

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	% on time	Total SWL, dB(A)
Advance Works					
Activity 1 Mobilisation, site set up, tree removal					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	100%	107
Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	3	110	50%	112
Excavator (45kW)	BS 5228 Table D.3/35	3	106	50%	108
Concrete lorry mixer	CNP 044	2	109	20%	105
Poker, vibratory, hand-held	CNP 170	2	113	20%	109
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112	60%	110
Lorry with crane/grab	CNP 145	2	105	70%	106
Generator, silenced, 75 dB(A) at 7 m	CNP 102	2	100	100%	103
				Total	117
Activity 2 Demolition of Entrance e, Footbridge stairs, LCSD staff room					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	100%	107
Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	6	110	60%	116
Breaker, excavator mounted (hydraulic), 73kW, 200kg	BS 5228 Table D.8/13	3	110	60%	113
Mobile crane	BS 5228 Table D.7/114	1	101	60%	99
Lorry with crane/grab	CNP 145	2	105	60%	106
Generator, silenced, 75 dB(A) at 7 m	CNP 102	2	100	100%	103
Concrete lorry mixer	CNP 044	1	109	20%	102
Poker, vibratory, hand-held	CNP 170	2	113	20%	109
				Total	119
Activity 3 Works Area preparation: strip soil, instant wells, instrumentation					
Excavator (45kW)	BS 5228 Table D.3/35	3	106	70%	109
Lorry	CNP 141	3	112	50%	114
Welder/ Generation (silenced)	CNP 002	3	102	100%	107
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	3	111	30%	111
Drill rig, rotary type (diesel)	CNP 072	3	110	70%	113
Water pump (electric)	CNP 281	4	88	50%	91
Concrete lorry mixer	CNP 044	1	109	20%	102
Poker, vibratory, hand-held	CNP 170	1	113	20%	106
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100	100%	100
				Total	119
Activity 4 Ground Investigation					
Drill rig, rotary type (diesel)	CNP 072	2	110	70%	111
Water pump (petrol)	CNP 282	2	103	50%	103
Grout mixer	CNP 105	1	90	20%	83
Grout pump	CNP 106	1	105	20%	98
				Total	112
Activity 5 Cavern access shaft pipe piles					
Piling, large diameter bored, reverse circulation drill	CNP 166	3	100	70%	103
Crane, mobile/ barge mounted (diesel)	CNP 048	2	112	50%	112
Generator, silenced, 75 dB(A) at 7 m	CNP 102	3	100	30%	100
Drill rig, rotary type (diesel)	CNP 072	3	110	20%	108
Grout mixer	CNP 105	3	90	20%	88
Grout pump	CNP 106	3	105	20%	103
Water pump (electric)	CNP 281	4	88	20%	87
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100	100%	100
				Total	114
Activity 6 Temporary lateral support					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	100%	102
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	2	111	50%	111
Mini backhoe	CNP 082	1	94	50%	91
Lorry with crane/grab	CNP 145	1	105	30%	100
Concrete lorry mixer	CNP 044	1	109	20%	102
Poker, vibratory, hand-held	CNP 170	2	113	20%	109
Piling, large diameter bored, reverse circulation drill	CNP 166	1	100	70%	98
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112	50%	109
Drill rig, rotary type (diesel)	CNP 072	1	110	20%	103
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100	30%	95
Grout mixer	CNP 105	1	90	20%	83
Grout pump	CNP 106	1	105	20%	98
Water pump (electric)	CNP 281	1	88	20%	81
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100	100%	100
				Total	116
Activity 7 CITIC pier underpinning H-piles					
Piling, large diameter bored, reverse circulation drill	CNP 166	2	100	70%	101
Crane, mobile/ barge mounted (diesel)	CNP 048	2	112	50%	112
Generator, silenced, 75 dB(A) at 7 m	CNP 102	2	100	30%	98
Grout mixer	CNP 105	2	90	20%	86
Grout pump	CNP 106	2	105	20%	101
				Total	113

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	% on time	Total SWL, dB(A)
Activity 8 Diaphragm wall					
Piling, diaphragm wall, bentonite filtering plant	CNP 162	1	105	100%	105
Piling, diaphragm wall, hydraulic extractor	CNP 163	1	90	20%	83
Mobile crane	BS 5228 Table D.7/114	3	101	70%	104
Lorry	CNP 141	3	112	70%	115
Grout mixer	CNP 105	1	90	50%	87
Grout pump	CNP 106	1	105	50%	102
Bar bender and cutter (electric)	CNP 021	2	90	100%	93
Concrete lorry mixer	CNP 044	1	109	20%	102
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	100%	102
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100	100%	100
				Total	117
Main Works					
Activity 1 Mobilisation and site set up					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	100%	105
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	2	111	30%	109
Excavator/ loader, wheeled/ tracked	CNP 081	2	112	30%	110
Concrete lorry mixer	CNP 044	2	109	30%	107
Poker, vibratory, hand-held	CNP 170	4	113	30%	114
Crane, mobile/ barge mounted (diesel)	CNP 048	2	112	70%	113
Lorry with crane/grab	CNP 145	4	105	70%	109
Generator, silenced, 75 dB(A) at 7 m	CNP 102	2	100	100%	103
				Total	119
Activity 2 Cavern Access Shaft: Excavation in soft, Strutting and Decking					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	100%	105
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	4	111	50%	114
Excavator (45kW)	BS 5228 Table D.3/35	4	106	50%	109
Mini backhoe	CNP 082	3	94	50%	96
Lorry	CNP 141	4	112	50%	115
Mobile crane	BS 5228 Table D.7/114	3	101	60%	104
Generator, silenced, 75 dB(A) at 7 m	CNP 102	4	100	60%	104
Ventilation fan	CNP 241	3	108	100%	113
Piling, large diameter bored, reverse circulation drill	CNP 166	1	100	70%	98
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112	50%	109
Drill rig, rotary type (diesel)	CNP 072	1	110	20%	103
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100	30%	95
Grout mixer	CNP 105	1	90	20%	83
Grout pump	CNP 106	1	105	20%	98
Water pump (electric)	CNP 281	1	88	20%	81
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100	100%	100
				Total	120
Activity 3 CITIC piers C2 and C3 underpinning					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	100%	105
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	4	111	60%	115
Breaker, excavator mounted (hydraulic), 73kW, 200kg	BS 5228 Table D.8/13	2	110	60%	111
Excavator/ loader, wheeled/ tracked	CNP 081	1	112	40%	108
Mini backhoe	CNP 082	1	94	50%	91
Lorry	CNP 141	4	112	20%	111
Crane, mobile/ barge mounted (diesel)	CNP 048	2	112	80%	114
Concrete lorry mixer	CNP 044	1	109	20%	102
Poker, vibratory, hand-held	CNP 170	2	113	20%	109
Generator, silenced, 75 dB(A) at 7 m	CNP 102	3	100	70%	103
				Total	120
Activity 4 Cavern Access Shaft : Excavation in rock under deck					
Breaker, excavator mounted (hydraulic), 73kW, 200kg	BS 5228 Table D.8/13	3	110	30%	110
Rock Drill	TNS EIA*	3	108	30%	108
Burster	CNP 051	3	90	30%	90
Excavator/ loader, wheeled/ tracked	CNP 081	2	112	70%	113
Mini backhoe	CNP 082	2	94	70%	95
Lorry with crane/grab	CNP 145	4	105	70%	109
Ventilation fan	CNP 241	4	108	100%	114
Hoist, passenger/ material (electric)	CNP 122	1	95	100%	95
Winch (electric)	CNP 262	4	95	100%	101
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	100%	105
Water pump (electric)	CNP 281	6	88	100%	96
Generator, silenced, 75 dB(A) at 7 m	CNP 102	2	100	100%	103
				Total	119
Activity 5 Demolish ADD and Entrance E below ground					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	100%	105
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	4	111	80%	116
Breaker, excavator mounted (hydraulic), 73kW, 200kg	BS 5228 Table D.8/13	5	110	80%	116
Crane, mobile/ barge mounted (diesel)	CNP 048	3	112	50%	114
Lorry with crane/grab	CNP 145	3	105	30%	105
Water pump (electric)	CNP 281	2	88	100%	91
Generator, silenced, 75 dB(A) at 7 m	CNP 102	2	100	100%	103
				Total	120

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	% on time	Total SWL, dB(A)
Activity 6 Cut-and-cover box: King posts					
Piling, large diameter bored, reverse circulation drill	CNP 166	3	100	70%	103
Crane, mobile/ barge mounted (diesel)	CNP 048	3	112	50%	114
Generator, silenced, 75 dB(A) at 7 m	CNP 102	3	100	30%	100
Grout mixer	CNP 105	3	90	20%	88
Grout pump	CNP 106	3	105	20%	103
				Total	115
Activity 7 Strutting and decking at ground level					
Crane, mobile/ barge mounted (diesel)	CNP 048	6	112	70%	118
Generator, silenced, 75 dB(A) at 7 m	CNP 102	6	100	80%	107
				Total	119
Activity 8 Bulk excavation in soft incl strutting					
Crane, mobile/ barge mounted (diesel)	CNP 048	4	112	70%	116
Excavator/ loader, wheeled/ tracked	CNP 081	6	112	70%	118
Lorry with crane/grab	CNP 145	4	105	30%	106
Generator, silenced, 75 dB(A) at 7 m	CNP 102	6	100	80%	107
Water pump (electric)	CNP 281	6	88	100%	96
				Total	121
Activity 9 Bulk excavation in mixed ground incl strutting					
Breaker, excavator mounted (hydraulic), 73kW, 200kg	BS 5228 Table D.8/13	5	110	50%	114
Rock Drill	TNS EIA*	3	108	50%	110
Rock drill, hand-held (pneumatic)	CNP 183	5	116	50%	120
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	100%	105
Burster	CNP 051	3	90	50%	92
Generator, silenced, 75 dB(A) at 7 m	CNP 102	2	100	100%	103
Excavator/ loader, wheeled/ tracked	CNP 081	6	112	50%	117
Crane, mobile/ barge mounted (diesel)	CNP 048	4	112	50%	115
Generator, silenced, 75 dB(A) at 7 m	CNP 102	6	100	70%	106
Water pump (electric)	CNP 281	6	88	100%	96
				Total	123
Activity 10 Bulk excavation in rock, no strutting					
Breaker, excavator mounted (hydraulic), 73kW, 200kg	BS 5228 Table D.8/13	10	110	80%	119
Rock Drill	TNS EIA*	5	108	80%	114
Burster	CNP 051	5	90	80%	96
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	4	102	100%	108
Excavator/ loader, wheeled/ tracked	CNP 081	4	112	30%	113
Crane, mobile/ barge mounted (diesel)	CNP 048	4	112	30%	113
Generator, silenced, 75 dB(A) at 7 m	CNP 102	2	100	100%	103
Water pump (electric)	CNP 281	6	88	100%	96
				Total	122
Activity 11 Station Cut-and-cover box					
Crane, tower (electric)	CNP 049	2	95	100%	98
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	4	102	100%	108
Generator, silenced, 75 dB(A) at 7 m	CNP 102	4	100	100%	106
Ventilation fan	CNP 241	4	108	100%	114
Hoist, passenger/ material (electric)	CNP 122	1	95	100%	95
Concrete pump, stationary/ lorry mounted	CNP 047	2	109	50%	109
Concrete lorry mixer	CNP 044	6	109	50%	114
Poker, vibratory, hand-held	CNP 170	6	113	50%	118
Chipper, hand-held (pneumatic)	CNP 043	4	112	20%	111
Bar bender and cutter (electric)	CNP 021	3	90	100%	95
Saw, circular, wood	CNP 201	2	108	100%	111
Crane, mobile/ barge mounted (diesel)	CNP 048	2	112	80%	114
				Total	123
Activity 12 Station Fit out					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	4	102	100%	108
Generator, silenced, 75 dB(A) at 7 m	CNP 102	4	100	100%	106
Ventilation fan	CNP 241	4	108	100%	114
Hoist, passenger/ material (electric)	CNP 122	1	95	100%	95
Crane, mobile/ barge mounted (diesel)	CNP 048	2	112	50%	112
				Total	117
Activity 13 Surface equipment serving cavern and tunnels					
Ventilation fan	CNP 241	4	108	100%	114
Hoist, passenger/ material (electric)	CNP 122	1	95	100%	95
Winch (electric)	CNP 262	4	95	100%	101
				Total	114
Material Storage and Site Facilities					
Activity 1 Material Storage and Site Facilities					
Dump truck (50t)	BS 5228 Table D.9/39	2	103	20%	99
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112	20%	105
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100	20%	93
				Total	106

*TNS EIA refers to Tsim Sha Tsui Northern Subway EIA

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 1 Slope Stabilization							
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102			100%	102
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108			30%	106
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106			80%	105
Mobile crane	BS 5228 Table D.7/114	1	101			70%	99
Drill rig, rotary type (diesel)	CNP 072	1	110			50%	107
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			50%	92
Grout mixer	CNP 105	1	90			20%	83
Grout pump	CNP 106	1	105			20%	98
Lorry with crane/grab	CNP 145	2	105			50%	105
Poker, vibratory, hand-held	CNP 170	2	113			50%	113
Water pump, submersible (electric)	CNP 283	1	85			100%	85
						Total	116
Activity 2 RCP & Machine Room Construction							
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102			100%	102
Bar bender and cutter (electric)	CNP 021	1	90			25%	84
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108			40%	107
Concrete lorry mixer	CNP 044	1	109			20%	102
Mobile crane	BS 5228 Table D.7/114	1	101			60%	99
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			100%	95
Lorry with crane/grab	CNP 145	1	105			50%	102
Poker, vibratory, hand-held	BS 5228 Table D.6/40	3	98			50%	100
Saw, circular, wood	CNP 201	1	108			40%	104
						Total	112
Activity 3 Demolition of RCP and Storm Drain & Foul Sewer Diversion							
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102			100%	102
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	3	108	-10	Movable Noise Barrier	30%	98
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	2	106			80%	108
Concrete lorry mixer	CNP 044	1	109			20%	102
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			100%	95
Lorry with crane/grab	CNP 145	2	105			50%	105
Poker, vibratory, hand-held	BS 5228 Table D.6/40	2	98			50%	98
Water pump, submersible (electric)	CNP 283	1	85			100%	85
						Total	112
Activity 4 Demolition of existing Retaining Wall & Caisson Wall							
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102			100%	102
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	3	108			30%	108
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	2	106			70%	107
						Total	111
Activity 5 Pipe Pile Wall							
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108			30%	106
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106			50%	103
Drill rig, rotary type (diesel)	CNP 072	1	110			60%	108
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			100%	95
Lorry with crane/grab	CNP 145	1	105			50%	102
Poker, vibratory, hand-held	BS 5228 Table D.6/40	1	98			30%	93
Ventilation fan	CNP 241	2	108	-15	Silencer	100%	96
Water pump, submersible (electric)	CNP 283	1	85			100%	85
						Total	112
Activity 6 Shaft Excavation & Installation of Shoring							
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102			100%	102
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108			30%	106
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106			80%	105
Concrete lorry mixer	CNP 044	1	109			20%	102
Concrete mixer (petrol)	CNP 046	1	96			50%	93
Concrete pump, stationary/ lorry mounted	CNP 047	1	109			20%	102
Mobile crane	BS 5228 Table D.7/114	1	101			60%	99
Dump truck (50t)	BS 5228 Table D.9/39	2	103			50%	103
Drill rig, rotary type (diesel)	CNP 072	1	110			50%	107
Excavator (45kW)	BS 5228 Table D.3/35	2	106			80%	108
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			100%	95
Ventilation fan	CNP 241	2	108			100%	111
Water pump, submersible (electric)	CNP 283	2	85			50%	85
						Total	116

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 7 Shaft Drill and Blast							
At surface							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			100%	102
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112			100%	112
Grout mixer	CNP 105	1	90			100%	90
Grout pump	CNP 106	1	105			100%	105
Lorry with crane/grab	CNP 145	2	105			100%	108
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	95			100%	98
Ventilation fan	CNP 241	1	108			100%	108
In shaft under deck							
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108	-20	Underground plant	100%	91
Breaker, excavator mounted (pneumatic)	CNP 027	1	122	-20	Underground plant	100%	102
Burster	CNP 051	1	90	-20	Underground plant	100%	70
Grout mixer	CNP 105	1	90	-20	Underground plant	100%	70
Grout pump	CNP 106	1	105	-20	Underground plant	100%	85
Rock Drill	TNS EIA*	2	108	-20	Underground plant	100%	91
Water pump, submersible (electric)	CNP 283	2	85	-20	Underground plant	100%	68
						Total	116
Activity 8 Vent Shaft Construction							
At surface							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			100%	102
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112			20%	105
Water pump, submersible (electric)	CNP 283	1	85			80%	84
Concrete lorry mixer	CNP 044	1	109			20%	102
Hoist, passenger/ material (electric)	CNP 122	1	95			50%	92
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			20%	88
Ventilation fan	CNP 241	2	108			60%	109
In shaft under deck							
Chipper, hand-held (pneumatic)	CNP 043	2	112	-20	Underground plant	20%	88
Poker, vibratory, hand-held	CNP 170	2	113	-20	Underground plant	20%	89
						Total	112
Activity 9 Adit to Tunnels and Tunnel from HKB to ADM - Drill & Blast							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-20	Underground plant	100%	82
Concrete lorry mixer	CNP 044	1	109	-20	Underground plant	50%	86
Concrete mixer (petrol)	CNP 046	1	96	-20	Underground plant	50%	73
Concrete pump, stationary/ lorry mounted	CNP 047	1	109	-20	Underground plant	20%	82
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112	-20	Underground plant	60%	90
Dump truck	CNP 067	2	117	-20	Underground plant	50%	97
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-20	Underground plant	100%	75
Ventilation fan	CNP 241	1	108	-20	Underground plant	100%	88
Water pump, submersible (electric)	CNP 283	1	85	-20	Underground plant	100%	65
						Total	99
Activity 10 Adits Lining							
At surface							
Mobile crane	BS 5228 Table D.7/114	1	101			60%	99
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			100%	95
Lorry with crane/grab	CNP 145	2	105			40%	104
Ventilation fan	CNP 241	1	108			100%	108
Water pump, submersible (electric)	CNP 283	1	85			100%	85
Grout mixer	CNP 105	1	90			20%	83
Grout pump	CNP 106	1	105			20%	98
Hoist, passenger/ material (electric)	CNP 122	1	95			60%	93
In cavern							
Chipper, hand-held (pneumatic)	CNP 043	2	112	-20	Underground plant	20%	88
Poker, vibratory, hand-held	CNP 170	3	113	-20	Underground plant	20%	91
						Total	110

*TNS EIA refers to Tsim Sha Tsui Northern Subway EIA

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 1 Mobilisation work, Site Clearance, Formation, Site Offices & Works Area							
Mobilisation work, Site Clearance							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	-15	Enclosure/ Shed	70%	90
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	3	108	-10	Movable Noise Barrier	70%	101
Mobile crane	BS 5228 Table D.7/114	2	101	-5	Movable Noise Barrier	100%	99
Dump truck (50t)	BS 5228 Table D.9/39	1	103			60%	101
Excavator (45kW)	BS 5228 Table D.3/35	5	106	-5	Movable Noise Barrier	80%	107
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			60%	93
Lorry with crane/ grab	CNP 145	4	105	-5	Movable Noise Barrier	70%	104
Water pump, submersible (electric)	CNP 283	4	85			100%	91
						Total	111
Formation, Site Offices & Works Area							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	-15	Enclosure/ Shed	70%	90
Bulldozer (218kW)	BS 5228 Table D.3/72	1	111	-5	Movable Noise Barrier	70%	104
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	2	100	-5	Movable Noise Barrier	70%	96
Mobile crane	BS 5228 Table D.7/114	2	101	-5	Movable Noise Barrier	100%	99
Compactor, vibratory	CNP 050	1	105	-5	Movable Noise Barrier	50%	97
Dump truck (50t)	BS 5228 Table D.9/39	2	103	-5	Movable Noise Barrier	60%	99
Drill rig, rotary type (diesel)	CNP 072	5	110	-10	Fabric	70%	105
Excavator (45kW)	BS 5228 Table D.3/35	5	106	-5	Movable Noise Barrier	80%	107
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			60%	93
Lorry with crane/ grab	CNP 145	4	105	-5	Movable Noise Barrier	70%	104
Poker, vibratory, hand-held	BS 5228 Table D.6/40	5	98	-10	Movable Noise Barrier	50%	92
Water pump, submersible (electric)	CNP 283	4	85			100%	91
						Total	112
						Maximum	112
Activity 2 Slope Stabilization							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/ Shed	100%	87
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108			30%	106
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106			80%	105
Mobile crane	BS 5228 Table D.7/114	1	101			70%	99
Drill rig, rotary type (diesel)	CNP 072	1	110	-10	Fabric	50%	97
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			50%	92
Grout mixer	CNP 105	1	90			20%	83
Grout pump	CNP 106	1	105			20%	98
Lorry with crane/ grab	CNP 145	2	105			50%	105
Poker, vibratory, hand-held	BS 5228 Table D.6/40	2	98			50%	98
Water pump, submersible (electric)	CNP 283	1	85			100%	85
						Total	111
Activity 3 Portal - Pipe Piles, Excavation & Shoring							
(Group 1) - Pipe Piles							
Mobile crane	BS 5228 Table D.7/114	6	101	-5	Movable Noise Barrier	80%	103
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			25%	89
Piling, large diameter bored, grab and chisel	CNP 164	4	115	-10	Fabric	70%	109
Piling, large diameter bored, oscillator	CNP 165	4	115	-10	Fabric	100%	111
Piling, large diameter bored, reverse circulation drill	CNP 166	4	100	-10	Fabric	70%	94
Water pump, submersible (electric)	CNP 283	4	85			70%	89
						Total	114
(Group 2) - Excavation							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	-20	Underground Plant	80%	84
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	3	108	-20	Underground Plant	70%	91
Mobile crane	BS 5228 Table D.7/114	6	101	-20	Underground Plant	60%	87
Dump truck (50t)	BS 5228 Table D.9/39	2	103	-20	Underground Plant	40%	82
Drill rig, rotary type (diesel)	CNP 072	4	110	-20	Underground Plant	80%	95
Excavator (45kW)	BS 5228 Table D.3/35	4	106	-20	Underground Plant	80%	91
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-20	Underground Plant	80%	74
Lorry with crane/ grab	CNP 145	4	105	-20	Underground Plant	100%	91
						Total	99
(Group 3) - Shoring							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	-20	Underground Plant	80%	84
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	3	108	-20	Underground Plant	30%	88
Concrete lorry mixer	CNP 044	3	109	-20	Underground Plant	20%	87
Concrete pump, stationary/ lorry mounted	CNP 047	1	109	-20	Underground Plant	70%	87
Grout mixer	CNP 105	2	90	-20	Underground Plant	60%	71
Grout pump	CNP 106	2	105	-20	Underground Plant	20%	81
						Total	93
						Maximum	114

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 4 Excavation - Drill & Blast Tunnel							
At ground level in enclosure							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	-15	Noise Enclosure	20%	83
Lorry with crane/ grab	CNP 145	6	105	-15	Noise Enclosure	50%	95
Ventilation fan	CNP 241	3	108	-15	Noise Enclosure	100%	98
Crusher	Anderson Road EIA	1	118	-15	Noise Enclosure	100%	103
In cavern							
Lorry with crane/ grab	CNP 145	6	105	-20	Underground Plant	50%	90
Excavator/ loader, wheeled/ tracked	CNP 081	1	112	-20	Underground Plant	50%	89
Grout mixer	CNP 105	1	90	-20	Underground Plant	50%	67
Grout pump	CNP 106	1	105	-20	Underground Plant	50%	82
Rock drill, crawler mounted (hydraulic)	CNP 182	4	123	-20	Underground Plant	25%	103
Water pump, submersible (electric)	CNP 283	3	85	-20	Underground Plant	100%	70
Ventilation fan	CNP 241	3	108	-20	Underground Plant	100%	93
						Total	107
Activity 5 Tunnel Waterproofing & Lining							
At ground level in enclosure							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	-15	Noise Enclosure	60%	88
Concrete lorry mixer	CNP 044	2	109	-15	Noise Enclosure	20%	90
Concrete pump, stationary/ lorry mounted	CNP 047	1	109	-15	Noise Enclosure	20%	87
Lorry with crane/ grab	CNP 145	3	105	-15	Noise Enclosure	40%	91
Ventilation fan	CNP 241	3	108	-15	Noise Enclosure	100%	98
In cavern							
Chipper, hand-held (pneumatic)	CNP 043	2	112	-20	Underground Plant	30%	90
Lorry with crane/ grab	CNP 145	3	105	-20	Underground Plant	40%	86
Poker, vibratory, hand-held	CNP 170	2	113	-20	Underground Plant	20%	89
Ventilation fan	CNP 241	3	108	-20	Underground Plant	100%	93
Water pump, submersible (electric)	CNP 283	3	85	-20	Underground Plant	100%	70
						Total	101
Activity 6 Construction of Nam Fung Vent Building							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			50%	99
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108			30%	106
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	2	106	-5	Movable Noise Barrier	40%	100
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	1	100			60%	98
Concrete mixer (petrol)	CNP 046	1	96			60%	94
Concrete pump (100kW)	BS 5228 Table D.6/36	1	106	-15	Enclosure/Shed	60%	89
Mobile crane	BS 5228 Table D.7/114	1	101			60%	99
Dump truck (50t)	BS 5228 Table D.9/39	2	103			60%	104
Drill rig, rotary type (diesel)	CNP 072	1	110	-10	Fabric	70%	98
Excavator (45kW)	BS 5228 Table D.3/35	1	106	-5	Movable Noise Barrier	70%	99
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			100%	95
Ventilation fan	CNP 241	1	108	-15	Silencer	100%	93
Water pump, submersible (electric)	CNP 283	1	85			100%	85
						Total	111

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 1 Mobilisation, site set-up, Utilities & Ground Investigation							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			100%	102
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	2	111			30%	109
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106			30%	101
Concrete lorry mixer	CNP 044	2	109			20%	105
Mobile crane	BS 5228 Table D.7/114	1	101			40%	97
Drill rig, rotary type (diesel)	CNP 072	1	110			60%	108
Welder/ generator (silenced)	CNP 102	1	100			100%	100
Lorry with crane/grab	CNP 145	2	105			60%	106
Poker, vibratory, hand-held	CNP 170	2	113			20%	109
Water pump (petrol)	CNP 282	2	103			100%	106
						Total	116
Activity 2 Bored piles & pilecaps							
Bar bender and cutter (electric)	CNP 021	2	90			100%	93
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108			30%	106
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	2	100			20%	96
Concrete pump, stationary/ lorry mounted	CNP 047	1	109			20%	102
Mobile crane	BS 5228 Table D.7/114	4	101			70%	105
Excavator (45kW)	BS 5228 Table D.3/35	1	106			35%	101
Welder/ generator (silenced)	CNP 102	1	100			70%	98
Lorry with crane/grab	CNP 145	2	105			70%	106
Piling, large diameter bored, oscillator	CNP 165	2	115	-10	Fabric	70%	106
Power rammer (petrol)	CNP 169	1	108			20%	101
Saw, circular, wood	CNP 201	2	108	-5	Movable Noise Barrier	100%	106
Water pump (petrol)	CNP 282	2	103	-10	Movable Noise Barrier	100%	96
						Total	114
Activity 3 Superstructure							
Air compressor, air flow > 30m3/min	CNP 003	1	104	-15	Enclosure/ Shed	100%	89
Bar bender and cutter (electric)	CNP 021	2	90			100%	93
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108	-10	Movable Noise Barrier	30%	96
Chipper, hand-held (pneumatic)	CNP 043	2	112	-5	Movable Noise Barrier	20%	103
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	2	100			20%	96
Concrete pump, stationary/ lorry mounted	CNP 047	1	109			20%	102
Mobile crane	BS 5228 Table D.7/114	1	101			40%	97
Crane, tower (electric)	CNP 049	1	95			70%	93
Lorry with crane/grab	CNP 145	2	105			50%	105
Poker, vibratory, hand-held	BS 5228 Table D.6/40	3	98			20%	96
Saw, circular, wood	CNP 201	2	108	-5	Movable Noise Barrier	100%	106
						Total	111
Activity 4 Roof							
Air compressor, air flow > 30m3/min	CNP 003	1	104	-15	Enclosure/ Shed	100%	89
Chipper, hand-held (pneumatic)	CNP 043	1	112	-5	Movable Noise Barrier	30%	102
Mobile crane	BS 5228 Table D.7/114	1	101			40%	97
Crane, tower (electric)	CNP 049	1	95			70%	93
Drill, percussive, hand-held (electric)	CNP 064	2	103	-5	Movable Noise Barrier	60%	99
Drill/grinder, hand-held (electric)	CNP 065	2	98			60%	99
Lorry with crane/grab	CNP 145	2	105			50%	105
						Total	108
Activity 5 ABWF							
Air compressor, air flow > 30m3/min	CNP 003	1	104			20%	97
Chipper, hand-held (pneumatic)	CNP 043	1	112	-5	Movable Noise Barrier	20%	100
Mobile crane	BS 5228 Table D.7/114	1	101			20%	94
Drill, percussive, hand-held (electric)	CNP 064	2	103			20%	99
Drill/grinder, hand-held (electric)	CNP 065	2	98			20%	94
Lorry with crane/grab	CNP 145	1	110			35%	105
						Total	108
Activity 6 New Bus Terminus & Roadworks at WCH Rd							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			100%	102
Mobile crane	BS 5228 Table D.7/114	1	101			70%	99
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	2	111			30%	109
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106			80%	105
Welder/ generator (silenced)	CNP 102	1	100			50%	97
Lorry with crane/grab	CNP 145	2	105			50%	105
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	1	100			50%	97
Poker, vibratory, hand-held	BS 5228 Table D.6/40	2	98			50%	98
Road planer or miller	CNP 184	1	111			80%	110
Road roller	CNP 185	1	108			80%	107
						Total	115

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 7 Footbridge							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/ Shed	100%	87
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106	-5	Movable Noise Barrier	30%	96
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	100%	96
Lorry with crane/grab	CNP 145	1	105	-5	Movable Noise Barrier	70%	98
Bar bender and cutter (electric)	CNP 021	1	90	-10	Movable Noise Barrier	80%	79
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
						Total	102
(Group 2)							
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106	-5	Movable Noise Barrier	30%	96
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	108	-10	Movable Noise Barrier	30%	93
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	1	100	-5	Movable Noise Barrier	50%	92
Poker, vibratory, hand-held	BS 5228 Table D.6/40	2	98	-10	Movable Noise Barrier	50%	88
Grout pump	CNP 106	1	105	-10	Movable Noise Barrier	20%	88
Saw, circular, wood	CNP 201	1	108	-5	Movable Noise Barrier	80%	102
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
						Total	104
						Maximum	104

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Construction of Each Pier with Associated Foundation and Erection of Segment							
Activity 1 Install Monitoring, Site Clearance and Hoarding and Utility diversion (Preparatory Works)							
Group 1							
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	2	111	-10	Movable Noise Barrier	30%	99
Dump truck with grab	CNP 069	1	105			70%	103
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table C.8/12	1	106			30%	101
Mobile crane	BS 5228 Table C.7/114	1	101			30%	96
						Total	107
Group 2							
Welder/Generator	CNP 107	1	99			50%	96
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			60%	100
Water pump (electric)	CNP 281	1	88			40%	84
Mobile crane	BS 5228 Table C.7/114	1	101			30%	96
Excavator (45kW)	BS 5228 Table C.3/35	1	106			50%	103
						Total	106
						Maximum	107
Activity 2 Install Bored Pile							
Group 1							
Drill rig, rotary type (diesel)	CNP 072	1	110	-10	Fabric	20%	93
Water pump (electric)	CNP 281	1	88			100%	88
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	80%	86
Mobile crane	BS 5228 Table C.7/114	1	101			100%	101
Welder/Generator	CNP 107	1	99			100%	99
						Total	104
Group 2							
Water pump (electric)	CNP 281	1	88			100%	88
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	80%	86
Mobile crane	BS 5228 Table C.7/114	1	101	-5	Movable Noise Barrier	100%	96
Piling, large diameter bored, grab and chisel	CNP 164	1	115	-10	Fabric	70%	103
Welder/Generator	CNP 107	1	99	-10	Movable Noise Barrier	100%	89
						Total	104
Group 3							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	80%	86
Concrete lorry mixer (5m3)	BS 5228 Table C.6/35	1	100			20%	93
Concrete pump, stationary/ lorry mounted	CNP 047	1	109			20%	102
Welder/Generator	CNP 107	1	99			100%	99
						Total	104
						Maximum	104
Activity 3a Construction of Pilecap							
Group 1							
Water pump (electric)	CNP 281	1	88			80%	87
Welder/Generator	CNP 107	2	99			80%	101
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			60%	100
Concrete lorry mixer (5m3)	BS 5228 Table C.6/35	2	100			20%	96
Concrete pump, stationary/ lorry mounted	CNP 047	2	109			20%	105
Mobile crane	BS 5228 Table C.7/114	1	101			80%	100
						Total	108
Group 2							
Vibrator for sheetpile		1	112			30%	107
Water pump (electric)	CNP 281	1	88			80%	87
Welder/Generator	CNP 107	2	99	-10	Movable Noise Barrier	80%	91
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			60%	100
Mobile crane	BS 5228 Table C.7/114	1	101			80%	100
						Total	108
Group 3							
Excavator (45kW)	BS 5228 Table C.3/35	1	106	-5	Movable Noise Barrier	50%	98
Dump truck with grab	CNP 069	2	105			50%	105
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	4	111	-10	Movable Noise Barrier	40%	103
						Total	108
						Maximum	108
Activity 3b Backfill to Road Level and Reinstatement							
Excavator (45kW)	BS 5228 Table C.3/35	1	106	-5	Movable Noise Barrier	70%	99
Roller, vibratory	CNP 186	1	108			20%	101
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			50%	99
Dump truck (50t)	BS 5228 Table C.9/39	2	103			50%	103
Asphalt paver	CNP 004	1	109			20%	102
						Total	108
						Overall Maximum	108

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Construction of Each Pier with Associated Foundation and Erection of Segment							
Activity 4 Construction of Pier							
Group 1							
Welder/Generator	CNP 107	2	99			80%	101
Concrete lorry mixer (5m3)	BS 5228 Table C.6/35	2	100			20%	96
Concrete pump, stationary/ lorry mounted	CNP 047	2	109	-15	Enclosure/Shed	20%	90
Mobile crane	BS 5228 Table C.7/114	1	101			60%	99
						Total	104
Group 2							
Dump truck with grab	CNP 069	1	105			50%	102
Welder/Generator	CNP 107	2	99	-10	Movable Noise Barrier	80%	91
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	60%	85
Poker, vibratory, hand-held	BS 5228 Table C.6/40	4	98			20%	97
Mobile crane	BS 5228 Table C.7/114	1	101	-5	Movable Noise Barrier	60%	94
						Total	104
						Maximum	104
Activity 5a Erection of Segments (ground level)							
Mobile crane	BS 5228 Table C.7/114	1	101			60%	99
Transporter	CNP 141	2	112			20%	108
Dump truck with grab	CNP 069	1	105			50%	102
						Total	109
Activity 5b Erection of Segments (elevated level)							
Prestress Jack*	CNP 261	4	110			30%	111
Welder/Generator	CNP 107	2	99			80%	101
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			60%	100
						Total	112
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity							

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Construction of Each Pier with Associated Foundation and Erection of Segment							
Activity 1 Install Monitoring, Site Clearance and Hoarding and Utility diversion (Preparatory Works)							
Group 1							
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	2	111	-10	Movable Noise Barrier	30%	99
Dump truck with grab	CNP 069	1	105			70%	103
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table C.8/12	1	106	-5	Movable Noise Barrier	30%	96
Mobile crane	BS 5228 Table C.7/114	1	101	-5	Movable Noise Barrier	30%	91
						Total	105
Group 2							
Welder/Generator	CNP 107	1	99			50%	96
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	60%	85
Water pump (electric)	CNP 281	1	88			40%	84
Mobile crane	BS 5228 Table C.7/114	1	101			30%	96
Excavator (45kW)	BS 5228 Table C.3/35	1	106			50%	103
						Total	105
						Maximum	105
Activity 2 Install Bored Pile							
Group 1							
Drill rig, rotary type (diesel)	CNP 072	1	110	-10	Fabric	20%	93
Water pump (electric)	CNP 281	1	88			100%	88
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	80%	86
Mobile crane	BS 5228 Table C.7/114	1	101	-5	Movable Noise Barrier	100%	96
Welder/Generator	CNP 107	1	99			100%	99
						Total	102
Group 2							
Water pump (electric)	CNP 281	1	88	-10	Movable Noise Barrier	100%	78
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	80%	86
Mobile crane	BS 5228 Table C.7/114	1	101	-5	Movable Noise Barrier	100%	96
Piling, large diameter bored, grab and chisel	CNP 164	1	115	-10	Fabric	70%	103
Welder/Generator	CNP 107	1	99	-10	Movable Noise Barrier	100%	89
						Total	104
Group 3							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	80%	86
Concrete lorry mixer (5m3)	BS 5228 Table C.6/35	1	100			20%	93
Concrete pump, stationary/ lorry mounted	CNP 047	1	109			20%	102
Welder/Generator	CNP 107	1	99			100%	99
						Total	104
						Maximum	104
Activity 3a Construction of Pilecap							
Group 1							
Water pump (electric)	CNP 281	1	88			80%	87
Welder/Generator	CNP 107	2	99			80%	101
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			60%	100
Concrete lorry mixer (5m3)	BS 5228 Table C.6/35	2	100			20%	96
Concrete pump, stationary/ lorry mounted	CNP 047	2	109			20%	105
Mobile crane	BS 5228 Table C.7/114	1	101			80%	100
						Total	108
Group 2							
Vibrator for sheetpile		1	112			30%	107
Water pump (electric)	CNP 281	1	88	-10	Movable Noise Barrier	80%	77
Welder/Generator	CNP 107	2	99	-10	Movable Noise Barrier	80%	91
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	60%	85
Mobile crane	BS 5228 Table C.7/114	1	101	-5	Movable Noise Barrier	80%	95
						Total	107
Group 3							
Excavator (45kW)	BS 5228 Table C.3/35	1	106	-5	Movable Noise Barrier	50%	98
Dump truck with grab	CNP 069	2	105			50%	105
Breaker, hand-held breaker, 35kg	BS 5228 Table C.2/10	4	110	-10	Movable Noise Barrier	40%	102
						Total	107
						Maximum	108
Activity 3b Backfill to Road Level and Reinstatement							
Excavator (45kW)	BS 5228 Table C.3/35	1	106	-5	Movable Noise Barrier	70%	99
Roller, vibratory	CNP 186	1	108			20%	101
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			50%	99
Dump truck (50t)	BS 5228 Table C.9/39	2	103			50%	103
Asphalt paver	BS 5228 Table C.8/24	1	101			20%	94
						Total	107
						Overall Maximum	108

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Construction of Each Pier with Associated Foundation and Erection of Segment							
Activity 4 Construction of Pier							
Group 1							
Welder/Generator	CNP 107	2	99	-10	Movable Noise Barrier	80%	91
Concrete lorry mixer (5m3)	BS 5228 Table C.6/35	2	100			20%	96
Concrete pump, stationary/ lorry mounted	CNP 047	2	109	-15	Enclosure/Shed	20%	90
Mobile crane	BS 5228 Table C.7/114	1	101			60%	99
						Total	101
Group 2							
Dump truck with grab	CNP 069	1	105			50%	102
Welder/Generator	CNP 107	2	99	-10	Movable Noise Barrier	80%	91
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	60%	85
Poker, vibratory, hand-held	BS 5228 Table C.6/40	4	98	-10	Movable Noise Barrier	20%	87
Mobile crane	BS 5228 Table C.7/114	1	101	-5	Movable Noise Barrier	60%	94
						Total	103
						Maximum	103
Activity 5a Erection of Segments (ground level)							
Mobile crane	BS 5228 Table C.7/114	1	101	-5	Movable Noise Barrier	60%	94
Transporter	CNP 141	2	112			20%	108
Dump truck with grab	CNP 069	1	105			50%	102
						Total	109
Activity 5b Erection of Segments (elevated level)							
Prestress Jack*		4	110	-5	Movable Noise Barrier	30%	106
Welder/Generator	CNP 107	2	99	-10	Movable Noise Barrier	80%	91
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	60%	85
						Total	106
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity							

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Construction of Each Pier with Associated Foundation and Erection of Segment							
Activity 1 Install Monitoring, Site Clearance and Hoarding and Utility diversion (Preparatory Works)							
Group 1							
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	2	111	-10	Movable Noise Barrier	30%	99
Dump truck with grab	CNP 069	1	105			70%	103
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106	-5	Movable Noise Barrier	30%	96
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	30%	91
						Total	105
Group 2							
Welder/Generator	CNP 107	1	99			50%	96
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			60%	100
Water pump (electric)	CNP 281	1	88			40%	84
Mobile crane	BS 5228 Table D.7/114	1	101			30%	96
Excavator (45kW)	BS 5228 Table D.3/35	1	106	-5	Movable Noise Barrier	50%	98
						Total	104
						Maximum	105
Activity 2 Install Bored Pile							
Group 1							
Drill rig, rotary type (diesel)	CNP 072	1	110	-10	Fabric	20%	93
Water pump (electric)	CNP 281	1	88	-10	Movable Noise Barrier	100%	78
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	80%	86
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	100%	96
Welder/Generator	CNP 107	1	99	-10	Movable Noise Barrier	100%	89
						Total	99
Group 2							
Water pump (electric)	CNP 281	1	88	-10	Movable Noise Barrier	100%	78
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	80%	86
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	100%	96
Giken Piler and Power pack	TNS EIA	1	94			70%	92
Welder/Generator	CNP 107	1	99	-10	Movable Noise Barrier	100%	89
						Total	98
Group 3							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	80%	86
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	1	100			20%	93
Concrete pump, stationary/ lorry mounted	CNP 047	1	109	-15	Enclosure/Shed	20%	87
Welder/Generator	CNP 107	1	99	-10	Movable Noise Barrier	100%	89
						Total	96
						Maximum	99
Activity 3a Construction of Pilecap							
Group 1							
Water pump (electric)	CNP 281	1	88			80%	87
Welder/Generator	CNP 107	2	99			80%	101
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			60%	100
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	2	100			20%	96
Concrete pump, stationary/ lorry mounted	CNP 047	2	109	-10	Movable Noise Barrier	20%	95
Mobile crane	BS 5228 Table D.7/114	1	101			80%	100
						Total	106
Group 2							
Vibrator for sheetpile		1	112			30%	107
Water pump (electric)	CNP 281	1	88			80%	87
Welder/Generator	CNP 107	2	99	-10	Movable Noise Barrier	80%	91
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	60%	85
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	80%	95
						Total	107
Group 3							
Excavator (45kW)	BS 5228 Table D.3/35	1	106	-5	Movable Noise Barrier	50%	98
Dump truck with grab	CNP 069	2	105			50%	105
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	4	111	-10	Movable Noise Barrier	40%	103
						Total	108
						Maximum	108
Activity 3b Backfill to Road Level and Reinstatement							
Excavator (45kW)	BS 5228 Table D.3/35	1	106	-5	Movable Noise Barrier	70%	99
Roller, vibratory	CNP 186	1	108			20%	101
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			50%	99
Dump truck (50t)	BS 5228 Table D.9/39	2	103			50%	103
Asphalt paver	BS 5228 Table D.8/24	1	101			20%	94
						Total	107
						Overall Maximum	108

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Construction of Each Pier with Associated Foundation and Erection of Segment							
Activity 4 Construction of Pier							
Group 1							
Welder/Generator	CNP 107	2	99	-10	Movable Noise Barrier	80%	91
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	2	100			20%	96
Concrete pump, stationary/ lorry mounted	CNP 047	2	109	-15	Enclosure/Shed	20%	90
Mobile crane	BS 5228 Table D.7/114	1	101			60%	99
						Total	101
Group 2							
Dump truck with grab	CNP 069	1	105			50%	102
Welder/Generator	CNP 107	2	99	-10	Movable Noise Barrier	80%	91
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	60%	85
Poker, vibratory, hand-held	BS 5228 Table D.6/40	4	98	-10	Movable Noise Barrier	20%	87
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	60%	94
						Total	103
						Maximum	103
Activity 5a Erection of Segments (ground level)							
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	60%	94
Transporter	CNP 141	2	112			20%	108
Dump truck with grab	CNP 069	1	105			50%	102
						Total	109
Activity 5b Erection of Segments (elevated level)							
Prestress Jack*		4	110	-10	Movable Noise Barrier	30%	101
Welder/Generator	CNP 107	2	99	-10	Movable Noise Barrier	80%	91
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/Shed	60%	85
						Total	101
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity							

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 1 Temporary Works (inc. mobilization, utilities, traffic diversions etc.)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			100%	102
Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	2	110			30%	108
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106			30%	101
Concrete lorry mixer	CNP 044	2	109			20%	105
Mobile crane	BS 5228 Table D.7/114	1	101			40%	97
Excavator (45kW)	BS 5228 Table D.3/35	1	106			40%	102
Drill rig, rotary type (diesel)	CNP 072	1	110			50%	107
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100			60%	98
Lorry with crane/ grab	CNP 145	2	105			60%	106
Piling, large diameter bored, reverse circulation drill	CNP 166	2	100			50%	100
Poker, vibratory, hand-held	CNP 170	1	113			20%	106
Water pump (petrol)	CNP 282	2	103			100%	106
						Total	115
Activity 2 Station Foundations							
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	108			30%	103
Concrete lorry mixer	CNP 044	2	109			20%	105
Concrete pump, stationary/ lorry mounted	CNP 047	1	109			20%	102
Mobile crane	BS 5228 Table D.7/114	1	101			70%	99
Excavator (45kW)	BS 5228 Table D.3/35	1	106			35%	101
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100			50%	97
Lorry with crane/ grab	CNP 145	2	105			50%	105
Piling, large diameter bored, oscillator	CNP 165	1	115	-10	Fabric	60%	103
Power rammer (petrol)	CNP 169	1	108			20%	101
Water pump (petrol)	CNP 282	2	103			70%	104
						Total	113
Activity 3 Station Structure							
Air compressor, air flow > 10m3/min	CNP 003	1	104			70%	102
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	108			30%	103
Chipper, hand-held (pneumatic)	CNP 043	2	112			20%	108
Concrete lorry mixer	CNP 044	2	109			20%	105
Concrete pump, stationary/ lorry mounted	CNP 047	1	109			20%	102
Mobile crane	BS 5228 Table D.7/114	1	101			40%	97
Crane, tower (electric)	CNP 049	1	95			70%	93
Lorry with crane/ grab	CNP 145	2	105			50%	105
Poker, vibratory, hand-held	BS 5228 Table D.6/40	3	98			20%	96
						Total	113
Activity 4 Culvert Excavation							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102			40%	98
Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	1	110			40%	106
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106			40%	102
Excavator (45kW)	BS 5228 Table D.3/35	1	106			60%	104
Lorry with crane/ grab	CNP 145	2	105			60%	106
Water pump (petrol)	CNP 282	2	103	-10	Movable Noise Barrier	100%	96
						Total	111
Activity 5 Culvert Structure							
Air compressor, air flow > 30m3/min	CNP 003	1	104			40%	100
Chipper, hand-held (pneumatic)	CNP 043	2	112			20%	108
Concrete lorry mixer	CNP 044	2	109			20%	105
Concrete pump, stationary/ lorry mounted	CNP 047	1	109			20%	102
Mobile crane	BS 5228 Table D.7/114	1	101			60%	99
Lorry with crane/ grab	CNP 145	2	105			30%	103
Poker, vibratory, hand-held	BS 5228 Table D.6/40	2	98			20%	94
						Total	112
Activity 6 Roadworks (inc. backfill & utilities)							
Air compressor, air flow > 30m3/min	CNP 003	1	104			25%	98
Asphalt paver	CNP 004	1	109			20%	102
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108			30%	106
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106			30%	101
Concrete lorry mixer	CNP 044	2	109			20%	105
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112			40%	108
Drill/grinder, hand-held (electric)	CNP 065	1	98			25%	92
Excavator/ loader, wheeled/ tracked	CNP 081	1	112			25%	106
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100			25%	94
Lorry with crane/ grab	CNP 145	2	105			40%	104
Power rammer (petrol)	CNP 169	1	108			25%	102
Roller, vibratory	CNP 186	1	108			20%	101
						Total	114
Activity 7 EPIW - Footbridge							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/ Shed	100%	87
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106	-5	Movable Noise Barrier	30%	96
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	100%	96
Lorry with crane/ grab	CNP 145	1	105	-5	Movable Noise Barrier	70%	98
Bar bender and cutter (electric)	CNP 021	1	90	-10	Movable Noise Barrier	80%	79
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
						Total	102
(Group 2)							
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106	-5	Movable Noise Barrier	30%	96
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	108	-10	Movable Noise Barrier	30%	93
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	1	100	-5	Movable Noise Barrier	50%	92
Poker, vibratory, hand-held	BS 5228 Table D.6/40	2	98	-10	Movable Noise Barrier	50%	88
Grout pump	CNP 106	1	105	-10	Movable Noise Barrier	20%	88
Saw, circular, wood	CNP 201	1	108	-5	Movable Noise Barrier	80%	102
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
						Total	104
						Maximum	104

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 1 Mobilisation work, Site Clearance, Formation & Works Area							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	-15	Enclosure/Shed	50%	89
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	3	108	-10	Movable Noise Barrier	30%	98
Mobile crane	BS 5228 Table D.7/114	2	101	-5	Movable Noise Barrier	40%	95
Excavator (45kW)	BS 5228 Table D.3/35	3	106	-5	Movable Noise Barrier	20%	99
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
Lorry with crane/grab	CNP 145	5	105	-5	Movable Noise Barrier	40%	103
Water pump, submersible (electric)	CNP 283	3	85	-10	Movable Noise Barrier	100%	80
						Total	106
(Group 2)							
Bulldozer	BS 5228 Table D.9/2	1	104	-5	Movable Noise Barrier	40%	95
Mobile crane	BS 5228 Table D.7/114	2	101	-5	Movable Noise Barrier	40%	95
Dump truck (50t)	BS 5228 Table D.9/39	2	103	-5	Movable Noise Barrier	50%	98
Drill rig, rotary type (diesel)	CNP 072	5	110	-10	Fabric	20%	100
						Total	104
(Group 3)							
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	2	100	-5	Movable Noise Barrier	20%	91
Mobile crane	BS 5228 Table D.7/114	2	101	-5	Movable Noise Barrier	40%	95
Compactor, vibratory	CNP 050	1	105	-5	Movable Noise Barrier	50%	97
Lorry with crane/grab	CNP 145	5	105	-5	Movable Noise Barrier	40%	103
Poker, vibratory, hand-held	BS 5228 Table D.6/40	3	98	-10	Movable Noise Barrier	20%	86
						Total	105
						Maximum	106
Activity 2a Demolition of Footbridge							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	-15	Enclosure/Shed	100%	92
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	3	108	-10	Movable Noise Barrier	40%	99
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	2	106	-5	Movable Noise Barrier	40%	100
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
Lorry with crane/grab	CNP 145	2	105	-5	Movable Noise Barrier	40%	99
Water pump, submersible (electric)	CNP 283	3	85	-10	Movable Noise Barrier	100%	80
						Total	104
(Group 2)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	-15	Enclosure/Shed	100%	92
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	1	100			30%	95
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			100%	95
Poker, vibratory, hand-held	BS 5228 Table D.6/40	3	98			30%	98
						Total	101
						Maximum	104
Activity 2b Demolition of Harbour Mission School							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	-15	Enclosure/Shed	100%	92
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	3	108	-10	Movable Noise Barrier	40%	99
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	2	106	-5	Movable Noise Barrier	40%	100
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
Lorry with crane/grab	CNP 145	2	105	-5	Movable Noise Barrier	40%	99
Water pump, submersible (electric)	CNP 283	3	85	-10	Movable Noise Barrier	100%	80
						Total	104
(Group 2)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	-15	Enclosure/Shed	100%	92
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	1	100			30%	95
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			100%	95
Poker, vibratory, hand-held	BS 5228 Table D.6/40	3	98			30%	98
						Total	101
						Maximum	104
Activity 3 Slope Stabilization							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	-15	Enclosure/Shed	100%	90
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108	-10	Movable Noise Barrier	30%	96
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106	-5	Movable Noise Barrier	80%	100
Mobile crane	BS 5228 Table D.7/114	1	101			70%	99
Drill rig, rotary type (diesel)	CNP 072	1	110	-10	Fabric	50%	97
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			100%	95
Lorry with crane/grab	CNP 145	2	105	-5	Movable Noise Barrier	50%	100
Water pump, submersible (electric)	CNP 283	1	85			100%	85
						Total	106
(Group 2)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	-15	Enclosure/Shed	100%	90
Mobile crane	BS 5228 Table D.7/114	1	101			70%	99
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			100%	95
Grout mixer	CNP 105	1	90			100%	90
Grout pump	CNP 106	1	105			20%	98
Poker, vibratory, hand-held	BS 5228 Table D.6/40	2	98			50%	98
						Total	104
						Maximum	106

PME	TM or other reference	No. of PME	SWL, dB(A)/ unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 4 Piling/Walling							
Pile Rig	BS 5228 Table D.11/2	1	112	-10	Fabric	25%	96
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102	-15	Enclosure/Shed	50%	84
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	50%	82
						Total	96
Activity 5 Excavation of Soil							
(Group 1)							
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106	-5	Movable Noise Barrier	30%	96
Conveyor belt	CNP 041	1	90			50%	87
Dump truck (50t)	BS 5228 Table D.9/39	2	103			100%	106
Drill rig, rotary type (diesel)	CNP 072	2	110	-10	Fabric	50%	100
Excavator (45kW)	BS 5228 Table D.3/35	1	106			100%	106
Ventilation fan	CNP 241	1	108	-15	Silencer	100%	93
Water pump, submersible (electric)	CNP 283	1	85			100%	85
						Total	110
(Group 2)							
Concrete pump, stationary/ lorry mounted	CNP 047	1	109			20%	102
Grout mixer	CNP 105	2	90			20%	86
Grout pump	CNP 106	2	105			20%	101
Ventilation fan	CNP 241	1	108			100%	108
Winch (electric)	CNP 262	1	95			20%	88
						Total	110
						Maximum	110
Activity 6 Construction of Box Tunnel & Backfill							
(Group 1)							
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	2	102			20%	98
Concrete lorry mixer	CNP 044	2	109			20%	105
Concrete pump, stationary/ lorry mounted	CNP 047	1	109			20%	102
Ventilation fan	CNP 241	2	108			100%	111
Winch (electric)	CNP 262	1	95			100%	95
						Total	113
(Group 2)							
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	2	102			30%	100
Dump truck (50t)	BS 5228 Table D.9/39	2	103			30%	101
Poker, vibratory, hand-held	BS 5228 Table D.6/40	6	98			30%	101
Ventilation fan	CNP 241	2	108			100%	111
Water pump, submersible (electric)	CNP 283	2	85			100%	88
						Total	112
						Maximum	113
Activity 7 Sitting Out Area at Sham Wan Tower - Reinstatement Works							
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102			100%	102
Asphalt paver	CNP 004	1	109			20%	102
Concrete lorry mixer	CNP 044	1	109			20%	102
Dump truck	CNP 067	1	117			20%	110
Power rammer (petrol)	CNP 169	1	108			20%	101
Poker, vibratory, hand-held	CNP 170	2	113			20%	109
Road roller	CNP 185	1	108			20%	101
						Total	114
Activity 8 Material Storage and Site Facilities							
Dump truck	CNP 067	2	117			20%	113
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112			20%	105
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100			20%	93
						Total	114

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
LET Entrance A							
Activity 1 Entrance A Rock Excavation							
(Group 1 - Rock Breaking)							
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108	-10	Movable Noise Barrier	50%	98
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	3	106	-5	Movable Noise Barrier	70%	104
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
Lorry with crane/grab	CNP 145	2	105	-5	Movable Noise Barrier	35%	98
						Total	106
(Group 2 - Piling)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure	100%	87
Mobile crane	BS 5228 Table D.7/114	2	101	-5	Movable Noise Barrier	70%	97
Drill rig, rotary type (diesel)	CNP 072	3	110	-10	Fabric	80%	104
Excavator (45kW)	BS 5228 Table D.3/35	2	106	-5	Movable Noise Barrier	35%	99
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
Water pump, submersible (electric)	CNP 283	1	85	-10	Movable Noise Barrier	100%	75
						Total	106
(Group 3 - Concreting)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure	100%	87
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	2	100	-5	Movable Noise Barrier	50%	95
Grout mixer	CNP 105	1	90	-5	Movable Noise Barrier	50%	82
Grout pump	CNP 106	1	105	-10	Movable Noise Barrier	50%	92
Poker, vibratory, hand-held	BS 5228 Table D.6/40	2	98	-10	Movable Noise Barrier	50%	88
Water pump, submersible (electric)	CNP 283	1	85	-10	Movable Noise Barrier	100%	75
						Total	98
						Maximim	106
Activity 2 Entrance A Concrete Works							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	-15	Enclosure	80%	89
Bar bender and cutter (electric)	CNP 021	1	90	-10	Movable Noise Barrier	80%	79
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	2	100	-5	Movable Noise Barrier	50%	95
Concrete pump (100kW)	BS 5228 Table D.6/36	1	106	-15	Enclosure	50%	88
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	60%	94
Poker, vibratory, hand-held	BS 5228 Table D.6/40	4	98	-10	Movable Noise Barrier	50%	91
Saw, circular, wood	CNP 201	1	108	-5	Movable Noise Barrier	80%	102
Winch (electric)	CNP 262	1	95	-5	Movable Noise Barrier	80%	89
Water pump, submersible (electric)	CNP 283	2	85	-10	Movable Noise Barrier	100%	78
						Total	104

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
LET Entrance B							
Activity 1 Entrance B Piling/Walling							
Pile Rig	BS 5228 Table D.11/2	2	112	-10	Fabric	80%	104
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102			100%	105
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95			100%	95
						Total	108
Activity 2 Entrance B Excavation							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-20	Underground Plant	100%	82
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	4	108	-20	Underground Plant	50%	91
Breaker, excavator mounted (hydraulic)	CNP 028	1	122	-20	Underground Plant	80%	101
Excavator/ loader, wheeled/ tracked	CNP 081	1	112	-20	Underground Plant	50%	89
Hoist, passenger/ material (electric)	CNP 122	1	95	-20	Underground Plant	100%	75
Lorry with crane/grab	CNP 145	2	105	-20	Underground Plant	50%	85
Rock drill, crawler mounted (hydraulic)	CNP 182	2	123	-20	Underground Plant	80%	105
Water pump, submersible (electric)	CNP 283	1	85	-20	Underground Plant	100%	65
						Total	107
(Group 2)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-20	Underground Plant	100%	82
Concrete lorry mixer	CNP 044	1	109	-20	Underground Plant	20%	82
Grout mixer	CNP 105	1	90	-20	Underground Plant	30%	65
Grout pump	CNP 106	1	105	-20	Underground Plant	30%	80
Poker, vibratory, hand-held	CNP 170	2	113	-20	Underground Plant	20%	89
Water pump, submersible (electric)	CNP 283	1	85	-20	Underground Plant	100%	65
						Total	91
						Maximim	107
Activity 3 Entrance B Concrete Works							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	-15	Enclosure	80%	89
Bar bender and cutter (electric)	CNP 021	1	90			80%	89
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	2	100			50%	100
Concrete pump (100kW)	BS 5228 Table D.6/36	1	106	-15	Enclosure	50%	88
Mobile crane	BS 5228 Table D.7/114	1	101			60%	99
Hoist, passenger/ material (electric)	CNP 122	1	95			100%	95
Lorry with crane/grab	CNP 145	1	105	-5	Movable Noise Barrier	50%	97
Poker, vibratory, hand-held	BS 5228 Table D.6/40	4	98			50%	101
Saw, circular, wood	CNP 201	1	108	-5	Movable Noise Barrier	80%	102
Water pump, submersible (electric)	CNP 283	2	85			100%	88
						Total	108

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 1a Rock Slope Excavation							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	-15	Noise Enclosure	100%	92
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	4	108	-10	Movable Noise Barrier	30%	99
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	3	106	0		30%	106
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	70%	94
Burster	CNP 051	2	90	-5	Movable Noise Barrier	25%	82
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	95	-10	Movable Noise Barrier	20%	81
Lorry with crane/grab	CNP 145	2	105	-5	Movable Noise Barrier	40%	99
Water pump, submersible (electric)	CNP 283	2	85	-10	Movable Noise Barrier	20%	71
						Total	107
(Group 2)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	-15	Noise Enclosure	100%	92
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	70%	94
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	95	-10	Movable Noise Barrier	20%	81
Lorry with crane/grab	CNP 145	2	105	-5	Movable Noise Barrier	40%	99
Rock Drill	TNS EIA*	3	108	-10	Fabric	30%	98
Rock drill, hand-held (pneumatic)	CNP 183	2	116	-10	Movable Noise Barrier	30%	104
Water pump, submersible (electric)	CNP 283	2	85	-10	Movable Noise Barrier	20%	71
						Total	106
Activity 1b Slope Stabilization							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	3	102	-15	Noise Enclosure	100%	92
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	4	108	-10	Movable Noise Barrier	30%	99
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	3	106	0		30%	106
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	95	-10	Movable Noise Barrier	20%	81
						Total	107
(Group 2)							
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	70%	94
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	95	-10	Movable Noise Barrier	20%	81
Grout mixer	CNP 105	2	90	-10	Movable Noise Barrier	50%	80
Grout pump	CNP 106	2	105	-10	Movable Noise Barrier	50%	95
Lorry with crane/grab	CNP 145	2	105	-5	Movable Noise Barrier	40%	99
						Total	102
						Maximum	107
Activity 2 Mobilisation work, Site Clearance, Formation, & Works Area							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Noise Enclosure	100%	87
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106	0		30%	101
Mobile crane	BS 5228 Table D.7/114	1	101	0		40%	97
Drill rig, rotary type (diesel)	CNP 072	1	110	-10	Fabric	60%	98
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
						Total	104
(Group 2)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Noise Enclosure	100%	87
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108	-10	Movable Noise Barrier	30%	96
Mobile crane	BS 5228 Table D.7/114	1	101	0		40%	97
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
Lorry with crane/grab	CNP 145	2	105	0		60%	106
						Total	107
(Group 3)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Noise Enclosure	100%	87
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	2	100	0		20%	96
Poker, vibratory, hand-held	CNP 170	2	113	-10	Movable Noise Barrier	20%	99
						Total	101
						Maximum	107
Activity 3a Piling/Walling (Group 1)							
Press in Piler	TNS EIA*	1	94			50%	91
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Noise Enclosure	100%	87
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
						Total	93
Activity 3a Piling/Walling (Group 2)							
Press in Piler	TNS EIA*	1	94			50%	91
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Noise Enclosure	100%	87
						Total	92
Activity 3b Piling/Walling (same location)							
Press in Piler	TNS EIA*	2	94			50%	94
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	-15	Noise Enclosure	100%	90
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
						Total	96
Activity 3c Piling/Walling (underground)							
Press in Piler	TNS EIA*	2	94	-20	Underground plant	50%	74
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	-20	Underground plant	100%	85
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-20	Underground plant	100%	75
						Total	86

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 4 Temporary Walls and Traffic Deck							
(Group 1)							
Road ripper, mini-robot mounted	CNP 189	4	97	0		70%	101
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
Water pump, submersible (electric)	CNP 283	2	85	-10	Movable Noise Barrier	50%	75
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	4	102	-15	Noise Enclosure	70%	91
Lorry with crane/grab	CNP 145	3	105	0		20%	103
Ventilation fan	CNP 241	2	108	-15	Silencer	100%	96
						Total	106
(Group 2)							
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	8	108	-10	Movable Noise Barrier	50%	104
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
Water pump, submersible (electric)	CNP 283	2	85	-10	Movable Noise Barrier	50%	75
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	4	102	-15	Noise Enclosure	70%	91
Lorry with crane/grab	CNP 145	3	105	0		20%	103
Ventilation fan	CNP 241	2	108	-15	Silencer	100%	96
						Total	107
(Group 3)							
Concrete lorry mixer (5m ³)	BS 5228 Table D.6/35	2	100	0		50%	100
Mobile crane	BS 5228 Table D.7/114	2	101	0		50%	101
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
Water pump, submersible (electric)	CNP 283	2	85	-10	Movable Noise Barrier	50%	75
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	4	102	-15	Noise Enclosure	70%	91
Ventilation fan	CNP 241	2	108	-15	Silencer	100%	96
						Total	105
						Maximum	107
Activity 5 Excavation - Soil and Shoring							
(Group 1)							
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	2	102	-20	Underground plant	100%	85
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	108	-20	Underground plant	30%	83
Concrete pump (100kW)	BS 5228 Table D.6/36	1	106	-20	Underground plant	50%	83
Dump truck (50t)	BS 5228 Table D.9/39	1	103	-10	Underground plant	50%	90
Drill rig, rotary type (diesel)	CNP 072	2	110	-20	Underground plant	70%	91
Excavator (45kW)	BS 5228 Table D.3/35	1	106	-10	Underground plant	20%	89
Lorry with crane/grab	CNP 145	1	105	-10	Underground plant	70%	93
Ventilation fan	CNP 241	1	108	-20	Underground plant	100%	88
Winch (electric)	CNP 262	1	95	-10	Underground plant	50%	82
Water pump, submersible (electric)	CNP 283	1	85	-20	Underground plant	100%	65
						Total	98
(Group 2)							
Concrete lorry mixer (5m ³)	BS 5228 Table D.6/35	1	100	-10	Underground plant	50%	87
Mobile crane	BS 5228 Table D.7/114	1	101	-10	Underground plant	70%	89
Grout mixer	CNP 105	1	90	-20	Underground plant	50%	67
Grout pump	CNP 106	1	105	-20	Underground plant	50%	82
Ventilation fan	CNP 241	1	108	-20	Underground plant	100%	88
Water pump, submersible (electric)	CNP 283	1	85	-20	Underground plant	100%	65
						Total	93
						Maximum	98
Activity 6 Removal of Retaining Wall							
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102	-20	Underground plant	70%	80
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	3	108	-20	Underground plant	70%	91
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	2	106	-20	Underground plant	70%	87
						Total	93
Activity 7 Construction of Station							
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	2	102	-20	Underground plant	100%	85
Concrete lorry mixer (5m ³)	BS 5228 Table D.6/35	2	100	-10	Underground plant	50%	90
Concrete pump, stationary/ lorry mounted	CNP 047	1	109	-20	Underground plant	20%	82
Dump truck (50t)	BS 5228 Table D.9/39	2	103	-10	Underground plant	30%	91
Poker, vibratory, hand-held	BS 5228 Table D.6/40	6	98	-20	Underground plant	50%	83
Ventilation fan	CNP 241	2	108	-20	Underground plant	100%	91
Winch (electric)	CNP 262	1	95	-10	Underground plant	50%	82
Water pump, submersible (electric)	CNP 283	2	85	-20	Underground plant	100%	68
						Total	96

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total SWL, dB(A)
Activity 8 Construction of Plant Building							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	2	102	-15	Noise Enclosure	100%	90
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	2	100	-5	Movable Noise Barrier	50%	95
Concrete pump (100kW)	BS 5228 Table D.6/36	1	106	-10	Movable Noise Barrier	20%	89
Mobile crane	BS 5228 Table D.7/114	1	101	-5	Movable Noise Barrier	70%	94
Poker, vibratory, hand-held	BS 5228 Table D.6/40	4	98	-10	Movable Noise Barrier	50%	91
Water pump, submersible (electric)	CNP 283	1	85	-10	Movable Noise Barrier	100%	75
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
Lorry with crane/grab	CNP 145	2	105	-5	Movable Noise Barrier	30%	98
Bar bender and cutter (electric)	CNP 021	1	108	-10	Movable Noise Barrier	50%	95
Saw, circular, wood	CNP 201	1	108	-10	Movable Noise Barrier	50%	95
						Total	103
Activity 9 Backfill, Drainage & Road Pavement							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Noise Enclosure	50%	84
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108	-10	Movable Noise Barrier	30%	96
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106	0		30%	101
Drill/grinder, hand-held (electric)	CNP 065	2	98	-10	Movable Noise Barrier	50%	88
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	50%	82
Lorry with crane/grab	CNP 145	2	105	0		50%	105
						Total	107
(Group 2)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Noise Enclosure	50%	84
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	1	100	0		20%	93
Mobile crane	BS 5228 Table D.7/114	1	101	0		50%	98
Excavator (45kW)	BS 5228 Table D.3/35	1	106	0		50%	103
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	50%	82
Power rammer (petrol)	CNP 169	1	108	-10	Fabric	50%	95
						Total	105
(Group 3)							
Asphalt paver	BS 5228 Table D.8/24	1	101	0		20%	94
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	50%	82
Poker, vibratory, hand-held	BS 5228 Table D.6/40	1	98	-10	Movable Noise Barrier	50%	85
Vibratory roller (9kW)	BS 5228 Table D.3/115	1	102	0		50%	99
Road roller	CNP 185	1	108	0		50%	105
						Total	106
						Maximum	107
Activity 10 EPIW - Footbridge							
(Group 1)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/ Shed	100%	87
Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	1	106	0		30%	101
Mobile crane	BS 5228 Table D.7/114	1	101	0		100%	101
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
						Total	104
(Group 2)							
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	1	102	-15	Enclosure/ Shed	100%	87
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	108	-10	Movable Noise Barrier	30%	93
Lorry with crane/grab	CNP 145	1	105	0		50%	102
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
						Total	103
(Group 3)							
Bar bender and cutter (electric)	CNP 021	1	90	-10	Movable Noise Barrier	80%	79
Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	1	100	0		50%	97
Poker, vibratory, hand-held	BS 5228 Table D.6/40	2	98	-10	Movable Noise Barrier	50%	88
Grout pump	CNP 106	1	105	-10	Movable Noise Barrier	20%	88
Saw, circular, wood	CNP 201	1	108	-10	Movable Noise Barrier	80%	97
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	-10	Movable Noise Barrier	100%	85
						Total	101
						Maximum	104
Activity 11 Material Storage and Site Facilities							
Dump truck (50t)	BS 5228 Table D.9/39	2	103	0		20%	99
Mobile crane	BS 5228 Table D.7/114	1	101	0		20%	94
Generator, silenced, 75 dB(A) at 7 m	CNP 102	1	100	0		20%	93
						Total	101

*TNS EIA refers to Tsim Sha Tsui Northern Subway EIA

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	% on time	Total SWL, dB(A)
Plant Building					
Activity 1 Rock Excavation					
(Group 1)					
Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	1	102	80%	101
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108	30%	106
Breaker, excavator mounted (hydraulic)	CNP 028	3	122	40%	123
Crane, mobile/ barge mounted (diesel)	CNP 048	2	112	60%	113
Drill rig, rotary type (diesel)	CNP 072	3	110	70%	113
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	50%	92
Lorry with crane/grab	CNP 145	2	105	50%	105
Water pump, submersible (electric)	CNP 283	1	85	70%	83
Excavator/ loader, wheeled/ tracked	CNP 081	2	112	70%	113
				Total	124
(Group 2)					
Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	1	102	80%	101
Concrete lorry mixer	CNP 044	2	109	20%	105
Crane, mobile/ barge mounted (diesel)	CNP 048	2	112	60%	113
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	95	50%	92
Grout mixer	CNP 105	1	90	70%	88
Grout pump	CNP 106	1	105	70%	103
Poker, vibratory, hand-held	CNP 170	2	113	20%	109
				Total	115
				Maximum	124
Activity 2 Construction of Plant Building					
(Group 1)					
Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	1	102	80%	101
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108	60%	109
Mobile crane	BS 5228 Table D.7/114	1	101	20%	94
Dump truck (50t)	BS 5228 Table D.9/39	2	103	60%	104
Excavator (45kW)	BS 5228 Table D.3/35	1	106	60%	104
Ventilation fan	CNP 241	1	108	20%	101
Water pump, submersible (electric)	CNP 283	2	85	50%	85
				Total	112
(Group 2)					
Bar bender and cutter (electric)	CNP 021	1	90	20%	83
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108	60%	109
Concrete lorry mixer (5m ³)	BS 5228 Table D.6/35	2	100	60%	101
Concrete pump (100kW)	BS 5228 Table D.6/36	2	106	80%	108
Mobile crane	BS 5228 Table D.7/114	1	101	20%	94
Lorry with crane/grab	CNP 145	2	105	50%	105
Poker, vibratory, hand-held	BS 5228 Table D.6/40	3	98	100%	103
Saw, circular, wood	CNP 201	1	108	20%	101
				Total	113
				Maximum	113

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	% on time	Total SWL, dB(A)
Lee Nam Road Barging Point					
Activity 1 Mobilization / Site Clearance & Site Office					
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102	100%	102
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108	100%	111
Dump truck (50t)	BS 5228 Table D.9/39	1	103	100%	103
Excavator (45kW)	BS 5228 Table D.3/35	2	106	100%	109
Saw, circular, wood	CNP 201	1	108	100%	108
				Total	115
Activity 2 Construction of Conveyor Belt					
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102	50%	99
Concrete lorry mixer	CNP 044	1	109	50%	106
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112	50%	109
Dump truck (50t)	BS 5228 Table D.9/39	1	103	80%	102
Poker, vibratory, hand-held	BS 5228 Table D.6/40	2	98	100%	101
				Total	112
Activity 3a Operation (Barge)					
Derrick barge	CNP 061	2	104	100%	107
Tug boat	CNP 221	2	110	100%	113
				Total	114
Activity 3b Operation (Crusher)					
Crusher	Anderson Road EIA	1	118	100%	118
				Total	118
Activity 3c Operation (Other Plants)					
Front end loader	BS 5228 Table D.3/97	1	105	100%	105
Conveyor belt	CNP 041	1	90	100%	90
Mobile crane	BS 5228 Table D.7/114	1	101	100%	101
Dump truck (50t)	BS 5228 Table D.9/39	2	103	100%	106
				Total	109
Activity 4 Demolition of Barging Point					
Concrete lorry mixer (5m ³)	BS 5228 Table D.6/35	1	100	100%	100
Mobile crane	BS 5228 Table D.7/114	1	101	100%	101
Excavator (45kW)	BS 5228 Table D.3/35	1	106	100%	106
Lorry with crane/grab	CNP 145	1	105	100%	105
				Total	110
Activity 5 Re provision of Sitting Out Area					
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102	100%	102
Asphalt paver	BS 5228 Table D.8/24	1	101	20%	94
Concrete lorry mixer (5m ³)	BS 5228 Table D.6/35	1	100	100%	100
Dump truck (50t)	BS 5228 Table D.9/39	1	103	100%	103
Power rammer (petrol)	CNP 169	1	108	100%	108
Poker, vibratory, hand-held	BS 5228 Table D.6/40	2	98	20%	94
Road roller	CNP 185	1	108	100%	108
				Total	112

PME	TM or other reference	No. of PME	SWL, dB(A)/unit	% on time	Total SWL, dB(A)
Telegraph Bay Barging Point					
Activity 1 Mobilization and Barging Point Setup - Land Works					
Air compressor, air flow > 10m ³ /min and <= 30m ³ /min	CNP 002	1	102	80%	101
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	1	111	30%	106
Breaker, excavator mounted (hydraulic)	CNP 028	1	122	40%	118
Concrete lorry mixer	CNP 044	1	109	20%	102
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112	60%	110
Excavator/ loader, wheeled/ tracked	CNP 081	1	112	70%	110
Lorry with crane/grab	CNP 145	1	105	50%	102
Poker, vibratory, hand-held	CNP 170	2	113	20%	109
Water pump (petrol)	CNP 282	2	103	70%	104
				Total	120
Activity 2a Marine Piling (Land)					
Grout mixer	CNP 105	1	90	50%	87
Grout pump	CNP 106	1	105	50%	102
Poker, vibratory, hand-held	CNP 170	2	113	50%	113
				Total	113
Activity 2b Marine Piling					
Piling, large diameter bored, grab and chisel	CNP 164	1	115	80%	114
Derrick barge	CNP 061	1	104	80%	103
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112	60%	110
				Total	116
Activity 3 Operation of Barging point					
Excavator/ loader, wheeled/ tracked	CNP 081	1	112	50%	109
Dump truck (50t)	BS 5228 Table D.9/39	10	103	100%	113
Tug boat	CNP 221	1	110	100%	110
Derrick barge	CNP 061	1	104	100%	104
				Total	116
Activity 4a Marine Piling - Demolition (Land)					
Dump truck (50t)	BS 5228 Table D.9/39	10	103	100%	113
Piling, vibrating hammer	CNP 172	1	115	100%	115
				Total	117
Activity 4b Marine Piling - Demolition					
Tug boat	CNP 221	1	110	100%	110
Derrick barge	CNP 061	1	104	100%	104
Crane, mobile/ barge mounted (diesel)	CNP 048	1	112	60%	110
				Total	113