



# NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 15

Web: [www.nitt.edu](http://www.nitt.edu)

Phone: 0431-2503830

## e-Procurement Notice

Ref: NITT/EMD/EE/AMC/STP/Tender/2020-21/002

Dated: 22.05.2020

Online tenders are hereby invited in **three cover system** from Indian Nationals for **Operation and Maintenance of Sewage treatment plants capacity of 300 kLD & 800 kLD at NIT - Trichy**. Bidders can download complete set of bidding documents from e-procurement Platform <https://eprocure.gov.in/eprocure/app> from **25.05.2020** onwards. Bidders need to submit the bids online for the interested items by uploading all the required documents through <https://eprocure.gov.in/eprocure/app>.

**Last Date/ Time for receipt of bids through e-procurement is: 17.06.2020 (15.00Hrs)**  
(Server time).

Late bids shall not be accepted.

For further details regarding Tender Notification & Specifications please visit website:

<https://eprocure.gov.in/eprocure/app> and [www.nitt.edu](http://www.nitt.edu)

### CRITICAL DATE SHEET

|   |  |
|---|--|
| <b>Published Date</b>                   | <b>25.05.2020 (18.55Hrs)</b>   |
| <b>Bid Document Download Start Date</b> | <b>25.05.2020 (18.55Hrs)</b>   |
| <b>Clarification Start Date</b>         | <b>25.05.2020 (18.55Hrs)</b>   |
| <b>Clarification End Date</b>           | <b>16.06.2020 (15.00Hrs)</b>   |
| <b>Pre-Bid Meeting Date</b>             | <b>02.06.2020 (11.00Hrs)</b>   |
| <b>Bid Submission Start Date</b>        | <b>02.06.2020 (18.00Hrs)</b>   |
| <b>Bid Submission End Date</b>          | <b>17.06.2020 (15.00Hrs)</b>   |
| <b>Bid Opening Date(Technical)</b>      | <b>18.06.2020 (15.30Hrs)</b>   |
| <b>Bid Opening Date(Price)</b>          | Will be announced after technical evaluation (After evaluation of technical bids, the price bid will be opened only for technically qualified bidders in e-Tender) |

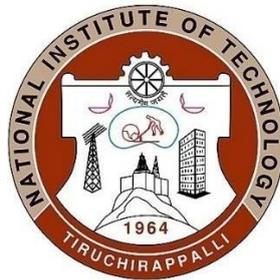
Note: \*Bidder should submit the EMD as specified in the tender. The hard copy should be posted / couriered / deposit in person to the Central Dispatch section / Tender Inviting Authority, within bid submission due date and time as indicated in the tender. Scanned copy of the instrument should be uploaded as part of the offer.

# NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 15

## Estate Maintenance Department

Web: [www.nitt.edu](http://www.nitt.edu)

Phone: 0431-2503830



## Tender Document (e - Procurement)

|  |   |  |
|--|---|--|
| Name of Work/ Service                    | : | <b>OPERATION AND MAINTENANCE OF SEWAGE TREATMENT PLANTS CAPACITY OF 300 KLD &amp; 800 KLD AT NIT – TRICHY</b>          |
| Tender Notification No                   | : | <b>NITT/EMD/EE/AMC/STP/Tender/2020-21/002</b>  |
| Date                                     | : | <b>22.05.2020</b>  |
| Name of the Department                   | : | <b>Estate Maintenance Department</b>   |
| EMD Amount                               | : | <b>Rs .73,060/-</b>  |
| Last Date & Time of submission of Tender | : | <b>17.06.2020 (15.00Hrs)</b>   |
| Address for submission of Tender         | : | <b>THE DIRECTOR, NIT<br/>TIRUCHIRAPPALLI-15<br/>KIND ATTENTION TO:<br/>The Executive Engineer , EMD<br/>Department</b> |
| Date & Time of Pre-Bid Meeting           | : | <b>02.06.2020 (11.00Hrs)</b>   |
| Date & Time of opening of technical bid  | : | <b>18.06.2020 (15.30Hrs)</b>   |

# **Bidding Procedures**

## **Section I: Instructions for Online Bid Submission**

Instructions to the Bidders to submit the bids online through the Central Public Procurement Portal for e Procurement at <https://eprocure.gov.in/eprocure/app>.

1. **Possession of valid Digital Signature Certificate (DSC) and enrollment / registration of the contractors / bidders on the e-Procurement/e-tender portal are prerequisite for e-tendering.**
2. Bidder should register for the enrollment in the e-Procurement site using the “[Online Bidder Enrollment](#)” option available on the home page. Portal enrollment is generally free of charge. During enrollment / registration, the bidders should provide only valid and true information including valid E-mail id. All the correspondence shall be made directly with the contractors/bidders through E-mail id as registered.
3. Bidder need to login to the site through their user ID / password chosen during enrollment / registration.
4. Then the Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by SIFY / TCS / nCode / eMudra or any other Certifying Authority recognized by Controller of Certifying Authorities (CCA) India on eToken / Smartcard, should be registered.
5. The registered DSC only should be used by the bidder in the transactions and should ensure safety of the same.
6. Contractor / Bidder may go through the tenders published on the site and download the tender documents/schedules for the tenders.
7. After downloading / getting the tender document/schedules, the Bidder should go through them carefully and then submit the documents as required, otherwise bid will be rejected.
8. Any clarifications may be sought online through the tender site, through the contact details or during pre-bid meeting if any. Bidder should take into account the corrigendum if any published before submitting the bids online.
9. Bidder may log in to the site through the secured login by the user id / password chosen during enrolment / registration and then by submitting the password of the e-Token / Smartcard to access DSC.
10. Bidder may select the tender in which he / she is interested in by using the search option and then move it to the ‘my tenders’ folder.
11. From my tender folder, he / she may select the tender to view all the details uploaded there.
12. It shall be deemed that the bidder has read and understood all the terms and conditions before submitting the offer. Bidder should go through the tender schedules carefully and upload the documents as asked; otherwise, the incomplete bid shall stand rejected.
13. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and ordinarily it shall be in PDF /xls / rar / jpg / dwf formats. If there is more than one document, all may be clubbed together and provided in the requested format. Bidders Bid documents may be scanned with 100 dpi with black and white option. It is advisable that each document to be uploaded through online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced through zip / rar and the same if permitted may be uploaded. The file size being less than 1 MB the transaction uploading time will be very fast.

14. The Bidders can update well in advance, the documents such as certificates, annual report details etc., under “My Space option” and these can be selected as per tender requirements and then send along with bid documents during bid submission. This will facilitate the bid submission process faster by reducing upload time of bids.
15. Bidder should submit the Tender Fee / EMD as specified in the tender. The hard copy should be posted / couriered / given in person to the Tender Inviting Authority, within bid submission due date and time as indicated in the tender. Scanned copy of the instrument should be uploaded as part of the offer.
16. The bidder has to select the payment option as offline to pay the Tender FEE / EMD as applicable and enter details of the instruments.
17. The details of the DD / any other accepted instrument, physically delivered, should tally with the details available in the scanned copy and the data entered during bid submission time, otherwise submitted bid shall not be acceptable or liable for rejection.
18. While submitting the bids online, the bidder shall read the terms and conditions and may accept the same to proceed further to submit the bid packets.
19. The bidder has to digitally sign and upload the required bid documents one by one as indicated. Very act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that they have read, understood and agreed with all clauses of the bid document including General conditions of contract without any exception.
20. The bidder has to upload the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid may be rejected.

#### **PRICE BID**

21. If the price bid format is provided in a spread sheet file like BoQ\_xxxxx.xls, the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Priced-bid / BOQ template shall not be modified / replaced by the bidder; else the bid submitted is liable to be rejected for the tender.
22. The bidders are advised to submit the bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission due date and time (as per Server System Clock). The TIA shall not be held responsible for any delay or the difficulties faced during the submission of bids online by the bidders.
23. The time settings fixed in the server side and displayed at the top of the tender site, shall remain valid for all actions of requesting, bid submission, bid opening etc., in the e-Tender system. The bidders should follow such time during bid submission.

#### **EVIDENCE FOR ONLINE BID SUBMISSION**

24. After the bid submission (i.e. after Clicking “Freeze Bid Submission” in the portal), the acknowledgement number indicated by the system should be printed by the bidder and kept as a record of evidence for online submission of bid for the particular tender and also be used as entry pass to participate in the bid opening.
25. All the data being entered by the bidders would be encrypted using Public Key Infrastructure (PKI) encryption techniques to ensure the secrecy of the data. The data entered is not retrievable by unauthorized persons during the bid submission and until the time of bid opening by any person.
26. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers’ public keys. Overall, the uploaded tender documents become

readable only after the tender opening by the authorized bid openers.

27. The confidentiality of the bids is maintained with the use of Secured Socket Layer (SSL) 128 bit encryption technology. Data storage encryption of sensitive fields is done.
28. The bidder should logout of the tendering system using the normal logout option available at the top right hand corner and not by selecting the (X) exit option in the browser.
29. For any queries regarding e-Tendering process, the bidders may contact at address as provided in the tender document. Parallely for any further queries, the bidders are advised to contact over phone: **1-800-233-7315, 0120-4001005** or send an E-mail to [cPPP- nic@nic.in](mailto:cPPP-nic@nic.in).



# NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 15

Web : [www.nitt.edu](http://www.nitt.edu)

Phone : 0431 –250 3830



## TENDER DOCUMENT

|   |  |
|---|--|
| Tender Notification No:                   | NITT/EMD/EE/AMC/STP/Tender/2020-21/002 Dated: 22.05.2020   |
| Name of the work                          | Operation and Maintenance of Sewage treatment plants capacity of 300 kLD & 800 kLD at NIT – Trichy |
| Estimated cost put to tender              | Rs. 36,53,000 /-(Excluding GST)  |
| EMD Amount                                | Rs. 73,060 /- (Rupees Seventy Three thousand and sixty only)                                       |
| Last Date of submission of Tender         | 17.06.2020 up to 15.00 Hrs   |
| Address for submission of Tender          | The Director,<br>National Institute of Technology,<br>Tiruchirappalli - 620 015.                   |
| Date and time of opening of Technical Bid | 18.06.2020 up to 15.30 Hrs   |



**NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI**  
**NOTICE INVITING TENDER TECHNICAL BID**

Tender Notification No: NITT/EMD/EE/AMC/STP/Tender/2020-21/002 Dated: 22.05.2020

|   |   |
|---|---|
| Name of work                                      | Operation & Maintenance of Sewage treatment plants capacity of 300 KLD & 800 KLD at NIT campus, Tiruchirappalli.  |
| Earnest Money deposit                             | Rs. 73,060 /- (Rupees Seventy Three thousand and sixty only)  |
| Period  | Initially for a period of 3 months and based on performance the work may extended to further 9 months. On completion of 1 year, the contract may extendable for another one year based on Performance. Additional extension(after 2 years) for one more year at the sole discretion of NITT |
| Cost of Tender Schedule                           | Nil   |
| Last date and Time of Receipt of Tender documents | 17.06.2020 up to 15.00 Hrs  |
| Date and Time of Pre – bid Meeting                | 02.06.2020 on 11.00 am at EMD Office  |
| Date and Time of Opening Technical bid            | 18.06.2020 up to 15.30 Hrs  |
| Date and Time of Opening Financial bid            | After evaluation of technical bids, the date, time and place of opening of the Price bid will be intimated only to technically qualified bidders  |
| Address for submission of Tender                  | <b>The Director, National Institute of Technology, Tiruchirappalli - 620 015</b>  |
| Procedure for submission of Bid                   | E- Tender through Central Public Procurement Portal (CPPP)  |

**Check list to evaluate the capability of the tenderer qualifying for price bid opening.**

| Sl.No | Description / Requirement from the tenderer  | Tenderer's response should be clear, Firm, complete & legible. If necessary, separate sheet shall be used. |
|-------|--|--|
| 1     | Name & Complete address of the tenderer with contact details:  |  |
| 2(a)  | Details of EMD<br><br>Demand draft No. Amount Rs.<br>Bank details:                                   | (Bids without EMD will be summarily rejected unless copy of NSIC/MSME with valid registration is attached) |
| 2(b)  | NSIC/MSME Registration No:<br>Company Name & Address:<br>Validity :<br>Product for which registered: |  |
| 3     | Status of the tenderer:<br>Proprietorship / Partnership / Private Limited. / Public Limited          |  |
| 4     | Details of Contract Registration with Govt. depts. Class and value                                   |  |
| 5(a)  | Details of PAN   |  |
| 5(b)  | Employees provident fund Registration:   |  |
| 5(c)  | Employees State Insurance Registration:  |  |
| 5(d)  | GST Registration:  |  |
| 6     | Copy of Income Tax Return for the last 3 years   |  |
| 7     | Details of similar works executed with Govt. depts. during last 3 years                              | Use separate sheet to furnish complete details   |

Note: Attested copy of relevant certificates for items 2b-7 are to be enclosed.

I/We hereby certify that the information furnished above and the attached documents as proof of the information are true and correct to the best of our knowledge.

I/We understand that these details are required to decide our eligibility to participate in the tender process and opening of our price bid thereon.

I/We also authorize the Director, NITT or representative of NITT to approach the source of the certificate to verify our competence, if required, for processing the tender.



**NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI**

*Certified that the tender document downloaded is replica of the document published by NIT, Tiruchirappalli and no alteration/addition have been made by me/us in the tender document. The tender document consists of **42** Pages.*



## NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI -15

### NOTICE INVITING TENDER

Tender Notification No.:

NITT/EMD/EE/AMC/STP/Tender/2020-21/002 Dated: 22.05.2020

National Institute of Technology, Tiruchirappalli invites E - tender, for the below mentioned work **up to 15.00 Hrs on 17.06.2020** for the following work:

| Name of work   | EMD          | Period   |
|--|--------------|--|
| Operation and Maintenance of Sewage treatment plants capacity of 300 kLD & 800 kLD at NIT - Trichy | Rs.73,060 /- | 12 (Twelve) Months;<br><br>Initially for a period of 3 months and based on performance the work may be extended to further 9 months. On completion of 1 year, the contract may be extendable for another one year based on Performance. Additional extension (i.e., after 2 years) for one more year at the sole discretion of NITT. |

**Initially for a period of 3 months and based on performance the work may be extended to further 9 months. On completion of 1 year, the contract may be extendable for another one year based on Performance.**

**Additional extension (i.e., after 2 years) for one more year at the sole discretion of NITT.**

#### **Eligibility criteria:-**

i) Contractors who fulfil the following criteria are eligible to submit tender. Experience of having Successfully completed similar supporting services/ Municipal waste water treatment/ STP Annual Maintenance (minimum 300KLD) work during the last 3 (Three) years ending 31-03-2020 that Should be either of the following:

- Three similar municipal wastewater treated works and Experience in conventional activated sludge process (at least one of them should be for Central / State Government/Central/State Autonomous Bodies / Public Sector Undertaking) each costing not less than Rs. 14.60 Lakhs.

OR

- Two similar works (at least one of them should be for Central/State Government / Central/State Autonomous Bodies / Public Sector Undertaking) each costing not less than Rs. 18.27 Lakhs.

OR

- One similar work (Central/State Government / Central/State Autonomous Bodies / Public Sector Undertaking) costing not less than Rs. 29.22 Lakhs.

- ii) Performance certificate from the department where the work completed, (Minimum good & above)
- iii) Should not incurred any loss continuously in last three financial years.

- iv) The average annual turnover of the bidder in the last three financial years shall be Rs.30 Lakhs and above
- v) Should have a solvency of Rs. 15.00 lakhs from any Nationalised / scheduled Bank
- vi) Separate Registration code No. for ESI, EPF and PAN on contractor's name / firm
- vii) Contractor has to submit live Agency/Company Registration certificate.
- viii) Contractor has to submit Labour license (renewal / current).

The other accessories such as Hoe, crowbar, spanner set (rings and double end), pipe wrench (12" to 36"), alien key, grass cutting knife, wheel borrow, bond, sludge removal mesh, hammer, Tripod stand for lifting motor from well etc to be maintained by the tenderer.

At least 3 years' experience in maintenance of municipal wastewater treatment system, is mandatory, technical qualified agency should make a presentation before price bid opening.

“Similar works” under this clause means experience in maintenance of municipal wastewater treatment system/STP. Necessary documentary proof like completion certificates in case of works carried out for Government Departments and TDS in case of works carried out for private parties should be enclosed in addition to the completion certificates.

#### **EARNEST MONEY DEPOSIT:-**

The tenders should be accompanied by Demand Drafts, which is drawn in favour of The Director, NIT, Tiruchirappalli and payable at Trichy.

- Demand Draft for Rs. 73,060/- (Rupees Seventy Three Thousand and Sixty only) towards Earnest Money Deposit which is refundable to the unsuccessful bidders. In respect of successful bidder, the same will be adjusted against the security deposit. EMD may be exempted in case of NSIC/ MSME submission in the relevant field.
- The Earnest Money deposited shall not carry any interest.
- Tender documents received without EMD/NSIC/MSME shall be summarily rejected.

#### **SUBMISSION OF TENDER:**

The Tender should be submitted as detailed below:-

##### **“E-Tender – e procurement portal”**

Award of the contract shall be made on the overall lowest quotation basis i.e, total Labour wages as mentioned on page 30, (which is to be taken as it is without change) + total consumable material cost + service charges.

The Director, NIT, Tiruchirappalli reserves the right to accept or reject any or all the tenders without assigning any reason thereof.

After award of the contract, if performance of the selected contractor is not found to be satisfactory during the trial period of three months, NITT reserves the right to terminate the contract at any time by giving due notice 7 days prior to the end of three months and forfeiting the security deposit to compensate the extra cost to be incurred by NITT in carrying out the service through an alternate agency. If the performance is satisfactory, the contract will be extended for nine more months. Based on the satisfactory performance, the contract may further extend one year (2<sup>nd</sup> year) and additional

one year (3<sup>rd</sup> year) with the evaluation at the end of every year at the sole discretion of NITT.

The Director, NIT, Tiruchirappalli-15 also reserves the right to disqualify such bidders in the future tenders whose performance was not satisfactory against the earlier contracts entered into NIT, Tiruchirappalli-15.

The Institute rules shall be binding for execution of the contract. Further, in case of any dispute arising out of or in connection with the aforesaid contract either during subsistence of the contract or thereafter will be settled at his/her level by mutual consultation and in case of failure, disputes shall be referred to The Director, NITT. The Director or an Arbitrator appointed by The Director would be competent authority to decide and his decision shall be final and binding as per the provisions of the Indian Arbitration and conciliation Act 1940 and 1996. If differences persist even after arbitration and there are compelling reasons to go to the court, the jurisdiction shall be Madurai Bench of Madras High Court. The Arbitration Award will bind both parties.

If the performance is satisfactory for 12 months, the contract will be extended for another twelve months. At the end of 24 months, NITT may decide for the extension of contract for another twelve months with the acceptance of the contractor at the same terms and conditions of the contract till the end of 36 months.

#### **SECURITY DEPOSIT:**

Security Deposit should be paid by the contractor. Security Deposit shall be collected from the successful tenderer as shown below:

|                                     |   |
|-------------------------------------|---|
| Up to Rs.10 Lakhs                   | 10 % of Contract Value                            |
| Above Rs.10 Lakhs up to Rs.50 Lakhs | 1 Lakh + 7.5% of the amount exceeding Rs.10 Lakhs |
| Above Rs.50 Lakhs                   | 4 Lakhs + 5% of the amount exceeding Rs.50 Lakhs  |

The Security Deposit shall be in the following form:

- Demand Draft in favour of The Director, NIT, Trichy-15.
- Banker's guaranty in favour of the Firm.

#### **The Security Deposit shall be collected before start of the Work.**

The security deposit shall not carry any interest.

The Earnest Money paid at the time of tender will be adjusted as part of the Security Deposit and the balance amount will be collected from the contractor as mentioned above. Security Deposit shall not be refunded except in accordance with the terms of Security Bond or Agreement. No interest shall be allowed on Security Deposits. NITT shall not be responsible for any loss of securities, due to liquidation for any other reasons, what-so-ever or any depreciation in the value of the securities while in their charge or for any loss of interest there on.

All compensation or other sums of money payable by the Contractor to NITT under the terms of this

contract or under any other contract with NITT may be deducted from the Security Deposit or realized by the sale of the securities or from the interest arising there from or from any sums which may be due or may become due to the contractor by NITT and in the event of this Security Deposit being deducted by reason of such deductions or sale, as aforesaid, the Contractor shall within 7 days thereafter, make good in cash or in securities endorsed as aforesaid, any sum by which the Security Deposit has been reduced.

**REFUND OF SECURITY DEPOSIT:**

The Security Deposit mentioned above may be refunded to the Contractor after a period of 06 months on termination or expiry of the contract, provided always that the Contractor shall first have been paid the last and final bill and have rendered a "NIL CLAIM CERTIFICATE".



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

**TECHNICAL BID**

DOCUMENTS TO QUALIFY THE TENDERER TO BE SUBMITTED IN E - TENDER

PORTAL

E - TENDER for Operation and Maintenance of Sewage treatment plants capacity of 300 kLD & 800 kLD at NIT - Trichy

Tender Notification No: NITT/EMD/EE/AMC/STP/Tender/2020-21/002 Dated: 22.05.2020

## SECTION-I

### GENERAL INFORMATION

General features of the work are as under:

- 1) The tenderer has to make his own arrangement for the inspection of site and his stay during the visits and no payments shall be made on this account. The contractor shall make his own arrangements for water.
- 2) Log book available at work spots should be maintained by recording the time of switching on / off of motors, sumps, sump water level readings etc., all at every one hour.
- 3) Operation of sluice valves during the process of switching on/off of pump sets.
- 4) Checking and correcting of gland rope in pumps / valves.
- 5) Attending and rectifying the faults in electrical equipment such as motors, switches, panel boards, lighting circuits including replacement of bulbs, fluorescent tubes, low tension fuses like HRC and re-wire able fuses in switch fuses/panel boards/distribution boards etc.
- 6) Regular Cleaning of electrical equipment like motors, starters and panel boards transformers, etc.
- 7) Maintaining log book for operation of pumps recording all necessary electrical parameters like Amps, Volts, PF for each one hour of operation and consumption of Bio-culture, Sodium hypo-chloride, Bleaching powder, oil changing, grease, filling of distilled water etc.
- 8) Addition of bio - culture in aeration tank and chlorination of the treated wastewater by sodium hypochlorite should be periodically performed at the cost of contractor.
- 9) Tamil Nadu pollution control board official will collect treated waste water samples once or twice in a month at various points at STPs and they will be testing the samples for the quality parameters, the contractor need to facilitate for the collection of the sample at the location where the board and NITT official specify.
- 10) The contractor need to take treated waste water samples twice in a month at STP-800 & STP-300 and submit the samples to Anna University or any government approved testing lab and test result need to be submitted to EMD. The result should be the within the range mentioned in the table below. The testing charges should be borne by the contractor and it is not claimable under any circumstances.

Treated Sewage Characteristics Required:

The Environment (protection) rules-1986. General standards for discharge of environmental pollutants – (Inland surface water)

| <b>Parameter</b>                | <b>Disposal standards value</b> |
|---------------------------------|---------------------------------|
| pH Value                        | 5.50— 9.00                      |
| Total suspended solids- TSS     | <100 mg / liter                 |
| Bio Chemical oxygen demand- BOD | <30 mg / liter                  |
| Chemical oxygen demand- COD     | <250 mg/liter                   |

|                               |               |
|-------------------------------|---------------|
| Ammonical Nitrogen            | <50 mg/liter  |
| Total kjeldahl Nitrogen (TKN) | <100 mg/liter |

- 11) Removal of dried sludge from sludge drying bed once in every three months and filled with river sand up to the depth 300cm.
- 12) Cleaning of the plant area and maintaining the plant surrounding are essential.
- 13) Operating the Collection open well pumps as directed by Engineer-in-charge.
- 14) The various operations involved are detailed in the tender documents (Financial bid).
- a. Adequate safety measures must be evolved and implemented.
  - b. The bill should be prepared by the contractor and submitted to the Estate office by the contractor as per the detailed procedure given in the tender documents (Financial bid).
  - c. All the materials including sodium hypochlorite solution, equipment's, machinery etc. required for the work have to be arranged and supply by the contractor.
  - d. Daily Report on day to day status of all sumps and overhead tanks in terms of their capacity including income and outgoing quantities of the day should be submitted by the agency along with the running bill.
- 15) The tenderer should furnish the complete details mentioned in the tender document. Inadequate and incomplete details which are not as per the documents are liable to be rejected. At the same time unwanted and unconnected details need not be furnished.
- 16) The bidders are cautioned that furnishing of incomplete information/ ambiguous information, suppression of facts and alteration of prescribed format will entail outright rejection of tender application.

## 1. GENERAL

1.1 The “TECHNICAL BID” (application to qualify) shall contain data and information to enable the institute to draw up a list of agencies who can take part in the tender process and who’s “Financial Bids” (Tenders) can be opened.

The following documents should be enclosed:

- I. Letter of transmittal in the enclosed format.
- II. Solvency certificate from a Nationalized Bank
- III. Financial information in **Form - A** (format enclosed).
- IV. Performance report in **Form - B** of works (format enclosed).
- V. Details regarding the structure of the organization in **Form – C** (Format enclosed).
- VI. Details of personnel establishment in **Form – D** (format enclosed).
- VII. Details of equipment in **Form – E** (format enclosed).
- VIII. Details of ISO certification (if any) in **Form – F** (Format enclosed - An optional document)

1.2 All information called for in the enclosed forms should be furnished against the respective columns in the forms. If information is furnished in a separate document, reference to the same should be given against respective columns. Such separate documents shall be chronologically placed at the end of the prescribed application. If information is ‘nil’ it should also be mentioned as ‘Nil’ or ‘no such case’. If any particular / query is not applicable in case of the applicant, it should be stated as ‘Not applicable’. However, the applicants are cautioned that furnishing of incomplete/ambiguous information, suppression of facts and alteration of prescribed format will entail outright rejection of tender at any point of the time. Application made by fax and those received late after the prescribed date and time will not be entertained.

1.3 The applicant should sign in each page of the application.

1.4 Overwriting should be avoided. Correction, if any, shall be made by neatly crossing out, initialing with date and rewriting over the correction to be done.

1.5 References, information’s and certificates from the respective clients certifying suitability, technical know-how or capability of the applicant should be signed by an officer not below the rank of Executive Engineer / Project Manager or equivalent.

1.6 The applicant may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. However the applicants are also advised not to attach superfluous / additional information beyond the requirement of the Bid. No information will be entertained after technical bid is submitted, unless it is called for by the Dean (P&D) / Executive Engineer, EMD-NITT.

1.7 Documents submitted in connection with the tender will be treated as confidential and will not be returned.

## 2. DEFINITIONS

In these documents the following words and expressions have their meaning here by assigned to them.

- a) Employer means The Director, NIT, Tiruchirappalli.

- b) Applicant means individual, proprietary firm, and firm in partnership, limited company (private, public and corporation).

### **3. METHOD OF APPLICATION**

- 3.1 If an individual makes the application, it shall be signed by him above his full type written name and current address.
- 3.2 If a proprietary firm makes the application, it shall be signed by the proprietor (with seal) above his full typewritten name & the full name of his firm with its current address.
- 3.3 If the application is made by a firm in partnership, it shall be signed (with seal) all the partners of the firm above their full typewritten names and current addresses or alternatively by a partner holding power of attorney for the firm in which case, a certified copy of the power of attorney shall accompany the application. A certified copy of the partnership deed along with current addresses of all the partners of the firm shall also accompany the application.
- 3.4 If a limited company or a corporation makes the application, it shall be signed by a duly authorized person holding power of attorney for signing the application, in which case, a certified copy of the power of attorney shall accompany the application. Such limited company or corporation may be required to furnish satisfactory evidence of its existence. The applicant shall also furnish a copy of the Memorandum and Articles of Association duly attested by a Notary Public.

### **4. FINAL DECISION MAKING AUTHORITY**

The Director, NIT Tiruchirappalli reserves the right to accept or reject all or any of the applications and to annul the qualification process / tender process at any time without assigning any reason or incurring any liability to the applicants.

### **5. PARTICULARS – PROVISIONAL**

The Particulars of work given in Section – I are provisional. They are liable to change and must be considered as advance information only to assist the applicant.

### **6. SITE VISIT**

The applicant is advised to visit the site of work at his own cost and examine the surroundings to collect all information concerning drinking water supply & distribution and treated sewage water pipe line system that he considers necessary for proper assessment of prospective assignment during working hours with prior permission from the Estate Maintenance Dept.

### **7. TOOLS AND EQUIPMENT**

The applicant should own tools & equipment's as per list enclosed for proper and timely execution of the work including manpower and fuel etc. Else, he should certify that he would be able to manage the equipment by hiring etc. and submit the list of firm from whom he proposes to hire.

### **8. FINANCIAL INFORMATION**

The applicant should furnish the annual financial statement for the last 5 years in Form – A.

- 8.1 The applicant should have sufficient number of employees for the proper execution of contract. The applicant should submit a list of his employees with their age (Not more than 58 years), Qualification, Experience and Required licenses stating clearly how they would be involved in this work
- 8.2 The applicant's performance in respect of completed works and ongoing works should be certified by an officer not below the rank of Executive Engineer or equivalent and should be obtained and delivered in sealed covers.
- 8.3 Inspection committees may carry out surprise visit to tenderers clients' places and their reports, form valuable inputs for the short-listing process.
- 8.4 Even though an applicant may satisfy the above requirements, the bidder would be liable to disqualification and black-listed if the bidder has:
- a) Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the qualification document.
  - b) Record of poor performance such as, abandoning work, not properly completing the contract, or financial failures / weaknesses etc.,

## **9. EXPERIENCE IN SIMILAR WORKS**

The applicant should furnish the following:-

- a) List of all works of similar nature successfully completed during last 3 years and are in Progress in Form - B
- b) Particulars of completed works and performance of applicant duly authenticated/ certified by an officer not below the rank of Executive Engineer or equivalent should be furnished for each work completed or in progress in Form – C

## **10. ORGANIZATIONAL INFORMATION**

Applicant is required to submit the following information in respect of his organization in form D

- a) Name and postal address including telephone, fax number, E-mail ID, etc.
- b) Copies of original documents defining the legal status, place of registration and principal places of business.
- c) Names and titles of Directors and officers to be concerned with the work, with designation of individuals authorized to act for the organization.
- d) Information on any litigation / arbitration in which the applicant was involved during the last five years including any current litigation / arbitration in process.
- e) Authorization for employer to seek detailed reference from clients to whom works were carried out.
- f) Number of technical and administrative employees in parent company, subsidiary company and how these would be involved in this work – Form – D.

## **11. EQUIPMENT**

Applicant should furnish the list of equipment to be deployed for carrying out this work at NITT (in Form E). Details of any other equipment not mentioned in Form E, but available with the applicant and likely to be used in this work may also be indicated.

## **12. TENDER SUBMISSION AND DECISION**

After the details submitted by the applicant regarding his financial capacity, previous experience etc. are studied and evaluated, a list of agencies who can take part in the tendering process shall be prepared and all concerned will be intimated. The financial bids (Tender) of the applicants, who have been qualified after evaluation, shall be opened on the date and time to be intimated later, in the presence of the tenderers or their authorized representatives who may be present, by the committee constituted for this purpose.

## **13. REFUND / FORFEITURE OF EMD**

1. Earnest Money Deposit (EMD) is to be paid by each tenderer to ensure that the tenderer does not refuse to execute the work after it is awarded to them and shall be furnished in the form of Demand Draft in favour of The Director, NIT Tiruchirappalli payable at SBI branch at NITT. EMD in any other form will not be accepted.
2. EMD of the unsuccessful contractor shall be refunded on finalization of the contractor and the EMD amount shall not carry any interest.
3. Tender for the work shall remain open for acceptance for a period of 90 days from the date of opening of the Tender.
4. If lowest tenderer withdraws his tender before the said period or issue of acceptance, whichever is earlier or makes any modification in the terms and conditions of the tender which are not acceptable to the Institute, then NITT, shall without prejudice to any other right or remedy, be at liberty to forfeit 100 % of the said earnest money with blacklisting the firm.
5. The Security deposit will be released within six months on satisfactory completion of the contract including extended period.

## **14. PRE-BID MEETING**

The Tenderers or his authorized official representatives are invited to attend a Pre- bid Meeting which will take place at the Estate Maintenance Department on 02.06.2020 at 11.00 AM. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage. The Tenderers are required to submit questions if any in writing so as to reach the EXECUTIVE ENGINEER, NITT before the pre bid meeting. Non-attendance at the Pre-bid Meeting will not be a cause for disqualification of a Tenderer. However, Clarifications given in the Pre- bid meeting are the part of tender documents and bound to be agreed & signed by lowest bidder during the issue of work order.

## **15. ROLE OF PRINCIPAL EMPLOYER**

Monitoring the Progress and the Quality of the service.

Payment (composite single rate) to the contractor on monthly basis within two months from the date of submission of genuine bill (with all relevant supporting documents referred elsewhere in the tender

document) and application of Penalty / Termination clauses if warranted.

## **16. AUTHORITY TO SIGN THE TENDER DOCUMENT**

The tender must be signed by the person / persons competent to sign as indicated below. Same stipulations will also apply in the case of Receipt of payments for the work done.

1. If the Applicant is an individual, he should sign above his full typewritten name and current address.
2. If the Applicant is a proprietary firm, the Proprietor should sign above his full typewritten name and the full name of his firm with its current address.
3. If the Applicant is a firm in partnership, the Documents should be signed by all the Partners of the firm above their full typewritten names and current addresses. Alternatively the Documents should be signed by a Partner holding Power of Attorney for the firm and in this case a certified copy of the Power of Attorney should accompany the tender documents. In both cases a certified copy of the Partnership Deed and current address of all the partners of the firms should be furnished.
4. If the Applicant is a limited Company, or a Corporation, the Documents shall be signed by a duly authorized person holding Power of Attorney for signing the Documents, accompanied by a copy of the Power of Attorney. The Applicant should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

## **17. DISPUTE RESOLUTION MECHANISM**

In case of any dispute arising out during execution of the contract the following procedure will be followed for resolving the issue.

The decision of competent authority, NIT Trichy in regard to the interpretation of the terms and conditions shall be final and binding which shall not be called in question in proceedings before any forum.

The Institute rules shall be binding for execution of the contract. Further, in case of any dispute arising out of or in connection with the aforesaid contract either during subsistence of the contract or thereafter will be settled at his/her level by mutual consultation and in case of failure, disputes shall be referred to The Director, NITT. The Director or an Arbitrator appointed by The Director would be competent authority to decide and his decision shall be final and binding as per the provisions of the Indian Arbitration and conciliation Act 1940 and 1996. If differences persist even after arbitration and there are compelling reasons to go to the court, the jurisdiction shall be Madurai Bench of Madras High Court.

## **18. PERFORMANCE REVIEW**

A monthly review will be conducted by the Dean (P&D)/Executive Engineer, NITT in the following aspects of the contract implementation:

- Performance of the contractor

- Schedule for work assigned
- Levy of penalty for delayed completion of jobs
- Rating the work done
- Operation of dispute resolution mechanism for settlement of dispute with the contractor.

## 19. PERFORMANCE CERTIFICATE

The Contract period is initially for three months and may be extended for nine months and further 12 months based on the performance of the firm and on sole discretion of NITT authorities. The contract can be extended further for additional 12 months purely based on performance of the firm and on sole discretion of NITT authorities

## 20. MINIMUM STRENGTH OF WORKERS TO BE PROVIDED

The agency must have to keep following minimum strength on all working days:-

- One skilled Supervisor with B.E Civil or Diploma in civil engineering (with 3 year experience) with technical qualifications.
- One skilled Chemist with B.Sc / M.Sc Chemistry with laboratory experience as Technical qualifications.
- Nine qualified unskilled STP operators with sufficient experience in STP maintenance. The manpower deployed should have minimum 3 years' experience in the same field of works.
- Two ITI qualified semi-skilled Plumber cum Pump mechanic with sufficient experience in plumbing maintenance.

| SHIFT    | SUPERVISOR | CHEMIST | PLUMBER /<br>PUMP<br>MECHANIC      | UNSKILLED | TIME          |
|----------|------------|---------|------------------------------------|-----------|---------------|
| General  | 1          | 1       | -                                  | 4         | 09.00 – 05.30 |
| A        | -          | -       | 1                                  | 1         | 06.00 - 02.00 |
| B        | -          | -       | 1                                  | 1         | 02.00 – 10.00 |
| C        | -          | -       | 1                                  | 1         | 10.00 – 06.00 |
| Reliever | -          | -       | 1 (Rotational Shift Reliever duty) |           |               |

- Total minimum manpower should be 13 Nos.
- The General Shift & Reliever Employees should take weekly off on Sundays only. (6 continues work days earns 7<sup>th</sup> day compulsory weekly off).
- The Shift Operators can be given weekly off in rotation with in the week by utilizing the reliever man power. (6 continues work days earns 7<sup>th</sup> day compulsory weekly off).
- The agency has to submit the nominal roll of all workers along with their details on receipt of work order and may keep additional workers to substitute absentees; however, frequent changes in names of the nominal roll shall not be entertained.
- Contractor has to do the work round the clock i.e. 24 Hours a day in three shifts including Sunday and all other public holidays. The contractor should engage minimum of 6 operators for three shift daily, 1 operator reliever and 6 General shift technicians totaling as follows. The man power for Monday to Saturday – 12 Nos (5 operator +1 operator reliever + 6 General+ 1 week off) /

day, Sunday – 6 Nos (6 operator + 7 week off)/day. The list of technicians including few more technicians / workers against absentees enrolled at the beginning should not be changed frequently to ensure the Pay & allowances including bonus etc., paid to them periodically.

## **21. PENALTY CLAUSE**

If any worker deployed by the firm at NITT fails to attend and provide maintenance service on all weekdays including Sundays & Government Holidays, a Penalty of an amount equal to twice the actual payment entitled shall be levied along with a punitive charge @12.5%. The General Shift & Reliever Employees should take weekly off on Sundays only. (6 continues work days earns 7<sup>th</sup> day compulsory weekly off). The Shift Operators can be given weekly off in rotation with in the week by utilizing the reliever man power. (6 continues work days earns 7<sup>th</sup> day compulsory weekly off). Any deviation in the specified method of weekly off allotment penalty will be imposed in the running bill.

## **22. TERMINATION OF CONTRACT**

NITT reserves the right to issue show cause/termination notice to the contractor by giving one month period on violation of any terms & conditions. At the end of one month, if the contractor did not respond, NITT may serve termination order within 7days. At the sole discretion of NITT, on expiry of one month. During the notice period of termination of contract, the agency shall keep discharging his duties as before till the expiry of notice period.

### **SECTION – III ADDITIONAL CONDITIONS**

1. Every tenderer is expected before quoting his rates to inspect the entire sewage water treatment plant installations in NITT for which the service is to be rendered. The requirement and cost of labour & tools should be assessed and no claim for extra payment at a later date on that account shall be entertained. The rate quoted shall take care of the Minimum Wages, VDA, Bonus etc., and increase in Minimum wages and Variations in the VDA can be

Escalated to the concern department be claimed upon proper proof of the benefits had reached the employees.

2. Without written permission of The Dean (P&D)/Executive Engineer of NITT, no part of the contract shall be sublet, shall transfer the power of attorney, authorizing others to receive the payment on contractors behalf.
3. If further information is required, the Estate Office will furnish such information, but it must be clearly understood that tender must be received any information in order and according to instruction.
4. The Director, NIT Tiruchirappalli reserves the right to reject any or all the tenders without assigning reason therefore.
5. The contractors comply with the provision of all acts, statutes, rules and regulation etc. of the central and state governments as the case may be and if necessary get himself duly registered as required by the said acts, statutes rules and regulation etc. The firm should make necessary payment of wages as per Minimum wages Act 2017. Applicable EPF, ESI and bonus should be paid by the contractor along with the monthly bill for the workers and the proof of records for the payments made must be attached in the running bill of each month.
6. Child Labour is strictly prohibited and if there is any violation, the contract will be terminated.
7. Permits for workers and supervisor to the campus / building shall be obtained by the contractor from the concerned authorities. Only photo passes shall be issued and no group passes shall be issued.
8. Necessarily monthly bills should be submitted by the contractor after obtaining the signature from the Engineer in charge on or before tenth of subsequent month by obtaining all formalities.
9. The record of duty hours and pay structure should be maintained as per rules for inspection by authorized government personnel and meeting other statutory and non-statutory benefits/obligations.
10. The contractor should take all measures for environmental protection, such as control of chemical pollution, proper disposal of wastes developed out of their function etc. and ensure that there are no adverse effect on the ecology, particularly on flora and fauna of the campus.
11. The contractor should employ minimum 13 workers per day (One skilled supervisor, One Skilled chemist, Two Semi- Skilled Plumber cum Pump mechanic, Nine Unskilled employees used as operators, helpers and cleaning purpose). In the case of absentees, penalty clause will be applied and recovered from each running account bill of the contractor as per clause 20 in Section-II.
12. The contractor shall bring the required equipment's at his/her own cost and risk and no extra payment for manpower, fuels and maintenance etc., will be made for the same.
13. The contractor should maintain an attendance register in 300KLD and in 800 KLD buildings and the same should be certified by the nominated officials from NIT Administration and hand over a copy to the Executive Engineer, EMD, NITT on the next working day and it should be followed throughout the year.
14. The contractor should pay the Labour wages in the first week of the successive month i.e., within 7th of the month, if 7th day falls in any government holidays or on non - working weekends days of Bank, the salary should be paid prior to the employees without fail if the

salary is not paid as mentioned it will attract a penalty of Rs.1000/ day of delay.

15. The contractor shall obtain a feedback certificate on performance of work from Engineer in-charge while submitting the running bill along with the attendance registrar.
16. The contractor shall submit a copy of the Payments made to the workers along with EPF/ESI/bonus/ insurance documents along with each running account bill. Monthly bill will not be passed unless the above are submitted.
17. The contractor must ensure that no laborers shall work without uniforms and other safety accessories like mask, shoes and gloves etc.,
18. The contractor should issue the ESI card to all the workers within one month of commencement of work.
19. The contractor should provide Uniform and ID cards for workers - 2 sets per worker per annum within one month of commencement of work.

## **SCOPE OF WORK**

1. The wastewater from Septic tank, sewage sump shall be treated in Sewage Treatment Plant so that the same can be reused for Horticultural purpose.
2. In STP-800/300 the sludge drying beds shall be cleaned off all vegetation and accumulated sludge and kept prepared for receiving the new sludge deposits and sludge bed clear sludge particle to avoid bad smell in the plant.
3. In STP-800/300 Carbon filter media should be replaced every six months (during summer and winter vacation)
4. In STP-800/300 once in every three months the collection tank, Collection sump, Clarifier tank, Treated tank should be cleaned to avoid sludge particle accumulation in the bottom of tank.
5. Sludge drying bed 8nos should be cleaned periodically once in three months to avoid bad smell in the plant area.
6. In STP -800 /300 every Six month the aeration tank should be clean.
7. Periodically monitoring of MLSS (mixed liquor suspended solids) in the aeration tank and in the recycle line for proper functioning of STPs.
8. Measurement of MLSS and MLVSS once in three months to check the function of aeration tank.
9. MLSS should be maintained in the range of 1500 – 2000 mg / liter in the aeration tank to active the BOD 5,20 of 30 mg / liter in the treated wastewater.
10. Periodical monitoring of carbon filter media in STP 800 KLD & 300 KLD and its replacement to maintain the required quality of the treated wastewater.
11. MLVSS to MLSS ratio should be more than 0.75.
12. Avoiding of over aeration to maintain the good settle ability of the sludge in secondary sedimentation tank.
13. Continuous pumping of active Biomass into aeration tank from bottom of SST.

14. Approximately 5000 -7500 mg / liter of MLSS should be maintained in the sludge recycle line.
15. In STP -800/300 the open space in the plants area shall be kept neat and tidy. Alf the plants / hedges inside the plants area shall be nurtured satisfactorily including weeding out of wild vegetation, grass cutting etc., periodically within the compound wall enclosure of the plant.
16. In STP -800/300 maintaining the oil level in aeration tank motor and clarifier motors.
17. The contractor shall guarantee for the proper functioning of the sewage treatment scheme as specified and as per normal approved standards.
18. Sample of effluent shall be collected by TNPCB officials and tested at the intervals of one month at a reputed laboratory to ensure the satisfactory performance of the plant. The cost of testing charges will be borne by the contractor and can be claimed in the monthly bill. The test results should passes the requirement as per discharge standard. In addition to the TNPCB testing the contractor have to test the treated effluent through a reputed laboratory to ensure the satisfactory performance of the plant. The sample shall be collected in the presence of Engineer -in -charge, TNPCB officials or authorized representatives.
19. A register shall be maintained for the following details
  - a. Name of operators
  - b. Working hours and shift details
  - c. Breakdown details and remedial measures taken
  - d. Copies of test results of the effluent (used for Horticulture purpose)
20. Three operators shall be engaged so that each operator shall function 8 hours per day.
21. The tenderer should ensure that the treated effluent shall be suitable for Horticulture purpose.
22. Running bills can be claimed by the agency monthly. The test result shall be the base for payment.
23. Other agencies doing works in this campus will also simultaneously execute the works and the contractor shall afford necessary facilities for the same. Nothing extra over the agreement rates shall be paid for the same.
24. Restrictions may be imposed by the security staff of client department etc., on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/ instructions and nothing extra shall be payable on this account.
25. The Contractor shall have to carry out Routine / Periodic / Breakdown / Trouble shooting maintenance (Plumbing, Electrical as well as Mechanical) of all installations of the system including STP maintenance in sewage network.
26. All forms of consumables, spares, paints required for repairing, servicing, maintenance etc. Sludge disposal from Lagoons / pits / chambers / tanks or any holding device in the system is the responsibility of the Contractor. The contractor has to clear the Lagoons and the sludge and has to be disposed within the NIT Premises as per the direction of EMD.
27. The contractor or their employees shall in no case use sewage Treatment Plants as housing / accommodations. Use of stoves (Electrical / Gas) in STP premises is strictly prohibited.
28. The screen chambers of the source point of raw sludge collection (VIZ. from Hostel building etc) to be cleaned daily including removal of food waste, vegetables and other similar materials etc. and dumping of the collected materials at the places shown by the NIT.

29. Mechanical equipment like Transfer pump, sludge pump, filter feed Transfer pump, Aerator, clarifier, chlorine dosing pump, pressure sand filter, Activated carbon filter, pipes and valves shall be kept in working condition at all times. Minor repairs if any has to be attended in 8 hours and major repair if any has to be reported to EMD within 24 hours, major repairs like replacing coil, impeller, shaft and other parts etc. shall be carried out by EMD.
30. Electrical items like LT outdoor control panel board comprising of main switch, push buttons DOL starters and indicator lamp for the motors with suitable control fuses for outgoing feeders with necessary interconnection and incoming and outgoing terminal shall be checked for its working conditions in each shift and if any damage / repair occurs shall be attended in 8 hours.
31. Plumbing pipe line and joints if any damage / repair occurs shall be attended in 8 hours.

### **WORKING CONDITIONS**

- 1) The laborers put in work must be provided with the proper uniform to distinguish them from other staff.
- 2) The laborers and other staffs must be provided with identity card.
- 3) The supervisors, shall have to report daily to the Engineer in charge and take instructions.
- 4) The movement of workers should be restricted to their area of work and should not wander into other areas.
- 5) The contractor should execute an agreement in the Rs.100/-, non – judicial stamp paper incorporating the various terms and conditions at his/their own expenditure.
- 6) The work spot should be kept in spick and span.
- 7) The contractor shall recoup to the employer the cost of the damage incurred by the contractor on account of any breach of the terms and conditions of the agreement.
- 8) Attendance registers and the salary registers for the labours engaged per building and other registers required as per acts and rules and the same may be verified by Estate Maintenance Dept. NIT Tiruchirappalli or other enforcing agencies during their inspection.
- 9) The supervisor/Senior Electrician must be provided with the mobile phone and the mobile numbers must be given to the Institute authorities.
- 10) Workmen should be vigilant while on work.
- 11) The contractor or their employees shall in no case use sewage Treatment Plants as housing / accommodations. Use of stoves (Electrical /Gas) in STP premises is strictly prohibited.
- 12) Workers must be free from influence of alcohol.
- 13) Workers must be physically and mentally fit for work.

- 14) Workers should avoid causing damage to the Institute property.
- 15) The NIT, Tiruchirappalli Administration will not accept any responsibility if the workmen are injured.
- 16) The salary will be made after deducting Income Tax, Labour Welfare Cess etc., Normal working hours is in General shift 07:30/8:30 a.m. to 04:30/05:30 p.m. and rotational shift 06:00 a.m to 2:00 p.m , 02:00 p.m to 10:00 p.m , 10:00 p.m to 06:00 a.m (with one hour lunch break) based on the requirements and for extended hours if required by NITT for specific purpose.
- 17) Labour shall not be permitted (except staff for watch and ward) to stay inside the campus and no labour camp shall be allowed to be set up inside the campus.
- 18) All tool & plants and other activities and storage of materials shall be restricted within the area earmarked for the above purpose.
- 19) The contractor shall abide by the restrictions imposed by the security wing of the Institute on the working and movement of labour, materials etc. and nothing extra shall be payable on this account. The contractor shall arrange for necessary photo identity passes for the labour for entry into the campus. Advance action for obtaining such passes shall be taken by the contractor and no claim on this account shall be entrained.
- 20) The NIT, Tiruchirappalli Administration will not accept any responsibility if the work man is injured.
- 21) Movement of labour should be restricted to the areas where work is carried out. Workers should be made to confine themselves to the work areas and should not wander into the nearby areas / buildings/ forest.
- 22) The work should be executed during day time only. If the work is required to be carried out in the night, necessary permission of the Engineer-in-charge shall be obtained. Contractor will make his own arrangement for lighting the area and no extra amount for carrying out the work during night is payable. To the extent possible engaging women labour in the night shift should be avoided.
- 23) The work shall be carried out with least hindrance to the adjoining buildings and offices and the contractor will be responsible for any damage, caused to the existing fixtures, electric fittings, cables, roads, pipelines etc. in the course of execution and the contractor shall make good any such damages for which nothing extra is payable.
- 24) The contractor will not be allowed to use any of the water resources available within the campus nor will be permitted to dig any bore well inside the campus. Water connection available in the toilet and other area can be utilized by the contractor for the purpose of cleaning / jet cleaning etc at free of cost.
- 25) Tenderer shall inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the site and shall themselves obtain all necessary

information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not. Submission of a tender implies that the tenderer has read the complete contract documents and is aware of the conditions, specification of the work to be done and of the local conditions and other factors having a bearing on the execution of work. Any claim either for extra amount or for additional time for execution due to ignorance about the site and working conditions are not admissible /payable.

26) All documents forming the contract shall be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scaled.

27) Non-cooperation with NITT administration or strike in any form will lead to termination of contract with immediate effect without assigning any reason.

### **SERVICE MATERIALS AND TOOLS**

All the materials required for the work such as tools, Plants, testing kits & safety equipment's etc. will have to be provided by the contractor. Minimum required quantity of above materials shall be stored by the contractor and the Institute shall reserve the right to issue gate passes for all tools etc., on fixed regular periods. The storage space for the materials shall be provided by the Institute. Prior approval for quality of the material is to be obtained from the estate office. Any material of substandard quality, found on surprise check will attract penal action.

### **STATUTORY REQUIREMENT**

- A. The contractor should get labour license for the work from licensing authority of the Government if needed by paying necessary fees.
- B. The contractor should have First aid box with necessary medicines etc. He should make necessary arrangements including care taker for taking injured person to clinic / Hospital in the event of emergencies.

**Break up details for the monthly minimum wages for various category including statutory payments indicated in the Bill of Quantities**

# This amount should be mentioned in the Financial Bid for Part A.

**Note:**

**" Operation and Maintenance of Sewage treatment plants capacity of 300 kLD & 800 kLD at NIT - Trichy " with reference to the prevailing minimum Wages as Govt of India Ministry of Labour & Employment order: F. No 1/36 (1) /2019-LS-II dated 23.09.2019.**

| Sl.No | Description (As per Central Govt. Minimum Wages Act - As on 23.09.2019) | USW               | SSW                 | SW                |
|-------|---|-------------------|---------------------|-------------------|
|       |   | (Rs)              | (Rs)                | (Rs)              |
|       | <b>Monthly wage</b>   |                   |                     |                   |
| 1     | Basic wage for B grade City (Trichy)                                    | 437*26 = 11362.00 | 494*26 = 12844.00   | 579*26 = 15054.00 |
| 2     | Variable Dearness Allowance   | 66*26 = 1716.00   | 75*26 = 1950.00     | 87*26 = 2262.00   |
| 3     | Bonus @ 8.33% (for Basic + VDA)   | 1089.40           | 1232.34             | 1442.42           |
| 4     | EPF @ 13.00% (Limited to Basic + VDA = Rs. 15000/- )                    | 1700.14           | 1923.22             | 1950.00           |
| 5     | ESI @ 3.25% (Limited to Basic + VDA = Rs.21000/-)                       | 425.04            | 480.81              | 562.77            |
|       | Category wise total monthly wages without service charges               | <b>16292.68</b>   | <b>18430.37</b>     | <b>21271.19</b>   |
|       | Total Nos of Minimum Man Power Required                                 | <b>9</b>          | <b>2</b>            | <b>2</b>          |
|       | Monthly Expenses On Labour wages  | <b>146634.12</b>  | <b>36860.74</b>     | <b>42542.38</b>   |
|       | Overall Total on Monthly Expenses On Labour wages (1 Month)             |                   | 226037.24           |                   |
|       | Overall Total on Yearly Expenses On Labour wages (12 Months)            |                   | <b>2712446.88 #</b> |                   |

The Time to Time variations in Variable Dearness allowance announced by the central Labour welfare commission can be claimed upon paying the same to the employees in the salary and on submission of proof in the claiming running bill.

To  
The Director NIT,  
Tiruchirappalli 620 015.

**Subject: Operation and Maintenance of Sewage treatment plants capacity of 300 kLD & 800 kLD at NIT - Trichy**

Sir/Madam,

Having examined the details given in notice inviting tender for the above work, I / we hereby submit the qualification application documents (Technical Bid) and the tender (Financial Bid) for the work duly filled.

1. I / we hereby certify that all the statements made and information's supplied in the enclosed forms and accompanying statements are true and correct.
2. I / we have furnished all information's and details necessary for deciding our eligibility to be qualified for taking part in the tendering process for the work. We have no further information to supply.
3. I / we submit the requisite solvency certificate and authorize the Director, NIT Tiruchirappalli or his authorized representative to approach the bank concerned to confirm the correctness of the certificate. I / we also authorize the Director, NIT Tiruchirappalli or his representative to approach individuals, firms and corporations to verify our competence and general reputation.

I am / we are aware that the tender documents (Financial bid) will not be opened if I am / we are not qualified to take part in the tendering process.

Seal of the Applicant

Date of submission Signature(s) of the applicant(s)

**Form - A****FINANCIAL INFORMATION****I. Financial Analysis**

Details are to be furnished duly supported by figures in Balance sheet / Profit and loss account for the last five years duly certified by the chartered accountant, as submitted by the applicant to the Income – Tax Department (Copies to be attached).

| Sl. No. | Details  | Year Ending 31st March of |      |      |
|---------|--|---------------------------|------|------|
|         |  | 2017                      | 2018 | 2019 |
| 1.      | Gross annual turnover in operation & maintenance of Sewage Treatment Plant |                           |      |      |
| 2.      | Profit (+) / Loss (-)  |                           |      |      |

**II. Financial arrangement for carrying out the proposed work.****III. Income Tax PAN Details.****IV. Solvency certificate from Applicant's Bank.**

Signature(s) of Applicant (s) with seal

Signature of Chartered Accountant with seal

**Form – B**

Performance Report for works completed and are in progress during last 5 years (Attach copies of work order / agreement)

1. Name of the work / Project & Location :
2. Scope of work :
3. Agreement No. :
4. Tendered Cost :
5. Value of work done :
6. Date of commencement :
7. Date of Completion :
8. Performance report based on : Very Good / Good / Satisfactory/Bad/Very Bad  
quality of work, time management and resourcefulness

Date:

Name and Designation Executive Engineer/ Project Manager or Equivalent  
Contact Number

OFFICIAL SEAL

**Form – C**

**Structure and Organization**

1. Name and address of the applicant :
2. Telephone No. / Fax No. / E-Mail address :
3. Legal Status (attach copies of original Document defining the legal status) :
  - a) An Individual
  - b) A Proprietary Firm
  - c) A Firm in Partnership
  - d) A limited Company or corporation:
4. Particulars of registration with various Government bodies (Attach attested photocopy):
  - a) Registration Number
  - b) Organization / Place of registration
5. Names and Titles of Directors and officers with designation to be concerned with this work with designation of individuals authorized to act for the organization.
6. Was the applicant ever required to suspend operation & maintenance of water supply work a period of more than one month continuously after the work was commenced? If so, give the name of the project and give reasons thereof.
7. Has the applicant or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion?
8. Has the applicant or any constituent partner in case of partnership firm, ever been debarred / black listed for tendering in any organization at any time? If so, give details.
9. Has the applicant or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so give details.
10. If any other information considered necessary related to housekeeping works but not included above.

Signature(s) of Applicant (s) with seal

**Form – D****DETAILS OF KEY TECHNICAL AND ADMINISTRATIVE PERSONNEL  
EMPLOYED BY THE FIRM / COMPANY**

| <b>Sl. No.</b> | <b>Designation</b> | <b>Total number</b> | <b>Names</b> | <b>Qualification / Professional Experience</b> | <b>Length of continuous service with the employer</b> |
|----------------|--------------------|---------------------|--------------|--|---|
|                |                    |                     |              |  |   |

**Note:** Additional information about technical personnel, if any, be submitted on separate sheet

Signature(s) of Applicant (s) with seal

**FORM – E**

List of available equipment/tools:-

**Equipment Details**

| <b>Sl. No.</b> | <b>Equipment</b>                         | <b>Numbers #</b> | <b>Availability<br/>(Yes / No)</b> |
|----------------|--|------------------|------------------------------------|
| 1              | Hoe                                      | 4 Nos            |                                    |
| 2              | Crowbar                                  | 4 Nos            |                                    |
| 3              | Spanner set (rings and double end)       | 2 Set            |                                    |
| 4              | Pipe wrench (12” to 36”)                 | 2 Set            |                                    |
| 5              | Allen key                                | 2 Set            |                                    |
| 6              | Grass cutting knife                      | 4 Nos            |                                    |
| 7              | Wheel borrow                             | 4 Nos            |                                    |
| 8              | Bond                                     | 8 Nos            |                                    |
| 9              | Sludge removal mesh                      | 4 Nos            |                                    |
| 10             | Hammer                                   | 2 Nos            |                                    |
| 11             | Tripod stand for lifting motor from well | 1 Set            |                                    |
| 12             | <b>pH meter</b>                          | 2 Nos            |                                    |
| 13             | <b>DO meter</b>                          | 2 Nos            |                                    |
| 14             | <b>TDS meter</b>                         | 2 Nos            |                                    |

# mentioned numbers are only indicative actual supplies may be provided at the time of need.

Signature(s) of Applicant (s) with seal

**Form – F**

**PROFORMA ON ISO CERTIFICATION (OPTIONAL)**

1. Year of Certification :
  
2. Name and Address of Certifying Agency :
  
3. Name of Management Representative :
  
4. Validity of Certificate :

Note: Attested copy of certificate (attested by a Government officer or Notary Public) to be enclosed.

Signature(s) of Applicant (s) with seal



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

**FINANCIAL BID**

DOCUMENTS TO QUALIFY THE TENDERER TO BE SUBMITTED IN E-TENDER PORTAL

E - TENDER FOR Operation and Maintenance of Sewage treatment plants capacity of 300 kLD & 800 kLD at NIT - Trichy

Tender Notification No:

NITT/EMD/EE/AMC/STP/Tender/2020-21/002 Dated: 22.05.202



**NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI.**

**BILL OF QUANTITIES (SCOPE OF WORK)**

**Tender Inviting Authority: The Director, NIT Tiruchirappalli**

**Name of Work: Operation and Maintenance of Sewage treatment plants capacity of 300 kLD & 800 kLD at NIT - Trichy.**

**Contract No: NITT/EMD/EE/AMC/STP/Tender/2020-21/002 dt: 22.05.2020**

|                      |  |
|----------------------|--|
| <b>Bidder Name :</b> |  |
|----------------------|--|

**PRICE SCHEDULE**

**(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )**  
**Quoted Rate is exclusive of GST**

| Sl. No. | Item Description   | Quantity | Units     | BASIC RATE PER UNIT In<br>Figures To be entered by the Bidder | TOTAL AMOUNT | TOTAL AMOUNT In Words |
|---------|--|----------|-----------|---|--------------|-----------------------|
| 1       | <b>Man Power (PART -A)</b>   |          |           |   |              |                       |
| 2       | Detailed Scope of work mentioned in Pg No. 30.                               | 1.00     | Year      |   |              |                       |
| 3       | <b>CONSUMABLES (PART -B)</b>   |          |           |   |              |                       |
| 4       | Supply of Sodium Hypo chlorite (more than 100mg/L) including freight charges | 7200.00  | Kg / Year |   |              |                       |
| 5       | Supply of Bio Culture/ Urea including freight charges                        | 500.00   | Kg / Year |   |              |                       |

| Sl. No. | Item Description   | Quantity | Units        | BASIC RATE PER UNIT In<br>Figures To be entered by the Bidder | TOTAL AMOUNT | TOTAL AMOUNT In Words |
|---------|--|----------|--------------|---|--------------|-----------------------|
| 6       | JCB Hiring charges including all conveyance and diesel   | 30.00    | Hour / Year  |   |              |                       |
| 7       | Supply, discharging and Refilling of Gear Oil to the Aerator Pump, Blower (320 grade oil) including freight charges  | 150.00   | Litre / Year |   |              |                       |
| 8       | Supply and installation of 95mm Rubber spyder washer (RED colour) for motor and pump joints including freight charges, etc.,                               | 50.00    | Nos / Year   |   |              |                       |
| 9       | Supply and installation of 100 mm Rubber spyder washer (RED colour) for motor and pump joints including freight charges, etc.,                             | 50.00    | Nos / Year   |   |              |                       |
| 10      | Supply and installation of 95mm motor pump MS metal coupling for motor and pump joints including materials cost, lathe works, transport, conveyance etc.,  | 10.00    | Nos / Year   |   |              |                       |
| 11      | Supply and installation of 100mm motor pump MS metal coupling for motor and pump joints including materials cost, lathe works, transport, conveyance etc., | 10.00    | Nos / Year   |   |              |                       |
| 12      | Supply and installation of 3mm White Insertion Rubber Sheet for the motor pump joints, valves, including etc.,   | 20.00    | Meter / Year |   |              |                       |
| 13      | Supply and installation of 8 mm Silicon Oil Gland Rope for the motor, valves, coupling at motor and pump joints including etc.,                            | 30.00    | Meter / Year |   |              |                       |
| 14      | Supply and installation of 10 mm Silicon Oil Gland Rope for the motor, valves, coupling at motor and pump joints including etc.,                           | 30.00    | Meter / Year |   |              |                       |
| 15      | Supply and installation of NLGI 2 grade Grease for applying at the joints of Motor and Mono block pumps including etc.,                                    | 10.00    | Kg / Year    |   |              |                       |
| 16      | Supply and installation of 65mm x 600mm Fine Diffuser EPDM, 3 cum / Hr for aeration process including etc.,  | 50.00    | Nos/Year     |   |              |                       |

| Sl. No. | Item Description   | Quantity | Units        | BASIC RATE PER UNIT In Figures To be entered by the Bidder | TOTAL AMOUNT | TOTAL AMOUNT In Words |
|---------|--|----------|--------------|--|--------------|-----------------------|
| 17      | Sludge removal from drying bed and transporting to the nearest location (within NIT Campus through vehicle of capacity 120 C.Ft) in Hired Load vehicle including all conveyance etc.,      | 10.00    | Time / Year  |  |              |                       |
| 18      | Sludge removal from Collection Tank and transporting to the nearest location (within NIT Campus through vehicle of capacity 120 C.Ft) in Hired Load vehicle including all conveyance etc., | 20.00    | Time / Year  |  |              |                       |
| 19      | Filter Media Change in the 3 Nos of Filter tower with Activated Carbon, Pebbles, including etc., (River Sand will be supplied by NITT)   | 1.00     | Time / Year  |  |              |                       |
| 20      | Supply and installation of 5mm Neoprene Rubber sheet for Clarifier including etc.,   | 20.00    | Meter / Year |  |              |                       |
| 21      | Sump Cleaning with Pressure Jet Nozzle cleaning equipment's by own means   | 4.00     | Time / Year  |  |              |                       |
| 22      | Supply of Bleaching Powder including freight charges   | 100.00   | Kg / Year    |  |              |                       |
| 23      | Service Charge Per Year ( ---- %)  | 1.00     | Year         |  |              |                       |

|                     |  |
|---------------------|--|
| Total amount        |  |
| Rupees in words ( ) |  |

**\*Note: Quoted Rate is exclusive of GST**

**NOTE:**

**Consumables mentioned will be in tentative quantity, however the payment will be made for actual quantity supplied.**

- The above list is not exhaustive but only indicative. The contractor is also required to carry out activities not specifically mentioned here but required for the better up keeping of sumps and water sources.

- NITT will count on 26 days a month and will pay for only 26 days.
- The contractor should engage minimum manpower as mentioned in Sl. No. 20@ Page No. 22.
- The contractor shall comply all safety rules and regulation of NITT.
- All consumables required for the Operation shall be at owners cost.

\*\*\*\*\*