

Annex 5-C

Construction Plant Inventory

Annex 5-C - Preliminary Construction Plant Inventory

SOUTH SOKO OPTION

LAND BASED WORKS

Activity	Plant Required	No. of PME	CNP / BS5228 Ref.	SWL	Overall SWL
Earthwork					
- Site Clearance	Bulldozer / Excavator	2	CNP 030	115	118
	Backactor mounted with Breaker	3	CNP 027	122	127
	Truck	1	CNP 067	117	117
	Mobile Crane	4	CNP 048	112	118
	Water Pump	2	CNP 282	103	106
				<i>Sub-total SWL =</i>	128
- Soil Compaction	Pneumatic Roller	1	CNP 185	108	108
	Mobile Crane	4	CNP 048	112	118
	Water Pump	2	CNP 282	103	106
				<i>Sub-total SWL =</i>	119
- Blasting and Excavation	Bulldozer / Excavator	10	CNP 030	115	125
	Backactor mounted Drilling Rig	10	CNP 027	122	132
	Backactor mounted with Breaker	4	CNP 027	122	128
	Truck	18	CNP 067	117	130
	Electric Generator	4	CNP 101	108	114
	Concrete crushers, excavator mounted	2	.. ⁽¹⁾	103	106
	Mobile Crane	1	CNP 048	112	112
	Air Compressor	2	CNP 003	104	107
	Water Pump	2	CNP 282	103	106
	Derrick Lighter	14	CNP 061	104	115
					<i>Sub-total SWL =</i>
- Slope Stabilization and Drainage Works	Backactor mounted Drilling Rig	3	CNP 027	122	127
	Water Pump	2	CNP 282	103	106
	Backactor mounted with Breaker	3	CNP 027	122	127
	Concrete Pumps	2	CNP 047	109	112
	Grout Pump w/Mixer	2	.. ⁽¹⁾	105	108
				<i>Sub-total SWL =</i>	130

RECLAMATION

Activity	Plant Required	No. of PME	CNP / BS5228 Ref.	SWL	Overall SWL
Dredging					
	Dredger - Grab	1	CNP 063	112	112
	Tug Boat / Motor Boat	1	CNP 221	110	110
	Split Bottom Barge	1	CNP 061	104	104
				<i>Sub-total SWL =</i>	115
Seawall Construction					
Placing Seawall Core	Tug Boat / Motor Boat	2	CNP 221	110	113
	Derrick Ligher	2	CNP 061	104	107
				<i>Sub-total SWL =</i>	114
Placing Seawall Rock Armour	Derrick Lighter	1	CNP 061	104	104
	Backactor	1	CNP 027	122	122
				<i>Sub-total SWL =</i>	122
Placing Fill					
	Derrick Lighter / Pelican Barge	1	CNP 061	104	104
	Water Pump	2	CNP 282	103	106
				<i>Sub-total SWL =</i>	108
Drainage Works					
Install of Temporary Work	Backactor mounted with Vibrator	2	CNP 027	122	125
	Cutter, circular, steel (electric)	2	.. ⁽¹⁾	112	115
	Grinding Machine	2	CNP 065	98	101
	Water Pump	1	CNP 282	103	103
				<i>Sub-total SWL =</i>	125
Laying of Drainage Pipes	Backactor	2	CNP 081	112	115
	Truck	1	CNP 067	117	117
	Water Pump	1	CNP 282	103	103
				<i>Sub-total SWL =</i>	119
Backfilling	Pneumatic Roller	1	CNP 185	108	108
	Backactor	2	CNP 081	112	115
	Water Pump	1	CNP 282	103	103
				<i>Sub-total SWL =</i>	116

Main Jetty

Activity	Plant Required	No. of PME	CNP / BS5228 Ref.	SWL	Overall SWL	
Ground Investigation	SI Barge + Generator	2	CNP 061+CNP 101	109	112	
	Split Bottom Barge	2	CNP 061	104	107	
			<i>Sub-total SWL =</i>		113	
Jetties and Access Bridge						
- Steel Piles Construction	Crawler Crane	2	CNP 048	112	115	
	900 CFM Air Compressor	1	CNP 002	102	102	
	Mobile Crane	1	CNP 048	112	112	
	350 CFM Air Compressor	1	CNP 001	100	100	
	Tugboat	4	CNP 221	110	116	
	Truck	1	CNP 067	117	117	
	Generator	2	CNP 101	108	111	
	SI Barge + Generator	5	CNP 061+CNP 101	109	116	
	Water Pump	3	CNP 282	103	108	
	Derrick Ligher	7	CNP 061	104	112	
	Automatic Grinder Machine	2	CNP 065	98	101	
	Poker, vibratory	2	CNP 170	113	116	
	Piling, earth auger	3	CNP 167	114	119	
				<i>Sub-total SWL =</i>	125	
	- Concrete Caps, Slabs and Foundations	Crawler Crane	2	CNP 048	112	115
900 CFM Air Compressor		2	CNP 002	102	105	
Mobile Crane		1	CNP 048	112	112	
350 CFM Air Compressor		2	CNP 001	100	103	
Tugboat		7	CNP 221	110	118	
Truck		1	CNP 067	117	117	
Generator		8	CNP 101	108	117	
Water Pump		11	CNP 282	103	113	
Derrick Ligher		7	CNP 061	104	112	
Concrete Pump		2	CNP 047	109	112	
Bar bender and cutter		4	CNP 021	90	96	
				<i>Sub-total SWL =</i>	124	
Dredging of Approach Channel and Turning Basin						
- Dredging of Approach Channel and Turning Basin		Dredger - Grab	3	CNP 063	112	117
		Trailing Suction Hopper Dredger	1	Penny Bay EIA ⁽²⁾	109	109
	25 Ton Mobile Crane	1	CNP 048	112	112	
	Tugboat	4	CNP 221	110	116	
	Generator	1	CNP 101	108	108	
	Dredger, chain bucket	2	CNP 062	118	121	
	Derrick Ligher	2	CNP 061	104	107	
			<i>Sub-total SWL =</i>	124		
Intake and Outfall Construction						
- Intake and Outfall Construction	Dredger - Grab	1	CNP 063	112	112	
	Tug Boat / Motor Boat	1	CNP 221	110	110	
	Split Bottom Barge	1	CNP 061	104	104	
	Derrick Ligher	1	CNP 061	104	104	
			<i>Sub-total SWL =</i>	115		

LNG TERMINAL CIVIL, M&E WORK

Activity	Plant Required	No. of PME	CNP / BS5228 Ref.	SWL	Overall SWL
Terminal Civil Work	Machanich & Lub. Service Truck	3	CNP 141	112	117
	Derrick Barge	9	CNP 061	104	114
	Tugboat	5	CNP 221	110	117
	Crawler Crane	15	CNP 048	112	124
	Drill Rig	3	Table C.10 Ref No. 2 ⁽³⁾	112	117
	Backhoe – Track	2	CNP 081	112	115
	Forklift	11	Penny Bay EIA ⁽²⁾	113	123
	Dump truck, with grab	1	-- ⁽¹⁾	105	105
	Track Drill	1	Table C.3 Ref No. 123 ⁽³⁾	128	128
	Generator	18	CNP 101	108	121
	Air Compressor 375 cfm, Portable	13	CNP 001	100	111
	Air Compressor 900 cfm, Portable	1	CNP 002	102	102
	Air Compressor 1200 cfm, Portable	2	CNP 003	104	107
	Winch – Hoist 2 Drum	1	CNP 263	102	102
	Pump – Submersible	2	CNP 283	85	88
	Water jetting unit	1	-- ⁽¹⁾	107	107
	Pump – Concrete	4	CNP 047	109	115
	Grout Pump w/Mixer	1	-- ⁽¹⁾	105	105
	Tractor with Trailer	2	CNP 222	118	121
	Tower Crane	2	CNP 049	95	98
	Automatic Grinder Machine	8	CNP 065	98	107
	Air blower	3	-- ⁽¹⁾	95	100
	Winch (Power & Pneumatic/3 ton)	8	CNP 261	110	119
	Discharging Pump	4	CNP 282	103	109
	Batching Plant 60 CM/HR	2	CNP 022	108	111
	Concrete Mixer	10	CNP 046	96	106
	Water Pump	14	CNP 282	103	114
	Bar bender and cutter	8	CNP 021	90	99
	Poker, vibratory	8	CNP 170	113	122
				<i>Sub-total SWL =</i>	133

Installation of Water Main & Cable

Activity	Plant Required	No. of PME	CNP / BS5228 Ref.	SWL	Overall SWL
Dredging	Dredger - Grab	1	CNP 063	112	112
	hydraulic rock breaker	1	Table C.8 Ref No. 12 ⁽³⁾	106	106
				<i>Sub-total SWL =</i>	113
Water Pipeline Installation	Derrick Barge	1	CNP 061	104	104
Post Trenching Jetting	Derrick Barge	1	CNP 061	104	104
Backfilling	Dredger - Grab	1	CNP 063	112	112
Submarine Cable Installation	Derrick Barge	1	CNP 061	104	104

Installation of Submarine Gas Pipeline

Activity	Plant Required	No. of PME	CNP / BS5228 Ref.	SWL	Overall SWL
Pipeline Installation by Dredging	Trailing Suction Hopper Dredger	1	Penny Bay EIA ⁽²⁾	109	109

Installation of Gas Receiving Station

Activity	Plant Required	No. of PME	CNP / BS5228 Ref.	SWL	Overall SWL
Dredging	Dredger - Grab	1	CNP 063	112	112
	Tug Boat / Motor Boat	1	CNP 221	110	110
	Split Bottom Barge	1	CNP 061	104	104
				<i>Sub-total SWL =</i>	115
Seawall Construction					
Placing Seawall Core	Tug Boat / Motor Boat	2	CNP 221	110	113
	Derrick Lighter	2	CNP 061	104	107
				<i>Sub-total SWL =</i>	114
Placing Seawall Rock Armour	Derrick Lighter	1	CNP 061	104	104
	Backactor	1	CNP 027	122	122
				<i>Sub-total SWL =</i>	122
Placing Fill	Derrick Lighter	1	CNP 061	104	104
			<i>Sub-total SWL =</i>	104	

(1) SWL refer to the document prepared by the Noise Control Authority (http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

(2) SWL refer to the approved EIA Report for the Construction of an International Theme Park in Penny's Bay of North Lantau and its Essential Associated Infrastructures

(3) SWL refer to the BS 5228 : Part 1: 1997