

Appendix 4.04 Construction Plant Inventory under Unmitigated Scenario

Construction Plant Inventory (Unmitigated Scenario)

Activity ID	Activity Name	PME	No. of Plant	30-min Usage	PME ID	SWL / item, dB(A)	SWL, dB(A)	Barrier Corr., dB(A)	SWL / Activity, dB(A)
RELOCATION OF SHA TIN SEWAGE TREATMENT WORKS TO CAVERNS									
Package 1 - Construction of Tunnels and Caverns for relocated STSTW									
<i>Access Road for Magazine at A Kung Kok Road</i>									
<i>Construction of Temporary Haul Road</i>									
M1010	Mobilisation and site clearance	excavator lorry dump truck	2 2 2	50% 50% 50%	CNP 081 CNP 142 CNP 068	112 105 105	112 105 105	0 0 0	113
M1020	Site Formation and Platform Erection for Works Area	excavator lorry dump truck	3 3 3	50% 50% 50%	CNP 081 CNP 142 CNP 068	112 105 105	114 107 107	0 0 0	115
M1030	Formation of Temporary Haul Road (incl temp slope works)	excavator lorry dump truck	3 3 3	50% 50% 50%	CNP 081 CNP 142 CNP 068	112 105 105	114 107 107	0 0 0	115
<i>Construction of Access Road</i>									
M1040	Piling Foundation for Retaining Wall	drilling rig piling rig water pump crawler crane bar bender and cutter concrete pump generator concrete lorry mixer air compressor	4 4 4 2 2 2 2 3 2	50% 50% 50% 50% 30% 50% 100% 50% 50%	CNP 072 BS C3/8 CNP 282 CNP 181 CNP 021 CNP 047 CNP 101 CNP 044 CNP 003	110 116 103 128 90 109 108 109 104	113 119 106 128 88 109 111 111 104	0 0 0 0 0 0 0 0 0	129
M1050	Permanent Slope Works	excavator lorry dump truck drilling rig grout mixer grout pump	3 2 3 3 3 3	50% 50% 50% 50% 50% 50%	CNP 081 CNP 142 CNP 068 CNP 072 CNP 105 CNP 106	112 105 105 110 90 105	114 105 107 112 92 107	0 0 0 0 0 0	117
M1060	Retaining Wall & Elevated Section	concrete lorry mixer dump truck excavator circular saw crane poker, vibratory bar bender and cutter generator breaker (pneumatic)	4 4 4 4 4 4 2 2 3	50% 50% 50% 40% 50% 50% 30% 100% 50%	CNP 044 CNP 068 CNP 081 CNP 201 CNP 048 CNP 170 CNP 021 CNP 101 CNP 027	109 105 112 108 112 113 90 108 122	112 108 115 110 115 116 88 111 124	0 0 0 0 0 0 0 0 0	126
M1070	Soil Backfilling and Compaction	excavator roller, vibratory	4 2	50% 50%	CNP 081 CNP 186	112 108	115 108	0 0	116
M1080	Permanent Access Road & Other Road Furniture	lorry roller, vibratory poker, vibratory compactor mobile crane concrete mixer	2 1 2 1 2 1	50% 50% 50% 50% 50% 50%	CNP 142 CNP 186 CNP 170 CNP 050 CNP 048 CNP 046	105 108 113 105 112 96	105 105 113 102 112 93	0 0 0 0 0 0	116
M1090	Remaining Works	lorry roller, vibratory poker, vibratory compactor mobile crane concrete mixer	2 1 2 1 2 1	50% 50% 50% 50% 50% 50%	CNP 142 CNP 186 CNP 170 CNP 050 CNP 048 CNP 046	105 108 113 105 112 96	105 105 113 102 112 93	0 0 0 0 0 0	116
<i>Construction of Explosive Compound Structure</i>									
M1100	Site Formation & Construction of Explosive Compound Structure	excavator lorry dump truck roller	1 1 1 1	50% 50% 50% 50%	CNP 081 CNP 142 CNP 068 CNP 186	112 105 105 108	109 102 102 105	0 0 0 0	112
M1110	E&M Installation for Explosive Compound Structure	air compressor breaker, hand-held concrete lorry mixer poker, vibratory generator	1 2 1 2 2	50% 50% 50% 50% 100%	CNP 003 CNP 025 CNP 044 CNP 170 CNP 101	104 111 109 113 108	101 111 106 113 111	0 0 0 0 0	117
Main Access Tunnel									
<i>Natural Terrain Hazard Mitigation Works-1</i>									
A1549	Mobilisation and site clearance	excavator lorry dump truck	2 2 2	50% 50% 50%	CNP 081 CNP 142 CNP 068	112 105 105	112 105 105	0 0 0	113

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A1550	NTHS-Construction of Check Dam near East Portal	poker, vibratory	1	50%	CNP 170	113	110	0	116
		breaker, hand-held	1	50%	CNP 025	111	108	0	
		excavator	1	50%	CNP 081	112	109	0	
		lorry	1	50%	CNP 142	105	102	0	
		grout mixer	1	50%	CNP 105	90	87	0	
		grout pump	1	50%	CNP 106	105	102	0	
		concrete lorry mixer	1	50%	CNP 044	109	106	0	
		concrete pump	1	50%	CNP 047	109	106	0	
		compactor	1	50%	CNP 050	105	102	0	
A1560	NTHS-Construction of Check Dam near West Portal	poker, vibratory	1	50%	CNP 170	113	110	0	116
		breaker, hand-held	1	50%	CNP 025	111	108	0	
		excavator	1	50%	CNP 081	112	109	0	
		lorry	1	50%	CNP 142	105	102	0	
		grout mixer	1	50%	CNP 105	90	87	0	
		grout pump	1	50%	CNP 106	105	102	0	
		concrete lorry mixer	1	50%	CNP 044	109	106	0	
		concrete pump	1	50%	CNP 047	109	106	0	
		compactor	1	50%	CNP 050	105	102	0	
A1570	NTHS-Construction of Check Dam near Emergency Portal	poker, vibratory	1	50%	CNP 170	113	110	0	116
		breaker, hand-held	1	50%	CNP 025	111	108	0	
		excavator	1	50%	CNP 081	112	109	0	
		lorry	1	50%	CNP 142	105	102	0	
		grout mixer	1	50%	CNP 105	90	87	0	
		grout pump	1	50%	CNP 106	105	102	0	
		concrete lorry mixer	1	50%	CNP 044	109	106	0	
		concrete pump	1	50%	CNP 047	109	106	0	
		compactor	1	50%	CNP 050	105	102	0	
A1580	Boulder Fall Fence Construction	poker, vibratory	1	50%	CNP 170	113	110	0	117
		breaker, hand-held	1	50%	CNP 025	111	108	0	
		excavator	1	50%	CNP 081	112	109	0	
		lorry	1	50%	CNP 142	105	102	0	
		grout mixer	1	50%	CNP 105	90	87	0	
		grout pump	1	50%	CNP 106	105	102	0	
		piling rig	1	50%	BS C3/8	116	113	0	
		bar bender and cutter	1	30%	CNP 021	90	85	0	
		concrete lorry mixer	1	50%	CNP 044	109	106	0	
concrete pump	1	50%	CNP 047	109	106	0			
<i>Temporary Road Construction</i>									
A2100	Site Formation works in Area 73 (site office set-up, levelling, etc)	excavator	2	50%	CNP 081	112	112	0	113
		lorry	2	50%	CNP 142	105	105	0	
		dump truck	2	50%	CNP 068	105	105	0	
A2110	Temporary road construction	excavator	1	50%	CNP 081	112	109	0	114
		lorry	1	50%	CNP 142	105	102	0	
		dump truck	1	50%	CNP 068	105	102	0	
		roller	1	50%	CNP 186	108	105	0	
		concrete mixer	1	50%	CNP 046	96	93	0	
		poker, vibratory	1	50%	CNP 170	113	110	0	
A2120	Temporary steel bridge across Ah Kwong Kok Street	crane	1	50%	CNP 048	112	109	0	115
		hoist	1	50%	CNP 122	95	92	0	
		Mini piling rig	1	50%	BS C3/8	116	113	0	
		concrete lorry mixer	1	50%	CNP 044	109	106	0	
		welder/generator portable	1	50%	CNP 101	108	105	0	
<i>Pilot Construction Adit</i>									
<i>Preparation Works</i>									
A1010	Mobilisation and site clearance	excavator	2	50%	CNP 081	112	112	0	113
		lorry	2	50%	CNP 142	105	105	0	
		dump truck	2	50%	CNP 068	105	105	0	
<i>Site Formation Works of Portal</i>									
A1020	Construction of Retaining Wall	concrete lorry mixer	3	50%	CNP 044	109	111	0	124
		dump truck	3	50%	CNP 068	105	107	0	
		excavator	3	50%	CNP 081	112	114	0	
		circular saw	3	40%	CNP 201	108	109	0	
		crane	3	50%	CNP 048	112	114	0	
		poker, vibratory	3	50%	CNP 170	113	115	0	
		bar bender and cutter	2	30%	CNP 021	90	88	0	
		generator	2	100%	CNP 101	108	111	0	
		breaker (pneumatic)	2	50%	CNP 027	122	122	0	

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A1030	Portal Slope Stabilisation Works	drilling rig	1	50%	CNP 072	110	107	0	112
		air compressor	1	50%	CNP 003	104	101	0	
		grout mixer	1	50%	CNP 105	90	87	0	
		grout pump	1	50%	CNP 106	105	102	0	
		generator	1	100%	CNP 101	108	108	0	
A1040	Excavation and Temporary Haul Road Construction to Adit Portal	excavator	1	50%	CNP 081	112	109	0	121
		excavator with hydraulic breaker	1	40%	CNP 028	122	118	0	
		hydraulic rock splitter	1	30%	CNP 182	123	118	0	
A1050	Drainage provision and surface protection	crane	1	50%	CNP 048	112	109	0	111
		roller	1	50%	CNP 186	108	105	0	
		truck	1	50%	CNP 068	105	102	0	
<i>Excavation of Adit Tunnel</i>									
A1060	Soft ground excavation for Pilot Construction Adit	drilling jumbo	1	50%	BS D10/2	112	109	0	113
		lorry	1	50%	CNP 142	105	102	0	
		dump truck	1	50%	CNP 068	105	102	0	
		excavator	1	50%	CNP 081	112	109	0	
A1070	Hard ground excavation for Pilot Construction Adit	drilling jumbo	1	50%	BS D10/2	112	109	0	115
		lorry	1	50%	CNP 142	105	102	0	
		dump truck	1	50%	CNP 068	105	102	0	
		excavator	1	50%	CNP 081	112	109	0	
		air compressor	1	50%	CNP 003	104	101	0	
		water pump	1	50%	CNP 282	103	100	0	
		generator	1	100%	CNP 101	108	108	0	
		cherry picker	1	50%	BS C4/54	107	104	0	
		ventilation fan	1	50%	CNP 241	108	105	0	
		Main Access Tunnel Portal (East)							
<i>Preparation Works</i>									
A1080	Mobilisation and general site clearance	excavator	2	50%	CNP 081	112	112	0	113
		lorry	2	50%	CNP 142	105	105	0	
		dump truck	2	50%	CNP 068	105	105	0	
A1090	Diversion of existing utilities	excavator	2	50%	CNP 081	112	112	0	113
		lorry	2	50%	CNP 142	105	105	0	
<i>Site Formation Works of Portal (East)</i>									
A1100	Excavation and slope cutting	excavator	1	50%	CNP 081	112	109	0	123
		excavator with hydraulic breaker	1	40%	CNP 028	122	118	0	
		hydraulic rock splitter	2	30%	CNP 182	123	121	0	
A1110	Portal Slope Stabilisation Works	drilling rig	3	50%	CNP 072	110	112	0	116
		air compressor	3	50%	CNP 003	104	106	0	
		grout mixer	3	50%	CNP 105	90	92	0	
		grout pump	3	50%	CNP 106	105	107	0	
		generator	3	100%	CNP 101	108	113	0	
A1120	Tunnel Portal Formation & Soft ground excavation (East)(60m)	drilling jumbo	1	50%	BS D10/2	112	109	0	128
		lorry	2	50%	CNP 142	105	105	0	
		dump truck	2	50%	CNP 068	105	105	0	
		excavator	2	50%	CNP 081	112	112	0	
		crawler crane	2	50%	CNP 181	128	128	0	
		concrete lorry mixer	2	50%	CNP 044	109	109	0	
		concrete pump	2	50%	CNP 047	109	109	0	
		water pump, submersible	3	50%	CNP 283	85	87	0	
		grout mixer	2	50%	CNP 105	90	90	0	
		grout pump	2	50%	CNP 106	105	105	0	
Main Access Tunnel Portal (West)									
<i>Preparation Works</i>									
A1130	Mobilisation, general site clearance and levelling	excavator	2	50%	CNP 081	112	112	0	113
		lorry	2	50%	CNP 142	105	105	0	
		dump truck	2	50%	CNP 068	105	105	0	
A1140	Diversion of existing utilities	excavator	1	50%	CNP 081	112	109	0	112
		lorry	1	50%	CNP 142	105	102	0	
		mobile crane	1	50%	CNP 048	112	109	0	
A1150	Demolition of existing facility (Evangelical Lutheran Church of HK)	excavator	2	50%	CNP 081	112	112	0	115
		lorry	2	50%	CNP 142	105	105	0	
		mobile crane	1	50%	CNP 048	112	109	0	
		generator	1	100%	CNP 101	108	108	0	
		air compressor	1	50%	CNP 003	104	101	0	
<i>Site Formation Works of Portal (West)</i>									
A1160	Erection of working platform for bored pile wall construction	crane	2	50%	CNP 048	112	112	0	116
		lorry	2	50%	CNP 142	105	105	0	

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		excavator	2	50%	CNP 081	112	112	0	
		dump truck	2	50%	CNP 068	105	105	0	
		air compressor	2	50%	CNP 003	104	104	0	
A1170	Pre-drilling for bored pile wall	drilling rig	10	50%	CNP 072	110	117	0	117
A1180	Bored Piling Works for Cantilever Retaining Wall	crawler crane	1	50%	CNP 181	128	125	0	126
		concrete pump	1	50%	CNP 047	109	106	0	
		air compressor	1	50%	CNP 003	104	101	0	
		oscillator	1	50%	CNP 165	115	112	0	
		RCD	1	50%	CNP 166	100	97	0	
		generator	1	100%	CNP 101	108	108	0	
		chisel	1	40%	CNP 164	115	111	0	
		concrete lorry mixer	1	50%	CNP 044	109	106	0	
		water pump	1	50%	CNP 282	103	100	0	
		bar bender and cutter	1	30%	CNP 021	90	85	0	
		dump truck	1	50%	CNP 068	105	102	0	
A1190	Testing for bored piles	grout mixer	4	50%	CNP 105	90	93	0	114
		grout pump	4	50%	CNP 106	105	108	0	
		drilling rig	4	50%	CNP 072	110	113	0	
A1191	Capping beam construction for Cantilever Retaining Wall	air compressor	2	50%	CNP 003	104	104	0	118
		generator	1	100%	CNP 101	108	108	0	
		concrete pump	1	50%	CNP 047	109	106	0	
		lorry	3	50%	CNP 142	105	107	0	
		poker, vibratory	3	50%	CNP 170	113	115	0	
		bar bender and cutter	4	30%	CNP 021	90	91	0	
		air blower	4	50%	CNP 006	95	98	0	
		saw	4	40%	CNP 205	101	103	0	
		mobile crane	2	50%	CNP 048	112	112	0	
A1200	Excavation and slope cutting	excavator	6	50%	CNP 081	112	117	0	129
		excavator with hydraulic breaker	6	40%	CNP 028	122	126	0	
		hydraulic rock splitter	6	30%	CNP 182	123	126	0	
A1210	Portal Slope Stabilisation works	drilling rig	4	50%	CNP 072	110	113	0	118
		air compressor	4	50%	CNP 003	104	107	0	
		grouting machine	4	50%	CNP 106	105	108	0	
		generator	4	100%	CNP 101	108	114	0	
A1201	Piling works	drilling rig	1	50%	CNP 072	110	107	0	126
		piling rig	1	50%	BS C3/8	116	113	0	
		water pump	1	50%	CNP 282	103	100	0	
		crawler crane	1	50%	CNP 181	128	125	0	
		concrete pump	1	50%	CNP 047	109	106	0	
		generator	1	100%	CNP 101	108	108	0	
		concrete lorry mixer	1	50%	CNP 044	109	106	0	
		air compressor	1	50%	CNP 003	104	101	0	
A1220	Tunnel Portal Formation & Soft ground excavation (West)(25m)	drilling jumbo	1	50%	BS D10/2	112	109	0	113
		lorry	1	50%	CNP 142	105	102	0	
		dump truck	1	50%	CNP 068	105	102	0	
		excavator	1	50%	CNP 081	112	109	0	
		air compressor	1	50%	CNP 003	104	101	0	
Cavern Construction									
<i>Cavern Excavation (Drill & Blast)</i>									
A1931	Manuvour and handling of C&D materials in Area 73	excavator	25	50%	CNP 081	112	123	0	123
<i>Vent Shaft at A Kung Kok Shan</i>									
A1360	Site Formation for Works Area	excavator	2	50%	CNP 081	112	112	0	115
		lorry	2	50%	CNP 142	105	105	0	
		dump truck	2	50%	CNP 068	105	105	0	
		roller	2	50%	CNP 186	108	108	0	
A1370	Construction of Guide wall	concrete mixer	1	50%	CNP 046	96	93	0	113
		excavator	1	50%	CNP 081	112	109	0	
		lorry	1	50%	CNP 142	105	102	0	
		poker, vibratory	1	50%	CNP 170	113	110	0	
A1380	Setting up for construction of Diaphragm Wall	excavator	1	50%	CNP 081	112	109	0	113
		lorry	1	50%	CNP 142	105	102	0	
		dump truck	1	50%	CNP 068	105	102	0	
		crane	1	50%	CNP 048	112	109	0	
A1390	Construction of Diaphragm Wall	pump	2	50%	CNP 282	103	103	0	117
		crane	2	50%	CNP 048	112	112	0	
		grab	2	40%	CNP 069	105	104	0	
		hydrofraise	2	60%	CNP 166	100	101	0	

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		concrete mixer	2	50%	CNP 046	96	96	0	
		generator	3	100%	CNP 101	108	113	0	
		air compressor	4	50%	CNP 003	104	107	0	
		desander	1	80%	CNP 162	105	104	0	
A1400	Testing of Diaphragm Wall	grout mixer	4	50%	CNP 105	90	93	0	114
		grout pump	4	50%	CNP 106	105	108	0	
		drilling rig	4	50%	CNP 072	110	113	0	
A1590	Excavation in Soft Ground (16m depth)	excavator	2	50%	CNP 081	112	112	0	115
		lorry	2	50%	CNP 142	105	105	0	
		crane	2	50%	CNP 048	112	112	0	
A1591	Setting up for Noise Enclosure	bar bender and cutter	2	30%	CNP 021	90	88	0	118
		poker, vibratory	3	50%	CNP 170	113	115	0	
		air compressor	2	50%	CNP 003	104	104	0	
		concrete lorry mixer	2	50%	CNP 044	109	109	0	
		concrete pump	2	50%	CNP 047	109	109	0	
		mobile crane	1	50%	CNP 048	112	109	0	
		cherry picker	1	50%	BS C4/54	107	104	0	
A1660	Excavation for Ventilation Adit by drill & blast method (540m)	drilling jumbo	1	50%	BS D10/2	112	109	0	116
		lorry	1	50%	CNP 142	105	102	0	
		dump truck	1	50%	CNP 068	105	102	0	
		excavator	1	50%	CNP 081	112	109	0	
		air compressor	1	50%	CNP 003	104	101	0	
		water pump	1	50%	CNP 282	103	100	0	
		generator	1	100%	CNP 101	108	108	0	
		cherry picker	1	50%	BS C4/54	107	104	0	
		ventilation fan	2	50%	CNP 241	108	108	0	
A1661	Excavation in Rock Portion by drill & blast method (90m depth)	raiseboring rig	1	30%	BS C3/17	104	99	0	106
		dump truck	2	50%	CNP 068	105	105	0	
Emergency Access Tunnel Portal									
<i>Preparation Works</i>									
A1240	Mobilisation and general site clearance	excavator	2	50%	CNP 081	112	112	0	113
		lorry	2	50%	CNP 142	105	105	0	
		dump truck	2	50%	CNP 068	105	105	0	
<i>Construction Works</i>									
A1260	Erection of working platform for bored pile wall construction	crane	2	50%	CNP 048	112	112	0	116
		lorry	2	50%	CNP 142	105	105	0	
		excavator	2	50%	CNP 081	112	112	0	
		dump truck	2	50%	CNP 068	105	105	0	
		air compressor	2	50%	CNP 003	104	104	0	
		hoist	2	50%	CNP 122	95	95	0	
A1270	Pre-drilling for bored pile wall	drilling rig	10	50%	CNP 072	110	117	0	117
A1280	Cantilever Retaining Wall	crawler crane	4	50%	CNP 181	128	131	0	132
		concrete pump	3	50%	CNP 047	109	111	0	
		air compressor	4	50%	CNP 003	104	107	0	
		oscillator	4	50%	CNP 165	115	118	0	
		RCD	4	50%	CNP 166	100	103	0	
		generator	4	100%	CNP 101	108	114	0	
		chisel	3	40%	CNP 164	115	116	0	
		concrete lorry mixer	3	50%	CNP 044	109	111	0	
		water pump	3	50%	CNP 282	103	105	0	
		bar bender and cutter	3	30%	CNP 021	90	90	0	
		dump truck	4	50%	CNP 068	105	108	0	
A1290	Testing for bored piles	grout mixer	4	50%	CNP 105	90	93	0	114
		grout pump	4	50%	CNP 106	105	108	0	
		drilling rig	4	50%	CNP 072	110	113	0	
A1300	Excavation and slope cutting	excavator	2	50%	CNP 081	112	112	0	125
		excavator with hydraulic breaker	2	40%	CNP 028	122	121	0	
		hydraulic rock splitter	3	30%	CNP 182	123	123	0	
A1310	Soil backfilling and compaction	excavator	4	50%	CNP 081	112	115	0	116
		roller, vibratory	2	50%	CNP 186	108	108	0	
A1320	Portal Slope Stabilisation works	drilling rig	4	50%	CNP 072	110	113	0	118
		air compressor	4	50%	CNP 003	104	107	0	
		grouting machine	4	50%	CNP 106	105	108	0	
		generator	4	100%	CNP 101	108	114	0	
A1330	Tunnel Portal Formation at Mui Tsz Lam Portal	drilling rig	4	50%	CNP 072	110	113	0	118
		lorry	4	50%	CNP 142	105	108	0	
		dump truck	4	50%	CNP 068	105	108	0	

Appendix 4.04 Construction Plant Inventory under Unmitigated Scenario

Construction Plant Inventory (Unmitigated Scenario)

Activity ID	Activity Name	PME	No. of Plant	30-min Usage	PME ID	SWL / item, dB(A)	SWL, dB(A)	Barrier Corr., dB(A)	SWL / Activity, dB(A)
		excavator	4	50%	CNP 081	112	115	0	
		air compressor	4	50%	CNP 003	104	107	0	
Construction of effluent pipeline									
A1940	Condition survey and tunnel strengthening works for THEES tunnel*	excavator	1	50%	CNP 081	112	109	0	113
		drilling rig	1	50%	CNP 072	110	107	0	
		air compressor	1	50%	CNP 003	104	101	0	
		grout mixer	1	50%	CNP 105	90	87	0	
		grout pump	1	50%	CNP 106	105	102	0	
		generator	1	100%	CNP 101	108	108	0	
A1940	Condition survey	excavator	1	50%	CNP 081	112	109	0	113
		drilling rig	1	50%	CNP 072	110	107	0	
		air compressor	1	50%	CNP 003	104	101	0	
		grout mixer	1	50%	CNP 105	90	87	0	
		grout pump	1	50%	CNP 106	105	102	0	
		generator	1	100%	CNP 101	108	108	0	
A1940	Tunnel strengthening works	excavator	1	50%	CNP 081	112	109	0	113
		drilling rig	1	50%	CNP 072	110	107	0	
		air compressor	1	50%	CNP 003	104	101	0	
		grout mixer	1	50%	CNP 105	90	87	0	
		grout pump	1	50%	CNP 106	105	102	0	
		generator	1	100%	CNP 101	108	108	0	
A1940	Tunnel strengthening works	excavator	1	50%	CNP 081	112	109	0	113
		drilling rig	1	50%	CNP 072	110	107	0	
		air compressor	1	50%	CNP 003	104	101	0	
		grout mixer	1	50%	CNP 105	90	87	0	
		grout pump	1	50%	CNP 106	105	102	0	
		generator	1	100%	CNP 101	108	108	0	
A1941	Soft ground excavation	drilling jumbo	1	50%	BS D10/2	112	109	0	114
		lorry	1	50%	CNP 142	105	102	0	
		dump truck	1	50%	CNP 068	105	102	0	
		excavator	1	50%	CNP 081	112	109	0	
		cherry picker	1	50%	BS C4/54	107	104	0	
		ventilation fan	1	50%	CNP 241	108	105	0	
A1943	Set up of micro TBM	crane	1	50%	CNP 048	112	109	0	112
		generator	1	100%	CNP 101	108	108	0	
		pump	1	50%	CNP 282	103	100	0	
A1945	Modification of existing inlet chamber and complete connection*	mobile crane	1	50%	CNP 048	112	109	0	116
		generator	1	100%	CNP 101	108	108	0	
		air compressor	1	50%	CNP 003	104	101	0	
		breaker	1	50%	CNP 025	111	108	0	
		concrete pump	1	50%	CNP 047	109	106	0	
		poker, vibratory	1	50%	CNP 170	113	110	0	
		saw	1	40%	CNP 205	101	97	0	
		lorry	1	50%	CNP 142	105	102	0	
		concrete lorry mixer	1	50%	CNP 044	109	106	0	
Package 2 - Civil and E&M Works and T&C of relocated STSTW									
E&M Installation									
A1690	Construction of civil & builders works of relocated STSTW	excavator	5	50%	CNP 081	112	116	0	135
		crawler crane	10	50%	CNP 181	128	135	0	
		dump truck	10	50%	CNP 068	105	112	0	
		lorry	10	50%	CNP 142	105	112	0	
		generator	10	100%	CNP 101	108	118	0	
		air compressor	10	50%	CNP 003	104	111	0	
		ventilation fan	6	50%	CNP 241	108	113	0	
		cherry picker	5	50%	BS C4/54	107	111	0	
A1720	Construction of transformer and plant control room at main access tunnel portal area	crawler crane	1	50%	CNP 181	128	125	0	125
		concrete lorry mixer	1	50%	CNP 044	109	106	0	
		concrete pump	1	50%	CNP 047	109	106	0	
		lorry	1	50%	CNP 142	105	102	0	
A1730	Construction of ventilation building at main access tunnel portal area	air compressor	2	50%	CNP 003	104	104	0	118
		generator	1	100%	CNP 101	108	108	0	
		breaker	2	50%	CNP 025	111	111	0	
		concrete pump	1	50%	CNP 047	109	106	0	
		crane	1	50%	CNP 048	112	109	0	
		lorry	3	50%	CNP 142	105	107	0	
		poker, vibratory	3	50%	CNP 170	113	115	0	

Appendix 4.04 Construction Plant Inventory under Unmitigated Scenario

Construction Plant Inventory (Unmitigated Scenario)

Activity ID	Activity Name	PME	No. of Plant	30-min Usage	PME ID	SWL / item, dB(A)	SWL, dB(A)	Barrier Corr., dB(A)	SWL / Activity, dB(A)
		bar bender and cutter	4	30%	CNP 021	90	91	0	
		air blower	4	50%	CNP 006	95	98	0	
A1750	Laying of rising mains, effluent pipeline and emergency bypass pipeline	crane	2	50%	CNP 048	112	112	0	114
		generator	1	100%	CNP 101	108	108	0	
		lorry	3	50%	CNP 142	105	107	0	
A1760	Proposed roadworks and landscaping	excavator	2	50%	CNP 081	112	112	0	118
		concrete pump	2	50%	CNP 047	109	109	0	
		poker, vibratory	2	50%	CNP 170	113	113	0	
		dump truck	2	50%	CNP 068	105	105	0	
		generator	1	100%	CNP 101	108	108	0	
		paver	1	50%	CNP 004	109	106	0	
		roller	4	50%	CNP 186	108	111	0	
Emergency Outfall Construction									
A1740	Mobilisation of plant and equipment on Site	excavator	2	50%	CNP 081	112	112	0	113
		lorry	2	50%	CNP 142	105	105	0	
		dump truck	2	50%	CNP 068	105	105	0	
A1770	Construction of jacking pit at Portal	lorry	2	50%	CNP 142	105	105	0	118
		dump truck	2	50%	CNP 068	105	105	0	
		excavator	2	50%	CNP 081	112	112	0	
		concrete mixer	2	50%	CNP 046	96	96	0	
		crane	1	50%	CNP 048	112	109	0	
		generator	2	100%	CNP 101	108	111	0	
		air compressor	2	50%	CNP 003	104	104	0	
		water pump	3	50%	CNP 282	103	105	0	
		ventilation fan	3	50%	CNP 241	108	110	0	
		welder/generator portable	3	50%	CNP 101	108	110	0	
A1771	Construction of 1st intermediate pit at Ma On Shan Road & MOS Rail	lorry	2	50%	CNP 142	105	105	0	118
		dump truck	2	50%	CNP 068	105	105	0	
		excavator	2	50%	CNP 081	112	112	0	
		concrete mixer	2	50%	CNP 046	96	96	0	
		crane	1	50%	CNP 048	112	109	0	
		generator	2	100%	CNP 101	108	111	0	
		air compressor	2	50%	CNP 003	104	104	0	
		water pump	3	50%	CNP 282	103	105	0	
		ventilation fan	3	50%	CNP 241	108	110	0	
		welder/generator portable	3	50%	CNP 101	108	110	0	
A1772	Construction of 2nd intermediate pit at Area 73	lorry	2	50%	CNP 142	105	105	0	118
		dump truck	2	50%	CNP 068	105	105	0	
		excavator	2	50%	CNP 081	112	112	0	
		concrete mixer	2	50%	CNP 046	96	96	0	
		crane	1	50%	CNP 048	112	109	0	
		generator	2	100%	CNP 101	108	111	0	
		air compressor	2	50%	CNP 003	104	104	0	
		water pump	3	50%	CNP 282	103	105	0	
		ventilation fan	3	50%	CNP 241	108	110	0	
		welder/generator portable	3	50%	CNP 101	108	110	0	
A1773	Construction of Receiving pit at existing STSTW	lorry	2	50%	CNP 142	105	105	0	118
		dump truck	2	50%	CNP 068	105	105	0	
		excavator	2	50%	CNP 081	112	112	0	
		concrete mixer	2	50%	CNP 046	96	96	0	
		crane	1	50%	CNP 048	112	109	0	
		generator	2	100%	CNP 101	108	111	0	
		air compressor	2	50%	CNP 003	104	104	0	
		water pump	3	50%	CNP 282	103	105	0	
		ventilation fan	3	50%	CNP 241	108	110	0	
		welder/generator portable	3	50%	CNP 101	108	110	0	
A1830	Pipe installation of remaining part and connection to existing submarine outfall	lorry	1	50%	CNP 142	105	102	0	125
		dump truck	1	50%	CNP 068	105	102	0	
		excavator	1	50%	CNP 081	112	109	0	
		concrete mixer	1	50%	CNP 046	96	93	0	
		crawler crane	1	50%	CNP 181	128	125	0	
		generator	1	100%	CNP 101	108	108	0	
		air compressor	1	50%	CNP 003	104	101	0	
Package 3 - Construction of Ancillary Facilities									
Administration Buildings and other ancillary facilities construction									
A1430	Construction of Administration Buildings and other ancillary facilities	air compressor	2	50%	CNP 003	104	104	0	119
		generator	1	100%	CNP 101	108	108	0	

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Construction Plant Inventory (Unmitigated Scenario)

Activity ID	Activity Name	PME	No. of Plant	30-min Usage	PME ID	SWL / item, dB(A)	SWL, dB(A)	Barrier Corr., dB(A)	SWL / Activity, dB(A)
		breaker	2	50%	CNP 025	111	111	0	
		concrete pump	1	50%	CNP 047	109	106	0	
		tower crane	3	30%	CNP 049	95	95	0	
		lorry	3	50%	CNP 142	105	107	0	
		poker, vibratory	3	50%	CNP 170	113	115	0	
		bar bender and cutter	4	30%	CNP 021	90	91	0	
		air blower	4	50%	CNP 006	95	98	0	
		saw	4	40%	CNP 205	101	103	0	
		mobile crane	2	50%	CNP 048	112	112	0	
Package 4 - Decommissioning and Demolition of Existing STSTW									
A1450	Demolition of existing STSTW	excavator	5	50%	CNP 081	112	116	0	127
		excavator with hvdraulic breaker	5	40%	CNP 028	122	125	0	
		dump truck	10	50%	CNP 068	105	112	0	
		air compressor	5	50%	CNP 003	104	108	0	
		generator	5	100%	CNP 101	108	115	0	
		lorry	5	50%	CNP 142	105	109	0	
		mobile crane	2	50%	CNP 048	112	112	0	
		cutter	5	50%	CNP 056	112	116	0	
		breaker, hand-held	10	50%	CNP 025	111	118	0	
A1451	Demolition of existing STSTW	excavator	5	50%	CNP 081	112	116	0	127
		excavator with hvdraulic breaker	5	40%	CNP 028	122	125	0	
		dump truck	10	50%	CNP 068	105	112	0	
		air compressor	5	50%	CNP 003	104	108	0	
		generator	5	100%	CNP 101	108	115	0	
		lorry	5	50%	CNP 142	105	109	0	
		mobile crane	2	50%	CNP 048	112	112	0	
		cutter	5	50%	CNP 056	112	116	0	
		breaker, hand-held	10	50%	CNP 025	111	118	0	
A1452	Demolition of existing STSTW	excavator	5	50%	CNP 081	112	116	0	127
		excavator with hvdraulic breaker	5	40%	CNP 028	122	125	0	
		dump truck	10	50%	CNP 068	105	112	0	
		air compressor	5	50%	CNP 003	104	108	0	
		generator	5	100%	CNP 101	108	115	0	
		lorry	5	50%	CNP 142	105	109	0	
		mobile crane	2	50%	CNP 048	112	112	0	
		cutter	5	50%	CNP 056	112	116	0	
		breaker, hand-held	10	50%	CNP 025	111	118	0	
A1453	Demolition of existing STSTW	excavator	5	50%	CNP 081	112	116	0	127
		excavator with hvdraulic breaker	5	40%	CNP 028	122	125	0	
		dump truck	10	50%	CNP 068	105	112	0	
		air compressor	5	50%	CNP 003	104	108	0	
		generator	5	100%	CNP 101	108	115	0	
		lorry	5	50%	CNP 142	105	109	0	
		mobile crane	2	50%	CNP 048	112	112	0	
		cutter	5	50%	CNP 056	112	116	0	
		breaker, hand-held	10	50%	CNP 025	111	118	0	