**Date: 11th OCTOBER 2024**

**BOQ FOR PROVISION OF DESIGN AND THE CONSTRUCTION OF ELEVATED STEEL WATER TANK 75 MATER CUBIC**

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| **TENDER REF NO** | **ITEM DESCRIPTION** | **DELIVERY LOCATION** |
| HFHK/ADH/05/2024 | **PROVISION OF DESIGN AND THE CONSTRUCTION OF ELEVATED STEEL WATER TANK 75 MATER CUBIC**  **As per specification provided on BOQ** | Project name: namaiyana kandutura elevated steel tank  Project location: kandutura village, laikipia north sub-county, laikipia county  (approximately 90km from nanyuki town)" |

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| **TENTATIVE BILLS OF QUANTITIES FOR THE DEVELOPMENT OF NAMAIYANA KANDUTURA ELEVATED STEEL TANK** | | | | | |
| **NO** | **ITEM DESCRIPTION** | **UNIT** | **QTY** | **RATE** | **AMOUNT** |
|  | **GENERAL ITEMS** |  |  |  |  |
| A | Allow for Provision of all risk insurance for the works and Establishment of a construction site camp; Establishment, maitencance and removal of site measuring equipments | LS | 1 |  |  |
| B | Provision for project visibility (sign Board installation and branding - Painting works/Plates on Tank) | LS | 1 |  | - |
| C | Provision and Supply of site protection materials/PPEs for workers | LS | 1 |  | - |
|  | **TOTAL GENERAL ITEMS** |  |  |  | **-** |
| **75M3 - 15m ELEVATED STEEL TANK- ALLOW FOR PROVISION OF DESIGNS, SUPPLY AND INSTALL** | | | | | |
| 1 | Provision of Design analysis and drawings including necessary manufacturer approvals and including submission of fabrication/working drawings for approval by the employer. | LS | 1 |  | - |
| 2 | **FOUNDATION WORKS:** Foundation as provided in the drawings. The cost to include setting out, Site clearance**,** Excavate the foundation bases(3m minimum), supply all materials, deliver to site, mix, vibrate reinforced concrete (class 25/20 concrete (approx 25m3)) footings and column stubs, provide holding down bolts together with casting template and all other materials necessary for the casting of foundation | Sum | 1 |  | - |
| 3 | **STEEL TANK - 75 M3.** Fabrication of a 75 m3 Cold Pressed Steel tank whose dimensions are 5m long x 5m wide x 3m high using 1000mmx1000mmx6mm thick mild steel pressed panels. The tanks comes with internal bracing, cleats, ladder brackets, internal and external ladders, calibrated level indicator, panels fitted with standard threaded nozzles (sockets) to BS 4211, 3mm pitched roof cover with sealant lockable manhole, mosquito proof inspection, fastens, and other finishes necessary for completion of works. | Sum | 1 |  | - |
| 3 | **TOWER:** Fabrication fo 15m high steel tower (sitting on a foundation) comprising **structural elements as per approved design** for columns, Beams, diagonal and horizontal bracings, grillage,using IPEs walkway with safety handrails, tower piers, gang way and access cat ladder | Sum | 1 |  | - |
| 4 | **TANK AND TOWER ASSEMBLY**. Tower and tank panels assembly on sites | Sum | 1 |  | - |
|  | **Sub-Total** |  |  |  | - |
| 5 | **Plumbing and fittings works (all GI class B)** |  |  |  | - |
|  | Allow for all the requisite pipe work including inlet of 2.”, outlet 2” and washout pipework 2”. The scouring pipe must be fitted in such a way that, it reaches the foot of the tank tower and each be fitted with a gate valve. |  |  |  | - |
| A | 2" diameter class B GI pipe inlet | m | 24 |  | - |
| B | 2" diameter class B GI pipe outlet | m | 24 |  | - |
| C | 2" diameter class B GI pipe overflow- to be directed 12m meters away from the tank | m | 24 |  | - |
| D | 2" diameter class B GI pipe Wash out | m | 24 |  | - |
| E | 2" diameter sluice Valve and approriate fittings - Outlet pipe | No | 1 |  | - |
| F | 2" diameter sluice Valve and approriate fittings - scour pipe | No | 1 |  | - |
| G | Construct 1200mm x1200mm x 1000mm standard valve chamber with locable cover | No. | 2 |  | - |
| 6 | **Finishes/painting** |  |  |  | - |
| H | Tank components to be hot dip galvanized as per local standards or alternatively be painted with two coat of zinc phosphate primer and two coat of silver aluminium. The tower steelwork will be painted with two coat of red oxide primer plus two coat of silver aluminium paint. Cover plates and flanges of tank plates should be completely sealed to prevent any leakage | LS | 1 |  | - |
| 7 | **Prevention of rust in interior of the tank** |  |  |  | - |
| I | Inside, three coats of non-toxic black bituminous paint should be applied. Note, borehole water in the area, can cause rust to the tank hence this is a MANDATORY component to mitigate against rusting from within the tank. | LS | 1 |  | - |
| 8 | **Tank testing** |  |  |  | - |
| J | Supply and apply recommended disinfectant and test the tank. The task will be accomplished in liaison with sub county water officer and or project manager | No | 1 |  | - |
| K | Allow for in-line Chlorine Doser- Dosatron supply and installation complete with fittings and 6 month chlorine supply | LS | 1 |  | - |
|  | **TOTAL COST OF 75CM ELEVATED STEEL TANK** |  |  |  | - |
| **COLLECTION SUMMARY** | | | | | |
| SN | **COMPONENT** | **Unit** | **Qty** |  | **Corrected Amount** |
| 1 | TOTAL GENERAL ITEMS | No | 1 | - | - |
| 2 | TOTAL COST OF 75CM ELEVATED STEEL TANK | No | 1 | - | - |
| 3 | 16% VAT |  |  |  | - |
|  | **GRAND TOTAL NAMAYANA ELEVATED STEEL TANK** |  |  |  | **-** |