



## NATIONAL INSTITUTE OF DESIGN, ASSAM Tocklai, Rajabari, Jorhat-785014 Assam

(NIDJ/2023-24/ESTATE/NIT/0738)

**Notice Inviting Tender** 

For

"Annual Maintenance Service for Water Treatment Plant, Effluent Treatment Plant & Pumping System" at NID, Assam



## **Tender document**

#### For

## "Annual Maintenance Service for Water Treatment Plant, Effluent Treatment Plant & Pumping System" at NID, Assam.

National Institute of Design Assam is an Autonomous Institution of National Importance under Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Govt. of India established at Jorhat through the NID (Amendment) Act, 2019 passed by the Parliament of India.

On behalf of Director NID, Assam, applications are invited from Interested and eligible vendor for "Annual Maintenance Service for Water Treatment Plant, Effluent Treatment Plant & Pumping System" at NID, Assam.

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# National Institute of Design Assam Tocklai, Rajabari, Jorhat-785014 NOTICE INVITING TENDER

National Institute of Design Assam invites offline bids in open bid system from eligible Vendors as mentioned in NIT for the work mentioned below:

"Sealed Documents are to be submitted Offline to Chief Administrator Officer, NID Assam, Vill-Tocklai, PO-Rajabari, Jorhat, Assam-785014 before the prescribed date and time.

### **Brief Details of Tender:**

SL no.	NAME OF ITEM	Estimated cost put to bid (Rs.)	Earnest money deposit (Rs.)	PBG	Time of Complet ion	Tender Inviting authority
1.	"Annual Maintenance Service for Water Treatment Plant, Effluent Treatment Plant & Pumping System" at NID, Assam.	(Including	2417.00/- (2% of estimate cost)	5% of Contract Value	12 Months	Director



## Section- 1

## **Notice Inviting Tender**

## Critical Data sheet: -

Date & Time For: -	:	Date and Time		
Date, Time & Venue of Pre-bid Meeting	:	12-12-2023 & 15.30 hrs at Chief Administrative Office National Institute of Design, Assam Vill- Tocklai, PO-Rajabari Jorhat, Assam-785014		
Tender Document Publishing Date	:	07-12-2023		
Tender Submission Start Date	:	07-12-2023		
Tender Submission End Date	• •	19-12-2023		
Last date of sending query through email related to the Tender document		12-12-2023		
Last date of physical submission of documents as specified in Tender document (Super scribing Name ofWork, Tender No., and Date/Time of Opening) in separate sealed envelope to the TIA with complete postal address.	:	19-12-2023 up to 14.00 hrs		
Date of Opening of Pre-Qualification Criteria documents	:	19-12-2023 up to 15.30 hrs		
Date of Opening of Financial proposal		Would be informed later to the applicants qualifying in the technical bid.		
Details of Submission of Hard Copies	:	Chief Administrative Officer National Institute of Design, Assam Vill- Tocklai, PO-Rajabari Jorhat, Assam-785014		



### **ELIGIBILTY CRITERIA: -**

The agency must fulfil the criteria mentioned below.

The agency should have experience of having successfully completed similar nature of minimum one work in Central Govt./ State Govt. / Semi Govt. or with reputed Public/Reputed private Limited companies during the last 5 years.

Similar nature of work means as follows.

- i. Supplying, Installation, testing and commissioning of pumps/ accessories of pumps in Water Treatment Plant/ Water Supply Projects.
- ii. Supplying & fixing of filter media & spares in Water Treatment Plant.
- iii. Annual Maintenance Service for Water Treatment Plant, Effluent Treatment Plant & Pumping System.
- iv. Operation and Maintenance of Water Treatment Plant, Sewage Treatment plant & Effluent Treatment Plant.

Applications from consortium/Joint venture shall not be accepted. Joint venture/Consortium experience shall not be considered. Experience of only the bidding entity as a prime contractor shall be considered. A job executed by a bidder for his own or project of their sister concern/Group Company shall not be considered as experience for the purpose of meeting requirement of experience criteria.

#### GENERAL DOCUMENTS TO BE PROVIDED: -

- 1. Copies of award letter/ Contract/work Orders in support of execution of similar nature of work. / Installation/Commissioning Report.
- 2. Completion certificate along with payment certified copy or any other document evidencing value of completed work to be submitted, giving of work, value of works, completion period etc. Completion Certificate from Central Govt./ State Govt. / Semi Govt. or with reputed Public Limited companies /reputed private organizations will be accepted.
- 3. Copy of GST certificate and PAN Card.
- 4. That the credential or any other Papers submitted is incorrect / manufactured / fabricated, in such case(s) tender will not be considered for evaluation and that Tender Documents will be out rightly rejected without any prejudice.
- 5. Before issuance of the work order, the Tender Inviting Authority may verify the credential & other Documents of the lowest tenderer if considered necessary. After verification, if it is found that such documents submitted by the **lowest tenderer** are either manufactured or false in that case, a work order will not be issued in favor of the tenderer under any circumstances.
- 6. **Penalty for suppression / distortion of facts:** If any tenderer fails to produce the original hard copies of any documents on demand of the Tender Inviting Authority within a specified time frame or if any deviation is detected in the original hard copies from the submitted Xerox copies or if there is any suppression of documents, such tenderer may



be suspended from participating in the tenders for 3 (three) years. Besides, NID, ASSAM may take appropriate legal action against such defaulting tenderer.

- 7. **Guiding schedule of rates**: Schedule of rates of as per Market rate has been considered.
- 8. The bidder shall have to pay the **Earnest Money Deposit of 2% of the Estimated value by** demand draft/Pay Order/Banker's cheque drawn in favor of "National Institute of Design, Assam" payable at Jorhat from any Nationalized/Schedule Bank.
- 9. Bidders with MSME or NSIC certificate are exempted from submission of EMD.
- 10. For unsuccessful tenderer, EMD shall be refunded within 30 days without interest after the decision to award the work order is taken. EMD shall be forfeited if any tenderer withdraws their offer before finalization of the tender.
- 11. Earnest money of the successful tenderer shall be refunded on receipt of Performance Guarantee submitted on award of work.
- 12. Tenderers should quote as per the Price Bid format and in the allotted space only. Prices bids not received in prescribed format will be liable for rejection.
- 13. The acceptance of Tender and award of contract (AOC) to one and more than one Contractor, if considered necessary, will rest with the Employer who does not bind himself to accept the lowest Tender and will reserve to himself the authority to accept a Tender in whole or in part or reject any orall the Tenders received without assigning any reasons thereof and no explanation can be demanded for the cause of rejection of Tender by any Tenderer, neither any claim whatsoever on this score is tenable.
- 14. **Bid Validity**: The Tenders shall be valid for a period of **04** (**Four**) **months i.e., 120 days** from the date of opening of the Price bid or any extension thereto.
- 15. Tender documents in which the Tender is submitted by a Tenderer shall become the property of the Employer and the Employer shall have no obligation to return the same to the Tenderer.
- 16. NID, ASSAM reserves the Right: To postpone/change/cancel the above-mentioned date, modify the terms and conditions include new items and conditions, split, and distribute the work amongst more than one agency etc. in the interest of the Project(s)/ Company, without assigning any reason thereof. To ask for further Clarifications etc., as, and when required.
- 17. To cancel the Notice anytime without assigning any reason for which no claim on any ground shall be entertained.
- 18. To verify the particulars furnished by the tenders independently, if any information furnished by the tenderer is found incorrect at any stage, the agency shall be liable to be debarred from tendering/cancellation of order including imposition of penalty or any other action is deemed necessary. The bidder shall be solely responsible for the authenticity of the documents or other details submitted.



- 19. To accept or reject any or all the applications received, at its own discretion, without assigning any reasons thereof for which no claim on any ground shall be entertained. Bid in which additional conditions put forth by the agencies, shall be summarily rejected.
- 20. To Reject all technical bids in case of no suitability as per specified technical specification.



## Scope of Work

- 1. The Tenderer shall provide the maintenance services to the National Institute of Design, Assam for maintenance of the Installation listed in Annexure -A.
- 2. It shall be the responsibility of the tenderer to keep the Installation covered under AMC in sound operating condition.
- 3. The tenderer during its normal working hours shall depute one supervisor and one mechanic, **not** less than 4 times per year and the following scope of works shall be attended during the AMC visits-
- i. Checking/Testing/Cleaning/Oiling/Greasing of all electro-mechanical Installation's i.e., electrical motors, pumps, water treatment plant & effluent treatment Installation's air blowers, chemical dozing, electrical panels, piping, valves & other accessories. The Minor Material Like Oil, Grease etc. will not be provided by NID, Assam.
- ii. Rectification / repair of equipment such as filters, pump, air blower or electrical panel at site, in case NID keeps spares in store and submission of report to NID Assam.
- iii. Checking operation of all filters installed in water treatment plant.
- iv. Getting extended backwash of all filters by opening the manhole covers of filters.
- v. Quality check of filter media filled in the filters. In case same are required to be replaced or recharged, supervisor of tenderer shall submit report to NID Assam for immediate, procurement of filter media such as gravels, silica sand, iron removal media, anthracite and activated carbon.
- vi. Checking the operation of Effluent treatment plant.
- 4. Upon notification by the NID Assam of a breakdown or failure in the installations, the tenderer shall send soon as may reasonably be possible (preferably within 36 Hours after reporting by NID Assam), a technician to carry out necessary repairs to restore the Installation to satisfactory operating condition subject to free of cost Consumable item (at emergency) paid separately as per actual by NID Assam.
- 5. The maintenance service shall consist of corrective & preventive maintenance service including carrying out necessary repairs / replacements. The cost of spare parts and components shall be borne by the NID Assam, however fittings and fixing of the same shall be in scope of the tender whenever required during the scheduled AMC visits or breakdown.



## **Section- 3 Instructions to Tenderers**

- 1. The Tenderers are required to submit sealed bids. The envelope containing the Technical Bid (including EMD) should be superscripted as "Technical Bid for Annual Maintenance Service for Water Treatment Plant, Effluent Treatment Plant & Pumping System" and the Financial Bid along with Annexures "IV" should be kept in a separate sealed envelope and superscripted as "Financial Bid for "Annual Maintenance Service for Water Treatment Plant, Effluent Treatment Plant & Pumping System ". Both the sealed envelopes should be put in a third sealed envelope as "Tender for Annual Maintenance Service for Water Treatment Plant, Effluent Treatment Plant & Pumping System.
- 2. The Technical Bid should be accompanied by an Earnest Money Deposit (EMD) at 2% of the estimated cost in the form of Demand Draft, banker cheque drawn in favour of "National Institute of Design, Assam" payable at Jorhat from any Nationalized/Schedule Bank. It should remain valid for a period of 120 (four) months from the last date of submission of the Tender. In the absence of EMD, the tender shall be rejected summarily. The earnest money shall be refunded to the unsuccessful Tenderers after finalization of the contract. It shall be refunded to successful Tenderer on the receipt of performance security deposit.
- 3. Bidders with MSME or NSIC certificate are exempted from submission of EMD.
- 4. All entries in the tender form should be legible and filled in clearly. Any overwriting or cutting which is unavoidable shall be signed by the authorized signatory.
- 5. The bid shall be valid for 120 (One Hundred Twenty) days from the date of opening.
- 6. Tender incomplete in any form will be rejected outright. Conditional Tenders will be rejected outright.
- 7. No Tenderer will be allowed to withdraw after submission of the tenders within the bid Validity period otherwise the EMD submitted by the tendering firm shall stand forfeited.
- 8. In case the successful Tenderer declines to take up the contract, for whatsoever reason(s), his EMD will be forfeited.
- 9. The successful Tenderer will have to deposit a Performance Security of 5% of the value of contract awarded by way of Demand Draft / Fixed Deposit Receipt (FDR) / from a nationalized bank and hypothecated in favour of 'National Institute of Design, Assam' 'with a validity of 60 days beyond completion of work / contract.
- 10. The successful Tenderer will have to deposit the Performance Security Deposit and commence the work within 15 days of acceptance of tender. Otherwise, the contract will be cancelled and EMD will be forfeited.
- 11. Each page of the Tender document i.e., Technical and Financial bid should be signed and stamped by the Tenderer or an Authorized representative of Tenderer in acceptance of the terms and conditions laid down by NID Assam.
- 12. The competent authority reserves the right to accept/reject any or all tender in whole or in part without assigning any reason thereof.
- 13. For finalization of contract, the Tenderer whose rates are reasonable / economical in the Financial Bid are the lowest in comparison to other tenderers will be considered as the Lowest Tenderer.
- 14. The agency or the Tenderer should ensure timely payment of all statutory dues like ESI, EPF etc. and ensure compensation as per payment of wages Act, Minimum wages Act, etc. This office is a statutory body under Central Govt. and all central labour laws are applicable.
- 15. Payment of wages to the workers shall be submitted for scrutiny of NID Assam after payment on every month.
- 16. Subletting of the contract is not permissible without prior consent.
- 17. The tenderers shall visit the site to acquaint himself/ themselves with the site working condition in



- detail prior to tendering and no claim will be entertained on the ground of ignorance or otherwise of the conditions under which the work shall have to be executed.
- 18. Tenders of those tenderers who fulfil the eligible criteria of technical bid shall be considered for opening the financial bid. The incomplete/ Invalid Tenders are liable for rejection and no correspondence will be entertained in case of rejection, if necessary, documents are not furnished.
- 19. The Tenderers are needed to consider while quoting their rates, all factors including any fluctuations in the Market rates etc., No claim will be entertained on this account after acceptance of the tender or during the currency of the contract.
- 20. The Successful tenderer shall submit the contract agreement on a non-judicial stamp paper of Rs 100/- in a prescribed form duly signed within fifteen days of the issue of Acceptance Letter.
- 21. Rates quoted shall be firm or fixed and are inclusive of cost of manpower, materials, tools, and plants etc., all taxes (including service tax) duties, levies and insurance etc., no escalation of whatsoever nature shall be payable.
- 22. **Pre-Bid Meeting and Clarification of Bids:** A Pre-Bid meeting will be organized by NID Assam at 03.30 PM on 12.12.2023 Bidders may seek any clarifications from NID Assam.



#### LETTER OF TRANSMITTAL

(In the Letter Head of the Bidder)

To

Director

National Institute of Design Assam, Tocklai, Rajabari, Jorhat-785014, Assam

Sub: Submission of Tender for the work of "Annual Maintenance Service for Water Treatment Plant, Effluent Treatment Plant & Pumping System"

Ref:

Dear Sir,

Having visited the Site, ascertained the Site conditions, and examined the General Conditions of Contract as well as Special Conditions of Contract, Notice Inviting Bids, Instructions to Bidders, of NID, Assam etc. and addenda for the above project, we the undersigned, are pleased to submit our Bid along with relevant documents as below: -

We acknowledge our unconditional acceptance of all the terms & conditions of the Tender.

While preparing this Bid, we gathered our own information and conducted our own inquiry / survey to our satisfaction, and we did not rely solely on the information provided in this BID. We shall not hold **NID**, **Assam** responsible on any account in this regard.

We undertake, if our Bid is accepted, to commence the works within the stipulated time and to complete the whole of the works comprised in the Contract document within the stipulated time based on the reckoned date of start as scheduled.

If our Bid is accepted, we will furnish a bank guarantee as Performance security for the due performance of the Contract. The amount and form of such guarantee or bond will be in accordance with as given in the tender document.

We are aware that in the event of a delay in the execution of the Project, beyond the agreed schedule due to reasons attributable to us, liquidated damages shall be recovered from us as per Conditions of Contract.

Our Bid is valid for a period of **120 days** from the date of opening of the Price Bid or any extension thereto. We agree to the General Conditions of Contract and Special Conditions of Contract and the terms and conditions mentioned in the BID.

We declare that for submission of this Bid confirms that no agent, middleman, or any intermediary has been, or will be engaged to provide any services, or any other item of work related to the award of this Contract. We further confirm and declare that no agency commission or any payment, which may be construed as an agency, commission has been, or will be, paid and that the Bid price does not include any such amount. We acknowledge the right of **NID**, **Assam**, if it finds anything to the contrary, to declare our Bid to be non- compliant and if the Contract has been awarded to declare the Contract null and void.

We understand that you are not bound to accept the lowest or any Bid you may receive.

If our Bid is accepted, we understand that we are to be held solely responsible for the due performance of the Contract.

We enclose all documents as required in the Bid.

Dated this \_\_\_\_day of \_2023.

Signature \_\_\_\_

Name \_\_\_\_\_in the capacity of duly authorized to sign Bids for and on behalf of \_\_\_\_\_

Address



## FORM OF AGREEMENT

tute floated <b>Tender</b>
tuto flootod <b>Tondor</b>
tuto flooted <b>Tondor</b>
rvice for Water quote submitted by
o them in the ement, whichever is t viz –
the contractor hereby tment plant, Sewage n all respects with the
s of the tender. like TDS, GST, etc. lls, must be produced
ntioned the contractor n all respects with the work with satisfactory day and year first
t 1 t 1 t 1



## FORM OF TENDER

Tenderers/Bidders are requested to fill up all the blank spaces in this Tender Form.
To
Name of work:
(As shown in the invitation to Tender.) Gentleman, Having examined the invitation to Tender, Instruction to Tender, GCC, Special conditions, Specifications, Tender Schedule and Tender Drawings for the Construction of the works mentioned above, we the undersigned offer to construct the whole of the said works in conformity with the said Tender documents for the sum of or such other sum as may be ascertained in accordance with the said conditions.
We undertake, if our Tender is accepted, to commence the works within <b>15</b> ( <b>Fifteen</b> ) <b>days</b> from the date of signingthe contract or Letter of Commencement/Work order, complete and deliver the whole of the works comprised in the contract within days calculated. from the date of signing the contract or Letter of commencement/work order.
We agree to abide by this Tender for the period of 120 (one hundred twenty) days from the date of opening of the price Bid and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
Unless and until a formal Agreement is prepared and executed, this Tender, together with your written acceptance thereof, shall constitute a binding contract between us.
We understand that you are not bound to accept the lowest or any Tender you may receive.6.
Dated this day of
Signature of witness Signature
Date Tenders for and on behalf of (BLOCK
LETTER)Occupation of witness: Date
Address
Signature of witness Signature
Date Tenders for and on behalf of (BLOCK
LETTER)Occupation of witness: Date
Address



### Section-4

### **GENERAL CONDITIONS OF THE CONTRACT**

#### 1. PERFORMANCE SECURITY:

- a) The successful Tenderer will have to deposit a Performance Security of 5% of the value of contract awarded by way of Demand Draft / Fixed Deposit Receipt (FDR) / from a nationalized bank and hypothecated in favour of "National Institute of Design, Assam" with a validity of 60 days beyond completion of work / contract and shall be renewed on extension of contract.
- b) The Performance Guarantee will be discharged by NID, Assam after completion of the Contractor's obligations including any warranty obligations under the contract.
- c) The performance Guarantee (PBG) shall be released after the physical completion of the work based on the 'completion certificate' issued by the competent authority stating that the agency has completed the work in all respects satisfactorily.
- d) The PBG shall be liable to be forfeited by the NID, Assam in case of any breach of any term and conditions of this contract by the contractor.

#### 2. UNSATISFACTORY WORK:

- a) In the event of Contractor's failure to execute the contract to the satisfaction of the NID, Assam, the NID, Assam reserves the right: to reject any part of the Contract executed and withhold payment for such portion of the Contract till such time the defects are rectified to the satisfaction of the NID, Assam.
- b) In the event of Contractor's failure to execute the contract to the satisfaction of the NID, Assam, NID, Assam reserves the right to terminate the Contract by giving 1 months' notice in writing without assigning any reason and to get the Contract executed by other agency at the risk and cost of the Contractor.

#### 3. LAW GOVERNING THE CONTRACT:

This Contract shall be governed by the laws of India from time to time.

#### 4. SETTLEMENT OF DISPUTES:

- a) NID, Assam and the Contractor shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
- b) If the parties have failed to resolve their dispute or differences by such mutual consultation, then either the Institute or the Vendor may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or differences in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.



#### 5. ARBITRATION:

In the event of any dispute or differences arising out of in connection with any of the terms and conditions of the Contract, the matter shall be referred to the Director, NID, Assam for settlement. In case the parties to the contract are not able to settle the dispute mutually, the matter shall be referred to a Sole Arbitrator to be appointed in accordance with the Arbitration & Reconciliation Act, 1996 & Arbitration and Conciliation (Amendment) Act, 2015 as amended from time to time and Place of arbitration shall be JORHAT.

#### 6. GENERAL LIEN:

Whenever under this contract any sum of money is recoverable from and payable by the Contractor, NID, Assam shall be entitled to recover such sum by appropriating in part or in whole the Performance security deposit of the Contractor, if a security is taken from the Contractor. In the event of the Security being insufficient, the balance or the total sum recoverable, as may be, shall be deducted from any sum due to the Contractor or which at any time thereafter may become due to the Contractor under this or any other contract with NID, Assam. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to NID, Assam on demand the remaining balance due.

#### 7. FORCE MAJEURE:

If any time, during the continuance of this contract, the performance in whole or in part by either party under obligation as per this contract is prevented or delayed by reasons of any war or hostility, act of the public enemy, civil commotion, sabotage, fire, flood, explosion, epidemic or pandemic (Covid-19), quarantine restrictions, strike, lockout or acts of God (hereinafter referred to "eventuality"), provided notice of happening of any such eventuality is given by either party to the other within 15 days of the date of occurrence thereof, neither party shall be reason of such an "eventuality" be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such nonperformance or delay in performance and deliveries under the contract. The contract shall be resumed as soon as practicable after such "eventuality" has come to an end or ceased to exist. In case of any dispute, the decision of Director, NID, Assam shall be final and conclusive, provided further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any such eventuality for a period exceeding 60 days, either party may at its option, terminate the contract. Provided also that if the contract is terminated under this clause the NID, Assam shall be at liberty to take over from the Contractor at a price to be fixed by the NID, Assam, which shall be final, all unused, undamaged and acceptable materials, bought out components and other stores, which may be in the possession of the Contractor at the time of such termination, or such portion thereof as the NID, Assam may deem fit except such material, as the Contractor may, with the concurrence of the NID, Assam, elect to retain.

#### 8. TERMINATION FOR DEFAULT:

The NID, Assam, may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the Contractor, terminate this contract in whole or in part.

- a) If the contractor fails to rectify a failure in the performance of their obligations.
- b) If the contractor fails to deliver any or all the services within the time, specified in the contract, or any extension thereof granted by the NID, Assam.
- c) If the Contractor, in either of the above circumstances, does not remedy his failure within a period of 15 days (or such longer period as the NID, Assam may authorize in writing) after receipt of the default notice from the NID, Assam.



- d) If the contractor fails to comply with any final decision reached because of arbitration proceedings.
- e) If the NID Assam, in its sole discretion and for any reason whatsoever, decides to terminate this contract.
- f) If the contractor, in the judgement of the NID, Assam has engaged in corrupt or fraudulent practices in executing the contract.
- g) In case the contract is terminated, the balance amount of fee if any, paid earlier (advance) shall be paid back by the contractor to NID, Assam within thirty days of termination letter, failing which the same shall be recovered by encasing the existing performance security deposit submitted by contractor.
- h) On a notice period of 90 days.



## Section- 5 SPECIAL CONDITIONS OF THE CONTRACT

#### 1. PLACE OF ANNUAL MAINTENANCE CONTRACT:

National Institute of Design, Assam Village tocklai, Post office Rajabari Jorhat- Mariani Road, Jorhat, Assam-785014

#### 2. PAYMENT TERMS:

- a) Annual Maintenance fees shall be payable by the NID Assam to the successful bidder, half yearly in two installments.
- b) NID Assam shall pay 50% of AMC charges to the successful bidder after completion of 6 (Six) Months and Minimum Visit of 2 (two) Times. Balance shall be paid after satisfactory completion of the AMC period and four visits.

#### 3. URGENT WORKS:

If any urgent work (in respect whereof the decision of the of the Engineer in charge NID, Assam shall be binding and final) become necessary for the safety of the work or personnel and the Contractor is unable or unwilling to carry it out, the Engineer -in-charge, NID, Assam shall have the right to employ other agencies as he may consider expedient. Labour charges and transportation charges only will be deducted from the vendor if not attended on time.

#### 4. Specialized work and new work:

If any New work is in respect to requirement of new asset, installation of new asset of new building, where quantity of the material and manpower cost is exceeding the permitted amount as per GFR rules, the work will be awarded through tendering only. If any Specialized work is in respect to shifting of equipment's, testing, calibration, troubleshooting, and programming is required the contractor shall submit quotation and NID shall award the work as per approval.

#### 5. PERIOD OF CONTRACT:

- a) This Annual maintenance contract will be valid for a period of one (01) year from the date of taking over by the party which is not later than fifteen days of issue of work order / service order. However, the contract may be extended for next year on same rates, terms and conditions if the contractor's performance is found satisfactory. The performance would be evaluated by institute authorities before renewal of contract.
- b) The Contractor at the request of NID, Assam shall render the service at the same rates, terms and conditions of the contract for spill over period not exceeding Three (3) months of the expiry of the contract, in case there is any delay in establishing the new contract.

#### **6. SPARE PARTS:**

NID assam shall provide spare parts as and when required based on the inspection reports provided by the successful tenderer required for the repair/maintenance of the Installations covered under Annexture-A. The replaced /Worn out parts shall be the property of NID assam.



#### 7. Liquidated Damages:

Liquidated damages (LD) clause shall be applicable as 0.50% (1/2 Percent) per week of the Contract Value. The LD shall be deducted if the Vendor does not attend the breakdown within stipulated time & AMC visit beyond reasonable period. The maximum amount of the LD shall be 5% (Five Percent) of the Contract Value.

#### 8. PERSONAL ACCIDENT INSURRANCE:

The entire contractor employee will have to be covered under insurance against any personal accident and NID, Assam will not be liable for payment of any compensation on that account.

#### 9. SAFETY:

- a) The Contractor shall at his own cost provide the materials necessary for safety of all the workmen and shall ensure that no damage, injury or loss is caused or is likely to be caused to any person or property.
- b) The contractor should take care of all safety precautions in respect of workers engaged by him by providing adequate safety appliances. He should see that the safety practices are adopted all the times to avoid any untoward incidents failing which he will be liable for penalty and compensation to be paid to his Laboure's.

#### 10. ACCIDENT OR INJURY TO WORKMEN:

NID, Assam shall not be responsible for any injury or loss of any workers of the contractor that may take place while on work any compensation or expenditure towards treatment for such injury or loss of life shall be the sole responsibility of the contractor. The contractor is solely responsible for any damage or injury or accident that may occur to any of his personnel working under this contract. He will not claim any compensation from NID, Assam.

#### 11. CONTRACTOR'S CO-ORDINATION

If during Contractor's work, other works of NID, Assam or works of other Contractors of NID, Assam are also in progress inside the NID, Assam Campus, the contractor is expected to work in harmony with all the others and in the best interest of NID, Assam.

#### 12. TOOLS & PLANTS:

All the general & special tools, tackles, etc. required for proper maintenance and repairs/break down etc., shall be arranged by the contractor at his own cost and issue to the staff deployed by him for this work. The quoted rates shall be deemed to include the above and nothing extra shall be paid on this account.

### 13. Other Terms & Conditions: -

- a) Plants should be operated as per the manufacturer's user manual.
- b) All disciplinary rules and regulations as enforced are to be followed by the work force of the Contractor during their stay at the premises.
- c) All the materials, spare parts, consumable such as oil, grease etc. will be arranged by successful firm/ contractor/agency without any extra cost.



- d) No advance payment will be made to the Contractor.
- e) The tenderers are required to visit the plant site to see the actual installations themselves to assess the quantum of work involved before submitting the tender. Once the tender is submitted, it will be presumed that the tenderer has seen and understood the complete work involved for each of the systems.
- f) No accommodation & transportation facility will be provided by the NID Assam.



## <u>Annexture - A</u> <u>Installation Details (Technical Data )</u>

### TECHNICAL DATA OF PUMPS FOR PUMPING SYSTEM

Water Supply Pumps

Type Filter Feed Pumps Treated Water Pumps
Quantity : TWO THREE

Make : KSB KSB

Model : ETN - 065 - 050 - 315 ETN - 050 - 032 - 200

Capacity : 30 m3/hr. 24 m3/hr.

 Head (M.)
 : 30
 50

 Liquid
 : Water
 Water

 Sp. Gravity
 : 1.0
 1.0

Temperature : Ambient Ambient Suction Size (mm) : 80 80

50

50

Material of Construction

Delivery Size (mm)

a) Casing : Cast Iron Cast iron
b) Impeller : Bronze Bronze

c) Shaft : Mechanical Mechanical

 d) Base Frame
 : M.S.
 M.S.

 bkw
 : 4.23
 5.85

 Recommended H.P.
 : 7.5
 10

 RPM
 : 1450
 2900

Type of Motor : IP55 Class F IP55 Class F

Make of Motor : Kirlokar Kirlokar



## TECHNICAL DATA OF CHEMICAL DOZING SYSTEMS FOR PRE CHLORINATION & COAGULATION

### **TECHNICAL DATA**

UNIT TYPE : Chemical Dosing System

PUMP TYPE : Electronic Metering Pump

PUMP MODEL : V-12

PUMP CAPACITY : 6 LPH.

MAX. INJECTION PRESSURE : 3.5 Kgs./cm<sup>2</sup>.

MATERIAL OF CONSTRUCTION : PVC.

ELECTRIC POWER REQUIRED : Single phase 220 V A.C. Supply.

ALLOWABLE PULSES

AT MAX. SPEED : 95-110 SPM.

CHEMICAL TUBE DOSED : Sod. Hypo Chlorite.

CHEMICAL SOLUTION TANK : 200 Liters.

M.O.C. : FRP

CHEMICAL QUANTITY

1. ALUM : 200 GMS. / HR.

2. SODIUM HYPO CHLORITE : 200 GMS. / HR. (5 liter liquid)

CHEMICAL CONCENTRATION : 5 %

CHEMICAL DOSING RATE : Dozing rate shall be min. 4 LPH for

Alum & Chlorine



#### **TECHNICAL DATA FOR IRON MEDIA FILTER - 1 NUMBER**

PLANT NAME : IRON REMOVAL PRESSURE FILTER
PLANT MODEL/MAKE : ENVIROX - 2000 IRF (Envirotech Utility)

PLANT TYPE : Down-Flow Type

PLANT DIMENSIONS

Diameter : 2000 mm
Height : 2000 mm
Thickness of shell : 6 mm
Thickness of dished ends : 8 mm

PLANT M.O.C. : M.S. Rubber Lined

PIPE LINE SIZE : 100 mm VALVES SIZE : 100 mm

FLOW RATE

Maximum [at 25 NTU turbidity] : 40.0 cum/hr.
Minimum : 08.0 cum/hr.
Average : 30.0 cum/hr.

PRESSURE RATING

Maximum working pressure : 3.5 kg./sq.cm
Minimum working pressure : 1.5 kg./sq.cm
Vessel design pressure : 4.0 kg./sq.cm
Vessel test pressure : 6.0 kg/.sq.cm

PRESSURE DROP

During normal working : 0.2 kg./sq.cm
During chocking : 0.5 kg./sq.cm
During Backwashing : 0.3 kg./sq.cm

**BACK WASH** 

Flow rate : 75.0 cum/hr.
Time : 10 min
Head : 10 m

Washing required : Depending upon pressure drop
Washing periodical : Depending upon pressure drop

FINAL WASH

Flow rate : 30.0 cum/hr.
Time : 5 min
Head required : 15 m

FILTER MEDIA : River bed gravels, Coarse & MnO2 / IRF Media

Pebbles 1 x 11/2" : 2200 kg.
Pebbles 1" x ¾" : 1200 kg.
Gravels ½" x 3/8" : 1200 kg.
Coarse silex (4/8) : 200 kg.
MnO2 : 1300 kg.
IRF MZ-10 : 1000 kg.



#### **TECHNICAL DATA FOR DUAL MEDIA FILTER - 1 NUMBER**

PLANT NAME : DUAL MEDIA PRESSURE FILTER
PLANT MODEL/MAKE : ENVIROX - 2000 DMF (Envirotech Utility)

PLANT TYPE : Down-Flow Type

PLANT DIMENSIONS

Diameter : 2000 mm
Height : 2000 mm
Thickness of shell : 6 mm
Thickness of dished ends : 8 mm

PLANT M.O.C. : M.S. Rubber Lined

PIPE LINE SIZE : 100 mm VALVES SIZE : 100 mm

FLOW RATE

Maximum [at 25 NTU turbidity] : 40.0 cum/hr.

Minimum : 08.0 cum/hr.

Average : 30.0 cum/hr.

PRESSURE RATING

Maximum working pressure : 3.5 kg./sq.cm
Minimum working pressure : 1.5 kg./sq.cm
Vessel design pressure : 4.0 kg./sq.cm
Vessel test pressure : 6.0 kg/.sq.cm

PRESSURE DROP

During normal working : 0.2 kg./sq.cm
During chocking : 0.5 kg./sq.cm
During Backwashing : 0.3 kg./sq.cm

**BACK WASH** 

Flow rate : 75.0 cum/hr.
Time : 10 min
Head : 10 m

Washing required : Depending upon pressure drop Washing periodical : Depending upon pressure drop

**FINAL WASH** 

 Flow rate
 : 30.0 cum/hr.

 Time
 : 5 min

 Head required
 : 15 m

FILTER MEDIA : River bed gravels, Coarse & MnO2 / IRF Media

 Pebbles 1 x 11/2"
 : 2200 kg.

 Pebbles 1" x ¾"
 : 1200 kg.

 Gravels ½" x 3/8"
 : 1200 kg.

 Coarse silex (4/8)
 : 200 kg.

 Quartz Silica sand
 : 2500 kg.

 Anthracite Coal
 : 1200 kg.

#### TECHNICAL DATA FOR ACTIVATED CARBON FILTER - 1 NUMBER

PLANT NAME : ACTIVATED CARBON FILTER

PLANT MODEL/MAKE : ENVIROX - 2000 ACF (Envirotech Utility)

PLANT TYPE : Down-Flow Type

PLANT DIMENSIONS

Diameter : 2000 mm
Height : 2000 mm
Thickness of shell : 6 mm
Thickness of dished ends : 8 mm

PLANT M.O.C. : M.S. Rubber Lined

PIPE LINE SIZE : 100 mm VALVES SIZE : 100 mm

FLOW RATE

Maximum [at 25 NTU turbidity] : 40.0 cum/hr.
Minimum : 08.0 cum/hr.
Average : 30.0 cum/hr.

PRESSURE RATING

Maximum working pressure : 3.5 kg./sq.cm
Minimum working pressure : 1.5 kg./sq.cm
Vessel design pressure : 4.0 kg./sq.cm
Vessel test pressure : 6.0 kg/.sq.cm

PRESSURE DROP

During normal working : 0.2 kg./sq.cm
During chocking : 0.5 kg./sq.cm
During Backwashing : 0.3 kg./sq.cm

**BACK WASH** 

Flow rate : 36.0 cum/hr.
Time : 10 min
Head : 10 m

Washing required : Depending upon pressure drop Washing periodical : Depending upon pressure drop

**FINAL WASH** 

Flow rate : 30.0 cum/hr.
Time : 5 min
Head required : 15 m

FILTER MEDIA : River bed gravels, Coarse & MnO2 / IRF Media

 Pebbles 1 x 11/2"
 : 2200 kg.

 Pebbles 1" x ¾"
 : 1200 kg.

 Gravels ½" x 3/8"
 : 1200 kg.

 Coarse silex (4/8)
 : 200 kg.

 Coco Granular Activated Carbon 1000 IV.
 : 1500 kg.



## PROCESS DETAIL & DESIGN CRITERIA FOR EFFLUENT TREATMENT PLANT HAVING DISCHARGE CAPACITY 5000 LITERS PER DAY

#### 1.0 DESIGN PARAMETERS: GENERAL INFORMATION

Location : NID, JORHAT

Type of Effluent : Waste Water From Dying Section

Plant Capacity : 5 cu.m./day.

Name of Institute : National Institute of Design

#### A. RAW EFFLUENT QUALITY AND OTHER DESIGN CRITERIA

Items	Unit	Values
Design Flow	m3/Day	5 KLD
pH	-	8.5-9.5
BOD	mg/I	150-300
COD	mg/I	400-600
Suspended Solids	mg/I	200-300

#### B. DISCHARGE EFFLUENT CHARACTERSTICS AFTER TREATMENT

Items	Unit	Values
pH	-	6.0-8.5
BOD	mg/I	Less than 30
COD	mg/I	Less than 250
Suspended Solids	mg/I	Less than 100
Oil and Grease	mg/I	Less than 10



## <u>Section- 8</u> <u>Financial Bid</u>

## BILL OF QUANTITY (BOQ) AND PRICE BID SCHEDULE

Sl. No.	Item description	Rate / Year in Figures	<b>Total Amount in</b>	<b>Total Amount in</b>
		to be entered by the	Rs.	words
		Bidder in Rs.		
1	<b>Annual Maintenance</b>			
	Service of Water			
	Treatment Plant,			
	<b>Effluent Treatment</b>			
	Plant & Pumping			
	System" at NID, Assam			
	as per Scope of Work,			
	<b>General Condition of</b>			
	Contract & Special			
	<b>Condition of Contract</b>			
	mentioned in NIT			
		GST rate		
		GST Amount		
		<b>Total Including GST</b>		

Amount in words Including GST	
(Rs	
)	

(Signature of the bidder with seal)