

Table 5.5 Sound Power Level of Equipment for Predicted Construction Scenarios

Work Stage	Equipment	CNP No.	Number of Equipment	Sound Power Level of Each Equipment, dB(A)	Total Sound Power Level, dB(A)
Land Based Work					
Ground Investigation	Drilling rig	064	3	103	107.8
Earth Work - Site Clearance	Bulldozer	030	2	115	126.7
	Backactor	081	3	112	
	Backactor mounted with Breaker	028	1	122	
Earthwork - Soil Compaction	Dump Truck	067	4	117	128.1
	Roller	185	1	108	
	Backactor mounted with Breaker	028	4	122	
Foundation (Ring Beam) Construction - Excavation	Mobile Crane	048	3	112	124.9
	Backactor	081	4	112	
	Dump Truck	067	4	117	
Foundation (Ring Beam) Construction - Steel Fixing &	Mobile Crane	048	3	112	117.3
	Bar Bender Machine	021	1	90	
	Electric Saw	201	1	108	
Foundation (Ring Beam) Construction - Concreting	Mobile Crane	048	3	112	119.2
	Concrete Mixing Truck	044	3	109	
	Air Compressor	003	2	104	
	Vibrator	050	2	105	
Tank Erection - Steel Panel Fabrication	Barge/Derrick Barge	061	1	104	118.4
	Mobile Crane	048	1	112	
	Dump Truck	067	1	117	
Tank Erection - Panel Assembling	Mobile Crane	048	3	112	117.0
	Wedding/Cutting Machine	021	4	90	
	Grinding Machine	065	4	98	
Ancillary Facilities Installation					
Excavation	Backactor	081	1	112	112.0
Steel Fixing & Formwork	Bar Bender Machine	021	1	90	108.1
	Electric Saw	201	1	108	
Concrete	Concrete Mixing Truck	044	2	109	114.4
	Air Compressor	003	2	104	
	Vibrator	050	2	105	
	Wedding/Cutting Machine	021	2	90	
Installation	Grinding Machine	065	2	98	101.6
	Pumps	283	1	85	
Testing					85.0
Pipe, Drainage & Utilities Installation					
Excavation	Backactor	081	2	112	121.2
	Dump Truck	067	2	117	
Casting Concrete (Manholes)	Backactor	081	1	112	119.3
	Dump Truck	067	1	117	
	Concrete Mixing Truck	044	1	109	
	Air Compressor	003	1	104	
	Vibrator	050	1	105	
	Electric Saw	201	1	108	
Testing	Pumps	283	1	85	85.0
Roadwork					
Roadwork - Sub-base	Pneumatic Roller	186	1	108	118.8
	Dump Truck	067	1	117	
	Grader	104	1	113	
Roadwork - Paving	Dump Truck	067	1	117	119.2
	Concrete Mixing Truck	044	2	109	
	Air Compressor	003	2	104	
	Vibrator	050	2	105	
	Electric Saw	201	1	108	
Office Building Construction					
Foundation (Raft) Construction - Excavation	Backactor	081	1	112	120.6
	Dump Truck	067	2	117	
Foundation (Raft) Construction - Formwork	Mobile Crane	048	1	112	113.5
	Electric Saw	201	1	108	
Foundation (Raft) Construction - Steel Fixing	Mobile Crane	048	1	112	112.0
	Bar Bender Machine	021	1	90	
Foundation (Raft) Construction - Concrete	Mobile Crane	048	1	112	116.3
	Concrete Mixing Truck	044	2	109	
	Air Compressor	003	2	104	
	Vibrator	050	2	105	
	Electric Saw	201	1	108	
Superstructures - Formwork	Electric Saw	201	1	108	108.0
Superstructures - Steel Fixing	Bar Bender Machine	021	1	90	90.0
Superstructures - Casting Concrete	Concrete Mixing Truck	044	2	109	115.5
	Concrete Pumps	047	1	109	
	Air Compressor	003	2	104	
	Vibrator	050	2	105	
Marine Work					
Ground Investigation	Drilling rig	064	2	103	112.2
	Barge/Derrick Barge	061	1	104	
	Tug Boat	221	1	110	
Dredging	Dredger	063	1	112	114.1
	Tug Boat	221	1	110	

Table 5.5 Sound Power Level of Equipment for Predicted Construction Scenarios (Con't)

Work Stage	Equipment	CNP No.	Number of Equipment	Sound Power Level of Each Equipment, dB(A)	Total Sound Power Level, dB(A)
Pile Construction					
Circular Pile Driven by Precussive Method	Barge/Derrick Barge	061	2	104	111.2
	Wedding/Cutting Machine	021	2	90	
	Grinding Machine	065	2	98	
	Tug Boat	221	2	110	
	Hydraulic Hammer*	-	2	129	
Load test	Barge/Derrick Barge	061	2	104	114.0
	Tug Boat	221	2	110	
Dolphins Construction					
Formwork	Barge/Derrick Barge	061	2	104	115.0
	Electric Saw	201	1	108	
	Tug Boat	221	2	110	
Steel Fixing	Barge/Derrick Barge	061	2	104	114.0
	Bar Bender Machine	021	1	90	
Casting Concrete	Tug Boat	221	2	110	118.2
	Barge/Derrick Barge	061	2	104	
	Concrete Mixing Truck	044	4	109	
	Concrete Pumps	047	1	109	
	Air Compressor	003	2	104	
	Vibrator	050	2	105	
Tug Boat	221	1	110		
Decking Construction					
Formwork	Barge/Derrick Barge	061	2	104	115.0
	Electric Saw	201	1	108	
	Tug Boat	221	2	110	
Steel Fixing	Barge/Derrick Barge	061	2	104	114.0
	Bar Bender Machine	021	1	90	
Concreting (Prefabrication Yard)	Tug Boat	221	2	110	118.8
	Barge/Derrick Barge	061	2	104	
	Concrete Mixing Truck	044	4	109	
	Concrete Pumps	047	1	109	
	Air Compressor	003	2	104	
	Vibrator	050	2	105	
Tug Boat	221	2	110		
Erection of Prefabricated Member	Barge/Derrick Barge	061	2	104	114.0
	Tug Boat	221	2	110	
Casting Concrete (In-Situ)	Barge/Derrick Barge	061	2	104	118.8
	Concrete Mixing Truck	044	4	109	
	Concrete Pumps	047	1	109	
	Air Compressor	003	2	104	
	Vibrator	050	2	105	
Tug Boat	221	2	110		
Installation of Plant					
Installation of Plant	Barge/Derrick Barge	061	1	104	111.5
	Wedding/Cutting Machine	021	2	90	
	Grinding Machine	065	2	98	
	Pumps	283	0	85	
	Tug Boat	221	1	110	
Testing					
Testing	Barge/Derrick Barge	061	1	104	111.0
	Pumps	283	1	85	
	Tug Boat	221	1	110	
Commissioning					
Commissioning	Barge/Derrick Barge	061	1	104	111.0
	Tug Boat	221	1	110	
Underwater Works					
Ground Investigation	Drilling rig	064	2	103	112.2
	Barge/Derrick Barge	061	1	104	
	Tug Boat	221	1	110	
Dredging	Dredger	063	2	112	116.5
	Barge/Derrick Barge	061	1	104	
Pipe Laying	Tug Boat	221	1	110	111.0
	Barge/Derrick Barge	061	1	104	
Backfilling	Tug Boat	221	1	110	111.0
	Barge/Derrick Barge	061	1	104	
Testing					
Testing	Pumps	283	1	85	85.0

* Note: Percussive piling is controlled under Noise Control Ordinance and should not be included in this assessment