

Appendix 5.3 - Powered Mechanical Equipment (PME) for the Different Construction Tasks

For Sau Mau Ping Road and Lin Tak Road (Unmitigated)

Task No.

1. General

101 1.1 Site Clearance

PME

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	-	-	2	50%	117
Excavator	CNP 081	112	-	-	2	65%	113
Lorry	CNP 141	112	-	-	2	50%	112
Total SWL:							119

3 Lin Tak Road pick up/drop off construction

201 4 Cut Slope

PME

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	-	-	1	50%	114
Excavator	CNP 081	112	-	-	1	65%	110
Total SWL:							115

202 5 Slope Drainage

PME

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Concrete Lorry Mixer	CNP 044	109	-	-	1	50%	106
Poker, Vibratory, Hand-held	CNP 170	113	-	-	1	30%	108
Total SWL:							110

203 6 Utility Installation

PME

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	-	-	1	65%	110
Compactor, Vibratory	CNP 050	105	-	-	1	50%	102
Air Compressor	CNP 003	104	-	-	1	50%	101
Breaker, Hand-held	CNP 024	108	-	-	1	40%	104
Total SWL:							112

204 7 Formation of Carriageway

PME

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	-	-	2	50%	117
Compactor, Vibratory	CNP 050	105	-	-	1	50%	102
Road Roller	CNP 185	108	-	-	1	80%	107
Total SWL:							118

205 8 Pavement Construction

PME

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*							
Dump Truck	CNP 067	117	-	-	2	50%	117
Sub SWL:							117
Group 2*							
Road Roller	CNP 185	108	-	-	1	80%	107
Asphalt Paver	CNP 004	109	-	-	1	80%	108
Sub SWL:							111
Group 3*							
Paint Line Marker	CNP 161	90	-	-	1	65%	88
Sub SWL:							88
Group 4*							
Concrete Lorry Mixer	CNP 044	109	-	-	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	-	-	2	30%	111
Sub SWL:							113
Total SWL:							117

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

Appendix 5.3 - Powered Mechanical Equipment (PME) for the Different Construction Tasks

For Sau Mau Ping Road and Lin Tak Road (Unmitigated)

Task No.

**206 13 Junction Modification
PME**

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	1	50%	114
Excavator	CNP 081	112	- -	1	65%	110
Concrete Lorry Mixer	CNP 044	109	- -	1	50%	106
Poker, Vibratory, Hand-held	CNP 170	113	- -	1	30%	108
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, hand-held	CNP 024	108	- -	1	30%	103
Total SWL:						117

17 TKOR Slip Road near Hong Wah Court

**301 18 Temp Cut Slope
PME**

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	1	50%	114
Excavator	CNP 081	112	- -	1	65%	110
Total SWL:						115

302 19 Retaining Wall

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Air Compressor	CNP 003	104	- -	2	50%	104
Breaker, Hand-held	CNP 024	108	- -	2	40%	107
Sub SWL:						119
<u>Group 2*</u>						
Excavator	CNP 081	112	- -	2	65%	113
Crane, mobile	CNP 048	112	- -	2	30%	110
Sub SWL:						115
<u>Group 3*</u>						
Generator, Silenced	CNP 102	100	- -	2	100%	103
Bar Bender and Cutter (electric)	CNP 021	90	- -	2	50%	90
Saw, Circular, Wood	CNP 201	108	- -	2	50%	108
Sub SWL:						109
<u>Group 4*</u>						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111
Crane, mobile	CNP 048	112	- -	2	30%	110
Sub SWL:						115
Total SWL:						119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

303 20 Backfilling of Slope

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	1	50%	114
Excavator	CNP 081	112	- -	1	65%	110
Sub SWL:						115
<u>Group 2*</u>						
Road Roller	CNP 185	108	- -	1	80%	107
Sub SWL:						107
Total SWL:						115

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

304 21 Utility Installation

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	1	65%	110
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	1	40%	104
Total SWL:						112

Appendix 5.3 - Powered Mechanical Equipment (PME) for the Different Construction Tasks

For Sau Mau Ping Road and Lin Tak Road (Unmitigated)

Task No.

305 22 Formation of Carriageway

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	-	-	1	50%	114
Compactor, Vibratory	CNP 050	105	-	-	1	50%	102
Road Roller	CNP 185	108	-	-	1	80%	107
Total SWL:							115

306 23 Pavement Construction

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>							
Dump Truck	CNP 067	117	-	-	2	50%	117
Sub SWL:							117
<u>Group 2*</u>							
Road Roller	CNP 185	108	-	-	1	80%	107
Asphalt Paver	CNP 004	109	-	-	1	80%	108
Sub SWL:							111
<u>Group 3*</u>							
Paint Line Marker	CNP 161	90	-	-	1	65%	88
Sub SWL:							88
<u>Group 4*</u>							
Concrete Lorry Mixer	CNP 044	109	-	-	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	-	-	2	30%	111
Sub SWL:							113
Total SWL:							117

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

25 TKOR Slip Rd SMP Bound Re-alignment

401 26 Temp Cut Slope

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	-	-	2	50%	117
Excavator	CNP 081	112	-	-	1	65%	110
Total SWL:							118

27 Retaining Walls

402 27 Pile Foundation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Piling Rig	CNP 166	100	-	-	2	50%	100
Air Compressor	CNP 003	104	-	-	2	50%	104
Crane, mobile	CNP 048	112	-	-	2	30%	110
Generator, Silenced	CNP 102	100	-	-	2	100%	103
Water Pump (electric)	CNP 281	88	-	-	2	100%	91
Concrete Lorry Mixer	CNP 044	109	-	-	2	50%	109
Total SWL:							114

Appendix 5.3 - Powered Mechanical Equipment (PME) for the Different Construction Tasks

For Sau Mau Ping Road and Lin Tak Road (Unmitigated)

Task No.

Task No.	Task Description	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL	
403	28 Retaining Wall Structure							
	PME							
	<u>Group 1*</u>							
	Dump Truck	CNP 067	117	- -	2	50%	117	
	Excavator	CNP 081	112	- -	2	65%	113	
	Air Compressor	CNP 003	104	- -	2	50%	104	
	Breaker, Hand-held	CNP 024	108	- -	2	40%	107	
							Sub SWL:	119
	<u>Group 2*</u>							
	Excavator	CNP 081	112	- -	2	65%	113	
	Crane, mobile	CNP 048	112	- -	2	30%	110	
							Sub SWL:	115
	<u>Group 3*</u>							
	Generator, Silenced	CNP 102	100	- -	2	100%	103	
	Bar Bender and Cutter (electric)	CNP 021	90	- -	2	50%	90	
	Saw, Circular, Wood	CNP 201	108	- -	2	50%	108	
							Sub SWL:	109
	<u>Group 4*</u>							
	Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109	
	Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111	
Crane, mobile	CNP 048	112	- -	2	30%	110		
						Sub SWL:	115	
*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.						Total SWL:	119	
404	29 Backfilling of Slope							
	PME							
	<u>Group 1*</u>							
	Dump Truck	CNP 067	117	- -	1	50%	114	
	Excavator	CNP 081	112	- -	1	65%	110	
							Sub SWL:	115
	<u>Group 2*</u>							
	Road Roller	CNP 185	108	- -	1	80%	107	
							Sub SWL:	107
	*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.						Total SWL:	115
405	30 Utility Installation							
	PME							
	Excavator	CNP 081	112	- -	1	65%	110	
	Compactor, Vibratory	CNP 050	105	- -	1	50%	102	
	Air Compressor	CNP 003	104	- -	1	50%	101	
Breaker, Hand-held	CNP 024	108	- -	1	40%	104		
						Total SWL:	112	
406	31 Utility Diversion							
	PME							
	Excavator	CNP 081	112	- -	1	65%	110	
	Compactor, Vibratory	CNP 050	105	- -	1	50%	102	
	Air Compressor	CNP 003	104	- -	1	50%	101	
Breaker, Hand-held	CNP 024	108	- -	1	40%	104		
						Total SWL:	112	
407	32 Formation of Carriageway							
	PME							
	Dump Truck	CNP 067	117	- -	2	50%	117	
	Compactor, Vibratory	CNP 050	105	- -	1	50%	102	
Road Roller	CNP 185	108	- -	1	80%	107		
						Total SWL:	118	

Appendix 5.3 - Powered Mechanical Equipment (PME) for the Different Construction Tasks

For Sau Mau Ping Road and Lin Tak Road (Unmitigated)

Task No.

408 33 Pavement Construction

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
						Sub SWL: 117
<u>Group 2*</u>						
Road Roller	CNP 185	108	- -	1	80%	107
Asphalt Paver	CNP 004	109	- -	1	80%	108
						Sub SWL: 111
<u>Group 3*</u>						
Paint Line Marker	CNP 161	90	- -	1	65%	88
						Sub SWL: 88
<u>Group 4*</u>						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111
						Sub SWL: 113
						Total SWL: 117

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

35 Flyover Construction

501 36 Pile Foundation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	2	65%	113
Piling Rig	CNP 166	100	- -	2	50%	100
Oscillator	CNP 165	115	- -	2	50%	115
Reverse Circulation Drill	CNP 166	100	- -	2	50%	100
Generator, Silenced	CNP 102	100	- -	2	100%	103
Bar Bender and Cutter (electric)	CNP 021	90	- -	2	50%	90
Water Pump (electric)	CNP 281	88	- -	2	100%	91
Crane, mobile	CNP 048	112	- -	2	50%	112
Air Compressor	CNP 003	104	- -	2	50%	104
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
						Total SWL: 119

502 37 Pile Cap

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Air Compressor	CNP 003	104	- -	2	65%	105
Breaker, Hand-held	CNP 024	108	- -	2	65%	109
						Sub SWL: 119
<u>Group 2*</u>						
Excavator	CNP 081	112	- -	2	65%	113
Crane, mobile	CNP 048	112	- -	2	65%	113
						Sub SWL: 116
<u>Group 3*</u>						
Generator, Silenced	CNP 102	100	- -	2	65%	101
Bar Bender and Cutter (electric)	CNP 021	90	- -	2	65%	91
Saw, Circular, Wood	CNP 201	108	- -	2	65%	109
						Sub SWL: 110
<u>Group 4*</u>						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	65%	114
Crane, mobile	CNP 048	112	- -	2	65%	113
						Sub SWL: 117
						Total SWL: 119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

Appendix 5.3 - Powered Mechanical Equipment (PME) for the Different Construction Tasks

For Sau Mau Ping Road and Lin Tak Road (Unmitigated)

Task No.

503 38 Bridge Pier and Abutment

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Air Compressor	CNP 003	104	- -	2	65%	105
Breaker, Hand-held	CNP 024	108	- -	2	65%	109
					Sub SWL:	119
Group 2*						
Excavator	CNP 081	112	- -	2	65%	113
Crane, mobile	CNP 048	112	- -	2	65%	113
					Sub SWL:	116
Group 3*						
Generator, Silenced	CNP 102	100	- -	2	65%	101
Bar Bender and Cutter (electric)	CNP 021	90	- -	2	65%	91
Saw, Circular, Wood	CNP 201	108	- -	2	65%	109
					Sub SWL:	110
Group 4*						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	65%	114
Crane, mobile	CNP 048	112	- -	2	65%	113
					Sub SWL:	117
					Total SWL:	119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

504 39 Insitu Deck

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Air Compressor	CNP 003	104	- -	2	65%	105
Breaker, Hand-held	CNP 024	108	- -	2	65%	109
					Sub SWL:	119
Group 2*						
Excavator	CNP 081	112	- -	2	65%	113
Crane, mobile	CNP 048	112	- -	2	65%	113
					Sub SWL:	116
Group 3*						
Generator, Silenced	CNP 102	100	- -	2	65%	101
Bar Bender and Cutter (electric)	CNP 021	90	- -	2	65%	91
Saw, Circular, Wood	CNP 201	108	- -	2	65%	109
					Sub SWL:	110
Group 4*						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	65%	114
Crane, mobile	CNP 048	112	- -	2	65%	113
					Sub SWL:	117
					Total SWL:	119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

505 40 Noise Barrier Installation

40.1 NB Column Post*

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	2	30%	110
Lorry	CNP 141	112	- -	2	50%	112
					Sub SWL:	114

Appendix 5.3 - Powered Mechanical Equipment (PME) for the Different Construction Tasks

For Sau Mau Ping Road and Lin Tak Road (Unmitigated)

Task No.

40.2 NB Panel Installation*

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	2	30%	110
Cherry Picker	BS C4/54	104	- -	2	30%	102
Lorry	CNP 141	112	- -	2	50%	112
					Sub SWL:	114
					Total SWL:	114

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

506 41 Pavement Construction

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
					Sub SWL:	117
<u>Group 2*</u>						
Road Roller	CNP 185	108	- -	1	80%	107
Asphalt Paver	CNP 004	109	- -	1	80%	108
					Sub SWL:	111
<u>Group 3*</u>						
Paint Line Marker	CNP 161	90	- -	1	65%	88
					Sub SWL:	88
<u>Group 4*</u>						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111
					Sub SWL:	113
					Total SWL:	117

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

601 43 SMPR Re-alignment

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	1	65%	110
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	1	40%	104
					Total SWL:	112

602 45 Formation of Carriageway

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	2	50%	117
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Road Roller	CNP 185	108	- -	1	80%	107
					Total SWL:	118

603 46 Pavement Construction

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
					Sub SWL:	117
<u>Group 2*</u>						
Road Roller	CNP 185	108	- -	1	80%	107
Asphalt Paver	CNP 004	109	- -	1	80%	108
					Sub SWL:	111
<u>Group 3*</u>						
Paint Line Marker	CNP 161	90	- -	1	65%	88
					Sub SWL:	88
<u>Group 4*</u>						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111
					Sub SWL:	113
					Total SWL:	117

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

604 47 Junction Modification

Appendix 5.3 - Powered Mechanical Equipment (PME) for the Different Construction Tasks

For Sau Mau Ping Road and Lin Tak Road (Unmitigated)

Task No.

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	1	50%	114
Excavator	CNP 081	112	- -	1	65%	110
Concrete Lorry Mixer	CNP 044	109	- -	1	50%	106
Poker, Vibratory, Hand-held	CNP 170	113	- -	1	30%	108
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, hand-held	CNP 024	108	- -	1	30%	103
Total SWL:						117

49 Semi-NE and NB along SMPR

605 50 Utility Diversion

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	1	65%	110
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	1	40%	104
Total SWL:						112

606 51 Pile Foundation at Uphill

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Piling Rig	CNP 166	100	- -	2	50%	100
Air Compressor	CNP 003	104	- -	2	50%	104
Crane, mobile	CNP 048	112	- -	2	30%	110
Generator, Silenced	CNP 102	100	- -	2	100%	103
Water Pump (electric)	CNP 281	88	- -	2	100%	91
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Total SWL:						114

607 52 Pile Cap at Uphill

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Air Compressor	CNP 003	104	- -	2	65%	105
Breaker, Hand-held	CNP 024	108	- -	2	65%	109
Sub SWL:						119
Group 2*						
Excavator	CNP 081	112	- -	2	65%	113
Crane, mobile	CNP 048	112	- -	2	65%	113
Sub SWL:						116
Group 3*						
Generator, Silenced	CNP 102	100	- -	2	65%	101
Bar Bender and Cutter (electric)	CNP 021	90	- -	2	65%	91
Saw, Circular, Wood	CNP 201	108	- -	2	65%	109
Sub SWL:						110
Group 4*						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	65%	114
Crane, mobile	CNP 048	112	- -	2	65%	113
Sub SWL:						117
Total SWL:						119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

608 53 Semi-NE and NB Column Post at Uphill

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	1	30%	107
Lorry	CNP 141	112	- -	1	50%	109
Total SWL:						111

609 54 Pile foundation at Downhill

Appendix 5.3 - Powered Mechanical Equipment (PME) for the Different Construction Tasks

For Sau Mau Ping Road and Lin Tak Road (Unmitigated)

Task No.

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Piling Rig	CNP 166	100	-	-	2	50%	100
Air Compressor	CNP 003	104	-	-	2	50%	104
Crane, mobile	CNP 048	112	-	-	2	30%	110
Generator, Silenced	CNP 102	100	-	-	2	100%	103
Water Pump (electric)	CNP 281	88	-	-	2	100%	91
Concrete Lorry Mixer	CNP 044	109	-	-	2	50%	109
Total SWL:							114

610 55 Pile Cap at Downhill

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>							
Dump Truck	CNP 067	117	-	-	2	50%	117
Excavator	CNP 081	112	-	-	2	65%	113
Air Compressor	CNP 003	104	-	-	2	65%	105
Breaker, Hand-held	CNP 024	108	-	-	2	65%	109
Sub SWL:							119
<u>Group 2*</u>							
Excavator	CNP 081	112	-	-	2	65%	113
Crane, mobile	CNP 048	112	-	-	2	65%	113
Sub SWL:							116
<u>Group 3*</u>							
Generator, Silenced	CNP 102	100	-	-	2	65%	101
Bar Bender and Cutter (electric)	CNP 021	90	-	-	2	65%	91
Saw, Circular, Wood	CNP 201	108	-	-	2	65%	109
Sub SWL:							110
<u>Group 4*</u>							
Concrete Lorry Mixer	CNP 044	109	-	-	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	-	-	2	65%	114
Crane, mobile	CNP 048	112	-	-	2	65%	113
Sub SWL:							117
Total SWL:							119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

611 56 Semi-NE Column Post at Downhill

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	-	-	1	30%	107
Lorry	CNP 141	112	-	-	1	50%	109
Total SWL:							111

612 57 Semi-NE Roof Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	-	-	1	30%	107
Cherry Picker	BS C4/54	104	-	-	1	30%	99
Lorry	CNP 141	112	-	-	1	50%	109
Total SWL:							111

613 58 Panel Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	-	-	1	30%	107
Cherry Picker	BS C4/54	104	-	-	1	30%	99
Lorry	CNP 141	112	-	-	1	50%	109
Total SWL:							111

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

J/O New Clear Water Bay Road and Shun Lee Tsuen Road (Unmitigated)

Task No.

1. General

1101 2 Site Clearance

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Lorry	CNP 141	112	- -	2	50%	112
Total SWL:						119

3 SLTR Slip Road

1201 4 Cut Slope

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	3	65%	115
Total SWL:						119

1202 5 Retaining Walls

5.1 Foundation for Retaining Wall

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Piling Rig	CNP 166	100	- -	2	50%	100
Air Compressor	CNP 003	104	- -	2	50%	104
Crane, mobile	CNP 048	112	- -	2	30%	110
Generator, Silenced	CNP 102	100	- -	2	100%	103
Water Pump (electric)	CNP 281	88	- -	4	100%	94
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Sub-Total SWL						114

5.2 Retaining Wall Structure

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 2*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	1	65%	110
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	1	40%	104
Sub SWL:						118
<u>Group 3*</u>						
Excavator	CNP 081	112	- -	1	65%	110
Crane, mobile	CNP 048	112	- -	1	30%	107
Sub SWL:						112
<u>Group 4*</u>						
Generator, Silenced	CNP 102	100	- -	1	100%	100
Bar Bender and Cutter (electric)	CNP 021	90	- -	1	50%	87
Saw, Circular, Wood	CNP 201	108	- -	1	50%	105
Sub SWL:						106
<u>Group 5*</u>						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	1	30%	108
Crane, mobile	CNP 048	112	- -	1	30%	107
Sub SWL:						113
Total SWL:						118

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

1203 6 Backfilling of Slope

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	1	50%	114
Excavator	CNP 081	112	- -	1	65%	110
Sub SWL:						115
<u>Group 2*</u>						
Road Roller	CNP 185	108	- -	1	80%	107
Sub SWL:						107
Total SWL:						115

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

J/O New Clear Water Bay Road and Shun Lee Tsuen Road (Unmitigated)

Task No.

1204 7 Slope Drainage

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Concrete Lorry Mixer	CNP 044	109	-	-	1	50%	106
Poker, Vibratory, Hand-held	CNP 170	113	-	-	1	30%	108
Total SWL:							110

1205 8 Landscape Works for Slope

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	-	-	2	65%	113
Lorry	CNP 141	112	-	-	2	50%	112
Total SWL:							116

1206 9 Demolition Works of Existing Carriageway / Verge

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>							
Dump Truck	CNP 067	117	-	-	2	50%	117
Excavator	CNP 081	112	-	-	1	65%	110
Breaker, Excavator Mounted	CNP 027	122	-	-	1	65%	120
Sub SWL:							122
<u>Group 2*</u>							
Dump Truck	CNP 067	117	-	-	2	50%	117
Breaker, Excavator Mounted	CNP 027	122	-	-	2	65%	123
Sub SWL:							124
<u>Group 3*</u>							
Dump Truck	CNP 067	117	-	-	2	50%	117
Excavator	CNP 081	112	-	-	2	65%	113
Sub SWL:							118
Total SWL:							124

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

1207 10 Utility Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	-	-	2	65%	113
Compactor, Vibratory	CNP 050	105	-	-	2	50%	105
Air Compressor	CNP 003	104	-	-	1	50%	101
Breaker, Hand-held	CNP 024	108	-	-	1	40%	104
Total SWL:							114

1208 11 Formation of Carriageway

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	-	-	2	50%	117
Compactor, Vibratory	CNP 050	105	-	-	1	50%	102
Road Roller	CNP 185	108	-	-	1	80%	107
Total SWL:							118

1209 12 Pavement Construction

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>							
Dump Truck	CNP 067	117	-	-	2	50%	117
Sub SWL:							117
<u>Group 2*</u>							
Road Roller	CNP 185	108	-	-	1	80%	107
Asphalt Paver	CNP 004	109	-	-	1	80%	108
Sub SWL:							111
<u>Group 3*</u>							
Paint Line Marker	CNP 161	90	-	-	1	65%	88
Sub SWL:							88
<u>Group 4*</u>							
Concrete Lorry Mixer	CNP 044	109	-	-	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	-	-	2	30%	111
Sub SWL:							113
Total SWL:							117

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

J/O New Clear Water Bay Road and Shun Lee Tsuen Road (Unmitigated)

Task No.

1301 15 Demolition of Existing Subway

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	1	65%	110
Breaker, Excavator Mounted	CNP 027	122	- -	1	65%	120
Sub SWL:						122
<u>Group 2*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Breaker, Excavator Mounted	CNP 027	122	- -	2	65%	123
Sub SWL:						124
<u>Group 3*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Sub SWL:						118
Total SWL:						124

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

1302 16 Reprovisioning of Existing Subway

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	1	50%	114
Excavator	CNP 081	112	- -	1	65%	110
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Generator, Silenced	CNP 102	100	- -	1	100%	100
Bar Bender and Cutter (electric)	CNP 021	90	- -	1	50%	87
Saw, Circular, Wood	CNP 201	108	- -	1	50%	105
Concrete Lorry Mixer	CNP 044	109	- -	1	50%	106
Poker, Vibratory, Hand-held	CNP 170	113	- -	1	30%	108
Total SWL:						117

1303 17 Utility Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	1	65%	110
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	1	40%	104
Total SWL:						112

1304 18 Formation of Carriageway

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	2	50%	117
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Road Roller	CNP 185	108	- -	1	80%	107
Total SWL:						118

1305 19 Pavement Construction

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Sub SWL:						117
<u>Group 2*</u>						
Road Roller	CNP 185	108	- -	1	80%	107
Asphalt Paver	CNP 004	109	- -	1	80%	108
Sub SWL:						111
<u>Group 3*</u>						
Paint Line Marker	CNP 161	90	- -	1	65%	88
Sub SWL:						88
<u>Group 4*</u>						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111
Sub SWL:						113
Total SWL:						117

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

J/O New Clear Water Bay Road and Shun Lee Tsuen Road (Unmitigated)

Task No.

1306 20 Demolition Works of Existing Carriageway / Central Median

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	1	65%	110
Breaker, Excavator Mounted	CNP 027	122	- -	1	65%	120
Sub SWL:						122
<u>Group 2*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Breaker, Excavator Mounted	CNP 027	122	- -	2	65%	123
Sub SWL:						124
<u>Group 3*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Sub SWL:						118
Total SWL:						124

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

22 NE and NB of NCWBR Kowloon Bound

1401 23 Pile Foundation at Verge

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Piling Rig	CNP 166	100	- -	2	50%	100
Air Compressor	CNP 003	104	- -	2	50%	104
Crane, mobile	CNP 048	112	- -	2	30%	110
Generator, Silenced	CNP 102	100	- -	2	100%	103
Water Pump (electric)	CNP 281	88	- -	2	100%	91
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Total SWL:						114

1402 24 Pile Cap at Verge

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	1	50%	114
Excavator	CNP 081	112	- -	1	65%	110
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	1	40%	104
Sub SWL:						116
<u>Group 2*</u>						
Excavator	CNP 081	112	- -	1	65%	110
Crane, mobile	CNP 048	112	- -	1	30%	107
Sub SWL:						112
<u>Group 3*</u>						
Generator, Silenced	CNP 102	100	- -	1	100%	100
Bar Bender and Cutter (electric)	CNP 021	90	- -	1	50%	87
Saw, Circular, Wood	CNP 201	108	- -	1	50%	105
Sub SWL:						106
<u>Group 4*</u>						
Concrete Lorry Mixer	CNP 044	109	- -	1	50%	106
Poker, Vibratory, Hand-held	CNP 170	113	- -	1	30%	108
Crane, mobile	CNP 048	112	- -	1	30%	107
Sub SWL:						112
Total SWL:						116

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

1403 25 NE Column Post at Verge

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	1	30%	107
Lorry	CNP 141	112	- -	1	50%	109
Total SWL:						111

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

J/O New Clear Water Bay Road and Shun Lee Tsuen Road (Unmitigated)

Task No.

1404 26 Pile foundation at Central Median

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Piling Rig	CNP 166	100	- -	2	50%	100
Air Compressor	CNP 003	104	- -	2	50%	104
Crane, Mobile	CNP 048	112	- -	2	30%	110
Generator, Silenced	CNP 102	100	- -	2	100%	103
Water Pump (electric)	CNP 281	88	- -	4	100%	94
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Total SWL:						114

1405 27 Pile Cap at Central Median

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Air Compressor	CNP 003	104	- -	2	50%	104
Breaker, Hand-held	CNP 024	108	- -	2	40%	107
Sub SWL:						119
<u>Group 2*</u>						
Excavator	CNP 081	112	- -	2	65%	113
Crane, mobile	CNP 048	112	- -	2	30%	110
Sub SWL:						115
<u>Group 3*</u>						
Generator, Silenced	CNP 102	100	- -	2	100%	103
Bar Bender and Cutter (electric)	CNP 021	90	- -	2	50%	90
Saw, Circular, Wood	CNP 201	108	- -	2	50%	108
Sub SWL:						109
<u>Group 4*</u>						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111
Crane, mobile	CNP 048	112	- -	2	30%	110
Sub SWL:						115
Total SWL:						119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

1406 28 NB Column Post at Central Median

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	1	30%	107
Lorry	CNP 141	112	- -	1	50%	109
Total SWL:						111

1407 29 NE Roof Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	2	30%	110
Cherry Picker	BS C4/54	104	- -	2	30%	102
Lorry	CNP 141	112	- -	2	50%	112
Total SWL:						114

1408 30 NE Column Post at Central Median

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	1	30%	107
Lorry	CNP 141	112	- -	1	50%	109
Total SWL:						111

1409 31 Panel Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	2	30%	110
Cherry Picker	BS C4/54	104	- -	2	30%	102
Lorry	CNP 141	112	- -	2	50%	112
Total SWL:						114

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

J/O New Clear Water Bay Road and Shun Lee Tsuen Road (Unmitigated)

Task No.

32 NB of NCWBR SK Bound

1501 33 Pile Foundation at Verge

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Piling Rig	CNP 166	100	-	-	2	50%	100
Air Compressor	CNP 003	104	-	-	2	50%	104
Crane, mobile	CNP 048	112	-	-	2	30%	110
Generator, Silenced	CNP 102	100	-	-	2	100%	103
Water Pump (electric)	CNP 281	88	-	-	4	100%	94
Concrete Lorry Mixer	CNP 044	109	-	-	2	50%	109
Total SWL:							114

1502 34 Pile Cap at Verge

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>							
Dump Truck	CNP 067	117	-	-	2	50%	117
Excavator	CNP 081	112	-	-	2	65%	113
Air Compressor	CNP 003	104	-	-	2	50%	104
Breaker, Hand-held	CNP 024	108	-	-	2	40%	107
Sub SWL:							119
<u>Group 2*</u>							
Excavator	CNP 081	112	-	-	2	65%	113
Crane, mobile	CNP 048	112	-	-	2	30%	110
Sub SWL:							115
<u>Group 3*</u>							
Generator, Silenced	CNP 102	100	-	-	2	100%	103
Bar Bender and Cutter (electric)	CNP 021	90	-	-	2	50%	90
Saw, Circular, Wood	CNP 201	108	-	-	2	50%	108
Sub SWL:							109
<u>Group 4*</u>							
Concrete Lorry Mixer	CNP 044	109	-	-	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	-	-	2	30%	111
Crane, mobile	CNP 048	112	-	-	2	30%	110
Sub SWL:							115
Total SWL:							119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

1503 35 NB Column Post at Verge

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	-	-	1	30%	107
Lorry	CNP 141	112	-	-	1	50%	109
Total SWL:							111

1504 36 Panel Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures		No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	-	-	1	30%	107
Cherry Picker	BS C4/54	104	-	-	2	30%	102
Lorry	CNP 141	112	-	-	1	50%	109
Total SWL:							112

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

For J/O Clear Water Bay Road and On Sau Road (Unmitigated)

Task No.

1. General

2101 2 Site Clearance

PME

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Lorry	CNP 141	112	- -	2	50%	112
Total SWL:						119

3 U-turn Facility at CWBR

2201 4 Cut Slope

PME

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Total SWL:						118

2202 5 Slope Drainage

PME

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Concrete Lorry Mixer	CNP 044	109	- -	1	50%	106
Poker, Vibratory, Hand-held	CNP 170	113	- -	1	30%	108
Total SWL:						110

2203 6 Retaining Walls

6.1 Foundation for Retaining Wall

PME

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Piling Rig	CNP 166	100	- -	1	50%	97
Air Compressor	CNP 003	104	- -	1	50%	101
Crane, mobile	CNP 048	112	- -	1	30%	107
Generator, Silenced	CNP 102	100	- -	1	100%	100
Water Pump (electric)	CNP 281	88	- -	2	100%	91
Concrete Lorry Mixer	CNP 044	109	- -	1	50%	106
Sub-Total SWL						111

6.2 Retaining Wall Structure

PME

	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 2*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	1	65%	110
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	1	40%	104
Sub SWL:						118
<u>Group 3*</u>						
Excavator	CNP 081	112	- -	1	65%	110
Crane, mobile	CNP 048	112	- -	1	30%	107
Sub SWL:						112
<u>Group 4*</u>						
Generator, Silenced	CNP 102	100	- -	1	100%	100
Bar Bender and Cutter (electric)	CNP 021	90	- -	1	50%	87
Saw, Circular, Wood	CNP 201	108	- -	1	50%	105
Sub SWL:						106
<u>Group 5*</u>						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	1	30%	108
Crane, mobile	CNP 048	112	- -	1	30%	107
Sub SWL:						113
Total SWL:						118

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

For J/O Clear Water Bay Road and On Sau Road (Unmitigated)

Task No.

2204 7 Backfilling of Slope

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
						Sub SWL: 118
Group 2*						
Road Roller	CNP 185	108	- -	2	80%	110
						Sub SWL: 110
						Total SWL: 118

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

2205 8 Landscape Works for Slope

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	2	65%	113
Lorry	CNP 141	112	- -	2	50%	112
						Total SWL: 116

2206 9 Demolition Works of Existing Carriageway / Verge

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group1*						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	1	65%	110
Breaker, Excavator Mounted	CNP 027	122	- -	1	65%	120
						Sub SWL: 122
Group2*						
Dump Truck	CNP 067	117	- -	2	50%	117
Breaker, Excavator Mounted	CNP 027	122	- -	2	65%	123
						Sub SWL: 124
Group3*						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
						Sub SWL: 118
						Total SWL: 124

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

2207 10 Utility Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	1	65%	110
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	1	40%	104
						Total SWL: 112

2208 11 Formation of Carriageway

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	3	50%	119
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Road Roller	CNP 185	108	- -	1	80%	107
						Total SWL: 119

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

For J/O Clear Water Bay Road and On Sau Road (Unmitigated)

Task No.

2209 12 Pavement Construction

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*						
Dump Truck	CNP 067	117	- -	3	50%	119
						Sub SWL: 119
Group 2*						
Road Roller	CNP 185	108	- -	1	80%	107
Asphalt Paver	CNP 004	109	- -	1	80%	108
						Sub SWL: 111
Group 3*						
Paint Line Marker	CNP 161	90	- -	1	65%	88
						Sub SWL: 88
Group 4*						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111
						Sub SWL: 113
						Total SWL: 119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

14 Slopeworks at CWBR SK Bound

2301 15 Cut Slope

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	1	65%	110
						Total SWL: 118

2302 16 Retaining Wall Structure

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	1	65%	110
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	1	40%	104
						Sub SWL: 118
Group 2*						
Excavator	CNP 081	112	- -	1	65%	110
Crane, mobile	CNP 048	112	- -	1	30%	107
						Sub SWL: 112
Group 3*						
Generator, Silenced	CNP 102	100	- -	1	100%	100
Bar Bender and Cutter (electric)	CNP 021	90	- -	1	50%	87
Saw, Circular, Wood	CNP 201	108	- -	1	50%	105
						Sub SWL: 106
Group 4*						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	1	30%	108
Crane, mobile	CNP 048	112	- -	1	30%	107
						Sub SWL: 113
						Total SWL: 118

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

2303 17 Backfilling of Slope

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*						
Dump Truck	CNP 067	117	- -	1	50%	114
Excavator	CNP 081	112	- -	1	65%	110
						Sub SWL: 115
Group 2*						
Road Roller	CNP 185	108	- -	1	80%	107
						Sub SWL: 107
						Total SWL: 115

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

For J/O Clear Water Bay Road and On Sau Road (Unmitigated)

Task No.

2304 18 Slope Drainage

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Concrete Lorry Mixer	CNP 044	109	- -	1	50%	106
Poker, Vibratory, Hand-held	CNP 170	113	- -	1	30%	108
Total SWL:						110

2305 19 Landscape Works for Slope

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	2	65%	113
Lorry	CNP 141	112	- -	2	50%	112
Total SWL:						116

20 CWBR SK Bound

2401 21 Demolition Works of Existing Carriageway / Footpath / Central Median

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	1	65%	110
Breaker, Excavator Mounted	CNP 027	122	- -	1	65%	120
Sub SWL:						122
<u>Group 2*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Breaker, Excavator Mounted	CNP 027	122	- -	2	65%	123
Sub SWL:						124
<u>Group 3*</u>						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Sub SWL:						118
Total SWL:						124

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

2402 22 Utility Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	1	65%	110
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	1	40%	104
Total SWL:						112

2403 23 Formation of Carriageway

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	3	50%	119
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Road Roller	CNP 185	108	- -	1	80%	107
Total SWL:						119

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

For J/O Clear Water Bay Road and On Sau Road (Unmitigated)

Task No.

2404 24 Pavement Construction

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*						
Dump Truck	CNP 067	117	- -	3	50%	119
						Sub SWL: 119
Group 2*						
Road Roller	CNP 185	108	- -	1	80%	107
Asphalt Paver	CNP 004	109	- -	1	80%	108
						Sub SWL: 111
Group 3*						
Paint Line Marker	CNP 161	90	- -	1	65%	88
						Sub SWL: 88
Group 4*						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111
						Sub SWL: 113
						Total SWL: 119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

2405 26 Roadside Landscape

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	1	65%	110
Lorry	CNP 141	112	- -	1	50%	109
						Total SWL: 113

27 CWBR Kowloon Bound & OSR

2501 28 Cut Slope

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	3	50%	119
Excavator	CNP 081	112	- -	1	65%	110
						Total SWL: 119

2502 29 Demolition Works of Existing Carriageway / Footpath / Central Median

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	1	65%	110
Breaker, Excavator Mounted	CNP 027	122	- -	1	65%	120
						Sub SWL: 122
Group 2*						
Dump Truck	CNP 067	117	- -	2	50%	117
Breaker, Excavator Mounted	CNP 027	122	- -	2	65%	123
						Sub SWL: 124
Group 3*						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
						Sub SWL: 118
						Total SWL: 124

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

2503 30 Utility Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	1	65%	110
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	1	40%	104
						Total SWL: 112

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

For J/O Clear Water Bay Road and On Sau Road (Unmitigated)

Task No.

2504 31 Formation of Carriageway

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Dump Truck	CNP 067	117	- -	2	50%	117
Compactor, Vibratory	CNP 050	105	- -	1	50%	102
Road Roller	CNP 185	108	- -	1	80%	107
Total SWL:						118

2505 32 Pavement Construction

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
<u>Group 1*</u>						
Dump Truck	CNP 067	117	- -	3	50%	119
Sub SWL:						119
<u>Group 2*</u>						
Road Roller	CNP 185	108	- -	1	80%	107
Asphalt Paver	CNP 004	109	- -	1	80%	108
Sub SWL:						111
<u>Group 3*</u>						
Paint Line Marker	CNP 161	90	- -	1	65%	88
Sub SWL:						88
<u>Group 4*</u>						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111
Sub SWL:						113
Total SWL:						119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

2506 34 Roadside Landscape

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Excavator	CNP 081	112	- -	1	65%	110
Lorry	CNP 141	112	- -	1	50%	109
Total SWL:						113

35. Semi-NE and NB of CWBR SK Bound

2601 36 Pile Foundation at Verge

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Piling Rig	CNP 166	100	- -	3	50%	102
Air Compressor	CNP 003	104	- -	3	50%	106
Crane, mobile	CNP 048	112	- -	3	30%	112
Generator, Silenced	CNP 102	100	- -	3	100%	105
Water Pump (electric)	CNP 281	88	- -	6	100%	96
Concrete Lorry Mixer	CNP 044	109	- -	3	50%	111
Total SWL:						115

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

For J/O Clear Water Bay Road and On Sau Road (Unmitigated)

Task No.

2602 37 Pile Cap at Verge

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Air Compressor	CNP 003	104	- -	1	50%	101
Breaker, Hand-held	CNP 024	108	- -	2	40%	107
					Sub SWL:	119
Group 2*						
Excavator	CNP 081	112	- -	2	65%	113
Crane, mobile	CNP 048	112	- -	2	30%	110
					Sub SWL:	115
Group 3*						
Generator, Silenced	CNP 102	100	- -	2	100%	103
Bar Bender and Cutter (electric)	CNP 021	90	- -	2	50%	90
Saw, Circular, Wood	CNP 201	108	- -	2	50%	108
					Sub SWL:	109
Group 4*						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111
Crane, mobile	CNP 048	112	- -	2	30%	110
					Sub SWL:	115
					Total SWL:	119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

2603 38 Semi-NE Column Post at Verge

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	2	30%	110
Lorry	CNP 141	112	- -	2	50%	112
					Total SWL:	114

2604 39 Pile foundation at Central Median

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Piling Rig	CNP 166	100	- -	3	50%	102
Air Compressor	CNP 003	104	- -	3	50%	106
Crane, Mobile	CNP 048	112	- -	3	30%	112
Generator, Silenced	CNP 102	100	- -	3	100%	105
Water Pump (electric)	CNP 281	88	- -	6	100%	96
Concrete Lorry Mixer	CNP 044	109	- -	3	50%	111
					Total SWL:	115

2605 40 Pile Cap at Central Median

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Group 1*						
Dump Truck	CNP 067	117	- -	2	50%	117
Excavator	CNP 081	112	- -	2	65%	113
Air Compressor	CNP 003	104	- -	3	50%	106
Breaker, Hand-held	CNP 024	108	- -	2	40%	107
					Sub SWL:	119
Group 2*						
Excavator	CNP 081	112	- -	2	65%	113
Crane, mobile	CNP 048	112	- -	2	30%	110
					Sub SWL:	115
Group 3*						
Generator, Silenced	CNP 102	100	- -	2	100%	103
Bar Bender and Cutter (electric)	CNP 021	90	- -	2	50%	90
Saw, Circular, Wood	CNP 201	108	- -	2	50%	108
					Sub SWL:	109
Group 4*						
Concrete Lorry Mixer	CNP 044	109	- -	2	50%	109
Poker, Vibratory, Hand-held	CNP 170	113	- -	2	30%	111
Crane, mobile	CNP 048	112	- -	2	30%	110
					Sub SWL:	115
					Total SWL:	119

*Only 1 group of PME will be operate a the same time. Maximum of sub-SWL is adpoted as conservative approach.

Appendix 5.3 Powered Mechanical Equipment (PME) for the Different Construction Tasks

For J/O Clear Water Bay Road and On Sau Road (Unmitigated)

Task No.

2606 41 Semi-NE Column Post at Central Median

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	2	30%	110
Lorry	CNP 141	112	- -	2	50%	112
Total SWL:						114

2607 42 Semi-NE Roof Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	2	30%	110
Cherry Picker	BS C4/54	104	- -	2	30%	102
Lorry	CNP 141	112	- -	2	50%	112
Total SWL:						114

2608 43 Semi-NE Panel Installation

PME	TM Ref./ other Ref	SWL/ Item dB(A)	Noise Reduction measures	No. of Plant	Utilization Rate	Sub-Total SWL
Crane, Mobile	CNP 048	112	- -	2	30%	110
Cherry Picker	BS C4/54	104	- -	2	30%	102
Lorry	CNP 141	112	- -	2	50%	112
Total SWL:						114