



OFFICE OF THE SUPERINTENDING ENGINEER
WORKS ESTABLISHMENT SECTION
NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL
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No. 55/ Inviting Quotation /21/ 2022-23/DM

Date: 02.09.2022

NOTICE INVITING QUOTATIONS

The National Institute of Technology Karnataka, Surathkal (in short - NITK, Surathkal or Institute) is an autonomous Institute of the Govt. of India [under the Ministry of Education] imparting technical and science education. The Institute intends to **“Daily operation and regular maintenance of 1 no of 40 KLD, Sewage Treatment Plant near Type 5 & 6 apartments, in NITK.”** sealed quotations are invited by the undersigned subject to the terms and conditions enumerated here under from the Contractor/ agencies so as to reach this office on or before **12.09.2022 by 3.00 PM**. The quotations shall be opened on the same day if possible.

Sl. no.	Description	Quantity	Rate/ month ₹	Tax	Amount in ₹
1.	Daily operation and regular maintenance of 1 no of 40 KLD, Sewage Treatment Plant near Type 5 & 6 apartments, as per the stipulated condition enclosed in scope of work including cost of all labours, consumables, materials, transportation, maintenance of equipment's, etc., as per the direction of engineer in charge. (Maintenance period of work is proposed from 01.10.2022 to end of Feb 2023.	1 job work			

Terms and conditions:

1. The sealed quotations duly super scribed on the envelop as quotation for **“Daily operation and regular maintenance of 1 no of 40 KLD, Sewage Treatment Plant near Type 5 & 6 apartments, in NITK”**.
2. The quotations received after the due date will not be considered.
3. Maintenance period of work is proposed from 01.10.2022 to end of February 2023.
4. The rates should be quoted including all taxes. No advance payment will be made.
5. The work should be carried out as per specifications.
6. Payment will be made on monthly basis, only after completion of satisfactory maintenance work and after submitting necessary basis test certificates (on monthly basis).
7. All applicable taxes should be clearly mentioned in the quotation and the agency / contractor must submit the copy of PAN and GST registration certificate along with the quotation.
8. The undersigned reserves the rejecting all the quotations without assigning any reasons thereof.

Encl: Scope of work.

Yours faithfully

Superintending Engineer
NITK Surathkal
Superintending Engineer
Work Establishment Section
National Institute of Technology Karnataka
Surathkal, P.O. Srinivasnagar- 575025

SCOPE OF WORK FOR MAINTENANCE

Daily operation and regular maintenance of 1 no of 40 KLD, Sewage Treatment Plant near Type 5 & 6 apartments, in NITK

1. The contractor shall arrange to operate the STPs daily on 24x7 basis in totality and maintain it regularly by arranging required consumables and other tools and plants/materials/labours.
2. The contractor shall provide trained personnel and required materials. He shall use his best endeavors to provide satisfactory services as per the requirement of the institute and to see that the entire STP system is working strictly as per the norms stipulated by the Central and/ or State Pollution Control Boards.
3. Daily operation and the maintenance of STP system shall be comprising of various pumps, motors, blowers, pipelines, Dosing tank, Sand filter, Carbon filter, silting tanks, setting tanks, filter tanks, filter unit, etc., together with the electrical panels and connections including operation of all connected pumps (including pumps installed for pumping of treated water), valves etc., cleaning of all chambers, collection of cake from sludge chamber beds, stacking within the premises.
4. The Contractor has to keep all the area and surroundings neat and clean and dump the scrapped materials at the designated scrap yard only and the contractor shall maintain the premises of the STP clean by sweeping every day, watering the gardens/ flower pots at the STP premises.
5. The Contractor shall carryout repairs of pumps and panel boards through Mechanic/ Operator/ Technician engaged on the work, for which no additional labour charges will be paid. However, if any spare parts/materials to be replaced, the same shall be supplied by the Engineer in charge of the institute (except damage caused to any machinery/plant due to negligence of the contractor).
6. Under no circumstances, plants shall remain under breakdown/ shutdown for more than three hours. In the event of breakdown/ shutdown, the onus of attending to the problem in the shortest possible time will rest with the Contractor failing which the institute is empowered to get the defects rectified from any outside agency at the sole risk and cost of the Contractor and make necessary deductions of the entire expenditure incurred from his bills at one and a half times plus taxes if nay as applicable (i.e the actual expenditure x 1.5 times plus taxes if any as applicable).
7. The contractor shall maintain the STPs including all machineries in healthy state all the time. He shall plan and undertake preventive maintenance of STPs at regular intervals and attend routine maintenance activity every day. Necessary registers regarding test reports, machinery performance is to be maintained.

8. The Contractor shall maintain the STPs so as to get the following results:

S.No	Parameters	Maintenance Standard of Pollution Control Board
1.	p H Value	6.5 to 9
2.	BOD	Not more than 30mg/l
3.	COD	Not more than 50mg/l
4.	Total Suspended solids (TSS)	Not more than 20mg/l
5.	Total Nitrogen (N-Total)	Not more than 10mg/l
6.	NH 4-N	Not more than 5mg/l
7.	Fecal Coliform (MPN/100ml)	Less than 100

9. The contractor shall arrange to carry out testing of water every month on the 5th day and furnish the test reports to the Engineer-in-charge before the 20th day of every month. The samples shall be collected in the presence of Enginner-in-charge. The Laboratory bill towards testing charges shall be reimbursed by the institute on production of original bills of the Laboratory. Prior approval from the Engineer in-charge shall be obtained by the contractor for the Laboratory from which the contractor intends to get the tests..

In addition to the above regular testing, the contractor shall arrange to carry out testing of water samples whenever felt necessary, as instructed to do so by the Engineer-in-charge.

10. It will be the responsibility of Contractor to remove excess sludge from sludge holding tank. In addition Contractor shall also carryout cleaning of Grease/Sludge holding Tanks periodically, and disposal of grease/sludge.
11. The contractor shall check the levels of the tanks and arranging for pumping of the Sewage collected in this tank at times/ regularly, so that at no point of time the sewage overflows the tank and cause a health hazard to the occupants of the institute and surrounding area.
12. Preventive Maintenance of Systems, Motors & Pumps:
- (i) Cleaning and tightening of all screw connections and terminals on controllers.
 - (ii) Examining of fuse contacts and terminals for cleanliness and tightness.
 - (iii) Checking the pump immediately after starting the motor, to see if the pump is generating the rated head, by reading the pressure gauge.
 - (iv) Checking for any undue vibration of stuffing boxes.
 - (v) Checking of glands for overheating and leakage, Gland packing around the pump set is adjusted to permit only a slight leakage of droplets of water to cool and lubricate the shaft.
 - (vi) Checking if the voltage fluctuation is within the permissible limit of 420-440 V.
 - (vii) Checking of current rating and actual loading of motor to prevent overloading, by frequently monitoring the ammeter reading.
 - (viii) Checking the bearings of the pump periodically and applying grease sufficiently.
 - (ix) Checking the gland packing once in a month.
 - (x) Checking the valves and pressure gauges and tightening the gland at closer intervals when too much leak of water occurs.
 - (xi) Checking the exhaust pump, its auxiliaries and impeller periodically.
 - (xii) Checking of MS Bar screen, sewage transfer pumps, Aie blowers, MBBR media, clarifier system filter feed pump, sludge transfer pump, filter transfer pump etc periodically so that the entire STP systems work properly.
13. Any major complaints in the Plant noticed shall be reported to Engineer-in-charge.
14. Contractor shall provide all Tools & Tackles as required for proper operation and maintenance of STPs, as well as safety of labours.
15. All consumable such as oil, grease etc. shall be arranged by the contractor. No extra payment towards consumable items shall be made over and above the quoted rate.
16. Any damages cause by the contractor to existing facilities while carrying out the work shall be made good by the contractor.
17. All dismantled/ replaced parts should be handed over to the Institutes Engineer-in-charge.
18. The contractor and his employees must strictly take all safety precautions and shall wear safety appliances like hand-gloves, safety boots, safety belt, safety helmets, duster cloth, dust mask/ nostril filter etc.
19. The contractor shall take adequate safety precaution to prevent accidents at site. The contractor shall also ensure that his employees/ workers observe the statutory safety rules and regulations and also those laid down by the employer from time to time and promptly submit report of accident and state the measures taken by him to prevent their recurrence and aslo keep the employer indemnified of all claims arising out of such accidents.

Seal and signature of the Bidder


Superintending Engineer
Work Engineer
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National Institute of Technology Karnataka
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