

BILL OF QUANTITIES FOR DRILLING OF 1 COMPLETE SOLAR POWERED BOREHOLE.

ITEMS	DESCRIPTION/SPECIFICATIONS	UNIT	QTY	RATE(USD)	AMOUNT(USD)	UG(SHILLINGS)
1.0	HYDROGEOLOGICAL ASSESSMENT AND SITE SELECTION. A detailed evaluation of potential drilling sites using geological techniques, existing groundwater data, and environmental considerations to ensure optimal borehole placement.	SUM	1	573	573	2,000,000
2.0	DRILLING OF A BOREHOLE The first 24m will be drilled at a 250mm diameter to accommodate casing, while the remaining 96m will be drilled at a 64mm diameter to ensure water accessibility and structure integrity.	LAMP SUM	1	2292	2292	
2.1	BOREHOLE CASING (PVC PIPES, 4MM THICKNESS) Installation of high-strength PVC Pipe casing to prevent borehole collapse, protect groundwater from contamination, and ensure long-term durability.	Meter	53.3	28.2	1500	
2.2	BOREHOLE DEVELOPMENT. Includes the installation of a gravel pack for filtration, a sanitary seal to prevent surface water contamination, and well disinfection to ensure compliance with food production water standards.	Packs	50	7.2	359	
2.3	SANITARY SEAL A specialized barrier to prevent surface contamination from entering the groundwater supply, ensuring the long-term safety of the borehole.	Building materials	-	-	777	
3.0	WATER QUALITY TESTING					

3.1	On-site water quality test(PH. Turbidity, conductivity) Immediate field testing of PH, turbidity, and electrical conductivity to assess preliminary water quality parameters, water quality should comply with the National Water and Sewerage Corporation (NWC) regulation.	No	1	228	228	
4.0	INSTALLATION OF SOLAR PUMP SYSTEM					
4.1	Supply and install a submersible Solar Pump. A high-efficiency pump powered by solar energy to provide a sustainable, low maintenance water extraction solution.	No	1	430	430	
4.2	SUPPLY AND INSTALL SOLAR PANELS AND BATTERIES. Installation of a durable solar panels to power the submersible pump, ensuring reliable water access without dependence on external electricity.	UNIT	-	1189	1189	
4.3	INSTALLATION OF TAP AND 40MM HDPE PIPE. Connection of the borehole water supply to a tap system using durable High-density Polyethylene (HDPE) piping for safe and efficient water distribution.	Meter	50	2.3	115	
5.0	WATER STORAGE AND DISTRIUTION					
5.1	SUPPLY AND INSTALL A 5000/10000L WATER TANK. High-capacity storage tank to ensure continuous water supply for community and agricultural needs.	No	1	716.2	716.2	
5.2	TANK STAND (3M HEIGHT. INCLUDING FOUNDATION) Structural support for the water ensuring elevation for gravity-fed distribution.	No	1	1189	1189	

6.0	CAR HIRE	DAYS	7	69	483	
7.0	STIPEND	NO	2	200	400	
8.0	CAR FUEL	DAYS	7	-	344	
9.0	CASUAL LABOUR (4 PEOPLE)	DAYS	7*4	14.32	100.24	
10	ACCOMODATION (6 PEOPLE)	DAYS	7*6	11.5	483	
11	MEALS (6 PEOPLE)	DAYS	7*6	10.03	421.3	
12						
13	GRAND-TOTAL	-	-	-	<u>11599.74</u>	