

Date: 10th March 2025

TENDER ADVERTISEMENT

Habitat for Humanity Kenya invites bids from interested, eligible, reputable, and competent suppliers and contractors:

TENDER REF NO	ITEM DESCRIPTION	LOCATION
HFHK/KELC/0001/03/2025	Borehole Drilling and Construction of Water Kiosk in Kajiado County, Kenya	Kajiado County

Detailed tender documents including the ToR and evaluation criteria may be obtained (Free of charge) from the Habitat for Humanity Kenya website: <u>https://hfhkenya.org/careers</u> or requested through <u>procurement@hfhkenya.org</u>

Duly completed and sealed tender documents in plain envelope with the **TENDER REF NO.** and **TENDER DESCRIPTION** title clearly indicated on the envelope should be deposited in the tender box placed at the Habitat for Humanity Kenya on or before Close of Business on 24th **March 2025** addressed to;

The Chairperson, Procurement Committee,

Habitat for Humanity Kenya

Kasuku Lane-off Lenana Road,

CVS Plaza 3rd Floor

P.O Box 38948 - 00623, Nairobi Kenya.

Habitat for Humanity Kenya reserve the right to accept or reject any tender in part or wholly and does not bind itself to accept the lowest bidder. Only successful bidders will receive communication from HFHK office. Any form of canvassing either directly or indirectly shall lead to disqualification of the tender.

BOQ FOR DRILLING, CONSTRUCTION, TESTING AND EQUIPPING OF 1NO. PRODUCTION BOREHOLE AND TWO WATER KIOSKS AND RELATED PIPE CONNECTIONS AT KENYA EVANGELICAL LUTHERAN CHURCH ON L/R NO. KAJIADO/MAILUA/3, WITHIN LORMONG'I AREA, KAJIADO CENTRAL SUB-COUNTY, KAJIADO COUNTY

1. BOREHOLE DRILLING, CONSTRUCTION AND TEST PUMPING

ITEM NO.	DESCRIPTION.	UNIT	QTY	RATE (KShs)	TOTAL AMOUNT (KShs)
1	Mobilization/Demobilization of drilling unit, equipment, materials, personnel and all other required supplies.	Sum	sum		
1a	Disposal of excavated and all other materials/debris from the site, reinstate the site to the Supervisor's satisfaction. Erecting/dismantling of drilling unit.	Sum	Sum		
2	Erecting/dismantling of Test Pumping Unit.	Sum	sum		
3	Rotary Drilling of 292mm (11.5") diameter borehole through all types of strata taking any remedial measures to overcome caving- in, or over drilling to accommodate sloughed material and keeping proper drilling records from:	Sum	sum		
3a	• 0 - 100m below surface.	m	100		
3b	• 100 - 200m	m	100		
3c	• 200 - 300m	m	100		
	Final drilling depth is <u>PROVISIONAL</u> , actual depth to be determined by the site's geological formation and recommendations by the Supervising Hydrogeologist.				
4	Supply and installation of 203mm (8") diameter plain black steel casings 4.8mm gauge.	m	200		
5	Supply and installation of 203mm (8") diameter machine-cut black steel screen casings 4.8mm gauge.	m	100		
6	Supply and installation of 2mm to 4mm well-rounded gravel filter pack.	m ³	10.4		
7	Allow for standby time	Hr	5		
8a	Allow for reaming, boring, supply and installation permanent surface casings on request by the Supervising Hydrogeologist.	m	3		
8b	Allow for the removal of the above temporary casings.	m	2		
9	Development works.	Hr	3		
10	Test pumping with 30kW motor and the appropriate pump to ascertain borehole yield for at least 24 hours including installation and withdrawal of pumping unit.	Hr	24		
11	Recovery measurements.	Hr	3hrs		
12	Construction of mass concrete plinth around well head of $1.5 \times 1.5 \times 0.5 \text{ m}$. (Normal borehole slab).	No.	1		
13	Borehole capping. A borehole well cap to be securely fitted to the 8inch/203mm casing.	No.	1		
14	Allow for all costs involved in providing water for all requirements of the contract drilling, field camp e.t.c.	No.	1		
15	Full water quality analysis (Physical, Chemical and Microbial), drilling logs, charts, test pumping and detailed final borehole completion report.	Sum	1		
TOTAL	COST				

2. BOREHOLE EQUIPPING WITH SOLAR POWERED WATER PUMPING (PROVISIONAL).

ITEM No.	DESCRIPTION	UNIT	QTY	RATE (KShs)	TOTAL AMOUNT (KShs)
1	a) Supply and installation of appropriate solar submersible pump with all accessories capable of pumping 10m ³ /Hour with pump setting 288m below ground level. The Submersible pump recommended is PROVISIONAL subject to test pumping findings and approval of the recommended pumping system by the client.	Sum	Sum		
	(15kW centrifugal borehole pump made of stainless-steel internal components with water lubricated rubber bearings and pressure equalizing diaphragm is recommended in the meantime. The pump is directly coupled with a sealed, liquid cooled 2-pole asynchronous 15kW (3HP) 3 phase electric motor. The pump can deliver 10m ³ /hr against a				

total estimated head of 310m, though actual water delivered will vary with level of water in the borehole whilst pumping).	
b) Installation of riser pipes, electric power cable, water flow meter, non-return valve and all related installation sundries following approval by the client	
c) Sizing and design, supply and installation of a hybrid Solar power supply system following the test pumping findings. The following components are PROVISIONAL subject to approval by the client of the recommended and appropriate solar power supply system.	
Monocrystalline Solar PV modules (19kW output power) mounted on steel support structure, Pump Control Unit 18.5kW with all necessary functions: over current, under voltage, over speed, over temperature, reverse polarity, low water. It has an integrated MPPT (Maximum Power Point Tracking) which maximizes power use from PV modules. The unit is housed in a damp proof enclosure with external display for current running data such as: input/output current/power/voltage, pump speed, temperature. Other accessories include well probe, lightening arrestor, earthing, sun switch and remote/online monitoring functions	
TOTAL	

3. WATER KIOSKS, PIPELINE AND VALVE CHAMBERS

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (KShs)	TOTAL AMOUNT (KShs)
A	General trench excavation in open ground, refill, ram and dispose. Depth not less than 0.6m and 350mm wide.	LM	50		
В	General trench excavation in hard rock, refill, ram and dispose. Depth not less than 0.6m and 350mm wide.	LM	50		
	SUPPLY OF HDPE PIPES AND LAYING IN TRENCHES. THE COST INCLUDE THE JOINERY (MANDATORY BUTT FUSION)				
A	HDPE 50mm dia. PN10 include for jointing (Mandatory Butt fusion/welding)	м	50		
	FITTINGS AND VALVES				
Δ	Single Acting Air valve 50mm complete with fittings	No	1		
B	50mm Equal Tee	No.	3		
C	Construct 1200mm x1200mm x 1000mm standard valve chamber	No.	1		
	with lockable cover		•		
D	Allow for minor fittings	LS	1		
E	Peglar (England) Gate valves 2" complete with fittings	No.	1		
F	Peglar (England) Gate valves 1 1/2" complete with fittings	No.	3		
G	Allow for pipeline pressure testing	LS	1		
ESTIM 10,00	TOTAL COST FOR PIPELINE DISTRIBUTION ATES FOR I NO. WATER KIOSK (OF UPTO 2.6M BY 2.6N OL PLASTIC WATER TANKS INSTALLED ON TOP -See desig Excavations	AND UPTO 1 gn drawings att	FOOT ABOV tached	E THE GROUND LEVE	L) WITH
1.00					
A	General excavation to remove topsoil to an average depth of 250mm	m²	17		
В	Excavation for column footing depth to a minimum depth 1200mm	m ³	6		
C	Excavation for front area depth not exceeding 250mm	m ³	5		
D	Cart away surplus excavated material & deposit at recommended area	m ³	3		
E	300mm thick approved hard-core, well compacted in layers not exceeding 150mm and blinded using 50mm murrum/quarry dust	m²	11		
2	Masonry Work				
A	150 x225X 450mm natural stone to walls to superstructures walling in 1:3 sand/cement mortar finished with steel finished on one side. Rate to include mild all reinforcement at every course	m²	16		
В	150 x225 X 450 natural stone to walls to Substructures walling in 1:3 sand/cement mortar. Rate to include mild all reinforcement at every course	m²	18		
C	150mm wide DPM to walls	m	12		
3	Concrete Work				
Α	Concrete grade 15/20 - 400 mm thick Plinth	m ³	0		
В	Concrete grade 15/20 - 100mm thick slanting front area	m ³	1		
С	Reinforced concrete grade 25/20 - 125mm thick floor slab	m ³	1		
D	Reinforced concrete grade 25/20 - 450 X 250mm footing	m ³	1		
E	Reinforced concrete grade 25/20 - 1050 X 1050* 300mm column footing	m ³	1		
F	Reinforced concrete grade 25/20 - 300 X 200mm columns	m ³	1		

	Reinforced concrete grade 25/20 - 450 X 300mm Ground and roof beams	m ³	3	
G	Reinforced concrete grade 25/20 in roof slab	m ³	1	
4	Concrete Ancillaries			
A	Provide, cut and fix in position sawn timber formwork and probs or equivalent for all concrete works	LS	1	
5	Reinforcement: Steel reinforcement cut, bend & placed in position, unit price to include cutting, bending & placing in position with binding wire and concrete seats			
A	a) Mesh 142 mild steel reinforcement mesh (0.40kg/m ²) in foundation wall	m²	15	
В	b) 10mm diameter high tensile steel (0.62kg/m^2) in foundation wall	m	45	
С	a) 8mm diameter mild steel (0.40kg/m) in foundation wall	m	130	
D	b) 12mm diameter high tensile steel in roof slab	m	182	
E	c) 8mm diameter mild steel (0.40kg/m) in roof slab	m	110	
F	d) 10mm diameter high tensile steel (0.89kg/m) in column footing	m	45	
G	e) 12mm high tensile steel (0.89kg/m) in columns	m	40	
Н	f) 10 mm diameter mild steel (0.40kg/m) in columns	m	35	
6	Fittings and Fixtures			
A	2000 X 1000 steel doors including locks and hinges to details	No	1	
В	1000 X 1000 steel swing window including locks and hinges to	No	1	
7	Pipes and Fittings: All pipes to be Galvanized Iron with Screw with adequate jute hemp thread for fixation of fittings			
A	50mm to 25mm reducing bush	No.	1	
В	25mm inlet pipe	m	18	
C	25mm dia. Elbows	No.	4	
	75mm dia. Valve sockets	No.	2	
	25mm dia. Gate Valve as Peglar	NO.	Z	
F	25 X 25 mm/Equal Reducing Tee	NO.	D	
	25mm long throad nipplo	NO.	1	
	25mm union	NO.	2	
ĸ	25mm short nipple	No.	11	
	25mm heavy duty Globe Valve	No.	3	
N	25mm Peglar Water Meter	No.	1	
8	Finishes		•	
A	Pointing to all External wall surfaces with cement sand mortar 1:2		16	
В	Apply plastering to lintel surfaces		1	
С	Apply plastering to all internal wall faces		16	
D	Provide three coats of gloss paint to all plastered wall faces		16	
E	Provide 3 coats of bituminous paint to all exposed concreted faces		1	
9	Drainage			
A	Excavate for 1200mm diameter X 2000mm soak pit as detailed	No.	1	
В	4" X 8" X 18" lining block to the site of the catch pit	m	2	
C	100mm thick mass concrete grade 15/20 for catch pit base slab and cover	m²	1	
D	100mm thick mass concrete grade 15/20 to the soak pit cover slab	m ³	1	
E	Provide 150mm perforated waste pipe to soak pit	No	2	
F	Graded approved free draining hard-core/rubble stone filling the soak pit	m ³	2	
10	Storage			
A	Allow for provision and installation of 10,000L double layered cylindrical plastic water tank on top of the water kiosk inclusive of pipe fittings and fitted with a ball valve	No.	1	
	TOTAL COST FOR 1NO WATER KIOSK			
SN	COMPONENT	Unit	Qty	Amount
1	BOREHOLE DRILLING, CONSTRUCTION AND TEST PUMPING	No	1	
2	BOREHOLE EQUIPPING WITH SOLAR POWERED	No	1	
2	WATER PUMPING (PROVISIONAL).	No	<u> </u>	<u> </u>
	AND VALVED CHAMBERS		L	
	GRAND TOTAL			
	ADD 16% VAT			
	GRAND TOTAL INCLUSIVE OF 16% VAT			





<u>1:1</u>







BEAM DETAIL

<u>1:1</u>

NOTES: GENERAL 1. All dimensions are in mm unless otherwise specified. 2. Dimensions to be read, not scaled.Only figured dimensions to be used. 3. Contractor to check and verify all dimensions on site before commencement of any works. CONSTRUCTION 1. All slabs at ground level to be poured over 1000 gauge polythene sheeting on 50 mm thick murram bliding layer which on 300 hardcore fill. 2. All soil under slabs and all around external foundations to be treated against termites. STRUCTURAL.

 All black cotton soil to be removed from below all building and paved surfaces.
 All soil under slabs and all around external foundations to be treated against termites.
 Building to be clear of black cotton soil within 3m outside the perimeter wall.
 Joral B.C. works,refer to structural

drawings. 4 Depth of foundation to be determined on the

site to structural Engneers Approval. <u>MECHANICAL</u> 1. All plumbing and drainage to comply with local authority regulations.

2. All service ducts to be accessible from all floors .

 SVP denotes soil vent pipe to be provided at the head of the drainage.

 P.V permanent ventilation, to be provided on all doors and windows except bathroom and

water closet doors. 5. All underground foul and waste drain pipes

shall be upvc to comply with Bs 5255. 6 All inspection chamber covers and framing

shall be cast iron to comply with Bs 497 table 2 grade A.

 The storm drain pipe to comply with Bs 556 minimum slope in the drain pipes in 1%.

 All testing of pipes must be done before plastering.

Developing PARIMEES
KELC-MEW PROJECT/

KAJIADO COUNTY GOVERNMENT

PROJECT ITLE PROPOSED TYPICAL WATER KIOSK IN KAIADO COUNTY DRAWING ITLE: WORKING DRAWINGS Date: 226 file 2025 South: As above Drignel by C.M. Dunesby C.M.







FLOOR PLAN LAYOUT

FOUNDATION PLAN LAYOUT

600 x 600 x 50 mm conc. paving

00

2,600

00

200 400

XA

(pg 03)

200 x 200mm RC column

to details (pg STR 03)

1:1

200

350

slab around the external wall







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prefix	description	date
DEVEL	OPING PARTNERS:	

KELC-MEW PROJECT/KAJIADO COUNTY GOVERNMENT

PROJECT TITLE PROPOSED TYPICAL WATER KIOSK IN KAJIADO COUNTY WORKING DRAWINGS Date: 25th Feb 202 Scale: As shown Designed by: C.M. Drawn by: C.M.



DRILLING OF BOREHOLE AND CONTRUCTION OF WATER KIOSKS IN KAJIADO COUNTY

EVALUATION CRITERIA

The tenders submitted by tenderers shall be evaluated in the following three (3) stages:

- 1) Mandatory Requirements Check;
- 2) Technical Evaluation; and
- 3) Financial Evaluation.

1) Mandatory Requirements Check

These are mandatory documents to be attached to the tender document. Absence of any of these documents will lead to bidder being disqualified and will not be considered proceed to the next stage of evaluation.

Item	Requirement	Yes / No
1.	Certificate of Registration/Incorporation.	
2.	Updated copy of certified CR12 Form	
3.	Current Single Business Permit	
4.	Valid KRA Tax Compliance Certificate	
5.	Valid registration as NCA 5 or higher as water works contractor,	
6.	NCA practicing license for water works and building works	
7.	Certificate of registration with the MWS&I as water development contractor	
8.	Priced Bill of Quantities in the Format Provided in the Bid Documents.	
9.	Certified Company's Audited Financial Statements for the last three years (2023 and 2024)	

Schedule-1: Mandatory Requirements

2) <u>Technical Evaluation Criteria</u>

The technical evaluation is weighted out of 100 points with a pass mark of 70 points. Any bidder scoring 70 points and above in the technical evaluation will be considered for Financial evaluation stage. Any bidder scoring below 70 Points in the Technical Evaluation will be disqualified from further evaluation.

	Scoring Criteria				
Item	Requirements	Maximum Possible Points	Bidder's Score		
1.	Contractors Experience (Value of Works and Works of Similar Nature)	40			
2.	Contractor Equipment for the works	20			
3.	Contractor's Staff (Technical Competence)	20			
4.	Works Plan and Method Statement	20			
	Total	100			

Schedule-2: Technical Evaluation Summary

2.1 Contractor's Experience - Value of Works and Works of Similar Nature (Max-30)

The bidder to attach reference letters and completion certificates for past and ongoing works as evidences.

	Scoring Criteria		
Item	Requirements	Maximum Possible Points	Score
1	Annual volume of construction works during the past three years of above Kshs 50,000,000.00	10	
2	Annual volume of construction work during the past three years of above Kshs 25,000,000.00 and not exceeding 50,000,000.00	5	
3	Annual volume of construction work during the past three years of below Kshs 25,000,000.00	4	
	No submission of project record	0	

NOTE: Score for value of works will be awarded based on submitted contracts for past and ongoing works / purchase orders/completion certificates for past and ongoing works.

Schedule-4: Works of Similar Nature and Complexity (Max-15)

	Scoring Criteria	Bidder's	
Item	Requirements	Maximum Possible Points	Score
1	Experience as prime contractor in the construction of at least Three Projects of similar nature and complexity in the last Three Years. Drilling of boreholes (Completion certificates) (10 points for each completion certificate	30	
2	Experience as prime contractor in the construction of at least Three Water Works Related Projects in the last Five Years. (e.g. Irrigation Works, Sewerage works, Dams/water pans, Canals, Pressed Steel Tanks, Pit latrines). Evidence of completed works must be attached and Ongoing works cited should be at least 80 percent complete	9	
3	Any other three unrelated Engineering Works (Buildings, Roads, Bridges etc) in the last five years	6	
4	No submission of project record	0	

NOTE: Score for value of works will be awarded and prorated based on submitted contracts for past and ongoing works / purchase orders/completion certificates for past and ongoing works.

2.2 Contractors Equipment for Works (Max-20)

	Scoring Criteria		Bidder's Score		
Item	Requirements	Maximum Possible Points	Listing	Proof of Ownership (Logbook or Valid Lease Agreement	
1.	Drilling Rig – one (1) unit	15	0.5	14.5	
2.	Truck one (1) unit;	2	0.5	1.5	
3	TEST PUMPING UNIT MOUNTED ON ASHOK LEYLAND	3	0.5	2.5	
	Total	20			

Schedule-5: Contractors Equipment (Max-20)

NOTE: Score for Equipment will be awarded based on submitted Logbooks (in the name of the Bidder or Owner in the CR12 provided) or Lease agreement between the Bidder and Leaser.

2.3 Contractor's Staff (Technical Competence) (Max-20)

Bidder must attach detailed and updated Curriculum Vitae (CVs) and other testimonials including Academic Certificates (Degree, Diploma etc), Registration Certificates from professional Bodies and Recommendations from past assignments as necessary for each staff.

Scoring Criteria							
Ite m	Requirements	Maximu m Possible Points	Degree in Water Eng.	Diploma in Civil/Wat er Eng.	Certificat e in Civil/Wat er Eng.	Registratio n with relevant bodies (Engineeri ng body/ NCA)	Bidder 's Score
1	Site Agent (Water Engineer)	5	4	2	0	1	
2	One (1) Site Foremen (Earthworks/concr ete Works)	2.5	1.5	2	1	0.5	
3	Two (2) Site Foremen (Plumbing technician)	2.5	1.5	2	1	0.5	
	Total	10					

Schedule-6.1: Contractors Key Staff – Education (Max-10)

Schedule-6.2: Contractors Key Staff – Experience (Max-10)

	Scoring Criteria								Diddowla
Item	Requirements	Maximum Possible Points	Over 5 Years		3 – 5 Years		1 – 3 Years		Score
			Relevant Experie nce	General Experien ce	Relev ant Exper ience	General Experien ce	Relevan t Experie nce	General Experience	
1	Site Agent (Water Engineer)	4	4	2	3	2	2	1	
2	One (1) Site Foremen (Earthworks/c oncrete Works)	3	3	1	2	1	1	0.5	
3	Two (2) Site Foremen	3	3	1	2	1	1	0.5	

(Plumbing technicians)					
Total	10				

NOTES on Relevant Experience

- Relevant experience refers the proposed key staff having worked in at least 2 projects of a similar nature in similar position in the last 5 years.
- The minimum registration requirement for the site agent must be either EBK, EIK or KTRB
- The minimum registration requirement for foremen will be NCA technician registration.

2.4 Work Plan and Method Statement (Max-20)

	Scoring Criteria	Bidder's		
Item	Description	Maximum Possible Points	Score	
1	Detailed and relevant Schedule of works (work plan) covering all items in the scope of works right from contract signing and including Defects Liability Period (DLP) and within the performance period as specified in the bid documents.	5		
2	Detailed and relevant Method Statement covering all items in the scope of works including but not limited to Mobilization, works execution methodology (site clearance, setting out, earthworks, concerted works, Pipe Works, testing, site cleaning etc.) for each items of works including DLP. As described in section 11 of this bid documents.	7		
3	Detailed Project Site management as described in section 11 of this bid documents.	2		
4	Occupational Safety and Health management as described in section 11 of this bid documents	2		
	Environmental Management as described in section 11 of this bid documents	2		
	Quality Management as described descried in section 11 of this bid documents	2		
	Total	20		

Schedule-7: Work Plan and Method Statement (Max-20)

NOTES on Works Plan and Method Statement

• Scores will be awarded based on the adequacy of the submitted documents in reference to the scope and works requirements.

Stage 3: Financial Evaluation Stage

The technical evaluation pass mark shall be 70% of which bidders who pass will be subjected to tender price comparisons.

HFHK will award the Contract to the tenderer whose tender is determined to be substantially responsive to the tender documents and who has offered the lowest evaluated tender price.