

**Appendix 4.3 Plant Inventory (Unmitigated Scenario)**

Location	Work Zone	Activity Index	Reference Code	Activities	No. of plant item	Utilisation rate	Type of Noise Control	Noise Reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)	Max SWL, dB(A)			
TUM Station Overrun	TUM	TUM	<b>TUM Station Overrun Modification Works</b>										119		
			CNP 048	Crane, mobile mounted (diesel)	2	80%			112	114					
			OCUPME-042	Lorry, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	60%			105	106					
			CNP 044	Concrete lorry mixer	1	40%			109	105					
			CNP 203	Saw, concrete (petrol)	2	60%			115	116					
CNP 024	Breaker, hand-held, mass > 10kg and < 20kg	2	80%			108	110		119						
Pet Garden	PG & WS3.5	PG-1	<b>Demolition of partial Pet Garden (Phase 1) [1]</b>										120		
			CNP 028	Breaker, excavator mounted (hydraulic)	1	70%			122	120		120			
			CNP 048	Crane, mobile mounted (diesel)	2	50%			112	112					
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	70%			105	103					
			OCUPME-044	Lorry, with grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	60%			105	103		113			
	PG-2	CNP 048	Crane, mobile mounted (diesel)	2	70%			112	113				115		
		CNP 103	Generator, super silenced, 70dB(A) at 7m	1	70%			95	93						
		Ref 1	Electric Chain Saw	3	70%			101	104						
		OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	70%			105	106			115			
Community Green Station	WS4.10	WS4.10	<b>Demolition of Community Green Station</b>										123		
			CNP 048	Crane, mobile mounted (diesel)	2	60%			112	113					
			CNP 028	Breaker, excavator mounted (hydraulic)	2	60%			122	123					
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	60%			105	106		123			
Various work sites between TUM & A16	W1	W1-1	<b>Site Clearance [1]</b>										113		
			CNP 048	Crane, mobile mounted (diesel)	2	70%			112	113		113			
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	70%			95	93					
			Ref 1	Electric Chain Saw	4	70%			101	105		106			
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	30%			105	103		103			
	W1-2	CNP 048	Crane, mobile mounted (diesel)	2	70%			112	113		113		113		
		OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	30%			105	103		103		103		
		CNP 045	Concrete mixer (electric)	2	80%			96	98						
		CNP 185	Road Roller	2	80%			108	110		110				
Viaduct between TUM & A16	Z3b	Z3b-1	<b>Construction of Temporary Platform [1]</b>										115		
			CNP 048	Crane, mobile mounted (diesel)	2	50%			112	112					
			OCUPME-044	Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne	3	50%			105	107					
			CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98					
			CNP 283	Water pump, submersible (electric)	2	100%			85	88		113			
			OCUPME-015	Drill rig, rotary type (diesel)	4	70%			110	114					
			CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98					
			CNP 283	Water pump, submersible (electric)	2	100%			85	88		115			
			OCUPME-041	Lorry, gross vehicle weight > 38 tonne	3	20%			112	110					
			CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98					
			CNP 283	Water pump, submersible (electric)	2	100%			85	88		110			
			Z3b-2	CNP 165	Piling, large diameter bored, oscillator	4	70%			115	119				120
				CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98				
				CNP 283	Water pump, submersible (electric)	2	100%			85	88				
	CNP 002	Air Compressor, air flow > 10m3/min and < =30m3/min		2	70%			102	103		120				
	OCUPME-015	Drill rig, rotary type (diesel)		4	70%			110	114						
	CNP 103	Generator, super silenced, 70dB(A) at 7m		2	100%			95	98						
	CNP 283	Water pump, submersible (electric)		2	100%			85	88		108				
	CNP 002	Air Compressor, air flow > 10m3/min and < =30m3/min		2	70%			102	103		108				
	OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne		4	60%			112	116						
	CNP 044	Concrete lorry mixer		4	40%			109	111						
	CNP 047	Concrete pump (stationary)		4	40%			109	111						
	OCUPME-022	Grout pump		4	50%			105	108						
	OCUPME-021	Grout mixer		4	50%			90	93						
	CNP 103	Generator, super silenced, 70dB(A) at 7m		2	100%			95	98						
	CNP 283	Water pump, submersible (electric)		2	100%			85	88		115				
	Z3b-3	CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110				114		
		CNP 081	Excavator, wheeled/tracked	2	50%			112	112						
		CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98						
CNP 283		Water pump, submersible (electric)	2	100%			85	88		114					
OCUPME-046		Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	60%			105	106							
CNP 103		Generator, super silenced, 70dB(A) at 7m	2	100%			95	98							
CNP 283		Water pump, submersible (electric)	2	100%			85	88		107					
CNP 103		Generator, super silenced, 70dB(A) at 7m	2	100%			95	98							
CNP 044		Concrete lorry mixer	2	40%			85	88							
OCUPME-027		Poker, vibratory, hand-held (electric)	2	30%			102	100							
CNP 047		Concrete pump (stationary)	2	30%			109	107		111					
Z3b-4		CNP 048	Crane, mobile mounted (diesel)	2	70%			112	113				114		
		OCUPME-018	Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr	2	70%			104	105						
		CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		114				
		CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
	CNP 044	Concrete lorry mixer	2	40%			109	108							
	OCUPME-027	Poker, vibratory, hand-held (electric)	2	40%			102	101							
CNP 047	Concrete pump (stationary)	2	40%			109	108		112						
Z3b-5	<b>Construction of Viaduct Structure [1]</b>											114			
	OCUPME-041	Lorry, gross vehicle weight > 38 tonne	2	20%			112	108		108					
	CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95							
	CNP 044	Concrete lorry mixer	1	40%			109	105							
	OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98							
	CNP 047	Concrete pump (stationary)	1	40%			109	105		109					
Z3a-1	CNP 048	Crane, mobile mounted (diesel)	2	80%			112	114				114			
	Ref 4	Launching Gantry	1	80%			100	99		114					
	<b>Construction of Temporary Platform [1]</b>											115			
	CNP 048	Crane, mobile mounted (diesel)	2	50%			112	112							
	OCUPME-044	Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	50%			105	105							
CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98								
CNP 283	Water pump, submersible (electric)	2	100%			85	88		113						
OCUPME-015	Drill rig, rotary type (diesel)	4	70%			110	114		114						
CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98								
CNP 283	Water pump, submersible (electric)	2	100%			85	88		115						

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Location	Work Zone	Activity Index	Reference Code	Activities	No. of plant item	Utilisation rate	Type of Noise Control	Noise Reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)	Max SWL, dB(A)							
				<u>Group C</u> Lorry, gross vehicle weight > 38 tonne	2	20%			112	108	108	117							
				CNP 103 Generator, super silenced, 70dB(A) at 7m	2	100%			95	98									
				CNP 283 Water pump, submersible (electric)	2	100%			85	88									
				<u>Piling Works [1]</u>															
				<u>Group A</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				CNP 283 Water pump, submersible (electric)	1	100%			85	85									
				CNP 002 Air Compressor, air flow > 10m3/min and < =30m3/min	1	70%			102	100									
				CNP 165 Piling, large diameter bored, oscillator	2	70%			115	116									
				<u>Group B</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				CNP 283 Water pump, submersible (electric)	1	100%			85	85									
				CNP 002 Air Compressor, air flow > 10m3/min and < =30m3/min	1	70%			102	100									
				CNP 166 Piling, large diameter bored, reverse circulation drill	2	70%			100	101									
				<u>Group C</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				CNP 283 Water pump, submersible (electric)	1	100%			85	85									
				CNP 048 Crane, mobile mounted (diesel)	2	60%			112	113									
				OCUPME-046 Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	60%			105	106									
				<u>Group D</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				CNP 283 Water pump, submersible (electric)	1	100%			85	85									
				CNP 044 Concrete lorry mixer	2	40%			109	108									
				CNP 047 Concrete pump (stationary)	2	40%			109	108									
				OCUPME-022 Grout pump	2	50%			105	105									
				OCUPME-021 Grout mixer	2	50%			90	90									
				<u>Construction of Pile Cap [1]</u>															
				<u>Group A</u> CNP 048 Crane, mobile mounted (diesel)	1	70%			112	110									
				CNP 081 Excavator, wheeled/tracked	2	50%			112	112									
				CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				CNP 283 Water pump, submersible (electric)	1	100%			85	85									
				<u>Group B</u> OCUPME-046 Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	60%			105	106									
				CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				CNP 283 Water pump, submersible (electric)	1	100%			85	85									
				CNP 044 Concrete lorry mixer	2	40%			109	108									
				CNP 047 Concrete pump (stationary)	2	40%			109	108									
				OCUPME-027 Poker, vibratory, hand-held (electric)	1	30%			102	97									
				CNP 047 Concrete pump (stationary)	1	30%			109	104									
				<u>Construction of Pier [1]</u>															
				<u>Group A</u> CNP 048 Crane, mobile mounted (diesel)	2	70%			112	113									
				OCUPME-018 Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr	2	70%			104	105									
				CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				<u>Group B</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				CNP 044 Concrete lorry mixer	2	40%			109	108									
				OCUPME-027 Poker, vibratory, hand-held (electric)	2	40%			102	101									
				CNP 047 Concrete pump (stationary)	2	40%			109	108									
				<u>Construction of Viaduct Structure [1]</u>															
				<u>Group A</u> OCUPME-041 Lorry, gross vehicle weight > 38 tonne	2	20%			112	108									
				<u>Group B</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				CNP 044 Concrete lorry mixer	1	40%			109	105									
				OCUPME-027 Poker, vibratory, hand-held (electric)	1	40%			102	98									
				CNP 047 Concrete pump (stationary)	1	40%			109	105									
				<u>Group C</u> CNP 048 Crane, mobile mounted (diesel)	2	80%			112	114									
				Ref 4 Launching Gantry	1	80%			100	99									
				<u>Construction of Temporary bridge [1]</u>															
				<u>Group A</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				CNP 283 Water pump, submersible (electric)	1	100%			85	85									
				CNP 048 Crane, mobile mounted (diesel)	2	50%			112	112									
				OCUPME-044 Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	50%			105	105									
				<u>Group B</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				CNP 283 Water pump, submersible (electric)	1	100%			85	85									
				OCUPME-015 Drill rig, rotary type (diesel)	4	70%			110	114									
				<u>Group C</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
				CNP 283 Water pump, submersible (electric)	1	100%			85	85									
				OCUPME-041 Lorry, gross vehicle weight > 38 tonne	2	20%			112	108									
				Viaduct between TUM & A16	Z2b.1 & Z2b.2	Z2b-1	<u>Construction of Temporary Platform [1]</u>												
							<u>Group A</u> CNP 048 Crane, mobile mounted (diesel)	2	50%					112	112	113	113		
							OCUPME-044 Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	50%					105	105				
							CNP 103 Generator, super silenced, 70dB(A) at 7m	2	100%					95	98				
							CNP 283 Water pump, submersible (electric)	2	100%					85	88				
							<u>Group B</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	2	100%					95	98				
							CNP 283 Water pump, submersible (electric)	2	100%					85	88				
							OCUPME-015 Drill rig, rotary type (diesel)	3	70%					110	113				
							<u>Group C</u> CNP 141 Lorry, gross vehicle weight > 38 tonne	1	20%					112	105				
							CNP 103 Generator, super silenced, 70dB(A) at 7m	2	100%					95	98				
							CNP 283 Water pump, submersible (electric)	2	100%					85	88				
						Z2b-2	<u>Piling Works [1]</u>												
							<u>Group A</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%					95	95	114	114		
							CNP 283 Water pump, submersible (electric)	1	100%					85	85				
							CNP 002 Air Compressor, air flow > 10m3/min and < =30m3/min	1	70%					102	100				
							CNP 165 Piling, large diameter bored, oscillator	1	70%					115	113				
							<u>Group B</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%					95	95				
							CNP 283 Water pump, submersible (electric)	1	100%					85	85				
							CNP 002 Air Compressor, air flow > 10m3/min and < =30m3/min	1	70%					102	100				
							CNP 166 Piling, large diameter bored, reverse circulation drill	1	70%					100	98				
							<u>Group C</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%					95	95				
							CNP 283 Water pump, submersible (electric)	1	100%					85	85				
							CNP 048 Crane, mobile mounted (diesel)	2	60%					112	113				
							OCUPME-046 Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	60%					105	106				
							<u>Group D</u> CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%					95	95	103	103		
							CNP 283 Water pump, submersible (electric)	1	100%					85	85				
							CNP 044 Concrete lorry mixer	1	40%					109	105				
							CNP 047 Concrete pump (stationary)	1	40%					109	105				
							OCUPME-022 Grout pump	1	50%					105	102				
							OCUPME-021 Grout mixer	1	50%					90	87				
						Z2b-3	<u>Construction of Pile Cap [1]</u>												
							<u>Group A</u> CNP 048 Crane, mobile mounted (diesel)	1	70%					112	110			113	113
							CNP 081 Excavator, wheeled/tracked	1	50%					112	109				
							CNP 103 Generator, super silenced, 70dB(A) at 7m	1	100%					95	95				
							CNP 283 Water pump, submersible (electric)	1	100%					85	85				
							<u>Group B</u> OCUPME-046 Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	60%					105	103				

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Location	Work Zone	Activity Index	Reference Code	Activities	No. of plant item	Utilisation rate	Type of Noise Control	Noise Reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)	Max SWL, dB(A)	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95	104		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85			
			<b>Group C</b>										
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95			
			CNP 283	Water pump, submersible (electric)	1	100%			85	85			
			CNP 044	Concrete lorry mixer	1	40%			109	105			
			OCUPME-027	Poker, vibratory, hand-held (electric)	1	30%			102	97			
			CNP 047	Concrete pump (stationary)	1	30%			109	104			
			<b>Construction of Pier [1]</b>										
			<b>Group A</b>										
			CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110			
			OCUPME-018	Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr	1	70%			104	102			
		CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95				
		<b>Group B</b>											
		CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95				
		CNP 044	Concrete lorry mixer	1	40%			109	105				
		OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98				
		CNP 047	Concrete pump (stationary)	1	40%			109	105				
		<b>Construction of Viaduct Structure [1]</b>											
		<b>Group A</b>											
		OCUPME-041	Lorry, gross vehicle weight > 38 tonne	1	20%			112	105				
		<b>Group B</b>											
		CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95				
		CNP 044	Concrete lorry mixer	1	40%			109	105				
OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98						
CNP 047	Concrete pump (stationary)	1	40%			109	105						
<b>Group C</b>													
CNP 048	Crane, mobile mounted (diesel)	1	80%			112	111						
Ref 4	Launching Gantry	1	80%			100	99						
Viaduct between TUM & A16	Z2a.1, Z2a.2 & WS3.3	Z2a-1		<b>Construction of Temporary Platform [1]</b>								113	
<b>Group A</b>													
CNP 048	Crane, mobile mounted (diesel)	1	50%			112	109						
OCUPME-044	Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	70%			105	103						
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
<b>Group B</b>													
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
OCUPME-015	Drill rig, rotary type (diesel)	3	70%			110	113						
<b>Group C</b>													
OCUPME-041	Lorry, gross vehicle weight > 38 tonne	1	20%			112	105						
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
Z2a-2				<b>Piling Works [1]</b>								114	
<b>Group A</b>													
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
CNP 002	Air Compressor, air flow > 10m <sup>3</sup> /min and < =30m <sup>3</sup> /min	1	70%			102	100						
CNP 165	Piling, large diameter bored, oscillator	1	70%			115	113						
<b>Group B</b>													
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
CNP 002	Air Compressor, air flow > 10m <sup>3</sup> /min and < =30m <sup>3</sup> /min	1	70%			102	100						
CNP 166	Piling, large diameter bored, reverse circulation drill	1	70%			100	98						
<b>Group C</b>													
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
CNP 048	Crane, mobile mounted (diesel)	1	60%			112	110						
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	60%			105	103						
<b>Group D</b>													
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
CNP 044	Concrete lorry mixer	1	40%			109	105						
CNP 047	Concrete pump (stationary)	1	40%			109	105						
OCUPME-022	Grout pump	1	50%			105	102						
OCUPME-021	Grout mixer	1	50%			90	87						
Z2a-3				<b>Construction of Pile Cap [1]</b>								113	
<b>Group A</b>													
CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110						
CNP 081	Excavator, wheeled/tracked	1	50%			112	109						
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
<b>Group B</b>													
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	60%			105	103						
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
<b>Group C</b>													
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
CNP 044	Concrete lorry mixer	1	40%			109	105						
OCUPME-027	Poker, vibratory, hand-held (electric)	1	30%			102	97						
CNP 047	Concrete pump (stationary)	1	30%			109	104						
Z2a-4				<b>Construction of Pier [1]</b>								111	
<b>Group A</b>													
CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110						
OCUPME-018	Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr	1	70%			104	102						
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
<b>Group B</b>													
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 044	Concrete lorry mixer	1	40%			109	105						
OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98						
CNP 047	Concrete pump (stationary)	1	40%			109	105						
Z2a-5				<b>Construction of Viaduct Structure [1]</b>								111	
<b>Group A</b>													
OCUPME-041	Lorry, gross vehicle weight > 38 tonne	1	20%			112	105						
<b>Group B</b>													
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 044	Concrete lorry mixer	1	40%			109	105						
OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98						
CNP 047	Concrete pump (stationary)	1	40%			109	105						
<b>Group C</b>													
CNP 048	Crane, mobile mounted (diesel)	1	80%			112	111						
Ref 4	Launching Gantry	1	80%			100	99						
Z2a-6				<b>Construction of Temporary Bridge [1]</b>								110	
<b>Group A</b>													
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
CNP 048	Crane, mobile mounted (diesel)	1	50%			112	109						
OCUPME-044	Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	30%			105	100						
<b>Group B</b>													
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
OCUPME-015	Drill rig, rotary type (diesel)	1	70%			110	108						
<b>Group C</b>													
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						
OCUPME-041	Lorry, gross vehicle weight > 38 tonne	1	20%			112	105						
Viaduct between TUM & A16	Z1-N.1 & Z1-N.2	Z1-N-1		<b>Construction of Temporary Platform [1]</b>								112	
<b>Group A</b>													
CNP 048	Crane, mobile mounted (diesel)	1	50%			112	109						
OCUPME-044	Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	70%			105	103						
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
CNP 283	Water pump, submersible (electric)	1	100%			85	85						



Appendix 4.3 Plant Inventory (Unmitigated Scenario)

Location	Work Zone	Activity Index	Reference Code	Activities	No. of plant item	Utilisation rate	Type of Noise Control	Noise Reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)	Max SWL, dB(A)					
Viaduct between TUM & A16	V1, Z3a,Z3b,Z2b,Z2a,Z1-N, Z1-S & WS2.2	V1-1	CNP 048	Crane, mobile mounted (diesel)	2	70%			112	113	114	114					
			OCUPME-018	Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr	2	70%			104	105							
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95							
				<b>Group B</b>													
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95							
			CNP 044	Concrete lorry mixer	2	40%			109	108							
			OCUPME-027	Poker, vibratory, hand-held (electric)	2	40%			102	101							
			CNP 047	Concrete pump (stationary)	2	40%			109	108							
				<b>Group C</b>													
				<b>Construction of Viaduct Structure [1]</b>													
	<b>Group A</b>																
OCUPME-041	Lorry, gross vehicle weight > 38 tonne	2	20%			112	108	108									
	<b>Group B</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95										
CNP 044	Concrete lorry mixer	1	40%			109	105										
OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98										
CNP 047	Concrete pump (stationary)	1	40%			109	105										
	<b>Group C</b>																
CNP 048	Crane, mobile mounted (diesel)	2	80%			112	114	114									
Ref 4	Launching Gantry	1	80%			100	99										
Viaduct between TUM & A16	V1, Z3a,Z3b,Z2b,Z2a,Z1-N, Z1-S & WS2.2	V1-1		<b>ABWF works for Degree 1 [1]</b>						114	114						
				<b>Group A</b>													
			CNP 065	Drill/grinder, hand-held (electric)	2	80%			98			100					
				<b>Group B</b>													
			CNP 048	Crane, mobile mounted (diesel)	2	70%			112			113					
			CNP 122	Hoist, passenger/material (electric)	2	70%			95			96					
Viaduct between TUM & A16	V1, Z3a,Z3b,Z2b,Z2a,Z1-N, Z1-S & WS2.2	V1-2		<b>Remove upstream and downstream temporary platform</b>						112	112						
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	80%			105			104					
		CNP 048	Crane, mobile mounted (diesel)	1	80%			112	111								
A16 station	Cooling Tower (CT)	CT-1		<b>Socketed H-Pile Works</b>						114	114						
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95			95					
			CNP 283	Water pump, submersible (electric)	1	100%			85			85					
			CNP 002	Air Compressor, air flow > 10m3/min and < =30m3/min	1	70%			102			100					
			CNP 048	Crane, mobile mounted (diesel)	1	70%			112			110					
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	70%			105			103					
			OCUPME-015	Drill rig, rotary type (diesel)	1	90%			110			110					
			OCUPME-022	Grout pump	1	50%			105			102					
			OCUPME-021	Grout mixer	1	50%			90			87					
				<b>Construction of Pile Cap</b>													
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95			95					
			CNP 048	Crane, mobile mounted (diesel)	1	70%			112			110					
			CNP 081	Excavator, wheeled/tracked	1	50%			112			109					
			OCUPME-026	Piling, vibrating hammer	1	50%			115			112					
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	60%			105			103					
			CNP 044	Concrete lorry mixer	1	40%			109			105					
			OCUPME-027	Poker, vibratory, hand-held (electric)	1	30%			102			97					
			CNP 047	Concrete pump (stationary)	1	30%			109			104					
				<b>Construction of Cooling Tower structure</b>													
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95			95					
			CNP 048	Crane, mobile mounted (diesel)	1	80%			112			111					
			OCUPME-018	Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr	1	80%			104			103					
			CNP 044	Concrete lorry mixer	1	40%			109			105					
			OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102			98					
			CNP 047	Concrete pump (stationary)	1	40%			109			105					
				<b>ABWF works for Degree 1 [1]</b>													
				<b>Group A</b>													
			CNP 065	Drill/grinder, hand-held (electric)	1	80%			98			97					
				<b>Group B</b>													
			CNP 048	Crane, mobile mounted (diesel)	1	70%			112			110					
			CNP 122	Hoist, passenger/material (electric)	1	70%			95			93					
			A16 station	A16N	A16N-1		<b>Remove Temporary Platform</b>								115	115	
						CNP 048	Crane, mobile mounted (diesel)	2	80%					112			114
						OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	80%					105			107
							<b>Construction of Temporary Platform [1]</b>										
							<b>Group A</b>										
CNP 103	Generator, super silenced, 70dB(A) at 7m	2				100%			95	98							
CNP 283	Water pump, submersible (electric)	2				100%			85	88							
CNP 048	Crane, mobile mounted (diesel)	2				50%			112	112							
OCUPME-044	Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2				50%			105	105							
	<b>Group B</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	2				100%			95	98							
CNP 283	Water pump, submersible (electric)	2				100%			85	88							
OCUPME-015	Drill rig, rotary type (diesel)	3				70%			110	113							
	<b>Group C</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	2				100%			95	98							
CNP 283	Water pump, submersible (electric)	2				100%			85	88							
CNP 048	Crane, mobile mounted (diesel)	4				60%			112	116							
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	4				60%			105	109							
	<b>Group D</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	2				100%			95	98							
CNP 283	Water pump, submersible (electric)	2				100%			85	88							
CNP 002	Air Compressor, air flow > 10m3/min and < =30m3/min	2				70%			102	103							
CNP 166	Piling, large diameter bored, reverse circulation drill	4				70%			100	104							
	<b>Group C</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	2				100%			95	98							
CNP 283	Water pump, submersible (electric)	2				100%			85	88							
CNP 048	Crane, mobile mounted (diesel)	4				60%			112	116							
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	4	60%			105	109										
	<b>Group D</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98										
CNP 283	Water pump, submersible (electric)	2	100%			85	88										
CNP 044	Concrete lorry mixer	4	40%			109	111										
CNP 047	Concrete pump (stationary)	4	40%			109	111										
OCUPME-022	Grout pump	4	50%			105	108										
OCUPME-021	Grout mixer	4	50%			90	93										
	<b>Construction of Pile Cap</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98										
CNP 283	Water pump, submersible (electric)	2	100%			85	88										
CNP 048	Crane, mobile mounted (diesel)	2	70%			112	113										
CNP 081	Excavator, wheeled/tracked	3	50%			112	114										
OCUPME-026	Piling, vibrating hammer	3	50%			115	117										
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	3	60%			105	108										
CNP 044	Concrete lorry mixer	3	40%			109	110										
OCUPME-027	Poker, vibratory, hand-held (electric)	3	30%			102	102										
CNP 047	Concrete pump (stationary)	3	30%			109	109										
	<b>Construction of Station structure</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98										
CNP 048	Crane, mobile mounted (diesel)	3	80%			112	116										
OCUPME-018	Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr	3	80%			104	108										
CNP 044	Concrete lorry mixer	3	40%			109	110										
OCUPME-027	Poker, vibratory, hand-held (electric)	3	40%			102	103										
CNP 047	Concrete pump (stationary)	3	40%			109	110										
CNP 049	Crane, tower (electric)	2	70%			95	96										
	<b>ABWF works for Degree 1 [1]</b>																
	<b>Group A</b>																
CNP 065	Drill/grinder, hand-held (electric)	2	80%			98	100										
	<b>Group B</b>																
CNP 048	Crane, mobile mounted (diesel)	2	70%			112	113										
CNP 122	Hoist, passenger/material (electric)	2	70%			95	96										

## Appendix 4.3 Plant Inventory (Unmitigated Scenario)

Location	Work Zone	Activity Index	Reference Code	Activities	No. of plant item	Utilisation rate	Type of Noise Control	Noise Reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)	Max SWL, dB(A)
		A16N-7		<b>ABWF and BS works [1]</b> <u>Group A</u> Drill/grinder, hand-held (electric) <u>Group B</u> Crane, mobile mounted (diesel) CNP 122 Hoist, passenger/material (electric)	2 2 2	80% 70% 70%			98 112 95	100 113 96	100 114	114
A16 station	A16S & TMSP	A16S-1	CNP 048 OCUPME-046	<b>Remove Temporary Platform</b> Crane, mobile mounted (diesel) Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1 1	80% 80%			112 105	111 104	112	112
		A16S-2	OCUPME-015 OCUPME-046	<b>GI Works</b> Drill rig, rotary type (diesel) Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1 1	90% 30%			110 105	110 100	110	110
		A16S-3	CNP 103 CNP 283 CNP 048 OCUPME-044 CNP 103 CNP 283 OCUPME-015 CNP 103 CNP 283 OCUPME-041	<b>Construction of Temporary Platform [1]</b> <u>Group A</u> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Crane, mobile mounted (diesel) Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne <u>Group B</u> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Drill rig, rotary type (diesel) <u>Group C</u> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Lorry, gross vehicle weight > 38 tonne	2 2 2 2 2 2 3 2 2 2	100% 100% 50% 50% 100% 100% 70% 100% 100% 20%			95 85 112 105 95 85 110 95 85 112	98 88 112 105 98 88 113 98 88 108	113	113
		A16S-4	CNP 048 CNP 028 OCUPME-046	<b>Demolition of existing swimming pool and plant room</b> Crane, mobile mounted (diesel) Breaker, excavator mounted (hydraulic) Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2 2 2	80% 80% 80%			112 122 105	114 124 107	125	125
		A16S-5	CNP 103 CNP 283 CNP 002 CNP 165 CNP 103 CNP 283 CNP 002 CNP 166 CNP 103 CNP 283 CNP 048 OCUPME-046 CNP 103 CNP 283 CNP 044 CNP 047 OCUPME-022 OCUPME-021	<b>Piling Works [1]</b> <u>Group A</u> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Air Compressor, air flow > 10m3/min and < =30m3/min Piling, large diameter bored, oscillator <u>Group B</u> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Air Compressor, air flow > 10m3/min and < =30m3/min Piling, large diameter bored, reverse circulation drill <u>Group C</u> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Crane, mobile mounted (diesel) Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne <u>Group D</u> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Concrete lorry mixer Concrete pump (stationary) Grout pump Grout mixer	2 2 2 3 2 2 2 3 2 2 2 3 2 2 3 3 3 3	100% 100% 70% 70% 100% 100% 70% 70% 100% 100% 60% 60% 100% 100% 40% 40% 50% 50%			95 85 102 115 95 85 102 100 95 85 112 105 95 85 109 109 105 90	98 88 103 118 98 88 103 103 98 88 115 108 98 88 110 110 107 92	118 107	118
		A16S-6	CNP 103 CNP 283 CNP 048 CNP 081 OCUPME-026 OCUPME-046 CNP 044 OCUPME-027 CNP 047	<b>Construction of Pile Cap</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Crane, mobile mounted (diesel) Excavator, wheeled/tracked Piling, vibrating hammer Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne Concrete lorry mixer Poker, vibratory, hand-held (electric) Concrete pump (stationary)	1 1 2 2 2 2 2 2 2	100% 100% 70% 50% 50% 60% 40% 30% 30%			95 85 112 112 115 105 109 102 109	95 85 113 112 115 106 108 100 107	119	119
		A16S-7	CNP 103 CNP 048 OCUPME-018 CNP 044 CNP 047 CNP 049	<b>Construction of Station structure</b> Generator, super silenced, 70dB(A) at 7m Crane, mobile mounted (diesel) Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr Concrete lorry mixer Concrete pump (stationary) Crane, tower (electric)	1 2 2 2 2 1	100% 80% 80% 40% 40% 70%			95 112 104 109 109 95	95 114 106 108 108 93	116	116
		A16S-8	CNP 065 CNP 048 CNP 122	<b>ABWF works for Degree 1 [1]</b> <u>Group A</u> Drill/grinder, hand-held (electric) <u>Group B</u> Crane, mobile mounted (diesel) Hoist, passenger/material (electric)	2 2 2	80% 70% 70%			98 112 95	100 113 96	114	114
		A16S-9	CNP 103 CNP 048 CNP 081 OCUPME-046 CNP 044 OCUPME-027 CNP 047	<b>Other External Works</b> Generator, super silenced, 70dB(A) at 7m Crane, mobile mounted (diesel) Excavator, wheeled/tracked Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne Concrete lorry mixer Poker, vibratory, hand-held (electric) Concrete pump (stationary)	1 2 2 2 2 2 2	100% 70% 70% 70% 40% 40% 40%			95 112 112 105 109 102 109	95 113 113 106 108 101 108	118	118
		A16S-10	CNP 065 CNP 048 CNP 122	<b>ABWF and BS works [1]</b> <u>Group A</u> Drill/grinder, hand-held (electric) <u>Group B</u> Crane, mobile mounted (diesel) Hoist, passenger/material (electric)	2 2 2	80% 70% 70%			98 112 95	100 113 96	114	114
Feeder Substation	FS	FS-1	CNP 103 CNP 283 CNP 002 CNP 048 OCUPME-046 OCUPME-015 OCUPME-022 OCUPME-021	<b>Socketed H-pile Works</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Air Compressor, air flow > 10m3/min and < =30m3/min Crane, mobile mounted (diesel) Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne Drill rig, rotary type (diesel) Grout pump Grout mixer	1 1 1 1 1 1 1 1	100% 100% 70% 70% 70% 90% 50% 50%			95 85 102 112 105 110 105 90	95 85 100 110 103 110 102 87	114	114
		FS-2	CNP 103 CNP 048 CNP 081 OCUPME-026 OCUPME-046 CNP 044 OCUPME-027 CNP 047	<b>Construction of Pile Cap</b> Generator, super silenced, 70dB(A) at 7m Crane, mobile mounted (diesel) Excavator, wheeled/tracked Piling, vibrating hammer Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne Concrete lorry mixer Poker, vibratory, hand-held (electric) Concrete pump (stationary)	1 1 1 1 1 1 1 1	100% 70% 50% 50% 60% 40% 30% 30%			95 112 112 115 105 109 102 109	95 110 109 112 103 105 97 104	116	116
		FS-3	CNP 103 CNP 048 OCUPME-018 CNP 044 OCUPME-027 CNP 047	<b>Construction of Building Structure</b> Generator, super silenced, 70dB(A) at 7m Crane, mobile mounted (diesel) Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr Concrete lorry mixer Poker, vibratory, hand-held (electric) Concrete pump (stationary)	1 1 1 1 1 1	100% 80% 80% 40% 40% 40%			95 112 104 109 102 109	95 111 103 105 98 105	113	113
		FS-4	CNP 065 CNP 048 CNP 122	<b>ABWF works for Degree 1 [1]</b> <u>Group A</u> Drill/grinder, hand-held (electric) <u>Group B</u> Crane, mobile mounted (diesel) Hoist, passenger/material (electric)	1 1 1	80% 70% 70%			98 112 95	97 110 93	111	111
Viaduct between A16 & TRB	WS4.14, V2, V2.1 & V2.2	V2-1	CNP 048	<b>Site clearance (incl tree felling) for WS 4.14</b> Crane, mobile mounted (diesel)	1	70%			112	110		115

Appendix 4.3 Plant Inventory (Unmitigated Scenario)

Location	Work Zone	Activity Index	Reference Code	Activities	No. of plant item	Utilisation rate	Type of Noise Control	Noise Reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)	Max SWL, dB(A)
			CNP 202 OCUPME-046	Saw, chain, hand-held Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1 1	70% 40%			114 105	112 101	115	
		V2-2		<b>Reinstatement for WS 4.14 [1]</b> <b>Group A</b> Concrete mixer (electric) Road roller <b>Group b</b> Crane, mobile mounted (diesel) Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1 1 2 2	80% 80% 70% 40%			96 108 112 105	95 107 113 104	107 114	114
		V2-3		<b>Construction of Temporary Platform [1]</b> <b>Group A</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Crane, mobile mounted (diesel) <b>Group B</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Drill rig, rotary type (diesel) <b>Group C</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne Lorry, gross vehicle weight > 38 tonne	1 1 1 1 1 1 2 1 1 1 1	100% 100% 70% 100% 100% 70% 100% 100% 70% 20%			95 85 112 95 85 110 95 85 105 112	95 85 110 95 85 111 95 85 103 105	111 112	112
		V2-4		<b>Remove Temporary Platform</b> Crane, mobile mounted (diesel) Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1 1	80% 80%			112 105	111 104	112	112
		V2-5		<b>Piling Works (Land and River) [1]</b> <b>Group A</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Air Compressor, air flow > 10m3/min and < =30m3/min Piling, large diameter bored, oscillator <b>Group B</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Air Compressor, air flow > 10m3/min and < =30m3/min Piling, large diameter bored, reverse circulation drill <b>Group C</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Crane, mobile mounted (diesel) Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne <b>Group D</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Concrete lorry mixer Concrete pump (stationary) Grout pump Grout mixer	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100% 100% 70% 70% 100% 100% 70% 70% 100% 100% 60% 100% 100% 40% 40% 50% 50%			95 85 102 115 95 85 102 100 95 85 112 110 105 95 85 85 109 109 105 102 90	95 85 100 113 95 85 100 98 103 85 110 103 95 85 85 105 105 102 87	114 103	114
		V2-6		<b>Construction of Pier (Land and River)</b> Generator, super silenced, 70dB(A) at 7m Crane, mobile mounted (diesel) Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr Concrete lorry mixer Poker, vibratory, hand-held (electric) Concrete pump (stationary)	1 2 2 2 2 2	100% 70% 70% 40% 40% 40%			95 112 104 109 102 109	95 113 105 108 101 108	116	116
		V2-7a		<b>Construction of Viaduct Structure (excl. last span connection to A16) [1]</b> <b>Group A</b> Lorry, gross vehicle weight > 38 tonne <b>Group B</b> Generator, super silenced, 70dB(A) at 7m Concrete lorry mixer Poker, vibratory, hand-held (electric) Concrete pump (stationary) <b>Group C</b> Crane, mobile mounted (diesel) Launching Gantry	2 1 1 1 1 2 1	20% 100% 40% 40% 40% 80% 80%			112 95 109 102 109 112 100	108 95 105 98 105 114 99	108 109 109 114	114
		V2-7b		<b>Construction of Viaduct Structure (last span connection to A16) [1]</b> <b>Group A</b> Lorry, gross vehicle weight > 38 tonne <b>Group B</b> Generator, super silenced, 70dB(A) at 7m Concrete lorry mixer Poker, vibratory, hand-held (electric) Concrete pump (stationary) <b>Group C</b> Crane, mobile mounted (diesel) Launching Gantry	1 1 1 1 1 1 1	20% 100% 40% 40% 40% 80% 80%			112 95 109 102 109 112 100	105 95 105 98 105 111 99	105 109 109 111	111
		V2-8		<b>ABWF works for Degree 1 [1]</b> <b>Group A</b> Drill/grinder, hand-held (electric) <b>Group B</b> Crane, mobile mounted (diesel) Hoist, passenger/material (electric)	1 1 1	80% 70% 70%			98 112 95	97 110 93	111	111
Tuen Mun River Bridge	TRB	TRB-1a		<b>Construction of Temporary Platform in 2nd dry season[1]</b> <b>Group A</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Crane, mobile mounted (diesel) Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne <b>Group B</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Drill rig, rotary type (diesel) <b>Group C</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Lorry, gross vehicle weight > 38 tonne	3 3 3 3 3 3 3 3	100% 100% 70% 70% 100% 100% 70% 100%			95 85 112 105 95 85 110 95 85 112	100 90 115 108 100 90 116 100 90 110	116 110	116
		TRB-1b		<b>Construction of Temporary Platform in 3rd dry season[1]</b> <b>Group A</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Crane, mobile mounted (diesel) Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne <b>Group B</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Drill rig, rotary type (diesel) <b>Group C</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Lorry, gross vehicle weight > 38 tonne	1 1 1 1 1 1 1 1	100% 100% 70% 70% 100% 100% 70% 20%			95 85 112 105 95 85 110 95 85 112	95 85 110 103 95 85 111 105	111 105	112
		TRB-2		<b>Remove Temporary Platform</b> Crane, mobile mounted (diesel) Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	3 3	80% 80%			112 105	116 109	117	117
		TRB-3		<b>Piling Works [1]</b> <b>Group A</b> Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric) Air Compressor, air flow > 10m3/min and < =30m3/min Piling, large diameter bored, oscillator <b>Group B</b> Generator, super silenced, 70dB(A) at 7m	1 1 1 1 1	100% 100% 70% 70% 100%			95 85 102 115 95	95 85 100 113 95	114	114

### Appendix 4.3 Plant Inventory (Unmitigated Scenario)

Location	Work Zone	Activity Index	Reference Code	Activities	No. of plant item	Utilisation rate	Type of Noise Control	Noise Reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)	Max SWL, dB(A)				
			CNP 283	Water pump, submersible (electric)	1	100%			85	85	103	111				
			CNP 002	Air Compressor, air flow > 10m <sup>3</sup> /min and < =30m <sup>3</sup> /min	1	70%			102	100						
			CNP 166	Piling, large diameter bored, reverse circulation drill	1	70%			100	98						
			<b>Group C</b>													
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
			CNP 283	Water pump, submersible (electric)	1	100%			85	85						
			CNP 048	Crane, mobile mounted (diesel)	1	60%			112	110						
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	60%			105	103						
			<b>Group D</b>													
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
			CNP 283	Water pump, submersible (electric)	1	100%			85	85						
			CNP 044	Concrete lorry mixer	1	40%			109	105						
			CNP 047	Concrete pump (stationary)	1	40%			109	105						
			OCUPME-022	Grout pump	1	50%			105	102						
			OCUPME-021	Grout mixer	1	50%			90	87						
			TRB-4	<b>Construction of Pile Cap</b>												
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95						
			CNP 283	Water pump, submersible (electric)	1	100%			85	85						
			CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110						
			CNP 081	Excavator, wheeled/tracked	1	50%			112	109						
			OCUPME-026	Piling, vibrating hammer	1	50%			115	112						
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	60%			105	103									
CNP 044	Concrete lorry mixer	1	40%			109	105									
OCUPME-027	Poker, vibratory, hand-held (electric)	1	30%			102	97									
CNP 047	Concrete pump (stationary)	1	30%			109	104									
CNP 048	Crane, barge mounted (diesel)	1	30%			112	107									
TRB-5	<b>Construction of pier &amp; pylon</b>															
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110									
OCUPME-018	Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr	1	70%			104	102									
CNP 044	Concrete lorry mixer	1	40%			109	105									
OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98									
CNP 047	Concrete pump (stationary)	1	40%			109	105									
CNP 049	Crane, tower (electric)	1	70%			95	93									
TRB-6	<b>Construction of Bridge Structure</b>															
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
CNP 044	Concrete lorry mixer	1	40%			109	105									
OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98									
CNP 047	Concrete pump (stationary)	1	40%			109	105									
Ref 4	Launching Gantry	1	80%			100	99									
CNP 061	Derrick barge	2	90%			104	107									
CNP 221	Tug boat	2	90%			110	113									
TRB-7	<b>ABWE works for Degree 1 [1]</b>															
<b>Group A</b>																
CNP 065	Drill/grinder, hand-held (electric)	1	80%			98	97									
<b>Group B</b>																
CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110									
CNP 122	Hoist, passenger/material (electric)	1	70%			95	93									
V3-1	<b>Site Clearance for WA 5.5, 5.6, 9.1</b>															
CNP 048	Crane, mobile mounted (diesel)	3	70%			112	115									
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	70%			95	93									
Ref 1	Electric Chain Saw	3	70%			101	104									
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	3	40%			105	106									
V3-2	<b>Reinstatement for WA 5.5, 5.6, 9.1</b>															
CNP 045	Concrete mixer (electric)	2	80%			96	98									
CNP 185	Road Roller	2	80%			108	110									
CNP 048	Crane, mobile mounted (diesel)	3	70%			112	115									
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	3	40%			105	106									
V3-3	<b>Site clearance and Tree felling (or transplant) of Tuen Mun Safety Town</b>															
CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110									
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	70%			95	93									
Ref 1	Electric Chain Saw	1	70%			101	99									
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	50%			105	102									
V3-4	<b>Reinstatement for of Tuen Mun Safety Town</b>															
CNP 045	Concrete mixer (electric)	2	80%			96	98									
CNP 185	Road Roller	2	80%			108	110									
CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110									
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	50%			105	102									
V3-5	<b>Piling Works [1]</b>															
<b>Group A</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
CNP 283	Water pump, submersible (electric)	1	100%			85	85									
CNP 002	Air Compressor, air flow > 10m <sup>3</sup> /min and < =30m <sup>3</sup> /min	1	70%			102	100									
CNP 166	Piling, large diameter bored, oscillator	1	70%			115	113									
<b>Group B</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
CNP 283	Water pump, submersible (electric)	1	100%			85	85									
CNP 002	Air Compressor, air flow > 10m <sup>3</sup> /min and < =30m <sup>3</sup> /min	1	70%			102	100									
CNP 166	Piling, large diameter bored, reverse circulation drill	1	70%			100	98									
<b>Group C</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
CNP 283	Water pump, submersible (electric)	1	100%			85	85									
CNP 048	Crane, mobile mounted (diesel)	1	60%			112	110									
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	60%			105	103									
<b>Group D</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
CNP 283	Water pump, submersible (electric)	1	100%			85	85									
CNP 044	Concrete lorry mixer	1	40%			109	105									
CNP 047	Concrete pump (stationary)	1	40%			109	105									
OCUPME-022	Grout pump	1	50%			105	102									
OCUPME-021	Grout mixer	1	50%			90	87									
V3-6	<b>Construction of pile caps at Tuen Mun Safety Town [1]</b>															
<b>Group A</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98									
CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110									
CNP 081	Excavator, wheeled/tracked	1	50%			112	109									
<b>Group B</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98									
OCUPME-026	Piling, vibrating hammer	1	50%			115	112									
<b>Group C</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98									
OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	60%			105	103									
<b>Group D</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98									
CNP 044	Concrete lorry mixer	1	40%			109	105									
OCUPME-027	Poker, vibratory, hand-held (electric)	1	30%			102	97									
CNP 047	Concrete pump (stationary)	1	30%			109	104									
V3-7	<b>Construction of Pier</b>															
CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98									
CNP 048	Crane, mobile mounted (diesel)	2	70%			112	113									
OCUPME-018	Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr	2	70%			104	105									
CNP 044	Concrete lorry mixer	2	40%			109	108									
OCUPME-027	Poker, vibratory, hand-held (electric)	2	40%			102	101									
CNP 047	Concrete pump (stationary)	2	40%			109	108									
V3-8	<b>Construction of Viaduct Structure [1]</b>															
<b>Group A</b>																
OCUPME-041	Lorry, gross vehicle weight > 38 tonne	2	20%			112	108									
<b>Group B</b>																
CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95									
CNP 044	Concrete lorry mixer	1	40%			109	105									
OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98									
CNP 047	Concrete pump (stationary)	1	40%			109	105									
<b>Group C</b>																



Appendix 4.3 Plant Inventory (Unmitigated Scenario)

Location	Work Zone	Activity Index	Reference Code	Activities	No. of plant item	Utilisation rate	Type of Noise Control	Noise Reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)	Max SWL, dB(A)	
		V3-9	CNP 048 Ref 4	Crane, mobile mounted (diesel) Launching Gantry	2 1	80% 80%			112 100	114 99	114		
			CNP 065	<b>ABWF works for Degree 1 [1]</b> Group A Drill/grinder, hand-held (electric)	1	80%			98	97	97	111	
			CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110			
			CNP 122	Hoist, passenger/material (electric)	1	70%			95	93	111		
Crossover	CRO	CRO-1	CNP 048 CNP 103 Ref 1	<b>Tree felling (or transplant)</b> Crane, mobile mounted (diesel) Generator, super silenced, 70dB(A) at 7m Electric Chain Saw	1 1 1	70% 70% 70%			112 95 101	110 93 99	112		
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	70%			105	103			
			CRO-2	CNP 048	<b>NF100 Modification work</b> Crane, mobile mounted (diesel)	1	70%			112	110	110	110
			CRO-3		<b>Piling Works [1]</b> Group A Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric)	2 2	100% 100%			95 85	98 88		
		CNP 002		Air Compressor, air flow > 10m3/min and < =30m3/min	2	70%			102	103			
		CNP 165		Piling, large diameter bored, oscillator	2	70%			115	116	117		
				Group B Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric)	2 2	100% 100%			95 85	98 88			
		CNP 202		Air Compressor, air flow > 10m3/min and < =30m3/min	2	70%			102	103			
		CNP 166		Piling, large diameter bored, reverse circulation drill	1	70%			100	98	106		
				Group C Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric)	2 2	100% 100%			95 85	98 88			
		CNP 048		Crane, mobile mounted (diesel)	1	60%			112	110			
		OCUPME-046		Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	60%			105	103	111		
				Group D Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric)	2 2	100% 100%			95 85	98 88			
		CNP 044		Concrete lorry mixer	1	40%			109	105			
		CNP 047		Concrete pump (stationary)	1	40%			109	105			
		OCUPME-022		Grout pump	1	50%			105	102			
		OCUPME-021		Grout mixer	4	50%			90	93	109	109	
		CRO-4			<b>Construction of Pile Cap [1]</b> Group A Crane, mobile mounted (diesel)	1	70%			112	110		
				CNP 081	Excavator, wheeled/tracked	1	50%			112	109		
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95	113		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85			
				Group B Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric)	1 1	100% 100%			95 85	95 85			
			CNP 283	Water pump, submersible (electric)	1	100%			85	85			
			OCUPME-026	Piling, vibrating hammer	1	50%			115	112	112		
				Group C Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric)	1 1	100% 100%			95 85	95 85			
			CNP 283	Water pump, submersible (electric)	1	100%			105	103	104		
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	60%			85	85			
				Group D Generator, super silenced, 70dB(A) at 7m Water pump, submersible (electric)	1 1	100% 100%			95 85	95 85			
			CNP 044	Concrete lorry mixer	1	40%			109	105			
			OCUPME-027	Poker, vibratory, hand-held (electric)	1	30%			102	97			
			CNP 047	Concrete pump (stationary)	1	30%			109	104	108	113	
			CRO-5		<b>Construction of Pier [1]</b> Group A Generator, super silenced, 70dB(A) at 7m Crane, mobile mounted (diesel)	2 1	100% 70%			95 112	98 110		
				OCUPME-018	Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr	1	70%			104	102	111	
				Group B Generator, super silenced, 70dB(A) at 7m Concrete lorry mixer	2 1	100% 40%			95 109	98 105			
		OCUPME-027		Poker, vibratory, hand-held (electric)	1	40%			102	98	109	109	
		CRO-6		<b>Construction of Viaduct Structure [1]</b> Group A Lorry, gross vehicle weight > 38 tonne	1	20%			112	105	105	111	
				Group B Generator, super silenced, 70dB(A) at 7m Concrete lorry mixer	1 1	100% 40%			95 109	95 105			
			OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98	109	109	
			CNP 047	Concrete pump (stationary)	1	40%			109	105			
		CRO-7		Group C Crane, mobile mounted (diesel) Launching Gantry	1 1	80% 80%			112 100	111 99	111		
	<b>ABWF works for Degree 1 [1]</b> Group A Drill/grinder, hand-held (electric)		1	80%			98	97	97	111			
CNP 065	Drill/grinder, hand-held (electric)		1	80%			98	97	97	111			
CNP 048	Crane, mobile mounted (diesel)		1	70%			112	110					
Precast Loading and Unloading for Work Contract 1501	W2	W2-1	OCUPME-041	<b>Precast Loading and Unloading [1]</b> Group A Lorry, gross vehicle weight > 38 tonne	1	20%			112	105	105	112	
			CNP 061	Derrick barge	1	90%			104	104			
			CNP 048	Crane, mobile mounted (diesel)	1	90%			112	112	112		
				Group B Crane, mobile mounted (diesel)	1	90%			112	112	112		
Precast Loading and Unloading for Work Contract 1502	W2	W2-2	OCUPME-041	<b>Precast Loading and Unloading [1]</b> Group A Lorry, gross vehicle weight > 38 tonne	1	20%			112	105	105	112	
			CNP 061	Derrick barge	1	90%			104	104			
			CNP 048	Crane, mobile mounted (diesel)	1	90%			112	112	112		
				Group B Crane, mobile mounted (diesel)	1	90%			112	112	112		
TMS Station	W3, LR, W4a, W4b, W5, W5.6.10, W5.6.5, TMS.1a, TMS.1b, TMS.1c, TMS.1d, TMS.2a & TMS.2b	TMS-1		<b>Site clearance for W5.6.2b, 6.4</b> Crane, mobile mounted (diesel) Generator, super silenced, 70dB(A) at 7m Electric Chain Saw	1 1 1	70% 70% 70%			112 95 101	110 93 99	112		
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	70%			105	103			
			TMS-2		<b>Light Rail Protection Work</b> Crane, mobile mounted (diesel) Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne Concrete lorry mixer	1 1 1	50% 50% 40%			112 105 109	109 102 105	111	
			TMS-3a		<b>Tree felling works along Wu King Road (West) [1]</b> Group A Crane, mobile mounted (diesel)	1	70%			112	110	110	110
		CNP 103		Generator, super silenced, 70dB(A) at 7m	1	70%			95	93	100		
		Ref 1		Electric Chain Saw	1	70%			101	99			
		OCUPME-046		Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	50%			105	102	102		
		TMS-3b		<b>Realignment of Wu King Road (West) [1]</b> Group A Breaker, excavator mounted (hydraulic)	1	50%			122	119	119	119	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95			
			Ref 3	Quieter Type Blade Saw	2	70%			106	107	108		
			CNP 081	Excavator, wheeled/tracked	2	70%			112	113			

Appendix 4.3 Plant Inventory (Unmitigated Scenario)

Location	Work Zone	Activity Index	Reference Code	Activities	No. of plant item	Utilisation rate	Type of Noise Control	Noise Reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)	Max SWL, dB(A)
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne Group D	1	50%			105	102	114	
			OCUPME-044	Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne Group E	1	50%			105	102	102	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 004	Asphalt Paver	1	40%			109	105	105	
		TMS-3c		<b>Tree felling works along central median [1]</b> Group A								110
			CNP 048	Crane, mobile mounted (diesel) Group B	1	70%			112	110	110	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	70%			95	93		
			Ref 1	Electric Chain Saw	1	70%			101	99	100	
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne Group C	1	50%			105	102	102	
		TMS-3d		<b>Removal of central median [1]</b> Group A								119
			CNP 028	Breaker, excavator mounted (hydraulic) Group B	1	50%			122	119	119	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			Ref 3	Quieter Type Blade Saw	3	70%			106	109	109	
			CNP 081	Excavator, wheeled/tracked	3	70%			112	115		
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne Group D	1	50%			105	102	115	
			OCUPME-044	Lorry, with crane, 5.5 tonne < gross vehicle weight ≤ 38 tonne Group E	1	50%			105	102	102	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 004	Asphalt Paver	1	40%			109	105	105	
		TMS-4		<b>NF98 &amp; NF99 Demolition and Reprovision of NF98 [1]</b> Group A								109
			CNP 103	Generator, super silenced, 70dB(A) at 7m	2	100%			95	98		
			OCUPME-036	Saw, wire Group B	4	60%			101	105	106	
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	40%			105	104		
			CNP 048	Crane, mobile mounted (diesel) Group C	1	40%			112	108	109	
			OCUPME-041	Lorry, gross vehicle weight > 38 tonne	1	20%			112	105	105	
		TMS-5		<b>Demolish Tuen Mun Ferry Pier Public Toilet and Park [1]</b> Group A								114
			OCUPME-006	Breaker, mini-robot mounted Group B	1	80%			115	114	114	
			CNP 048	Crane, mobile mounted (diesel)	2	70%			112	113		
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	2	50%			105	105	114	
		TMS-6		<b>Piling Works [1]</b> Group A								114
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85		
			CNP 002	Air Compressor, air flow > 10m <sup>3</sup> /min and < =30m <sup>3</sup> /min	1	70%			102	100		
			CNP 165	Piling, large diameter bored, oscillator	1	70%			115	113	114	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85		
			CNP 002	Air Compressor, air flow > 10m <sup>3</sup> /min and < =30m <sup>3</sup> /min	1	70%			102	100		
			CNP 166	Piling, large diameter bored, reverse circulation drill Group C	1	70%			100	98	103	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85		
			CNP 048	Crane, mobile mounted (diesel)	1	60%			112	110		
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne Group D	1	60%			105	103	111	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85		
			CNP 044	Concrete lorry mixer	1	40%			109	105		
			CNP 047	Concrete pump (stationary)	1	40%			109	105		
			OCUPME-022	Grout pump	1	50%			105	102		
			OCUPME-021	Grout mixer	1	50%			90	87	109	
		TMS-7		<b>Construction of Pile Cap [1]</b> Group A								112
			CNP 048	Crane, mobile mounted (diesel)	1	60%			112	110		
			CNP 081	Excavator, wheeled/tracked	1	50%			112	109		
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85	112	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85		
			Ref 2	Giken Piler and Power-pack	1	50%			94	91	97	
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne Group C	1	50%			105	102		
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85	103	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85		
			CNP 044	Concrete lorry mixer	1	30%			109	104		
			OCUPME-027	Poker, vibratory, hand-held (electric)	1	30%			102	97		
			CNP 047	Concrete pump (stationary)	1	30%			109	104	107	
		TMS-8		<b>Construction of Pier [1]</b> Group A								111
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 048	Crane, mobile mounted (diesel)	1	60%			112	110		
			OCUPME-018	Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr Group B	1	60%			104	102	111	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 044	Concrete lorry mixer	1	40%			109	105		
			OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98		
			CNP 047	Concrete pump (stationary)	1	40%			109	105	109	
		TMS-9		<b>Construction of Station structure [1]</b> Group A								112
			OCUPME-041	Lorry, gross vehicle weight > 38 tonne Group B	1	20%			112	105	105	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 048	Crane, mobile mounted (diesel)	1	80%			112	111		
			OCUPME-018	Forklift, LPG, output power ≤ 32kW, speed ≤ 10km/hr Group B	1	80%			104	103	112	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 044	Concrete lorry mixer	1	40%			109	105		
			OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98		
			CNP 047	Concrete pump (stationary)	1	40%			109	105	109	
		TMS-10		<b>Construct Pick Up Drop Off Area [1]</b> Group A								116
			CNP 048	Crane, mobile mounted (diesel)	2	70%			112	113		
			CNP 081	Excavator, wheeled/tracked	2	50%			112	112		
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85	116	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 283	Water pump, submersible (electric)	1	100%			85	85		
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne Group C	2	70%			105	106	107	
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		

### Appendix 4.3 Plant Inventory (Unmitigated Scenario)

Location	Work Zone	Activity Index	Reference Code	Activities	No. of plant item	Utilisation rate	Type of Noise Control	Noise Reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)	Max SWL, dB(A)
			CNP 283	Water pump, submersible (electric)	1	100%			85	85		
			CNP 044	Concrete lorry mixer	2	40%			109	108		
			OCUPME-027	Poker, vibratory, hand-held (electric)	2	40%			102	101		
			CNP 047	Concrete pump (stationary)	2	40%			109	108	112	
		TMS-11		<b>Other External Works [1]</b>								113
				<u>Group A</u>								
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110		
			CNP 081	Excavator, wheeled/tracked	1	50%			112	109	113	
				<u>Group B</u>								
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			OCUPME-046	Dump truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne	1	70%			105	103	104	
				<u>Group C</u>								
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%			95	95		
			CNP 044	Concrete lorry mixer	1	40%			109	105		
			OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%			102	98		
			CNP 047	Concrete pump (stationary)	1	40%			109	105	109	
		TMS-12		<b>ABWF works for Degree 1/ ABWF and BS works [1]</b>								111
				<u>Group A</u>								
			CNP 065	Drill/grinder, hand-held (electric)	1	80%			98	97	97	
				<u>Group B</u>								
			CNP 048	Crane, mobile mounted (diesel)	1	70%			112	110		
			CNP 122	Hoist, passenger/material (electric)	1	70%			95	93	111	

[1] Only 1 group of PME will be operated at the same time. Maximum of sub-SWL is adopted as conservative approach.

[2] ) Lorry, gross vehicle weight > 38 tonnes would be used for delivery/transportation of pre-cast units only. Lorry's engine would be switched off immediately once arriving the loading/unloading position. Therefore, it is anticipated that the use of utilization rate of 20% for the Lorry, gross vehicle weight > 38 tonnes is considered a conservative assumption.