

## HIGH COMMISSION OF INDIA NAIROBI

Drilling and pumping of borehole at India House, Limuru Road, Muthaiga, Nairobi, Kenya.

Bid submission start date : December 13, 2023

Bid submission end date : January 04, 2024

Validity of bids : 180 days

#### HIGH COMMISSION OF INDIA NAIROBI

## TENDER NOTICE Tender Reference Number: NAI/ADM/815/1/2022-9

Subject: Drilling and pumping of borehole at India House, Limuru Road, Muthaiga, Nairobi, Kenya.

The High Commission of India in Nairobi, invites bids from companies/firms registered with the government of Kenya for drilling and pumping of borehole at India House, Limuru Road, Muthaiga, Nairobi, Kenya.

Date of Publication	13.12.2023 on High Commission's website, CPPP and local Newspaper.
Pre-Bid Meeting	1100 hrs on 18.12.2024 at the High Commission of India, Nairobi, UN-Crescent, Gigiri, Nairobi.
Start Date for submission of bids	0900 hrs on 13.12.2023 at the High Commission of India, Nairobi, UN-Crescent, Gigiri, Nairobi.
Last Date for submission of bids	1700 hrs on 04.01.2024 at the High Commission of India, Nairobi, UN-Crescent, Gigiri, Nairobi.
Technical Bid Opening	1100 hrs on 08.01.2024 at the High Commission of India, Nairobi, UN-Crescent, Gigiri, Nairobi.
Financial Bid Opening	1100 hrs on 18.01.2024 at the High Commission of India, Nairobi, UN-Crescent, Gigiri, Nairobi.

#### **Contact Details:**

#### **Head of Chancery (HOC)**

High Commission of India, Nairobi, UN-Crescent, Gigiri, Nairobi.

Phone: 0701464838 Email:- hoc.nairobi@mea.gov.in

#### Admin (Attache)

High Commission of India, Nairobi, UN-Crescent, Gigiri, Nairobi.

Phone: 0701464838, Email:- adm.nairobi@mea.gov.in

#### HIGH COMMISSION OF INDIA NAIROBI

Notice Inviting Tender (NIT) for drilling and pumping of borehole at India House, Limuru Road, Muthaiga, Nairobi, Kenya.

- **1.** Sealed tenders in conformity with detailed tender call notice are invited from companies/ firms who are authorised by Government of Kenya to provide above services.
- **2.** This tender document can also be downloaded from High Commission of India website: www.hcinairobi.gov.in. The tender should be submitted in **ONE SEALED ENVELOPE** in the following manner:
- 2.1. The first sealed cover should be superscribed 'Technical Bid' and should contain all relevant information showing compliance with the technical requirements listed in this document with all supporting documents. Product details shall also be indicated in technical bids. The financial bids would be opened in respect of those bidders, whose technical bids have been found meeting given eligibility conditions/ specification. The checklist of documents to be submitted along with technical bid is placed at Annexure- I. The bid price must not be mentioned any where in the technical bid documents.
- 2.2. The second sealed envelope should be superscribed 'Financial Bid' and should contain the duly filled in proforma placed at Appendix- V. The financial bids should clearly mention the unit price, Rate (unit price x Quantity), any other expenditure, VAT and the total cost in US Dollars only. The High Commission of India is VAT exempted by the Government of Republic of Kenya.
- **2.3.** Both the sealed covers should be placed in ONE SEALED ENVELOPE superscribed "**Drilling and pumping of borehole at India House, Limuru Road, Muthaiga, Nairobi, Kenya**". This should be addressed to High Commission of India, UN Crescent, Gigiri, Nairobi and sent by post or hand delivered **latest by 04.01.2024 till 1700 hrs. All three envelopes should bear contact details of the company at the bottom left of the envelope.** The bids will be opened in the presence of the bidders or their authorised representatives at the High Commission of India, UN-Crescent, Gigiri, Nairobi at **1100 hrs on 08.01.2024.** Tenders received after the due date and time or incomplete and conditional tenders shall not be accepted. Submission of more than one tender paper by a bidder for a particular work will render the bid liable for rejection.

- **3. Scope of Work:** The main objective of this project is to carry out a drilling services complete with electrical installation and submersible pump as per the Bills of Quantities description and the Geological survey recommendations, as the following:
- **3.1.** An 8" diameter borehole to be drilled at the location to a depth of 350 mbgl.
- **3.2.** The borehole should be installed with 6" diameter steel casings and screens wiyj slots of 1.5 mm and high % open surface area.
- **3.3.** The borehole should be installed with water meter and an Airline / Piezometer to monitor abstraction and to facilitate measurements of the water levels in the borehole.
- **3.4.** Though water strikes are expected at shallow depth less than 250 mbgl, drilling should be continued to the recommended depth in order to optimize the yield of the borehole.
- **3.5.** Upon completion of drilling, a 2-litre water sample should be collected for reference to the WRA testing laboratory, or any other component Water Testing Authority for a full physical, chemical and bacteriological analysis before the water is put to any use.
- 3.6. The borehole construction and completion methods in appendix- IV.
- 4. Terms of reference for the borehole drilling:
- **4.1. Phase 1- Drilling process logs:** The borehole shall be drilled and completed according to stipulated technical specifications and sound professional standards to a depth of 180 meters The contractor shall conduct the Masers geological borehole logging and documentation of pumping test according to standard formats.
- **4.1.1.** The contractor to document on a daily bases the drilling, development and test pumping of the proposed boreholes and hand-in a daily drilling progress report to the High commission of India Administration and Establishment Coordinator.
- **4.1.2.** Adapt the general well-design according to the specific conditions of the location, basing it on the geological log and on the results obtained from the pumping test.

- **4.1.3.** Provide for the installation of screens, casings, gravel pack, impermeable seals, well heads etc. Ensure that the recommended drilling depths, design and materials are followed and propose and carry out quality control measures upon well -completion.
- **4.1.4.** Prepare a detailed borehole completion report; with all necessary recommendations e.g., pump capacity, optimum depth of installation, periodic water quality analysis according to the standard format.
- **4.1.5.** All these documents shall be summarized in the Drilling Report, which will also include a quality control review of the drilling report from the drilling contractor. Compile the reports into a comprehensive final report (2 hard copies plus softcopy including all the raw data) and submit to High commission of India Administration and Establishment Coordinator
- **4.3. Drilling Implementation Borehole Logs by the Contractor and the Drilling Contractor:** The contractor to carry out a separate geological and Hydrogeological borehole logging, which is updated each day.
- **4.3.1.** Documentation and monitoring of the well-development process: measuring the evolution of the yield versus time (since well-development started) and the temporal evolution of the turbidity.
- **4.3.2.** Monitoring and following the pumping test according to standard formats: present in the daily progress report. the characteristic curve and the safe yield. If the pumping test has not been carried out accordingly this has to be reported immediately to High commission of India Administration and Establishment Coordinator and the test needs to be repeated.
- **4.3.3.** After the borehole completion, the general well-design described in Phase-2 Geophysical Report may have to be adapted according to site conditions and would need final approval from High commission of India Administration and Establishment Coordinator Infrastructure -Coordinator before the drilling process can continue. This updated general design must in no way interrupt the well-construction process and therefore needs to be done on the spot so that approval can be given within 24 hours.
- **4.3.4.** Ensure that the drilling contractor carries out water sampling, geological logging and water quality analysis (chemical and bacteriological). Ensure and retrieve proof that bacteriological analyses were carried out within 24 hours after sample: carry out parallel measurements of water quality (electrical conductivity and turbidity).

- **4.3.5.** Adapt the general well-design according to the specific conditions at each well location, basing it on the geological log and on the results obtained from the pumping test.
- **4.3.6.** The contractor to ensure the sound installation of screens, casings, gravel pack, impermeable seals, well-heads etc. Ensure that the recommended drilling depths, design and materials are followed and propose and carry out quality control measures upon well-completion Provide a Drilling Report, which will also include a quality control review of the drilling report from the drilling contractor.
- **5. Description of Services to be Rendered:** The Drilling will be done within the India House, Submersible pump will be installed at the same location after completion of borehole drilling. Prompt response (within six hours of complaint made) during warranty of the product from the date of commissioning.
- **6. Technical Requirements**: Technical conditions for the companies/firms are as follows:
- **6.1.** The companies/firms should provide proof of compliance as regards local laws and statutory regulations.
- **6.2.** Defect Liability Period will be upto the warranty of the product. No charges shall be paid for any repair/replacement during this period.
- **6.3.** Upon successful installation and commissioning, it shall be incumbent on the company to impart training to the officials who would operate the system.
- **6.4.** The Client shall not be liable for any loss, damage of any personal belongings, equipment or vehicles of the personnel of the companies/firms while executing the work.
- **6.5.** The companies/firms on its part and through its own resources shall ensure that the goods, material and equipment etc. of this Mission are not damaged in the process of carrying out the work undertaken by it. The companies/firms shall also be responsible for acts of commission and omission on the part of its staff and its employees. If the client suffers any loss or damage on account of negligence, default or theft on the part of the employees/ agents of the companies/firms, then companies/firms shall be liable to reimburse to the Client for the same. The companies/firms shall keep the Client fully indemnified against any such loss or damage. The responsibility and liability that will arise of any accident or casualty, occurring during the course of working to any staff engaged by the companies/firms, will remain with the

companies/firms. The Client will no way be responsible for this or any other clause mentioned above.

- **7. Approximate cost of tender-** The Tenderer shall examine the scope of work and other Documents and *all Addenda* (if any) before submitting his Tender and shall become fully aware of the extent, quality, type and character of operations involved in the supply. The Tenderer shall visit and acquaint himself with the site. The tenderer shall take entire responsibility in the interpretation of this report and of the site conditions. No consideration or compensation will be given for any alleged misunderstanding of the nature of the work to be executed.
- **8. Warranty Period:** The product shall have the 03 year warranty from the date of commissioning of borehole and pump. The service warranty shall also be equal to product warranty.
- **9. Earnest Money Deposit (EMD):** All Bidders are required to deposit Earnest Money Deposit (EMD) of USD 1200/- (US Dollar Twelve Hundred only) in form of "Pay Order, Demand Draft or bank Guarantee from Bank of India, Kenyatta Avenue, Nairobi" in favour of "High Commission of India, Nairobi". **Bids received without EMD will not be considered and rejected summarily.** EMD of unsuccessful bidders shall be refunded within 30 days of awarding the tender. No interest shall be payable for EMDs.
- **10. Performance Guarantee Bond (PGB):** Performance Guarantee Bond is mandatory. The successful bidder, must send the its acceptance in writing along with Performance Guarantee Bond @ 5% of the contract value shall be submitted in the form of Bank Guarantee as Performance Guarantee which should be remained in force till the Warranty period is over. If successful bidder fails to submit the Performance Guarantee Bond @ 5% of the contract value within 15 days from the date of placing of purchase order then purchase order will be cancelled and EMD will be forfeited. No interests shall be paid on PGB.
- **11. Financial quote & variations**: Contractor shall quote his Fixed Price based on the enclosed Scope of Work. The Contractor shall note that the price quoted by him in the Bill of Quantities (BOQ) shall be considered as the final quote for completing the scope of work defined in this document. Before submission of bid the contractor is advised to visit the site and ensure that his bid encompasses the items required for entire scope of work. No variation shall be paid to the contractor for the defined scope of work.
- **12. Commencement & Completion**: Commencement of the works shall be affected within 15 days from the issue of acceptance letter or letter of intent. Such 15 days period may be defined as the mobilisation period. The period of

completion for whole work is 30 days and shall be calculated from the date of commencement of works.

- **13. Liquidity damages:** High Commission of India reserves the right to impose liquidity damages @ 1% of the total cost of the work for every week of delay. The total value of the liquidated damages is limited to a maximum of 10% and shall be levied up to 10 weeks only.
- **14. Payment schedule:** 90% of total amount will be paid after successful completion, testing and commissioning the borehole. The remaining amount will be paid after completion of retention money period.
- **15. Retention Money:** The remaining 10% of the amount will be retained by the HCI Nairobi and will be released after 180 days from the date of successful completion of the borehole.
- **16. Right to Acceptance or Rejection of Tenders:** The tender is liable to be rejected *inter-alia:* -
- **16.1** If it is not in conformity with the instructions and proforma mentioned in the tender paper.
- **16.2** If it is not duly signed by the bidder.
- **16.3** If it is received by telex, telegram, email and any other mode of open communication.
- **16.4** If it is received after the expiry of the due date and time.
- **17. High Commission of India reserves the right to**: Accept/Reject any of the tenders in full or part thereof. Revise the requirement at the time of placing the order. Add, modify, relax or waive any of the conditions stipulated in the tender specification wherever deemed necessary. Reject any or all the tenders in part or full without assigning any reason thereof.
- **18. Arbitration:** Disputes shall be settled in accordance with The United Nations Commission on International Trade Law (UNCITRAL). The venue of Arbitration shall be Delhi High Court, New Delhi, India.

# CHECK-LIST OF DOCUMENTS TO BE SUBMITTED ALONG WITH TECHNICAL BID

Sl.	Document to be Submitted	Submitted	Not	Remarks
No.			Submitted	
1.	Copy of Authorisation from			
	Government of Kenya			
2.	Copy of Registration with NCA			
3.	0 1			
	of work executed with them, as a			
	proof of experience in this field			
	and reference thereof.			
4.	8 3			
	to Appendix-II)			
5.	Bill of Quantity (BoQ) in			
	Appendix- III			
6.	Whether the terms and			
	conditions in the tender notice			
	are acceptable to the bidder			
7.	Whether the firms is blacklisted			
	by any government			
	organization / country. A self-			
	declaration by the firm on its			
	letter head, in this regard, to be			
	enclosed.			
8.	7 11 8			
9.	Scope of Insurance			
	(documentary proof)			

Signature of Bidder

Seal of Establishment

Full Name of Bidder with address & Date

#### **UNDERTAKING BY THE BIDDER**

This is to certify that I/we before signing this tender have read and fully understood all the terms and conditions contained herein and undertake myself/ ourselves to abide by them. I/we further certify that I/we have the ability to meet all the technical conditions and requirements listed in this tender document.

Signature of	the Bidder with Seal
Name:	
Designation:	
Address:	
Phone No.	

### Appendix- III

### Bill of Quantity (BoQ)

Sl. No.	Description
1.	Hydrogeological Survey
2.	Water Resource Authority (WRA) Permits or necessary approvals
	of Local government
3.	Borehole Drilling and Test pumping-
	- Drilling
	- Supply and installation of screen casings.
	- Well gravel packing
	- Test pumping for 24 hours
	- Construction of concrete slab with well cap
4.	Pump fitting and installation-
	- Submersible pump complete with a 4.0kW motor capable of
	delivering 11m3/hr.
	- 5.5 KW 3 phase hober pump inverter
	- Control unit, modules and structure.
5.	Civil work
6.	Transport and labour

#### **BOREHOLE CONSTRUCTION AND COMPLETION METHODS**

- **1. Drilling:** Drilling should be carried out with a rotary-drilling rig which is considered suitable for the area. Geological rock samples should be collected at 2 metre intervals. Struck and water rest levels and if possible, estimates of the yield of individual aquifers encountered, should also be noted.
- **2. Well Design:** The design of the well should ensure that screens are placed against the optimum aquifer zones. The final design should be made by an experience hydrogeologist.
- **3. Casing and Screens:** The well should be cased and screened with good quality screens; considering the depth of the borehole it is recommended to use steel casings and screens 6" diameter. Slots should be maximum 2 mm in size.
- **4. Gravel pack:** The use of a gravel pack is recommended within the aquifer could contains sands or silts which are finer than the screen slot size. An 8" diameter borehole screened at 6" will leave an annular space of approximately 2", which should be sufficient, Should the slot size chosen be too large, the well will pump sand, thus damaging the pumping plant, and leading to gradual siltation of the well. The grain size of the gravel pack should be an average 2-4 mm.
- **5. Well Construction:** Once the design has been agreed, construction can proceed. In installing screen and casing, centralizer at 6m-intervels should be used to ensure centrality within borehole. This is particularly important to insert the artificial gravel pack all around the screen. If installed, gravel packed sections should be sealed off top and bottom with clay (2 m).

The remaining annular space should be backfilled with and inert material, and the top five meters grouted with cement to ensure that no surface water at the well head can enter the well bore and thus prevent contamination.

**6. Well Development:** Once screen, pack, seals and backfill have been installed, the well should be developed. Development aims at repairing the damages done to the aquifer during the course of drilling by removing clays and other additives from the borehole walls. Secondly, it alters the physical characteristics of the aquifer around the screen and removes fine particles.

We do not advocate the use of over pumping as a means of development since it only increases permeability in zones which are already permeable. Instead, we would recommend the use of air or water jetting, or the use of the mechanical plunger, which physically agitates the gravel pack and adjacent aquifer material. This is an extremely efficient method of developing and cleaning wells.

Well development is an expensive element in the completion of a well, but is usually justified in longer well-life, greater efficiencies, lower operational and maintenance costs and a more constant yield. Within this frame the pump should be installed at least 2 m above the screen, certainly not at the same depth as the screen.

**7. Well Testing:** After the development and and preliminary tests, a long duration well test should be carried out. Well tests have to be carried out on all newly completed wells, because from giving an indication of the quality of drilling, design and development, it also yields information on aquifer parameters which are vital to the hydrogeologist.

A well test consists of pumping a well from a measured start level (Water Rest Level- (WRL) at a known or measured yield, and simultaneously recording the discharge rate and the resulting drawdown as a function of time. Once a dynamic water level (DWL) is reached, the rate of inflow to the well equals the rate of pumping. Usually the rate of pumping is increased stepwise during the test each time equilibrium has been reached (Step Draw-Down Test). Towards the end of the test water sample of 2 liters should be collected for chemical analysis.

The duration of the test should be 24 hours, followed by a recovery test for a further 24 hours, or alternatively until the initial WRL has been reached (during which the rate of recovery to WRL is recorded). The results of the test will enable a hydrogeologist to calculate the optimum pumping rate, the installation depth, and the drawdown for a given discharge rate.

#### PROFORMA FOR SUBMITTING FINANCIAL BID

Sl. No.	Description of Service	Total Cost (in USD)
1.	Drilling and pumping of borehole at	
	India House, Limuru Road, Muthaiga,	
	Nairobi, Kenya	
2.	VAT, if any	
3.	Grand Total (in figures)	
4.	Grand Total (in Words)	
		Submitted Not Submitted
5.	Bill of Quantity (BoQ) as per	
	Appendix-IV	

Signature of the Bidder with Seal
Seal of Establishment
Full Name of Bidder with address & Date

#### Note: -

- (a) The bidders are required to quote their rates both in words and figures and put their signature; they should also sign on any overwriting or any correction made in the tendered rate. The rates filled in figure only and not in words shall be liable for rejection for which no paper cost shall be returned to the bidder(s).
- (b) The High Commission of India is VAT exempted by the Government of Republic of Kenya.

#### FORMAT FOR EARNEST MONEY DEPOSIT / BID SECURITY

Brief description of contract: - Drilling and pumping of borehole at India House, Limuru Road, Muthaiga, Nairobi, Kenya.

To,	
High	Commission of India,
UN C	rescent, Gigiri, Nairobi,
<b>P.O.</b> 1	Box 30074-00100,
Tel: (	+254 20) 2222 566 / 2225 104
	In accordance with your Tender No dated for Drilling and pumping of borehole at India House, Limuru
	Muthaiga, Nairobi, Kenya, M/s. (Name of Contractor with address)  submits a Bank Guarantee amounting to USD
	- (US Dollar Twelve Hundred only).
2.	In fulfilment of the tender conditions, we, (Name of Bank with address)  hereby irrevocably and uncondition-
ally u	ndertake to pay to you within three working days of receipt of your first
writte	n demand, without any demur whatsoever and without seeking any rea-
sons,	whatsoever, up to the maximum aggregate amount of USD 1200/- (US
	r Twelve Hundred only), which is liable to be forfeited by the Purchaser
on:	
(a)	The withdrawal / revision of the offer by the bidder within the validity period.
(b)	Non acceptance of the Work order / Purchase order by the Bidder when

(c) Failure to execute the contract as per contractual terms and condition with in the contractual delivery period.

issued within the validity period, and

3. This Bank Guarantee will be valid for a period of six months from the bid submission date. Any claim and statement here under must be received at the above-mentioned office before expiry. After expiry, this guarantee shall become null and void whether returned to us for cancellation or not and any claim or statement received after expiry shall be ineffective.

4. Notwithstanding anything to the contrary contained herein above, the maximum liability under this guarantee is restricted to USD 1200/- (US Dollar Twelve Hundred only).
5. Notwithstanding anything to the contrary contained herein above, this Guarantee is valid from (date of issue)up to the (six months from the bid submission date) and claims under this Guarantee should be submitted not later than (six months from the bid submission date)
6. This Guarantee may not, without our prior written consent, be transferred or assigned and this guarantee is limited to the payment of a sum of money.
7. This Guarantee shall be governed and construed in accordance with the laws of the Kenya and shall be subject to exclusive Jurisdiction of the Kenya Courts.
Yours truly,
Signature and seal of the guarantor: Name of Bank: Address: Date:
Note:- On expiry of Bond Period, the original Bond will not be returned to the Bank. Bank is requested to take appropriate necessary action on or after expiry of bond period.

# FORMAT FOR PERFORMANCE GUARANTEE BOND / PERFORMANCE SECURITY

Brief description of contract: - Drilling and pumping of borehole at India House, Limuru Road, Muthaiga, Nairobi, Kenya.

4.	Notwithstanding anything contained herein:
(a)	Our liability under this Bank Guarantee shall not exceed 5% of the
	contract value i.e. USDonly (in words).
(b)	This Bank Guarantee shall be valid up to(date) i.e. upto
	end of warranty period of 03 years; and
(c)	We are liable to pay the guaranteed amount or any part thereof under this
	bank guarantee only and only High Commission of India, Nairobi serve
	upon us a written claim or demand on or before(date) i.e.
	upto end of warranty period of 03 years.
Yours	s truly,
Signa	ture and seal of the guarantor:
Name	e of Bank:
Addre	ess:
Date:	

Note:- On expiry of Bond Period, the original Bond will not be returned to the Bank. Bank is requested to take appropriate necessary action on or after expiry of bond period.