

Appendix 5.6 Powered Mechanical Equipment (PME) for Demolition/Construction Tasks (With Mitigation Measures)

Area D-01

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Demolition	Excavator#	BS C1/4	104	2	30%		101.8
	Excavator#	BS C1/12	110	2	40%		109.0
	Hand-held breaker	CNP 025	111	4	30%	-10.00	101.8
	Dump truck#	BS C2/30	107	4	40%		109.0
Total SWL:							112.8

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Sheet Steel Piling	Silent Piler#	Giken-001	86	2	30%		83.8
Total SWL:							83.8

Area D-02

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Demolition	Excavator#	BS C1/4	104	2	60%		104.8
	Excavator#	BS C1/12	110	2	60%		110.8
	Hand-held breaker	CNP 025	111	4	40%	-10.00	103.0
	Dump truck#	BS C2/30	107	6	40%		110.8
Total SWL:							114.6

Area D-03

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Demolition	Excavator#	BS C1/4	104	2	60%		104.8
	Excavator#	BS C1/12	110	2	60%		110.8
	Hand-held breaker	CNP 025	111	4	40%	-10.00	103.0
	Dump truck#	BS C2/30	107	6	40%		110.8
Total SWL:							114.6

Area D-04

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Demolition	Excavator#	BS C1/4	104	2	40%		103.0
	Excavator#	BS C1/12	110	2	40%		109.0
	Hand-held breaker	CNP 025	111	2	40%		110.0
	Dump truck#	BS C2/30	107	4	40%		109.0
Total SWL:							114.5

Area C-01

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Steel Piling (cofferdam)	Silent Piler#	Giken-001	86	2	50%		86.0
Total SWL:							86.0

Deep Excavation	Dump Truck#	BS C2/30	107	4	50%		110.0
	Excavator*#	BS C2/14	107	2	50%	-5.00	102.0
Total SWL:							110.6

Substructure and Superstructure	Excavator#	BS C4/17	99	2	30%		96.8
	Concrete pump + truck	CNP 047	109	2	30%		106.8
	Poker Vibrator*#	BS C4/33	106	2	30%	-10.00	93.8
	Mobile Crane#	BS C4/43	98	1	30%		92.8
	Diesel Generator#	BS C4/85	94	1	30%		88.8
	Water Pump	BS C4/88	96	1	80%		95.0
Total SWL:							107.8

Area C-02

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Steel Piling (cofferdam)	Silent Piler#	Giken-001	86	4	50%		89.0
Total SWL:							89.0

Deep Excavation	Dump Truck#	BS C2/30	107	6	50%		111.8
	Excavator*#	BS C2/14	107	4	50%	-5.00	105.0
Total SWL:							112.6

Substructure and Superstructure	Excavator#	BS C4/17	99	2	30%		96.8
	Concrete pump + truck	CNP 047	109	2	30%		106.8
	Poker Vibrator*#	BS C4/33	106	2	30%	-10.00	93.8
	Mobile Crane#	BS C4/43	98	1	30%		92.8
	Diesel Generator#	BS C4/85	94	1	30%		88.8
	Water Pump	BS C4/88	96	1	80%		95.0
Total SWL:							107.8

Area C-03

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Steel Piling (cofferdam)	Silent Piler#	Giken-001	86	4	30%		86.8
Total SWL:							86.8

Deep Excavation	Dump Truck#	BS C2/30	107	6	30%		109.6
	Excavator*#	BS C2/14	107	4	30%	-5.00	102.8
Total SWL:							110.4

Substructure and Superstructure	Excavator#	BS C4/17	99	2	30%		96.8
	Concrete pump + truck	CNP 047	109	2	30%		106.8
	Poker Vibrator*#	BS C4/33	106	2	30%	-10.00	93.8
	Mobile Crane#	BS C4/43	98	1	30%		92.8
	Diesel Generator#	BS C4/85	94	1	30%		88.8
	Water Pump	BS C4/88	96	1	80%		95.0
Tower Crane	CNP 049	95	1	50%		92.0	
Total SWL:							107.9

Area C-04

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Sheet Steel Piling (cofferdam)	Silent Piler#	Giken-001	86	4	50%		89.0
Total SWL:							89.0

Deep Excavation	Dump Truck#	BS C2/30	107	6	50%		111.8
	Excavator*#	BS C2/14	107	4	50%	-5.00	105.0
Total SWL:							112.6

Substructure and Superstructure	Excavator#	BS C4/17	99	2	30%		96.8
	Concrete pump + truck	CNP 047	109	2	30%		106.8
	Poker Vibrator*#	BS C4/33	106	2	30%	-10.00	93.8
	Mobile Crane#	BS C4/43	98	1	30%		92.8
	Diesel Generator#	BS C4/85	94	1	30%		88.8
	Water Pump	BS C4/88	96	1	80%		95.0
Total SWL:							107.8

Area C-05

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Sheet Steel Piling (cofferdam)	Silent Piler#	Giken-001	86	4	50%		89.0
Total SWL:							89.0

Deep Excavation	Dump Truck#	BS C2/30	107	6	50%		111.8
	Excavator*#	BS C2/14	107	4	50%	-5.00	110.0
Total SWL:							114.0

Substructure and Superstructure	Excavator#	BS C4/17	99	2	30%		96.8
	Concrete pump + truck	CNP 047	109	2	30%		106.8
	Poker Vibrator*#	BS C4/33	106	2	30%	-10.00	93.8
	Mobile Crane#	BS C4/43	98	1	30%		92.8
	Diesel Generator#	BS C4/85	94	1	30%		88.8
	Water Pump	BS C4/88	96	1	80%		95.0
Total SWL:							107.8

Area C-06

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Sheet Steel Piling (cofferdam)	Silent Piler#	Giken-001	86	4	50%		89.0
Total SWL:							89.0

Deep Excavation	Dump Truck#	BS C2/30	107	6	50%		111.8
	Excavator*#	BS C2/14	107	4	50%	-5.00	105.0
Total SWL:							112.6

Substructure and Superstructure	Excavator#	BS C4/17	99	2	30%		96.8
	Concrete pump + truck	CNP 047	109	2	30%		106.8
	Poker Vibrator*#	BS C4/33	106	2	30%	-10.00	93.8
	Mobile Crane#	BS C4/43	98	1	30%		92.8
	Diesel Generator#	BS C4/85	94	1	30%		88.8
	Water Pump1	BS C4/88	96	1	80%		95.0
Total SWL:							107.8

Area C-07

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Sheet Steel Piling (cofferdam)	Silent Piler#	Giken-001	86	4	50%		89.0
Total SWL:							89.0

Deep Excavation	Dump Truck#	BS C2/30	107	6	50%		111.8
	Excavator*#	BS C2/14	107	4	50%	-5.00	105.0
Total SWL:							112.6

Substructure and Superstructure	Excavator#	BS C4/17	99	2	30%		96.8
	Concrete pump + truck	CNP 047	109	2	30%		106.8
	Poker Vibrator#	BS C4/33	106	2	30%		103.8
	Mobile Crane#	BS C4/43	98	1	30%		92.8
	Diesel Generator#	BS C4/85	94	1	30%		88.8
	Water Pump	BS C4/88	96	1	80%		95.0
Total SWL:							109.1

Area C-08

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Sheet Steel Piling (cofferdam)	Silent Piler#	Giken-001	86	2	50%		86.0
Total SWL:							86.0
Deep Excavation	Dump Truck#	BS C2/30	107	4	50%		110.0
	Excavator*#	BS C2/14	107	2	50%	-5.00	102.0
Total SWL:							110.6
Substructure and Superstructure	Excavator#	BS C4/17	99	2	10%		92.0
	Concrete pump + truck	CNP 047	109	2	30%		106.8
	Poker Vibrator*#	BS C4/33	106	2	30%	-10.00	93.8
	Mobile Crane#	BS C4/43	98	1	30%		92.8
	Diesel Generator#	BS C4/85	94	1	30%		88.8
	Water Pump	BS C4/88	96	1	80%		95.0
Total SWL:							107.6

Area C-10

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Sheet Steel Piling (cofferdam)	Silent Piler#	Giken-001	86	2	50%		86.0
Total SWL:							86.0
Deep Excavation	Dump Truck#	BS C2/30	107	4	50%		110.0
	Excavator*#	BS C2/14	107	2	50%	-5.00	102.0
Total SWL:							110.6
Substructure and Superstructure	Excavator#	BS C4/17	99	2	30%		96.8
	Concrete pump + truck	CNP 047	109	2	30%		106.8
	Poker Vibrator#	BS C4/33	106	2	30%		103.8
	Mobile Crane#	BS C4/43	98	1	30%		92.8
	Diesel Generator#	BS C4/85	94	1	30%		88.8
	Water Pump1	BS C4/88	96	1	80%		95.0
Total SWL:							109.1

Area C-11

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Bored Piling	Piling Machine#	BS C3/14	111	2	30%		108.8
	Concrete Pump + Truck	CNP 047	109	2	30%		106.8
Total SWL:							110.9
Substructure and Superstructure	Excavator#	BS C4/17	99	2	30%		96.8
	Concrete pump + truck	CNP 047	109	2	30%		106.8
	Poker Vibrator*#	BS C4/33	106	4	30%	-10.00	96.8
	Tower Crane	CNP 049	95	1	50%		92.0
	Mobile Crane#	BS C4/43	98	1	50%		95.0
	Diesel Generator#	BS C4/85	94	1	30%		88.8
	Water Pump	BS C4/88	96	2	50%		96.0
Total SWL:							108.2

Area C-12

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Bored Piling (Retaining Wall)	Piling Machine*#	BS C3/14	111	2	30%	-5.00	103.8
	Concrete Pump + Truck	CNP 047	109	2	30%		106.8
Total SWL:							108.5
Deep Excavation	Dump Truck#	BS C2/30	107	6	40%		110.8
	Excavator*#	BS C2/14	107	4	60%	-5.00	105.8
	Excavator#	BS C1/4	104	2	40%		103.0
	Dozer	BS C2/10	108	1	30%		102.8
Total SWL:							113.0
Road Paving	Road Roller#	BS C2/37	107	2	30%		104.8
Total SWL:							104.8
Bored Piling (Building Foundation)	Piling Machine*#	BS C3/14	111	2	50%	-5.00	106.0
	Concrete Pump + Truck	CNP 047	109	2	30%		106.8
Total SWL:							109.4
Substructure and Superstructure	Excavator#	BS C4/17	99	2	30%		96.8
	Concrete pump + truck	CNP 047	109	2	30%		106.8
	Poker Vibrator*#	BS C4/33	106	4	30%	-10.00	96.8
	Tower Crane	CNP 049	95	4	50%		98.0
	Mobile Crane#	BS C4/43	98	1	30%		92.8
	Diesel Generator#	BS C4/85	94	1	30%		88.8
	Water Pump	BS C4/88	96	2	50%		96.0
Total SWL:							108.5

Area C-14

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Lifting	Mobile Crane#	BS C4/43	98	1	100%		98.0
Total SWL:							98.0

Area C-15

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Bored Piling (Foundation)	Piling Machine*	BS C3/14	111	1	50%	-5.00	103.0
	Concrete Pump + Truck	CNP 047	109	1	30%		103.8
Total SWL:							106.4
Superstructure	Excavator#	BS C4/17	99	1	30%		93.8
	Concrete Pump + Truck	CNP 047	109	1	30%		103.8
	Poker Vibrator*#	BS C4/33	106	2	30%	-10.00	93.8
	Mobile Crane#	BS C4/43	98	1	30%		92.8
Total SWL:							104.8

Area C-16

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Bored Piling (Foundation)	Piling Machine*#	BS C3/14	111	2	30%	-5.00	103.8
	Concrete Pump + Truck	CNP 047	109	2	30%		106.8
Total SWL:							108.5
Excavation	Excavator*#	BS C2/14	107	2	40%	-5.00	101.0
	Dump Truck#	BS C2/30	107	3	40%		107.8
Total SWL:							108.6
Road Paving	Bulldozer#	BS C5/14	114	1	30%		108.8
	Road Roller#	BS C2/37	107	1	30%		101.8
Total SWL:							109.6

Access Road

Activity	Item	SWL ref.	SWL	No. of Plant	Utilization Rate	Mitigation Measure	Sub-Total SWL
Bored Piling (Foundation)	Backhoe Mounted Hydraulic Breaker*	BS C5/1	116	1	30%	-5.00	105.8
Total SWL:							105.8
Excavation	Excavator*#	BS C2/14	107	1	30%	-5.00	96.8
	Dump Truck#	BS C2/30	107	1	30%		101.8
Total SWL:							103.0
Road Paving	Road Roller#	BS C2/37	107	1	30%		101.8
Total SWL:							101.8

Remarks:

- * Movable noise barriers used as mitigation measures
- # Quiet plants adopted