

|                |   |  |            |                    |
|----------------|---|--|------------|--------------------|
|                | <b>COUNTY</b>   | <b>NAKURU</b>  |            |                    |
|                | <b>CONSTITUENCY</b>   | <b>SUBUKIA</b>   |            |                    |
|                | <b>SUB-COUNTY</b>   | <b>SUBUKIA</b>   |            |                    |
|                | <b>WARD</b>   | <b>KABAZI</b>  |            |                    |
| <b>PROJECT</b> |   | <b>KABAZI WARD WATER WO</b>                                      |            |                    |
| <b>SUBJECT</b> |   | <b>KABAZI RUGONGO WATER PROJECT(PIPELAYING AND CONSTRUCTION)</b> |            |                    |
| <b>ITEM</b>    | <b>DESCRIPTION</b>  | <b>UNIT</b>  | <b>QTY</b> | <b>RATE (Kshs)</b> |
|                | <b>PIPING MATERIALS</b>   |  |            |                    |
| 1.00           | Supply and deliver to site Ø 3" uPVC pipe class 'D'   | No.  | 105.00     |                    |
| 1.02           | Supply and deliver to site Ø 2½" uPVC pipe class 'D'  | No.  | 237.00     |                    |
| 1.03           | Supply and deliver to site Ø 2½" uPVC pipe class 'C'  | No.  | 400.00     |                    |
|                | <b>Sub-Total</b>  |  |            |                    |
|                | Add 7% to cater for any fittings/fabrication at the bridge, and anchor blocks (as directed by the Eng. On site) |  |            |                    |
|                | <b>Total</b>  |  |            |                    |
|                |   |  |            |                    |
|                | <b>SITE CLEARANCE &amp; EARTH WORKS</b>   |  |            |                    |
| 1.10           | Clear the pipeline route of all shrubs and bushes and remove from site  | m  | 4452.00    |                    |
| 1.11           | Excavate pipeline trench average width 0.45m and depth 0.6m but n.e 1m over medium ground                       | m  | 4452.00    |                    |
| 1.12           | Backfill and ram excavated material in trench on pipe laying on medium ground                                   | m  | 4452.00    |                    |
|                | <b>Sub-Total</b>  |  |            |                    |
|                |   |  |            |                    |
|                | <b>PIPELAYING &amp; FITTINGS</b>  |  |            |                    |
| 1.20           | Lay, test and commission pipes in trench.   | No   | 742.00     |                    |
|                | <b>Sub-Total</b>  |  |            |                    |
|                |   |  |            |                    |
|                | <b>FITTINGS</b>   |  |            |                    |
| 1.30           | Supply to site, install and test 2½" peglar gate as directed.   | No   | 2.00       |                    |
| 1.31           | Supply materials to site and construct a stardard manhole 1.0m x 1.0m internal measurement .                    | No   | 4.00       |                    |
|                | <b>Sub-Total</b>  |  |            |                    |
|                |   |  |            |                    |
|                | <b>3No. AIR VALVE ON 2½" PIPELINE</b>   |  |            |                    |
| 1.40           | Ø 2½" G.I. equal tee  | No.  | 3.00       |                    |
| 1.41           | Ø 2½x 1" reducer  | No.  | 3.00       |                    |
| 1.42           | Ø 1" Gate valve-peglar  | No.  | 3.00       |                    |

|      |  |                |       |  |
|------|--|----------------|-------|--|
| 1.43 | Ø 1" air valve - peglar  | No.            | 3.00  |  |
| 1.44 | Supply materials to site and construct a standard manhole 1.0m x 1.0m x 1.0m internal measurement. | No             | 2.00  |  |
|      | <b>Sub-Total</b>   |                |       |  |
|      |  |                |       |  |
|      | <b>3No. WASHOUT ON 2½" PIPELINE</b>  |                |       |  |
| 1.50 | Ø 2½" G.I. equal tee   | No.            | 3.00  |  |
| 1.51 | Ø 2½" G.I./PVC adaptor   | No.            | 3.00  |  |
| 1.52 | Ø 2½" G.I. 0.5m long nipple (threaded both sides)  | No.            | 3.00  |  |
| 1.53 | Ø 2½" peglar gate valve  | No.            | 3.00  |  |
| 1.54 | Ø 2½" socket union   | No.            | 3.00  |  |
| 1.55 | Supply materials to site and construct a standard manhole 1.0m x 1.0m x 1.0m internal measurement. | No             | 2.00  |  |
|      | <b>Sub-Total</b>   |                |       |  |
|      |  |                |       |  |
|      | <b>Total</b>   |                |       |  |
|      |  |                |       |  |
|      | <b>Wayleave across Nakuru-Nyahururu road</b>   |                |       |  |
| 2.00 | Micro-tunnel across the tarmac road (B5) 1.5m below top of the road                                | m              | 13.00 |  |
| 2.01 | Payment to Kenha for the wayleave  | lane           | 2.00  |  |
| 2.02 | Supply, lay and join 4" G.I. pipe class 'D' for sleeve   | No             | 3.00  |  |
|      | <b>Sub-Total</b>   |                |       |  |
|      | Add 5% to cater for the relevant authority monitoring  |                |       |  |
|      | <b>TOTAL FOR BILL NO 4 TAKEN TO SUMMARY PAGE</b>   |                |       |  |
|      |  |                |       |  |
|      | <b>100m<sup>3</sup> MASONRY STORAGE TANK</b>   |                |       |  |
|      | <b>GENERAL ITEMS</b>   |                |       |  |
| 3.00 | Establishment of sign board as directed.   | Nr             | 1.00  |  |
| 3.01 | Testing and commissioning of the works including labelling, plaque etc as directed                 | Nr             | 1.00  |  |
|      | <b>Sub-Total</b>   |                |       |  |
|      |  |                |       |  |
|      | <b>100m<sup>3</sup> TANK CONSTRUCTION</b>  |                |       |  |
|      | <b>SETTING OUT AND EARTH WORKS</b>   |                |       |  |
| 3.10 | General site clearance and setting out   | m <sup>2</sup> | 64.00 |  |
| 3.11 | Excavate oversite 200mm to remove vegetable soil and remove from site.                             | m <sup>3</sup> | 8.00  |  |
| 3.12 | Excavate pit foundation to a depth n.e. 1m.  | m <sup>3</sup> | 24.00 |  |
|      | <b>Sub-Total</b>   |                |       |  |
|      |  |                |       |  |
|      | <b>TANK CONSTRUCTION</b>   |                |       |  |

|      |   |                |        |  |
|------|---|----------------|--------|--|
| 3.20 | Supply materials, transport to site, fill and compact 300mm thick approved hardcore materials on tank foundation base.                | m <sup>3</sup> | 21.00  |  |
| 3.21 | Ditto 50 mm thick blinding layer.   | m <sup>2</sup> | 2.50   |  |
| 3.22 | Supply, transport, cut, bend and fix Y-10 bars in floor slab @ 150mm c/c.   | Kg             | 678.00 |  |
| 3.23 | Supply materials, transport, place and compact concrete class 20 in tank slab floor.  | m <sup>3</sup> | 7.39   |  |
| 3.24 | Supply materials and construct 225mm circular masonry wall  | m <sup>2</sup> | 77.20  |  |
| 3.25 | Supply, transport, cut, bend and fix Y-10 bars in wall.   | kg             | 876.00 |  |
| 3.26 | Supply materials and construct formwork to roof slab and collumn.   | m <sup>2</sup> | 62.70  |  |
| 3.27 | Supply, transport, cut, bend and fix Y- 16 bars to collumn @ 200mm c/c  | Kg             | 52.00  |  |
| 3.28 | Supply, transport, cut, bend and fix Y- 16 bars to beams @ 200mm c/c as directed  | Kg             | 130.00 |  |
| 3.29 | Supply, transport, cut, bend and fix Y- 12 bars to roof slab @ 200mm c/c  | Kg             | 466.98 |  |
| 3.30 | Supply, transport, materials and plaster the internal of the tank.  | m <sup>2</sup> | 85.00  |  |
| 3.31 | Supply material and place concrete class 20 to roof slab. Include fixing 18" x 24" (GAUGE 16)steel lockable manhole cover with frame. | m <sup>3</sup> | 8.64   |  |
| 3.32 | Supply and fix 2.7m high ladder to the inside of the tank   | No             | 1.00   |  |
| 3.33 | Supply 2.7m high ladder (movable)   | No             | 1.00   |  |
| 3.34 | Supply and install 2½" float valve  | No             | 1.00   |  |
| 3.35 | Apply bondex as per DRG   | kg             | 50.00  |  |
|      | <b>Sub-Total</b>  |                |        |  |
|      |   |                |        |  |
|      | <b>Inlet</b>  |                |        |  |
| 3.40 | 2½" GI bend   | No.            | 2.00   |  |
| 3.41 | 2½" dia 3.6m long G.I. pipe threaded both sides   | No.            | 1.00   |  |
| 3.42 | 2½" dia 0.5m long G.I. pipe threaded both sides   | No.            | 1.00   |  |
| 3.43 | 2½" dia G.I. pipe threaded both sides   | No.            | 4.00   |  |
|      |   |                |        |  |
|      | <b>Overflow</b>   |                |        |  |
| 3.50 | 2" dia 1.0m long G.I. pipe threaded with hoppers welded   | No.            | 1.00   |  |
|      | <b>Sub-Total</b>  |                |        |  |
|      |   |                |        |  |
|      | <b>Outlet</b>   |                |        |  |
| 3.60 | 3" dia 3m long G.I. pipe threaded both sides  | No.            | 1.00   |  |
| 3.61 | 3" gate valve   | No             | 3.00   |  |
| 3.62 | 3" GI bend  | No.            | 1.00   |  |

|      |  |     |      |  |
|------|--|-----|------|--|
| 3.63 | 3" flange  | No. | 1.00 |  |
| 3.64 | 3" socket union  | No. | 2.00 |  |
| 3.65 | 3" dia 0.5m long G.I. pipe threaded both sides   | No. | 2.00 |  |
| 3.66 | 3" GI TEE  | No. | 1.00 |  |
|      | <b>Sub-Total</b>   |     |      |  |
|      |  |     |      |  |
|      | <b>Washout</b>   |     |      |  |
| 3.70 | 3" dia 2m long G.I. pipe threaded both sides   | No. | 1.00 |  |
| 3.71 | 3" dia 0.5m long G.I. pipe threaded both sides   | No. | 1.00 |  |
| 3.72 | 3" gate valve  | No  | 1.00 |  |
| 3.73 | 3" GI bend   | No. | 1.00 |  |
| 3.74 | 3" flange  | No. | 1.00 |  |
|      | <b>Sub-Total</b>   |     |      |  |
|      |  |     |      |  |
|      | <b>Valve chamber</b>   |     |      |  |
| 3.80 | Supply materials to site and construct a standard manhole 1.0m x 1.0m x 1.0m internal measurement. | No  | 2.00 |  |
|      | <b>Sub-Total</b>   |     |      |  |
|      |  |     |      |  |
|      |  |     |      |  |
|      |  |     |      |  |
|      | <b>SUMMARY PAGE</b>  |     |      |  |
|      | Pipeline   |     |      |  |
|      | Wayleave   |     |      |  |
|      | 100m <sup>3</sup> masonry storage tank   |     |      |  |
|      | <b>TOTAL</b>   |     |      |  |
|      | Add 7% for Supervision and Monitoring  |     |      |  |
|      | <b>TOTAL</b>   |     |      |  |
|      | Add 16% VAT  |     |      |  |
|      | <b>GRAND TOTAL</b>   |     |      |  |







