 Jan 20 | Feb 21 | Mar 22 | Apr 23 | May 24 | Jun 25 | Jul 26 | Aug 27 | Sep 28 | Oct 29 | Nov 30 | Dec 31 | 2015 Jan 32 | Feb 33 | Mar 34 | Apr 35 | May 36 | Jun 37 | Jul 38 | Aug 39 | Sep 40 | Oct 41 | Nov 42 | Dec 43 | 2016 Jan 44 | Feb 45 | Mar 46 | Apr 47 | May 48 | Jun 49 | Jul 50 | Aug 51 | Sep 52 | Oct 53 | Nov 54 | Dec 55 | 2017 Jan 56 | Feb 57 | Mar 58 | Apr 59 | May 60 | Jun 61 | Jul 62 | Aug 63 | Sep 64 | Oct 65 | Nov 66 | Dec 67 | 2018 Jan 68 | Feb 69 | Mar 70 | Apr 71 | May 72 | Jun 73 | Jul 74 | Aug 75 | Sep 76 | Oct 77 | Nov 78 | Dec 79 |
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Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: OM4a - Carmel Secondary School (South Blk)

Scenario: Mitigated

Package	Construction Activity	Work [1] Site No.	SWL	Dist [2] (m)	SPL [3]	Shielding Effect
New EVA	***New EVA***					
	1112 EVA Construction (subarea 1)	EVA16	106	1010	41	0
	1112 EVA Construction (subarea 2)	EVA17	106	941	42	-10
	1112 EVA Construction (subarea 3)	EVA18	106	618	45	0
	1111 EVA at NAT Construction (subarea 1)	EVA19	106	593	46	0
	1111 EVA at NAT Construction (subarea 2)	EVA20	106	565	46	0
	1111 EVA at NAT Construction (subarea 3)	EVA21	106	538	47	0
	1111 EVA at NAT Construction (subarea 4)	EVA22	106	509	47	0
	1111 EVA at NAT Construction (subarea 5)	EVA23	106	481	48	0
	1111 EVA at NAT Construction (subarea 6)	EVA24	106	455	48	0
	1111 EVA at NAT Construction (subarea 7)	EVA25	106	435	49	0
	1111 EVA at NAT Construction (subarea 8)	EVA26	106	416	49	0
	1111 EVA at NAT Construction (subarea 9)	EVA27	106	400	49	0
	1111 EVA at NAT Construction (subarea 10)	EVA28	106	364	50	0
	1111 EVA at NAT Construction (subarea 11)	EVA29	106	336	51	0
	1111 EVA at NAT Construction (subarea 12)	EVA30	106	322	51	0
Hung Hom Freight Pier	***Hung Hom Freight Pier***					
	Barging Activities					
	At the Freight Pier					
	Loading Activities	FP1	111	1231	44	0
	At Tip of the Freight Pier					
	Loading Activities	FP2	111	1318	43	0
	Trucks Travelling					
	Travelling to Barging Points by Haul Roads					
	Trucks Travelling to the Freight Pier by haul road (segment 1) [4]	HR1-1	70	-		0
	Trucks Travelling to the Freight Pier by haul road (segment 2) [4]	HR1-2	71	-		0
	Trucks Travelling away from the Freight Pier by haul road [4]	HR2	75	-		0
	Trucks at Buffer Zone During Peak Periods					
	Trucks Travelling at Buffer Zone [4]	BZL1	69	-		0
	[4] Calculation of total SWL for Haul Road is based on BS 5228: Part 1: 2009 (Equation F.6)					
Concurrent Work from SCL (HUH - ADM)						
15 Hung Hom SAT	**Demolish Existing Facilities**					
	Demolition of Freight Buidling	803	121	1054	56	0
12 Hung Hom Landfall	**Hung Hom Landfall**					
	Cofferdam Wall Construction and Shear Pining	801	117	1093	51	0
	Soft Ground Excavation	801	117	1093	52	0
	Excavation Work	801	121	1093	55	0
	Tunnel Box Construction	801	115	1093	50	0
	E&M Installation	801	114	1093	48	0
	Cofferdam Wall Removal	801	119	1093	53	0
	Backfilling and Reinstatement	801	116	1093	51	0
	Hung Hom Freight Pier					
	Demolition of Existing Tip of Freight Pier	804	116	1314	49	0
	Piling Construction	804	118	1314	51	0
	Concrete Deck Construction and Marine Furniture	804	115	1314	47	0
13 NOV	**North Ventilation Building, Plant Rooms and Emergency Access (NOV)**					
	Site Clearance, Fencing & Hoarding	802	118	1039	53	0
	Excavate Soft Material (+4.0mPD to -17.5mPD)	802	120	1039	55	0
	Construct North Flood Gate Building	802	114	1039	48	0

	2012												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	-5	-4	-3	-2	-1	1	2	3	4	5	6	7	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	57	57	48	48	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	63	62	62	62	62	62	64	62	62	60	60	60	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	63	62	62	62	62	62	64	62	63	62	60	60	

	2013												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	8	9	10	11	12	13	14	15	16	17	18	19	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	-	-	59	59	55	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	60	60	60	56	56	56	56	56	64	64	64	61	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	60	60	62	60	59	56	56	56	64	64	64	61	

	2014												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	20	21	22	23	24	25	26	27	28	29	30	31	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	36	60	59	60	62	63	64	64	63	65	65	65	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	64	66	64	64	64	67	66	68	67	69	67	67	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	64	67	65	66	66	68	68	69	68	70	69	69	

	2015												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	32	33	34	35	36	37	38	39	40	41	42	43	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	63	63	63	62	62	63	63	63	64	61	61	56	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	64	63	63	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	67	66	66	62	62	63	63	63	64	61	61	56	

	2016												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	44	45	46	47	48	49	50	51	52	53	54	55	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	62	62	63	61	61	61	62	62	64	64	63	64	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	62	62	63	61	61	61	62	62	64	64	63	64	

	2017												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	56	57	58	59	60	61	62	63	64	65	66	67	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	64	61	61	61	61	61	57	65	65	65	57	57	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	64	63	63	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	67	65	65	61	61	61	57	65	65	65	57	57	

	2018												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	68	69	70	71	72	73	74	75	76	77	78	79	
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	53	53	53	54	54	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	
Overall Noise Level (Cumulative), Leq (30min), dB(A)	53	53	53	54	54	-	-	-	-	-	-	-	

Remarks:
[1] The Works Area with length to width ratio exceeding 5 : 1 is divided into Subareas.
[2] Noise source at more than 300m from the sensitive receiver are not considered in the noise assessment due to large distance attenuation effect.
[3] For the calculation of sound pressure levels (SPL), the PMEs are assumed to be placed at the notional source position according to the "Technical Memorandum on Noise from Construction Work other than Percussive Piling" by EPD.

Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: HH2 - Wing Fung Building

Scenario: Mitigated

Package	Construction Activity	Work [1] Site No.	SWL	Dist [2] (m)	SPL [3]	Shielding Effect
Hung Hom Station, SAT & Related Work	***Hung Hom Station Sub-Location Area***					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Project Office Construction	PSO	104	907	40	0
	Hoarding Erection	HUH1	112	381	55	0
	Pre-drilling	HUH1	90	381	33	0
	Dwall Plants Setting up	HUH1	114	381	57	0
	A&A/ Modification Works					
	Concourse Level HUH					
	Stage 1 - Re-construct M/F, ABWF & BS	HUH2	123	468	64	0
	Stage 2 - Re-construct M/F, ABWF & BS	HUH2	123	468	64	0
	Area H1					
	Modification/ Enabling Works/ Utilities Diversions					
	Podium to NOV					
	Cooling mains diversion	H1	115	757	53	0
	Dia 1650 Sewer diversion (SCL (MKK - HUH) part)	H1	118	757	55	0
	Tentative CLP cable tunnels strengthening	H1	111	757	48	0
	IMC Building & Carpark areas					
	IMC Hoarding & Catch Fan Erection	IMC	114	780	51	0
	IMC Demolition and site clearance	IMC	123	780	60	0
	Dia 1650 Sewer diversion	IMC	115	780	53	0
	Modification to Existing EVA structures	HWPR	119	748	56	0
	Temporary Cofferdam					
	Podium to NOV					
	Dwall construction (SCL (MKK - HUH)) for sewer diversion	H1	120	757	58	0
	Dwall construction (SCL (MKK - HUH)) remaining	H1	120	757	57	0
	IMC Building & Carpark areas					
	Temporary Cofferdam after demolition	IMC	118	780	55	0
	Excavation					
	Podium to NOV					
	Excavation & Strutting to SCL (MKK - HUH) roof	H1	114	757	52	0
	Excavation & Strutting to SCL (MKK - HUH) base	H1	124	757	62	0
	IMC Building & Carpark areas					
	Pump test, Excavation & Strutting	IMC	82	780	19	0
	Structure Works					
	Podium to NOV					
	Concrete Structure SCL (MKK - HUH) roof	H1	120	757	57	0
	Concrete Support to CLP Tunnel	H1	118	757	55	0
	Concrete Structure SCL (MKK - HUH) roof	H1	124	757	62	0
	Waterfront EVA structure (SCL (MKK - HUH))	H1	118	757	55	0
	IMC Building & Carpark areas					
	Cooling Tower Raft	CT	115	785	52	0
	Cooling Tower Ground Slab	CT	115	785	52	0
	Cooling Tower wall & roof	CT	115	785	52	0
	Waterfront EVA structure (SCL (TAW - HUH))	IMC	118	780	55	0
	Area H2					
	Modification/ Enabling Works/ Utilities Diversions					
	Podium to Coliseum					
	Modification of Traversa	H2	116	709	54	0
	Utilities Diversion/ Services relocate (GL 0 - GL 7)	H2	124	709	62	0
	Temporary Cofferdam					
	Podium to Coliseum					
	Ground Treatment to GL 1 to GL 7	H2	94	709	32	0
	Dwall & Barrette GL 0 to GL 7	H2	119	709	57	0
	Pump test GL 0 to GL 7	H2	82	709	20	0
	Underpinning beam & columns	H2	114	709	52	0
	Demolish existing columns	H2	122	709	60	0
	Excavation					
	Podium to Coliseum					
	Excavation & Strutting GL 0 to GL 7	H2	121	709	59	0
	Final Excavation & Strutting to NSL base Gl 0 to GL 7	H2	121	709	59	0
	Structure Works					
	Podium to Coliseum					
	SCL (TAW - HUH) Base GL 0 to GL 7	H2	116	709	54	0
	SCL (MKK - HUH) Slab & props to existing foundation GL 0 to GL 7	H2	116	709	54	0
	SCL (MKK - HUH) Base & Wall GL 0 to GL 7	H2	122	709	60	0
	SCL (TAW - HUH) & other Structures GL 0 to GL 7	H2	116	709	54	0
	Vent Shaft Structures GL 0	H2	117	709	55	0
	Area H3					
	Modification/ Enabling Works/ Utilities Diversions					
	Coliseum Area					
	Utilities Diversion/ Services relocate (GL 7 - GL 15)	H3	119	647	58	0
	Temporary Cofferdam					
	Coliseum Area					
	Dwall GL 7 to GL 15	H3	119	647	58	0
	Excavation					
	Coliseum Area					
	Pump test GL 7 to GL 15	H3	82	647	21	0
	Excavation to SCL (TAW - HUH) slab Gl 7 to GL 15	H3	124	647	63	0
	Excavation & Strutting to intermediate slab GL 7 to GL 15	H3	124	647	63	0
	Excavation & Strutting to SCL (MKK - HUH) base Gl 7 to GL 15	H3	124	647	63	0
	Structure Works					
	Podium to Coliseum					
	SCL (TAW - HUH) Track Slab & Structures GL 7 to GL 15	H3	116	647	55	0
	SCL (MKK - HUH) Structures Intermediate Slab & props GL 7 to GL 15	H3	116	647	55	0
	SCL (MKK - HUH) Structure Base & Wall GL 7 to GL 15	H3	116	647	55	0
	SCL (TAW - HUH) Structures Wall & Roof GL 7 to GL 15	H3	116	647	55	0
	SCL (TAW - HUH) & other Structures GL 7 to GL 15	H3	116	647	55	0
	Area H4					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Utilities Diversion/ Services relocate (GL 15 - GL 28)	H4	119	552	59	0
	Temporary Cofferdam					
	Hung Hom Station					
	Underpinning GL K	H4	119	552	60	0
	Dwall GL 15 to GL 31 / GL N	H4	118	552	59	0
	Dwall GL 15 to GL 31 / GL K1	H4	118	552	59	0
	Excavation					
	Hung Hom Station					
	Pump test GL 15 to GL 28	H4	85	552	25	0
	Excavation & Strutting 1st Layer GL 15 to GL 28	H4	124	552	64	0
	Excavation & Strutting GL 15 to GL 28	H4	123	552	64	0
	Excavation & Strutting to SCL (MKK - HUH) base Gl 7 to GL 15	H4	124	552	65	0
	Structure Works					
	Hung Hom Station					
	SCL (TAW - HUH) Track Slab GL 15 to GL 28	H4	116	552	56	0
	Install Temporary Steel Tower Column GL 15 to GL 22	H4	114	552	54	0
	Demolish existing Column & Pier Cap GL 15 to GL 22	H4	117	552	57	0
	SCL (MKK - HUH) Base Structure GL 15 to GL 28	H4	116	552	56	0
	SCL (TAW - HUH) & other Structures GL 15 to GL 28	H4	121	552	61	0
	SCL (MKK - HUH) Internal Structures GL 15 to GL 28	H4	119	552	59	0

2012												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
-5	-4	-3	-2	-1	1	2	3	4	5	6	7	

2013												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
8	9	10	11	12	13	14	15	16	17	18	19	

2014												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
20	21	22	23	24	25	26	27	28	29	30	31	

2015												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
32	33	34	35	36	37	38	39	40	41	42	43	

2016												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
44	45	46	47	48	49	50	51	52	53	54	55	

2017												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
56	57	58	59	60	61	62	63	64	65	66	67	

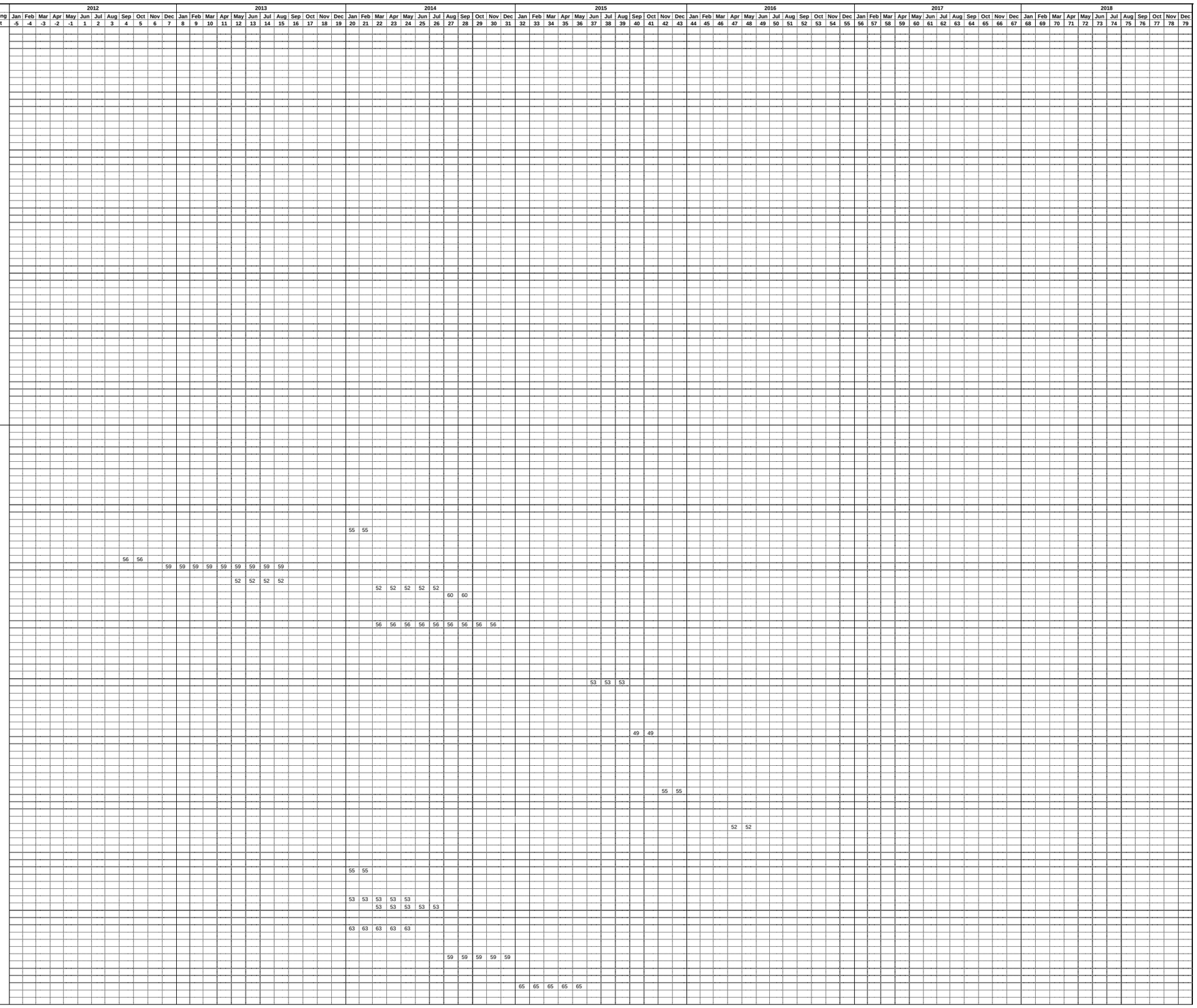
2018												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
68	69	70	71	72	73	74	75	76	77	78	79	

Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: HH2 - Wing Fung Building

Scenario: Mitigated

Package	Construction Activity	Work [1] Site No.	SWL	Dist [2] (m)	SPL [3]	Shielding Effect
	Area H5					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Utilities Diversion/ Services relocate (GL 28 - GL 38)	H5	119	463	61	0
	Temporary Storm Drain@ 1875 Diversion (GL 31)	H5	114	463	55	0
	Redivert Storm Drain@ 1875 Diversion (GL 32)	H5	125	463	67	0
	Temporary Cofferdam					
	Hung Hom Station					
	Underpinning GL K & L	H5	119	463	60	0
	Dwall GL 31 to GL 38 / GL K1	H5	118	463	60	0
	Dwall GL 31 to GL 38 / GL N	H5	118	463	60	0
	Excavation					
	Hung Hom Station					
	Pump test GL 28 to GL 38	H5	85	463	27	0
	Excavation & Strutting 1st Layer GL 28 to GL 38	H5	124	463	65	0
	Excavation & Strutting GL 28 to GL 38	H5	124	463	66	0
	Structure Works					
	Hung Hom Station					
	SCL (TAW - HUH) Track Slab GL 28 to GL 38	H5	116	463	58	0
	SCL (MKK - HUH) Base Structure GL 28 to GL 38	H5	116	463	58	0
	SCL (MKK - HUH) Internal Structures GL 28 to GL 38	H5	116	463	58	0
	Underpinning Columns to Podium Soffit GL 28 to GL 38	H5	114	463	56	0
	SCL (TAW - HUH) & other Structures GL 28 to GL 38	H5	121	463	62	0
	Area H6					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Utilities Diversion/ Services relocate (GL 38 - GL 48)	H6	119	381	63	0
	Temporary Cofferdam					
	Hung Hom Station					
	Underpinning GL K & L	H6	119	381	62	0
	Underpinning Mid-level walkway	H6	114	381	58	0
	Dwall GL 38 to GL 48 / Interface / GL N	H6	118	381	62	0
	Dwall GL 38 to GL 48 / Interface / GL K1	H6	118	381	62	0
	Excavation					
	Hung Hom Station					
	Pump test GL 38 to GL 48 / Interface	H6	85	381	28	0
	Excavation & Strutting 1st Layer GL 38 to GL 48	H6	121	381	64	0
	Excavation & Strutting GL 38 to GL 48 / Interface	H6	121	381	64	0
	Structure Works					
	Hung Hom Station					
	SCL (TAW - HUH) Track Slab GL 38 to GL 48 / Interface	H6	123	381	66	0
	SCL (MKK - HUH) Base Structure GL 38 to GL 48	H6	116	381	60	0
	SCL (MKK - HUH) Internal Structures GL 38 to GL 48	H6	116	381	59	0
	Underpinning Columns to Podium Soffit GL 38 to GL 48	H6	114	381	57	0
	SCL (TAW - HUH) & other Structures GL 38 to GL 48	H6	121	381	64	0
NAT & Related Work	***North Approach Tunnel Sub-Location Area***					
	Reprovisioning Facilities					
	Reprovisioned at Hung Hom Station Area					
	Building Works for Intercity Train Crew Facilities	ITCF	112	500	53	0
	Building Works for Signal Equipment Room	SER	110	362	54	0
	Building Works for Telecom Equipment Room	TER	110	714	48	0
	Building Works for S&C Depot	S&C	110	665	49	0
	Area C1					
	Demolish Existing Facilities					
	Demolish Existing Loco Running Shed	LRS	109	333	53	0
	Demolish Existing Ways & Works Workshop	W&W	109	291	55	0
	Modification/ Enabling Works/ Utilities Diversions					
	Cheung Wan Road Viaduct					
	Site Clearance and Hoarding and Utility diversion	NCWR	110	272	56	0
	Foundations	NCWR	113	272	59	0
	Construction of Substructure and Superstructure for New Diversion Bridge					
	Stage 1	NCWR	106	272	52	0
	Stage 2	NCWR	106	272	52	0
	Demolish of Existing Viaduct	ECWR	114	290	60	0
	DSD Culvert Diversion					
	Construct New Box Culvert - Loco Shed area	BC1	110	325	54	0
	Construct New Box Culvert - Ways & Works Workshop area	BC3	110	277	56	0
	Construct New Box Culvert - above SCL (MKK - HUH) Tunnels	BC2	110	320	54	0
	Temporary Cofferdam					
	Podium to Existing Culverts					
	Cofferdam Construction	C1a	106	303	52	0
	At Existing Culverts					
	Cofferdam Construction (existing culvert)	C1b	106	260	53	0
	Excavation					
	Podium to Existing Culverts					
	Excavation & Shoring	C1a	102	303	48	0
	At Existing Culverts					
	Excavation & Shoring (existing culvert)	C1b	102	260	49	0
	Structure Works					
	Podium to Existing Culverts					
	Concrete Structures SCL (MKK - HUH)	C1a	108	303	54	0
	Concrete Structures SCL (TAW - HUH)	C1a	106	303	52	0
	At Existing Culverts					
	Concrete Structures SCL (MKK - HUH) (existing culvert)	C1b	108	260	55	0
	Concrete Structures SCL (TAW - HUH) (existing culvert)	C1b	106	260	53	0
	Backfilling					
	Backfill	C1	105	260	52	0
	Area C2					
	Demolish Existing Facilities					
	Demolish Existing STA Building	STA	105	170	55	0
	Temporary Cofferdam					
	Hung Hom Bypass Pier C2/5					
	Install Diaphragm Wall	PierC2/5	101	140	53	0
	Underpinning foundation	PierC2/5	101	140	53	0
	Existing Culverts to STA Building					
	Cofferdam Construction	C2	106	79	63	0
	Excavation					
	Existing Culverts to STA Building					
	Excavation & Shoring	C2	102	79	59	0
	Structure Works					
	Existing Culverts to STA Building					
	Concrete Structures SCL (MKK - HUH)	C2	108	79	65	0
	Concrete Structures SCL (TAW - HUH)	C2	109	79	66	0



Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: HH2 - Wing Fung Building

Scenario: Mitigated

| Package | Construction Activity | Work [1] Site No. | SWL | Dist [2] (m) | SPL [3] | Shielding Effect | 2012 Jan -5 | Feb -4 | Mar -3 | Apr -2 | May -1 | Jun 1 | Jul 2 | Aug 3 | Sep 4 | Oct 5 | Nov 6 | Dec 7 | 2013 Jan 8 | Feb 9 | Mar 10 | Apr 11 | May 12 | Jun 13 | Jul 14 | Aug 15 | Sep 16 | Oct 17 | Nov 18 | Dec 19 | 2014 Jan 20 | Feb 21 | Mar 22 | Apr 23 | May 24 | Jun 25 | Jul 26 | Aug 27 | Sep 28 | Oct 29 | Nov 30 | Dec 31 | 2015 Jan 32 | Feb 33 | Mar 34 | Apr 35 | May 36 | Jun 37 | Jul 38 | Aug 39 | Sep 40 | Oct 41 | Nov 42 | Dec 43 | 2016 Jan 44 | Feb 45 | Mar 46 | Apr 47 | May 48 | Jun 49 | Jul 50 | Aug 51 | Sep 52 | Oct 53 | Nov 54 | Dec 55 | 2017 Jan 56 | Feb 57 | Mar 58 | Apr 59 | May 60 | Jun 61 | Jul 62 | Aug 63 | Sep 64 | Oct 65 | Nov 66 | Dec 67 | 2018 Jan 68 | Feb 69 | Mar 70 | Apr 71 | May 72 | Jun 73 | Jul 74 | Aug 75 | Sep 76 | Oct 77 | Nov 78 | Dec 79 |
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Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: HH2 - Wing Fung Building

Scenario: Mitigated

Package	Construction Activity	Work Site No. [1]	SWL	Dist (m) [2]	SPL [3]	Shielding Effect
New EVA	***New EVA***					
	1112 EVA Construction (subarea 1)	EVA16	106	767	43	0
	1112 EVA Construction (subarea 2)	EVA17	106	695	44	-10
	1112 EVA Construction (subarea 3)	EVA18	106	360	50	0
	1111 EVA at NAT Construction (subarea 1)	EVA19	106	332	51	0
	1111 EVA at NAT Construction (subarea 2)	EVA20	106	302	52	0
	1111 EVA at NAT Construction (subarea 3)	EVA21	106	274	53	0
	1111 EVA at NAT Construction (subarea 4)	EVA22	106	243	54	0
	1111 EVA at NAT Construction (subarea 5)	EVA23	106	216	55	0
	1111 EVA at NAT Construction (subarea 6)	EVA24	106	190	56	0
	1111 EVA at NAT Construction (subarea 7)	EVA25	106	169	57	0
	1111 EVA at NAT Construction (subarea 8)	EVA26	106	150	58	0
	1111 EVA at NAT Construction (subarea 9)	EVA27	106	130	59	0
	1111 EVA at NAT Construction (subarea 10)	EVA28	106	96	62	0
	1111 EVA at NAT Construction (subarea 11)	EVA29	106	73	64	0
	1111 EVA at NAT Construction (subarea 12)	EVA30	106	43	69	0
Hung Hom Freight Pier	***Hung Hom Freight Pier***					
	Barging Activities					
	At the Freight Pier					
	Loading Activities	FP1	111	975	46	0
	At Tip of the Freight Pier					
	Loading Activities	FP2	111	1068	45	0
	Trucks Travelling					
	Travelling to Barging Points by Haul Roads					
	Trucks Travelling to the Freight Pier by haul road (segment 1)[4]	HR1-1	70	-		0
	Trucks Travelling to the Freight Pier by haul road (segment 2)[4]	HR1-2	71	-		0
	Trucks Travelling away from the Freight Pier by haul road[4]	HR2	75	-		0
	Trucks at Buffer Zone During Peak Periods					
	Trucks Travelling at Buffer Zone[4]	BZL1	69	-		0
	[4] Calculation of total SWL for Haul Road is based on BS 5228 Part 1: 2009 (Equation F.6)					
Concurrent Work from SCL (HUH - ADM)						
15 Hung Hom SAT	**Demolish Existing Facilities**					
	Demolition of Freight Buidling	803	121	808	58	0
12 Hung Hom Landfall	**Hung Hom Landfall**					
	Cofferdam Wall Construction and Shear Pining	801	117	851	54	0
	Soft Ground Excavation	801	117	851	54	0
	Excavation Work	801	121	851	57	0
	Tunnel Box Construction	801	115	851	52	0
	E&M Installation	801	114	851	50	0
	Cofferdam Wall Removal	801	119	851	55	0
	Backfilling and Reinstatement	801	116	851	53	0
	Hung Hom Freight Pier					
	Demolition of Existing Tip of Freight Pier	804	116	1060	51	0
	Piling Construction	804	118	1060	53	0
	Concrete Deck Construction and Marine Furniture	804	115	1060	49	0
13 NOV	**North Ventilation Building, Plant Rooms and Emergency Access (NOV)**					
	Site Clearance, Fencing & Hoarding	802	118	795	55	0
	Excavate Soft Material (+4.0mPD to -17.5mPD)	802	120	795	57	0
	Construct North Flood Gate Building	802	114	795	51	0

Construction Activity	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	-5	-4	-3	-2	-1	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
New EVA																																				
1112 EVA Construction (subarea 1)																																				
1112 EVA Construction (subarea 2)																																				
1112 EVA Construction (subarea 3)																																				
1111 EVA at NAT Construction (subarea 1)																																				
1111 EVA at NAT Construction (subarea 2)																																				
1111 EVA at NAT Construction (subarea 3)																																				
1111 EVA at NAT Construction (subarea 4)																																				
1111 EVA at NAT Construction (subarea 5)																																				
1111 EVA at NAT Construction (subarea 6)																																				
1111 EVA at NAT Construction (subarea 7)																																				
1111 EVA at NAT Construction (subarea 8)																																				
1111 EVA at NAT Construction (subarea 9)																																				
1111 EVA at NAT Construction (subarea 10)																																				
1111 EVA at NAT Construction (subarea 11)																																				
1111 EVA at NAT Construction (subarea 12)																																				
Hung Hom Freight Pier																																				
Barging Activities																																				
At the Freight Pier																																				
Loading Activities																																				
At Tip of the Freight Pier																																				
Loading Activities																																				
Trucks Travelling																																				
Travelling to Barging Points by Haul Roads																																				
Trucks Travelling to the Freight Pier by haul road (segment 1)[4]																																				
Trucks Travelling to the Freight Pier by haul road (segment 2)[4]																																				
Trucks Travelling away from the Freight Pier by haul road[4]																																				
Trucks at Buffer Zone During Peak Periods																																				
Trucks Travelling at Buffer Zone[4]																																				
Concurrent Work from SCL (HUH - ADM)																																				
15 Hung Hom SAT																																				
Demolish Existing Facilities																																				
Demolition of Freight Buidling																																				
12 Hung Hom Landfall																																				
Hung Hom Landfall																																				
Cofferdam Wall Construction and Shear Pining																																				
Soft Ground Excavation																																				
Excavation Work																																				
Tunnel Box Construction																																				
E&M Installation																																				
Cofferdam Wall Removal																																				
Backfilling and Reinstatement																																				
Hung Hom Freight Pier																																				
Demolition of Existing Tip of Freight Pier																																				
Piling Construction																																				
Concrete Deck Construction and Marine Furniture																																				
13 NOV																																				
North Ventilation Building, Plant Rooms and Emergency Access (NOV)																																				
Site Clearance, Fencing & Hoarding																																				
Excavate Soft Material (+4.0mPD to -17.5mPD)																																				
Construct North Flood Gate Building																																				

Construction Activity	2015 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2016 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2017 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	32	33	34	35	36	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
New EVA																																				
1112 EVA Construction (subarea 1)																																				
1112 EVA Construction (subarea 2)																																				
1112 EVA Construction (subarea 3)																																				
1111 EVA at NAT Construction (subarea 1)																																				
1111 EVA at NAT Construction (subarea 2)																																				
1111 EVA at NAT Construction (subarea 3)																									53	53	53	53								
1111 EVA at NAT Construction (subarea 4)																									54	54	54	54								
1111 EVA at NAT Construction (subarea 5)																									55	55	55	55								
1111 EVA at NAT Construction (subarea 6)																									56	56	56	56								
1111 EVA at NAT Construction (subarea 7)																									57	57	57	57								
1111 EVA at NAT Construction (subarea 8)																									58	58	58	58								
1111 EVA at NAT Construction (subarea 9)																									59	59	59	59								
1111 EVA at NAT Construction (subarea 10)																									62	62	62	62								
1111 EVA at NAT Construction (subarea 11)																									64	64	64	64								
1111 EVA at NAT Construction (subarea 12)																									69	69	69	69								
Hung Hom Freight Pier																																				
Barging Activities																																				
At the Freight Pier																																				
Loading Activities																																				
At Tip of the Freight Pier																																				
Loading Activities																																				
Trucks Travelling																																				
Travelling to Barging Points by Haul Roads																																				
Trucks Travelling to the Freight Pier by haul road (segment 1)[4]																																				
Trucks Travelling to the Freight Pier by haul road (segment 2)[4]																																				
Trucks Travelling away from the Freight Pier by haul road[4]																																				
Trucks at Buffer Zone During Peak Periods																																				
Trucks Travelling at Buffer Zone[4]																																				
Concurrent Work from SCL (HUH - ADM)																																				
15 Hung Hom SAT																																				
Demolish Existing Facilities																																				
Demolition of Freight Buidling																																				
12 Hung Hom Landfall																																				
Hung Hom Landfall																																				
Cofferdam Wall Construction and Shear Pining																																				
Soft Ground Excavation																																				
Excavation Work																																				
Tunnel Box Construction																																				
E&M Installation																																				
Cofferdam Wall Removal																																				
Backfilling and Reinstatement																																				
Hung Hom Freight Pier																																				
Demolition of Existing Tip of Freight Pier																																				
Piling Construction																																				
Concrete Deck Construction and Marine Furniture																																				
13 NOV																																				
North Ventilation Building, Plant Rooms and Emergency Access (NOV)																																				
Site Clearance, Fencing & Hoarding																																				
Excavate Soft Material (+4.0mPD to -17.5mPD)																																				
Construct North Flood Gate Building																																				

Construction Activity	2018 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	68	69	70	71	72	73	74	75	76	77	78	79
New EVA												
1112 EVA Construction (subarea 1)												
1112 EVA Construction (subarea 2)												
1112 EVA Construction (subarea 3)												
1111 EVA at NAT Construction (subarea 1)												
1111 EVA at NAT Construction (subarea 2)												
1111 EVA at NAT Construction (subarea 3)												
1111 EVA at NAT Construction (subarea 4)												
1111 EVA at NAT Construction (subarea 5)												
1111 EVA at NAT Construction (subarea 6)												
1111 EVA at NAT Construction (subarea 7)												
1111 EVA at NAT Construction (subarea 8)												
1111 EVA at NAT Construction (subarea 9)												
1111 EVA at NAT Construction (subarea 10)												
1111 EVA at NAT Construction (subarea 11)												
1111 EVA at NAT Construction (subarea 12)												
Hung Hom Freight Pier												
Barging Activities												
At the Freight Pier												
Loading Activities												
At Tip of the Freight Pier												
Loading Activities												
Trucks Travelling												
Travelling to Barging Points by Haul Roads												
Trucks Travelling to the Freight Pier by haul road (segment 1)[4]												
Trucks Travelling to the Freight Pier by haul road (segment 2)[4]												
Trucks Travelling away from the Freight Pier by haul road[4]												
Trucks at Buffer Zone During Peak Periods												
Trucks Travelling at Buffer Zone[4]												
Concurrent Work from SCL (HUH - ADM)												
15 Hung Hom SAT												
Demolish Existing Facilities												
Demolition of Freight Buidling												
12 Hung Hom Landfall												
Hung Hom Landfall												
Cofferdam Wall Construction and Shear Pining												
Soft Ground Excavation												
Excavation Work												
Tunnel Box Construction												
E&M Installation												
Cofferdam Wall Removal												
Backfilling and Reinstatement												
Hung Hom Freight Pier												
Demolition of Existing Tip of Freight Pier												
Piling Construction												
Concrete Deck Construction and Marine Furniture												
13 NOV												
North Ventilation Building, Plant Rooms and Emergency Access (NOV)												
Site Clearance, Fencing & Hoarding												
Excavate Soft Material (+4.0mPD to -17.5mPD)												
Construct North Flood Gate Building												

	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	57	57	49	59	59	59	60	60	60	60	60	60	-	-	-	-	65	69	70	70	68	65	66	68	70	70	71	71	71
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	59	65	65	67	67	67	60	60	60	66	65	65	65	57	57	57	73	73	62	66	75	75	77	75	76	73	75	75	75
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	66	64	64	64	64	64	67	65	65	64	64	62	63	63	60	60	59	59	59	61	61	61	59	65	66	65	66	65	66	65	66	62	64	62	62	62
Overall Noise Level (Cumulative), Leq (30min), dB(A)	66	64	64	64	64	64	67	65	67	68	68	69	69	69	66	65	65	68	67	67	66	66	62	61	74	75	72	72	76	76	78	76	77	75	77	77

	2015 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2016 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2017 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	71	70	70	66	66	62	62	64	65	62	62	59	59	59	62	58	58	57	61	61	63	63	64	64	72	72	72	72	61	61	57	60	60	60	58	58
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	75	71	72	74	73	74	69	69	68	68	64	62	62	53	53	51	62	62	62	55	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	60	58	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	58	58	-	-	-	-	-	-	-	-	-
Overall Noise Level (Cumulative), Leq (30min), dB(A)	77	74	74	75	74	74	70	70	70	69	66	64	64	60	63	59	64	63	64	62	64	63	64	64	66	63	63	61	61	61	57	60	60	60	58	58

	2018 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	55	55	55	58	58	-	-	-	-	-	-	-
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
Overall Noise Level (Cumulative), Leq (30min), dB(A)	55	55	55	58	58	-	-	-	-	-	-	-

Remarks:
[1] The Works Area with length to width ratio exceeding 5 : 1 is divided into Subareas.
[2] Noise source at more than 300m from the sensitive receiver are not considered in the noise assessment due to large distance attenuation effect.
[3] For the calculation of sound pressure levels (SPL), the PMEs are assumed to be placed at the notional source position according to the "Technical Memorandum on Noise from Construction Work other than Percussive Piling" by EPD.

Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: HH9 - Harbourfront Horizon

Scenario: Mitigated

| Package | Construction Activity | Work Site No. [1] | SWL | Dist (m) [2] | SPL [3] | Shielding Effect | 2012 Jan -5 | Feb -4 | Mar -3 | Apr -2 | May -1 | Jun 1 | Jul 2 | Aug 3 | Sep 4 | Oct 5 | Nov 6 | Dec 7 | 2013 Jan 8 | Feb 9 | Mar 10 | Apr 11 | May 12 | Jun 13 | Jul 14 | Aug 15 | Sep 16 | Oct 17 | Nov 18 | Dec 19 | 2014 Jan 20 | Feb 21 | Mar 22 | Apr 23 | May 24 | Jun 25 | Jul 26 | Aug 27 | Sep 28 | Oct 29 | Nov 30 | Dec 31 | 2015 Jan 32 | Feb 33 | Mar 34 | Apr 35 | May 36 | Jun 37 | Jul 38 | Aug 39 | Sep 40 | Oct 41 | Nov 42 | Dec 43 | 2016 Jan 44 | Feb 45 | Mar 46 | Apr 47 | May 48 | Jun 49 | Jul 50 | Aug 51 | Sep 52 | Oct 53 | Nov 54 | Dec 55 | 2017 Jan 56 | Feb 57 | Mar 58 | Apr 59 | May 60 | Jun 61 | Jul 62 | Aug 63 | Sep 64 | Oct 65 | Nov 66 | Dec 67 | 2018 Jan 68 | Feb 69 | Mar 70 | Apr 71 | May 72 | Jun 73 | Jul 74 | Aug 75 | Sep 76 | Oct 77 | Nov 78 | Dec 79 |
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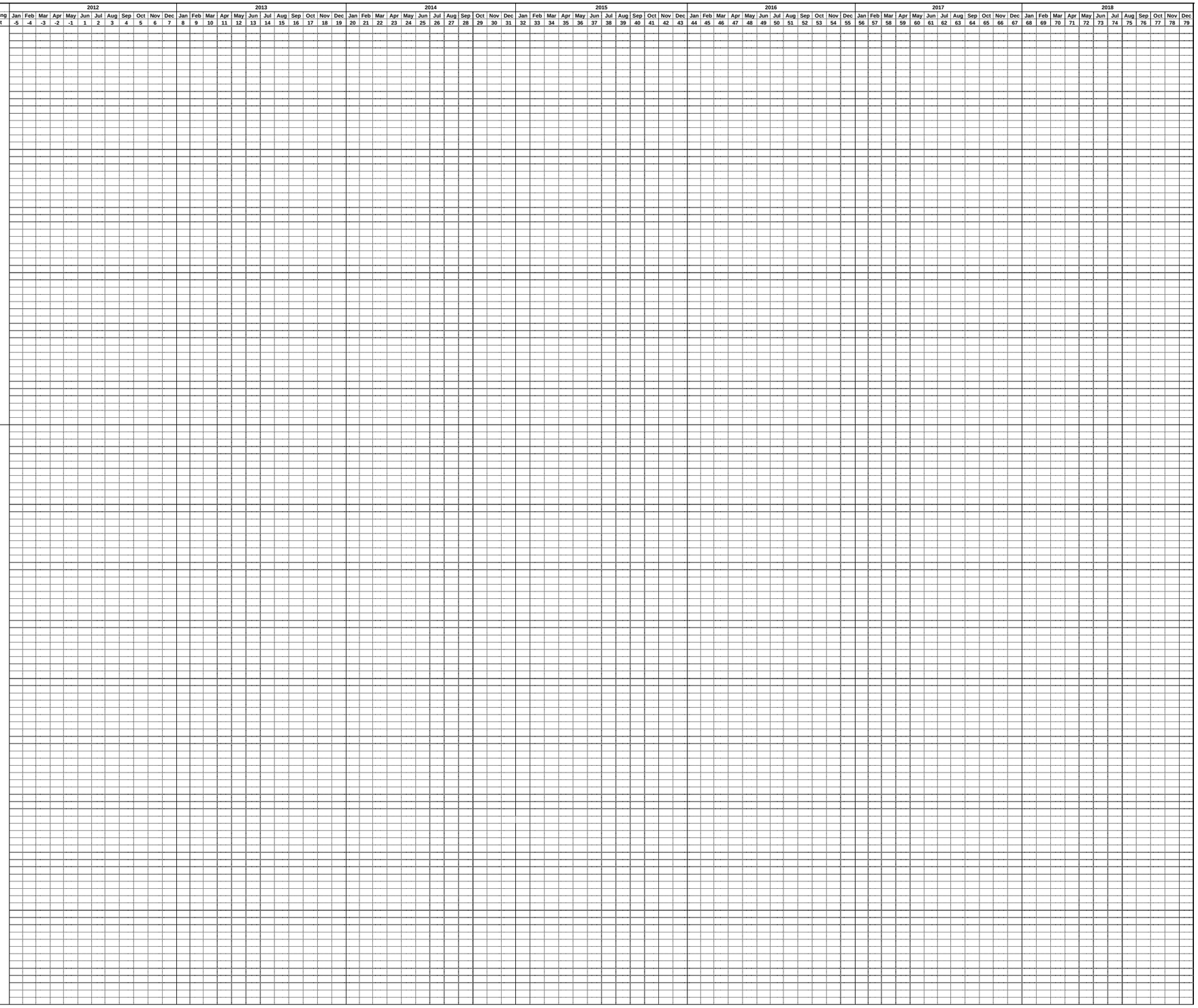
Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: HH9 - Harbourfront Horizon

Scenario: Mitigated

Package	Construction Activity	Work [1] Site No.	SWL	Dist [2] (m)	SPL [3]	Shielding Effect
	Area H5					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Utilities Diversion/ Services relocate (GL 28 - GL 38)	H5	119	435	61	-10
	Temporary Storm Drain@ 1875 Diversion (GL 31)	H5	114	435	56	-10
	Redivert Storm Drain@ 1875 Diversion (GL 32)	H5	125	435	68	-10
	Temporary Cofferdam					
	Hung Hom Station					
	Underpinning GL K & L	H5	119	435	61	-10
	Dwall GL 31 to GL 38 / GL K1	H5	118	435	61	-10
	Dwall GL 31 to GL 38 / GL N	H5	118	435	61	-10
	Excavation					
	Hung Hom Station					
	Pump test GL 28 to GL 38	H5	85	435	27	-10
	Excavation & Strutting 1st Layer GL 28 to GL 38	H5	124	435	66	-10
	Excavation & Strutting GL 28 to GL 38	H5	124	435	66	-10
	Structure Works					
	Hung Hom Station					
	SCL (TAW - HUH) Track Slab GL 28 to GL 38	H5	116	435	59	-10
	SCL (MKK - HUH) Base Structure GL 28 to GL 38	H5	116	435	59	-10
	SCL (MKK - HUH) Internal Structures GL 28 to GL 38	H5	116	435	58	-10
	Underpinning Columns to Podium Soffit GL 28 to GL 38	H5	114	435	56	-10
	SCL (TAW - HUH) & other Structures GL 28 to GL 38	H5	121	435	63	-10
	Area H6					
	Modification/ Enabling Works/ Utilities Diversions					
	Hung Hom Station					
	Utilities Diversion/ Services relocate (GL 38 - GL 48)	H6	119	503	60	-10
	Temporary Cofferdam					
	Hung Hom Station					
	Underpinning GL K & L	H6	119	503	60	-10
	Underpinning Mid-level walkway	H6	114	503	55	-10
	Dwall GL 38 to GL 48 / Interface / GL N	H6	118	503	59	-10
	Dwall GL 38 to GL 48 / Interface / GL K1	H6	118	503	59	-10
	Excavation					
	Hung Hom Station					
	Pump test GL 38 to GL 48 / Interface	H6	85	503	26	-10
	Excavation & Strutting 1st Layer GL 38 to GL 48	H6	121	503	62	-10
	Excavation & Strutting GL 38 to GL 48 / Interface	H6	121	503	62	-10
	Structure Works					
	Hung Hom Station					
	SCL (TAW - HUH) Track Slab GL 38 to GL 48 / Interface	H6	123	503	64	-10
	SCL (MKK - HUH) Base Structure GL 38 to GL 48	H6	116	503	57	-10
	SCL (MKK - HUH) Internal Structures GL 38 to GL 48	H6	116	503	57	-10
	Underpinning Columns to Podium Soffit GL 38 to GL 48	H6	114	503	55	-10
	SCL (TAW - HUH) & other Structures GL 38 to GL 48	H6	121	503	62	-10
NAT & Related Work	***North Approach Tunnel Sub-Location Area***					
	Reprovisioning Facilities					
	Reprovisioned at Hung Hom Station Area					
	Building Works for Intercity Train Crew Facilities	ITCF	112	479	54	-10
	Building Works for Signal Equipment Room	SER	110	602	50	-10
	Building Works for Telecom Equipment Room	TER	110	358	54	0
	Building Works for S&C Depot	S&C	110	406	53	-10
	Area C1					
	Demolish Existing Facilities					
	Demolish Existing Loco Running Shed	LRS	109	536	49	0
	Demolish Existing Ways & Works Workshop	W&W	109	610	48	0
	Modification/ Enabling Works/ Utilities Diversions					
	Cheung Wan Road Viaduct					
	Site Clearance and Hoarding and Utility diversion	NCWR	110	593	49	0
	Foundations	NCWR	113	593	53	0
	Construction of Substructure and Superstructure for New Diversion Bridge					
	Stage 1	NCWR	106	593	45	0
	Stage 2	NCWR	106	593	45	0
	Demolish of Existing Viaduct	ECWR	114	577	54	0
	DSD Culvert Diversion					
	Construct New Box Culvert - Loco Shed area	BC1	110	561	50	0
	Construct New Box Culvert - Ways & Works Workshop area	BC3	110	612	49	0
	Construct New Box Culvert - above SCL (MKK - HUH) Tunnels	BC2	110	590	49	0
	Temporary Cofferdam					
	Podium to Existing Culverts					
	Cofferdam Construction	C1a	106	573	46	0
	At Existing Culverts					
	Cofferdam Construction (existing culvert)	C1b	106	633	45	0
	Excavation					
	Podium to Existing Culverts					
	Excavation & Shoring	C1a	102	573	42	0
	At Existing Culverts					
	Excavation & Shoring (existing culvert)	C1b	102	633	41	0
	Structure Works					
	Podium to Existing Culverts					
	Concrete Structures SCL (MKK - HUH)	C1a	108	573	48	0
	Concrete Structures SCL (TAW - HUH)	C1a	106	573	46	0
	At Existing Culverts					
	Concrete Structures SCL (MKK - HUH) (existing culvert)	C1b	108	633	47	0
	Concrete Structures SCL (TAW - HUH) (existing culvert)	C1b	106	633	45	0
	Backfilling					
	Backfill	C1	105	573	45	0
	Area C2					
	Demolish Existing Facilities					
	Demolish Existing STA Building	STA	105	717	43	0
	Temporary Cofferdam					
	Hung Hom Bypass Pier C2/5					
	Install Diaphragm Wall	PierC2/5	101	767	38	0
	Underpinning foundation	PierC2/5	101	767	38	0
	Existing Culverts to STA Building					
	Cofferdam Construction	C2	106	676	45	0
	Excavation					
	Existing Culverts to STA Building					
	Excavation & Shoring	C2	102	676	41	0
	Structure Works					
	Existing Culverts to STA Building					
	Concrete Structures SCL (MKK - HUH)	C2	108	676	47	0
	Concrete Structures SCL (TAW - HUH)	C2	109	676	47	0

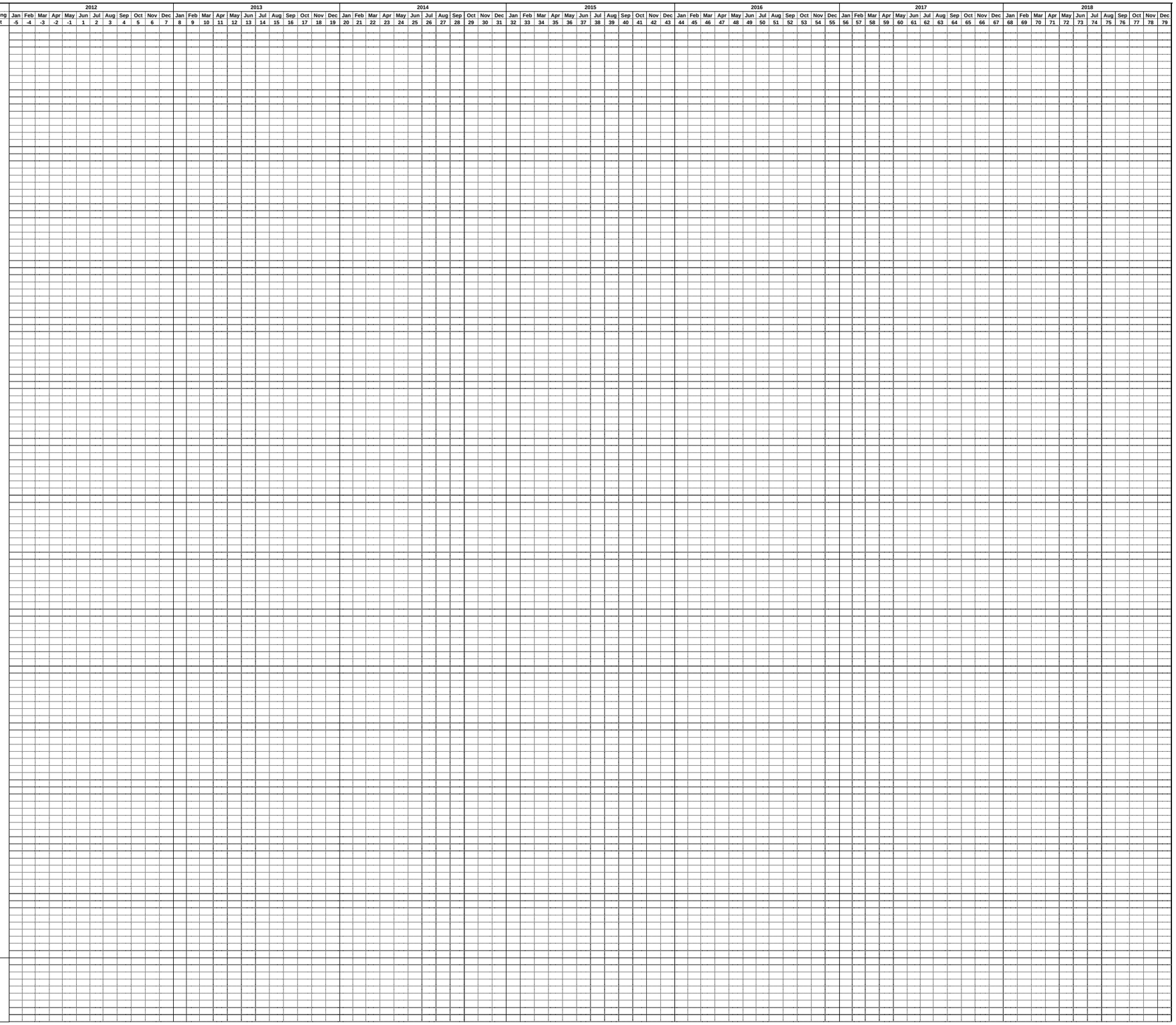


Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: HH9 - Harbourfront Horizon

Scenario: Mitigated

Package	Construction Activity	Work [1] Site No.	SWL	Dist [2] (m)	SPL [3]	Shielding Effect
	Area C3A					
	Temporary Cofferdam					
	STA Building to Chatham Road North (OB2)					
	Cofferdam Construction	C3A	105	880	41	0
	Excavation					
	STA Building to Chatham Road North (OB2)					
	Excavation & Shoring	C3A	102	880	38	0
	Structure Works					
	STA Building to Chatham Road North (OB2)					
	Concrete Structures SCL (MKK - HUH)	C3A	108	880	44	0
	Backfilling					
	STA Building to Chatham Road North (OB2)					
	Backfill	C3A	105	880	41	0
	Area C4A					
	Temporary Cofferdam					
	Chatham Road North (OB2) to Slip Road (OB2A)					
	Cofferdam Construction	C4A	105	943	41	0
	Excavation					
	Chatham Road North (OB2) to Slip Road (OB2A)					
	Excavation & Shoring	C4A	102	943	38	0
	Structure Works					
	Chatham Road North (OB2) to Slip Road (OB2A)					
	Concrete Structures SCL (MKK - HUH)	C4A	106	943	41	0
	Backfilling					
	Chatham Road North (OB2) to Slip Road (OB2A)					
	Backfill	C4A	105	943	41	0
	Area C6					
	Modification/ Enabling Works/ Utilities Diversions					
	Existing CLP Substation					
	Modify Existing CLP Substation	CLP	104	1086	38	0
	Oi Sen Path Temporary Footbridge					
	Construct Temporary Working Platform (GL G-J)	TFB4	84	1212	17	0
	Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL G-J)	TFB4	103	1212	36	0
	Construct Temporary Working Platform (GL E-G)	TFB3	84	1247	17	0
	Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL E-G)	TFB3	103	1247	36	0
	Construct Temporary Working Platform (GL C-E)	TFB2	84	1287	17	0
	Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL C-E)	TFB2	103	1287	35	0
	Construct Temporary Working Platform (GL A-C)	TFB1	84	1327	16	0
	Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL A-C)	TFB1	103	1327	35	0
	Construct Temporary Footbridge Structure and Finishes (GL A-J)	GL A-J	102	1212	35	0
	Install Mini Piles (Pier K)	Pier K	101	1186	35	0
	Construct Pile Cap (Pier K)	Pier K	98	1186	31	0
	Construct Truss Structure (Pier K)	Pier K	99	1186	33	0
	Install Mini Piles (Pier L)	Pier L	101	1161	35	0
	Construct Pile Cap (Pier L)	Pier L	98	1161	31	0
	Construct Truss Structure (Pier L)	Pier L	99	1161	33	0
	Install Mini Piles (Pier M)	Pier M	101	1138	35	0
	Construct Pile Cap (Pier M)	Pier M	98	1138	32	0
	Construct Truss Structure (Pier M)	Pier M	99	1138	33	0
	Install Mini Piles (Pier N)	Pier N	101	1116	35	0
	Construct Pile Cap (Pier N)	Pier N	98	1116	32	0
	Construct Truss Structure (Pier N)	Pier N	99	1116	33	0
	Install Mini Piles (Pier P)	Pier P	101	1070	36	0
	Construct Pile Cap (Pier P)	Pier P	98	1070	32	0
	Construct Truss Structure (Pier P)	Pier P	99	1070	34	0
	Construct Temporary Footbridge Structure and Finishes (GL J-O)	GL J-O	103	1064	37	0
	Construct Pile Cap (GL O-R)	TFB12	98	1061	32	0
	Construct Truss Structure (GL O-R)	TFB12	103	1061	38	0
	Construct Temporary Footbridge Structure and Finishes (GL O-R)	TFB12	98	1061	32	0
	Complete Footpath and Finishes (GL R-T)	TFB13	95	1059	29	0
	Chatham Road North Slip Road Overbridge (OB2A)					
	Site Clearance and Hoarding and Utility diversion	TOB2A	104	1015	39	0
	Foundations for Temporary OB2A (Piling & Pier)	TOB2A	105	1015	40	0
	Deck Construction for Temporary OB2A	TOB2A	100	1015	35	0
	Demolish Deck of Existing OB2A	OOB2A	105	1014	40	0
	Construction of New OB2A Pile & Pile Cap	OOB2A	107	1014	42	0
	Construction of New OB2A Abutment & Bridge Deck	OOB2A	110	1014	45	0
	OB2A Reinstatement	OOB2A	106	1014	41	0
	Temporary OB2A Removal	TOB2A	106	1015	41	0
	OB2A Pedestrian Subway					
	Site Clearance and Hoarding and Utility diversion	OB2APS	104	1002	39	0
	Demolish Existing Box Structure of OB2A Pedestrian Subway	OB2APS	108	1002	43	0
	OB2A Pedestrian Subway Reinstatement	OB2APS	103	1002	38	0
	Oi Sen Path Works					
	Pedestrian Diversion Works	OSPPS	107	1025	41	0
	Relocate CLP cable	OSPPS	107	1025	41	0
	Soil Nailing	OSPPS	101	1025	36	0
	Retaining wall	OSPPS	105	1025	40	0
	Slope Cut	OSPPS	105	1025	40	0
	Reinstate Oi Sen Path	OSPPS	105	1025	40	0
	Temporary Cofferdam					
	Between OB2 and OB2A					
	Temporary Retaining Wall	C6a	104	997	39	0
	North of OB2A					
	Sheet Piled Wall	C6b	108	1030	43	0
	At Temporary OB2A					
	Sheet Piled Wall	C6c	108	1071	42	0
	Excavation					
	Between OB2 and OB2A					
	Excavation & Shoring	C6a	102	997	37	0
	North of OB2A					
	Excavation & Shoring (existing culvert)	C6b	102	1030	37	0
	At Temporary OB2A					
	Excavation & Shoring (existing culvert)	C6c	102	1071	37	0
	Structure Works					
	Between OB2 and OB2A					
	Concrete Structures	C6a	108	997	43	0
	North of OB2A					
	Concrete Structures	C6b	105	1030	40	0
	At Temporary OB2A					
	Concrete Structures	C6c	105	1071	40	0
	Backfilling					
	OB2 to Temporary OB2A					
	Backfill	C6	105	997	40	0
Homantin Siding	***Homantin Siding***					
	Loco Siding @HKPolyU Building					
	Removal of Existing Tracks	ETR	102	984	37	0
	Decking Across Culvert	CUV	99	1018	34	0
	Office / Store construction	OFF	100	897	36	0
	EVA construction	EVA	100	950	35	0
	Track Laying to HKPolyU	NTL	102	984	37	0



Appendix 6.12A Sample Calculation of Construction Noise Levels during Non-Restricted Hours - Mitigated Scenario

NSR: HH9 - Harbourfront Horizon

Scenario: Mitigated

Package	Construction Activity	Work Site No. [1]	SWL	Dist (m) [2]	SPL [3]	Shielding Effect
New EVA	***New EVA***					
	1112 EVA Construction (subarea 1)	EVA16	106	324	51	0
	1112 EVA Construction (subarea 2)	EVA17	106	317	51	0
	1112 EVA Construction (subarea 3)	EVA18	106	559	46	-10
	1111 EVA at NAT Construction (subarea 1)	EVA19	106	584	46	0
	1111 EVA at NAT Construction (subarea 2)	EVA20	106	611	46	0
	1111 EVA at NAT Construction (subarea 3)	EVA21	106	637	45	0
	1111 EVA at NAT Construction (subarea 4)	EVA22	106	663	45	0
	1111 EVA at NAT Construction (subarea 5)	EVA23	106	691	45	0
	1111 EVA at NAT Construction (subarea 6)	EVA24	106	716	44	0
	1111 EVA at NAT Construction (subarea 7)	EVA25	106	739	44	0
	1111 EVA at NAT Construction (subarea 8)	EVA26	106	758	44	0
	1111 EVA at NAT Construction (subarea 9)	EVA27	106	776	44	0
	1111 EVA at NAT Construction (subarea 10)	EVA28	106	803	43	0
	1111 EVA at NAT Construction (subarea 11)	EVA29	106	838	43	0
	1111 EVA at NAT Construction (subarea 12)	EVA30	106	863	43	0
Hung Hom Freight Pier	***Hung Hom Freight Pier***					
	Barging Activities					
	At the Freight Pier					
	Loading Activities	FP1	111	183	60	0
	At Tip of the Freight Pier					
	Loading Activities	FP2	111	280	57	0
	Trucks Travelling					
	Travelling to Barging Points by Haul Roads					
	Trucks Travelling to the Freight Pier by haul road (segment 1)[4]	HR1-1	70	80	54	0
	Trucks Travelling to the Freight Pier by haul road (segment 2)[4]	HR1-2	71	150	52	0
	Trucks Travelling away from the Freight Pier by haul road[4]	HR2	75	170	56	0
	Trucks at Buffer Zone During Peak Periods					
	Trucks Travelling at Buffer Zone[4]	BZL1	69	31	57	0
	[4] Calculation of total SWL for Haul Road is based on BS 5228 Part 1: 2009 (Equation F.6)					
Concurrent Work from SCL (HUH - ADM)						
15 Hung Hom SAT	**Demolish Existing Facilities**					
	Demolition of Freight Buidling	803	121	248	68	0
12 Hung Hom Landfall	**Hung Hom Landfall**					
	Cofferdam Wall Construction and Shear Pining	801	117	253	64	0
	Soft Ground Excavation	801	117	253	64	0
	Excavation Work	801	121	253	67	0
	Tunnel Box Construction	801	115	253	62	0
	E&M Installation	801	114	253	61	0
	Cofferdam Wall Removal	801	119	253	66	0
	Backfilling and Reinstatement	801	116	253	63	0
	Hung Hom Freight Pier					
	Demolition of Existing Tip of Freight Pier	804	116	243	64	0
	Piling Construction	804	118	243	66	0
	Concrete Deck Construction and Marine Furniture	804	115	243	62	0
13 NOV	**North Ventilation Building, Plant Rooms and Emergency Access (NOV)**					
	Site Clearance, Fencing & Hoarding	802	118	258	65	0
	Excavate Soft Material (+4.0mPD to -17.5mPD)	802	120	258	67	0
	Construct North Flood Gate Building	802	114	258	61	0

Construction Activity	2012 Jun	2013 Jan	2013 Feb	2013 Mar	2013 Apr	2013 May	2013 Jun	2013 Jul	2013 Aug	2013 Sep	2013 Oct	2013 Nov	2013 Dec	2014 Jan	2014 Feb	2014 Mar	2014 Apr	2014 May	2014 Jun	2014 Jul	2014 Aug	2014 Sep	2014 Oct	2014 Nov	2014 Dec
Loading Activities (FP1)	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Loading Activities (FP2)	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57			
Trucks Travelling to the Freight Pier by haul road (segment 1)[4]	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
Trucks Travelling to the Freight Pier by haul road (segment 2)[4]	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Trucks Travelling away from the Freight Pier by haul road[4]	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Trucks Travelling at Buffer Zone (BZL1)	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Demolition of Freight Buidling (803)																								68	68
Cofferdam Wall Construction and Shear Pining (801)																									
Soft Ground Excavation (801)																									
Excavation Work (801)																									
Tunnel Box Construction (801)																									
E&M Installation (801)																									
Cofferdam Wall Removal (801)																									
Backfilling and Reinstatement (801)																									
Demolition of Existing Tip of Freight Pier (804)																							64	64	64
Piling Construction (804)																									
Concrete Deck Construction and Marine Furniture (804)																									
Site Clearance, Fencing & Hoarding (802)																									
Excavate Soft Material (802)																									
Construct North Flood Gate Building (802)																									
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	64	68	67	67	69	68	68	64	64	64	64	66	66	66	66	66	66	64	65	66	66	65	65	67	65
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64	64	69	69
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	57	57	57	57	57	57	57	57	57	57	57	57	-	-	-	-	-	-	-	-	-	-	-	-	-
Overall Noise Level (Cumulative), Leq (30min), dB(A)	65	68	67	67	69	68	68	65	65	65	65	66	66	66	66	66	66	64	65	66	66	68	68	71	71

Construction Activity	2015 Jan	2015 Feb	2015 Mar	2015 Apr	2015 May	2015 Jun	2015 Jul	2015 Aug	2015 Sep	2015 Oct	2015 Nov	2015 Dec	2016 Jan	2016 Feb	2016 Mar	2016 Apr	2016 May	2016 Jun	2016 Jul	2016 Aug	2016 Sep	2016 Oct	2016 Nov	2016 Dec
Loading Activities (FP1)	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Loading Activities (FP2)																								
Trucks Travelling to the Freight Pier by haul road (segment 1)[4]	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
Trucks Travelling to the Freight Pier by haul road (segment 2)[4]	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Trucks Travelling away from the Freight Pier by haul road[4]	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Trucks Travelling at Buffer Zone (BZL1)	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Demolition of Freight Buidling (803)																								
Cofferdam Wall Construction and Shear Pining (801)	64	64	64	64	64	64	64	64	64															
Soft Ground Excavation (801)										64	64	64												
Excavation Work (801)										67	67	67	67	67	67	67								
Tunnel Box Construction (801)														62	62	62								
E&M Installation (801)																	61							
Cofferdam Wall Removal (801)																	66							
Backfilling and Reinstatement (801)																		63	63	63	63	63		
Demolition of Existing Tip of Freight Pier (804)	64	64	64	64																				
Piling Construction (804)																								
Concrete Deck Construction and Marine Furniture (804)																								
Site Clearance, Fencing & Hoarding (802)												65												
Excavate Soft Material (802)													67	67										
Construct North Flood Gate Building (802)														61	61	61	61							
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	69	69	69	69	69	71	71	70	72	73	72	70	70	69	67	67	67	72	72	73	73	73	73	67
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	71	67	64	64	64	64	64	64	64	69	70	70	70	71	69	69	65	67	63	63	63	63	63	-
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54	54	50	-	-	-	-
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overall Noise Level (Cumulative), Leq (30min), dB(A)	73	71	71	71	70	72	72	71	73	73	74	73	73	73	71	71	69	73	72	73	73	73	73	67

Construction Activity	2017 Jan	2017 Feb	2017 Mar	2017 Apr	2017 May	2017 Jun	2017 Jul	2017 Aug	2017 Sep	2017 Oct	2017 Nov	2017 Dec	2018 Jan	2018 Feb	2018 Mar	2018 Apr	2018 May	2018 Jun	2018 Jul	2018 Aug	2018 Sep	2018 Oct	2018 Nov	2018 Dec
Loading Activities (FP1)	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Trucks Travelling to the Freight Pier by haul road (segment 1)[4]	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
Trucks Travelling to the Freight Pier by haul road (segment 2)[4]	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Trucks Travelling away from the Freight Pier by haul road[4]	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Trucks Travelling at Buffer Zone (BZL1)	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Cofferdam Wall Removal (801)														66	66	66								
Backfilling and Reinstatement (801)																	62	62	62	62	62	62		
Piling Construction (804)																								
Site Clearance, Fencing & Hoarding (802)																								
Excavate Soft Material (802)																								
Construct North Flood Gate Building (802)																								
Overall Noise Level (SCL - Mong Kok East to Hung Hom Section), Leq (30min), dB(A)	67	67	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
Overall Noise Level (SCL - Hung Hom to Admiralty Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	66	66	66	62	62	62	62	62	62	-	-	-
Overall Noise Level (SCL - Tai Wai to Hung Hom Section), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overall Noise Level (Kwun Tong Line Extension), Leq (30min), dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overall Noise Level (Cumulative), Leq (30min), dB(A)	67	67	64	64	64	64	64	64	64	64	64	64	68	68	68	66	66	66	66	66	66	64	64	64

Remarks:
[1] The Works Area with length to width ratio exceeding 5 : 1 is divided into Subareas.
[2] Noise source at more than 300m from the sensitive receiver are not considered in the noise assessment due to large distance attenuation effect.
[3] For the calculation of sound pressure levels (SPL), the PMEs are assumed to be placed at the notional source position according to the "Technical Memorandum on Noise from Construction Work other than Percussive Piling" by EPD.