

**BILL OF QUANTITIES FOR DRILLING BOREHOLES AT SESE.MSEFUNI ,
HESHIMA, MUGUMOINI, MINI VALLEY,ZEBRA,BOPWE AND LUMSHI PRIMARY
SCHOOL IN HONGWE WARD LAMU WEST SUB- COUNTY WITH A MAXIMUM
DEPTH OF 30M.**

| ITEM | DESCRIPTION | UNIT | QTY | RATES KSHS | AMOUNT IN KSHS |
|------|--|----------|-----|---------------|-------------------|
| 1 | Carry Hydro geological survey | Lump sum | 1 | | |
| 2 | Mobilization and transportation of machinery, erection of camps and sanitary facilities and demobilization | Lump sum | 1 | | |
| 3 | Drilling of borehole of minimum diameter of 205mm through all types of strata including disposal of excavated materials, taking any remedial measures to overcome caving in or over drilling to accommodate sloughed materials and keeping drilling record as specified between ground level and 30m below ground level. | M | 30 | | |
| 4 | Supply and install 150mm internal diameter plain PVS (C/D) casings in the borehole to reach 1.5m above ground level. | M | 20 | | |
| 5 | Supply and install 150mm internal diameter plain slotted PVC (C/D) casing. | M | 10 | | |
| 6 | Allow for taking sample of drill cuttings at two (2M) intervals. | Lump sum | 1 | | |
| 7 | Supply and invert gravel pack (river bed rounded) grout between the casing and the borehole for top five (5metres) of 50mm thickness (2mm-4mm) | Ton | 2 | | |
| | TOTAL | | | | |

| ITEM | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|------|---|----------|-----|------|--------|
| 8. | <p>Balance brought forward</p> <p>Physical and chemical development of the borehole including inserting and removal of development equipment</p> <p>(a)Physical development</p> <p>(b)Chemical development</p> | HRS | 12 | | |
| | | HRS | 4 | | |
| 9. | Undertake constant discharge test as specified (24hours for actual test pumping and show for insertion and removal of test pumping equipment) | HRS | 24 | | |
| 10. | Undertake constant discharge test as specified (24hours for actual test pumping and show for insertion and removal of test pumping equipment) | Lump sum | 4 | | |
| 11. | Carryout boreholes sterilization. | Lump sum | 1 | | |
| 12. | Install wellhead, well cap serial number and cement slab of dimension 1.0 × 1.0 × | | | | |

| | | | | | |
|-----|--|----------|---|--|--|
| | 1.0 meter around the well head. | Lump sum | 1 | | |
| 13. | Supply of water and drilling fluids for drilling operations and field camp. | Lump sum | 1 | | |
| 14. | Take water sample for laboratory analysis (1 no. Sample for bacteriological and 1 no. for chemical each 1.5litres. | Lump sum | 1 | | |
| 15. | Supply and install an approved gantry. | NO | 1 | | |
| 16. | Install Afridev pump. | Lump sum | 1 | | |
| 17. | Allow for client supervision (7% of the total). | Lump sum | 1 | | |
| | TOTAL | | | | |
| | Total for 8NO. Boreholes =Kshs.....×8 | | | | |