

**PROJECT: KAMELIL WATER PROJECT.(CHEPKORIO WARD) FY17/18**

**BILL NO: 1.0. 50M3 GROUND MASONRY TANK**

Item	Item description	Qty	Unit	Rate	Amount
	<b>1.1 PRELIMINARY AND GENERAL ITEMS.</b>				
1.1.1	The contractor shall allow for the engineers and /or his representative's supervision an overheads for 3 months contract period at a rate of ksh <b>10,000.00</b> per month.	3	M0nths	<b>10000/-</b>	<b>30,000.00</b>
1.1.2	The contractor shall allow for provisional sum of Kenya shilling Thirty thousand ( <b>Ksh 30,000.00</b> ) to cater for water to be used during construction works	Ls	Item	L s	<b>30,000.00</b>
	<b>TOTAL CARRIED TO SUMMARY SHEET</b>				<b>60,000.00</b>

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**BILL NO: 1.2 EXCAVATION AND EARTH WORKS**

Item	Item description	Qty	Unit	Rate	Amount
1.2.1	Clear site of bushes ,shrubs, grub uproots and dispose of spoil.	38	M <sup>2</sup>		
1.2.2	Excavate oversite to reduce levels not exceeding 1.5m deep starting from the existing ground level and remove to temporary spoil heap.	35	M <sup>3</sup>	-	
1.2.3	Allow for keeping all the excavations free from foreign materials and general waters.	L /S	Item		
1.2.4	Provide and apply anti- termite solution preferably Gladiator or any other approved grade to the surfaces of excavation.	30	M <sup>2</sup>		
1.2.5	Provide ,place and compact hardcore 300mm thick to make up levels.	6	M <sup>3</sup>		
1.2.6	Provide and compact 50mm thick selected 1:4:8 mass concrete blinding to the surface of hardcore.	2.5	M <sup>3</sup>		
1.2.7	Provide and place 1000gauge polythene sheet to the surface of blinded hardcore.	30	M <sup>2</sup>		
<b>TOTAL CARRIEDNTO SUMMARY SHEET</b>					

**BILL NO: 1.3 CONCRETE WORKS AND REINFORCEMENT**

Item	Item description	Qty	Unit	Rate	Amount
	<b>Reinforced concrete grade 20/20 (1:2:4) as described to the following.</b>				
1.3.1	150mm thick floor slab mixed with 1kg water proof /50kg bag of ordinary Portland cement.	3.2	M <sup>3</sup>		
1.3.2	Ditto 250mmx250mm square columns	0.5	M <sup>3</sup>		
1.3.3	Ditto 250mmx 250mm cross beams	0.5	M <sup>3</sup>		
1.3.4	Ditto 100mm thick roof slab	4.8	M <sup>3</sup>		
	<b>Provide ,handle,cut to size and fix the following reinforcement bars as stated in the bending schedule.</b>				
1.3.5	12mm twisted bars to the beams	89	Kg		
1.3.6	Ditto to columns	71	Kg		
1.3.7	Ditto to roof slab	310	Kg		
1.3.8	Ditto to floor slab	320	Kg		
1.3.9	6mm bars to beams and columns	15	Kg		
1.3.10	8mm circumferential bars to the walls	216	Kg		
1.3.11	Allow for binding wires for tying the reinforcement	20	Kg		
	<b>TOTAL CARRIED TO SUMMARY SHEET</b>				

**BILL NO: 1.4 WALLING, SHUTTERING AND FORM WORK**

Item	Item description	Qty	Unit	Rate	Amount
1.4.1	Provide, handle materials, mix mortar as per specification and construct 225mm thick reinforced concrete block wall in 1:1:3 cement: water proof cement: sand mortar.	42	M <sup>2</sup>		
1.4.2	Sawn timber formwork to the sides of foundation slab.	18	M		
1.4.3	Sawn timber formwork to edges of the roof slab.	60	M		
1.4.4	Sawn timber formwork to the soffit of the roof slab.	23	M <sup>2</sup>		
1.4.5	Sawn timber 3"x2" to the soffit roof slab.	75	M		
1.4.6	Struts/timber supports of approved size and quality average height 3.0m.	100	NO		
1.4.7	Provide and fix 1000gauge polythene sheeting to top of timber formwork to the roof slab.	23	M <sup>2</sup>		
1.4.8	Provide ,handle and fix bondex between the tank wall and the slab as per the drawing.	15	Kg		

<b>FINISHES</b>					
1.4.9	20mm thick cement: sand (1:3) mixed with water proof cement to the inside walls .	40	M <sup>2</sup>		
1.4.10	Ditto the floor slab	23	M <sup>2</sup>		
1.4.11	Ditto to the external walls	45	M <sup>2</sup>		
1.4.12	Ditto to the exterior surface of the roof slab	26	M <sup>2</sup>		
1.4.13	Ditto to the interior of the roof slab	28	M <sup>2</sup>		
1.4.14	Provide materials and apply 2 coats of first grade gloss oil paint to the external walls	42	M <sup>2</sup>		
<b>TOTAL CARRIED TO SUMMARY SHEET.</b>					

**BILL NO: 1.5 ANCILLARY AND PIPEWORK**

Item	Item description	Qty	Unit	Rate	Amount
1.5.1	Fabricate and fix a vertical ladder comprising 25mm stainless steel tubing average height 3.0m to the internal and external surfaces of the tank.	2	NO		
1.5.2	Fabricate and fix 600mmx600mm x3mm thick metal plate ,manhole covers complete with lockable device and high quality padlock.	3	No		
1.5.3	Construct and complete in dressed stone walling 1500mmx1500mm man hole chambers.	2	No		
1.5.4	Provide and install air vents to the roof slab of the tank comprising 100mmdiameter G.Ipipes,nipple, and 2No G.I elbows. <b>Provide,handle,lay and fix the following pipes and fittings as described to;</b>	3	No		
1.5.5	Outlet pipe. 80mmØ G.I pipe	6	M		
1.5.6	Ditto 90 degrees bend	1	No		
1.5.7	Ditto nipple	1	No		
1.5.8	80mm Ø sluice valve	1	No		
1.5.9	<b>Scour ,inlet and Overflow pipes.</b> 80mmØ G.I pipe	6	M		

1.5.10	800mm G.I Pipe	6	M		
1.5.11	80mm 90 degrees bend	1	No		
1.5.12	50mm 90 degree bend	4	No		
1.5.13	80mm sluice valve	1	No		
<b>TOTAL CARRIED TO SUMMARY SHEET</b>					

**PROJECT: KAMELIL WATER PROJECT.(CHEPKORIO WARD)**

**50M3 GROUND MASONRY TANK CONSTRUCTION**

**SUMMARY SHEET**

<b>BILL</b>	<b>BILL DESCRIPTION</b>	<b>AMOUNT KSH.</b>
1.1	PRELIMINARY AND GENERAL ITEMS.	
1.2	EXCAVATION AND EARTH WORKS	
1.3	CONCRETE WORKS AND REINFORCEMENT	
1.4	WALLING ,SHUTTERING AND FORM WORK	
1.5	ANCILLARY AND PIPE WORK	
<b>TOTAL</b>		

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**BILL NO: 2.0. PIPELINE AND COMPLETION OF PUMPING SYSTEM**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2.1	<b>RISING MAIN.</b>				
2.1.1	Excavate trench for pipeline 450mmx600mm in normal soil. Rate to include back filling of pipeline.	228	M		
2.1.2	Provide ,lay and test G.I pipe 3'' (80mm) class B including all fittings and accessories.	18	M		
2.1.3	Ditto 3'' (90mm) UPVC class D	210	M		
2.2	<b>DISTRIBUTION MAIN.</b>				
2.2.1	Excavate trench for pipeline 450mmx600mm in normal soil. Rate to include back filling of pipeline.	1200	M		
2.2.2	Provide ,lay and test G.I pipe 1½ ' (38mm) class B including all fittings and accessories.	120	M		
2.2.3	Ditto 1 ½ (40mm) UPVC class C	1080	M		
2.3.	<b>PUMPING SYSTEM</b> Provide and fix the following fittings as described to the installed pump.				
2.3.1	G .I reducing socket 3''x2''	1	No		
2.3.2	G.I bend 3''	2	No		
2.3.3	Peglar foot valve 3''	1	No		
2.3.4	G.I reducing socket 2½'' x2''	1	No		
2.3.5	Non return valve 2''	1	No		
2.3.6	Peglar gate valve 2''	1	No		
2.3.7	G.I nipple 2''	3	No		
2.3.8	G.I union 2''	2	No		
2.3.9	G.I tee 2''	2	No		
2.3.10	G.I elbow ½ ''	4	No		
2.3.11	Peglar Gate valve ½ ''	2	No		
2.3.12	G.I union ½ ''	2	No		
2.3.13	G.I tee ½ ''	1	No		
2.3.14	G.I nipple ½ ''	3	No		
2.3.15	G.I bend 2''	2	No		
2.3.16	G.I pipe ½ ''	1	No		
2.3.17	Reducing bush 2'' x1/2''	2	No		
2.3.18	G.I socket 2'' x 1½ ''	2	No		
	<b>SUB TOTAL</b>				

