

**NANDANKANAN ZOOLOGICAL PARK, BHUBANESWAR**

**GSTIN:21BBNW00027G1DL**

**E-mail-deputydirector.kanan@gmail.com**

**TENDER SPECIFICATION NO.32/2022-23**

**FOR**

**FOR SINKING OF 03 NOS. OF 200 MM X 150 MM DIA X 200 MTR DEEP  
BOREWELLS, AT NANDANKANAN ZOOLOGICAL PARK AND STATE  
BOTANICAL GARDEN**

**SECTION-I- INSTRUCTION TO BIDDERS**

**SECTION-II- GENERAL CONDITIONS OF CONTRACT**

**SECTION-III- TECHNICAL SPECIFICATION**

**SECTION-IV PRICE BID**

**SECTION-V- LIST OF ANNEXURE**

**Tender document can be downloaded: From dt- 23.06.2022 (10.00 Hrs)**

**To dt- 30.06.2022 (10.00 Hrs)**

**Last date of submission of tender: Upto dt- 30.06.2022(03.30 PM)**

**Date of opening of Tender: On dt- 30.06.2022 (04.00 PM)**

## NOTICE INVITING TENDER

For and on behalf of Nandankanan Zoological Park, Deputy Director, Nandankanan Zoological Park, Bhubaneswar invites Tenders from reputed bidders fulfilling the eligibility criteria and must possess valid goods & service tax registration certificate, for the work of "For Sinking of 03 Nos. of 200 mm x 150 mm dia x 200 mtr deep Bore wells, Supply at three (3 Nos.) sites inside Nandankanan Zoological Park & State Botanical Garden".

The above Tender is a two -part bidding system in manual paper mode only as per the following details.

Tender Specification No: 32 of 2022-23

Tender documents can be downloaded: From dt- 23.06.2022 (10.00 A.M)

To dt- 30.06.2022 (10.AM)

Last date of submission of tender: Upto dt- 30.06.2022 (03.30 PM)

Date of opening of Tender: On dt- 30.06.2022 (04.00 Hrs)

Cost of Tender Spec Document: Rs.2000/- (Inclusive of GST@18%)= Rs 2,360/-

Earnest Money Deposit: \*Rs. 5,000.00/- (Rupees Five thousand only)

\*This is a fixed amount not related to estimate.

The bidders can view the tender documents from website (<https://www.nandankanan.org/>) free of cost.

### ELIGIBILITY FOR SUBMISSION OF BIDS:

Bidders should not have any legal suit against Nandankanan Zoological Park and State Botanical Garden are only eligible for submission of Bids. Firms banned / blacklisted for business dealings by any organization are not eligible to participate in the tender. Participation in the tender by suppression of the above facts shall invite penal action, whenever detected. The bidders must have in possession of following qualifications for participation in tender:-

1. The bidder who will quote for Sinking of \*03 Nos. of 200 mm x 150 mm dia x 200 mtr deep Bore wells at Nandankanan Zoological Park and State Botanical Garden shall be sank the similar or higher depth bore well prior to the date of opening of the tender. The same document has to submit along with the bid. The documents may be verified with original copy as required.

Copy of Registration Certificate as "D" or above class contractor with either CPWD / R & B Deptt. / Irrigation Deptt / Railways / MES

8



3. GST Registration Certificate.

4. Permanent Account Number (PAN) issued by Income Tax Department.

The bidders can view the tender documents from website free of cost. The bidders who want to participate in the tender shall have to pay Rs.2360/- (Rupees Two Thousand Three Hundred Sixty Rupees Only) non-refundable including GST @ 18%) towards the cost of tender document, in the form of Demand draft only, drawn in favour of "Deputy Director, Nandankanan Zoological Park, Payable at Bhubaneswar" in any scheduled Bank, But the bidders have to deposit the paper cost. The Paper cost is Non-refundable) and the same is to be submitted to the office of the undersigned on or before the last date & time of Opening of tender. The undersigned shall not be held responsible for any postal delay.

5. The tender has two part – Technical & Financial .

The bidder after qualifying technical evaluation will be selected to participate in the financial bid .

6. The bidder shall technical and financial bid in separate envelope.

N.B:- Tender Paper must be downloaded from website accompanied with Paper cost. Tender paper only to be downloaded from the website only.

#### TELEPHONES / CONTACTS


1. Deputy Director, Nandankanan Zoological Park-9437022023

2. Head Clerk, Nandankanan Zoological Park-7978202474

#### NOTE: -

1. In case the due date for opening of tender happens to be a holiday, then tenders would be received & opened on the next working day at the same time.

2. Please note that the tenders against this tender enquiry are being invited through Paper mode (Hard Copy of Tender documents has to submit). In case of any clarification the prospective bidders may contact this office as mentioned above.

  
Deputy Director  
Nandankanan Zoological Park  
Bhubaneswar

## **SECTION-I**

### **INSTRUCTIONS TO BIDDER**

#### **1. Submission of Bids: -**

➤ The bidders shall seal the original bid in an inner and an outer envelope, duly marking the envelopes as "original".

➤ The inner and outer envelopes shall :

a) be addressed to Nandankanan Authority at the following shall :

**DEPUTY DIRECTOR**

**OFFICE OF THE DEPUTY DIRECTOR, NANDANKANAN ZOOLOGICAL PARK, BARANGA,  
AT/PO: BARANGA,**

**DIST: KHORDHA (ODISHA), Pin-754005, Email-*deputydirector.kanan@gmail.com***

b) Bear the name of the work, Bid reference number, and the date of opening as mentioned in tender notice / cover page.

c) Bidder should not write their name or any other information on the body of the sealed envelope. Super scribing any other information on the body of the envelope, Conditional tender, Incomplete tender, Telegraphic / Fax / E-mail (etc.) Tenders & Tenders not accompanied with requisite amount of E.M.D. will be rejected. The authority reserves all rights to reject any, all or part of the Tender, alter/modify the requirement/ delete any part of the tender without assigning any reason thereof.

➤ The inner envelop shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "late" or is otherwise unacceptable.

➤ If the outer envelope is not sealed and marked as required, Nandankanan Authority will assume no responsibility for the bid's misplacement or premature opening. A bid opened prematurely for this cause will be rejected by this office and returned to the bidder.

➤ Bids in any other form and incomplete bids shall be summarily ignored.

➤ Bids may be either submitted in person or may be sent by registered post with acknowledgement due, so as to reach within stipulated date and time as mentioned in tender notice / cover page.

➤ Bids must be received by the Nandankanan Authority at the address specified not later than the time and date specified for receipt of the bids as indicated in the Tender Notice, or as extended by Nandankanan Authority.

➤ The Nandankanan Authority may, at its discretion, extend this deadline for the submission of bids above, in which case all rights and obligations of the Nandankanan and bidders previously subject to the deadline will thereafter be subject to the new deadline as extended.

➤ The Nandankanan Authority will not be liable for any postal delay in delivering the tender when the tenders are sent by post.

#### **2. Division of Specification.**

The specification is mainly divided into two parts viz. Part-I & Part-II.

Part-I Consists of

SECTION-I- INSTRUCTION TO BIDDERS.

SECTION-II- GENERAL CONDITIONS OF CONTRACT

SECTION-III- TECHNICAL SPECIFICATION



## SECTION-IV- PRICE BID/ FINANCIAL BID

## SECTION-V- LIST OF ANNEXURE

### 3. Purchaser's Right Regarding Alteration of Quantities Tendered.

The Purchaser may alter the quantities of work at the time of placing orders. Initially the purchaser may place orders for lesser quantity with full freedom to place extension orders for further quantity under similar terms and conditions of the original orders. Orders may also be split among more than one bidder for any particular item or division wise for the work, if considered necessary in the interest of the Nandankanan.

### 4. Purchaser's right to accept/reject bids:

The purchaser reserves the right to reject any or all the tenders without assigning any reasons what so ever if it is in the interest of Nandankanan Authority, under the existing circumstances.

### 5. Earnest money deposit:

The Tenders shall be accompanied by Earnest Money deposit of value specified in the notice inviting tenders. Tenders without the required EMD will be rejected out rightly. The earnest money deposit shall be furnished in shape of Bank Draft/Demand Draft to be drawn in favour of Deputy Director, Nandankanan Zoological Park drawn at any scheduled Bank Payable at Bhubaneswar, the bidders have to deposit the along with the paper cost.

#### NOTE:-

- i) No adjustment towards EMD shall be permitted against any outstanding amount with the Nandankanan Zoological Park.
- ii) In the case of un- successful bidder, the EMD will be refunded after finalization of the tender. In the case of successful Bidder, this will be refunded on written request only after award of contract & on submission of security deposit in the form of BG/DD.
- iii) Suits, if any, arising out of this clause shall be filed in a Court of law to which the jurisdiction of High Court of ODISHA extends.
- iv) EMD will be forfeited if the bidder fails to accept the purchase order and/or work order issued in his favour or to execute the order, placed on them.
- v) Tenders not accompanied by Earnest Money shall be disqualified.
- vi) EMD not claimed within one year of placement of order shall be forfeited.

### 6. Validity of the Bids: -

The bidders are requested to keep the validity of their offer for a period of 30 days from the date of opening of the tender, failing which the tenders will be rejected.

### 7. PRICE: -

The bidders are advised to quote their rate as per the price schedule attached with this specification and shall remain firm exclusive of all taxes & duties, labour charges etc. within the validity of the tender. There shall be no change in price irrespective of hike in labour rate within one year of the contract.

7

## **8. Bidders to be fully conversant with the clauses of the Specification:**

Bidders are expected to be fully conversant with the meaning of all the clauses of the specification before submitting their tenders. In case of doubt regarding the meaning of any clause, the bidder may seek clarification in writing from the Deputy Director, Nandankanan. This, however, does not entitle the Bidder to ask for time beyond due date, fixed for receipt of tender.

## **TECHNICAL BID**

### **9. Documents to Accompany Bids.**

Bidders are required to submit tenders in the following manner:

- i) Qualification for participating in the Bid as mentioned above.
- ii) Declaration Form as per Annexure-I (duly signed).
- iii) Earnest Money (Demand Draft).
- iv) Abstract of Terms & conditions in prescribed proforma as per Annexure-II. To be entered in the bid sheets provided.
- v) General Terms & Conditions of contract as per Section-II of the Specification. (All therequired documents are to be submitted.)
- vi) Data on past experience if any as per the Specification.(Document to be Submitted)
- vii) GSTIN certificate, permanent account number [PAN] of the firm is required under Incometax Act.
- viii) Any other document required, is to be submitted.

### **10. Conditional Offer:**

Conditional offer shall not be accepted.

### **12. General: -**

- i) The tender paper cost (Form fee non-refundable) for an amount of Rs 2360/- is to be paid in shape of DD.
- ii) The EMD amount as specified is to be paid in shape of DD.
- iii) In the event of discrepancy or arithmetical error in the schedule of price, the decision of the purchaser shall be final and binding on the Bidder.
- iv) Notice inviting tender shall form part of this specification.
- v) The EMD, shall be returned to the unsuccessful bidders after finalization of tender on written request.
- vi) It should be distinctly understood that the price bid shall contain only details/documents relating to price, as mentioned herein above.
- vii) The Bidder must submit the EMD amount of **₹.5,000/-** and cost of tender document in shape of DD in a sealed cover envelope super scribing the Tender Notice No & Date opening offender clearly on the envelope cover along with the bid. The said envelope is to be submitted in the office of the purchaser on or before the last date and time of Opening of tender. Deputy Director, Nandankanan Zoological Park at any scheduled Bank.
- viii) The estimated quantity is indicated in this tender document for reference. The bidders are advised to visit the site; assess the quantum of work involvement and make themselves acquainted with the site conditions before submission of tender.
- ix) The bidder must observe all the safety rules while working in EHV environment.

## **SECTION-II**

### **GENERAL TERMS AND CONDITIONS OF CONTRACT [G.T.C.C.]**



### **1. SCOPE OF THE CONTRACT: -**

The work consists of drilling boreholes for water supply. The work includes drilling boreholes, installation of casings and screens; provision of gravel packing; development of the boreholes, obtaining rock and water samples; water quality analysis; as specified hereinafter and as directed by the Engineer in charge.

### **2. TIMING AND MANNER OF EXECUTION OF ABOVE WORK: -**

(a) The above work may be carried out/Execute at site within 15days & complete the same within Two Months from the date of placing the work order. (The completion period shall be reckoned from the date of placing the detailed (Final) Work Order, as may be specified in work order).

(b) The work should be executed to the full satisfaction of the concerned Authorities strictly as per the direction laid down in the work order / the instruction of the officer In-charge. Any substandard materials supplied/ substandard work noticed / negligence in discharging the entrusted works should be replaced/rectified immediately on receipt of such complaint from concerned officers in charge. Non response to the above complaint may lead to termination of work order with forfeiture of security deposit.

### **3. DEPLOYMENT OF PERSONNEL: -**

(a) The Contractor shall be responsible for engagement of required number of trained persons having uniforms and ID Cards in each unit as per schedule of quantity for above work.

(b) The Contractor shall engage sufficient manpower for timely completion of the work.

(c) The Contractor shall be responsible for all payments of above persons engaged by him for the above work, including all other statutory dues. Nandankanan Authority shall not be held responsible for any unrest caused by the above persons on account of their engagement by the Contractor. During any unrest if any equipment or offset of Nandankanan Authority is damaged by irate workmen, the same shall be recovered from the contractor / his pending bills, if any.

(d) The Contractor shall be responsible for the proper behavior of all the persons engaged by him and shall exercise proper degree of control over them.

(e) Neatly typed address with recent stamp size photos of the persons to be deployed for above work are to be submitted with the concerned authority for record and permitting the persons with a valid entry gate pass into the premises of the working places.

(f) In case of replacement/ substitute of the deployed person, the contractor is required to intimate the same to the authority and obtain permission with an entry (gate) pass in favour of the new person duly surrendering the earlier pass.

(g) The Contractor is fully responsible for any accident (General/ Electrical)/ met by the deployed persons during execution of the contract. It is the responsibility of the contractor for any compensation arising out of aforementioned accident and to be disposed off by the contractor only.

(h) The manpower engaged should be trained in management of waste also so that waste disposal is carried out in totally sealed manner without affecting the environment as per pollution control directions. This shall be the responsibility of the contractor to collect all the sweepings, garbage and wastes and transport/dispose of the same to the nearest pit actually earmarked by the local authority.



- (i) No other person except Contractor's authorized representative shall be allowed to enter the office premises of Nandankanan Zoological Park.
- (j) Within the premises of the Nandankanan Zoological Park, the Contractor's personnel shall not do any private work other than their normal duties.
- (k) The contractor shall deploy one Supervisor (onsite) and adequate number of workers (onsite) for providing services as per scope of work.
- (l) No person below 18 years will be engaged by the Contractor.
- (m) The Contractor shall recruit his own staff for the contract work. The Contractors staff will not be treated as Nandankanan Zoological staff. For any purpose whatsoever facilities/ benefits applicable to Nandankanan Authority staff will not be applicable to Contractor's employees. The Contractor shall be responsible for strict compliance of all statutory provisions of the relevant labour laws applicable from time to time and particularly for carrying out of the above job. If due to any reason whatsoever Nandankanan Authority is made liable to meet any obligation under any of the said laws and enactment's etc. the same shall be recovered from the Security Deposit of the Contractor with Nandankanan Authority or from the bills payable to him or failing which it shall be recovered as per law.

#### **4. SUPERVISION: -**

The supervision of the above work shall be done by the contractor or his representative. The Officer-In-Charge will cross check the services on sample basis and may impose penalty for any negligence.

#### **5. Bidder to inform himself fully: -**

The Firm shall examine the instructions to bidders, general conditions of contract, specification and the completion schedule to satisfy himself as to all terms and conditions and circumstances affecting the contract price. He shall quote price [s] according to his own views on these matters and understand that no additional allowances except as otherwise provided there in will be admissible. He may inspect the site & verify the physical condition prior to submission of the bid, at his own interest. The purchaser shall not be responsible for any misunderstanding or incorrect information, obtained by the Firm/Bidder other than the information given to the Bidder in writing by the purchaser.

#### **6. Bidders Default Liability: -**

- [i] The Purchaser may, upon written notice of default to the bidder, terminate the contract in circumstances detailed hereunder.
- [a] If in the judgment of the Purchaser, the bidder fails to complete the repair work within the time specified in the contract or within the period for which if extension has been granted by the Purchaser in writing in response to written request of the manufacturer/Repairer.
- [b] If in the judgment of the Purchaser, the bidder fails to comply with any of the provisions of this contract.
- [ii] In the event the Purchaser does not terminate the contract, bidder shall be liable to the Purchaser for penalty for delay until the equipment is accepted. This shall be based only on written request of the bidder and written willingness of the Purchaser.

#### **7. Force Majeure: -**



The Bidders shall not be liable for any penalty for delay or for failure to perform the contract for reasons of force majeure such as acts of god, acts of the public enemy, acts of Govt., Fires, floods, epidemics, Quarantine restrictions, strikes, Freight Embargo and provided that the Bidder shall within Ten (10) days from the beginning of delay on such account notify the purchaser in writing of the cause of delay, the purchaser shall verify the facts and grant such extension as facts justify.

**8. Extension of time: -**

If the completion period is delayed due to reasons beyond the control of the Firm, the Firm shall without delay give notice to the purchaser in writing of his claim for an extension of time. The purchaser on receipt of such notice may or may not agree to extend the contract delivery date as may be reasonable but without prejudice to other terms and conditions of the contract.

**9. Guarantee period: -**

[i] The work shall be guaranteed against defects in design, quality of materials used, workmanship of the repair & satisfactory performance for a period of at least 18 [Eighteen] months from the last date of completion or 12 [twelve] months from the date of commissioning whichever is earlier. Any defect noticed during this period shall be rectified by the Bidder free of cost to the purchaser (Nandankanan Zoological Park) provided such defects are due to faulty design, bad workmanship or bad materials used, within three months upon written notice from the purchaser, failing which the

**Security Deposit/BG will have forfeited.**

The above guarantee certificate shall be furnished in triplicate to the purchaser for his approval. The Bank Guarantee is to be extended accordingly.

**10. SECURITY DEPOSIT/Bank Guarantee towards security deposit, 100% payment, performance guarantee & Acceptance of Bid:-**

[i] A Composite Bank Guarantee as per the Performa, which will provide during Work order for 5% [five percent] of the total cost of the purchase order, shall be furnished from any nationalized/scheduled bank having a place of business at Bhubaneswar, to the office of Deputy Director, Nandankanan Zoological park, Bhubaneswar within 15 days from the date of issue of the purchase order. The BG shall be executed on non-judicial stamp paper worth of Rs.101.00 [Rupees One Hundred One] only or as per the prevalent rules, valid for a period of 2 months more than the guarantee period, for scrutiny and acceptance, failing which the supply order will be liable for cancellation without any further written notices. The BG should be accompanied by a confirmation letter from the concerned bank and should be capable of being en-cashed at Bhubaneswar before the Bank Guarantee is accepted and all concerned intimated.

OR

The Firm may deposit the same may be furnished in shape of Bank Draft/Demand Draft to be drawn in favour of Deputy Director, Payable at Bhubaneswar. The collection fee is Non-refundable).

[ii] No interest is payable on any kind of Bank Guarantee.

[iii] In case of non-fulfilment of contractual obligation, the security deposit (BG/DD) shall be forfeited.

[iv] Whenever any claim against the Contractor for the payment of a sum of money arises out of or under the contract, the Nandankanan Authority shall be entitled to recover such sum of appropriating

8



in part or whole from the Security Deposit of the Contractor. In the event of the Security Deposit being insufficient, the balance or the total sum recoverable as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due. The Contractor shall pay to the Nandankanan Authority on demand any such balance remaining due.

[v] In the event of any breach of the terms of the contract by the Contractor or any loss or damage occurred to the Nandankanan Authority which in the opinion of the Nandankanan Administration has arisen, the decision where of shall be final and binding on the Contractor or in the event of the termination of the contract or for any such breach, the Security Deposit is liable to be forfeited. The decision of forfeiture shall be final and binding on the Contractor.

**11. Terms of Payment: -**

(A) 100 % (Hundred percent) cost of the work along with taxes & duties if any will be paid after completion of the work, verification thereof, & against approval of Composite Bank Guarantee, & guarantee certificate.

(B) The Bidder shall furnish Composite Bank Guarantee/DD of appropriate amount to Nandankanan Authority towards Security Deposit covering 5% of F.O.R. Destination cost of the work order well in advance within 15 days from the date of issue of the work order, & treat as acceptance of Order.

**12. Penalty for Delay in Completion of Contract: -**

If the Firm fails to deliver the materials/equipments within the delivery schedule, specified in the contract including delivery time extension, if any, granted thereto, the Purchaser shall recover from the Repairer, penalty for a sum of half percent (0.5 percent) of the Ex-works price of the incomplete portion for each calendar week of delay or part thereof. The total amount of penalty shall not exceed five percent (5%) of the contract price. The work order amount shall mean ex-works price + freight & insurance and all taxes & duties.

**13. Payment Due from the Bidder: -** All costs and damages, for which the Bidder is liable to the purchaser, will be deducted by the purchaser from any money, due to the Bidder under any of the contract (s) executed with Nandankanan Zoological Park.

**14. EVALUATION OF PRICE BIDS / FINANCIAL BID**

a) Order on the firm will be placed on the basis of L1 evaluated price of qualified bidders and, if required negotiations will be held with L1 bidder. Financial bid will be open & compared for only those bidders who fulfil all the criteria of technical bid and submit the documents as sought. However, Deputy Director, Nandankanan Zoological Park reserves the right to split up the orders among bidders on individual merits of the bidders, if the situation so warrants, in the interest of Nandankanan. All the bidders may be required to explain / justify the basis of their quoted rates as and when asked for. In case, any bidder fails to justify his quoted rates or refuses to co-operate in this regard, they will not be considered for participating in the tendering with forfeiture of EMD and will not be allowed to participate in any future tender for a period of 6 months to 5 five years as the case may be. The financial Bid should be enclosed in separate envelop and shouldn't combined with technical bid.

**15. SAFETY REQUIREMENT: -**

(i) The Contractor shall provide First-Aid and emergency medical facilities for his employees.

7



(iii) The Bidder must be followed the Nandankanan Zoological Park Safety Rule while performing the work. The workmen must provide Safety Equipments by the contractor while performing the works. No deviation will be allowed and the consignee has the power to stop the work at any time for any breach of safety Practice. The contractor is fully responsible for any loss of Man & Materials at the time of execution of work.

**16. DISPUTE SETTLEMENT: -**

Any dispute or difference arising out of the contract shall be mutually settled, but if the Contractor disagree to such settlement the decision of Deputy Director, Nandankanan Zoological Park or his authorized representative shall be final & binding.

**17. JURISDICTION: -**

Suit, if any, arising out of this tender/ or contract shall be filed by either party in High Court of Odisha

**18. Correspondences.**

i) Any notice to the bidder/contractor under the terms of the contract shall be served by Registered Post or by hand at the bidder/contractor's Principal Place of Business.

ii) Any notice to the Purchaser shall be served at the Purchaser's Principal Office in the same manner.

Official Address of the Parties to the Contract

The address of the parties to the contract shall be specified: -

Purchaser: Deputy Director,

Nandankanan Zoological Park,

AT-Nandankanan

/PO: BARANGA,

DIST: KHORDHA (ODISHA), Pin-754005,

Email-deputydirector.kanan@gmail.com

**19. Outright Rejection of Tenders**

Tenders shall be outright rejected if the followings are not complied with:

1. Tenders shall be accompanied with the prescribed earnest money deposit, Paper Cost & Tender processing Fee.
2. Tenders shall be kept valid for a minimum of 180 days from the date of opening of the tender.
3. Tenders shall be accompanied with clear valid Xerox copy of GST registration (if applicable), & clearance certificate, PAN card, which must be valid on the date of opening of the tender. All copies of documents and each page of the tender must be signed by the authorized representative of the bidders.
4. Abstract of general terms and conditions of contract.

8

5. Bidders not fulfilling the qualifying criteria as mentioned in **ELIGIBILITY FOR SUBMISSION OF BIDS**.

6. The bidders have to unconditionally comply with tender specification.

### **SECTION-III**

#### **Technical Specification**

1. **SCOPE:** - The work consists of drilling boreholes for water supply. The work includes Surveying the water sources by using scientific equipments, drilling boreholes, Supply & installation of Pumps, installation of casings and screens; provision of gravel packing; development of the boreholes, obtaining rock and water samples; water quality analysis; as specified hereinafter and as directed by the Engineer in charge.

#### **2. Drilling site: -**

The Contractor shall drill the borehole(s) at the exact location(s) designated by the Engineer in charge. Tracks required for access of drilling plant, gear, camp and accessories to the borehole site shall be made by the Contractor,

#### **3. Environmental protection of the site: -**

Care must be taken in the handling and storage of all drilling fluids, oils, greases and fuel on site, to avoid any environmental degradation. The Contractor shall dispose of any toxic materials, drilling fluids and other additives, cuttings and discharged water in a manner approved by the Supervisor so as not to create damage to public and private property, and shall adhere to the set of "Environmental Guidelines for Drilling and Test pumping Operations" issued to him by the Employer. The Contractor's adherence to these guidelines will be closely monitored by the Supervisor, and any infringement by the Contractor may render unacceptable the particular portion of the Works to which it applies. The Contractor shall ensure that all its personnel are aware of these Environmental Guidelines and the consequences of not adhering to them.

#### **4. Workmanship: -**

The Contractor is expected to carry out all works as instructed by the Supervisor in a thorough and workman-like manner, and up to today's professional standards. The Contractor shall carry out operations with due efficiency and dispatch in accordance with the terms of the contract and to the satisfaction of the Supervisor. For this purpose, the Contractor shall use suitable equipment, and supply efficient and experienced staff.

#### **5. Equipment and materials: -**

All necessary machinery, equipment and materials to carry out the drilling, test pumping, headwork construction, etc. as specified are to be mobilised for the Works. Test pumping equipment should be independent from the drilling rig(s). Prior to mobilization the Supervisor will verify the specifications and state of repair of all major items of plant and transport, and shall have the right to order the removal and/or replacement of any items which in his opinion is insufficient or in unsatisfactory condition. Acceptance by the Supervisor of the Contractor's proposed plant and transport does not, however, relieve the Contractor of his obligations under this Contract, in case such plant and transport accepted by the Supervisor fails to successfully complete the required Works. All machinery, equipment and materials to carry out the said Works shall be handled, transported and stored in accordance with the manufacturers' recommendations to minimise deterioration. All the required



materials to be fixed/installed in the bore well shall be of standard specification and number as mentioned in the description of work in the annexure of price schedule. The supervising officer will check the materials before its use.

#### **6. Water supply for drilling: -**

The Contractor shall make his own arrangements for obtaining, storing, transporting and pumping of water, required for drilling purposes and for use by the drilling crew at their campsite.

#### **7. Development and cleaning of boreholes: -**

The Contractor shall develop and clean the boreholes upon completion of the drilling and installation of casing, screens, grouting and filter pack are installed, in order to remove native silts, clays, loose rock particles and drilling fluid residues deposited on the borehole wall during the drilling process. If organic drilling fluids are used, they shall be broken down chemically according to manufacturer's recommendations before or during development. Cleaning may be carried out by airlift pumping, surging, backwashing or jetting, to the approval of the Supervisor. Clay desegregation by means of Sodium Hexametaphosphate ("Calgon") treatment may, in some cases, also be called for by the Supervisor. The minimum requirement is the "air-lift" method until the ground water runs clean and turbidity free, but in any case for a minimum of 3 hours. If this condition is not achieved after 6 hours, air-lift will be carried-out until the water becomes limpid, but up to a maximum of 12 hours with any extra hours on top of 6 hours to be invoiced accordingly. Upon completion of development, any accumulation of material shall be removed from the bottom of the borehole by airlifting.

#### **8. Test pumping**

The Contractor shall perform test pumping to establish the performance and yield of the borehole, and shall provide a suitable, self-contained, mobile test pumping unit, approved by the Supervisor, for this purpose. The method for varying the discharge rate of the pumps will depend on the type of pump used, but the Contractor shall ensure the provision of a suitable means of achieving the range of constant flow rates specified by the Supervisor. Test pumping will be undertaken in each productive borehole, as assessed by the Supervisor from the yields indicated during drilling. In the case of boreholes with indicative yields of between 500 and 1500 litres per hour, the borehole will be tested at a constant discharge rate of 600 litres per hour for a minimum period of three(3) hours or until the water level stabilizes. In the case of boreholes with an indicative yield of greater than 1500 litres per hour, the boreholes will be tested in the manner of a step-test, with the initial step being at 600 litres per hour. The duration of each step shall be 90 minutes, and a minimum of three steps of increasing discharge will be undertaken. The final step should lower the dynamic water level to approximately three metres above the level of the pump. Discharge for each step should be kept constant. On completion of the final step, the recovery of water level should be monitored by the Contractor until 95% recovery has been achieved, or until advised by the Supervisor. It is anticipated that the maximum testing and recovery time per borehole should not exceed 6 hours for hand pumps and 24 hours for motorised boreholes. Discharge shall be measured by volumetric methods, or by means of some other approved calibrated measuring device. During the test pumping, the discharged water must be handled and disposed of in an appropriate manner to a point of overland drainage sufficiently far from the borehole to prevent recharge. This distance shall be at least 100m from the borehole, but may be reduced with the approval of the Supervisor if the pumped aquifer is confined. During all testing operations, once the flow rate has been determined and preliminary adjustments made, the measured discharge rate shall be maintained within 5% of the required rate for the duration of the test or test stage. Persistent fluctuations

8



beyond this tolerance will require abortion of the test. When continuous pumping at a uniform rate is specified, failure of the pump operation for a period greater than one percent of the elapsed pumping time shall also require abortion of the test. Any test which is aborted due to the reasons above shall be repeated, after full recovery of the water level. No payment shall be made to the Contractor for aborted tests, nor for standing time during water level recovery after aborted tests.

#### **9. Borehole disinfection**

All boreholes shall be disinfected after completion. This can be achieved by placing a chlorine solution into the well so that a concentration of at least 50 mg/l (0.005%) of available chlorine exists in all parts of the well at static conditions. All borehole parts above the water level should be completely flushed with the solution. The solution shall remain in the well a minimum of 12 hours before pumping the well to waste.

#### **10. Water level observations**

The Contractor shall supply appropriate electric contact water level gauges, suitably calibrated such that measurements can be made to an accuracy of 5mm, for measuring water levels in the boreholes. Water levels shall be measured during test pumping at pre-determined intervals, dependent on the nature of the test. The frequency of measurement shall be specified in an agreed test pumping data form or as otherwise determined by the Supervisor. Well head arrangements shall permit these gauges to be inserted and passed freely. Any other method of measuring water levels will be subject to approval by the Supervisor. The contractor should have on the site at least 2 electric gauges suitable for a maximum depth of 100m. The devices should fit into the 3/4 -1" observation pipes and should permit direct, convenient and accurate reading of depth of static and dynamic water levels.

#### **11. Electrical conductivity measurements**

The Contractor shall provide an operational Electrical Conductivity meter, and shall take electrical conductivity readings of the discharge water during test pumping.

#### **12. Water sampling and quality testing**

The Contractor shall take water samples for testing the physico-chemical and bacteriological quality at the end of the test pumping. For this purpose, the Contractor shall supply and keep on site a minimum of 4 suitable two-litre capacity water containers, and shall collect water samples as directed by the Supervisor. Samples shall be tested at a certified laboratory, and the test results shall form part of the monthly and End of Contract Reports.

#### **13. Capping of borehole**

During borehole construction, installation, development and test pumping, the contractor shall use all reasonable measures to prevent entry of foreign matter into the borehole. The Contractor shall be responsible for any objectionable materials that may fall into the borehole and any effect it may have on the water quality or quantity until completion of the Works and acceptance by the Supervisor.

#### **14. Acceptance of boreholes**

The borehole shall only be acceptable by the Supervisor upon satisfactory completion of all drilling operations, installation of casing and screens, development works, and test pumping.

#### **15. Loss of equipment**

8



Any equipment lost down a borehole must be removed by the Contractor or the borehole will be considered a lost bore. A replacement borehole will have to be constructed and test pumped at the Contractor's expense. The Contractor shall be entitled to NO payment for such tools or equipment.

#### **16. Clearing the site**

On completion of each borehole the site shall be left clean and free from all debris, hydrocarbons and waste, and all pits filled to the satisfaction of the Supervisor. A site not delivered clean may render the borehole unacceptable. The borehole shall be numbered as specified by the Supervisor and the number marked on the casing with indelible ink or in such a way that the marking is permanent.

#### **17. Pump Installation**

The firm has to supply the Pump & pipes (make & brand as mentioned in Price Bid) and installation of the same as specified in the specification.

#### **18. Personnel**

- a) The Contractor will provide an experienced project Coordinator to oversee the drilling and testing to be carried out under this Contract. The name and work resume of the project Coordination will be included in the tender.
- b) The Contractor will maintain a full crew on each drilling unit and test pump unit. If a member of crew quits for personal reasons or must leave because of illness or injury, the Contractor will replace him as soon as possible with a worker of similar experience.
- c) If the Client is dissatisfied with the performance of members of the crew, such members shall be informed of their shortcomings and warned by the contractor. If no change results within a reasonable period, the Contractor will be notified and requested to take necessary measures on the unsatisfactory crewmember.
- d) If the Client wishes to operate drilling equipment more than one shift per day, the Contractor shall increase the size of the drilling crew as required. However, in the percussion drilling, the rig will be operated for a minimum of 20 hours a day.
- e) In the case of absence of one or more members of the drilling crew the decision of whether to proceed with drilling operations will be at the discretion of the Engineering Supervisor.

#### **19. Failure of Borewell to Pump water**

If the borewell fails to pumps sufficient water after the sinking activities tenderer fails to produce sufficient water it will be treated as failure and no payment shall be made from the Purchaser side for the failed activities like digging of borewell etc. will be borne by the awarded bidder.

**SECTION-IV**  
**Price Bid / Financial Bid**

Sinking of 200mm X 150mm X 200mtr deep bore well near different places at Nandankanan Zoological Park (2 nos.) and 1No. at State Botanical Garden or as per Instruction of site in-charge

Sl	Description of Work	Unit	Quantity	Amount
1	<b><u>Pre-Boring Survey/Test</u></b> The bidder should perform pre-boring Survey and Test by using hydrological and scientific equipments to detect the ground water availability. The test should be the basis of the of the boring work			
2)	<b>Sinking of 200 mm x 150 mm dia x 200mtr deep Bore well:-</b> Supplying all labour and T&P for drillingas perfectlyverticalborehole of specified diameter for a specified depthbelow ground level through consolidated and un-consolidated rock with down the hole hammerdrillingrigorcombinationdrillingrigs(650cfm/200 psi) as required to suit the site conditions per direction of Engineer-in-charge includinguse of own rigs with its accessories, tools andplants and consumables etc. for lowering of 200mmdiaPVC/GIpipesforhousingfittedwithsocket and without well screen as per necessityfor soft, medium, hard and boulder formation (GI/PVCCasingpipesifrequiredtopreventcollapse of over burden is to be provided by thecontractorincludinglowering andwithdrawingaftercompletionoftheTube well).[Drillingof200 mmx150mmdia [0m to 200mdeep]	Mtr(in depth)	200	
3)	Supplying all labour and T&P for Lowering thefollowingsizeGI/PVCpipeswithorwithoutslotted pipes as per necessity from ground levelup to 30 mtr or above depth and fitted and fixedup in perfectly vertical position including cuttingand threading pipe and slotted pipe and supplyingand fixing all jointing materials, tools and plantsetc. complete and keeping the top of the casingpipe threaded including plugging tube wells toprevententryofforeignmaterialsfromabove. [Loweringof200mmdia0mto30.00orabove]	Mtr	30	



4)	Supplying all labour and T&P for Cleaning and developing the Bore wells using their own compressor continuously worked till clear and adequate discharge is obtained from the tube well including supply and use of necessary equipments and labour as per the direction of the Engineer-in-charge. Developing the Bore Well	Nos	1	
5)	Supplying all materials, labour and T&P for providing sanitary sealing by cement concrete grouting of annular space around GI/PVC/M Shousing pipe up to 5 mtr below ground level to plug the borehole including cost of cement etc. All complete as per direction of EIC. Sanitary sealing	Mtr	5	
6)	Supplying all labour and T&P and withdrawing the casing pipe from the unsuccessful bore and depositing in departmental store in good condition (If necessary). 0 to 30 Mtr	Mtr	30	
7)	Cost of materials (Casing pipe) 200mm dia PVC Pipes as per ASTM-D-1785/2004 (Sch-80)	Mtr	30	
8)	Supplying and fixing of the following materials for fitting and fixing of the submersible pump set.			
	b) 4.00mm <sup>2</sup> flat copper submersible cable	Mtr	150	
	c) C.I/M. S cover for 200mm dia casing pipe	No.	1	
	d) 40mm dia S/Nipple with bolt & nut	Nos.	2	
9)	Supplying all labour and T&P for earthwork in excavation of foundation including dressing and leveling the bed and depositing the soil within initial lead and lift in all kinds of soil as per specification and direction of EIC for external water supply. For 40 mm dia ASTM pipe line. For 40mm dia ASTM pipeline & filling pea gravel of 1m to 3 m size around the casing pipe of bore well including all leads and lifts should pea gravel free from dust, dirt or vegetable manure complete as per the direction of the Engineer-in-Charge. [1*60m*.45m*.45m=12.15cum]	Cum	12.15	
10)	<b>Test Pumping/Yield Test</b> will be undertaken in each productive borehole, as assessed by the Supervisor from the yields indicated during drilling. In the case of boreholes with indicative yields of between 500 and 1500 litres per hour, the borehole will be tested at a constant discharge rate of 600 litres per hour for a minimum period of three(3) hours or until the water level stabilizes. In the case of boreholes with an indicative yield of greater than 1500 litres per hour, the boreholes will be tested in the manner of a step-test, with the initial step being at 600 litres per hour. The duration of each step shall be 90 minutes, and a minimum of three			

	steps of increasing discharge will be undertaken.(Refer:Section 3.Point No.8)			
11)	Grand Total for one No. Bore well including all taxes & Duties (Sl.No.1 to Sl.No. 10)			
12)	GrandTotal forThreeNos.Borewell IncludingallTaxes&Duties(Sl.11*3)			
13)	<b>GrandTotalinWord</b>			

❖ Financial Bid to be send separately in sealed cover.

#### SECTION-V [LIST OF ANNEXURES]

The following schedules and Proforma are annexed to this specification and contained in  
Section-IV as referred to in the relevant clauses.

1	Declaration form	ANNEXURE-I
2	Abstract of terms and conditions to accompany Section-II of Part-I	ANNEXURE-II
3	Supplier Information	ANNEXURE-III

8



**ANNEXURE - I**  
**DECLARATION FORM**

To,

The Deputy Director  
Nandankanan Zoological Park  
Bhubaneswar, Khordha

Sub: - Tender Specification No- \_\_\_\_\_

Sir,

1. Having examined the above specification together with terms & conditions referred to therein I/We the undersigned hereby offer to take up the work of sanitation and upkeep of different units of Nandankanan Zoological Park under the control of Deputy Director, Nandankanan Zoological Park including labour charges & and other consumables etc in all respects as per the specification and General conditions, at the rates, entered in the attached contract schedule of prices in the Tender.

2. I / We hereby undertake the SINKING of Bore Well as specified in the Tender.

3. I / We hereby guarantee the validity of the required documents from concerned authorities to be submitted as per the ELIGIBILITY FOR BID SUBMISSION mentioned in the Tender specification.

4. I/We certify to have submitted the bid electronically by remitting \*cash/money order /D.D./ remitting the cost of tender, herewith and this has been acknowledged by your letter/ money receipt No. Dated,

5. In the event of Tender, being decided in \*my/our favour, \* I/We agree to furnish the Composite B.G.

/ Fixed Deposit in the manner, acceptable to NANADANKANAN ZOOLOGICAL PARK., and for the sum as applicable to \*me/us as per clause-14 of section-II of this specification within 15 days of issue of letter of intent/purchase order failing which \*I/We clearly understand that the said letter of Intent/Purchase order will be liable to be withdrawn by the purchaser, and the EMD deposited by us shall be forfeited by Nandankanan Zoological Park Authority.

Signed this day of        2022

Yours faithfully

Signature of the Bidder  
with seal of the company

[This form should be dully filled in & signed by the bidder and uploaded at the time of submission of tender.]

\* (Strikeout whichever is not applicable)

8

**ANNEXURE-II**  
**ABSTRACT OF GENERAL TERMS AND CONDITIONS OF CONTRACT**  
**TO ACCOMPANY PART-I (Check list)**

1(a)	Cost of Tender Document: D.D No & Date.	
1(b)	Earnest money furnished. D.D No. & Date.	
2	Contractor's work experience including user's certificate furnished	Yes/No
3	<b>Manner of work :-</b> Whether agreeable to Nandankanan's to desired manner as indicated .	Yes/No
4	Whether agreeable to furnish Composite B.G./DD in case his tender be successful towards Security Deposit.	Yes/No
5	Terms of payment:- Whether agreeable to Nandankanan terms of regarding payment'	Yes/No.
6	Penalty: - Whether agreeable to Nandankanan's term.	Yes/No
7	Validity: - Whether agreeable to Nandankanan's terms	Yes/No
8	Whether declaration form duly filled in furnished.	Yes/No.
9	Whether scanned copy of required documents furnished.	Yes/No.

Signature of the Bidder  
with seal of the company

3



**ANNEXURE-III**  
**BIDDER'S INFORMATION**

NAME OF THE BIDDER	
1	
Address:-	
2	City
3	Pin Code
4	Contact person's Name :-
5	Telephone No. office & Residence:-
6	FAX No:-
7	EMAIL:-
9	GST NO.
10	PAN NO.
Signature of the Bidder with seal of the company	