BILL OF QUANTITIES FOR DISTRIBUTION OF MULIMA WATER PROJECT TO KIKIMA					
MBOONI WARD, MBOONI SUB-COUNTY, MAKUENI COUNTY					
FY2025-2026					
NB: Rates and prices inserted by Contractor in the BoQ shall include value of the work described under the item and shall cover all over heads charges, profits, and applicable taxes. Contract to be paid as per actual works done.					
BILL 1	**Preliminaries**				
ITEM	**ITEM DESCRIPTION**	**UNIT**	**QTY**	**RATE**	**AMOUNT**
				(KShs.)	(KShs.)
1.1	Fabricate erect and maintain public sign post 1200x1200x1.5mm metal sheet, 1500mm above ground level. It should be anchored 600mm deep motorised in mass concrete and well supported with 50x25mm RHS frame to detail as provided in the drawing and as instructed by the project manager.	Item	1		
1.2	Provide 350,000 for technical supervision to be expended as directed by the Chief Officer	Item	1	350,000.00	350,000.00
1.3	Allow 10% attendance for item 1.2 above	%	10	350,000.00	35,000.00
Bill 1 Total carried to Summary					
BILL 2	**100 M^3 MASONRY TANK AT SYILUNI**				
NO	**Item Description**	**Unit**	**Quantity**	**Unit Rate**	**Amount**
2.1	**EXCAVATIONS**				
2.2	Strip top soil 200mm from g.l. over area of tank and remove all vegetable soil to temporary spoil heap.	CM	9		
2.3	Excavate from stripped level over the tank site to depth n.e. 1.5m deep and dispose soil as directed	CM	30		
2.4	Extra over for excating in soft rock	CM	10		
2.5	Extra over for excavating in hard rock	CM	5		
2.6	Allow for keeping all excavation free from general waters	Item	1		
2.7	Construct a foundation skin wall using natural stone to G.L. Use 300mm thick naturally dressed quarry stone	SM	22		
2.8	Allow for backfilling to approve levels after Completion of the works.	CM	50		
2.9	**HARDCORE**				
2.1	Provide, place and compact hardcore of approved quality 250mm thick to make up levels to G.L	CM	35		
2.11	MURRUM - 50mm approved murrum filling consolidated in layers to make up levels	CM	4		
2.12	Anti-Termite Treatment for Foundation/to hardcore surface applied in accordance with manufacturer's instructions.	SM	37		
2.13	Damp proof Membrane 1000 gauge black polythene sheet	SM	37		
2.14	**Provided handle, cut, bend and fix the Sump reinforcement bars as stated in the bending schedule or as directed by the Engineer**				
2.15	8 mm twisted mild steel bars	KG	10		
2.16	**Provided handle, cut, bend and fix the Floor reinforcement bars as stated in the bending schedule or as directed by the Engineer**				
2.17	D12 mm reinforcement bars	KG	380		
2.18	D10 mm reinforcement bars	KG	540		
2.19	**Provide place, handle, mix (using a concrete mixer) and vibrate as directed by the Engineer**				

2.2	Mass concrete mix 1:4:8: in 50mm thick blinding to hardcore	CM	2		
2.21	Vibrated reinforced concrete mix 1:2:4 in 200 mm thick for floor slab. Use water proof cement (Pudlo) 8 kg per 1 m^3 concrete equal to 1 kg per 50 kg cement	CM	8		
2.22	**WALLING**				
2.23	Provide, handle and fix 25 X 25 mm bondex joint as per Drawing	M	23		
2.24	300mm thick dressed quarry stone walling curved on plan radius 3300 mm Height 1715 m joint using 1:3 mortar waterproofed to 1 kg per 50 kg cement	SM	65		
2.25	225mm thick dressed quarry stone walling curved on plan radius 3300mm joint using 1:3 mortar waterproofed to 1 kg per 50 kg cement	SM	46		
2.26	REINFORCEMENT BARS				
2.27	Provided handle, cut, bend and fix the wall reinforcement bars as stated in the bending schedule or as directed by the Engineer				
2.28	10mm deformed steel bars	KG	572		
2.29	8 mm deformed steel bars	KG	280		
2.3	**REINFORCEMENT BARS**				
2.31	**Provided handle, cut, bend and fix the Roof reinforcement bars as stated in the bending schedule or as directed by the Engineer**				
2.32	16 mm twisted mild steel bars	KG	584		
2.33	12 mm twisted mild steel bars	KG	340		
2.34	10mm twisted mild steel bars	KG	58		
2.35	8mm twisted mild steel bars	KG	38		
2.36	Plain G.I binding wire,G24, 50Kg roll (For all reinforcement works)	Rolls	2		
2.37	**Provide place, handle, mix (using a concrete mixer) and vibrate as directed by the Engineer**				
2.38	Vibrated reinforced concrete mix 1:2:4 mix for 200mm thick roof slab. Use water proof cement (Pudlo) 8 kg per 1 m^3 concrete equal to 1 kg per 50 kg cement	CM	8		
2.39	Ditto centre Column radius 300 mm min 4080 mm height	CM	2		
2.4	Ditto in ring beam	CM	1		
2.41	Ditto in cross beam	CM	1.5		
2.42	Vibrated mass concrete 250mm thick surrounded to off take and scour pipes	CM	0.5		
2.43	**FORMWORK**				
2.44	Sawn timber formwork as per engineer's Specification. Include propping strutting and striking off to:				
2.45	Edges of 200 mm floor slab	SM	5		
2.46	Soffits and sides of 200mm roof slab min 4080 mm high	SM	41		
2.47	Sides of foundation column	SM	1		
2.48	Curved sides of column 300 mm dia. Min height 4080 mm	SM	4		
2.49	Edge of the manhole opening	SM	1		
2.5	**INTERNAL AND EXTERNAL FINISHES**				
2.51	25 mm thick 1:2 cement sand trowelled hard and smooth screed to floor slab with waterproof cement at 1kg for 1 No.50kg ordinary Portland cement with steel float finish	SM	37		
2.51b	Extra over for Kivandini tanks	SM	37		

2.52	25mm thick 1:2 cement sand to interior face of the wall with water proof cement at 1kg for 1No. 50kg of ordinary Portland cement with steel float finish	SM	88		
2.52b	Extra over for Kivandini tanks	SM	88		
2.53	20mm thick 1:2 cement sand to exterior face of tank wall	SM	88		
2.54	20mm thick 1:2 cement sand to column with steel float finish	SM	4		
2.55	20mm thick 1:2 cement sand to soffit of roof slab	SM	37		
2.56	20mm ditto to exterior face of roof slab	SM	5		
2.57	**MISCELLANEOUS WORKS**				
2.58	Construct and fix a vertical ladder of length of 3.5 M fixed to wall and floor on the internal side of tank	NO	1		
2.59	60mmx600mm steel manhole cover complete with frame, locking device and keys	No	1		
2.6	16mm reinforcement bar to be cut bent to terminate at manhole cover as per drawings or as directed by the engineer	M	12		
2.61	**OUTLET & SCOUR PIPEs:**				
2.62	Supply and install G.I class B 110mm flange^{d} pipe 6 m long installed through floor slab	M	12		
2.63	**INLET and OVERFLOW PIPES:**				
2.64	Use existing HDPE 8" pipes on site. Provide for butt-fussion to fit	Lot	1		
2.69	**AIRVENT** :				
2.7	50 mm GI pipe piece 200mm long threaded	NO	4		
2.71	50 mm GI elbow with mosquito gauze	NO	4		
2.72	50 mm GI nipple	NO	4		
2.73	**Finishes & Paints**				
2.8	Prepare and apply three coats of bituminous paint after proper curing as directed. Include for all additives.	m²	75.00		
2.8b	Extra over for Kivandini tanks	m131	75.00		
2.81	Prepare and apply first grade super gloss oil/sylicone white paint to external wall surfaces in three coats, cost inclusive of branding as shall be instructed	SM	75.00		
2.81b	Extra over for Kivandini tanks	SM	75.00		
2.82	Construct standard valve chamber (1200 x1200)	No	2.00		
	Sub Total Carried from Bill 2 to Main summary page				
Bill 3	**PROPOSED 2-DOOR PIT LATRINE+URINAL AT MULIMA WATER TREATMENT SITE**				
ITEM	**DESCRIPTION**	**QNTY**	**UNIT**	**RATE**	**AMOUNT**
	SUBSTRUCTURE [ALL PROVISIONAL]				
A	Excavate oversite average 150mm deep to remove top vegetable soil load up wheel and cart away	4	SM		
B	Excavate for foundation trenches not exceeding 1.5M deep commencing from stripped	3	CM		
C	Excavate for pit not exceeding 1.5M deep commencing from ground level	10	CM		

D	Ditto exceeding 1.5M deep but not exceeding 3.0M deep	10	CM		
E	Ditto exceeding 3.0M deep but not exceeding 4.5M deep	10	CM		
G	Extra over excavation in rock of any class	10	CM		
H	Load surplus excavated materials and cart away from site	30	CM		
	Dewatering				
I	Keeping all excavations free from all general water		ITEM		
	Plunking and strutting				
J	Allow for maintaining and supporting sides of excavations and keeping the same free from fallen material		ITEM		
	Carried forward to collection				
ITEM	**DESCRIPTION**	**QNTY**	**UNIT**	**RATE**	**AMOUNT**
A	200mm thick dressed natural stone wall lining bedded and jointed in cement and sand (1:3) mortar	49	SM		
B	Ditto to foundation walling ditto	4	SM		
C	Mass concrete class 1:2:4/20 to strip footing	1	CM		
D	200mm thick well consolidated hardcore filling compacted in layers not exceeding 150mm thick	3	SM		
E	Termidor' or other equal and approved antitermite insecticide treatment applied according to manufacturer's instruction	3	SM		
F	50mm thick murram/sand blinding to surfaces of hardcore	3	SM		
	Highyield sguare twisted reinforcement to BS 4461				
G	8mm diameter ditto	160	KG		
H	10mm diameter ditto	340	KG		
I	Fabric mesh reinforced Ref: A98 including laps tyingwire and spacer blocks.	3	SM		
J	150mm thick Vibrated Reinfoced concrete class 1:2:4/20mm in floor slab	11	SM		
K	Ditto to beams	1	SM		
L	Sawn softwood formwork to edges of slab exceeding 75mm but not exceeding 150mm girth	13	LM		
M	Ditto to sides of beam	7	SM		

	Carried forward to collection				
ITEM	**DESCRIPTION**	**QNTY**	**UNIT**	**RATE**	**AMOUNT**
	COLLECTION				
	Brought Forward page 1				-
	Brought Forward page 2				-
	TOTAL FOR SUBSTRUCTURE CARRIED TO SUMMARY				**-**
ITEM	**DESCRIPTION**	**QNTY**	**UNIT**	**RATE**	**AMOUNT**
	SUPERSTRUCTURE				
	Smooth dressed natural stone walling bedded and jointed in cement sand (1:3) mortar with hoop iron reinforcement at alternate courses as described in:-				
A	150mm thick external wall ditto	18	SM		
B	Ditto internal wall	6	SM		
	Damp proof course, as described to walls				
C	Polythene sheet; 500 gauge, 200mm wide	13	LM		
	Vibrated Reinforced concrete class 1:2:4/ 20mm] to;				
D	Ringbeam	1	CM		
	Highyield sguare twisted reinforcement to BS 4461				
E	8mm diameter ditto	35	KG		
F	10mm diameter ditto	70	KG		
	Sawn formwork to				
G	Sides of ringbeam	8	SM		
H	450 x 25mm thick Precast concrete coping stone bedded in cement sand mortar (1:4) on top of wall	7	LM		
	TOTAL FOR WALLING CARRIED TO SUMMARY				
ITEM	**DESCRIPTION**	**QNTY**	**UNIT**	**RATE**	**AMOUNT**
	ROOF WORK				
	Roof Structure				
	The following in Celcured prime grade II cypress or other approved soft wood				
A	100 x 50mm wall Rafters/Joists	6	LM		
B	100 x 50mm Wall plate	6	LM		
C	75 x 50mm Purlins	8	LM		
	Roof covering				

D	Prepainted 30G IT5 roofing sheets fixed to timber purlins (m/s)	9	SM		
E	225 x 20mm fascia board nailed to rafters	12	LM		
	Prepare and apply three coats of polyurethene clear varnish / Gloss oil paint on:-				
F	General surfaces of wood girth 200-300mm	12	LM		
	TOTAL FOR ROOF CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QNTY	UNIT	RATE	AMOUNT
	DOORS				
	Wrot prime grade Cypress or other approved				
	softwood in door frames and finishings				
A	100 x 50mm frame with one labour plugged to wall	11	LM		
B	15 mm quadrant beading	11	LM		
C	40 x 25mm architrave	11	LM		
	Timber Doors				
D	45mm thick, 900 x 2100mm solid timber bettened door	2	NO		
	Iron mongery				
E	Door lock with handle	2	NO		
F	Medium duty steel door hinges	3.0	PRS		
	Prepare and apply three coats of polyurethene clear varnish / Gloss oil paint on:-				
G	General surfaces of wood	9	SM		
H	Wood surfaces not exceeding 100mm girth	11	LM		
	TOTAL FOR DOORS CARRIED TO SUMMARY				
ITEM	**DESCRIPTION**	**QNTY**	**UNIT**		
	WINDOWS				
	Mild Steel casement window				
	Purpose made windows with handles, stays and				
	hinges, fihed with lugs built in masonry and primed				
A	Overal size 600 x 600mm high	2	NO		
	Glazing				
B	4mm thick Obscure glass fixed to metal in panes with putty	1	SM		
	Painting				
	Prepare and apply three coats of gloss paint or other equal and approved to:-				
C	General surfaces of windows	1	SM		
	TOTAL FOR WINDOWS CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QNTY	UNIT	RATE	AMOUNT
	FINISHES				
	FLOOR FINISHES				
	Cement and sand [1:4] in				
A	25mm thick cement sand (1:4) screed miixed with red oxide and finished smooth	11	SM		
	WALL FINISHES				
	Cement and sand [1:3] in				
B	12mm thick plaster to walls trowelled smooth internally to receive paint	30	SM		
C	Ditto to rendered surfaces externally	5	SM		
	Prepare and apply one undercoat and two finishing paint to				
D	Plastered wall internally	30	SM		
E	Ditto to rendered surfaces extenally	5	SM		
F	Horizontal wall key-pointing to with cement sand mortar (1:4) externally	17	SM		
G	100mm diameter PVC vent cowl complete with weathering slate	6	LM		
	TOTAL FOR FINISHES CARRIED TO SUMMARY				
ITEM	**DESCRIPTION**	**QNTY**	**UNIT**	**RATE**	**AMOUNT**
	LATRINE SUMMARY				
A	SUBSTRUCTURE				
B	SUPERSTRUCTURE				
C	ROOF				
D	DOORS				
E	WINDOWS				
F	FINISHES				
	BILL 3 TOTAL FOR 2-DOOR PIT LATRINE+URINAL CARRIED TO GRAND SUMMARY				

BILL 4	**PIPELINES**				
NO	**Item Description**	**Unit**	**Quantity**	**Unit Rate**	**Amount**
	SYILUNI-KIVANDINI TANKS PIPELINE				
	CLASS D: DEMOLITION AND SITE CLEARANCE				
	The rate quoted is for site clearance and demolition along construction wayleave. *Rate shall be deemed to include removal of the material, natural and artificial* *articles, objects and obstructions which are above th e original surface and carting away to tips, identified by the contractor in liaison with the Local Authority*				
	General clearence				
4.1	Site clear and excavate to pipe invert level 750 mm n.e 1m below existing ground level and backfill/ reinstate to original ground level after testing pipeline, all to the approval of the engineer	LM	9060		
4.1.1	Excavation in rock Class A/B	CM	5		
4.1.2	Allow for setting out of the entire pipeline and installations	Item	1.00		
	CLASS I: PIPEWORK - PIPES				
	The rate quoted is for supply and transport to site storage, transport from site storage, *excavate, lay and joint pipes complete with all jointing materials and but fusing. The rate is deemed to include excavation, bed lining, installation and backfilling of the pipe trenches. keep trenches and ther excavations free of water.*				
4.2	PN25 DN110mm HDPE PE100 ISO4427	LM	1100		
4.3	PN20 DN110mm HDPE PE100 ISO4427	LM	1200		
4.4	PN16 DN110mm HDPE PE100 ISO4428	LM	1300		
4.5.0	PN12.5 DN110mm HDPE PE100 ISO4427	LM	2300		
4.5.1	PN10 DN110mm HDPE PE100 ISO4427	LM	2300		
4.5.2	PN10 DN75mm HDPE PE100 ISO4427 for Syiluni-Forest Tank	LM	300		
4.5.3	PN10 DN75mm HDPE PE100 ISO4427 for Kyangoma-Kyambui tank	LM	500		
4.6	Class B GI pipes DN 100mm with flanges	LM	60		
4.7	Allow for electrofusion/ buttfusion of the pipes and fittings. Connectors and adaptors NOT PERMITTED	Joints	90		
4.8	Allow for fixing leakages along the pipeline interconnecting the 5no. Syiluni kiosks	Lot	1		
	CLASS J: PIPEWORK - FITTINGS AND VALVES				
	'The rate quoted is for provision and fixing				
	Bends				
4.9	GI OD 100mm plain ended, 22.50^0 and 90^0	No	2		

	Junctions and branches				
4.10	GI OD 4"X2.5"/2" tees to be fused, with flanged branch and valves and all the necessary accessories for airvalves, junctions and washouts	No	7		
	Airvalves				
4.11	Supply and install DN50mm anti-shock/ anti-surge double- orifice Air Valves complete with installation sundries as per the attached technical specifications with flanged base	No	4		
	Gate/ Sluice Valves/ water meters				
4.12	Supply and install DN75 mm gate valves complete with installation adopters/sundries for Off-takes and washouts	No	5		
4.13	Supply and install DN100mm sluice valves complete with installation sundries for mainline at Off-takes	No	6		
4.14	Supply and install 4" water meters complete with installation adopters/sundries	No	5		
4.15	Supply and install 2.5" water meters complete with installation adopters/sundries	No	5		
4.16	Supply and install a 2" high pressure float ball valve complete with a 2.5"x2" reducer	No	5		
4.17	**Valve Chambers**				
4.18	Construct 900mm by 900mm masonry valve chamber. Depth not exceeding 1m, all in accordance with details shown on drawings and as per engineer's instructions. Include for provision and fixing of cast iron step irons and heavy duty rectangular mild steel frame with locking devices as per details on drawing	nr	8.00		
4.19	Construct 600mm by 600mm masonry valve chamber. Depth not exceeding 1m, all in accordance with details shown on drawings and as per engineer's instructions. Include for provision and fixing of cast iron step irons and heavy duty rectangular mild steel frame with locking devices as per details on drawing	nr	8.00		
4.20	**Marker Posts**				
4.21	*Construct concrete marker posts and install along th e water supply pipeline, all in accordance with details shown on drawings. (Reinforced concrete 1:2:4(class 20/20, bars D12), as per details on drawing*				
4.22	Pipeline marker post inscribed WL	No	18.12		
4.23	Air valve marker post Inscribed AV	No	4		
4.24	Wahouts marker post inscribed WO	No	4		

	KIKIMA MARKET GRAVITY LINE				
	CLASS D: DEMOLITION AND SITE CLEARANCE				
	The rate quoted is for site clearance and demolition along construction wayleave. *Rate shall be deemed to include removal of the material, natural and artificial* *articles, objects and obstructions which are above th e original surface and carting away to tips, identified by the contractor in liaison with the Local Authority*				
	General clearence				
4.25	Site clear and excavate to pipe invert level 750 mm n.e 1m below existing ground level and backfill/ reinstate to original ground level after testing pipeline, all to the approval of the engineer	LM	1512		
4.26	Excavation in rock Class A/B	CM	2		
4.27	**CLASS I: PIPEWORK - PIPES**				
4.28	*The rate quoted is for supply and transport to site storage, transport from site storage, excavate, lay and joint pipes complete with all jointing materials and but fusing. The rate is deemed to include excavation, bed lining, installation and backfilling of the pipe trenches. keep trenches and ther excavations free of water.*				
4.29	PN10 75mm HDPE PE100 ISO4427	LM	1500		
4.30	Class B GI pipes 2.5" threaded in 3m lengths complete with sockets	LM	12		
4.31	Supply and install 75mm connectors and adaptors as shall be instructed by the engineer	Joints	25		
4.32					
4.33	**CLASS J: PIPEWORK - FITTINGS AND VALVES**				
4.34	*'The rate quoted is for provision and fixing*				
4.35	**Bends**				
4.36	HDPE 75mm elbow 90^0	No	2		
4.37	GI 2.5" elbow 90^0	No	2		
4.38	**Junctions and branches**				
4.39	HDPE 75mm equal tee and all the necessary accessories for airvalves, junctions and washouts	No	4		
4.40	Saddle clamps PN16 75mmX1.5"	No	2		
4.41	**Airvalves**				
4.42	Supply and install steel 1.5" anti-shock/ anti-surge double- orifice Air Valves complete with installation sundries as per the attached technical specifications with flanged base	No	2		
4.43	**Valve Chambers**				
4.44	Construct 900mm by 900mm masonry valve chamber. Depth not exceeding 1m, all in accordance with details shown on drawings and as per engineer's instructions. Include for provision and fixing of cast iron step irons and heavy duty rectangular mild steel frame with locking devices as per details on drawing	nr	2.00		
4.45	Construct 400mm by 400mm masonry valve chamber. Depth not exceeding 1m, all in accordance with details shown on drawings and as per engineer's instructions. Include for provision and fixing of cast iron step irons and heavy duty rectangular mild steel frame with locking devices as per details on drawing	nr	2.00		

4.46	**Gate/ Sluice Valves & Water meters**				
4.47	Supply and install 2.5"gate valves complete with installation sundries for Off-takes	No	2		
4.48	Supply and install 2.5" water meters complete with installation sundries	No	2		
4.49	**Marker Posts**				
4.50	*Construct concrete marker posts and install along th e water supply pipeline, all in accordance with details shown on drawings. (Reinforced concrete 1:2:4(class 20/20, bars D12), as per details on drawing*				
4.51	Pipeline marker post inscribed WL	No	5		
4.52	Air valve marker post Inscribed AV	No	2		
4.53	Sluice/Gate Valve marker post inscribed SV	No	2		
	Bill 4 total carried over to summary				
Bill 5	**WATER KIOSKS**				
	Supply, deliver all necessary materials as below and Construct 2M×2.5M kiosks each with a tank. The rates must iclude all connection costs from the main line or the tanks and Branding the kiosks at sites as advised by the engineer				
5.1	**FOUNDATION**				
5.1.1	Cut to spoil top soil n.e. 150mm below g.l. over Kiosks and fetching bay areas into a permanent heap	m^2	7		
5.1.2	Cut to spoil a strip foundation trench n.e. 600mm below g.l.	m^3	1.2		
5.1.3	300mm thick hardcore filling well watered and compacted in layers of 150mm maximum thickness to make up levels	m^3	2.1		
5.1.4	50mm thick quarry dust/Murram blinding to surfaces of hardcore	m^2	7		
5.1.5	Chemical anti-termite treatment (as gladiator or equally approved) executed complete by an approved specialist under ten (10) year guarantee to surfaces of blinded hardcore	m^2	7		
5.1.6	1000gauge polythene or any other equally approved Damp proof membrane laid under surface bed with 300mm side and end laps(measured nett - allow for laps)	m^2	9		
5.1.7	Natural stone walling, roughly chisel dressed on both sides and jointed in cement and sand (1:3) mortar 200mm foundation walling	LM	9		
5.1.8	Mass concrete class 15 (1:4:8) in 50mm thick surface blinding under strip footings	m^3	0.35		
5.1.9	Mesh fabric reinforcement A98 to B.S 4483 (measured nett-allow for laps)	m^2	7		
5.1.10	100mm thick 1:2:4 (C20/20) vibrated RC floor slab over Kiosks and fetching bay areas	m^2	7		
5.1.11	25mm thick Cement sand screed (1:3) finished with steel float.	LM	5		
5.2	**WALLING**				
5.2.1	Hessian based bituminous felt DPC 225mm wide horizontally placed below masonry walling	LM	10		

5.2.2	Dressed Natural stone / Block walling: 200mm thick, bedded and jointed with cement and sand mortar (1:3), reinforced with 20SWG hoop iron in alternate courses to external wall including gable ends	m^2	30		
5.2.3	Vibrated reinforced concrete 1:2:4 (class 20 (20/20mm) in Ringbeams	m^3	0.4		
5.2.4	High yield square twisted steel reinforcement bars to BS 4461 including for cutting, bending to shape, tying, hooking and spacer blocks as described in:				
5.2.5	8mm diameter ditto	KG	10		
5.2.6	12mm diameter ditto	KG	50		
5.2.7	Sawn formwork to Sides of ringbeam	m^2	2.7		
5.2.8	Horizontal key pointing in masonry joints in external wall surfaces	m^2	27		
5.2.9	15mm thick Cement sand plaster to walls surfaces (1:3) finished to walls to receive paint internally	m^2	30		
5.3	**ROOFING:**				
5.3.1	Wrought Cypress Timber 4x2	LM	17		
5.3.2	Wrought Cypress Timber 3" x 2"	LM	39		
5.3.3	Wrought Cypress Timber 2" x 2"	LM	39		
5.3.4	G30 Blue Box profile Iron Sheets.	m^2	7		
5.3.5	Roofing Nails	Kg	1.5		
5.3.6	Assorted Ordinary Wire Nails	Kg	5		
5.3.7	2.1M x 1M Standard steel door complete with frame, hinges latch bolts and padlock.	No	1		
5.3.8	1M X 1M Standard steel window complete with frame hinges and latch bolts.	No	1		
5.4	**FINISHES:**				
5.4.1	ROOF: 8" x 1" planed timber fascia board	LM	36		
5.4.2	METAL SURFACES: Prepare and apply three coats plastic enamel paint to General metal surfaces (both sides).- (Red oxide primer glossy)	m^2	3.5		
5.4.2b	Extra over for tank steel tower at Kikima market	m^3	3.5		
5.4.3	INTERNAL PLASTERED WALLS: Prepare and apply three coats plastic silk emulsion paint to Plastered wall surfaces internally	m^2	29		
5.4.3b	Extra over for Ulilinzi kiosk	m^3	29		

5.4.4	EXTERNAL WALLS: Prepare and apply three coats permaplast external wall paint to Rendered sides of beam and walls externally and allow for branding of the kiosk as directed by the supervising engineer	m^2	7		
5.4.4b	Extra over for Ulilinzi kiosk	m^3	7		
5.5	**PLUMBING:**				
5.5.1	1.5" diameter GI class B 6m length	No.	1		
5.5.2	1.5" diameter GI Elbow	No	4		
5.5.3	1.5" diameter GI Couplers	No.	4		
5.5.4	1.5" by 3/4" reducing socket	No.	1		
5.5.5	Water meter 3/4" dia. Kent	No.	1		
5.5.6	3/4" diameter assorted length G.I nipples	No	5		
5.5.7	3/4" diameter GI Pipe class B	No.	1		
5.5.8	3/4" diameter Gate valve-peglar type	No.	3		
5.5.9	3/4" diameter valve sockets	No	2		
5.5.10	3/4" diameter GI union.	No.	4		
5.5.11	3/4" diameter GI Elbow	No	4		
5.5.12	**Pipe joining material:**				
5.5.12.1	Boss white for G.I Pipes	Kg	0.5		
5.5.12.2	Solvent Cement	Kg	0.5		
5.5.12.3	Coolant	Lts	1		
5.5.12.4	Sealing thread	Pcs	2		
	Bill 5 sub-total carried to summary				

Bill No. 6: Tanks on platforms

ITEM	DESCRIPTION	UNIT	QTY	UNIT COST (KShs.)	TOTAL COST (KShs.)
6.1	Supply, Deliver & Install a $10m^3$ Double Laminated Plastic Water Tank, c/w GI Inlet, Outlet & Overflow Fixtures, 2'' dia. Include for water connection the water point and branding of the tank. For Ulilinzi petrol station kiosk	No	1		
6.2	Supply all materials and construct a 1m high above ground masonary platform with reinforced concrete slab.	No	1		
	Bill 6 Total carried to summary page				

GRAND SUMMARY

BILL	BILL DESCRIPTION				AMOUNT (Kshs)
Bill 1	Preliminaries				
Bill 2	100 M3 MASONRY TANK AT SYILUNI				
BILL 3	PROPOSED 2-DOOR PIT LATRINE+URINAL AT MULIMA WATER TREATMENT SITE				
Bill 4	PIPELINES				
Bill 5	WATER KIOSKS				
BILL 6	Tanks on platforms				
	SUB-TOTAL				
	Allow Ksh. 180,000 for contingencies				180,000.00
	SUB-TOTAL A				
	Add 0.03% to sub-total A for PPRA capacity building levy				
	Add 16% VAT to sub-total A for VAT				
	TOTAL CARRIED TO FORM OF TENDER				