

A BOREHOLE DRILLING AND CASING

The Contractor shall supply labour and supply, deliver, install, fix, connect, test, label and commission the works, clean, complete and working to every detail as described in the specification and by related specifications and on the drawings listed in the Schedule or Drawings to the satisfaction of the Consulting Engineers.

The Contractor shall fill in the period in the space provided for each item. For items which may run concurrent, please state and at the bottom fill in the total No. of days required for the entire project.

Kindly note that no loss of profit shall be entertained should the client opt to undertake supply of all or some of the equipments

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kshs.) VAT Incl.	Cost (Kshs.) VAT Incl.
a.1	Allow for application and acquisition of permit for drilling from relevant authorities before commencing the works. They include but not limited to; Enviornment Impact Assessment (EIA) report, WRMA permit, NEMA permit, Local authority permit and Any other necessary permit (Note: No payments to be made before the permit is acquired and submitted to the Client).	Item	1		
a.2	Mobilization / demobilization of drilling unit, equipment materials, personnel and all other required supplies. It shall include erecting / dismantling of drilling unit.	Item	1		
a.3	Insuarance	Item	1		
a.4	Performance Bond	Item	1		
a.5	Accesses to site, hoarding, signboard, site Security etc	Item	1		
a.6	Site Utilities (water, sanitation and Electricity)	Item	1		
a.7	Conducting Hydrogeological survey and issuance of report	Item	1		
a.8	Drilling 200mm diameter borehole from 0-100m depth.	LM	100		
a.9	Drilling 200mm diameter borehole from 100-200m depth	LM	100		
a.10	Drilling 200mm diameter borehole from 200-300m depth	LM	100		
a.10	Drilling 200mm diameter borehole from 300-400m depth	LM	100		

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kshs.) VAT Incl.	Cost (Kshs.) VAT Incl.
a.11	Supply and Install 150mm dia plain steel casings	LM	250		
a.12	Supply and Install 150mm dia plasma cut steel casings	LM	150		
a.13	50mm diameter gate valve as 'pegler' or approved equivalent	No.	2		
a.14	50mm diameter non-return valve as pegler or approved equivalent.	No.	2		
a.15	Supply and install single orifice air valve, complete with pipe mounting accessories	Item	1		
a.16	Supply and installation of filter gravel pack	Ton	7		
a.17	Allow for borehole development work (surging by air of completed well until the water is clean consisting:-	Hr	4		
a.18	Test pumping to ascertain borehole yield for at least 24 hours including installation and withdrawal of pumping unit and recovery measurements.	Item	1		
a.19	Reaming and boring. RO	Item	1		
a.20	Insert, remove temporary casing etc.RO	Item	1		
a.21	Bentonite seal.	Item	1		
a.22	152mm diameter borehole capping	No.	1		
a.23	Allow for all costs involved in providing water for all requirements of the contractor drilling field camp etc.	Item	1		
a.24	Provide all materials and construct concrete top slab Class 20 of 1.5mx1.5x1.0m around the well head with well cap and engraving serial number	Sum	1		
a.25	Standby charges for reasons beyond the Contractor's Control RO	Day	1		

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kshs.) VAT Incl.	Cost (Kshs.) VAT Incl.
a.26	Borehole Completion Report, Water Biological and Chemical Analysis Report	Sum	1		
a.27	Trenching: Excavate trench upto 600mm deep, remove soft earth, lay sleeves, cover with "HATARI" tiles, back fill soil and compact to natural ground level and cart away excess soil.	Lm	0		
a.28	600 x600 x 750mm Masonary deep manhole c/w medium gauge "E.A.F.W. Cast Iron cover engraved 'Valve Chambers'.	No.	1		
a.29	Allow for Water Pipeline and Power Cable-line Markers	No.	2		
a.30	Supply and install 50mm diameter water meter as 'Kent' or approved equivalent including registration and calibration with relevant local authority and KEBS	No.	0		
a.31	<i>Contigency</i>				400,000
a.32	<i>PC sum for Hydrologist supervision</i>				
a.33	<i>Any other additional items, please specify below and attach catalogues. (If none write NIL)</i>				
i	<i>INSERT TEMPORARY CASING</i>				
ii					
iii					
a.34	Total for Borehole drilling and equipment installation VAT Inclusive C/F to the Summary Page				

A BOREHOLE PUMP, PIPING AND WIRING

The Contractor shall supply labour and supply, deliver, install, fix, connect, test, label and commission the works, clean, complete and working to every detail as described in the specification and by related specifications and on the drawings listed in the Schedule or Drawings to the satisfaction of the Consulting Engineers.

Kindly note that no loss of profit shall be entertained should the client opt to undertake supply of all or some of the equipments

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kshs.) VAT Incl.	AMOUNT (Kshs.) VAT Incl.
b.1	SUPPLY ONLY: (Note that the actual size of the pump will be determined after the borehole has been drilled and the yeild determined) a centrifugal multistage borehole pump, continuously rated and capable of pumping 8m ³ /hr of water against a total head of 320m. The entire pump-set body, impellers, shaft etc shall be made of heavy duty stainless steel material. The pump shall have inbuilt non-return valve, tail strainer and cable guard. including control panel, electrodes, electrode cable, underground cables, float switches and various installation accessories Pump to be Grundfos or Equal and Approved. The cost must also include IP65 control panel which shall be water tight with corrosion resistant from hinged lockable door metal enclosure and have Merlin Gerin swith-gear and Telemecanique control gear or equal and approved. The control panel shall have star-delta starter, phase failure, surge protector, isolator, voltemeter, ammeter, MCBs, 300m long float switch cable, float switch and any other necessary controls.	No.	1		
b.2	6MM2x4 Core Armoured Cable - Power	LM	320		
b.3	Dayliff 2" fitting Sundry (Rates only)	No.	1		
b.4	PVC 2" fittings Sundry	No.	1		
b.5	PVC Cooling Sleeve	No.	1		
b.6	DAYLIF PVC 2" Standard 3M Pipe (Rate only: RO)	No.	1		
b.6	GI class C 2" 6M Pipe (Rate only: RO)	No.	1		
b.7	Astral Column 2" Super heavy 3M Pipe	No.	127		

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kshs.) VAT Incl.	AMOUNT (Kshs.) VAT Incl.
b.8	2" Borehole Cover with Accessories	L/S	1		
b.9	DAYLIF PVC Pipe 25mm Diameter 6m	No.	200		
b.10	Adaptor Box 4*4*3	No.	1		
b.11	Dayliff Electrodes	No.	2		
b.12	Sensor Cable Black	LM	320		
b.13	Sensor Cable Brown	LM	320		
b.14	Dayliff YDF3 -Floatswitch	No.	1		
b.15	Catco 3 phase change over switch	No.	1		
b.16	600 x 450 x 750mm Masonary deep manhole c/w medium gauge "E.A.F.W. Cast Iron cover engraved 'POWER'.	No.	1		
b.17	Allow for Water Pipeline and Power Cable- line Markers	No.	2		
b.18	PC sum for power supply to borehore site.	item	1		
b.19	50mm Dispalcement or Velocity Water check meters complete with accesories, ISO 9001 certified - Type approval certificate (either according to EN ISO 4064 from 2005 or 2014, or OIML R49 from 2003 or 2013) Required Certificates - Manufacturer's authorization - KEBS certificate	No.	1		
a.31	<i>Contigency</i>				20,000
b.20	Total for Borehole Pump CF to Summary page				

C PRICE SUMMARY PAGE

ITEM	DESCRIPTION	Cost (Kshs.) VAT Incl.
c.1	Total Borehole drilling and piping	
c.2	Total Borehole pump	
c.3	Grand Total for Borehole drilling and equipment installation VAT Inclusive C/F to the Form of Tender	

Total amount in words: Kenya shillings _____

Name of firm / company _____

Official rubber-stamp _____

P.I.N. No.: _____ V.A.T. Reg. No. : _____

Signed by: _____ Date _____