

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>BCP Site Formation</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			80%	1
						<b>Total SWL, dB (A)</b>	<b>107</b>
<b>Group 2</b>							
	Excavator (45kW)	BS 5228 Table D.3/35	106			80%	4
							<b>111</b>
<b>Group 3</b>							
	Bulldozer (239kW)	BS 5228 Table D.3/27	109			70%	1
	Lorry with crane/grab	CNP 145	105			70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			70%	3
						<b>Total SWL, dB (A)</b>	<b>111</b>
						<b>Maximum SWL, dB (A)</b>	<b>111</b>
<b>Stage 2 - Site Formation Works</b>							
<b>Group 1</b>							
	Excavator (45kW)	BS 5228 Table D.3/35	106			80%	3
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
							<b>110</b>
<b>Group 2</b>							
	Piling, diaphragm wall, bentonite filtering plant	CNP 162	105			80%	1
	Piling, diaphragm wall, hydraulic extractor	CNP 163	90			80%	1
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			80%	1
							<b>106</b>
<b>Group 3</b>							
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	70%	1
	Compactor, vibratory	CNP 050	105			70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			70%	4
						<b>Total SWL, dB (A)</b>	<b>110</b>
						<b>Maximum SWL, dB (A)</b>	<b>110</b>
<b>Stage 3 - Building Formation Works</b>							
<b>Group 1</b>							
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	50%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			30%	1
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
						<b>Total SWL, dB (A)</b>	<b>106</b>
<b>Group 2</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	2
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	100%	1
	Piling, large diameter bored, reverse circulation drill	CNP 166	100			70%	1
	Water pump (electric)	CNP 281	88			80%	4
						<b>Total SWL, dB (A)</b>	<b>107</b>
<b>Group 3</b>							
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			40%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			70%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			70%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			80%	2
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	50%	2
	Water pump (electric)	CNP 281	88			80%	4
	Bar bender and cutter (electric)	CNP 021	90			80%	3
						<b>Total SWL, dB (A)</b>	<b>109</b>
						<b>Maximum SWL, dB (A)</b>	<b>109</b>
<b>Stage 4 - Building Structures</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	40%	2
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			70%	3
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	40%	1
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			70%	3
	Bar bender and cutter (electric)	CNP 021	90			80%	3
						<b>Total SWL, dB (A)</b>	<b>109</b>

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>BCP Site Formation</b>							
<b>Stage 5 - Building E&amp;M System</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	111			40%	2
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			30%	2
	Mobile crane	BS 5228 Table D.7/114	101			50%	1
	Lorry with crane/grab	CNP 145	105			50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	4
						Total SWL, dB (A)	112
<b>Stage 6 - Cross Boundary Bridges - Substructures</b>							
<b>Group 1</b>							
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	50%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			30%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	2
	Dump truck (50t)	BS 5228 Table D.9/39	103			70%	3
						Total SWL, dB (A)	110
<b>Group 2</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	2
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	100%	1
	Piling, large diameter bored, reverse circulation drill	CNP 166	100			70%	1
	Water pump (electric)	CNP 281	88			80%	4
						Total SWL, dB (A)	107
<b>Group 3</b>							
	Concrete pump, stationary/ lorry mounted	CNP 047	109	-5	Movable Noise Barrier	40%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			70%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			70%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			80%	2
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	50%	2
	Water pump (electric)	CNP 281	88			80%	4
	Bar bender and cutter (electric)	CNP 021	90			80%	3
	Mobile crane	BS 5228 Table D.7/114	101			70%	1
						Total SWL, dB (A)	109
						Maximum SWL, dB (A)	110
<b>Stage 7 - Cross Boundary Bridges - Bridges Deck</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	40%	2
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			70%	6
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	40%	2
	Mobile crane	BS 5228 Table D.7/114	101			40%	2
	Lorry with crane/grab	CNP 145	105			50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	3
	Bar bender and cutter (electric)	CNP 021	90			80%	3
						Total SWL, dB (A)	110
<b>Stage 8 - Cross Boundary Bridges - Road Works &amp; Facilities</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
						Total SWL, dB (A)	105
<b>Group 2</b>							
	Roller, vibratory	CNP 186	108			30%	1
	Asphalt paver	CNP 004	109			40%	1
	Concrete lorry mixer	CNP 044	109			30%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			40%	3
	Bar bender and cutter (electric)	CNP 021	90			20%	1
						Total SWL, dB (A)	109
						Maximum SWL, dB (A)	109
<b>Stage 9 - Cross Boundary Bridges - E&amp;M System</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	111			40%	2
	Lorry with crane/grab	CNP 145	105			50%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	5
						Total SWL, dB (A)	112

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>BCP Site Formation</b>							
<b>Stage 10 - General Civil Works and Utilities</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Compactor, vibratory	CNP 050	105			70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			70%	2
	Excavator (45kW)	BS 5228 Table D.3/35	106			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
						<b>Total SWL, dB (A)</b>	<b>110</b>
<b>Group 2</b>							
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			75%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			70%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Bar bender and cutter (electric)	CNP 021	90			90%	1
	Lorry with crane/grab	CNP 145	105			50%	1
						<b>Total SWL, dB (A)</b>	<b>106</b>
<b>Group 3</b>							
	Roller, vibratory	CNP 186	108			30%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			50%	2
	Asphalt paver	CNP 004	109			40%	1
	Concrete lorry mixer	CNP 044	109			30%	1
						<b>Total SWL, dB (A)</b>	<b>110</b>
						<b>Maximum SWL, dB (A)</b>	<b>110</b>
<b>Stage 11 - Road Works</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
						<b>Total SWL, dB (A)</b>	<b>105</b>
<b>Group 2</b>							
	Roller, vibratory	CNP 186	108			30%	1
	Asphalt paver	CNP 004	109			40%	1
	Concrete lorry mixer	CNP 044	109			30%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
						<b>Total SWL, dB (A)</b>	<b>109</b>
						<b>Maximum SWL, dB (A)</b>	<b>109</b>
<b>Stage 12 - Lighting/E&amp;M/TCSS</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	40%	2
	Concrete lorry mixer	CNP 044	109			30%	2
	Mobile crane	BS 5228 Table D.7/114	101			50%	1
	Lorry with crane/grab	CNP 145	105			50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	5
						<b>Total SWL, dB (A)</b>	<b>111</b>
<b>Stage 13 Sewage Treatment Plant</b>							
<b>13a Foundation Works</b>							
<b>Group 1</b>							
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	50%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			30%	1
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
						<b>Total SWL, dB (A)</b>	<b>106</b>
<b>Group 2</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	2
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	100%	1
	Piling, large diameter bored, reverse circulation drill	CNP 166	100			70%	1
	Water pump (electric)	CNP 281	88			80%	4
						<b>Total SWL, dB (A)</b>	<b>107</b>
<b>Group 3</b>							
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			40%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			70%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			70%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			80%	2
	Water pump (electric)	CNP 281	88			80%	4
	Bar bender and cutter (electric)	CNP 021	90			80%	3
						<b>Total SWL, dB (A)</b>	<b>109</b>
						<b>Maximum SWL, dB (A)</b>	<b>109</b>

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>BCP Site Formation</b>							
<b>13b Superstructures</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102			70%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	40%	2
	Concrete lorry mixer	CNP 044	109			70%	3
	Concrete pump, stationary/ lorry mounted	CNP 047	109			40%	1
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Lorry with crane/grab	CNP 145	105			50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	3
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							114
<b>13c Road Works /Pipe Works</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102			70%	1
	Compactor, vibratory	CNP 050	105			70%	1
	Dump truck	CNP 067	117			70%	2
	Excavator/ loader, wheeled/ tracked	CNP 081	112			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							119
<b>Group 2</b>							
	Roller, vibratory	CNP 186	108			30%	1
	Dump truck	CNP 067	117			50%	2
	Asphalt paver	CNP 004	109			40%	1
	Concrete lorry mixer	CNP 044	109			30%	1
Total SWL, dB (A)							118
Maximum SWL, dB (A)							119

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Lin Ma Hang Road next to BCP (Grade Road)</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102	-15	Enclosure/Shed	100%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-5	Movable Noise Barrier	70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			80%	1
	Excavator (45kW)	BS 5228 Table D.3/35	106			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
Total SWL, dB (A)							109
<b>Group 2</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102			100%	1
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105			70%	1
	Water pump, submersible (electric)	CNP 283	85			100%	1
Total SWL, dB (A)							107
Maximum SWL, dB (A)							109
<b>Stage 2 - Site Formation and Road Works</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102	-15	Enclosure/Shed	50%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	1
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	70%	1
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1
	Road roller	BS 5228 Table D.8/30	101			70%	1
Total SWL, dB (A)							106

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Chuk Yuen Village Access Road</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102			100%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			80%	1
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
Total SWL, dB (A)							107
<b>Group 2</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102			100%	1
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105			70%	1
	Water pump, submersible (electric)	CNP 283	85			100%	1
Total SWL, dB (A)							107
Maximum SWL, dB (A)							107
<b>Stage 2 - Road Works</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102			50%	1
	Generator, standard	CNP 101	108			50%	1
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1
	Road roller	BS 5228 Table D.8/30	101			70%	1
Total SWL, dB (A)							108

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Road improvement works of Lin Ma Hang Road</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	1
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
Total SWL, dB (A)							104
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	1
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	1
	Water pump, submersible (electric)	CNP 283	85			100%	1
Total SWL, dB (A)							102
Maximum SWL, dB (A)							104
<b>Stage 2 - Temporary Bridge - Piling</b>							
<b>Group 1</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	2
	Excavator/ loader, wheeled/ tracked	CNP 081	112			50%	1
	Lorry	CNP 141	112			50%	2
Total SWL, dB (A)							114
<b>Group 2</b>							
	Piling, large diameter bored, reverse circulation drill	CNP 166	100			30%	2
	Piling, large diameter bored, oscillator	CNP 165	115			70%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	2
Total SWL, dB (A)							117
<b>Group 3</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	2
	Crane, mobile/ barge mounted (diesel)	CNP 048	112			50%	2
	Poker, vibratory, hand-held	CNP 170	113			20%	1
	Concrete pump, stationary/ lorry mounted	CNP 047	109			20%	1
	Concrete lorry mixer	CNP 044	109			20%	2
Total SWL, dB (A)							115
Maximum SWL, dB (A)							117
<b>Stage 3 - Temporary Bridge - PileCaps</b>							
<b>Group 1</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			70%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	2
	Excavator (45kW)	BS 5228 Table D.3/35	106			50%	1
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2
Total SWL, dB (A)							109
<b>Group 2</b>							
	Water pump (electric)	CNP 281	88			70%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			70%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	2
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	2
	Concrete pump, stationary/ lorry mounted	CNP 047	109			20%	1
	Mobile crane	BS 5228 Table D.7/114	101			100%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	1
Total SWL, dB (A)							108
Maximum SWL, dB (A)							109
<b>Stage 4 - Temporary Bridge - Piers</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	2
	Concrete lorry mixer	CNP 044	109			20%	2
	Concrete pump, stationary/ lorry mounted	CNP 047	109			20%	1
	Crane, mobile/ barge mounted (diesel)	CNP 048	112			50%	1
	Poker, vibratory, hand-held	CNP 170	113			20%	1
Total SWL, dB (A)							113
<b>Stage 5 - Temporary Bridge - Bridge Decks</b>							
	Crane, mobile/ barge mounted (diesel)	CNP 048	112			50%	1
	Lorry	CNP 141	112			70%	1
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	1
	Prestress Jack*	CNP 261	110			20%	2
Total SWL, dB (A)							114
<b>Stage 6 - Road Works</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	1
	Asphalt paver	BS 5228 Table D.8/24	101	-5	Movable Noise Barrier	70%	1
	Road roller	BS 5228 Table D.8/30	101	-5	Movable Noise Barrier	70%	1
Total SWL, dB (A)							98
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity							

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Flyover from BCP to Wo Keng Shan</b>							
<b>Stage 1 - Site Clearance &amp; Haul Road</b>							
<b>Group 1</b>							
	Excavator (45kW)	BS 5228 Table D.3/35	106	-10	Movable Noise Barrier	30%	2
						Total SWL, dB (A)	94
<b>Group 2</b>							
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	2
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	40%	1
						Total SWL, dB (A)	105
<b>Group 3</b>							
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4
						Total SWL, dB (A)	103
						Maximum SWL, dB (A)	105
<b>Stage 2 - Piling</b>							
<b>Group 1</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	13
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	6
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	30%	13
						Total SWL, dB (A)	109
<b>Group 2</b>							
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	-10	Fabric	40%	6
	Piling, large diameter bored, oscillator	CNP 165	115	-10	Fabric	40%	7
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	13
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	13
						Total SWL, dB (A)	110
<b>Group 3</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	13
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	13
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	13
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	6
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-10	Movable Noise Barrier	20%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6
						Total SWL, dB (A)	108
						Maximum SWL, dB (A)	110
<b>Stage 3 - PileCaps</b>							
<b>Group 1</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	13
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	13
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	4
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	13
						Total SWL, dB (A)	110
<b>Group 2</b>							
	Water pump (electric)	CNP 281	88			70%	13
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	13
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	13
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	13
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	13
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	6
						Total SWL, dB (A)	110
						Maximum SWL, dB (A)	110
<b>Stage 4 - Piers</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	13
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	13
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	13
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	6
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	6
						Total SWL, dB (A)	107
<b>Stage 5 - Bridge Decks</b>							
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	4
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	60%	8
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6
	Prestress Jack*	CNP 261	110	-5	Movable Noise Barrier	20%	6
						Total SWL, dB (A)	110
<b>Stage 6 - Parapet &amp; Surfacing</b>							
<b>Group 1 (Parapet)</b>							
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	30%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
						Total SWL, dB (A)	105
<b>Group 2 (Surfacing)</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1
	Road roller	BS 5228 Table D.8/30	101			70%	3
						Total SWL, dB (A)	106
						Maximum SWL, dB (A)	106
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity							



Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Ping Yeung Interchange Section</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	3
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	70%	3
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	60%	5
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	5
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
Total SWL, dB (A)							110
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	3
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105			70%	4
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							110
Maximum SWL, dB (A)							110
<b>Stage 2 - Site Formation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	5
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	4
Total SWL, dB (A)							109
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	5
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							107
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			40%	2
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	1
	Compactor, vibratory	CNP 050	105	-5	Movable Noise Barrier	50%	3
	Vibratory roller (9kW)	BS 5228 Table D.3/115	102			70%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98	-10	Movable Noise Barrier	50%	5
Total SWL, dB (A)							108
Maximum SWL, dB (A)							109
<b>Stage 3 - Road Works</b>							
<b>Group 1</b>							
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	30%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
Total SWL, dB (A)							101
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
	Asphalt paver	BS 5228 Table D.8/24	101	-5	Movable Noise Barrier	70%	1
	Road roller	BS 5228 Table D.8/30	101	-5	Movable Noise Barrier	70%	3
Total SWL, dB (A)							101
Maximum SWL, dB (A)							101

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Wo Keng Shan Road Section</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	3
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	70%	3
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	60%	5
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	5
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
Total SWL, dB (A)							110
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	3
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	4
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							109
Maximum SWL, dB (A)							110
<b>Stage 2 - Site Formation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	5
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	4
Total SWL, dB (A)							109
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	5
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							107
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			40%	2
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	1
	Compactor, vibratory	CNP 050	105	-5	Movable Noise Barrier	50%	3
	Vibratory roller (9kW)	BS 5228 Table D.3/115	102			70%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98	-10	Movable Noise Barrier	50%	5
Total SWL, dB (A)							108
Maximum SWL, dB (A)							109
<b>Stage 3 - Bored Pile Wall</b>							
<b>Group 1</b>							
	Drill rig, rotary type (diesel)	CNP 072	110	-10	Fabric	40%	2
	Water pump (electric)	CNP 281	88			100%	3
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							104
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Mobile crane	BS 5228 Table D.7/114	101			100%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	70%	2
Total SWL, dB (A)							109
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			50%	1
	Concrete pump, stationary/ lorry mounted	CNP 047	109			50%	1
Total SWL, dB (A)							108
Maximum SWL, dB (A)							109
<b>Stage 4 - Road Works</b>							
<b>Group 1</b>							
	Crane, mobile/ barge mounted (diesel)	CNP 048	112			30%	2
	Lorry	CNP 141	112			50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	2
Total SWL, dB (A)							114
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	2
	Asphalt paver	CNP 004	109			70%	1
	Road roller	CNP 185	108			70%	3
Total SWL, dB (A)							113
Maximum SWL, dB (A)							114

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Flyover Crossing Wo Keng Shan Road</b>							
<b>Stage 1 - Site Clearance &amp; Haul Road</b>							
<b>Group 1</b>							
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2
						Total SWL, dB (A)	98
<b>Group 2</b>							
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	2
	Bulldozer (239kW)	BS 5228 Table D.3/27	109			40%	1
						Total SWL, dB (A)	107
<b>Group 3</b>							
	Dump truck (50t)	BS 5228 Table D.9/39	103			80%	4
						Total SWL, dB (A)	108
						Maximum SWL, dB (A)	108
<b>Stage 2 - Piling</b>							
<b>Group 1</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	4
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	4
						Total SWL, dB (A)	105
<b>Group 2</b>							
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	-10	Fabric	50%	4
	Piling, large diameter bored, oscillator	CNP 165	115	-10	Fabric	50%	4
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	4
						Total SWL, dB (A)	108
<b>Group 3</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	4
	Mobile crane	BS 5228 Table D.7/114	101			50%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	4
						Total SWL, dB (A)	106
						Maximum SWL, dB (A)	108
<b>Stage 3 - PileCaps</b>							
<b>Group 1</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	4
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	4
						Total SWL, dB (A)	109
<b>Group 2</b>							
	Water pump (electric)	CNP 281	88			70%	4
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	4
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	4
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1
	Mobile crane	BS 5228 Table D.7/114	101			100%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4
						Total SWL, dB (A)	108
						Maximum SWL, dB (A)	109
<b>Stage 4 - Piers</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	4
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	4
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4
						Total SWL, dB (A)	103
<b>Stage 5 - Bridge Decks</b>							
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105			60%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	3
	Prestress Jack*	CNP 261	110	-5	Movable Noise Barrier	20%	3
						Total SWL, dB (A)	110
<b>Stage 6 - Parapet &amp; Surfacing</b>							
<b>Group 1 (Parapet)</b>							
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	30%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
						Total SWL, dB (A)	105
<b>Group 2 (Surfacing)</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1
	Road roller	BS 5228 Table D.8/30	101			70%	3
						Total SWL, dB (A)	106
						Maximum SWL, dB (A)	106
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity							

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Ng Chow Road Road Section</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	3
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-5	Movable Noise Barrier	70%	3
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	60%	5
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	5
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
Total SWL, dB (A)							111
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	3
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	4
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							109
Maximum SWL, dB (A)							111
<b>Stage 2 - Site Formation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	5
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	4
Total SWL, dB (A)							109
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			80%	5
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							110
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			40%	2
	Mobile crane	BS 5228 Table D.7/114	101			100%	1
	Compactor, vibratory	CNP 050	105	-5	Movable Noise Barrier	50%	3
	Vibratory roller (9kW)	BS 5228 Table D.3/115	102			70%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			50%	5
Total SWL, dB (A)							109
Maximum SWL, dB (A)							110
<b>Stage 3 - Slope Stabilisation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	2
	Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	111			20%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	1
	Lorry with crane/grab	CNP 145	105			50%	2
Total SWL, dB (A)							112
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	2
	Drill rig, rotary type (diesel)	CNP 072	110	-10	Fabric	70%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	1
	Water pump, submersible (electric)	CNP 283	85			100%	1
Total SWL, dB (A)							107
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	2
	Mobile crane	BS 5228 Table D.7/114	101			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	1
	Grout mixer	CNP 105	90			40%	1
	Grout pump	CNP 106	105			40%	1
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			50%	2
Total SWL, dB (A)							108
Maximum SWL, dB (A)							112
<b>Stage 4 - Road Works</b>							
<b>Group 1</b>							
	Crane, mobile/ barge mounted (diesel)	CNP 048	112			30%	2
	Lorry	CNP 141	112			50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	2
Total SWL, dB (A)							114
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	2
	Asphalt paver	CNP 004	109			70%	1
	Road roller	CNP 185	108			70%	3
Total SWL, dB (A)							113
Maximum SWL, dB (A)							114

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Flyover Crossing over Ng Chow Road</b>							
<b>Stage 1 - Site Clearance &amp; Haul Road</b>							
<b>Group 1</b>							
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2
						Total SWL, dB (A)	98
<b>Group 2</b>							
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	2
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	40%	1
						Total SWL, dB (A)	105
<b>Group 3</b>							
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4
						Total SWL, dB (A)	103
						Maximum SWL, dB (A)	105
<b>Stage 2 - Piling</b>							
<b>Group 1</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	4
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	4
						Total SWL, dB (A)	105
<b>Group 2</b>							
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	-10	Fabric	50%	4
	Piling, large diameter bored, oscillator	CNP 165	115	-10	Fabric	50%	4
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	4
						Total SWL, dB (A)	108
<b>Group 3</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	4
	Mobile crane	BS 5228 Table D.7/114	101			50%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	4
						Total SWL, dB (A)	106
						Maximum SWL, dB (A)	108
<b>Stage 3 - PileCaps</b>							
<b>Group 1</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	4
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	4
						Total SWL, dB (A)	105
<b>Group 2</b>							
	Water pump (electric)	CNP 281	88			70%	4
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	4
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	4
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4
						Total SWL, dB (A)	105
						Maximum SWL, dB (A)	105
<b>Stage 4 - Piers</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	4
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	4
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4
						Total SWL, dB (A)	103
<b>Stage 5 - Bridge Decks</b>							
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	60%	4
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	3
	Prestress Jack*	CNP 261	110	-5	Movable Noise Barrier	20%	3
						Total SWL, dB (A)	107
<b>Stage 6 - Parapet &amp; Surfacing</b>							
<b>Group 1 (Parapet)</b>							
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	30%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
						Total SWL, dB (A)	105
<b>Group 2 (Surfacing)</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1
	Road roller	BS 5228 Table D.8/30	101			70%	3
						Total SWL, dB (A)	106
						Maximum SWL, dB (A)	106
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity							

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>North Portal of North Tunnel and Ventilation Building</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	3
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	70%	3
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	60%	4
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	4
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
Total SWL, dB (A)							109
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	3
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	4
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							106
Maximum SWL, dB (A)							109
<b>Stage 2 - Portal Formation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	80%	2
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	4
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	4
Total SWL, dB (A)							108
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	80%	2
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	60%	4
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							105
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	80%	2
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			40%	1
	Mobile crane	BS 5228 Table D.7/114	101			100%	1
	Compactor, vibratory	CNP 050	105	-5	Movable Noise Barrier	60%	3
	Vibratory roller (9kW)	BS 5228 Table D.3/115	102	-5	Movable Noise Barrier	60%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			50%	5
Total SWL, dB (A)							108
Maximum SWL, dB (A)							108
<b>Stage 3 - Bored Pile Wall</b>							
<b>Group 1</b>							
	Drill rig, rotary type (diesel)	CNP 072	110	-10	Fabric	40%	2
	Water pump (electric)	CNP 281	88			100%	3
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							104
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	80%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	70%	2
Total SWL, dB (A)							107
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			50%	1
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			50%	1
Total SWL, dB (A)							106
Maximum SWL, dB (A)							107

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>North Portal of North Tunnel and Ventilation Building</b>							
<b>Stage 4 - Road Works</b>							
<b>Group 1</b>							
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	30%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
Total SWL, dB (A)							105
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1
	Road roller	BS 5228 Table D.8/30	101			70%	3
Total SWL, dB (A)							106
Maximum SWL, dB (A)							106
<b>Stage 5 - Building Foundation Works</b>							
<b>Group 1</b>							
	Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	111			30%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			30%	1
	Crane, mobile/ barge mounted (diesel)	CNP 048	112			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							113
<b>Group 2</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	90%	1
	Piling, large diameter bored, reverse circulation drill	CNP 166	100			40%	1
	Water pump (petrol)	CNP 282	103			80%	4
Total SWL, dB (A)							110
<b>Group 3</b>							
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Concrete pump, stationary/ lorry mounted	CNP 047	109			40%	1
	Concrete lorry mixer	CNP 044	109			50%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			80%	2
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							113
Maximum SWL, dB (A)							113
<b>Stage 6 - Building Structures</b>							
	Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	111			40%	2
	Concrete lorry mixer	CNP 044	109			50%	3
	Concrete pump, stationary/ lorry mounted	CNP 047	109			40%	1
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Lorry with crane/grab	CNP 145	105			50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	3
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							115

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>South Portal of North Tunnel and Ventilation Building</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	3
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	70%	3
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	60%	4
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
Total SWL, dB (A)							108
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	3
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	4
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							106
Maximum SWL, dB (A)							108
<b>Stage 2 - Portal Formation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	3
Total SWL, dB (A)							107
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
	Water pump, submersible (electric)	CNP 283	85	-10	Movable Noise Barrier	100%	4
Total SWL, dB (A)							106
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Concrete lorry mixer	CNP 044	109	-5	Movable Noise Barrier	40%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	2
	Compactor, vibratory	CNP 050	105	-5	Movable Noise Barrier	50%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			50%	5
Total SWL, dB (A)							106
Maximum SWL, dB (A)							107
<b>Stage 3 - Slope Stabilisation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	2
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	20%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106	-5	Movable Noise Barrier	80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	50%	2
Total SWL, dB (A)							104
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	2
	Drill rig, rotary type (diesel)	CNP 072	110	-10	Fabric	70%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	1
	Water pump, submersible (electric)	CNP 283	85	-10	Movable Noise Barrier	100%	1
Total SWL, dB (A)							103
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	2
	Mobile crane	BS 5228 Table D.7/114	101			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	1
	Grout mixer	CNP 105	90			60%	1
	Grout pump	CNP 106	105	-15	Enclosure/Shed	60%	1
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			50%	2
Total SWL, dB (A)							103
Maximum SWL, dB (A)							104



Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>South Portal of North Tunnel and Ventilation Building</b>							
<b>Stage 4 - Bored Pile Wall</b>							
<b>Group 1</b>							
	Drill rig, rotary type (diesel)	CNP 072	110	-10	Fabric	40%	2
	Water pump (electric)	CNP 281	88			100%	3
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							104
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	80%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	70%	2
Total SWL, dB (A)							107
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			50%	1
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			50%	1
Total SWL, dB (A)							106
Maximum SWL, dB (A)							107
<b>Stage 5 - Road Works</b>							
<b>Group 1</b>							
	Mobile crane	BS 5228 Table D.7/114	101			30%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
Total SWL, dB (A)							106
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1
	Road roller	BS 5228 Table D.8/30	101			70%	3
Total SWL, dB (A)							106
Maximum SWL, dB (A)							106
<b>Stage 6 - Building Foundation Works</b>							
<b>Group 1</b>							
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			30%	1
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							105
<b>Group 2</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	90%	1
	Piling, large diameter bored, reverse circulation drill	CNP 166	100			40%	1
	Water pump (petrol)	CNP 282	103	-10	Movable Noise Barrier	80%	4
Total SWL, dB (A)							106
<b>Group 3</b>							
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			40%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			50%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			80%	2
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							107
Maximum SWL, dB (A)							107
<b>Stage 7 - Building Structures</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	40%	2
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			50%	3
	Concrete pump, stationary/ lorry mounted	CNP 047	109	-5	Movable Noise Barrier	40%	1
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Lorry with crane/grab	CNP 145	105			50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	3
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							109

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Administration Building</b>							
<b>Stage 1 - Site Clearance</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102	-15	Enclosure/Shed	100%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	60%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			50%	1
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	50%	1
	Water pump, submersible (electric)	CNP 283	85			100%	1
Total SWL, dB (A)							105
<b>Stage 2 - Building Foundation Works</b>							
<b>Group 1</b>							
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			30%	1
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							105
<b>Group 2</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	90%	1
	Piling, large diameter bored, reverse circulation drill	CNP 166	100			40%	1
	Water pump (petrol)	CNP 282	103	-10	Movable Noise Barrier	80%	4
Total SWL, dB (A)							106
<b>Group 3</b>							
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			40%	1
	Concrete lorry mixer (5m <sup>3</sup> )	BS 5228 Table D.6/35	100			50%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			80%	2
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							107
Maximum SWL, dB (A)							107
<b>Stage 3 - Building Structures</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102			50%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	40%	2
	Concrete lorry mixer (5m <sup>3</sup> )	BS 5228 Table D.6/35	100			50%	3
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			40%	1
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Lorry with crane/grab	CNP 145	105			50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	3
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							108

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME	
<b>Flyover Crossing Sha Tau Kok Road</b>								
<b>Stage 1 - Site Clearance &amp; Haul Road</b>								
<b>Group 1</b>								
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2	
							Total SWL, dB (A)	98
<b>Group 2</b>								
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	2	
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	40%	1	
							Total SWL, dB (A)	105
<b>Group 3</b>								
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4	
							Total SWL, dB (A)	103
							Maximum SWL, dB (A)	105
<b>Stage 2 - Piling</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	5	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	5	
							Total SWL, dB (A)	106
<b>Group 2</b>								
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	-10	Fabric	50%	5	
	Piling, large diameter bored, oscillator	CNP 165	115	-10	Fabric	50%	5	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	5	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	5	
							Total SWL, dB (A)	109
<b>Group 3</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	5	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	5	
	Mobile crane	BS 5228 Table D.7/114	101			50%	5	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	5	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	5	
							Total SWL, dB (A)	108
							Maximum SWL, dB (A)	109
<b>Stage 3 - PileCaps</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	5	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	5	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	5	
							Total SWL, dB (A)	106
<b>Group 2</b>								
	Water pump (electric)	CNP 281	88			70%	5	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	5	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	5	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100	-5	Movable Noise Barrier	20%	5	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	5	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	5	
							Total SWL, dB (A)	105
							Maximum SWL, dB (A)	106
<b>Stage 4 - Piers</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	5	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	5	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	5	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	2	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	5	
							Total SWL, dB (A)	104
<b>Stage 5 - Bridge Decks</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	60%	4	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	3	
	Prestress Jack*	CNP 261	110	-5	Movable Noise Barrier	20%	3	
							Total SWL, dB (A)	107
<b>Stage 6 - Parapet &amp; Surfacing</b>								
<b>Group 1 (Parapet)</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	30%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
							Total SWL, dB (A)	105
<b>Group 2 (Surfacing)</b>								
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1	
	Road roller	BS 5228 Table D.8/30	101			70%	3	
							Total SWL, dB (A)	106
							Maximum SWL, dB (A)	106
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity								

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Sha Tau Kok Road (Road Section)</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	3
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	70%	4
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	2
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	2
Total SWL, dB (A)							108
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	3
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	2
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	3
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							105
Maximum SWL, dB (A)							108
<b>Stage 2 - Site Formation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	4
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	2
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	3
Total SWL, dB (A)							107
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	4
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	60%	2
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	2
	Water pump, submersible (electric)	CNP 283	85	-10	Movable Noise Barrier	100%	8
Total SWL, dB (A)							107
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	4
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			40%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	2
	Compactor, vibratory	CNP 050	105	-5	Movable Noise Barrier	60%	2
	Vibratory roller (9kW)	BS 5228 Table D.3/115	102	-5	Movable Noise Barrier	60%	3
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			50%	5
Total SWL, dB (A)							107
Maximum SWL, dB (A)							107
<b>Stage 3 - Bored Pile Wall</b>							
<b>Group 1</b>							
	Drill rig, rotary type (diesel)	CNP 072	110	-10	Fabric	40%	2
	Water pump (electric)	CNP 281	88			100%	3
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							104
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	80%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	70%	2
Total SWL, dB (A)							107
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			50%	1
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			50%	1
Total SWL, dB (A)							106
Maximum SWL, dB (A)							107
<b>Stage 4 - Road Works</b>							
<b>Group 1</b>							
	Mobile crane	BS 5228 Table D.7/114	101			30%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	2
Total SWL, dB (A)							103
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	2
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1
	Road roller	BS 5228 Table D.8/30	101			70%	2
Total SWL, dB (A)							105
Maximum SWL, dB (A)							105

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>North Portal of South Tunnel and Ventilation Building</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	3
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	70%	3
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	8
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
Total SWL, dB (A)							112
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	3
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105			70%	2
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							110
Maximum SWL, dB (A)							112
<b>Stage 2 - Portal Formation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	3
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	8
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105			70%	2
Total SWL, dB (A)							112
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	3
	Bulldozer (239kW)	BS 5228 Table D.3/27	109			70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			80%	4
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							112
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	3
	Concrete lorry mixer	CNP 044	109			40%	1
	Mobile crane	BS 5228 Table D.7/114	101			100%	1
	Compactor, vibratory	CNP 050	105			50%	1
	Roller, vibratory	CNP 186	108			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			50%	5
Total SWL, dB (A)							111
Maximum SWL, dB (A)							112
<b>Stage 3 - Slope Stabilisation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	2
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110			20%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	1
	Lorry with crane/grab	CNP 145	105			50%	2
Total SWL, dB (A)							111
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	2
	Drill rig, rotary type (diesel)	CNP 072	110			70%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	1
	Water pump, submersible (electric)	CNP 283	85			100%	1
Total SWL, dB (A)							112
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	2
	Crane, mobile/ barge mounted (diesel)	CNP 048	112			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	1
	Grout mixer	CNP 105	90			40%	1
	Grout pump	CNP 106	105			40%	1
	Poker, vibratory, hand-held	CNP 170	113			50%	2
Total SWL, dB (A)							116
Maximum SWL, dB (A)							116

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>North Portal of South Tunnel and Ventilation Building</b>							
<b>Stage 4 - Bored Pile Wall</b>							
<b>Group 1</b>							
	Drill rig, rotary type (diesel)	CNP 072	110	-10	Fabric	40%	2
	Water pump (electric)	CNP 281	88			100%	3
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							104
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	80%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	70%	2
Total SWL, dB (A)							107
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			50%	1
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			50%	1
Total SWL, dB (A)							106
Maximum SWL, dB (A)							107
<b>Stage 5 - Building Foundation Works</b>							
<b>Group 1</b>							
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110			30%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			30%	1
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							109
<b>Group 2</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	90%	1
	Piling, large diameter bored, reverse circulation drill	CNP 166	100			40%	1
	Water pump (petrol)	CNP 282	103			80%	4
Total SWL, dB (A)							110
<b>Group 3</b>							
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Concrete pump, stationary/ lorry mounted	CNP 047	109			40%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			50%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			80%	2
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							109
Maximum SWL, dB (A)							110
<b>Stage 6 - Building Structures</b>							
	Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	111			40%	2
	Concrete lorry mixer	CNP 044	109			50%	3
	Concrete pump, stationary/ lorry mounted	CNP 047	109			40%	1
	Crane, mobile/ barge mounted (diesel)	CNP 048	112			80%	1
	Lorry with crane/grab	CNP 145	105			50%	2
	Poker, vibratory, hand-held	CNP 170	113			20%	3
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							117

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Mid Ventilation Building</b>							
<b>Stage 1 - Site Clearance</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102			100%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	60%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103			50%	1
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105			50%	1
	Water pump, submersible (electric)	CNP 283	85			100%	1
Total SWL, dB (A)							107
<b>Stage 2 - Shaft Construction</b>							
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102	-15	Enclosure/Shed	100%	1
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	60%	3
	Dump truck (50t)	BS 5228 Table D.9/39	103			50%	10
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	2
	Crane, tower (electric)	CNP 049	95			50%	1
	Piling, diaphragm wall, bentonite filtering plant	CNP 162	105	-10	Fabric	100%	2
	Piling, diaphragm wall, hydraulic extractor	CNP 163	90			100%	1
	Drill rig, rotary type (diesel)	CNP 072	110	-10	Fabric	100%	2
	Water pump, submersible (electric)	CNP 283	85			100%	1
Total SWL, dB (A)							112
<b>Stage 3 - Building Foundation Works</b>							
<b>Group 1</b>							
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			30%	1
	Air compressor, air flow > 10m <sup>3</sup> /min and <= 30m <sup>3</sup> /min	CNP 002	102			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							105
<b>Group 2</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	90%	1
	Piling, large diameter bored, reverse circulation drill	CNP 166	100			40%	1
	Water pump (petrol)	CNP 282	103	-10	Movable Noise Barrier	80%	4
Total SWL, dB (A)							106
<b>Group 3</b>							
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			40%	1
	Concrete lorry mixer (5m <sup>3</sup> )	BS 5228 Table D.6/35	100			50%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			80%	2
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							107
Maximum SWL, dB (A)							107
<b>Stage 4 - Building Structures</b>							
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	40%	2
	Concrete lorry mixer (5m <sup>3</sup> )	BS 5228 Table D.6/35	100			50%	3
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			40%	1
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Lorry with crane/grab	CNP 145	105			50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	3
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							110

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>South Portal of South Tunnel and Ventilation Building</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	3
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	70%	3
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	4
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
Total SWL, dB (A)							109
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			100%	3
	Mobile crane	BS 5228 Table D.7/114	101			40%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	2
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							108
Maximum SWL, dB (A)							109
<b>Stage 2 - Portal Formation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	5
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	70%	2
Total SWL, dB (A)							108
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	70%	1
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	5
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	60%	1
	Water pump, submersible (electric)	CNP 283	85			100%	4
Total SWL, dB (A)							107
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	70%	3
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			40%	1
	Mobile crane	BS 5228 Table D.7/114	101			100%	1
	Compactor, vibratory	CNP 050	105			50%	1
	Vibratory roller (9kW)	BS 5228 Table D.3/115	102			20%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			60%	1
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			50%	5
Total SWL, dB (A)							107
Maximum SWL, dB (A)							108
<b>Stage 3 - Slope Stabilisation</b>							
<b>Group 1</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	2
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	20%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106	-5	Movable Noise Barrier	80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	1
	Lorry with crane/grab	CNP 145	105	-5	Movable Noise Barrier	50%	2
Total SWL, dB (A)							104
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	2
	Drill rig, rotary type (diesel)	CNP 072	110	-10	Fabric	70%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	1
	Water pump, submersible (electric)	CNP 283	85			100%	1
Total SWL, dB (A)							102
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	2
	Mobile crane	BS 5228 Table D.7/114	101			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	1
	Grout mixer	CNP 105	90			40%	1
	Grout pump	CNP 106	105	-15	Enclosure/Shed	40%	1
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			50%	2
Total SWL, dB (A)							103
Maximum SWL, dB (A)							104



Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>South Portal of South Tunnel and Ventilation Building</b>							
<b>Stage 4 - Bored Pile Wall</b>							
<b>Group 1</b>							
	Drill rig, rotary type (diesel)	CNP 072	110	-10	Fabric	40%	2
	Water pump (electric)	CNP 281	88			100%	3
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							104
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	80%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	70%	2
Total SWL, dB (A)							107
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			50%	1
	Concrete pump, stationary/ lorry mounted	CNP 047	109			50%	1
Total SWL, dB (A)							107
Maximum SWL, dB (A)							107
<b>Stage 5 - Road Works</b>							
<b>Group 1</b>							
	Mobile crane	BS 5228 Table D.7/114	101			30%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
Total SWL, dB (A)							106
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1
	Road roller	BS 5228 Table D.8/30	101			70%	3
Total SWL, dB (A)							106
Maximum SWL, dB (A)							106
<b>Stage 6 - Building Foundation Works</b>							
<b>Group 1</b>							
	Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	111			30%	2
	Breaker, excavator mounted (hydraulic), 52kW	BS 5228 Table D.8/12	106			30%	1
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			70%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							110
<b>Group 2</b>							
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	90%	1
	Piling, large diameter bored, reverse circulation drill	CNP 166	100			40%	1
	Water pump (petrol)	CNP 282	103			80%	4
Total SWL, dB (A)							110
<b>Group 3</b>							
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Concrete pump, stationary/ lorry mounted	CNP 047	109			40%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			50%	4
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			80%	2
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							109
Maximum SWL, dB (A)							110
<b>Stage 7 - Building Structures</b>							
	Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	111			40%	2
	Concrete lorry mixer	CNP 044	109			50%	3
	Concrete pump, stationary/ lorry mounted	CNP 047	109			40%	1
	Mobile crane	BS 5228 Table D.7/114	101			80%	1
	Lorry with crane/grab	CNP 145	105			50%	2
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	3
	Bar bender and cutter (electric)	CNP 021	90			80%	3
Total SWL, dB (A)							115

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME	
<b>Fanling Highway Connection Flyovers - Temporary Access Bridge</b>								
<b>Stage 1 - Site Clearance &amp; Haul Road</b>								
<b>Group 1</b>								
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2	
							Total SWL, dB (A)	98
<b>Group 2</b>								
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	2	
	Bulldozer (218kW)	BS 5228 Table D.3/72	111	-5	Movable Noise Barrier	40%	2	
							Total SWL, dB (A)	106
<b>Group 3</b>								
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4	
							Total SWL, dB (A)	103
							Maximum SWL, dB (A)	106
<b>Stage 2 - Piling</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	4	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	30%	4	
							Total SWL, dB (A)	105
<b>Group 2</b>								
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	-10	Fabric	30%	4	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	4	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	4	
							Total SWL, dB (A)	97
<b>Group 3</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	4	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	4	
	Mobile crane	BS 5228 Table D.7/114	101			50%	4	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	2	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
							Total SWL, dB (A)	107
							Maximum SWL, dB (A)	107
<b>Stage 3 - PileCaps</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			70%	4	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	4	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2	
							Total SWL, dB (A)	109
<b>Group 2</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			70%	4	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	4	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	4	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	2	
	Mobile crane	BS 5228 Table D.7/114	101			100%	4	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	2	
							Total SWL, dB (A)	109
							Maximum SWL, dB (A)	109
<b>Stage 4 - Piers</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			30%	2	
	Mobile crane	BS 5228 Table D.7/114	101			50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105			20%	2	
							Total SWL, dB (A)	104
<b>Stage 5 - Bridge Decks</b>								
	Mobile crane	BS 5228 Table D.7/114	101			50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	60%	4	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	4	
							Total SWL, dB (A)	106
<b>Stage 6 - Parapet &amp; Surfacing</b>								
<b>Group 1 (Parapet)</b>								
	Mobile crane	BS 5228 Table D.7/114	101			30%	1	
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	2	
							Total SWL, dB (A)	107
<b>Group 2 (Surfacing)</b>								
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	2	
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1	
	Road roller	BS 5228 Table D.8/30	101			70%	3	
							Total SWL, dB (A)	107
							Maximum SWL, dB (A)	107

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME	
<b>Fanling Highway Connection Flyovers - Link Road 1</b>								
<b>Stage 1 - Site Clearance &amp; Haul Road</b>								
<b>Group 1</b>								
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2	
							Total SWL, dB (A)	98
<b>Group 2</b>								
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	2	
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	40%	1	
							Total SWL, dB (A)	103
<b>Group 3</b>								
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4	
							Total SWL, dB (A)	103
							Maximum SWL, dB (A)	103
<b>Stage 2 - Piling</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	3	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	30%	6	
							Total SWL, dB (A)	105
<b>Group 2</b>								
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	-10	Fabric	40%	3	
	Piling, large diameter bored, oscillator	CNP 165	115	-10	Fabric	40%	3	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure Shed	100%	6	
							Total SWL, dB (A)	106
<b>Group 3</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure Shed	100%	6	
	Mobile crane	BS 5228 Table D.7/114	101			50%	6	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure Shed	20%	1	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
							Total SWL, dB (A)	108
							Maximum SWL, dB (A)	108
<b>Stage 3 - PileCaps</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure Shed	50%	6	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	6	
							Total SWL, dB (A)	107
<b>Group 2</b>								
	Water pump (electric)	CNP 281	88			70%	6	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure Shed	50%	6	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	6	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
							Total SWL, dB (A)	107
							Maximum SWL, dB (A)	107
<b>Stage 4 - Piers</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure Shed	50%	6	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	3	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
							Total SWL, dB (A)	104
<b>Stage 5 - Bridge Decks</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	40%	4	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure Shed	40%	3	
	Prestress Jack*	CNP 261	110	-5	Movable Noise Barrier	20%	3	
							Total SWL, dB (A)	106
<b>Stage 6 - Parapet &amp; Surfacing</b>								
<b>Group 1 (Parapet)</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	30%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	2	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
							Total SWL, dB (A)	105
<b>Group 2 (Surfacing)</b>								
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1	
	Road roller	BS 5228 Table D.8/30	101			70%	3	
							Total SWL, dB (A)	106
							Maximum SWL, dB (A)	106
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity								

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME	
<b>Fanling Highway Connection Flyovers - Link Road 2</b>								
<b>Stage 1 - Site Clearance &amp; Haul Road</b>								
<b>Group 1</b>								
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2	
							<b>Total SWL, dB (A)</b>	<b>98</b>
<b>Group 2</b>								
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	2	
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	40%	1	
							<b>Total SWL, dB (A)</b>	<b>103</b>
<b>Group 3</b>								
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4	
							<b>Total SWL, dB (A)</b>	<b>103</b>
							<b>Maximum SWL, dB (A)</b>	<b>103</b>
<b>Stage 2 - Piling</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	3	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	30%	6	
							<b>Total SWL, dB (A)</b>	<b>105</b>
<b>Group 2</b>								
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	-10	Fabric	40%	3	
	Piling, large diameter bored, oscillator	CNP 165	115	-10	Fabric	40%	3	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	6	
							<b>Total SWL, dB (A)</b>	<b>106</b>
<b>Group 3</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	6	
	Mobile crane	BS 5228 Table D.7/114	101			50%	6	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
							<b>Total SWL, dB (A)</b>	<b>108</b>
							<b>Maximum SWL, dB (A)</b>	<b>108</b>
<b>Stage 3 - PileCaps</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	6	
							<b>Total SWL, dB (A)</b>	<b>107</b>
<b>Group 2</b>								
	Water pump (electric)	CNP 281	88			70%	6	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	6	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
							<b>Total SWL, dB (A)</b>	<b>107</b>
							<b>Maximum SWL, dB (A)</b>	<b>107</b>
<b>Stage 4 - Piers</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100	-5	Movable Noise Barrier	20%	6	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	3	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98	-10	Movable Noise Barrier	20%	4	
							<b>Total SWL, dB (A)</b>	<b>101</b>
<b>Stage 5 - Bridge Decks</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	40%	4	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	40%	3	
	Prestress Jack*	CNP 261	110	-5	Movable Noise Barrier	20%	3	
							<b>Total SWL, dB (A)</b>	<b>106</b>
<b>Stage 6 - Parapet &amp; Surfacing</b>								
<b>Group 1 (Parapet)</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	30%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
							<b>Total SWL, dB (A)</b>	<b>105</b>
<b>Group 2 (Surfacing)</b>								
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1	
	Road roller	BS 5228 Table D.8/30	101			70%	3	
							<b>Total SWL, dB (A)</b>	<b>106</b>
							<b>Maximum SWL, dB (A)</b>	<b>106</b>
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity								

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME	
<b>Fanling Highway Connection Flyovers - Link Road 3</b>								
<b>Stage 1 - Site Clearance &amp; Haul Road</b>								
<b>Group 1</b>								
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2	
							Total SWL, dB (A)	98
<b>Group 2</b>								
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	2	
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	40%	1	
							Total SWL, dB (A)	103
<b>Group 3</b>								
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4	
							Total SWL, dB (A)	103
							Maximum SWL, dB (A)	103
<b>Stage 2 - Piling</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	3	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	30%	6	
							Total SWL, dB (A)	105
<b>Group 2</b>								
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	-10	Fabric	40%	3	
	Piling, large diameter bored, oscillator	CNP 165	115	-10	Fabric	40%	3	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	6	
							Total SWL, dB (A)	106
<b>Group 3</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	6	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	6	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
							Total SWL, dB (A)	105
							Maximum SWL, dB (A)	106
<b>Stage 3 - PileCaps</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	6	
							Total SWL, dB (A)	107
<b>Group 2</b>								
	Water pump (electric)	CNP 281	88			70%	6	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100	-5	Movable Noise Barrier	20%	6	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	6	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
							Total SWL, dB (A)	106
							Maximum SWL, dB (A)	107
<b>Stage 4 - Piers</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	3	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
							Total SWL, dB (A)	104
<b>Stage 5 - Bridge Decks</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	40%	4	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	40%	3	
	Prestress Jack*	CNP 261	110	-5	Movable Noise Barrier	20%	3	
							Total SWL, dB (A)	106
<b>Stage 6 - Parapet &amp; Surfacing</b>								
<b>Group 1 (Parapet)</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	30%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
							Total SWL, dB (A)	105
<b>Group 2 (Surfacing)</b>								
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
	Asphalt paver	BS 5228 Table D.8/24	101	-5	Movable Noise Barrier	70%	1	
	Road roller	BS 5228 Table D.8/30	101			70%	3	
							Total SWL, dB (A)	105
							Maximum SWL, dB (A)	105
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity								

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME	
<b>Fanling Highway Connection Flyovers - Link Road 4</b>								
<b>Stage 1 - Site Clearance &amp; Haul Road</b>								
<b>Group 1</b>								
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2	
							Total SWL, dB (A)	98
<b>Group 2</b>								
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	2	
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	40%	1	
							Total SWL, dB (A)	103
<b>Group 3</b>								
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4	
							Total SWL, dB (A)	103
							Maximum SWL, dB (A)	103
<b>Stage 2 - Piling</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	3	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	30%	6	
							Total SWL, dB (A)	105
<b>Group 2</b>								
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	-10	Fabric	40%	3	
	Piling, large diameter bored, oscillator	CNP 165	115	-10	Fabric	40%	3	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	6	
							Total SWL, dB (A)	106
<b>Group 3</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	6	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	6	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
							Total SWL, dB (A)	105
							Maximum SWL, dB (A)	106
<b>Stage 3 - PileCaps</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	6	
							Total SWL, dB (A)	107
<b>Group 2</b>								
	Water pump (electric)	CNP 281	88			70%	6	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100	-5	Movable Noise Barrier	20%	6	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	6	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
							Total SWL, dB (A)	106
							Maximum SWL, dB (A)	107
<b>Stage 4 - Piers</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	3	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
							Total SWL, dB (A)	104
<b>Stage 5 - Bridge Decks</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	40%	4	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	40%	3	
	Prestress Jack*	CNP 261	110	-5	Movable Noise Barrier	20%	3	
							Total SWL, dB (A)	106
<b>Stage 6 - Parapet &amp; Surfacing</b>								
<b>Group 1 (Parapet)</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	30%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	2	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
							Total SWL, dB (A)	101
<b>Group 2 (Surfacing)</b>								
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
	Asphalt paver	BS 5228 Table D.8/24	101	-5	Movable Noise Barrier	70%	1	
	Road roller	BS 5228 Table D.8/30	101	-5	Movable Noise Barrier	70%	3	
							Total SWL, dB (A)	101
							Maximum SWL, dB (A)	101
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity								

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME	
<b>Fanling Highway Connection Flyovers - Link Road 5</b>								
<b>Stage 1 - Site Clearance &amp; Haul Road</b>								
<b>Group 1</b>								
	Breaker, hand-held breaker, 35kg	BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	30%	2	
							<b>Total SWL, dB (A)</b>	<b>98</b>
<b>Group 2</b>								
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	2	
	Bulldozer (239kW)	BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	40%	1	
							<b>Total SWL, dB (A)</b>	<b>103</b>
<b>Group 3</b>								
	Dump truck (50t)	BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4	
							<b>Total SWL, dB (A)</b>	<b>103</b>
							<b>Maximum SWL, dB (A)</b>	<b>103</b>
<b>Stage 2 - Piling</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	40%	3	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	30%	6	
							<b>Total SWL, dB (A)</b>	<b>105</b>
<b>Group 2</b>								
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	-10	Fabric	40%	3	
	Piling, large diameter bored, oscillator	CNP 165	115	-10	Fabric	40%	3	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	6	
							<b>Total SWL, dB (A)</b>	<b>106</b>
<b>Group 3</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	100%	6	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	6	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
							<b>Total SWL, dB (A)</b>	<b>105</b>
							<b>Maximum SWL, dB (A)</b>	<b>106</b>
<b>Stage 3 - PileCaps</b>								
<b>Group 1</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Excavator (45kW)	BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	6	
							<b>Total SWL, dB (A)</b>	<b>107</b>
<b>Group 2</b>								
	Water pump (electric)	CNP 281	88			70%	6	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	70%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100	-5	Movable Noise Barrier	20%	6	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	6	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
							<b>Total SWL, dB (A)</b>	<b>106</b>
							<b>Maximum SWL, dB (A)</b>	<b>107</b>
<b>Stage 4 - Piers</b>								
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	6	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	6	
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			20%	6	
	Concrete pump (100kW)	BS 5228 Table D.6/36	106	-15	Enclosure/Shed	20%	1	
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	3	
	Poker, vibratory, hand-held	BS 5228 Table D.6/40	98			20%	4	
							<b>Total SWL, dB (A)</b>	<b>104</b>
<b>Stage 5 - Bridge Decks</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	50%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	40%	4	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	40%	3	
	Prestress Jack*	CNP 261	110	-5	Movable Noise Barrier	20%	3	
							<b>Total SWL, dB (A)</b>	<b>106</b>
<b>Stage 6 - Parapet &amp; Surfacing</b>								
<b>Group 1 (Parapet)</b>								
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	30%	2	
	Lorry (35 t)	BS 5228 Table D.3/59	105	-5	Movable Noise Barrier	50%	2	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
							<b>Total SWL, dB (A)</b>	<b>101</b>
<b>Group 2 (Surfacing)</b>								
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	50%	2	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	50%	2	
	Asphalt paver	BS 5228 Table D.8/24	101	-5	Movable Noise Barrier	70%	1	
	Road roller	BS 5228 Table D.8/30	101	-5	Movable Noise Barrier	70%	3	
							<b>Total SWL, dB (A)</b>	<b>101</b>
							<b>Maximum SWL, dB (A)</b>	<b>101</b>
Note*: The SWL of Prestress Jack is assumed same as Winch (Pneumatic) of similar activity								

Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Fanling Road Section</b>							
<b>Stage 1 - Site Clearance</b>							
<b>Group 1</b>							
Air compressor, air flow > 10m3/min and <= 30m3/min		CNP 002	102	-15	Enclosure/Shed	100%	3
Breaker, hand-held breaker, 35kg		BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	70%	3
Dump truck (50t)		BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	4
Excavator (45kW)		BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	80%	8
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95	-10	Movable Noise Barrier	60%	1
Total SWL, dB (A)							111
<b>Group 2</b>							
Air compressor, air flow > 10m3/min and <= 30m3/min		CNP 002	102			100%	3
Mobile crane		BS 5228 Table D.7/114	101			40%	1
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95			60%	1
Lorry with crane/grab		CNP 145	105			70%	2
Water pump, submersible (electric)		CNP 283	85			100%	4
Total SWL, dB (A)							110
Maximum SWL, dB (A)							111
<b>Stage 2 - Site Formation</b>							
<b>Group 1</b>							
Air compressor, air flow > 10m3/min and <= 30m3/min		CNP 002	102	-15	Enclosure/Shed	60%	3
Excavator (45kW)		BS 5228 Table D.3/35	106	-5	Movable Noise Barrier	50%	5
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95	-10	Movable Noise Barrier	50%	1
Lorry with crane/grab		CNP 145	105	-5	Movable Noise Barrier	50%	4
Total SWL, dB (A)							107
<b>Group 2</b>							
Air compressor, air flow > 10m3/min and <= 30m3/min		CNP 002	102	-15	Enclosure/Shed	70%	3
Bulldozer (239kW)		BS 5228 Table D.3/27	109	-5	Movable Noise Barrier	70%	1
Dump truck (50t)		BS 5228 Table D.9/39	103	-5	Movable Noise Barrier	80%	5
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95	-10	Movable Noise Barrier	60%	1
Water pump, submersible (electric)		CNP 283	85			100%	4
Total SWL, dB (A)							107
<b>Group 3</b>							
Air compressor, air flow > 10m3/min and <= 30m3/min		CNP 002	102	-15	Enclosure/Shed	70%	3
Concrete lorry mixer (5m3)		BS 5228 Table D.6/35	100	-5	Movable Noise Barrier	40%	2
Mobile crane		BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	1
Compactor, vibratory		CNP 050	105	-5	Movable Noise Barrier	50%	3
Vibratory roller (9kW)		BS 5228 Table D.3/115	102	-5	Movable Noise Barrier	70%	3
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95			60%	1
Poker, vibratory, hand-held		BS 5228 Table D.6/40	98			50%	5
Total SWL, dB (A)							107
Maximum SWL, dB (A)							107
<b>Stage 3 - Slope Stabilisation</b>							
<b>Group 1</b>							
Air compressor, air flow > 10m3/min and <= 30m3/min		CNP 002	102	-15	Enclosure/Shed	100%	2
Breaker, hand-held breaker, 35kg		BS 5228 Table D.2/10	110	-10	Movable Noise Barrier	20%	2
Breaker, excavator mounted (hydraulic), 52kW		BS 5228 Table D.8/12	106	-5	Movable Noise Barrier	80%	1
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95	-10	Movable Noise Barrier	50%	1
Lorry with crane/grab		CNP 145	105	-5	Movable Noise Barrier	40%	2
Total SWL, dB (A)							104
<b>Group 2</b>							
Air compressor, air flow > 10m3/min and <= 30m3/min		CNP 002	102	-15	Enclosure/Shed	100%	2
Drill rig, rotary type (diesel)		CNP 072	110	-10	Fabric	70%	2
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95			50%	1
Water pump, submersible (electric)		CNP 283	85			100%	1
Total SWL, dB (A)							102
<b>Group 3</b>							
Air compressor, air flow > 10m3/min and <= 30m3/min		CNP 002	102	-15	Enclosure/Shed	100%	2
Mobile crane		BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	70%	1
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95			50%	1
Grout mixer		CNP 105	90			40%	1
Grout pump		CNP 106	105	-15	Enclosure/Shed	40%	1
Poker, vibratory, hand-held		BS 5228 Table D.6/40	98			50%	2
Total SWL, dB (A)							101
Maximum SWL, dB (A)							104



Item	PME	TM or other reference	SWL, dB(A)	Screening Effect, dB(A)	Noise Mitigation Measures	% on time	Total no. of PME
<b>Fanling Road Section</b>							
<b>Stage 4 - Bored Pile Wall</b>							
<b>Group 1</b>							
	Drill rig, rotary type (diesel)	CNP 072	110	-10	Fabric	40%	2
	Water pump (electric)	CNP 281	88			100%	3
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
Total SWL, dB (A)							104
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	-15	Enclosure/Shed	80%	1
	Mobile crane	BS 5228 Table D.7/114	101	-5	Movable Noise Barrier	100%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	-10	Movable Noise Barrier	100%	1
	Piling, large diameter bored, grab and chisel	CNP 164	115	-10	Fabric	70%	2
Total SWL, dB (A)							107
<b>Group 3</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			80%	1
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			100%	1
	Concrete lorry mixer (5m3)	BS 5228 Table D.6/35	100			50%	1
	Concrete pump (100kW)	BS 5228 Table D.6/36	106			50%	1
Total SWL, dB (A)							106
Maximum SWL, dB (A)							107
<b>Stage 5 - Road Works</b>							
<b>Group 1</b>							
	Mobile crane	BS 5228 Table D.7/114	101			30%	2
	Lorry (35 t)	BS 5228 Table D.3/59	105			50%	2
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	2
Total SWL, dB (A)							108
<b>Group 2</b>							
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102			50%	2
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95			50%	2
	Asphalt paver	BS 5228 Table D.8/24	101			70%	1
	Road roller	BS 5228 Table D.8/30	101			70%	3
Total SWL, dB (A)							107
Maximum SWL, dB (A)							108