

BILLS OF QUANTITIES FOR THE PROPOSED DRILLING AND COMMISSIONING OF A SOLAR POWERED BOREHOLE IN TIGANIA WEST CONSTITUENCY - MERU COUNTY					
BILL NO. 01: PRELIMINARY AND GENERAL					
ITEM NO	DESCRIPTION	UNIT	QUANTIT Y	RATE (KES)	AMOUNT (KES)
ELEMENT NO..01					
1.1	Water Resource Authority (WRA) Fee	LS	1	80,000.00	80,000.00
1.2	Environmental Impact Assessment Report	LS	1	80,000.00	80,000.00
1.3	Establish, maintain and remove contractor's camps, offices, facilities, etc at the end of the contract. The employer has no available land to offer the contractor's camp. Identification and procurement of suitable land for contractor's use, whether rented or purchased is the obligation and responsibility of the contractor.	LS	1	100,000.00	100,000.00
1.4	Allow for project supervision	Ls	1	100,000.00	100,000.00
1.5	Allow for profits for item 1.5	%	0	100,000.00	10,000.00
TOTAL BILL NO. 01 CARRIED TO COLLECTION					370,000.00
BILL NO. 02: DRILLING AND CONSTRUCTION OF THE BOREHOLE					
ITEM NO	DESCRIPTION	UNIT	QTY	RATE (KSHS)	AMOUNT (KSHS)
2.0	Mobilization and demolition of contractor's plant and equipment including but not limited to drilling units, tank erection equipment, test pumping equipment, borehole development equipment, materials, personnel and other required supplies.	LS	1	200,000.00	200,000.00
2.1	Drilling one borehole with finished internal diameter 8" to the required maximum depth.				
	i) From ground level to 100m	m	100	4,100.00	410,000.00
	ii) From 101 to 160m	m	60	4,400.00	264,000.00
2.2	Supply and installation of plain steel 6" (152mm) class B steel casing- 4.5mm thickness.	PCS	100	4,700.00	470,000.00
2.3	Supply and installation of slotted steel casing 6" (152mm) class B diameter – 4.5mm thickness	PCS	60	4,900.00	294,000.00
2.4	Installation of gravel pack (2-4mm) (not laterite) to attest 3m above the top screen.	Ton	5	25,000.00	125,000.00
2.5	Grout between the casing and the borehole for top ten meters.	Ls	1	20,000.00	20,000.00
2.6	Borehole development by airlifting and/or surging for minimum of 4hrs, with estimate of discharge and static water level measurements.	Hr	4	42,500.00	170,000.00
2.7	Test pumping for 24hrs, drawdown, yield recovery, and data analysis.	Hrs	24	2,800.00	67,200.00
2.8	Supply and installation of surface casing (To Be Retained)	m	6	2,500.00	15,000.00

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2.90	Collect water sample and carry out full water quality analysis (chemical and bacteriological analysis) for in a reputable laboratory accepted to the project manager and submit water quality test report	LS	1	20,000.00	20,000.00		
2.10	Install 6" well head steel cap and cement slab of dimension 1.0MX1.0MX10M	LS	1	20,000.00	20,000.00		
2.11	Complete the prescribed WRA borehole drilling completion report and submit to WRA	LS	1	4,500.00	4,500.00		
2.12	Processing of water abstraction permit.	LS	1	10,000.00	10,000.00		
2.15	Allow cost for providing water for all requirements of the contract, field camp, drilling works etc	LS	1	50,000.00	50,000.00		
	TOTAL BILL NO. 02 CARRIED TO COLLECTION				2,139,700.00		
	COLLECTION						
1	BILL NO. 01				370,000.00		
2	BILL NO.02				2,139,700.00		
	TOTAL - DRILLING CARRIED TO SUMMARY				2,509,700.00		
ITEM	DESCRIPTION	QTY	16%VAT	UNIT PRICE	AMOUNT(Kshs)		
	PVC WATER TANK INSTALLATIONS						
	ELEMENT NO..02						
3	SQ TUBE 3X3X3MM	12	9,248.64	4,817.00	57,804		
3.1	SQ TUBES 3X3X3	2	6,344.64	19,827.00	39,654		
3.2	SQ TUBE 3X2X3	13	11,296.48	5,431.00	70,603		
3.3	SQ TUBE 1 1/2 X 1 1/2 X 2MM	16	5,184.00	2,025.00	32,400		
3.4	FLAT 1 1/2 X 1/4	8	2,151.68	1,681.00	13,448		
3.5	BLACKSHEET 4X 8 1.5MM	6	5,856.00	6,100.00	36,600		
3.6	WELDING ROD 3.2	3	620.64	1,293.00	3,879		
3.7	CUTTING DISC 9"	15	516.00	215.00	3,225		
3.8	PAINT	12	2,482.56	1,293.00	15,516		
3.9	TURPENTINE	7	1,254.40	1,120.00	7,840		
3.10	PAINTING BRUSH 4"	6	326.40	340.00	2,040		
3.11	CEMENT	8	936.96	732.00	5,856		
3.12	ANGELINE 1 1/2 X 1 1/2 X 3MM	46	17,767.04	2,414.00	111,044		
3.13	TANK	2	28,800.00	90,000.00	180,000		
3.14	TRANSPORT, LABOUR AND INSTALLATION	1	10,032.00	62,700.00	62,700		
	SUB-TOTAL		102,817.44		642,609		
	16% VAT				102,817.44		
	TOTAL- TANK INSTALLATION CARRIED TO SUMMARY				745,426.44		
ITEM	DESCRIPTION	QTY	16%VAT	UNIT PRICE	AMOUNT(Kshs)		
	SOLAR INSTALLATIONS						
	ELEMENT NO...03						
4.0	DSP 8-13 2.2KW PUMP END	1	15,148.80	94,680.00	94,680.00		
4.1	DSM 2.2KW 3PH MOTOR	1	2,662.40	137,064.00	137,064.00		
4.2	2.5MM2 4CORE FLAT SUBMERSIBLE CABLE	160	16,640.00	650.00	104,000.00		
4.3	LONDEX DUAL CABLE	160	2,508.80	98.00	15,680.00		
4.4	2" UPVC DROP PIPE (3M LENGTH)	50	28,000.00	3,500.00	175,000.00		
4.5	2"X 6" BOREHOLE COVER C/W SUNDRIES	1	3,688.80	23,055.00	23,055.00		
4.6	25MM CLASS D PVC AIRLINE PIPES	25	6,200.00	1,550.00	38,750.00		
4.7	2" ADAPTOR SET	1	9,192.00	57,450.00	57,450.00		
4.8	WATER LEVEL SWITCH	1	544.00	3,400.00	3,400.00		
4.9	SUNVERTER 3 2.2KW 3PH CONTROLLER	1	-	264,280.00	264,280.00		
4.10	200 WATTS SOLAR PANELS	16	-	14,000.00	224,000.00		
4.11	TWIN FLAT CABLE WITH EARTH	25	2,480.00	620.00	15,500.00		

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[Signature]

C	Allow a P.C sum of Kenya Shillings Fifty Thousand only (Kshs. 50,000.00) for project Documentation and supervision expenses			ITEM	50,000.00		
D	Allow a P.C sum of Kenya Shillings Fifty Thousand only (Kshs. 50,000.00) for PMC expenses			ITEM	50,000.00		
E	Allow a P.C sum of Kenya Shillings Twenty five Thousand only (Kshs. 25,000.00) for Project labeling/branding and launching plaque			ITEM	25,000.00		
TOTAL FOR P.C. & PROVISIONAL SUMS CARRIED TO GRAND SUMMARY					225,000.00		
PROPOSED CONSTRUCTION OF DRILLING AND COMMISSIONING OF SOLAR POWERED BOREHOLE AT							
----- IN TIGANIA WEST SUB COUNTY, MERU COUNTY							
ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT		
GRAND SUMMARY PAGE							
NO.	ELEMENT TITLE		PAGE NO.		KSHS.		
1	PRELIMINARIES AND BUILDER'S WORK				5,273,622.24		
	<i>SUB-TOTAL 1</i>				<i>5,273,622.24</i>		
	ADD 16% VAT				-		
	<i>SUB-TOTAL 2</i>				<i>5,273,622.24</i>		
3	PC SUMS & PROVISIONAL SUMS				225,000.00		
TOTAL FOR SOLARIZED BOREHOLE CARRIED TO FORM OF TENDER					5,498,622.24		
Amount in words.....							
Tenderers signature and stamp.....							
Address.....							
Date.....							
Witness Name.....							
Address.....							
Signature.....							
Date.....							

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