

**PROPOSED PORT DEVELOPMENT WORKS
CONTRACT PACKAGE II**

BILL OF MATERIALS (SCHEME B)			
BILL NO.	DESCRIPTION	UNIT	QTY
BILL NO.1	GENERAL EXPENSES		
1.01	Mobilization & Demobilization	LS	1.00
1.02	Provide Construction Safety and Health Program in the Execution of the Project	Month	24.00
	Sub-Total		
BILL NO.2	CONSTRUCTION OF PHASE II - MARGINAL AREA (148m X 75m)		
2.01	Supply and deliver of steel pipe piles (900mmØ x 13mm thk. x 21m A252 Grade 2) including interlock connectors.	lm	5,418.00
2.02	Handle, pitch and drive of steel pipe piles (900mmØ x 13mm thk. x 21m A252 Grade 2) including interlock connectors.	lm	5,418.00
2.03	Application of polyurethane external coating including surface preparation of SPP	m2	10,205.00
2.04	Provision for Coring	ea	258.00
2.05	Cutting and Disposal of 900mm dia. SPP	pcs	258.00
2.06	Supply, fabricate and install steel waling including plates, bolts, nuts washers and accessories.	kg.	27,493.00
2.07	Supply and place sand fill	m3	1,149.00
2.08	Supply and place 3,500 psi concrete filler for SPP	m3	821.00
2.09	Supply and Install RSB for concrete filler for SPP	kg.	88,788.00
2.10	Supply and place 4,000 psi. concrete for retaining wall, anchor wall, curb	m3	1,249.00
2.11	Supply and Install RSB for item 2.09	kg.	109,198.00
2.12	Placing of 50 - 100 kg. core rocks	m3	16,060.00
2.13a	Supply and install tie-rod including accessories (70mm dia. x 24m length)	set	125.00

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BILL OF MATERIALS (SCHEME B)				
BILL NO.	DESCRIPTION	UNIT	QTY	
2.13b	Supply and install tie-rod including accessories (32mm dia. x 18m length)	set	12.00	
2.14	Supply and Install 1300X1300X250mm thk . Reinforce Blocks for Bollard Tie Rod	set	12.00	
2.15	Placing and Install of gravel bedding for anchor wall	m3	155.00	
2.16	Supply and install geotextile fabric	m2	3,695.00	
2.17	Placing of sand and gravel fill	m3	80,886.00	
2.18	Spreading and compact selected fill	m3	21,236.00	
2.19	Supply, spread and compact aggregate base course (200mm thk)	m3	2,220.00	
2.20	Supply, spread and compact cement treated base course (200mm thk)	m3	1,628.00	
2.21	Supply and spread and grade levelling course sand cushion (50mm thk)	m3	407.00	
2.22	Supply, deliver concrete block (CB-1,CB-2A,CB-2B,CB-3)	m3	258.00	
2.23	Installation of concrete blocks (CB-1,CB-2A,CB-2B,CB-3)	m3	258.00	
2.24	Construct portland cement concrete pavement (300mm thk.)	m3	1,110.00	
2.25	Construct Paving blocks(150x100x200mm) 5000 psi including shear key	m2	7,400.00	
2.26	Supply and Deliver of Dual Cone SCN 860 F1.4	pcs	11.00	
2.27	Installation of Dual Cone SCN 860 F1.4	pcs	11.00	
2.28	Supply and Deliver of V1000X1000H RDF	pcs	5.00	
2.29	Installation of V1000X1000H RDF	pcs	5.00	
2.30	Supply 100 Ton Mooring Tee Head	pcs	11.00	
2.31	Installation of 100 Ton Mooring Tee Head	pcs	11.00	
	Sub-Total			

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BILL OF MATERIALS (SCHEME B)				
BILL NO.	DESCRIPTION	UNIT	QTY	
BILL NO.3	CONSTRUCTION OF PHASE II - TRAPEZOIDAL MAIN WHARF			
3.01	Supply and deliver of steel pipe piles (700mmØ x 16mm thk.)	lm	3,082.00	
3.02	Supply and deliver of steel pipe piles (700mmØ x 13mm thk.)	lm	2,628.00	
3.03	Handle, pitch and drive of steel pipe piles (700mmØ)	lm	5,710.00	
3.04	Coating for 700mmØ SPP with Polyurethane Paint	m2	6,092.00	
3.05	Splicing of 700mmØ SPP	pcs	155.00	
3.06	Cutting and Disposal of 700mm dia. SPP	pcs	155.00	
3.07	Supply and place sand fill	m3	903.00	
3.08	Extraction of clogged materials inside SPP	m3	239.00	
3.09	Supply and place 3,500 psi concrete filler for SPP	m3	821.00	
3.10	Supply and Install RSB for concrete filler for SPP	kg.	82,183.00	
3.11	Supply and place 4,000 psi. concrete for Superstructure	m3	1,155.00	
3.12	Supply and Install RSB for Superstructure	kg.	55,302.00	
3.13	Supply and Deliver of Dual Cone SCN 860 F1.4	pcs	5.00	
3.14	Installation of Dual Cone SCN 860 F1.4	pcs	5.00	
3.15	Supply 100 Ton Mooring Tee Head	pcs	5.00	
3.16	Installation of 100 Ton Mooring Tee Head	pcs	5.00	
	Sub-Total			

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BILL OF MATERIALS (SCHEME B)			
BILL NO.	DESCRIPTION	UNIT	QTY
BILL NO.4	CONSTRUCTION OF PHASE III BLOCK 1		
4.01	Supply and deliver of steel pipe piles (700mmØ x 16mm thk.)	lm	2,525.00
4.02	Supply and deliver of steel pipe piles (700mmØ x 13mm thk.)	lm	2,192.00
4.03	Handle, pitch and drive of steel pipe piles (700mmØ)	lm	4,717.00
4.04	Coating for 700mmØ SPP with Polyurethane Paint	m2	5,670.00
4.05	Splicing of 700mmØ SPP	pcs	131.00
4.06	Cutting and Disposal of 700mm dia. SPP	pcs	131.00
4.07	Extraction of clogged materials inside SPP	m3	222.00
4.08	Supply and place sand fill	m3	730.00
4.09	Supply and place 3,500 psi concrete filler for SPP	m3	318.00
4.10	Supply and Install RSB for concrete filler for SPP	kg.	46,739.00
4.11	Supply and place 4,000 psi. concrete for Superstructure	m3	1,111.00
4.12	Supply and Install RSB for Superstructure	kg.	209,401.00
4.13	Supply and Deliver of Dual Cone SCN 860 F1.4	pcs	3.00
4.14	Installation of Dual Cone SCN 860 F1.4	pcs	3.00
4.15	Supply 100 Ton Mooring Tee Head	pcs	3.00
4.16	Installation of 100 Ton Mooring Tee Head	pcs	3.00
4.17	Supply and deliver SCN 1400 F1.2	pcs	6.00
4.18	Installation of SCN 1400 F1.2	pcs	6.00
4.19	Supply 150 Ton Mooring Tee Head	pcs	6.00
4.20	Installation of 150 Ton Mooring Tee Head	pcs	6.00
	Sub-Total		

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BILL OF MATERIALS (SCHEME B)			
BILL NO.	DESCRIPTION	UNIT	QTY
BILL NO.5	CONSTRUCTION OF PHASE III BLOCK 2		
5.01	Supply and deliver of steel pipe piles (800mmØ x 16mm thk.)	lm	5,289.00
5.02	Supply and deliver of steel pipe piles (800mmØ x 13mm thk.)	lm	4,174.00
5.03	Handle, pitch and drive of steel pipe piles (800mmØ)	lm	9,463.00
5.04	Coating for 800mmØ SPP with Polyurethane Paint	m2	11,994.00
5.05	Splicing of 800mmØ SPP	pcs	227.00
5.06	Cutting and Disposal of 800mm dia. SPP	pcs	227.00
5.07	Extraction of clogged materials inside SPP	m3	457.00
5.08	Supply and place sand fill	m3	2,153.00
5.09	Supply and place 3,500 psi concrete filler for SPP	m3	719.00
5.10	Supply and Install RSB for concrete filler for SPP	kg.	103,563.00
5.11	Supply and place 4,000 psi. concrete for Superstructure	m3	2,028.00
5.12	Supply and Install RSB for Superstructure	kg.	386,128.00
5.13	Supply and deliver SCN 1400 F1.2	pcs	9.00
5.14	Installation of SCN 1400 F1.2	pcs	9.00
5.15	Supply 150 Ton Mooring Tee Head	pcs	9.00
5.16	Installation of 150 Ton Mooring Tee Head	pcs	9.00
	Sub-Total		

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BILL OF MATERIALS (SCHEME B)			
BILL NO.	DESCRIPTION	UNIT	QTY
BILL NO.6	CONSTRUCTION OF MOORING DOLPHIN		
6.01	Supply and deliver of steel pipe piles (800mmØ x 13mm thk.)	lm	333.00
6.02	Handle, pitch and drive of steel pipe piles (800mmØ)	lm	333.00
6.03	Coating for 800mmØ SPP with Polyurethane Paint	m2	385.00
6.04	Splicing of 800mmØ SPP	pcs	9.00
6.05	Cutting and Disposal of 800mm dia. SPP	pcs	9.00
6.06	Extraction of clogged materials inside SPP	m3	16.00
6.07	Supply and place sand fill	m3	86.00
6.08	Supply and place 3,500 psi concrete filler for SPP	m3	23.00
6.09	Supply and Install RSB for concrete filler for SPP	kg.	4,107.00
6.10	Supply and place 4,000 psi. concrete for Superstructure	m3	81.00
6.11	Supply and Install RSB for Superstructure	kg.	2,685.00
6.12	Supply 150 Ton Mooring Tee Head	pcs	1.00
6.13	Installation of 150 Ton Mooring Tee Head	pcs	1.00
	Sub-Total		
BILL NO.7	PORT DRAINAGE SYSTEM		
7.01	Port Drainage System	LS	1.00
	Sub-Total		

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BILL OF MATERIALS (SCHEME B)			
BILL NO.	DESCRIPTION	UNIT	QTY
BILL NO.8	SUPPORT FACILITIES		
8.01	Water Lines		
8.01.1	PVC Pipe, 100mm dia. (100 psi.)	lm	940
8.01.2	Steel Pipe, 100mm dia. (CL/CC)	lm	247
8.01.3	Cast Iron Pipe, 100mm dia. Including fittings	lm	389
8.01.4	100 mm Ø CLCC Pipe Bracket	pcs.	130
8.01.5	100mmØ CI Tee	pcs.	8
8.01.6	100mmØ 90° PVC Bend	pcs.	2
8.01.7	100mmØ 45° PVC Bend	pcs.	4
8.01.8	100mmØ 22° PVC Bend	pcs.	1
8.01.9	100 x 50 mm Reducer (CI)	pcs.	3
8.01.10	100 x 75 mm Reducer (CI)	pcs.	1
8.01.11	100mmØ Endcap/Plug (CI)	pcs.	7
8.01.12	75mmØ Endcap/Plug (CI)	pcs.	1
8.01.13	50mmØ Endcap/Plug (CI)	pcs.	2
8.01.14	Gate Valve (100mmØ)	pcs.	14
8.01.15	Gate Valve (75mmØ)	pc.	1
8.01.16	Gate Valve (50mmØ)	pc.	1
8.01.17	Blow-Off Valve (100mmØ)	each	1
8.01.18	Fire Hydrant, Commercial Type (100mmØ)	each	3
8.01.19	(100mmØ)	each	4
8.01.20	Service Connection (50mm)	each	8
8.01.21	Proposed Elevated Water Tank (25 cu.m.)	lot	1
8.01.22	Proposed Sump Tank (130 cu.m.)	lot	1
8.01.23	Transfer Pump, 1 HP (15.75 gpm x 78.72ft)	lot	1
8.01.24	Sewerage Line (Including STP, 45 CMD)	lot	1
	Sub-Total		

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BILL OF MATERIALS (SCHEME B)			
BILL NO.	DESCRIPTION	UNIT	QTY
8.02	Electrical Works		
8.02.1	Supply and Install Complete New Lighting Control Panel "LCP-PN1" NEMA 4X ENCLOSURE PAD MOUNTED	set	1
	MAIN 150AT/ 225AF, 3 PSN, MCCB BRS. 20-30AT/ 50AF, 3 PSN, MCCB		
8.02.2	Supply and Install Complete Lighting Pole for the Main Alignment		
8.02.2.1	12M LAMP POST- SINGLE ARM HOT DIP GALVANIZED	set	72
8.02.2.2	12M HIGH MAST - HOT DIP GALVANIZED	set	6
8.02.2.3	Supply and Install Complete, Lighting Pole Foundation.	set	78
8.02.2.4	High Mast Steel Ladder	set	6
8.02.3	Supply and Install Complete Lighting Luminaire Light Emitting Diode LED		
8.02.3.1	ROADWAY LUMINAIRE 150W LED, 230 VOLTS	set	72
8.02.3.2	264W LED FLOODLIGHT	set	16
8.02.4	Supply and Install Complete Wires and Cables for the Main Alignment		
8.02.4.1	3.5mm ² THNN, 600V	lm	5148
8.02.4.2	5.5mm ² THNN, 600V	lm	7315
8.02.4.3	8mm ² THNN, 600V	lm	24145
8.02.4.4	14mm ² THNN, 600V	lm	6798
8.02.4.5	38mm ² THNN, 600V	lm	594
8.02.5	Supply and Install Complete PVC Conduit for the Main Alignment		
8.02.5.1	25mmØ PVC	lm	390
8.02.5.2	50mmØ IMC	lm	6
8.02.5.3	50mmØ PVC	lm	31648

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BILL OF MATERIALS (SCHEME B)

BILL NO.	DESCRIPTION	UNIT	QTY
8.02.6	CONCRETE MANHOLE COMPLETE WITH PULLING IRON, CABLE TRAY, & GROUND ROD	set	22
8.02.7	GENERATOR SET 250KVA, 400/230V, 3PSN, 60Hz., 1800 RPM, DIESEL ENGINE DRIVEN, SOUNDPROOF TYPE.	set	1
8.02.8	MANUAL TRANSFER SWITCH, 150AMP, 3PSN, WITH MECHANICAL INTERLOCK.	set	1
8.02.9	CCTV CONSOLE APARATUS 16 CHANNEL	set	1
8.02.10	CCTV CAMERA	set	16
8.02.11	CCTV CABLE & BRACKET	LS	1
8.02.12	CCTV HANDHOLE	set	11
8.02.13	CCTV POLE STAND 6 METER WITH CAM SUPPORT.	set	8
8.02.14	Supply and Install complete Grounding System for the Roadway & Flood Lighting of Port & Alignment		
8.02.14.1	Air Terminal Lightning Arrester 16mm dia., x 600mm Long Copper Arrester	set	8
8.02.14.2	30mm ² THNN, 600V	lm	132
8.02.14.3	14mm ² TW Green Insulator	lm	415
8.02.14.4	20mm \varnothing x 3000mm long Copperclad Ground rod	pcs.	83
8.02.14.5	Exothermic Weld	set	120

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BILL OF MATERIALS (SCHEME B)			
BILL NO.	DESCRIPTION	UNIT	QTY
8.02.15	Upgrading of Service Entrance Equipment		
8.02.15.1	Conduit 4" dia. PVC	lm	990
8.02.15.2	Manhole	pcs.	6
8.02.15.3	Cable 300 mm dia.	lm	3780
8.02.15.4	Neutral Cable 60 mm	lm	1080
8.02.15.5	Air Circuit Breaker 1,400 amp. Trip	pcs.	2
8.02.16	Miscellaneous for Materials	LS	1.00
	Sub-Total		
BILL NO.9	DEMOLITION OF EXISTING MARGINAL WHARF		
9.01	Demolition of Existing Marginal Wharf	m ²	2910
	Sub-Total		
	GRAND TOTAL		