

BILL OF QUANTITIES					
South Sudan Enhancing Community Resilience and Local Governance Project (ECRP)					
	<b>Project Description:</b> Construction of one block of 2 classrooms at Freedom Primary School, Guengalath; Construction of women Resource Center, Construction of 1 block of 4 stances latrine with Washroom attached and construction 50m x50m chain link fence at Abon-2 and Waukok village; Construction of additional wards, construction of an Incinerator and Construction of Placenta pit at Pariang Main Hospital, Guengalath, Pariang Payam - Pariang County	Tender No.16			
	Name of Bidder:				
	DESCRIPTIONS	Unit	Quantity	Unit Cost [USD]	Total cost (USD)
<b>BILL NO.1</b>	<b>PRELIMINARIES</b>				<b>\$ 29,750.00</b>
	Notes:				
	<u>All the Bidders are requested to refer "Pricing Preamble and notes below" and works items of this Bills of Quantities shall be priced to fulfill the requirements there-in. Also see that no page or items are missing prior to pricing of this bill of quantities.</u>	Note			
	<u>A list of typical general items are given below. However, the Bidder is requested to price only those items that may affect this Contract.</u>	Note			
	<u>If no price has been stated against any item hereunder, the Contractor shall not be entitled to claim any money for such items even though he is obliged to execute the work or provide services described therein. Preliminary items priced by the Tenderer are deemed to include the cost of unpriced items.</u>	Note			
	<u>Cost and expenses in connection with any other preliminary item which is not listed below, but is necessary for the due completion of works, is deemed to be included in the tender rates.</u>	Note			
<b>1.1</b>	<b>Mobilization and Site Facilities</b>				<b>\$ 5,950.00</b>
1.1.1	Mobilization of all required Construction materials ,equipments and personel to project site.	Lump Sum	1.00	\$ 3,000.00	\$ 3,000.00
1.1.2	The contractor shall provide adequate space to serve as a temporary site office and fit it with the required facilities for his own site management staff The contractor shall provide adequate space to serve as a temporary site stores or space for storage of plant and materials for the work herein. The contractor shall provide toilet facilities for his workers and the Engineers within the site as directed and with Sanitary conditions meeting WHO Standards.	Lump Sum	1.00	\$ 1,000.00	\$ 1,000.00
1.1.3	The contractor shall provide necessary protective fencing/site hoarding, lighting, watchmen and other precautions and maintain for entire construction period.	Lump Sum	1	\$ 1,000.00	\$ 1,000.00
	<b>PLATES</b>				
1.1.4	Fabricate a metal visibility plate 100 x 80 mm to be wall mounted. Art work of name board will be issued by IOM	Each	5.00	\$ 100.00	\$ 500.00
1.1.5	Fabricate and install a sign post stand, 1m x 1.2m metal signboard on a 1.8m stand with a concrete foundation (min. 0.40 x 0.40 x 0.60 m, as directed by the Site Engineer). Concrete class C-25 (1:1:2) with RHS 40 x 40 x 2.5mm posts and 2mm thick sheet metal sign.	Each	3.00	\$ 150.00	\$ 450.00
	<b>Sites Operations</b>				<b>\$ 5,200.00</b>
1.1.6	Allow for setting out of works in accordance with drawings; liaise with client to establish exact boundaries and other written information given by the Engineer and obtain written approval from the relevant government authorities for setting out, street and building lines before commencements of construction; Checking of any setting out or of any line or level by the Engineer shall not in any way relieve the Contractor of his responsibility for the accuracy thereof.	Lump Sum	1	\$ 1,000.00	\$ 1,000.00
1.1.7	Allow for supplying water for the Works and facilities of the contractor including connection, distribution system for the work, internal arrangements and all payment to the authorities for connections. It is the responsibility of the Contractor to ensure steady and uninterrupted water supply to Works.	Lump Sum	1	\$ 1,000.00	\$ 1,000.00
1.1.8	Allow for maintaining daily records in the manner required by the Engineer to indicate factual details of, Workers, materials , Machinery and Equipment, Weather	Lump Sum	1	\$ 600.00	\$ 600.00
1.1.9	Allow for maintaining the sites in clean and orderly fashion at all times and during the entire contract period. Materials, cement etc. shall be kept neatly stacked on the site with all access-ways kept clear. All dust, debris and rubbish etc., arising out of his own works shall be continually cleared and removed from the site. The Engineer's Representative shall certify a percentage of the monthly rate or shall completely suspend the monthly amount if the contractor's maintenance is found to be unacceptable.	Lump Sum	1	\$ 1,200.00	\$ 1,200.00
1.1.10	Allow for providing all necessary safety measures to workmen (provision for proper usage of Personal protective equipment (PPE)). The bidder should submit his comprehensive safety plan with description and number in each safety device and other safety equipment proposed. The Engineer's Representative has the right to pay a percentage of the monthly component to suit the percentage accomplishment of this safety plan.	Lump Sum	1	\$ 1,400.00	\$ 1,400.00
	<b>Insurances, Bonds &amp; Fees</b>				<b>\$ 2,500.00</b>

1.1.11	Allow for Contractor's All Risk Insurance Policy, including third party liability and from the starting date until the defects liability certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the works, plant, materials, and equipment) which are not employers risk but are contractors risk Allow for insurance against claims for worker's compensation. Engineer's and Consultant's representatives, shall be included in the Insurance Policy. Allow for insurance against loss or damage to the works, adjacent structures, any existing overhead and/or underground services that may cause damages during the construction	Lump Sum	1	\$	2,500.00	\$	2,500.00
	<b>Environmental and Social Safeguarding Requirements</b>					\$	16,100.00
1.1.12	<u>Allow for providing all necessary safety measures to workmen (provision for proper usage of Personal protective equipment (PPE). The bidder should submit his comprehensive safety plan with description and number in each safety device and other safety equipment proposed. The Engineer's Representative has the right to pay a percentage of the monthly component to suit the percentage accomplishment of this safety plan.</u>						
1.1.13	Conduct environmental and social risk assessment and management on all subproject sites including conducting inspections to ensure adherence to the requirement of IOM and the World Bank	Lump Sum	1	\$	800.00	\$	800.00
1.1.14	Provide resources to ensure a safe working environment including signage, access control, fall protection equipment and devices, occupational safety and health equipment, and first aid kit.	Lump Sum	1	\$	800.00	\$	800.00
1.1.15	Ensure measures are put in place to guarantee community safety including stakeholder engagement and information disclosure	Lump Sum	1	\$	750.00	\$	750.00
1.1.16	Acquire all relevant Environmental permits, licenses and authorisation prior to engaging in any activities that require such. This includes adhering to conditions of any licenses issues.	Lump Sum	1	\$	950.00	\$	950.00
1.1.17	Rehabilitate and ensure maintenance of aesthetic environment including ensuring the sound management of waste on all sites.	Lump Sum	1	\$	800.00	\$	800.00
1.1.18	Ensure there is a designated qualified and competent environmental and social safeguards specialist within the contractor's team at least for each subproject.	Month	6	\$	2,000.00	\$	12,000.00
<b>BILL NO.2</b>	<b>CONSTRUCTION OF ONE BLOCK OF 2 CLASSROOMS AT FREEDOM PRIMARY SCHOOL</b>					\$	108,546.61
<b>2.1</b>	<b>SUBSTRUCTURE</b>					\$	49,768.84
	<b>Excavation</b>						
2.1.1	Site clearance and removal of debris from site as directed	308.0	m2	\$	5.00	\$	1,540.00
2.1.2	Excavate to remove loose top soil not exceeding 0.3 meters deep and cart away as directed	308.0	m2	\$	10.00	\$	3,080.00
2.1.3	Excavate in soft material for foundation trenches not exceeding 1.8m deep starting from stripped level	46.0	m3	\$	15.00	\$	690.00
2.1.4	Ditto: Column bases, Verandah post, splash apron and Ramp	62.8	m3	\$	15.00	\$	942.00
	<b>Backfilling</b>					\$	-
2.1.5	Return, fill in and ram selected excavated material around foundations and splash apron	39.9	m3	\$	10.00	\$	399.00
	<b>Disposal of Surplus spoils</b>						
2.1.6	Load and cart away surplus material from site to an approved dumping site	33.8	m3	\$	8.00	\$	270.59
	<b>Crushed stone fill</b>						
2.1.7	200mm thick hardcore (crushed stone) compacted in layers not exceeding 100mm deep and well watered under slab, Verandah and ramps	42.8	m3	\$	50.00	\$	2,140.00
	<b>Imported/selected filling/material</b>						
2.1.8	min 500mm thick compacted selected fill to grade	118.7	m3	\$	25.00	\$	2,967.50
2.1.9	Ditto to ramps	7.2	m3	\$	25.00	\$	180.00
2.1.10	Ditto to Splash apron	11.0	m3	\$	25.00	\$	275.00
	Anti-termite treatment						
2.1.11	TERMIDOR or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	265.9	m2	\$	2.00	\$	531.80
2.1.12	Ditto to ramps	28.8	m2	\$	2.00	\$	57.60
	<b>Damp Proofing</b>						
2.1.13	1000 gauge polythene sheet damp proof membrane: to floors: laid on blinded smooth finished hardcore bed with 300mm side and end laps to receive concrete floor bed (m/s) - measured net with no allowance for overlaps	149.4	m2	\$	3.50	\$	522.90
2.1.14	Ditto to ramps	19.2	m2	\$	3.50	\$	67.20
	<b>Concrete work in substructure</b>						
	<i>Plain concrete class 15 (mix 1:3:6)</i>						
2.1.15	50mm Thick surface blinding under foundations	1.4	m3	\$	322.00	\$	450.80
2.1.16	Ditto: Under column bases, Ramp and verandah post	1.8	m3	\$	322.00	\$	579.60
	<b>In Situ concrete class 25, vibrated and reinforced as described, in:-</b>						
2.1.17	Strip Footing	14.0	m3	\$	460.00	\$	6,440.00
2.1.18	Column bases and Verandah post	5.5	m3	\$	460.00	\$	2,530.00
2.1.19	Columns in foundations	1.2	m3	\$	460.00	\$	552.00
2.1.20	Ground beam (300x200)mm	3.7	m3	\$	460.00	\$	1,702.00
2.1.21	Ramp	2.9	m3	\$	460.00	\$	1,334.00
2.1.22	100mm thick ground floor slab (classrooms & Verandah) C-25 concrete	14.9	m3	\$	460.00	\$	6,854.00

2.1.23	600mm wide stone chipping aggregates Splash Apron 1:4 cement Sand ratio	4.4	m3	\$ 280.00	\$ 1,232.00
	<b>Reinforcement</b>				
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				
2.1.24	8mm diameter bars	155.6	kg	\$ 3.00	\$ 466.80
2.1.25	10mm diameter bars	1478.8	kg	\$ 3.50	\$ 5,175.80
2.1.26	12mm diameter bars	423.6	kg	\$ 4.00	\$ 1,694.40
	<u>Mesh reinforcement : B.S. 4483 weighing 2.22 kgs per square meter including bends, tying wire and spacing blocks</u>				
2.1.27	Fabric mesh reinforcement to ground floor slab	167.2	m2	\$ 12.00	\$ 2,006.57
2.1.28	Ditto to ramps	19.2	m2	\$ 12.00	\$ 230.40
	<u>Sawn formwork to:</u>				
2.1.29	Vertical sides of ground beam	51.2	m2	\$ 9.20	\$ 471.04
2.1.30	Vertical sides of column bases	64.0	m2	\$ 9.20	\$ 588.80
2.1.31	Vertical sides of columns	23.9	m2	\$ 9.20	\$ 219.88
2.1.32	Edges of 100mm high ground floor slab	10.0	m2	\$ 9.20	\$ 92.00
2.1.33	Edges of 150mm high ramps	4.8	m2	\$ 9.20	\$ 44.16
	<b>Foundation walling</b>				
	<u>Solid concrete block walling (mix 1:3:6); with minimum comprehensive strength of 7.0N/mm2 bedded and jointed in cement sand (1:3) mortar; reinforced with gauge 20 hoop iron after every alternate course.</u>				
2.1.34	200mm thick walls	55.5	m2	\$ 40.00	\$ 2,220.00
	<u>Plinths</u>				
2.1.35	12 mm thick cement : sand (1:3) plaster to plinth	55.5	m2	\$ 15.00	\$ 832.50
2.1.36	Prepare and apply one priming coat and two coats of black bitumastick paint on rendered plinths	55.5	m2	\$ 7.00	\$ 388.50
<b>2.2</b>	<b>STRUCTURAL FRAME</b>				<b>\$ 4,808.24</b>
	<b>Concrete work in superstructure- In Situ concrete class 25, vibrated and reinforced as described, in:-</b>				
2.2.1	Column (200x200)	1.4	m3	\$ 460.00	\$ 644.00
2.2.2	Ring beam	2.2	m3	\$ 460.00	\$ 1,012.00
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				
2.2.3	8mm diameter bars	157.6	kg	\$ 3.00	\$ 472.80
2.2.4	12mm diameter bars	489.3	kg	\$ 4.00	\$ 1,957.20
	<b>RHS section steel column Supporting the roof at the Verendah</b>				
2.2.5	RHS100x3mm Steel columns supporting roof at the verendah	5.0	No	\$ 30.00	\$ 150.00
	<u>Sawn formwork</u>				
2.2.6	Vertical sides of Columns	32.3	m2	\$ 9.20	\$ 297.16
2.2.7	Ring beam	29.9	m2	\$ 9.20	\$ 275.08
<b>2.3</b>	<b>WALLING</b>				<b>\$ 4,925.00</b>
	<u>Damp proof Course</u>				
	<u>Three- ply bituminous felt damp proof course bedded in cement and sand (1:3) mortar (measured nett allow for 300mm laps):-</u>				
2.3.1	200mm wide	52.0	m	\$ 3.50	\$ 182.00
	<b>Walling</b>				
	<u>Solid blocks 200mm thick</u>				
2.3.2	200mm thick walls reinforced with two lines of hoop iron after every three courses	92.5	m2	\$ 40.00	\$ 3,700.00
2.3.3	50mm Concrete Window cill	18.2	m	\$ 25.00	\$ 455.00
2.3.4	Gable end with vent 600mm Ø	14.7	m2	\$ 40.00	\$ 588.00
<b>2.4</b>	<b>ROOF AND RAIN WATER DISPOSAL</b>				<b>\$ 18,430.35</b>
	<u>Roof Construction</u>				
	<u>Structural steelwork grade 4.3C (factory primed) to be executed by an approved sub-contractor.</u>				
2.4.1	50 x 50 x 3mm Bottom chord, welded to the top of column	53.0	m	\$ 10.00	\$ 530.00
2.4.2	50 x 50 x 3mm Top chord/rafters welded with 6mm fillet welds to 40 x 40 x 3mm RHS internals (RHS internals measured separately)	56.0	m	\$ 10.00	\$ 560.00
2.4.3	40 x 40 x 3mm SHS internals welded with 6mm fillet welds to 50 x 50 x 3mm Bottom/top chords (Bottom and Top chords measured separately)	80.0	m	\$ 8.00	\$ 640.00
2.4.4	40x40x3mm RHS section bracings welded to trusses at each intersection; including necessary drilling holes welding/bolts and washers	55.1	m	\$ 8.00	\$ 440.80
2.4.5	100 x 50 x 2mm thick Z-purlins securely fixed onto the steel trusses (MS) including all the welding, straining, surface preparation and hoisting into position.	208.8	m	\$ 15.00	\$ 3,132.00
2.4.6	16mm diam anchor bolts L=250 to be welded on steel reinforcement	40.0	Nr	\$ 18.00	\$ 720.00
2.4.7	150x150x8mm plate (fillet weld of 6mm thick) welded to the truss and column	14.0	Nr	\$ 18.00	\$ 252.00
	<u>Roof Covering</u>				
2.4.8	Supplying & fixing of gauge 28 pre-painted Super Five IT4 profiled roofing sheets ( 0.5mm ) of approved colour: fixed with J-bolts to 100 x 50 x 2mm zed purlins ( measured separately) and rubber capping to tops of bolts	194.9	m2	\$ 20.00	\$ 3,898.00

2.4.9	Supplying & fixing of an approved heat insulation layer fixed to purlins according to manufacturer's specifications.	194.9	m2	\$ 9.50	\$ 1,851.55
2.4.10	Supplying & fixing Gauge 28 prepainted ridge cap; 650mm girth (average) in position complete with all necessary roofing screws or hooks as required.	17.4	m	\$ 10.00	\$ 174.00
	<i>Valance / Barge Board</i>				
2.4.11	25x225mm high timber valance board / barge board bolted to 100 x 100 x 8mm thick mild steel plate with 4 No 12mm diameter bolts : plates welded to edges of rafters: all complete with approved wood preservative as specified and as per Drawing.	46.0	m	\$ 15.00	\$ 690.00
	<b>Rain Water Disposal</b>				
	<i>Supply and fix rain water system to manufacturer's instructions.</i>				
2.4.12	250x350 GMS 2mm thick gutter with its accessories and fittings	34.80	m	\$ 15.00	\$ 522.00
2.4.13	Rainwater outlets with nozzle for 100mm rainwater down pipe outlet.	3.00	Nr	\$ 20.00	\$ 60.00
2.4.14	10000L Plastic tank including plumbing work (pipe connections and taps)	1.00	lump sum	\$ 1,500.00	\$ 1,500.00
2.4.15	Water tank concrete plinth construction including supply and installation of all materials and labour	1.00	lump sum	\$ 2,000.00	\$ 2,000.00
2.4.16	Soak pit construction including supply and installation of all materials and labour	1.00	lump sum	\$ 1,000.00	\$ 1,000.00
2.4.17	Storm water drainage	46.00	m	\$ 10.00	\$ 460.00
<b>2.5</b>	<b>DOORS AND WINDOWS</b>				<b>\$ 9,890.50</b>
	<i>Note: All doors to be supplied and fixed as per the details and schedule provided. All iron Mongery that has not been measured separately shall be priced together with the corresponding door.</i>				
	<i>Door Shutter</i>				
2.5.1	Steel doors to fit structural opening size 950mm x 2700mm high: RHS steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint, 180D Opening, 0.5mm casement metal pane, with Buglar proofing with RHS 25mm x 25mm x 2mm Vertical steel bars at equal intervals welded to frames on the exterior side. Ironmongry stainless steel pull-push bar handle, 0.5mm thick steel louvers at top welded to RHS frame. Louver to be covered with approved mosquito net.	2.0	Nr	\$ 450.00	\$ 900.00
	<i>Painting and Decorating</i>				
	<i>Prepare and apply two coats of brown rust inhibiting primer finished with two coats of white matt oil paint on metal:-</i>				
2.5.2	Surfaces steel plated doors and steel frames	10.3	m2	\$ 7.00	\$ 72.10
	<b>WINDOWS</b>				
	<i>Purpose made steel casement windows manufactured from standard strong Z sections: manufacture, assemble and deliver to site: Supply and fix ironmongery comprising approved hinges, stays, fasteners to opening lights: frames drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery.</i>				
	<i>Supply and fix the following</i>				
2.5.3	W1. 1200x1600mm. door Frame material is LTZ steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint glazed with 5mm thick clear glass. Bugler proofing is RHS 25 X 25 X 2 mm steel bars welded to frames at equal spacing behind glazings on the interior side and 0.5mm thick steel louvers welded to RHS frame. Louver to be covered with approved mosquito net. Ironmongry stainless steel pull-push bar handle	14.0	Nr	\$ 300.00	\$ 4,200.00
2.5.4	Burglar proofing grille comprising 12mm high yield tensile bars 150mm centres vertical and 300mm centres horizontal in cobweb pattern having one coat of red oxide primer to fit the above window sizes.	380.8	m	\$ 8.00	\$ 3,046.40
2.5.5	Iron Mongery and matching fixing	14.0	Nr	\$ 18.00	\$ 252.00
2.5.6	Fastener	14.0	Nr	\$ 18.00	\$ 252.00
2.5.7	Stay	14.0	Nr	\$ 18.00	\$ 252.00
	<i>Ordinary quality(OQ) clear sheet glass and glazing</i>				
2.5.8	4mm glass: glazing to metal casement panes 0.1-0.5mm2 with tropical glazing putty	22.9	m2	\$ 40.00	\$ 916.00
<b>2.6</b>	<b>ELECTRICAL INSTALLATIONS</b>				<b>\$ 950.00</b>
	<b>Earthing</b>				
2.2.1	Supply and install Earthing of DC installation at the combiner box on the roof comprising of 25sq.mm SC PVC insulated copper cable from the roof to copper earth electrode of size 1200mm long x15mm diameter enclosed by a concrete manhole of size 300x300x200mm with removable cover	1.0	Lumpsum	\$ 700.00	\$ 700.00
	<b>TESTING &amp; COMMISSIONING</b>				
2.2.2	Allow for testing and commissioning for earthing installations system	1.0	Lumpsum	\$ 250.00	\$ 250.00
<b>2.7</b>	<b>FINISHES</b>				<b>\$ 9,773.68</b>
	<i>Floor Finishes: Cement and sand (1:3) screeds and pavings: one coat: steel trowel finish: laid on concrete</i>				
2.7.1	50mm thick screeding.	141.9	m2	\$ 17.25	\$ 2,447.78
2.7.2	External wall finishes: Cement and sand(1:4)				
2.7.3	15mm thick to walls and concrete surfaces	108.8	m2	\$ 17.25	\$ 1,876.80
2.7.4	300mm x 10mm rendered skirt	57.8	m	\$ 7.00	\$ 404.60
	<i>walls</i>				

	<u>Prepare surfaces: apply three coats weather guard emulsion paint:</u>				
2.7.5	Rendered surfaces: walls	108.8	m2	\$ 7.00	\$ 761.60
	Skirt				
	<u>Prepare surfaces: apply three coats bituminous paint:</u>				
2.7.6	Skirt	57.8	m	\$ 7.00	\$ 404.60
	<u>Internal Wall finishes Cement/lime putty/sand(1:2:9)</u>				
2.7.7	15mm plaster to: walls and concrete surfaces: steel trowelled smooth	113.2	m2	\$ 17.25	\$ 1,952.70
2.7.8	Prepare surfaces: apply three coats vinyl silk soft white emulsion paint: on steel trowelled plaster: to Skirting	57.8	m	\$ 7.00	\$ 404.60
	<b>FITTINGS &amp; FIXTURES</b>				
	<u>The following in 4 No. Pin boards each classroom size as directed by the Engineer</u>				
2.7.9	15mm thick 'cellotex, soft board (in 3 No.)	15.2	m2	\$ 10.00	\$ 152.00
2.7.10	25 x 50mm beading to edges of pin boards	24.0	m	\$ 5.00	\$ 120.00
2.7.11	Prepare and apply one under coat and two coats of emulsion paint : on	22.8	m2	\$ 10.00	\$ 228.00
2.7.12	General surfaces: soft board lining	14.6	m	\$ 5.00	\$ 73.00
2.7.13	Knot prime and stop and apply three gloss oil paint to timber surfaces not exceeding 100mm girth.	15.2	m2	\$ 15.00	\$ 228.00
2.7.14	Surfaces 25 x 50mm girth: edge trim	24.0	m	\$ 5.00	\$ 120.00
2.7.15	The following in blackboards: size 3m x 1.2m high (in 1 No)	7.2	m2	\$ 15.00	\$ 108.00
2.7.16	20mm thick internal lime plaster to walls internally	14.4	m2	\$ 15.00	\$ 216.00
2.7.17	Prepare and apply three coats of black bit mastic paint to blackboard surfaces	21.6	m2	\$ 10.00	\$ 216.00
2.7.18	Knot prime and stop and apply three gloss oil paint to timber surfaces not exceeding 100mm girth.	12.0	m	\$ 5.00	\$ 60.00
<b>2.8</b>	<b>CLASSROOM FURNITURE</b>				<b>\$ 10,000.00</b>
	<u>Furniture supply, as laid out in drawings. Contractor to provide shop drawings or manufacturer specifications for approval by Engineer</u>				
2.8.1	Student desk and bench, Desk size 120x40cm surface, 75cm high; Bench size 120x28cm seating area, 50cm high	48.00	Nr	\$ 200.00	\$ 9,600.00
2.8.2	Teacher's table, Desk size 150x75 cm surface, 75cm high	2.00	Nr	\$ 100.00	\$ 200.00
2.8.3	Teacher's chair, wood or metal	2.00	Nr	\$ 100.00	\$ 200.00
<b>BILL NO.3</b>	<b>BOQ- CONSTRUCTION OF WOMEN RESOURCE CENTER BLOCK, ABON-2 AND WAUKOK VILLAGE</b>				<b>\$ 107,528.93</b>
<b>3.1</b>	<b>SUBSTRUCTURE</b>				<b>\$ 38,394.25</b>
	<b>Excavation and Earthworks</b>				
3.1.1	Site clearance and removal of debris from site as directed	152.0	m2	\$ 5.00	\$ 760.00
3.1.2	Excavate to remove loose top soil not exceeding 0.3 meters deep and cart away as directed	152.0	m2	\$ 10.00	\$ 1,520.00
3.1.3	Excavate in soft material for foundation trenches not exceeding 1.5m deep starting from stripped level	57.0	m3	\$ 15.00	\$ 855.00
3.1.4	Ditto: Column bases	29.0	m3	\$ 15.00	\$ 435.00
	<b>Backfilling</b>				
3.1.5	Return, fill in and ram selected excavated material around foundations	49.0	m3	\$ 10.00	\$ 490.00
	<b>Disposal of Surplus spoils</b>				
3.1.6	Load and cart away surplus material from site to an approved dumping site	52.0	m3	\$ 8.00	\$ 416.00
	<b>Crushed stone fill</b>				
3.1.7	200mm thick hardcore (crushed stone)	21.0	m3	\$ 50.00	\$ 1,050.00
	<b>Imported filling</b>				
3.1.8	min 500mm thick compacted selected fill to grade	52.0	m3	\$ 25.00	\$ 1,300.00
3.1.9	Ditto to ramps	2.0	m3	\$ 25.00	\$ 50.00
3.1.10	Ditto to Splash apron	15.0	m3	\$ 25.00	\$ 375.00
	Anti-termite treatment				
3.1.11	TERMIDOR' or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	103.0	m2	\$ 2.00	\$ 206.00
3.1.12	Ditto to ramps	5.0	m2	\$ 2.00	\$ 10.00
	<b>Damp Proofing</b>				
3.1.13	1000 gauge polythene sheet damp proof membrane: to floors: laid on blinded smooth finished hardcore bed with 300mm side and end laps to receive concrete floor bed (m/s) - measured net with no allowance for overlaps	103.0	m2	\$ 3.50	\$ 360.50
3.1.14	Ditto to ramps	13.0	m2	\$ 3.50	\$ 45.50
	<b>Concrete work in substructure</b>				
3.1.15	<u>Plain concrete class 15 (mix 1:3:6)</u>				
3.1.16	50mm Thick surface blinding under foundations	2.0	m3	\$ 322.00	\$ 644.00
3.1.17	Ditto: Under column bases	1.0	m3	\$ 322.00	\$ 322.00
	<u>In Situ concrete class 25, vibrated and reinforced as described, in:-</u>				
3.1.18	Strip Footing	10.0	m3	\$ 460.00	\$ 4,600.00
3.1.19	Column bases	5.0	m3	\$ 460.00	\$ 2,300.00
3.1.20	Columns in foundations	0.9	m3	\$ 460.00	\$ 414.00
3.1.21	Ground beam (200x300)mm	3.7	m3	\$ 460.00	\$ 1,702.00
3.1.22	Ramp	1.3	m3	\$ 460.00	\$ 598.00
3.1.23	100mm thick ground floor slab (class & Verandah) C-25 concrete	10.0	m3	\$ 460.00	\$ 4,600.00

3.1.24	600mm wide stone chipping aggregates Splash Apron 1:4 cement Sand ration	3.0	m3	\$	280.00	\$	840.00
	<b>Reinforcement</b>						
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>						
3.1.25	8mm diameter bars	143.0	kg	\$	3.45	\$	493.35
3.1.26	12mm diameter bars	835.0	kg	\$	4.50	\$	3,757.50
	<u>Mesh reinforcement ; B.S. 4483 weighing 2.22 kgs per square meter including bends, tying wire and spacing blocks</u>						
3.1.27	Fabric mesh reinforcement to ground floor slab	103.0	m2	\$	12.00	\$	1,236.00
3.1.28	Ditto to ramps	13.0	m2	\$	12.00	\$	156.00
	<b>Sawn formwork to:</b>						
3.1.29	Vertical sides of foundations footing	19.0	m2	\$	9.20	\$	174.80
3.1.30	Vertical sides of column bases	16.0	m2	\$	9.20	\$	147.20
3.1.31	Vertical sides of columns	17.5	m2	\$	9.20	\$	161.00
3.1.32	Edges of 100mm high ground floor slab	5.0	m2	\$	9.20	\$	46.00
3.1.33	Edges of 150mm high ramps	4.5	m2	\$	9.20	\$	41.40
	<b>Foundation walling</b>						
	<u>Solid concrete block walling (mix 1:3:6); with minimum comprehensive strength of 7.0N/mm2 bedded and jointed in cement sand (1:3) mortar; reinforced with gauge 20 hoop iron after every alternate course.</u>						
3.1.34	200mm thick walls	117.0	m2	\$	40.00	\$	4,680.00
	<b>Plinths</b>						
3.1.35	12 mm thick cement : sand (1:3) plaster to plinth	164.0	m2	\$	15.00	\$	2,460.00
3.1.36	Prepare and apply one priming coat and two coats of black bitumastick paint on rendered plinths	164.0	m2	\$	7.00	\$	1,148.00
<b>3.2</b>	<b>STRUCTURAL FRAME</b>					\$	<b>8,152.00</b>
	<u>Concrete work in superstructure- In Situ concrete class 25, vibrated and reinforced as described, in:-</u>						
3.2.1	Column (200x200)mm	2.0	m3	\$	460.00	\$	920.00
3.2.2	Ring beam (200x200)mm	3.0	m3	\$	460.00	\$	1,380.00
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>						
3.2.3	8mm diameter bars	930.0	kg	\$	3.45	\$	3,208.50
3.2.4	12mm diameter bars	475.0	kg	\$	4.50	\$	2,137.50
	<b>Sawn formwork</b>						
3.2.5	Vertical sides of Columns	27.0	m2	\$	9.20	\$	248.40
3.2.6	Ring beam and soffits	28.0	m2	\$	9.20	\$	257.60
	<b>WALLING</b>					\$	<b>8,090.80</b>
	Damp proof Course						
	<u>Three- ply bituminous felt damp proof course bedded in cement and sand (1:3) mortar (measured net allow for 300mm laps):-</u>						
3.2.7	200mm wide	64.0	m	\$	3.50	\$	224.00
	<b>Walling</b>						
	<u>Solid blocks 200mm thick</u>						
3.2.8	200mm thick walls reinforced with two lines of hoop iron after every three courses	156.0	m2	\$	40.00	\$	6,240.00
3.2.9	150mm thick partition walls	18.0	m2	\$	35.00	\$	630.00
3.2.10	50mm Concrete Window sill	12.0	m	\$	25.00	\$	300.00
3.2.11	20 SWG Hoop Iron wall tie 25mm wide x 450mm long cast 75mm into concrete and built into joint of block walling.	60.0	Item	\$	5.00	\$	300.00
3.2.12	Gable end with vent 600mm Ø	9.9	m2	\$	40.00	\$	396.80
<b>3.3</b>	<b>ROOF AND RAIN WATER DISPOSAL</b>					\$	<b>18,630.10</b>
	<u>Roof Construction</u>						
	<u>Structural steelwork grade 4.3C (factory primed) to be executed by an approved sub-contractor.</u>						
3.3.1	50 x 50 x 3mm Bottom chord, welded to the top of column	36.0	m	\$	10.00	\$	360.00
3.3.2	50 x 50 x 3mm Top chord/rafters welded with 6mm fillet welds to 40 x 40 x 3mm RHS internals (RHS internals measured separately)	47.0	m	\$	10.00	\$	470.00
3.3.3	40 x 40 x 3mm SHS internals welded with 6mm fillet welds to 50 x 50 x 3mm Bottom/top chords (Bottom and Top chords measured separately)	21.0	m	\$	8.00	\$	168.00
3.3.4	40x40x3mm RHS section bracings welded to trusses at each intersection; including necessary drilling holes welding/bolts and washers	39.0	m	\$	8.00	\$	312.00
3.3.5	100 x 50 x 2mm thick Z-purlins securely fixed onto the steel trusses (MS) including all the welding, straining, surface preparation and hoisting into position.	153.0	m	\$	15.00	\$	2,295.00
3.3.6	16mm diam anchor bolts L=250 to be welded on steel reinforcement	48.0	Nr	\$	18.00	\$	864.00
3.3.7	150x150x8mm plate (fillet weld of 6mm thick) welded to the truss and colum	12.0	Nr	\$	18.00	\$	216.00
	<b>Roof Covering</b>						
3.3.8	Supplying & fixing of gauge 28 pre-painted Super Five IT4 profiled roofing sheets ( 0.5mm ) of approved colour: fixed with roofing nails to 100 x 50 timber purlins ( measured separately) and rubber seals	160.0	m2	\$	20.00	\$	3,200.00



3.3.9	Supplying & fixing Gauge 28 prepainted ridge cap; 650mm girth (average) in position complete with all necessary roofing screws or hooks as required.	19.8	m	\$ 9.50	\$ 188.10
	<b><u>Valance / Barge Board</u></b>				
3.3.10	25x225mm high timber valance board / barge board nailed to 150 x 50mm timber rafters : all complete with approved wood preservative as specified and as per Drawing.	55.0	m	\$ 10.00	\$ 550.00
	<b><u>Rain Water Disposal</u></b>				
	<u>Supply and fix rain water system to manufacturer's instructions.</u>				
3.3.11	250 x 350 x 2mm galvanised metal sheet gutter welded on 40 x 25 x 2mm RHS; gutter sitting on 20 x 6mm thick metallic support bracket placed at 2000mm c/c	19.8	m	\$ 15.00	\$ 297.00
3.3.12	Extra over for shoe.	6	Nr	\$ 20.00	\$ 120.00
3.3.13	Ditto for rainwater outlets with nozzle for 80mm rainwater down pipe outlet.	16	Nr	\$ 20.00	\$ 320.00
	<b><u>Ceiling</u></b>				
3.3.14	Supply and fix 8x2ft, 24 gauge metal lath to suspended wooden timber truss and eave to construct ceiling, cost includes ceiling joists, branders and connections	103	m2	\$ 60.00	\$ 6,180.00
3.3.15	Apply 12mm thick pricking course of mortar mix 1:3 to ceiling metal lath	103	m2	\$ 30.00	\$ 3,090.00
<b>3.4</b>	<b>DOORS</b>				<b>\$ 3,234.10</b>
	<i>Note: All doors to be supplied and fixed as per the details and schedule provided. All iron Mongery that has not been measured separately shall be priced together with the corresponding door.</i>				
	<b><u>Door Shutter</u></b>				
3.3.1	Steel doors D1 to fit structural opening size 1200mm x 2500mm high: RHS steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint, 180D Opening, 0.5mm casement metal pane, with Burglar proofing with RHS 25mm x 25mm x 2mm Vertical steel bars at equal intervals welded to frames on the interior side. Ironmongery stainless steel pull-push bar handle, 0.5mm thick steel louvers at top welded to RHS frame. Louver to be covered with approved mosquito net.	1.0	Nr	\$ 460.00	\$ 460.00
3.3.2	Hard wooden doors D2 to fit structural opening size 1200mm x 2100mm high: RHS steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint, 180D Opening, 0.5mm casement metal pane, with Burglar proofing with RHS 25mm x 25mm x 2mm Vertical steel bars at equal intervals welded to frames on the interior side. Ironmongery stainless steel pull-push bar handle, 0.5mm thick	1	Nr	\$ 345.00	\$ 345.00
3.3.3	Hard wooden door D3 to fit structural opening size 900mm x 2100mm high: RHS steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint, 180D Opening, 0.5mm casement metal pane, with Burglar proofing with RHS 25mm x 25mm x 2mm Vertical steel bars at equal intervals welded to frames on the interior side. Ironmongery stainless steel pull-push bar handle, 0.5mm thick	4		\$ 345.00	\$ 1,380.00
3.3.4	Steel doors D4 to fit structural opening size 900mm x 2500mm high: RHS steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint, 180D Opening, 0.5mm casement metal pane, with Burglar proofing with RHS 25mm x 25mm x 2mm Vertical steel bars at equal intervals welded to frames on the interior side. Ironmongery stainless steel pull-push bar handle, 0.5mm thick steel louvers at top welded to RHS frame. Louver to be covered with approved mosquito net.	2.0		\$ 345.00	\$ 690.00
	<b><u>Painting and Decorating</u></b>				
	<u>Prepare and apply two coats of brown rust inhibiting primer finished with two coats of white matt oil paint on metal:-</u>				
3.3.5	Surfaces steel plated doors and steel frames	51.3	m2	\$ 7.00	\$ 359.10
<b>3.5</b>	<b>WINDOWS</b>				<b>\$ 4,388.00</b>
	<i>Purpose made steel casement windows manufactured from standard strong Z sections: manufacture, assemble and deliver to site: Supply and fix ironmongery comprising approved hinges, stays, fasteners to opening lights: frames drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery.</i>				
	<b><u>Supply and fix the following</u></b>				
3.5.1	W1. 900x1800mm. door Frame material is LTZ steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint glassed with 4mm thick clear glass. Bugler proofing is RHS 25 X 25 X 2 mm steel bars welded to frames at equal spacing behind glazing on the interior side and 0.5mm thick steel louvers welded to RHS frame. Louver to be covered with approved mosquito net. Ironmongery stainless steel pull-push bar handle	12	Nr	\$ 325.00	\$ 3,900.00
	<b><u>Ordinary quality(OQ) clear sheet glass and glazing</u></b>				
3.5.2	4mm glass: glazing to metal casement panes 0.1-0.5mm2 with tropical glazing putty	12.2	m2	\$ 40.00	\$ 488.00
<b>3.6</b>	<b>FINISHES</b>				<b>\$ 14,009.18</b>
	<b><u>Floor Finishes</u></b>				
	<u>Cement and sand (1:3) screeds and paving: one coat: steel trowel finish: laid on concrete</u>				
3.2.1	50mm thick screeding.	103	m2	\$ 17.25	\$ 1,776.75
	<b><u>External wall finishes</u></b>				
	<u>Cement and sand(1:4)</u>				
3.2.2	15mm thick to walls and concrete surfaces	145.7	m2	\$ 17.25	\$ 2,513.33
3.2.3	300mm x 10mm rendered skirt	72.8	m	\$ 7.00	\$ 509.60

	<b>walls</b>				
	<i>Prepare surfaces: apply three coats weather guard emulsion paint;</i>				
3.2.4	Rendered surfaces: walls	145.7	m2	\$ 7.00	\$ 1,019.90
	<b>Skirt</b>				
	<i>Prepare surfaces: apply three coats bituminous paint;</i>				
3.2.5	Skirt	72.8	m	\$ 7.00	\$ 509.60
	<b>Internal Wall finishes Cement/lime putty/sand(1:2:9)</b>				
3.2.6	15mm plaster to: walls and concrete surfaces: steel trowelled smooth	236	m2	\$ 17.25	\$ 4,071.00
3.2.7	Prepare surfaces: apply three coats vinyl silk soft white emulsion paint: on steel trowelled plaster: to plastered surface	236	m2	\$ 7.00	\$ 1,652.00
	<b>Ceiling finishes</b>				
3.2.8	Apply 15mm thick c/s plaster of mix 1:3 to ceiling soffit	103	m2	\$ 12.00	\$ 1,236.00
3.2.9	Prepare and apply one undercoat and 2 finishing coats of matt paint to protect ceiling soffit	103	m2	\$ 7.00	\$ 721.00
<b>3.7</b>	<b>ELECTRICAL INSTALLATION</b>				<b>\$ 6,399.00</b>
	<b>Lightning Protection</b>				
3.7.1	Supply and install 25 mm x 3 mm bare copper tape conductor as Furse or approved equivalent complete with metallic DC tape clip, wall plugs, fixing screws and other necessary accessories	15	Lm	\$ 100.00	\$ 1,500.00
3.7.2	Supply and install 1500 mm long multiple air terminal complete with terminal base as Furse or approved equivalent and all necessary accessories	1	Nr	\$ 250.00	\$ 250.00
3.7.3	Supply and install screw down test clamps as Furse or approved equivalent and all necessary accessories	1	Nr	\$ 100.00	\$ 100.00
3.7.4	Supply and install 16 mm x 1200 mm long copper earth rod complete with spike, driving stud, dowel clamps as Furse or approved equivalent and all necessary accessories	1	Nr	\$ 120.00	\$ 120.00
3.7.5	Supply and install copper earth 300mm x 300mm mast complete with trenching in black cotton soil /soft rock, earth termination pits, marconite backfill, backfilling, reinstatement of ground to meet the requirements of the technical specifications	1	Nr	\$ 100.00	\$ 100.00
3.7.6	Supply and install concrete inspection pit complete with waterproof cover for earth test / rod inspections and all other necessary accessories	1	Nr	\$ 150.00	\$ 150.00
3.7.7	Allow for testing and commissioning for the lightning protection and grounding system	1	Sum	\$ 150.00	\$ 150.00
	<b>Earthing</b>				
	<i>Rates inclusive of supply and installation of all accessories for earthing.</i>				
3.7.8	Excavation of 400x400x400mm concrete pit, cost shall include concrete cover, coupling gravel etc.	1	Nr	\$ 175.00	\$ 175.00
3.7.9	Supply and drive copper rod 16mm diameter, 1.5m deep	1	Nr	\$ 115.00	\$ 115.00
3.7.10	Copper conductor 1x6mm2	5	m	\$ 15.00	\$ 75.00
3.7.11	Extra over to earth connection - driving stud	1	Nr	\$ 20.00	\$ 20.00
3.7.12	Allow for testing and commissioning for earthing installations system	1	Lumpsum	\$ 250.00	\$ 250.00
	<b>Conduit work</b>				
	<i>Supply and installation of upvc electrical conduits for passage of wires in walls and ceiling, rates inclusive of wall chiselling</i>				
3.7.13	25mm conduits	86	m	\$ 3.50	\$ 301.00
3.7.14	Extra over to corners (bents 25mm)	15	Nr	\$ 23.00	\$ 345.00
3.7.15	Couplers 25mm	10	Nr	\$ 30.00	\$ 300.00
3.7.16	Circular boxes 25mm	18	Nr	\$ 7.00	\$ 126.00
3.7.17	Metallic MK boxes (Double)	6	Nr	\$ 9.50	\$ 57.00
3.7.18	Metallic MK boxes (Single)	6	Nr	\$ 12.00	\$ 72.00
3.7.19	Supply and installation of main switch 4-way (MCB) 16A	1	Nr	\$ 600.00	\$ 600.00
	<b>Wiring work</b>				
	<i>Supply and installation of insulated twin cables in conduits, twin cable.</i>				
3.7.20	Load cable, 16mm2 (single)	18	m	\$ 15.00	\$ 270.00
3.7.21	Power cable 2.5mm2	100	m	\$ 5.00	\$ 500.00
3.7.22	Light cables 2.5mm2	150	m	\$ 3.00	\$ 450.00
	<b>Fittings</b>				
	<i>Supply and fit fittings approved by the client or client's representative</i>				
3.7.23	Florescent fixture complete with lamp , electronic ballast 2x30w, 2350lm	11	Nr	\$ 12.00	\$ 132.00
3.7.24	Double switch 220V ac, 10A/1P mounted 1.4@AFFL	4	Nr	\$ 17.25	\$ 69.00
3.7.25	Single switch 220V ac, 10A/1P mounted 1.4@AFFL	4	Nr	\$ 9.00	\$ 36.00
3.7.26	16A single socket outlet with 3x2.5mm2 fixed above 40cm	4	Nr	\$ 10.00	\$ 40.00
3.7.27	16A double socket outlet with 3x2.5mm2 fixed above 40cm	4	Nr	\$ 8.00	\$ 32.00
3.7.28	Supply, install and connect ceiling fan points comprising 3x1.5 sq.mm PVC single core copper cables, in HG PVC conduits, together with raw-bolt anchored on the roof tie beam	4	Nr	\$ 7.00	\$ 28.00
3.7.29	Supply and install Ceiling fans complete with controller as Xplair or equal and approved	4	Nr	\$ 9.00	\$ 36.00
<b>3.8</b>	<b>WATER SUPPLY AND FIXTURES</b>				<b>\$ 6,231.50</b>
	<i>Supply, install, connect and set to work the following, all described in the specifications and drawings</i>				



3.8.1	Supply and installation of 10,000 liters plastic water tank installed to harvest rain roof water, cost to include connection accessories, piping work and elevated platform with and including 0.75mm tap and valves.	1	Nr	\$	3,000.00	\$	3,000.00
	<b>FITTINGS &amp; FIXTURES</b>						
	<i>The following for a pin board (size 80x60 cm)</i>						
3.8.2	15mm thick 'celotex, soft board, placed in 3 layers, painted with one under coat and one coat of emulsion paint in white	0.25	m2	\$	110.00	\$	27.50
3.8.3	25 x 50mm timber edge trim to edges of pin boards, one under coat and two coat of emulsion paint in white	1.40	m	\$	10.00	\$	14.00
	<b>Railings</b>						
3.8.4	Handrails for length of ramps on both sides, CHS 50mm dia. and 2.5 mm thickness, painted with 2 coats of antirust paint and 1 coat of enamel paint	2	Pair	\$	300.00	\$	600.00
	<b>FURNITURE</b>						
	<i>Furniture supply. Contractor to provide shop drawings or manufacturer specifications for approval by Engineer.</i>						
3.8.5	Supply a cabinet storage shelf 400mm wide, 1200mm length and 2000mm height	2.00	Nr	\$	300.00	\$	600.00
3.8.6	Plastic chair, stackable, for adults	30.00	Nr	\$	60.00	\$	1,800.00
3.8.7	Plastic square table	2.00	Nr	\$	95.00	\$	190.00
<b>BILL NO.4</b>	<b>BOQ - CONSTRUCTION OF 1 BLOCK OF 4 STANCES LATRINE WITH WASH ROOM ATTACHED FOR GIRLS AT WOMEN RESOURCE CENTER, ABON-2 AND WAUKOK VILLAGE</b>					<b>\$</b>	<b>41,059.55</b>
<b>4.1</b>	<b>SUBSTRUCTURE</b>					<b>\$</b>	<b>22,487.80</b>
	<b>Excavation and Earthworks</b>						
4.1.1	Site clearance and removal of debris from site as directed (10m by 6m)	74.00	m2	\$	3.00	\$	222.00
4.1.2	Excavate loose top soil average 200 deep from ground level and wheel and deposit on site as directed	74.00	m2	\$	5.00	\$	370.00
4.1.3	Manual-Mass excavation for latrine pit not exceeding 1.5m deep starting from Ground level	24.60	m3	\$	10.00	\$	246.00
4.1.4	Ditto exceeding 1.5-3.0m depth starting from stripped level	24.60	m3	\$	10.00	\$	246.00
4.1.5	Excavate in soft material for foundation trenches and column bases not exceeding 1.8m depth starting from stripped level and 60 cm wide	23.60	m3	\$	10.00	\$	236.00
4.1.6	Excavate in soft material for ramp trenches not exceeding 600mm depth	8.64	m3	\$	10.00	\$	86.40
<b>4.2</b>	<b>Disposal of surplus spoils</b>						
4.2.1	Load and cart away surplus material from site to an approved dumping site	100.20	m3	\$	5.00	\$	501.00
<b>4.2</b>	<b>Selected filling</b>						
4.2.1	200mm Thick hardcore fillings compacted in layers not exceeding 100mm deep and well watered under lobby ground slab and ramps	9.24	m3	\$	70.00	\$	646.80
4.2.2	500mm Thick compacted selected fill to grade natural soil	14.09	m3	\$	70.00	\$	986.30
	<b>Damp proof membrane</b>						
4.2.3	1000 gauge polythene or other equal and approved damp proof membrane laid under surface bed with 300mm side and end laps (measured net- allow for laps)	57.87	m2	\$	2.00	\$	115.74
	<b>Concrete work in substructure</b>						
	<i>Plain concrete class 10 (mix 1:3:6)</i>						
4.2.4	50mm Thick surface blinding under strip foundation and bottom pit	1.43	m3	\$	280.00	\$	400.40
4.2.5	Ditto for columns bases	0.22	m3	\$	280.00	\$	60.48
4.2.6	Ditto for ramps	0.72	m3	\$	280.00	\$	201.60
	<i>Insitu concrete class 25/20, vibrated and reinforced as described, in:-</i>						
4.2.7	Foundation strip (250mm thick)	2.42	m3	\$	360.00	\$	871.20
4.2.8	Pit foundation beams (200mm thick)	1.03	m3	\$	360.00	\$	370.80
4.2.9	Column Bases (250mm thick)	0.72	m3	\$	360.00	\$	259.20
4.2.10	Columns (substructure)	0.96	m3	\$	360.00	\$	345.60
4.2.11	150mm thick ground floor slab over the pit and 100mm on the walk way	4.41	m3	\$	360.00	\$	1,587.60
4.2.12	Ground beams (300mm thick by 200mm wide)	2.59	m3	\$	360.00	\$	932.40
4.2.13	Ramp (minimum 100mm thick)	2.88	m3	\$	360.00	\$	1,036.80
4.2.14	100mm thick bottom pit slab of concrete reinforced with mesh	1.90	m3	\$	360.00	\$	684.00
	<b>Reinforcement for Substructure</b>						
	<i>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</i>						
4.2.15	8 mm diameter bars	162.62	kg	\$	3.00	\$	487.86
4.2.16	10 mm diameter bars	459.33	kg	\$	3.50	\$	1,607.66
4.2.17	12 mm diameter bars	563.61	kg	\$	4.00	\$	2,254.44
	<i>Mesh reinforcement ; B.S. 4483 Ref A142 weighing 3.22 kgs per square meter including bends, tying wire and spacing blocks</i>						
4.2.18	Fabric mesh reinforcement for ground floor, ramp and bottom pit slab	32.74	m2	\$	5.00	\$	163.70
	<b>Sawn formwork to:-</b>						
4.2.19	Horizontal sides of pit foundation beam	11.82	m2	\$	8.00	\$	94.56
4.2.20	Horizontal sides of foundation strip	4.03	m2	\$	8.00	\$	32.24
4.2.21	Horizontal sides of ground beams and floor slabs	35.71	m2	\$	8.00	\$	285.68
4.2.22	Edge of ramps	5.28	m2	\$	8.00	\$	42.24
	<b>Foundation Walling</b>						

	<u>Solid concrete block walling (mix 1:3:6); bedded, load bearing 7N/mm², jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.</u>				
4.2.23	200mm Thick walling for pit	75.90	m2	\$ 30.00	\$ 2,277.00
4.2.24	200mm thick plinth	37.03	m2	\$ 30.00	\$ 1,110.90
	<b>Damp proof course</b>				
4.2.25	1200 gauge polythene or other equal and approved damp proof membrane laid under 150mm thick walls	51.10	m	\$ 3.00	\$ 153.30
4.2.26	Ditto: Ramp	12.50	m2	\$ 3.00	\$ 37.50
	<b>Plastering and Painting</b>				
4.2.27	12 mm thick cement : sand (1:3) plaster to walling	218.96	m2	\$ 15.00	\$ 3,284.40
	<b>Sundries</b>				
4.2.28	Allow for making squat hole openings in 150 mm slab	3.00	nr	\$ 50.00	\$ 150.00
4.2.29	Ditto for making 600 x600 mm openings in 150 mm slab for manhole.	1.00	nr	\$ 100.00	\$ 100.00
<b>4.3</b>	<b>SUPERSTRUCTURE - 1 block of latrine with 4 stances and washroom attached for girls</b>				<b>\$ 6,090.77</b>
	<b>Reinforced Concrete</b>				
	<u>Insitu concrete class 25/20 , vibrated and reinforced as described, in:-</u>				
4.4.1	Ring beam	2.31	m3	\$ 360.00	\$ 831.60
4.4.2	Columns (superstructure)	0.61	m3	\$ 360.00	\$ 218.70
	<b>Reinforcement</b>				
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks.</u>				
4.4.3	8 mm diameter bars	117.97	kg	\$ 3.00	\$ 353.91
4.4.4	12 mm diameter bars	352.81	kg	\$ 4.00	\$ 1,411.24
	<b>Formwork</b>				
	<u>Formwork in sawn finish at any level to:-</u>				
4.4.5	Sides and soffits of ring beams	30.66	m2	\$ 8.00	\$ 245.28
4.4.6	Columns	18.63	m2	\$ 8.00	\$ 149.04
	<b>Walling</b>				
	<u>Solid concrete block walling (mix 1:3:6); bedded, load bearing 7N/mm², jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.</u>				
4.4.7	150mm Thick walls for toilet and curtain	115.24	m2	\$ 25.00	\$ 2,881.00
<b>4.4</b>	<b>ROOF AND RAIN WATER DISPOSAL - 1 block of latrine with 4 stances and washroom attached for girls</b>				<b>\$ 4,015.78</b>
	<u>Contractor to allow for hoisting and all angle brackets or gusset plates, bolts, cleats, fish tailing lugs, drilling holes and the likes for fixing members to position as per the details provided.</u>		Note		
	<b>Roof Construction</b>				
	<u>Unframed mild steel including hoisting and fixing in position and including drilling holes, all necessary welding, bolts plates/gusset plates and other jointing whether or not specifically described herein or shown on the drawing and with one coat of red oxide primer after erection. (see the drawings)</u>				
4.4.1	100 x 50 x 2mm thick Z-purlins securely fixed onto the steel trusses (MS) at 900mm c/c spacing including all the welding, straining, surface preparation and hoisting into position	41.80	m	\$ 5.00	\$ 209.00
4.4.2	16mm diam anchor bolts L=250 to be welded on steel	12.00	Nr	\$ 10.00	\$ 120.00
4.4.3	240x150x6mm plate (fillet weld of 6mm thick) welded to the truss and column	12.00	Nr	\$ 10.00	\$ 120.00
4.4.4	100x60x3mm RHS Rafter including all the welding, straining, surface preparation and hoisting into position	20.90	m	\$ 5.00	\$ 104.48
	<b>Roof Covering</b>				
4.4.5	Supplying & fixing of gauge 28 pre-painted Super Five IT4 profiled roofing sheets ( 0.5mm ) of approved colour: fixed with J-bolts to 100 x 50 x 2mm zed purlins ( measured separately) and rubber capping to tops of bolts	57.32	m2	\$ 15.00	\$ 859.80
4.4.6	250x350 GMS 2mm thick gutter	20.90	m	\$ 10.00	\$ 209.00
4.4.7	Rainwater outlets with nozzle for 100mm rainwater down pipe outlet.	2.00	Nr	\$ 8.00	\$ 16.00
4.4.8	1000L Plastic tank including plumbing work (pipe connections and taps)	1.00	lump sum	\$ 450.00	\$ 450.00
4.4.9	Water tank concrete plinth construction including supply and installation of all materials and labour	1.00	lump sum	\$ 1,200.00	\$ 1,200.00
4.4.10	Soak pit construction including supply and installation of all materials and labour	1.00	lump sum	\$ 600.00	\$ 600.00
4.4.11	Storm water drainage	25.50	m	\$ 5.00	\$ 127.50
<b>4.5</b>	<b>DOORS, WINDOWS, FINISHES, PLUMBING - 1 block of latrine with 4 stances and washroom attached for girls</b>				<b>\$ 8,465.20</b>
	<b>Doors</b>				
	<u>Note: All doors to be supplied and fixed as per the details and schedule provided. All iron Mongery that has not been measured separately shall be priced together with the corresponding door.</u>				
4.4.1	Door D1 90x237cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of antirust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	3.00	Nr	\$ 280.00	\$ 840.00

4.4.2	Door D2 100x237cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of antirust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	1.00	Nr	\$ 300.00	\$ 300.00
4.4.3	Door D3 100x170cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of antirust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	1.00	Nr	\$ 200.00	\$ 200.00
	<b>Louvers</b>				
4.4.4	600x400mm high windows, RHS steel frame 40x40x2mm painted with 2 coats of antirust paint & one coat of enamel paint with steel louvers	4.00	Nr	\$ 120.00	\$ 480.00
	<b>Finishes</b>				
	<b>Floor finishes</b>				
	<u>Insitu cement and sand (1:3) screed</u>				
4.4.5	50mm thick screed for floor and ramp	44.33	m2	\$ 15.00	\$ 664.95
	<b>Wall Finishes</b>				
	<u>Internal and external Walls: 12mm thick cement sand plaster, with steel trowelled finish, as described to:-</u>				
4.4.6	Internal wall plaster	107.77	m2	\$ 15.00	\$ 1,616.55
4.4.7	External wall plaster	64.86	m2	\$ 15.00	\$ 972.90
4.4.8	Wooden fascia board paint, 1 coat of emulsion under coat & 3 coats of oil based gloss white paint	31.35	m2	\$ 8.00	\$ 250.80
	<b>Miscellaneous</b>				
4.4.9	Manhole Cover (supply and form concrete for 600x600x10mm RC cover)	1.00	Nr	\$ 120.00	\$ 120.00
	<b>Plumbing installations</b>				
4.4.10	PSN Seat attached with handrails support, casted with concrete and finished with tiles (400mm x 300mm x 400mm).	1.00	Nr	\$ 400.00	\$ 400.00
4.4.11	Construct a masonry Drainage channel 1.2m long with channel width 0.15m having 1.2% slop and install shower head connected to the water supply with all the required accessories/fittings draining to a soak away pit	1.00	lump sum	\$ 1,500.00	\$ 1,500.00
4.4.12	Supply and install handwash basin and 50l water bucket with its drainage (refer to hand wash details on the drawing)	1.00	lump sum	\$ 600.00	\$ 600.00
4.4.13	Well finished squat hole with foot rest	3.00	Nr	\$ 60.00	\$ 180.00
4.4.14	Handrails for length of ramps (on both sides)	1.00	Pairs	\$ 200.00	\$ 200.00
4.4.15	Vent-pipe	4.00	Item	\$ 35.00	\$ 140.00
<b>BILL NO.5</b>	<b>CONSTRUCTION OF CHAIN LINK FENCE (50MX50M) WITH VEHICULAR GATE AT WOMEN RESOURCE CENTER, ABON-2 AND WAUKOK</b>				<b>\$ 25,251.75</b>
	<b>Notes:</b>				
	<u>1. Chainlink fence all around the site- Approx. 200 metres</u>				
	<u>2. 3,800mm wide x 2,000mm high vehicular gate with integral 1000mm wide x 1900 mm high pedestrian gate</u>				
	<u>Chainlink fencing</u>				
<b>5.1</b>	<b>Excavation</b>				<b>\$ 77.74</b>
5.1.1	Excavate for stub-columns not exceeding 1000mm from ground level at maximum 2.3m centers (average depth 0.5m)	3.38	m3	\$ 15.00	\$ 50.70
5.1.2	Remove and cart away from site surplus excavated material as directed	3.38	m3	\$ 8.00	\$ 27.04
<b>5.2</b>	<b>Mass concrete</b>				<b>\$ 6,635.58</b>
	<u>Mass concrete blinding class 10 (1:3:6) :-</u>				
5.2.1	50mm thick strip base [100mm wide]	0.39	m3	\$ 322.00	\$ 125.58
	<u>Insitu concrete class 20 (1:1.5:3), vibrated in:-</u>				
5.2.2	Column bases and Sub-columns below ground level cost shall include necessary form work.	3.50	m3	\$ 420.00	\$ 1,470.00
5.2.3	Cast concrete layer beneath the chain link of 300mm depth (200mm below ground level and 100mm above ground level) and 200mm wide and all along the perimeter of the chain link fence	12.00	m3	\$ 420.00	\$ 5,040.00
<b>5.3</b>	<b>Steel Angle columns posts</b>				<b>\$ 11,091.00</b>
	<u>Note: Rate for steel shall include all necessary welding, cutting, joining members, drilling holes and paint work</u>				
	<u>All steel sections to be thoroughly cleaned and phosphatized to resist corrosion before receiving 2 undercoats of brown rust inhibiting primer, 2 coats of matt white oil paint and finished with 2 coats of premium quality oil based acrylic paint of approved colour</u>				
5.3.1	50x50x4mm Thick rolled steel angle column posts; fixed into 500mm deep concrete bases (concrete bases measured separately) [Total of 87no. Angle posts each approx. 3.5m long]	304.50	m	\$ 12.00	\$ 3,654.00
5.3.2	50x50x4mm Extra steel angle bars for diagonal bracing of corner/end posts, and posts at an interval of every five posts or 12.5m approximately 3650mm long each	32.00	Nr	\$ 50.00	\$ 1,600.00
	<u>Steel angle coping/"Y" Crank</u>				
5.3.3	50x50x4mm thick rolled steel angle "Y" crank welded on top of steel posts (measured separately)	87.00	Nr	\$ 45.00	\$ 3,915.00
5.3.4	40x40x3mm rolled steel angle top rail/cooping	192.20	m	\$ 10.00	\$ 1,922.00

<b>5.4</b>	<b>Chain-link and Razor wire</b>				<b>\$ 5,432.00</b>
5.5.1	Supply and fix 2000mm high galvanised chain-link fencing (diamond wire mesh), Gauge 10 opening 50x50mm, wire 3mm, tied to steel heavy duty chain-link fencing fixed on steel angle columns and 2 No. bottom and intermediate strand of Gauge 13, 3mm dia galvanized tension wire at 1500mm centres (columns measured separately)	192.20	m	\$ 10.00	\$ 1,922.00
5.5.2	Supply and fix 2No. Strands of Galvanized plane tension wire fixed through 50x50x4mm steel angle posts	394.40	m	\$ 2.50	\$ 986.00
	<i>Razor wire on top of chain-link fence</i>				
5.5.3	450mm diameter Razor wire mounted on top of chain-link	192.40	m	\$ 10.00	\$ 1,924.00
5.5.4	Supply and fix 3No. Strands of Galvanized plane tension wire fixed through 50x50x4mm "Y" crank steel angle bars (steel angle bars measured with razor wire above).	600.00	m	\$ 1.00	\$ 600.00
<b>5.5</b>	<b>GATE</b>				<b>\$ 2,015.43</b>
	<b>Gate Columns</b>				
	<i>Excavation</i>				
5.5.1	Excavation of pits 750mm x 750mm x 1000mm n.e 1500mm depth from levelled ground for 300mmx300mm reinforced concrete Gate columns( maximum 1.0m excavation)	1.13	m3	\$ 15.00	\$ 16.88
5.5.2	Backfill around the column footing	0.71	m3	\$ 10.00	\$ 7.07
5.5.3	Remove and cart away from site surplus excavated material as directed	0.41	m3	\$ 15.00	\$ 6.14
	<i>Mass concrete</i>				
5.5.4	50mm thick blinding under Gate column footings with plain cement concrete (PCC) class C-10 (1:3:6)	0.06	m3	\$ 322.00	\$ 18.11
5.5.5	750mmx750mmx250mm pad footing concrete class C-20 (1:1.5:3).	0.28	m3	\$ 420.00	\$ 118.13
5.5.6	300mmx300mm column, concrete class C-20 (1:1.5:3)	1.33	m3	\$ 420.00	\$ 559.44
	<i>Reinforcement</i>				
	<i>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</i>				
5.5.7	8Y12 in footing pads rebars @225mm c/c	23.59	Kg	\$ 4.00	\$ 94.34
5.5.8	4Y12 in gate column rebar.	33.20	Kg	\$ 4.00	\$ 132.80
5.5.9	R8 links/stirrups @ 150mm centers in gate column	25.14	Kg	\$ 3.00	\$ 75.41
	<i>Gate Column Finishes</i>				
5.5.10	Rendering and paint, 15mm thick cement sand rendering (1:3), with steel trowelled finish, Paint: 2 coats of emulsion under coat, finish with 2 coats of emulsion weather guard paint in smoked grey	5.81	m2	\$ 15.00	\$ 87.12
	<b>Grilled Gate</b>				
5.5.10	Supply, fabricate and fix 3800mm wide and 2000mm high double leafed grilled gate, with 1000mm wide by 1900mm high Pedestrian access embedded on one leaf. Gate of 25x25x2mm thick intermediate vertical SHS bars fixed to 60x40x3mm RHS external frame and 40x40x3mm SHS middle stile; "Y" Crank welded to the top of the gate to hold 3 lines of tension wire and Razor wire including all necessary accessories (anchorage to the columns, heavy duty hinges, bottom lock and its socket, barrel locks etc.) shall be installed to Engineer's satisfaction. (Rates shall include for painting with two coats of primer and two finishing coats of approved enamel paint.	1.00	Ea	\$ 900.00	\$ 900.00
<b>BILL NO.6</b>	<b>BOQ - CONSTRUCTION OF ADDITIONAL WARDS AT PARIANG MAIN HOSPITAL, GUENGALATH</b>				<b>\$ 117,881.36</b>
<b>6.1</b>	<b>SUBSTRUCTURE</b>				<b>\$ 46,046.21</b>
	<b>Excavation and Earthworks</b>				
6.1.1	Site clearance and removal of debris from site as directed	218.4	m2	\$ 5.00	\$ 1,092.00
6.1.2	Excavate to remove loose top soil not exceeding 0.3 meters deep and cart away as directed	218.4	m2	\$ 10.00	\$ 2,184.00
6.1.3	Excavate in soft material for foundation trenches not exceeding 1.5m deep starting from stripped level	65.0	m3	\$ 15.00	\$ 975.00
6.1.4	Ditto: Column bases	29.0	m3	\$ 15.00	\$ 435.00
6.1.5	Ditto: Splash Apron	13.5	m3	\$ 15.00	\$ 202.50
	<b>Backfilling</b>				
6.1.6	Return, fill in and ram selected excavated material around foundations	74.5	m3	\$ 10.00	\$ 745.00
	<b>Disposal of Surplus spoils</b>				
6.1.7	Load and cart away surplus material from site to an approved dumping site	33.5	m3	\$ 8.00	\$ 268.00
	<b>Crushed stone fill</b>				
6.1.8	200mm thick hardcore (crushed stone)	23.2	m3	\$ 50.00	\$ 1,160.00
	<b>Imported filling</b>				
6.1.9	min 500mm thick compacted selected fill to grade	58.0	m3	\$ 25.00	\$ 1,450.00
6.1.10	Ditto to ramps	11.2	m3	\$ 25.00	\$ 280.00
6.1.11	Ditto to Splash apron	5.0	m3	\$ 25.00	\$ 125.00
	<b>Anti-termite treatment</b>				
6.1.12	TERMIDOR' or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	118.0	m2	\$ 2.00	\$ 236.00
6.1.13	Ditto to ramps	33.7	m2	\$ 2.00	\$ 67.40
	<b>Damp Proofing</b>				

6.1.14	1000 gauge polythene sheet damp proof membrane: to floors: laid on blinded smooth finished hardcore bed with 300mm side and end laps to receive concrete floor bed (m/s) - measured net with no allowance for overlaps	118.0	m2	\$ 3.50	\$ 413.00
6.1.15	Ditto to ramps	33.7	m2	\$ 3.50	\$ 117.95
	<b>Concrete work in substructure</b>				
	<u>Plain concrete class 15 (mix 1:3:6)</u>				
6.1.16	50mm Thick surface blinding under foundations (C-10)	2.2	m3	\$ 322.00	\$ 708.40
6.1.17	Ditto: Under column bases (C-10)	1.0	m3	\$ 322.00	\$ 322.00
	In Situ concrete class 25, vibrated and reinforced as described, in:-				
6.1.18	Strip Footing	10.8	m3	\$ 460.00	\$ 4,968.00
6.1.19	Column bases	4.8	m3	\$ 460.00	\$ 2,208.00
6.1.20	Columns in foundations	0.8	m3	\$ 460.00	\$ 368.00
6.1.21	Ground beam (200x300)mm	4.6	m3	\$ 460.00	\$ 2,116.00
6.1.22	Ramps	3.4	m3	\$ 460.00	\$ 1,564.00
6.1.23	100mm thick ground floor slab (wards, nurse room & storage room) C-25 concrete	13.20	m3	\$ 460.00	\$ 6,072.00
6.1.24	800mm wide 100mm thick class 20 mass concrete Splash (C-25)	3.4	m3	\$ 460.00	\$ 1,564.00
	<b>Reinforcement</b>				
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				
6.1.25	8mm diameter bars	184.0	kg	\$ 3.00	\$ 552.00
6.1.26	12mm diameter bars	825.0	kg	\$ 4.00	\$ 3,300.00
	<u>Mesh reinforcement : B.S. 4483 weighing 2.22 kgs per square meter including bends, tying wire and spacing blocks</u>				
6.1.27	Fabric mesh reinforcement to ground floor slab	118.0	m2	\$ 12.00	\$ 1,416.00
6.1.28	Ditto to ramps	33.7	m2	\$ 12.00	\$ 404.40
	<b>Sawn formwork to:</b>				
6.1.29	Vertical sides of foundations footing	27.0	m2	\$ 9.20	\$ 248.40
6.1.30	Vertical sides of column bases	12.8	m2	\$ 9.20	\$ 117.76
6.1.31	Vertical sides of columns	12.5	m2	\$ 9.20	\$ 115.00
6.1.32	Edges of 100mm high ground floor slab	11.0	m2	\$ 9.20	\$ 101.20
6.1.33	Edges of 150mm high ramps	8.5	m2	\$ 9.20	\$ 78.20
	<b>Foundation walling</b>				
	<u>Solid concrete block walling (mix 1:3:6); with minimum comprehensive strength of 7.0N/mm<sup>2</sup> bedded and jointed in cement sand (1:3) mortar; reinforced with gauge 20 hoop iron after every alternate course.</u>				
6.1.34	200mm thick walls	144.0	m2	\$ 40.00	\$ 5,760.00
	<b>Plinths</b>				
6.1.35	12 mm thick cement : sand (1:3) plaster to plinth	196.0	m2	\$ 15.00	\$ 2,940.00
6.1.36	Prepare and apply one priming coat and two coats of black bitumastick paint on rendered plinths	196.0	m2	\$ 7.00	\$ 1,372.00
<b>6.2</b>	<b>STRUCTURAL FRAME</b>				<b>\$ 5,668.40</b>
	<u>Concrete work in superstructure- In Situ concrete class 25, vibrated and reinforced as described, in:-</u>				
6.2.1	Column (200x200)mm	1.3	m3	\$ 460.00	\$ 598.00
6.2.2	Ring beam (200x300)mm	3.9	m3	\$ 460.00	\$ 1,794.00
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				
6.2.3	8mm diameter bars	178.0	kg	\$ 3.45	\$ 614.10
6.2.4	12mm diameter bars	471.0	kg	\$ 4.50	\$ 2,119.50
	<b>Sawn formwork</b>				
6.2.5	Vertical sides of Columns	27.0	m2	\$ 9.20	\$ 248.40
6.2.6	Ring beam and soffits	32.0	m2	\$ 9.20	\$ 294.40
<b>6.3</b>	<b>WALLING</b>				<b>\$ 7,184.00</b>
	<u>Damp proof Course</u>				
	<u>Three- ply bituminous felt damp proof course bedded in cement and sand (1:3) mortar (measured net allow for 300mm laps):-</u>				
6.3.1	200mm wide	64.0	m	\$ 3.50	\$ 224.00
	<b>Walling</b>				
	Solid blocks 200mm thick				
6.3.2	200mm thick walls reinforced with two lines of hoop iron after every three courses	145.4	m2	\$ 40.00	\$ 5,816.00
6.3.3	150mm thick partition walls	11.0	m2	\$ 35.00	\$ 385.00
6.3.4	50mm Concrete Window sill	18.2	m	\$ 25.00	\$ 455.00
6.3.5	Gable end with vent 600mm Ø	7.6	m2	\$ 40.00	\$ 304.00
<b>6.4</b>	<b>ROOF AND RAIN WATER DISPOSAL</b>				<b>\$ 21,372.90</b>
	<b>Roof construction</b>				
	<u>Structural steelwork grade 4.3C (factory primed) to be executed by an approved sub-contractor.</u>				

	<u>Unframed mild steel including hoisting and fixing in position and including drilling holes, all necessary welding, bolts plates/gusset plates and other jointing whether or not specifically described herein or shown on the drawing and with one coat of red oxide primer after erection.(see the drawings)</u>				
6.4.1	50 x 50 x 3mm Bottom chord, welded to the top of column	50.00	m	\$ 10.00	\$ 500.00
6.4.2	50 x 50 x 3mm Top chord welded with 6mm fillet welds to 40 x 40 x 3mm RHS internals (RHS internals measured separately)	60.20	m	\$ 10.00	\$ 602.00
6.4.3	40 x 40 x 3mm RHS internals welded with 6mm fillet welds to 50 x 50 x 3mm Bottom/top chords (Bottom and Top chords measured separately)	28.50	m	\$ 8.00	\$ 228.00
6.4.4	40x40x3mm RHS section bracings welded to trusses at each intersection; including necessary drilling holes welding/bolts and washers	54.00	m	\$ 8.00	\$ 432.00
6.4.5	100 x 50 x 2mm thick Z-purlins securely fixed onto the steel trusses (MS) including all the welding, straining, surface preparation and hoisting into position.	177.60	m	\$ 15.00	\$ 2,664.00
6.4.6	16mm diam anchor bolts L=250 to be welded on steel reinforcement	48.00	each	\$ 18.00	\$ 864.00
6.4.7	200x150x10mm plate(fillet weld of 6mm thick) welded to the truss and connected to ring beam with 4 Ø18 slotted holes for Ø16 bolt with nut	12.00	each	\$ 18.00	\$ 216.00
	<b>Roof Covering</b>				
6.4.8	Supplying & fixing of gauge 28 pre-painted Super Five IT4 profiled roofing sheets ( 0.5mm ) of approved colour: fixed with roofing nails to 100 x 50 timber purlins ( measured separately) and rubber seals	170.0	m2	\$ 20.00	\$ 3,400.00
6.4.9	Supplying & fixing Gauge 28 prepainted ridge cap; 650mm girth (average) in position complete with all necessary roofing screws or hooks as required.	22.2	m	\$ 9.50	\$ 210.90
	<b>Valance / Barge Board</b>				
6.4.10	25x225mm high timber valance board / barge board nailed to 150 x 50mm timber rafters : all complete with approved wood preservative as specified and as per Drawing.	53.0	m	\$ 10.00	\$ 530.00
	<b>Rain Water Disposal and Harvesting</b>				
	<u>Supply and fix rain water system to manufacturer's instructions.</u>				
6.4.11	250 x 350 x 2mm galvanised metal sheet gutter welded on 40 x 25 x 2mm RHS; gutter sitting on 20 x 6mm thick metallic support bracket placed at 2000mm c/c	44.4	m	\$ 15.00	\$ 666.00
6.4.12	Extra over for shoe.	6	Nr	\$ 20.00	\$ 120.00
6.4.13	Ditto for rainwater outlets with nozzle for 80mm rainwater down pipe outlet.	16	Nr	\$ 20.00	\$ 320.00
	<b>Ceiling</b>				
6.4.14	Supply and fix 8x2ft, 24 gauge metal lath to suspended wooden timber truss and eave to construct ceiling, cost includes ceiling joists, branders and connections	118	m2	\$ 60.00	\$ 7,080.00
6.4.15	Apply 12mm thick pricking course of mortar mix 1:3 to ceiling metal lath	118	m2	\$ 30.00	\$ 3,540.00
<b>6.5</b>	<b>DOORS</b>				<b>\$ 2,398.50</b>
	<u>Note: All doors to be supplied and fixed as per the details and schedule provided. All iron Monqery that has not been measured separately shall be priced together with the corresponding door.</u>				
	<b>Door Shutter</b>				
6.5.1	Steel doors D1 to fit structural opening size 1200mm x 2700mm high: RHS steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint, 180D Opening, 0.5mm casement metal pane, with Burglar proofing with RHS 25mm x 25mm x 2mm Vertical steel bars at equal intervals welded to frames on the interior side. Ironmongery stainless steel pull-push bar handle, 0.5mm thick steel louvers at top welded to RHS frame. Louver to be covered with approved mosquito net.	2.0	Nr	\$ 460.00	\$ 920.00
6.5.2	Steel doors D2 to fit structural opening size 1000mm x 2700mm high: RHS steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint, 180D Opening, 0.5mm casement metal pane, with Burglar proofing with RHS 25mm x 25mm x 2mm Vertical steel bars at equal intervals welded to frames on the interior side. Ironmongery stainless steel pull-push bar handle, 0.5mm thick steel louvers at top welded to RHS frame. Louver to be covered with approved mosquito net.	1	Nr	\$ 345.00	\$ 345.00
6.5.3	Hard wooden door D3 to fit structural opening size 900mm x 2100mm high: RHS steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint, 180D Opening, 0.5mm casement metal pane, with Burglar proofing with RHS 25mm x 25mm x 2mm Vertical steel bars at equal intervals welded to frames on the interior side. Ironmongery stainless steel pull-push bar handle, 0.5mm thick	2		\$ 345.00	\$ 690.00
6.5.4	Hard wooden door D3 to fit structural opening size 800mm x 2100mm high: RHS steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint, 180D Opening, 0.5mm casement metal pane, with Burglar proofing with RHS 25mm x 25mm x 2mm Vertical steel bars at equal intervals welded to frames on the interior side. Ironmongery stainless steel pull-push bar handle, 0.5mm thick	1.0		\$ 300.00	\$ 300.00
	<b>Painting and Decorating</b>				
	Prepare and apply two coats of brown rust inhibiting primer finished with two coats of white matt oil paint on metal:-				
6.5.5	Surfaces steel plated doors and steel frames	20.5	m2	\$ 7.00	\$ 143.50
<b>6.6</b>	<b>WINDOWS</b>				<b>\$ 6,125.00</b>



	<u>Purpose made steel casement windows manufactured from standard strong Z sections: manufacture, assemble and deliver to site: Supply and fix ironmongery comprising approved hinges, stays, fasteners to opening lights: frames drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery.</u>				
	<b>Supply and fix the following</b>				
6.6.1	W1. 900x1800mm. door Frame material is LTZ steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint glassed with 4mm thick clear glass. Bugler proofing is RHS 25 X 25 X 2 mm steel bars welded to frames at equal spacing behind glazing on the interior side and 0.5mm thick steel louvers welded to RHS frame. Louver to be covered with approved mosquito net. Ironmongery stainless steel pull-push bar handle	16	Nr	\$ 300.00	\$ 4,800.00
6.6.2	W2. 1400x1800mm. door Frame material is LTZ steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint glassed with 4mm thick clear glass. Bugler proofing is RHS 25 X 25 X 2 mm steel bars welded to frames at equal spacing behind glazing on the interior side and 0.5mm thick steel louvers welded to RHS frame. Louver to be covered with approved mosquito net. Ironmongery stainless steel pull-push bar handle	1	Nr	\$ 325.00	\$ 325.00
6.6.3	W3. 600x700mm. door Frame material is LTZ steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint glassed with 4mm thick clear glass. Bugler proofing is RHS 25 X 25 X 2 mm steel bars welded to frames at equal spacing behind glazing on the interior side and 0.5mm thick steel louvers welded to RHS frame. Louver to be covered with approved mosquito net. Ironmongery stainless steel pull-push bar handle	1	Nr	\$ 200.00	\$ 200.00
6.6.4	Ordinary quality(OQ) clear sheet glass and glazing				
6.6.5	4mm glass: glazing to metal casement panes 0.1-0.5mm2 with tropical glazing putty	20.0	m2	\$ 40.00	\$ 800.00
6.7	<b>FINISHES</b>				<b>\$ 13,788.85</b>
	<b>Floor Finishes</b>				
	<u>Cement and sand (1:3) screeds and paving: one coat: steel trowel finish: laid on concrete</u>				
6.7.1	50mm thick screeding.	118	m2	\$ 17.25	\$ 2,035.50
	<b>External wall finishes</b>				
	<u>Cement and sand(1:4)</u>				
6.7.2	15mm thick to walls and concrete surfaces	124	m2	\$ 17.25	\$ 2,139.00
6.7.3	300mm x 10mm rendered skirt	51.4	m	\$ 7.00	\$ 359.80
	<b>walls</b>				
	Prepare surfaces: apply three coats weather guard emulsion paint;				
6.7.4	Rendered surfaces: walls	124	m2	\$ 7.00	\$ 868.00
	<b>Skirt</b>				
	Prepare surfaces: apply three coats bituminous paint;				
6.7.5	Skirt	51.4	m	\$ 7.00	\$ 359.80
	<b>Internal Wall finishes Cement/lime putty/sand(1:2:9)</b>				
6.7.6	15mm plaster to: walls and concrete surfaces: steel trowelled smooth	213	m2	\$ 17.25	\$ 3,674.25
6.7.7	Prepare surfaces: apply three coats vinyl silk soft white emulsion paint: on steel trowelled plaster: to plastered surface	213	m2	\$ 7.00	\$ 1,491.00
	<b>Ceiling finishes</b>				
6.7.8	Apply 15mm thick c/s plaster of mix 1:3 to ceiling soffit	118	m2	\$ 17.25	\$ 2,035.50
6.7.9	Prepare and apply one undercoat and 2 finishing coats of matt paint to protect ceiling soffit	118	m2	\$ 7.00	\$ 826.00
6.8	<b>ELECTRICAL INSTALLATION</b>				<b>\$ 6,597.50</b>
	<b>Lightning Protection</b>				
6.8.1	Supply and install 25 mm x 3 mm bare copper tape conductor as Furse or approved equivalent complete with metallic DC tape clip, wall plugs, fixing screws and other necessary accessories	15	Lm	\$ 100.00	\$ 1,500.00
6.8.2	Supply and install 1500 mm long multiple air terminal complete with terminal base as Furse or approved equivalent and all necessary accessories	1	Nr	\$ 250.00	\$ 250.00
6.8.3	Supply and install screw down test clamps as Furse or approved equivalent and all necessary accessories	1	Nr	\$ 100.00	\$ 100.00
6.8.4	Supply and install 16 mm x 1200 mm long copper earth rod complete with spike, driving stud, dowel clamps as Furse or approved equivalent and all necessary accessories	1	Nr	\$ 120.00	\$ 120.00
6.8.5	Supply and install copper earth 300mm x 300mm mast complete with trenching in black cotton soil /soft rock, earth termination pits, marconite backfill, backfilling, reinstatement of ground to meet the requirements of the technical specifications	1	Nr	\$ 100.00	\$ 100.00
6.8.6	Supply and install concrete inspection pit complete with waterproof cover for earth test / rod inspections and all other necessary accessories	1	Nr	\$ 150.00	\$ 150.00
6.8.7	Allow for testing and commissioning for the lightning protection and grounding system	1	Sum	\$ 150.00	\$ 150.00
	<b>Earthing</b>				
	Rates inclusive of supply and installation of all accessories for earthing.				
6.8.8	Excavation of 400x400x400mm concrete pit, cost shall include concrete cover, coupling gravel etc.	1	Nr	\$ 175.00	\$ 175.00
6.8.9	Supply and drive copper rod 16mm diameter, 1.5m deep	1	Nr	\$ 115.00	\$ 115.00
6.8.10	Copper conductor 1x6mm2	5	m	\$ 15.00	\$ 75.00
6.8.11	Extra over to earth connection - driving stud	1	Nr	\$ 20.00	\$ 20.00

6.8.12	Allow for testing and commissioning for earthing installations system	1	Lumpsum	\$	250.00	\$	250.00
	<b>Conduit work</b>						
	<i>Supply and installation of upvc electrical conduits for passage of wires in walls and ceiling, rates inclusive of wall chiselling</i>						
6.8.13	25mm conduits	86	m	\$	3.50	\$	301.00
6.8.14	Extra over to corners (bents 25mm)	15	Nr	\$	23.00	\$	345.00
6.8.15	Couplers 25mm	10	Nr	\$	30.00	\$	300.00
6.8.16	Circular boxes 25mm	18	Nr	\$	7.00	\$	126.00
6.8.17	Metallic MK boxes (Double)	10	Nr	\$	9.50	\$	95.00
6.8.18	Metallic MK boxes (Single)	5	Nr	\$	12.00	\$	60.00
6.8.19	Supply and installation of main switch 4-way (MCB) 16A	1	Nr	\$	600.00	\$	600.00
	<b>Wiring work</b>						
	<i>Supply and installation of insulated twin cables in conduits, twin cable.</i>						
6.8.20	Load cable, 16mm <sup>2</sup> (single)	18	m	\$	15.00	\$	270.00
6.8.21	Power cable 2.5mm <sup>2</sup>	100	m	\$	5.00	\$	500.00
6.8.22	Light cables 2.5mm <sup>2</sup>	150	m	\$	3.00	\$	450.00
	<b>Fittings</b>						
	<i>Supply and fit fittings approved by the client or client's representative</i>						
6.8.23	Florescent fixture complete with lamp , electronic ballast 2x30w, 2350lm	14	Nr	\$	12.00	\$	168.00
6.8.24	Double switch 220V ac, 10A/1P mounted 1.4@AFFL	6	Nr	\$	17.25	\$	103.50
6.8.25	Single switch 220V ac, 10A/1P mounted 1.4@AFFL	6	Nr	\$	9.00	\$	54.00
6.8.26	16A single socket outlet with 3x2.5mm <sup>2</sup> fixed above 40cm	6	Nr	\$	10.00	\$	60.00
6.8.27	16A double socket outlet with 3x2.5mm <sup>2</sup> fixed above 40cm	6	Nr	\$	8.00	\$	48.00
6.8.28	Supply, install and connect ceiling fan points comprising 3x1.5 sq.mm PVC single core copper cables, in HG PVC conduits, together with raw-bolt anchored on the roof tie beam	7	Nr	\$	7.00	\$	49.00
6.8.29	Supply and install Ceiling fans complete with controller as Xplair or equal and approved	7	Nr	\$	9.00	\$	63.00
<b>6.9</b>	<b>WATER SUPPLY FIXTURES</b>					\$	<b>8,700.00</b>
	<i>Supply, install, connect and set to work the following, all described in the specifications and drawings</i>						
6.9.1	Supply and installation of 10,000 liters plastic water tank installed to harvest rain roof water, cost to include connection accessories, piping work and elevated platform with and including 0.75mm tap and valves.	1.00	Lump Sum	\$	3,000.00	\$	3,000.00
	<b>Railings</b>						
6.9.2	Handrails for length of ramps on both sides,CHS 50mm dia. and 2.5 mm thickness, painted with 2 coats of antirust paint and 1 coat of enamel paint	3	Pair	\$	300.00	\$	900.00
6.9.3	Supply hospital mattresses size 900x2000mm for the two wards	20	Nr	\$	60.00	\$	1,200.00
6.9.4	Hospital beds metallic 900x2000mm	20.00	Nr	\$	150.00	\$	3,000.00
6.9.5	Supply wooden nurse table including drawers and cabinet storage	2.00	Nr	\$	200.00	\$	400.00
6.9.6	Supply office chairs	2.00	Nr	\$	100.00	\$	200.00
<b>BILL NO.7</b>	<b>BOQ - CONSTRUCTION OF INCINERATOR, ASH PIT AND SHADE AT PARIANG MAIN HOSPITAL, GUENGALATH</b>					\$	<b>10,856.25</b>
<b>7.1</b>	<b>GENERAL SITE CLEARANCE</b>					\$	<b>600.00</b>
7.1.1	Site clearance and removal of debris from site as directed	30.0	m <sup>2</sup>	\$	5.00	\$	150.00
7.1.2	Excavate to remove loose top soil not exceeding 0.2 meters deep and cart away as directed	30.0	m <sup>2</sup>	\$	15.00	\$	450.00
	<b>INCINERATOR</b>					\$	<b>6,978.75</b>
	<b>Excavation and backfilling</b>						
7.1.3	Excavate in soft material for foundation trenches not exceeding 1.0 m deep starting from stripped level	4.8	m <sup>2</sup>	\$	15.00	\$	72.00
	<b>Backfilling</b>						
7.1.4	Return, fill in and ram selected excavated material around foundations	2.0	m <sup>3</sup>	\$	10.00	\$	20.00
	<b>Disposal of Surplus spoils</b>						
7.1.5	Load and cart away surplus material from site to an approved dumping site	3.3	m <sup>3</sup>	\$	8.00	\$	26.40
	<b>Imported filling</b>						
7.1.6	Min 500mm thick compacted selected fill to grade	3.0	m <sup>3</sup>	\$	25.00	\$	75.00
	<b>Crushed stone fill</b>						
7.1.7	200mm thick hardcore (crushed stone)	1.2	m <sup>3</sup>	\$	60.00	\$	72.00
	<b>Anti-termite treatment</b>						
7.1.8	TERMIDOR' or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	6.0	m <sup>2</sup>	\$	2.00	\$	12.00
	<b>Damp Proofing</b>						
7.1.9	1000 gauge polythene sheet damp proof membrane: to floors: laid on blinded smooth finished hardcore bed with 300mm side and end laps to receive concrete floor bed (m/s) - measured net with no allowance for overlaps	6.0	m <sup>2</sup>	\$	3.50	\$	21.00
	<b>Concrete works</b>						
	Plain concrete class 15 (mix 1:3:6)						
7.1.10	50mm Thick surface blinding under foundations (C-10)	0.3	m <sup>3</sup>	\$	352.00	\$	105.60
	<b>In Situ concrete class 25, vibrated and reinforced as described, in:-</b>						
7.1.11	150mm thick floor slab (C-25 concrete) over the blinding layer	0.90	m <sup>3</sup>	\$	460.00	\$	414.00

	<b>Reinforcement</b>				
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks (180mm c/c both direction)</u>				
7.1.12	10 mm diameter bars	44.1	kg	\$ 3.50	\$ 154.35
	<b>Sawn formwork to:</b>				
7.1.13	Edges of 150mm high ground floor slab	2.0	m2	\$ 9.20	\$ 18.40
	<b>Bricks walling</b>				
7.1.14	Provide refractory bricks and lay fire brick base with refractory cement to a thickness of 70mm	1.1	m2	\$ 40.00	\$ 44.00
	<u>Provide fire bricks and construct fire brick core walls with refractory cement, including retaining bands to the following thicknesses:</u>				
7.1.15	113 mm thick walls	4.2	m2	\$ 40.00	\$ 168.00
7.1.16	232 mm thick walls	1.1	m2	\$ 40.00	\$ 44.00
7.1.17	Provide bricks and constructing common brick lining surround with 1:3 cement sand mortar for the walls of thickness 113mm thickness	5.8	m2	\$ 40.00	\$ 232.00
	<b>Chimney and support, Top frame, Loading door and Ash door</b>				
7.1.18	Provide and fit top frame as per the drawing (De Montfort Mark 9), fitting with sand frames, including supply of sand and with steel angle stiffeners	1.0	Lumpsum	\$ 2,000.00	\$ 2,000.00
7.1.19	Provide and fitting Loading door of 620x620mm as per the drawing MK9	1.0	Lumpsum	\$ 500.00	\$ 500.00
7.1.20	Provide and fit chimney support pannel with chimney spigot	1.0	Lumpsum	\$ 2,500.00	\$ 2,500.00
7.1.21	Supply and fit ash door 230mmx240mm as per the drawing MK9	1.0	Lumpsum	\$ 500.00	\$ 500.00
<b>7.2</b>	<b>ASH PIT</b>				<b>\$ 395.50</b>
	<b>Excavation and backfilling</b>				
7.7.1	Excavate in soft material for foundation pit not exceeding 1.5 m deep starting from stripped level	4.2	m2	\$ 15.00	\$ 63.00
	<b>Backfilling</b>				
7.1.2	Return, fill in and ram selected excavated material around foundations	3.6	m3	\$ 10.00	\$ 36.00
	<b>Disposal of Surplus spoils</b>				
7.7.3	Load and cart away surplus material from site to an approved dumping site	1.0	m3	\$ 8.00	\$ 8.00
	<b>Imported filling</b>				
7.7.4	Min 200mm thick compacted sand fill	0.6	m3	\$ 25.00	\$ 15.00
	<b>Damp Proofing</b>				
7.7.5	1000 gauge polythene sheet damp proof membrane: to floors: laid on blinded smooth finished hardcore bed with 300mm side and end laps to receive concrete floor bed (m/s) - measured net with no allowance for overlaps	7.5	m2	\$ 3.50	\$ 26.25
	<b>Concrete works</b>				
	In situ concrete class 20 (mix 1:1.5:3)				
7.7.6	100mm thick bottom pit slab of reinforced concrete with mesh (C-20)	0.2	m3	\$ 322.00	\$ 48.30
	In Situ concrete class 25, vibrated and reinforced as described, in:-				
7.7.7	150mm thick ground floor slab (C-25 concrete) over the ash pit	0.30	m3	\$ 460.00	\$ 138.00
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks (180mm c/c both direction)</u>				
7.7.8	10mm diameter bars	11.0	kg	\$ 3.45	\$ 37.95
	<b>Sawn formwork</b>				
7.7.9	Edges of 150mm high ground floor slab	1.0	m2	\$ 9.20	\$ 9.20
7.7.10	Under ground floor slab	1.5	m2	\$ 9.20	\$ 13.80
	<b>WALLING</b>				<b>\$ 451.00</b>
	<u>Damp proof Course</u>				
	<u>Three- ply bituminous felt damp proof course bedded in cement and sand (1:3) mortar (measured net allow for 300mm laps):-</u>				
7.7.11	200mm wide	1.0	m	\$ 3.50	\$ 3.50
	<b>Walling</b>				
	<u>Solid blocks 200mm thick</u>				
7.7.12	200mm thick walls reinforced with two lines of hoop iron after every three courses	4.5	m2	\$ 40.00	\$ 180.00
	<b>Pit Plastering</b>				
7.7.13	12 mm thick cement : sand (1:3) plaster to walling	4.50	m2	\$ 15.00	\$ 67.50
	<b>Sundries</b>				
7.7.14	Ditto for making 300 x300 mm openings in 150 mm slab for manhole.	2.00	nr	\$ 100.00	\$ 200.00
<b>7.3</b>	<b>SHADE</b>				<b>\$ 143.00</b>
	<b>Excavation</b>				
7.3.1	Excavate for stub-columns not exceeding 1000mm from ground level and cart away arisings (average depth 0.5m)	0.2	m <sup>3</sup>	\$ 15.00	\$ 3.00
7.3.2	Remove and cart away from site surplus excavated material as directed	0.2	m <sup>3</sup>	\$ 10.00	\$ 2.00
	<u>Mass concrete class M15(1:2:4):-</u>				
	<u>Mass concrete blinding class 10 (1:3:6) :-</u>				
7.3.4	50mm thick strip base [100mm wide]	0.02	m <sup>3</sup>	\$ 322.00	\$ 6.44
	<u>Insitu concrete class 25, vibrated and reinforced as described, in:-</u>				
7.3.5	Column bases and Sub-columns below ground level	0.25	m <sup>3</sup>	\$ 460.00	\$ 115.00
	<b>Sawn formwork to:-</b>				

7.3.6	Vertical sides of column bases	1.8	m <sup>2</sup>	\$ 9.20	\$ 16.56
	<b>Columns</b>				<b>\$ 828.00</b>
	<i>Note: Rate for steel shall include all necessary welding, cutting, joining members, drilling holes and paint work</i>				
	<i>All steel sections to be thoroughly cleaned and phosphatized to resist corrosion before receiving 2 undercoats of brown rust inhibiting primer, 2 coats of matt white oil paint and finished with 2 coats of premium quality oil based acrylic paint of approved colour</i>				
7.3.7	CHS 75x5mm Thick rolled steel column posts; fixed into 500mm deep concrete bases (concrete bases measured separately) [Total of 4no. Each posts approx. 3.6m long]	14.4	m	\$ 45.00	\$ 648.00
7.3.8	Extra steel for bracings and supporting the chimney 40x40x4mm MS Angle	18	m	\$ 10.00	\$ 180.00
<b>7.4</b>	<b>SHADE ROOFING</b>				<b>\$ 1,460.00</b>
	<b>Roof construction</b>				
	<i>Structural steelwork grade 4.3C (factory primed) to be executed by an approved sub-contractor.</i>				
	<i>Unframed mild steel including hoisting and fixing in position and including drilling holes, all necessary welding, bolts plates/gusset plates and other jointing whether or not specifically described herein or shown on the drawing and with one coat of red oxide primer after erection. (see the drawings)</i>				
7.4.1	50x50x5mm M.S angle tie beam, welded to the top of column	10.00	m	\$ 15.00	\$ 150.00
7.4.2	50 x 50 x 5mm M.S angle rafters welded with 6mm fillet welds to 40 x 40 x 4mm M.S Angle Ties (Ties measured separately)	8.00	m	\$ 15.00	\$ 120.00
7.4.3	40 x 40 x 4mm M.S Angle ties welded with 6mm fillet welds to 50 x 50 x 5mm Tie beams/rafters (Tie beams and Rafters measured separately)	5.00	m	\$ 10.00	\$ 50.00
7.4.4	40x40x4mm M.S Angle section bracings (struts) welded to trusses at each intersection; including necessary drilling holes welding/bolts and washers	7.00	m	\$ 10.00	\$ 70.00
7.4.5	40 x 40 x 3mm thick SHS purlins securely fixed onto the steel trusses (MS) including all the welding, straining, surface preparation and hoisting into position.	50.00	m	\$ 15.00	\$ 750.00
	<b>Roof Covering</b>				
7.4.6	Supplying & fixing of gauge 28 pre-painted Super Five IT4 profiled roofing sheets ( 0.5mm ) of approved colour: fixed with self tapping screws ( measured separately)	11.0	m <sup>2</sup>	\$ 20.00	\$ 220.00
7.4.7	Supplying & fixing Gauge 28 prepainted ridge cap; 300mm wide fix in position complete with all necessary roofing screws or hooks as required.	10.0	m	\$ 10.00	\$ 100.00
<b>BILL NO.8</b>	<b>BOQ - CONSTRUCTION OF PLACENTA PIT AT PARIANG MAIN HOSPITAL, GUENGALATH</b>				<b>\$ 2,707.58</b>
<b>8.1</b>	<b>SUBSTRUCTURE</b>				<b>\$ 2,707.58</b>
	<b>Excavation and Earthworks</b>				
8.1.1	Site clearance and removal of debris from site as directed	36.0	m <sup>2</sup>	\$ 3.00	\$ 108.00
8.1.2	Excavate to remove loose top soil not exceeding 0.2 meters deep and cart away as directed	36.0	m <sup>2</sup>	\$ 5.00	\$ 180.00
8.1.3	Excavate for placenta pit commencing from stripped level and not exceeding 1.5m deep	4.0	m <sup>3</sup>	\$ 15.00	\$ 60.00
8.1.4	Excavate for placenta pit commencing from 1.5m deep and not exceeding 2.2m deep	1.5	m <sup>3</sup>	\$ 15.00	\$ 22.50
8.1.5	Ditto: Footing bases	0.5	m <sup>3</sup>	\$ 15.00	\$ 7.50
	<b>Backfilling</b>				
8.1.6	Return, fill in and ram selected excavated material around foundations and pit wall	0.5	m <sup>3</sup>	\$ 10.00	\$ 5.00
	<b>Disposal of Surplus spoils</b>				
8.1.7	Load and cart away surplus material from site to an approved dumping site	5.5	m <sup>3</sup>	\$ 10.00	\$ 55.00
	<b>Crushed stone fill</b>				
8.1.8	100mm thick hardcore (crushed stone) at the base of placenta pit	0.2	m <sup>3</sup>	\$ 70.00	\$ 14.00
	<b>Imported sand filling</b>				
8.1.9	min 100mm thick compacted selected sand fill to bottom of placenta pit	0.2	m <sup>3</sup>	\$ 70.00	\$ 14.00
	Anti-termite treatment				
8.1.10	TERMIDOR' or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	2.6	m <sup>2</sup>	\$ 15.00	\$ 39.00
	<b>Damp Proofing</b>				
8.1.11	1000 gauge polythene sheet damp proof membrane: to floors: laid on blinded smooth finished hardcore bed with 300mm side and end laps to receive concrete floor bed (m/s) - measured net with no allowance for overlaps	2.6	m <sup>2</sup>	\$ 3.50	\$ 9.10
	<b>Concrete work in substructure</b>				
	<i>Plain concrete class 15 (mix 1:3:6)</i>				
8.1.12	50mm Thick surface blinding under foundations	0.1	m <sup>3</sup>	\$ 352.00	\$ 17.60
	<i>In Situ concrete class 25, vibrated and reinforced as described, in:-</i>				
8.1.13	Strip Footing	1.3	m <sup>3</sup>	\$ 460.00	\$ 598.00
8.1.14	intermediate beam in toilet pit (200x200mm)	0.1	m <sup>3</sup>	\$ 460.00	\$ 27.60
8.1.15	150mm thick floor slab C-20 concrete	0.1	m <sup>3</sup>	\$ 460.00	\$ 23.00
	<b>Reinforcement</b>				

	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				
8.1.16	8mm diameter bars	8.9	kg	\$ 3.00	\$ 26.70
8.1.17	10mm diameter bars	38.2	kg	\$ 3.50	\$ 133.70
8.1.18	12mm diameter bars	25.2	kg	\$ 4.00	\$ 100.80
	<b>Sawn formwork to:</b>				
8.1.19	Vertical sides of foundations footing	1.9	m <sup>2</sup>	\$ 9.20	\$ 17.48
8.1.20	Edges of intermediate beam	1.9	m <sup>2</sup>	\$ 9.20	\$ 17.48
8.1.21	Edges of 150mm high ground floor slab and below	3.6	m <sup>2</sup>	\$ 9.20	\$ 33.12
	<b>Foundation walling</b>				
	<u>Solid concrete block walling (mix 1:3:6); with minimum comprehensive strength of 7.0N/mm<sup>2</sup>; bedded and jointed in cement sand (1:3) mortar; reinforced with gauge 20 hoop iron after every alternate course.</u>				
8.1.22	200mm thick walls	12.8	m <sup>2</sup>	\$ 40.00	\$ 512.00
8.1.23	Ditto: Steps	0.7	m <sup>2</sup>	\$ 40.00	\$ 28.00
	<b>Plinths</b>				
8.1.24	12 mm thick cement : sand (1:3) plaster to plinth	12.8	m <sup>2</sup>	\$ 20.00	\$ 256.00
8.1.25	Prepare and apply one priming coat and two coats of black bitumastick paint on rendered plinths	12.8	m <sup>2</sup>	\$ 15.00	\$ 192.00
	<b>Sundries</b>				
8.1.26	Allow for making 300x400mm opening in 150mm thick floor slab with steel plate cover	1.0	Nr	\$ 150.00	\$ 150.00
8.1.27	100mm vent pipe	1.0	Nr	\$ 60.00	\$ 60.00
<b>BILL NO. 9</b>	<b>Assessment, Design, Supply, Installation &amp; Commissioning of a Solar power system at the women resource center and the Wards in Pariang.</b>				<b>\$ 8,999.25</b>
9.1.1	PV445A-Solar Module, ASTRONERGY/CHINT, CHSM72M-HC Series (166), 445Wp, 144half Cell, MonoCrystalline, 41.05V Vmp, 48.8V Voc, 10.84A Imp, 11.30A Isc, 20.5% efficiency, 25 years Linear Performance	pc	8	\$ 365.00	\$ 2,920.00
9.1.2	BVAR210-Solar Battery, Valve Regulated Lead Acid (VRLA), Sealed AGM Electrolyte, ROLLS: S12-220AE, 12V, 225Ah@C/100, 210Ah@C/20. 1200 Cycles @ 50% DoD. Temp. range of -30 to 40°C	pc	4	\$ 500.00	\$ 2,000.00
9.1.3	AICDE3-Hybrid Solar Inverter / Charger, DEYE; SUN-3.6K-SG04LP1-EU, 3.6KW - 230Vac, 48Vdc, Max.PV Input Power; 4680Wp, MPPT Voltage Range; 150-425V, Number of MPPT; 2,PV Input ISC per MPPT; 17A, AC Output Current; 18A, Max. Efficiency; 97.6%, MPPT Efficiency: 99.90%, Max.16pcs in parallel operation.	pc	1	\$ 1,800.00	\$ 1,800.00
9.1.4	BSPVM3-Solar Mount -Perforated (Slotted) steel Angle Frame, 3m long.	pc	8	\$ 25.00	\$ 200.00
9.1.5	FFBN8.8P -Bolts & Nuts with 2 washers M8.8x20mm	pc	80	\$ 1.50	\$ 120.00
9.1.6	FFSDS -Self Drilling Screws, Hex washer zinc with steel & rubber washer. 6.3 x 32 mm #14 x 4"	pc	30	\$ 1.50	\$ 45.00
9.1.7	BSPVC26 -PV Array cable. Fine multi stranded tinned copper 2X6mm <sup>2</sup> , 600VDC, UV resistant, XLPE insulated	m	30	\$ 8.00	\$ 240.00
9.1.8	BSMC4-MC4 Type, Solar Connector, Male & Female (Pair), Housing & Connector Crimp Conductor, rated 1000V, 20A. Waterproof ring, compatible with; 4mm <sup>2</sup> -- 6mm <sup>2</sup> single core wires	pr	4	\$ 14.00	\$ 56.00
9.1.9	WABB-Breaker Box Enclosure, Metallic, Single Phase, 6 Ways, DIN Rai	pc	1	\$ 45.00	\$ 45.00
9.1.10	BSDCB-DC Miniature Circuit Breaker -NoArk (Chint), Solar DC Breaker, 20 A, 500VDC, 1 Pole, Din Rial Mount	pc	2	\$ 30.00	\$ 60.00
9.1.11	BSBR4 -Battery rack 2X2 stand ( 4 batteries 12V 200Ah Sealed )	pc	1	\$ 55.00	\$ 55.00
9.1.12	BSDCB-DC Miniature Circuit Breaker -NoArk (Chint), Solar DC Breaker, 32 A, 500VDC, 1 Pole, Din Rial Mount	pc	2	\$ 40.00	\$ 80.00
9.1.13	BSDCC-DC Cable, fine multi stranded copper, 2X10mm <sup>2</sup> , 450/750VDC, PVC insulated with standard colour codes	m	2	\$ 8.00	\$ 16.00
9.1.14	BSDCF-Cylindrical Cartridge fuse - 22x58mm, 63A, 500VDC	pc	2	\$ 45.00	\$ 90.00
9.1.15	BSCFH58 -Cylindrical fuse holder, 22X58mm, 500 - 690VDC, for 63 to 125A fuses, DIN Rail mount.	pc	2	\$ 40.00	\$ 80.00
9.1.16	BSLJW-Lugged Jumper Wire, 2 ends lugged, 0.25m long . fine multi stranded pure copper, 1X35mm <sup>2</sup> , PVC insulated.	pc	2	\$ 8.00	\$ 16.00
9.1.17	BSLJC5-Lugged Jumper Cable, 2 ends lugged, 0.5m long, fine multi stranded pure copper, 2X50mm <sup>2</sup> , PVC insulated with standard colour codes	pr	1	\$ 30.00	\$ 30.00
9.1.18	BSLJC2-Lugged Jumper Cable, 2 ends lugged, 2m long, fine multi stranded pure copper, 2X25mm <sup>2</sup> , PVC insulated with standard colour codes	pr	2	\$ 40.00	\$ 80.00
9.1.19	WACT2 -Cable - Wiring / Supply, Twin+Earth 2.5mm <sup>2</sup> pure Copper. (Copper Ray)	m	10	\$ 5.00	\$ 50.00
9.1.20	WAEW-Earth Wire. Single Core, 10mm, multi stranded pure copper, PVC Insulated with standard colour codes	m	10	\$ 4.50	\$ 45.00
9.1.21	WAIT1-PVC Insulating tape - 0.13 - 0.19mm x 19mm x 10m	pc	4	\$ 4.00	\$ 16.00
9.1.22	BSCT24 -Cable Zip Ties - 4.0mm x 200mm - Nylon (100pcs per packet)	pkt	2	\$ 8.00	\$ 16.00
9.1.23	BSB01 -MDF or Marine plex board	pc	0.125	\$ 50.00	\$ 6.25

9.1.24	FFSCN3" -Steel Concrete Nails, 3" (12pcs package)	pkt	1	\$	8.00	\$	8.00
9.1.25	FFWP8 -Wall plug (Expand nails) with Screws 8mm2	pkt	1	\$	15.00	\$	15.00
9.1.26	WATK25 -Trunking 25X38X3000 pvc heavy gauge	pc	2	\$	15.00	\$	30.00
9.1.27	WATK55 -Trunking 50X50X3000 pvc heavy gauge	pc	2	\$	25.00	\$	50.00
9.1.28	FFSDST-Self Drilling Screw, truss phillips zinc, 4.2 x 19 m/m 8 x 3/4"	pc	20	\$	4.00	\$	80.00
9.1.29	SFPVIT-Installation of all PV Solar power system Components; Testing, Commissioning & End-user Training	ls	1	\$	750.00	\$	750.00
<b>BILL SUMMARY-PRELIMINARIES</b>							
BILL NO.1	PRELIMINARIES	Unit	1.00	\$	29,750.00	\$	29,750.00
BILL NO.2	CONSTRUCTION OF ONE BLOCK OF 2 CLASSROOMS AT FREEDOM PRIMARY SCHOOL	Unit	1.00	\$	108,546.61	\$	108,546.61
BILL NO.3	BOQ- CONSTRUCTION OF WOMEN RESOURCE CENTER BLOCK, ABON-2 AND WAUKOK VILLAGE	Unit	1.00	\$	107,528.93	\$	107,528.93
BILL NO.4	BOQ - CONSTRUCTION OF 1 BLOCK OF 4 STANCES LATRINE WITH WASH ROOM ATTACHED FOR GIRLS AT WOMEN RESOURCE CENTER, ABON-2 AND WAUKOK VILLAGE	Unit	1.00	\$	41,059.55	\$	41,059.55
BILL NO.5	CONSTRUCTION OF CHAIN LINK FENCE (50MX50M) WITH VEHICULAR GATE AT WOMEN RESOURCE CENTER, ABON-2 AND WAUKOK	Unit	1.00	\$	25,251.75	\$	25,251.75
BILL NO.6	BOQ - CONSTRUCTION OF ADDITIONAL WARDS AT PARIANG MAIN HOSPITAL, GUENGALATH	Unit	1.00	\$	117,881.36	\$	117,881.36
BILL NO.7	BOQ - CONSTRUCTION OF INCINERATOR, ASH PIT AND SHADE AT PARIANG MAIN HOSPITAL, GUENGALATH	Unit	1.00	\$	10,856.25	\$	10,856.25
BILL NO.8	BOQ - CONSTRUCTION OF PLACENTA PIT AT PARIANG MAIN HOSPITAL, GUENGALATH	Unit	1.00	\$	2,707.58	\$	2,707.58
BILL NO. 9	Assessment, Design, Supply, Installation & Commissioning of a Solar power system at the women	Unit	2.00	\$	8,999.25	\$	17,998.50
<b>TOTAL</b>						<b>\$</b>	<b>461,580.51</b>