Fadhili Trust
P.O. Box 244 - 00511
Ongata Rongai

BILL OF QUANTITIES FOR CONSTRUCTION OF A 225M^3 MASONRY TANK AT ILINGONI ROCK CATCHMENT

NB: Rates and prices in the BoQ shall include value of the work described under the item and shall cover all over heads charges, profits, and applicable taxes. Contract to be paid as per actual works done

Item	Description	Unit	Qty	Rate	Amount
BILL 1	**PRELIMINARY AND GENERAL ITEMS**				
1.1	Allow for mobilization; include mobilization to site, and demobilization on completion of contract; Including transportation of materials beyond access point	Item			
1.2	Allow for a project branding to be installed at a convenient site to be maintained throughout the project period, as directed by the Project Manager.	Nos			
	TOTAL FOR PRELIMINARIES				
Bill 2	**Ground Masonry Tank 225 C.M.**				
Item No	**Description**	**Unit**	**Qty**		
	THE FOLLOWING WORKS IN GROUND MASONRY 225M^3 STORAGE TANK INCLUDING SUPPLY OF ALL MATERIALS AND NECESSARY WORKS FOR PLACING, ERECTING, COMPLETION, TESTING AND COMMISSIONING. ALL WORKS PROVISIONAL AND SUBJECT TO RE-MEASUREMENTS				
2.1	**Site Clearance**				
2.1.1	Clear site of all bushes and shrubs and remove debris from site directed by the Engineer	m^2			
2.2	**Excavation and Earthworks**				
2.2.1	Excavate a pit for water tank not exceeding 1.5m deep store onsite and backfill with selected material and spread surplus onsite; including all necessary	m^3			

Cell: (+254) 733 867 112/ (+254) 710 401 208
Email: info@fadhilitrust.org Website: www.fadhilitrust.org

Item	Description	Unit	Qty	Rate	Amount
	works for side protection and for keeping site free from water, mud and fallen material.				
2.2.2	E.O Decomposed rock/ compacted murram as defined in the specifications.	m^3			
2.2.3	Extra over for excavations in rock as described and defined in the specifications	m^3			
2.3	**Hardcore Filling**				
2.3.1	Lay and compact 200mm thick hand-packed hard core laid in layers not exceeding 150mm thick	m^2			
2.4	**Concrete**				
	Vibrated Reinforced Concrete 25/20 as described in:-				
2.4.1	200mm thick floor slab	m^3			
2.4.2	200mm thick suspended roof slab	m^3			
2.4.3	Allow for finishing in cement plaster (1:3) on roof slab laid in 2.5% fall	m^2			
2.4.4	450mm x 200mm beams	m^3			
2.4.5	diameter 300-mm columns	m^3			
2.5	**Erect and strike sawn Formwork to:-**				
2.5.1	Edges of 200mm thick floor slab.	m			
2.5.2	Soffit of suspended slab	m^2			
2.5.3	Edges of suspended roof slab 200mm thick.	m			
2.5.4	450 x 200mm beams	m^2			
2.5.5	300-mm diameter column	m^2			
2.5.6	Allow for forming 600x600mm opening for access manhole in 200mm thick slab	No.			
2.6	**Steel Reinforcement**				
	Supply and fix reinforcement including bending hooks binding wire, cutting, spacers and supporting all in position as described in the drawings				
	High tensile square twisted bars to B.S.4449				

Item	Description	Unit	Qty	Rate	Amount
2.6.1	16mm diameter	Kg			
2.6.2	12mm diameter	Kg			
2.6.3	10mm diameter	Kg			
2.6.4	8mm diameter	Kg			
2.6.5	6mm diameter	Kg			
	Natural Stone Walling jointed and pointed in Cement Sand Mortar (1:3) Reinforced every Course to engineer's details.				
2.6.4	225mm thick	m^2			
2.6.5	300mm thick	m^2			
2.6.6	375 mm thick	m2			
2.7	**Plaster**				
2.7.1	25mm Thick cement and sand (1:2) plaster to internal wall surface with water proof cement at a ratio 1kg to 50kg cement.	m^2			
2.7.2	20mm thick cement/ sand 1:3 plastering to external surface of walls.	m^2			
2.8	**Screed**				
2.8.1	40mm thick cement and sand (1:3) screed to floor, smooth render laid to falls and brushed with water proof treatment as vandex, master seal, hyseal, or any other equally approved to manufacturers specification.	m^2			
2.8.2	2:1 sand: cement plaster formed to section shown round bottom of wall to form 35mm deep groove after all excess moisture has drained out and groove has been painted with bituminous paint.	m			
2.9	**Ladder**				
2.9.1	2000mm long x 800mm wide mild steel ladder stringers 2.0m x50mm x 10mm flat bar, rings 800 x 200mm x 20mm round bar at 300mm centres externally anchored to wall lugs: one coat red oxide primer: three coats gloss oil finish: all to Engineers' detail.	No			
5.9.2	2000 long X 800mm width G.I ladder internally anchored to wall lugs: one coat red oxide primer: three coats gloss oil finish: all to Engineers' detail.	No.			

Item	Description	Unit	Qty	Rate	Amount
2.10.	**Manhole covers**				
2.10.1	Supply and fix steel prefabricated lockable cover 600×600mm complete with frames, steel gauge 16 and as directed by the Engineer.	No.			
2.11	**Pipework and fitting: Supply, fabricate, lay, test and fit all pipes and fittings including jointing materials (bolts, nuts, washers, gaskets, packings), cutting and threading as specified, galvanized mild steel pipes to BS 1387 Class B with flanged and drilled joints c/w bolts and nuts to BS 143 and 1256 of approved manufacturer with galvanized to BS 729.**				
2.11.1	**Scour Pipe**				
2.11.1.1	200x150mm dia flanged bellmouth	No.			
2.11.1.2	150mm dia 90o flanged GI bend	No.			
2.11.1.3	150mm flanged GI Pipe piece 3.5m long	No.			
2.11.1.4	150mm dia Cast Iron sluice valve	No.			
2.11.1.5	1200x1200mm Standard valve chamber	No.			
2.11.2	**Overflow**				
2.11.2.1	150mm dia 90 degree bend	No.			
2.11.2.2	150mm dia GS socket	No.			
2.11.2.3	150mm GS flanged 3m long pipe	No.			
2.11.2.4	150mm dia GS flanged adapter	No.			
2.11.3	**Air Vents 3 No.**				
5.11.3.1	75mm dia GI pipe piece 350mm long threaded	No.			
5.11.3.2	75mm elbow with mosquito gauze	No.			
5.11.3.3	75mm nipple	No.			
5.11.3.4	75mm equal Tee	No.			
5.11.3.5	25mm wide securing strip	m			
5.11.4	**Inlet Pipe**				
5.11.4.1	150x90° mm dia flanged GI bend	No.			
5.11.4.2	150mm dia GS flanged GI piece 500mm long	m			
2.11.4.3	150mm dia GI flanged pipe 3m long	No.			
2.11.4.4	150mm Cast Iron sluice valve	No.			
2.11.4.5	1200x1200mm Standard valve chamber	No.			

Item	Description	Unit	Qty	Rate	Amount
2.11.5	**Outlet 2No**				
2.11.5.1	150mm dia GS pipe piece 3m long flanged	No.			
2.11.5.2	3000x150mm dia bellmouth	No.			
2.11.5.3	150mm diameter flanged cast iron sluice valve.	No.			
2.12	1200x1200mm Standard valve chamber	No.			
2.13	**Testing and Sterilization**				
2.13.1	Allow for water tightness test as specified and directed	Item	1		
2.13.2	Allow for sterilization of the tank as directed	Item	1		
2.14	**Painting and Branding**				
2.14.1	Provide material for painting and branding the tank as directed by the Engineer	Item	1		
	SUB TOTAL FOR ONE WATER TANK 225M^3				
	AMOUNT FOR ONE WATER TANK CARRIED TO SUMMARY PAGE				
	MAIN SUMMARY				
1	PRELIMINARY AND GENERAL ITEMS				
2	GROUND MASONRY TANK 225 C.M.				
	SUB TOTAL 1				
	Add 2 % Contingencies				
	TOTAL				
	VAT (16%)				
	AMOUNT FOR ONE WATER TANK CARRIED TO FORM OF TENDER				