

BILL OF QUANTITIES					
South Sudan Enhancing Community Resilience and Local Governance Project (ECRP)					
	<b>Project Description:</b> Rehabilitation of one Hafir 60x50m in Gongbar village of Jerbena boma; and Construction of Amdulwis Haffir 50x30m; and Rehabilitation of Gosfami Primary School (GPS N 11.9254637 E 32.873243) at Gerger Payam Renk County	Tender No.12			
	Name of Bidder:				
	DESCRIPTIONS	Unit	Quantity	Unit Cost [USD]	Total cost (USD)
<b>BILL NO. 1</b>	<b>PRELIMINARIES</b>				\$ -
	<b>Notes:</b>				
	<b>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.</b>	Note			
	A list of typical general items are given below. However, the Bidder is requested to price only those items that may affect this Contract.	Note			
	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.	Note			
	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.	Note			
<b>1.1</b>	<b>Mobilization and Site Facilities</b>				\$ -
1.1.1	Mobilization of all required Construction materials ,equipments and personel to project site.	Lump Sum	1.00		\$ -
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		\$ -
1.1.3	The contractor shall provide necessary protective fencing/site hoarding, lighting, watchmen and other precautions and maintain for entire construction period.	Lump Sum	1		\$ -
	<b>PLATES</b>				
	Fabricate a metal visibility plate 100 x 80 mm to be wall mounted. Art work of name board will be issued by IOM	Each	3.00		\$ -
1.1.4	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		\$ -
	<b>Sites Operations</b>				\$ -
1.1.5	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		\$ -
1.1.6	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		\$ -
1.1.7	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		\$ -
1.1.8	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		\$ -

1.1.9	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		\$ -
	<b>Insurances, Bonds &amp; Fees</b>				\$ -
1.1.10	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		\$ -
	<b>Environmental and Social Safeguarding Requirements</b>				\$ -
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		\$ -
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		\$ -
1.1.15	Ensure measures are put in place to guarantee community safety including stakeholder engagement and information disclosure	Lump Sum	1		\$ -
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		\$ -
1.1.17	Rehabilitate and ensure maintenance of aesthetic environment including ensuring the sound management of waste on all sites.	Lump Sum	1		\$ -
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		\$ -
<b>BILL NO.2</b>	<b>CONSTRUCTION OF 50x30 HAFIR DAM IN AMDULWIS</b>				\$ -
<b>2.1</b>	<b>EARTH WORK - MAIN RESERVOIR</b>				\$ -
	<b>Excavation</b>				
2.1.1	Site clearance to remove top vegetable soil, average 200mm deep (60m by 40m)	m2	2400.00		\$ -
	<u>Bulk Excavation of the main reservoir area to a trapezoidal shape (50m by 30m on top, 32m by 12m bottom, depth of 3m) using a side slope of 3 to 1 and use excavated soil to construct embankment, placing and compacting in layers not exceeding 200mm thick around the main reservoir as shown in the drawings.</u>				
2.1.2	Excavate in Loose soil/soft rock formation 0m to 2m	m3	2100.00		\$ -
2.1.3	Excavate in stiff soil/hard rock formation 2m to 3m	m3	1050.00		\$ -
2.1.4	Use native excavated material to form embankments (1.5m high, 1.5H:1V side slope) as per the drawing by placing and compacting in layers not exceeding 200mm, all round the dam.	m3	900.00		\$ -
2.1.5	Use surplus excavated material build guide lines to divert surface runoff to the reservoir (3m wide x 1.5m high x 250m long on either side) and spread remainder for site grading as directed by the IOM Engineer. Cost includes hauling and dumping of material	m3	1450.00		\$ -
	<b>Pipe Line Excavation and Installation (Both Inlet and Outlet)</b>				
<b>2.2A</b>	<b>Inlet Boxes (2)</b>				\$ -
	<b>Excavation</b>				
2.1.5	Excavation for inlet boxes as shown of size 2m long, 1.8 wide and 1.2m deep and ramp the bottom to receive the base slab.	m3	8.64		\$ -
2.1.6	Excavate pipelines as per the drawing	m3	25.50		\$ -
2.1.7	<b>Backfilling</b>				

2.1.8	Return, fill in and ram selected excavated material around the 150mm thick wall	m3	2.33		\$ -
2.1.9	Return, fill in and ram selected material on top of the laid pipe	m3	23.00		\$ -
2.1.10	<b>Concrete work</b>				
2.1.11	<u>Weak concrete blinding class C-10 (1:4:8)</u>				
2.1.12	50mm thick blinding at the bases	m3	0.36		\$ -
2.1.13	<u>Insitu concrete class C-25 (1:1.5:3), vibrated and reinforced as described:</u>				
2.1.14	200mm thick base slab (pre-embedded reinforcement for box wall)	m3	1.44		\$ -
2.1.15	150mm thick reinforced concrete walls	m3	3.15		\$ -
2.1.16	<b>Reinforcement</b>				
2.1.17	<u>High tensile steel reinforcement to B.S. 4461, including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				
2.1.18	Top cover made of Y-12 bars in grid pattern @ 100mm c/c in both directions	kg	25.00		\$ -
2.1.19	<u>Mesh reinforcement : B.S. 4483</u> <u>A142 weighing 2.22 kgs per square meter, 6mm diameter</u> <u>A393 weighing 6.16 kgs per square meter, 10mm diameter</u> <u>including bends, tying wire and spacing blocks</u>				
2.1.20	A142 Fabric mesh reinforcement (2 layers) in box walls	m2	42.00		\$ -
2.1.21	A393 Fabric mesh reinforcement (2 layers) in box slabs	m2	15.20		\$ -
2.1.22	<b>Sawn formwork to:-</b>				
2.1.23	Vertical side of wall for 0.5m portion above ground level	m2	1.00		\$ -
2.1.24	<b>Pipes</b>				
2.1.25	<u>Pipe complaint with the standards of EN ISO 1452 and ISO 4422 and observance of the requirements of DIN 8063 and EN ISO 15493 for the use of plastic pipes</u>				
2.1.26	Supply and install 300mm (12") Dia uPVC pipe from inlet box to main reservoir. Including strainer and all necessary fittings.	m	48.00		\$ -
2.1.27	Supply and install a metallic strainer with gravel pack in cage of wire mesh framed 500x500x500mm sitting on a platform 500x500x400mm and all necessary fittings to each pipe	each	4.00		\$ -
2.1.28	<b>Outlet Box (1)</b>				\$ -
2.1.29	<b>Excavation</b>				
2.1.30	Excavate the base of the box on the already excavated reservoir and ramp to receive the base slab of the outlet box.	m3	0.72		\$ -
2.1.31	<b>Concrete work</b>				
2.1.32	<u>Weak concrete blinding class C-10 (1:4:8)</u>				
2.1.33	50mm thick blinding at the bases	m3	0.18		\$ -
2.1.34	<u>Insitu concrete class 25 (1:1.5:3), vibrated and reinforced as described:</u>				
2.1.35	200mm thick base slab (pre-embedded reinforcement for box wall)	m3	0.72		\$ -
2.1.36	150mm thick reinforced concrete walls	m3	1.58		\$ -
2.1.37	<b>Reinforcement</b>				
2.1.38	<u>High tensile steel reinforcement to B.S. 4461, including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				
2.1.39	Top cover made of Y-12 bars in grid pattern @ 100mm c/c in both directions	kg	12.50		\$ -
2.1.40	<u>Mesh reinforcement : B.S. 4483</u> <u>A142 weighing 2.22 kgs per square meter, 6mm diameter</u> <u>A393 weighing 6.16 kgs per square meter, 10mm diameter</u> <u>including bends, tying wire and spacing blocks</u>				
2.1.41	A142 Fabric mesh reinforcement (2 layers) in box walls	m2	21.00		\$ -
2.1.42	A393 Fabric mesh reinforcement (2 layers) in box slabs	m2	7.60		\$ -
2.1.43	<b>Sawn formwork to:-</b>				
2.1.44	Vertical sides of box walls	m2	10.50		\$ -
2.1.45	<b>Pipes</b>				
2.1.46	<u>Pipe complaint with the standards of EN ISO 1452 and ISO 4422 and observance of the requirements of DIN 8063 and EN ISO 15493 for the use of plastic pipes</u>				
2.1.47	Supply and install 150mm (6") Dia uPVC, class PN10 drinking water pipe from outlet box to the abstraction well. Including strainer and all necessary fittings.	m	12.00		\$ -
2.1.48	Supply and install and metallic strainer and gravel pack to the pipe opening in the outlet box. The gravel pack shall be filled with river-bed, washed, well-rounded and of uniform grading gravel of 1-5mm. The strainer and gravel pack assembly must allow for routine maintenance including removal, cleaning and reinstallation.	LS	1.00		\$ -
2.1.49	<b>ABSTRACTION WELL</b>				\$ -
2.1.50	<b>Excavation</b>				
2.1.51	Manual-mass excavation of 1.9 diameter pit not exceeding 1.5m deep starting from stripped level	m3	4.25		\$ -

2.1.52	Ditto exceeding 1.5-3.7m deep in stiffer soil	m3	6.23		\$ -
2.1.53	Excavate a strip foundation for the platform of size 400mm wide by 200mm deep around the built masonry well.	m3	0.68		\$ -
2.1.54	<b>Backfilling</b>				
2.1.55	Return, fill in and ram selected excavated material around the well	m3	2.32		\$ -
2.1.56	<b>Concrete work</b>				
2.1.57	<u>Weak concrete blinding class C-10 (1:4:8)</u>				
2.1.58	50mm Thick Blinding at the bottom of the well	m3	0.14		\$ -
2.1.59	<u>Insitu concrete class C-25 (1:1.5:3), vibrated and reinforced as described:</u>				
2.1.60	200mm thick base slab reinforced with mesh	m3	0.57		\$ -
2.1.61	Intermediate beam 300mm thick at 2m from the base reinforced with standard 6 Y-10 bars and R-8 ring spaced at 100mm c/c	m3	0.32		\$ -
2.1.62	Top beam, 300mm thick reinforced with standard 6 Y-10 bars and R-8 ring spaced at 100mm c/c	m3	0.32		\$ -
2.1.63	150mm thick slab over the well opening with 2 loop handles and withdrawal hole	m3	0.52		\$ -
2.1.64	<b>Reinforcement</b>				
2.1.65	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying, wire and spacing blocks.</u>				
2.1.66	8mm	Kg	25.00		\$ -
2.1.67	10mm	Kg	35.00		\$ -
2.1.68	<u>Mesh reinforcement ; B.S. 4483</u> <u>A393 weighing 6.16 kgs per square meter, 10mm diameter</u> <u>including bends, tying wire and spacing blocks</u>				
2.1.69	A393 Fabric mesh reinforcement (2 layers) in top and bottom slab	m2	11.34		\$ -
2.1.70	<b>Sawn formwork to:-</b>				
2.1.71	Vertical sides of intermediate beam	m2	3.20		\$ -
2.1.72	Vertical sides of top beam	m2	3.20		\$ -
2.1.73	Vertical side of top slab	m2	0.99		\$ -
2.1.74	<b>Foundation Walling</b>				
2.1.75	<u>Burnt Bricks walling; bedded, load bearing 7N/mm², jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.</u>				
2.1.76	200mm thick wall up to 250mm above GL	m2	22.67		\$ -
2.1.77	250mm thick wall for a foot step circling the well at ground level, 150mm tall	m2	1.01		\$ -
2.1.78	<b>Plastering</b>				
2.1.79	12 mm thick cement : sand (1:3) plaster for well lining	m2	19.31		\$ -
2.1.80	12 mm thick cement : sand (1:4) rough plaster for well exterior above ground	m2	5.02		\$ -
2.1.81	<b>Sundries</b>				
2.1.82	Allow for making 600 x600 mm square opening with a lockable galvanized access steel cover for drawing water	LS	1.00		\$ -
2.1.83	<b>Manual Rope Pump</b>				
2.1.84	<u>Contractor to provide shop drawings or manufacturer's specifications for approval by IOM Engineer</u>				
2.1.85	Fabrication and installation of manual rope pump, including welding, installation, pulley system, handles, and rope as per specification on the drawing	LS	1.00		\$ -
2.1.86	<b>Well Disinfection</b>				
2.1.87	Clean and disinfect the well as per ToR	LS	1.00		\$ -
<b>BILL NO.3</b>	<b>REHABILITATION OF 60X50m HAFFIR DAM IN GONGBAR</b>				\$ -
<b>2.1</b>	<b>EARTH WORK - MAIN RESERVIOR</b>				\$ -
	<b>Excavation</b>				
3.1.1	Site clearance to remove top vegetable soil, average 200mm deep (75m by 65m)	m2	4875.00		\$ -
	<u>Bulk Excavation of the main reservoir area to a trapezoidal shape (60m by 50m on top, 42m by 32m bottom , depth of 3m) using a side slope of 3 to 1 and use excavated soil to construct embankment, placing and compacting in layers not exceeding 200mm thick around the main reservoir as shown in the drawings.</u>				
3.1.2	Excavate in Loose soil/soft rock formation 0m to 2m	m3	4920.00		\$ -
3.1.3	Excavate in stiff soil/hard rock formation 2m to 3m	m3	2460.00		\$ -
3.1.4	Use native excavated material to form embankments (1.5m high, 1.5H:1V side slope) as per the drawing by placing and compacting in layers not exceeding 200mm, all round the dam.	m3	900.00		\$ -

3.1.5	Use surplus excavated material build guide lines to divert surface runoff to the reservoir (3m wide x 1.5m high x 250m long on either side) and spread remainder for site grading as directed by the IOM Engineer. Cost includes hauling and dumping of material	m3	1450.00		\$ -
<b>Pipe Line Excavation and Installation (Both Inlet and Outlet)</b>					
<b>3.2</b>	<b>Inlet Boxes (2)</b>				\$ -
	<b>Excavation</b>				
3.2.1	Excavation for inlet boxes as shown of size 2m long, 1.8 wide and 1.2m deep and ramp the bottom to receive the base slab.	m3	8.60		\$ -
3.2.2	Excavate pipelines as per the drawing	m3	25.50		\$ -
	<b>Backfilling</b>				
3.2.3	Return, fill in and ram selected excavated material around the 150mm thick wall	m3	2.33		\$ -
3.2.4	Return, fill in and ram selected material on top of the laid pipe	m3	23.00		\$ -
	<b>Concrete work</b>				
	<u>Weak concrete blinding class C-10 (1:4:8)</u>				
3.2.5	50mm thick blinding at the bases	m3	0.36		\$ -
	<u>Insitu concrete class C-25 (1:1.5:3), vibrated and reinforced as described:</u>				
3.2.6	200mm thick base slab (pre-embedded reinforcement for box wall)	m3	1.44		\$ -
3.2.7	150mm thick reinforced concrete walls	m3	3.15		\$ -
	<b>Reinforcement</b>				
	<u>High tensile steel reinforcement to B.S. 4461, including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				
3.2.8	Top cover made of Y-12 bars in grid pattern @ 100mm c/c in both directions	kg	25.00		\$ -
	<u>Mesh reinforcement ; B.S. 4483</u> <u>A142 weighing 2.22 kgs per square meter, 6mm diameter</u> <u>A393 weighing 6.16 kgs per square meter, 10mm diameter</u> <u>including bends, tying wire and spacing blocks</u>				
3.2.9	A142 Fabric mesh reinforcement (2 layers) in box walls	m2	42.00		\$ -
3.2.10	A393 Fabric mesh reinforcement (2 layers) in box slabs	m2	15.20		\$ -
	<b>Sawn formwork to:-</b>				
3.2.11	Vertical side of wall for 0.5m portion above ground level	m2	0.00		\$ -
	<b>Pipes</b>				
	<u>Pipe complaint with the standards of EN ISO 1452 and ISO 4422 and observance of the requirements of DIN 8063 and EN ISO 15493 for the use of plastic pipes</u>				
3.2.12	Supply and install 300mm (12") Dia uPVC pipe from inlet box to main reservoir. Including strainer and all necessary fittings.	m	48.00		\$ -
3.2.13	Supply and install a metallic strainer with gravel pack in cage of wire mesh framed 500x500x500mm sitting on a platform 500x500x400mm and all necessary fittings to each pipe	each	4.00		\$ -
<b>2.2B</b>	<b>Outlet Box (1)</b>				\$ -
	<b>Excavation</b>				
3.3.1	Excavate the base of the box on the already excavated reservoir and ramp to receive the base slab of the outlet box.	m3	0.72		\$ -
	<b>Concrete work</b>				
	<u>Weak concrete blinding class C-10 (1:4:8)</u>				
3.3.2	50mm thick blinding at the bases	m3	0.18		\$ -
	<u>Insitu concrete class 25 (1:1.5:3), vibrated and reinforced as described:</u>				
3.3.3	200mm thick base slab (pre-embedded reinforcement for box wall)	m3	0.72		\$ -
3.3.4	150mm thick reinforced concrete walls	m3	1.58		\$ -
	<b>Reinforcement</b>				
	<u>High tensile steel reinforcement to B.S. 4461, including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				
3.3.5	Top cover made of Y-12 bars in grid pattern @ 100mm c/c in both directions	kg	12.50		\$ -
	<u>Mesh reinforcement ; B.S. 4483</u> <u>A142 weighing 2.22 kgs per square meter, 6mm diameter</u> <u>A393 weighing 6.16 kgs per square meter, 10mm diameter</u> <u>including bends, tying wire and spacing blocks</u>				
3.3.6	A142 Fabric mesh reinforcement (2 layers) in box walls	m2	21.00		\$ -
3.3.7	A393 Fabric mesh reinforcement (2 layers) in box slabs	m2	7.60		\$ -
	<b>Sawn formwork to:-</b>				
3.3.8	Vertical sides of box walls	m2	10.50		\$ -
	<b>Pipes</b>				
	<u>Pipe complaint with the standards of EN ISO 1452 and ISO 4422 and observance of the requirements of DIN 8063 and EN ISO 15493 for the use of plastic pipes</u>				

3.3.9	Supply and install 150mm (6") Dia uPVC, class PN10 drinking water pipe from outlet box to the abstraction well. Including strainer and all necessary fittings.	m	12.00		\$ -
3.3.10	Supply and install and metallic strainer and gravel pack to the pipe opening in the outlet box. The gravel pack shall be filled with river-bed, washed, well-rounded and of uniform grading gravel of 1-5mm. The strainer and gravel pack assembly must allow for routine maintenance including removal, cleaning and reinstallation.	LS	1.00		\$ -
<b>BILL NO 2.3</b>	<b>ABSTRACTION WELL</b>				\$ -
	<b>Excavation</b>				
3.4.1	Manual-mass excavation of 1.9 diameter pit not exceeding 1.5m deep starting from stripped level	m3	4.25		\$ -
3.4.2	Ditto exceeding 1.5-3.7m deep in stiffer soil	m3	6.23		\$ -
3.4.3	Excavate a strip foundation for the platform of size 400mm wide by 200mm deep around the built masonry well.	m3	0.68		\$ -
	<b>Backfilling</b>				
3.4.4	Return, fill in and ram selected excavated material around the well	m3	2.32		\$ -
	<b>Concrete work</b>				
	<u>Weak concrete blinding class C-10 (1:4:8)</u>				
3.4.5	50mm Thick Blinding at the bottom of the well	m3	0.14		\$ -
	<u>In situ concrete class C-25 (1:1.5:3), vibrated and reinforced as described:</u>				
3.4.6	200mm thick base slab reinforced with mesh	m3	0.57		\$ -
3.4.7	Intermediate beam 300mm thick at 2m from the base reinforced with standard 6 Y-10 bars and R-8 ring spaced at 100mm c/c	m3	0.32		\$ -
3.4.8	Top beam, 300mm thick reinforced with standard 6 Y-10 bars and R-8 ring spaced at 100mm c/c	m3	0.32		\$ -
3.4.9	150mm thick slab over the well opening with 2 loop handles and withdrawal hole	m3	0.52		\$ -
	<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>				
3.4.10	8mm	Kg	25.00		\$ -
3.4.11	10mm	Kg	35.00		\$ -
	<u>Mesh reinforcement : B.S. 4483</u> <u>A393 weighing 6.16 kgs per square meter, 10mm diameter</u> <u>including bends, tying wire and spacing blocks</u>				
3.4.12	A393 Fabric mesh reinforcement (2 layers) in top and bottom slab	m2	11.34		\$ -
	<b>Sawn formwork to:-</b>				
3.4.13	Vertical sides of intermediate beam	m2	3.20		\$ -
3.4.14	Vertical sides of top beam	m2	3.20		\$ -
3.4.15	Vertical side of top slab	m2	0.99		\$ -
	<b>Foundation Walling</b>				
	<u>Burnt Bricks walling; bedded, load bearing 7N/mm², jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.</u>				
3.4.16	200mm thick wall up to 250mm above GL	m2	22.67		\$ -
3.4.17	250mm thick wall for a foot step circling the well at ground level, 150mm tall	m2	1.01		\$ -
	<b>Plastering</b>				
3.4.18	12 mm thick cement : sand (1:3) plaster for well lining	m2	19.31		\$ -
3.4.19	12 mm thick cement : sand (1:4) rough plaster for well exterior above ground	m2	5.02		\$ -
	<b>Sundries</b>				
3.4.20	Allow for making 600 x600 mm square opening with a lockable galvanized access steel cover for drawing water	LS	1.00		\$ -
	<b>Manual Rope Pump</b>				
	<u>Contractor to provide shop drawings or manufacturer's specifications for approval by IOM Engineer</u>				
3.4.21	Fabrication and installation of manual rope pump, including welding, installation, pulley system, handles, and rope as per specification on the drawing	LS	1.00		\$ -
	<b>Well Disinfection</b>				
3.4.22	Clean and disinfect the well as per ToR	LS	1.00		\$ -
<b>BILL NO. 4</b>	<b>BOQ - GOSFAMI PS - REHABILITATION OF ONE CLASSROOM BLOCK WITH FOUR CLASSES AND TWO OFFICES ATTACHED</b>				\$ -
	<b>SITE PREPARATION</b>				\$ -
	<b>Site Clearance</b>				
4.1.1	Site clearance and removal of debris from site as directed	100.00	m2		\$ -
	<b>ROOF WORK</b>				\$ -



	<u>Rates inclusive of selftapping screws or J-bolts, angle brackets, joints fillet, cutting and application of approved anti rust paints on the metal surfaces in three coats.</u>				
4.1.2	Remove iron sheets covering from of the classroom block roof, offices and varandah as directed by the Engineer	1.00	Lump Sum		\$ -
4.1.3	Removing and replacing corroded hollow sections size (80x50x2)mm at the varandah of classrooms and some for offices varandah as directed.	125.00	m		\$ -
4.1.4	Removing and Realigning the two lines of purlins at the ridgecap in a such a way the ridge caps can be firmly fasten to the purlins	97.68	m		\$ -
4.1.5	Fix the cracks on walls and floors with concrete mix 1:2:4 where necessary apply mortar mix 1:3 with smooth finishes ready for painting as directed by field Engineer	1.00	Lump Sum		\$ -
4.1.6	Apply floor screeding 25mm thick on all surfaces of the classrooms block floor including mirroring after hacking the floor to create keys for bonding	387.90	m2		\$ -
	<b>Roof Covering</b>				
4.1.7	Supplying & fixing of gauge 28 pre-painted Super Five IT4 profiled roofing sheets ( 0.5mm ) of approved blue colour: fixed with roofing screws to mettalic purlins ( measured separately) and caps/rubber seals	505.39	m2		\$ -
4.1.8	Supplying & fixing Gauge 28 prepainted ridge cap; 650mm girth (average) in position complete with all necessary roofing screws and caps	49.00	m		\$ -
4.1.9	25x225mm high mettalic valance board / barge board screwed firmly to 1mettalic rafters edges closed with same thickness of MS plates: all complete with approved metal preservative as specified. Painted with 1 coat of anti rust and finished with 3 coats of an oil-based gloss paint in white	104	m		\$ -
4.1.10	Parapet wall on gables, remove and replace in-kind with new masonry work hight 200mm (burnt clay bricks with cement mortar 1:4) including smooth paster finishes and 3 coats painting with matching colour of the external wall as directed by field Engineer and shown in SoW	1.00	Lumpsum		\$ -
	<b>Water Harvesting</b>				\$ -
4.1.11	6" (150mm) dia. and 4mm thick PVC gutter screwed on 25 x 225mm wooden fascia board with support bracket placed at 2000mm c/c	19.00	m		\$ -
4.1.12	Supply and install one rainwater harvesting tank stand including the foundation, plinth wall, concrete slab, brick wall, compacted murrum, top slab and 5,000L water tank with all pipe connections & fittings. See ToR for typical drawing	1.00	Nr		\$ -
	<b>DOORS AND WINDOWS</b>				\$ -
	<u>Note: All doors and windows to be supplied and fixed as per the details and schedule provided. Doors and windows to be sized to fit existing door/window frames as measured on site. All iron Mongery that has not been measured separately shall be priced together with the corresponding door/window.</u>				
	<b>Doors</b>				
4.1.13	Removing, replicating same design of existing doors and fixing fabricated doors for classrooms as directed by field Engineer. Door size 1200mm wide by 2200mm high	4.00	Nr		\$ -
	<b>Windows</b>				
	<u>Fabricated double opening windows manufactured from standard strong Z sections: manufacture, assemble and deliver to site: Rates are inclusive of all 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>				
4.1.14	Removing, replicating same design of existing window and fixing fabricated window for office as directed by field Engineer. Window size 1000mm wide by 1200mm high	1.00	Nr		\$ -
4.1.15	Check and fix loose and broken doors and windows hinges and locks for the whole block of classrooms and offices	1.00	Lumpsum		\$ -
	<b>FINISHES</b>				\$ -
	<b>Painting</b>				
4.1.16	Prepare surfaces: apply three coats vinyl silk soft white emulsion paint to the interior wall surface (for the 4 classrooms)	494.51	m2		\$ -
4.1.17	Prepare surfaces: apply three coats weather guard emulsion in cream to exterior plastered surface for the whole wall surfaces except skirting of 250mm high with blue paint	221.34	m2		\$ -
4.1.18	Prepare surfaces: apply three coats super gloss oil paint: on metal surface for each doors matching the existing colours for doors	2.00	Nr		\$ -
4.1.19	Prepare surfaces: apply three coats super gloss oil paint: on metal surface for each windows matching the existing colour for windows	27.00	Nr		\$ -
4.1.20	Prepare surfaces: apply three coats super gloss oil paint: on metal surface for each steel veranda posts replicating the same colour	12.00	Nr		\$ -
	<b>BILL SUMMARY</b>				

<b>BILL NO. 4</b>	BOQ - GOSFAMI PS - REHABILITATION OF ONE CLASSROOM BLOCK WITH FOUR CLASSES AND TWO OFFICES ATTACHED	1.00	unit	\$ -	\$ -
				<b>GRAND TOTAL</b>	<b>\$ -</b>
	<b>BILL SUMMARY</b>				
<b>BILL NO. 1</b>	PRELIMINARIES	Unit	1.00	\$ -	\$ -
<b>BILL NO.2</b>	CONSTRUCTION OF 50X30 HAFFIR IN AMDULWIS BOMA	Unit	1.00	\$ -	\$ -
<b>BILL NO.3</b>	REHABILITATION OF 60X50m HAFFIR DAM IN GONGBAR	Unit	1.00	\$ -	\$ -
<b>BILL NO. 4</b>	BOQ - GOSFAMI PS - REHABILITATION OF ONE CLASSROOM BLOCK WITH FOUR CLASSES AND TWO OFFICES ATTACHED	Unit	1.00	\$ -	\$ -
	<b>GRAND TOTAL</b>				<b>\$ -</b>