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**APPENDIX 4.5**

**Powered Mechanical Equipment (PME) for Construction  
Tasks during Normal Daytime Working Hours  
(Without Mitigation Measures)**

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**Appendix 4.5 Calculations of Construction Noise Levels During Normal Daytime Working Hours  
(Without Mitigation Measures)**

Distance of NSRs to the Notional Source Positions

<b>NSR</b>	<b>Description</b>	<b>No. of Storey</b>	<b>Type</b>	<b>Horizontal distance to notional source position, m</b>
N1	Scattered Village Houses	1	Residential	216
N2	Lai Chi Yuen Tsuen	2	Residential	281
N3	Scattered Village Houses	1	Residential	87

**Appendix 4.5 Powered Mechanical Equipment (PME) for Construction Tasks During Normal Daytime Working Hours (Without Mitigation Measures)**

**1 Slope Modification / Erection of Retaining Walls**

Powered Mechanical Equipment	Ref. <sup>[1]</sup>	No. of Items	SWL/Item, dB(A)	On-Time %	Total SWL, dB(A)
Compactor, vibratory	CNP 050	2	105	50%	105
Concrete lorry mixer	CNP 044	1	109	80%	108
Concrete pump, stationary/lorry mounted	CNP 047	1	109	80%	108
Bar bender and cutter (electric)	CNP 021	1	90	50%	87
Saw, circular, wood	CNP 201	1	108	50%	105
Air compressor, air flow > 30m <sup>3</sup> /min	CNP 003	1	104	100%	104
Generator, silenced, 75dB(A) at 7m	CNP 102	1	100	100%	100
Grout pump	CNP 106	1	105	65%	103
					<b>114</b>

**2 Excavation Works**

Powered Mechanical Equipment	Ref. <sup>[1]</sup>	No. of Items	SWL/Item, dB(A)	On-Time %	Total SWL, dB(A)
Air compressor, air flow > 30m <sup>3</sup> /min	CNP 003	1	104	100%	104
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	108	80%	110
Dump truck , 5.5 tonne < gross vehicle weight ≤ 38 tonne	OCNP	2	105	65%	106
Excavator/loader, wheeled/tracked	CNP 081	1	112	65%	110
Generator, silenced, 75dB(A) at 7m	CNP 102	1	100	100%	100
Bulldozer	CNP 030	1	115	65%	113
Lorry, 5.5 tonne < gross vehicle weight ≤ 38 tonne	OCNP	1	105	65%	103
Ventilation fan	CNP 241	1	108	100%	108
					<b>118</b>

**3 Sub-structure Works**

Powered Mechanical Equipment	Ref. <sup>[1]</sup>	No. of Items	SWL/Item, dB(A)	On-Time %	Total SWL, dB(A)
Compactor, vibratory	CNP 050	2	105	50%	105
Excavator/loader, wheeled/tracked	CNP 081	2	112	65%	113
Lorry, 5.5 tonne < gross vehicle weight ≤ 38 tonne	OCNP	2	105	65%	106
Air compressor, air flow > 30m <sup>3</sup> /min	CNP 003	2	104	100%	107
Generator, silenced, 75dB(A) at 7m	CNP 102	1	100	100%	100
Ventilation fan	CNP 241	1	108	100%	108
Mobile crane	CNP 048	1	112	30%	107
Crane Lorry	CNP 048	1	112	65%	110
Saw, circular, wood	CNP 201	2	108	50%	108
Concrete pump, stationary/lorry mounted	CNP 047	1	109	80%	108
Concrete lorry mixer	CNP 044	2	109	80%	111
Poker, vibratory, hand held (electric)	CNP 173	2	102	50%	102
Bar bender and cutter (electric)	CNP 021	2	90	50%	90
Dump truck , 5.5 tonne < gross vehicle weight ≤ 38 tonne	OCNP	1	105	30%	100
					<b>119</b>

**4 Superstructure Works**

Powered Mechanical Equipment	Ref. <sup>[1]</sup>	No. of Items	SWL/Item, dB(A)	On-Time %	Total SWL, dB(A)
Crane Lorry	CNP 048	1	112	65%	110
Concrete pump, stationary/lorry mounted	CNP 047	1	109	80%	108
Concrete lorry mixer	CNP 044	2	109	80%	111
Poker, vibratory, hand held (electric)	CNP 173	2	102	50%	102
Air compressor, air flow > 10m <sup>3</sup> /min and ≤ 30m <sup>3</sup> /min	CNP 002	2	102	100%	105
Generator, standard	CNP 101	1	108	100%	108
Bar bender and cutter (electric)	CNP 021	2	90	50%	90
Dump truck , 5.5 tonne < gross vehicle weight ≤ 38 tonne	OCNP	1	105	30%	100
Lorry, 5.5 tonne < gross vehicle weight ≤ 38 tonne	OCNP	2	105	65%	106
Saw, circular, wood	CNP 201	2	108	50%	108
					<b>117</b>

**5 Building Services Works / Fitting Out Works**

Powered Mechanical Equipment	Ref. <sup>[1]</sup>	No. of Items	SWL/Item, dB(A)	On-Time %	Total SWL, dB(A)
Mobile crane	CNP 048	1	112	80%	111
Crane lorry	CNP 048	1	112	80%	111
Dump truck , 5.5 tonne < gross vehicle weight ≤ 38 tonne	OCNP	1	105	30%	100
Lorry, 5.5 tonne < gross vehicle weight ≤ 38 tonne	OCNP	1	105	65%	103
					<b>115</b>

**6 Landscaping Works / Compensatory Tree Planting**

Powered Mechanical Equipment	Ref. <sup>[1]</sup>	No. of Items	SWL/Item, dB(A)	On-Time %	Total SWL, dB(A)
Excavator/loader, wheeled/tracked	CNP 081	1	112	80%	111
Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	OCNP	1	105	80%	104
					<b>112</b>

Notes:

- [1] CNP – Table 3, Technical Memorandum on Noise from Construction Work Other than Percussive Piling (GW-TM)  
 OCNP – Other PME documented by the Noise Control Authority  
 ([http://www.epd.gov.hk/epd/english/application\\_for\\_licences/guidance/files/OtherSWLe.pdf](http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf))