

Notice Inviting e-Tender for

Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) at Hospital Complex of AIIMS, Bhubaneswar **(3rd Call)**

(File No. : AIIMS/BBSR/Engg./ 488 refers)



अखिल भारतीय आयुर्वेदज्ञान संस्थान,
All India Institute of Medical Sciences
Engineering Branch, Bhubaneswar(Odisha)-751019
www.aiimsbhubaneswar.edu.in

NIT No. : **AIIMS/BBS/Engg./ 035 /2019-20**
NIT Issue Date : **11th Dec 2019**
Last Date of Submission : **19th Dec 2019 (by 1400hours)**

“Certified that, this tender document contains **41 (Forty One)** pages only”.

Executive Engineer (Civil)
AIIMS, Bhubaneswar

**Government of India, Ministry of Health & Family Welfare
Project Cell, AIIMS, Bhubaneswar**

Name of Work : **Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) of Hospital Complex, AIIMS, Bhubaneswar.**

INDEX

1	Cover Page	-	01
2.	Index	-	02
3.	Notice Invited e-Tendering	-	03
4.	Information & Instructions for the Bidders for e-Tendering	-	04 & 05
5.	Declarations to be given by the Tenderer	-	06
6.	General rules & Directions	-	07 to 09
7.	Form for Details of all Works of Similar Class Completed during the last 05 (Five) Years (Appendix `A`)	-	10
8.	Form for Detailed Information by Bidder (Appendix `B`)	-	11
9.	Form for Percentage Rate Tender/Item Rate Tender & Contract for Works	-	12
10.	Form of Performance Security (Guarantee)	-	13
11.	Additional Instructions to the Bidder	-	14
12.	Special Conditions of Contract	-	15 to 20
13.	Process	-	21
14.	Operation	-	22
15.	Maintenance	-	23
16.	Annexure – I (Design Basis) & Annexure – II (Process Description)	-	24
17.	Annexure – III (Civil Units, Serial Number, Unit/Equipment, Description & Quantity)	-	25
18.	Annexure – IV (List of Mechanical Units, Serial Number, Unit/Equipment, Description & Quantity)	-	26
19.	Annexure – V (List of Units) & Annexure – VI (Requirement of Manpower on Daily and Regular basis)	-	27
20.	Affidavit	-	28
21.	Agreement	-	29 to 33
22.	Performa of Schedules - A to F	-	34 to 37
23.	Financial Bid (Schedule of Quantities)	-	38
24.	e-Tendering Instructions to Bidders	-	39 to 41

ALL INDIA INSTITUTE OF MEDICAL SCIENCE, BHUBANESWAR
NOTICE INVITING e-TENDER

(a)	Name of Work	Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) of Hospital Complex, AIIMS, Bhubaneswar.
(b)	Tender No.	<u>AIIMS/BBS/Engg./ 035 /2019-20</u>
(c)	Contract Period	01 (One) Year & Extendable up to 01 (One) year with Mutual Consent.
(d)	Estimated Cost	Rs. 23,73,199/- (Rupees TWENTY THREE LAKH SEVENTY THREE THOUSAND ONE HUNDRED AND NINETY NINE only)
(e)	Earnest Money Deposit (EMD)	Rs. 48,000/- (Rupees FORTY EIGHT THOUSAND only)
(f)	Performance Security (Bank Guarantee)	5% of Tendered Cost.
(g)	Security Deposit	5% of the Tendered Value.
(h)	Tender documents will be Issued From	Download from Institute Website. (i.e. www.aiimsubnaneswar.nic.in , www.tenderwizard.com / www.eprocurement.gov.in).
(j)	Last Date, Time & Place of Submission	19th Dec 2019 by 1400 Hours through Online.
(k)	Date, Time for opening of Technical Bid	19th Dec 2019 at 1530 Hours.

1. The time of submission of Tender is **as above**. The indenting Bidder must read the Terms & conditions of AIIMS, Bhubaneswar carefully. He/They should only submit his/her/their bid if he/she/they consider himself/themselves eligible and he/she/they is/are in possession of all the documents required.

2. Information and Instructions for bidders posted on website shall form part of bid document.

3. The Bid documents consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms & conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.aiimsubnaneswar.edu.in Or www.tenderwizard.com/AIIMSBBSR.

Executive Engineer (Civil)
AIIMS, Bhubaneswar

INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING

The Executive Engineer (Civil), AIIMS, Bhubaneswar invites on behalf of Director, AIIMS, Bhubaneswar, Item Rate Tender from firms/contractor of repute in Two (02) Bid system (Technical & Financial respectively) from approved/registered and eligible contractors of CPWD, AIIMS, State PWD like and other eligible firms having successfully completed works of similar nature as per eligibility condition and for the Work as per the details as follows :-

Ser. No.	Description	Details
(a)	NIT No.	<u>AIIMS/BBS/Engg./ 035/2019-20</u>
(b)	Name of Work:	Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) of Hospital Complex, AIIMS, Bhubaneswar.
(c)	Estimated Cost	Rs. 23,73,199/- (Rupees TWENTY THREE LAKH SEVENTY THREE THOUSAND ONE HUNDRED AND NINETY NINE only)
(d)	Earnest Money	Rs. 48,000/- (Rupees FORTY EIGHT THOUSAND only)
(e)	Period of Completion	01 (One) Year & Extendable up to 01 (One) year with Mutual Consent.
(f)	Last date and time of online submission of tender	19th Dec 2019 by 1400 Hours through Online.
(g)	Time and date of online opening of Documents	19th Dec 2019 at 1530 Hours.
(h)	Time and date of opening of Online Financial Bids	To be intimated later.
(j)	Period during which hard copies of EMD (in Original), Registration Certificates, Undertaking and other Documents to be submitted to the Office of EE (Civ.) by the Bidders for reference and the Deposit confirmation may be sent to EE@ or SE through e-Mail eeeci@aiimsbhubaneswar.edu.in or se@aiimsbhubaneswar.edu.in . However, the Eligibility will be considered as per uploaded documents.	To be submitted on same Daye i.e. on 19th Dec 2019 from the date of opening of Technical Bid i.e. by 1400 Hours. In case the last day happens to be closed holidays, these Documents shall be submitted on the next working day failing which technical Bid will not be considered for Evaluation.

1. The intending bidder must read the terms and conditions of Tender document carefully. He should submit his bid if he considers himself eligible and he is in possession of all the certificates / documents required.
2. Information and Instructions for bidders for e-tendering posted on website shall form part of bid document.
3. The bid document consisting of NIT, plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from <http://www.tenderwizard.com/AIIMSBSR> or www.aiimsbhubaneswar.edu.in free of cost.

4. For e-tendering of this tender, AIIMS has engaged e-portal maintained by M/s ITI Limited, Bhubaneswar. Intending bidders shall have to register with M/s ITI Limited, Bhubaneswar to participate in the tendering process. For details kindly visit website <http://www.tenderwizard.com/AIIMSBBSR> or contact Shri SANJEEB MAHAPATRA (Mobile No. 7377708585). If needed they can be imparted training on online bidding process as per details available on the website.
5. The intending bidders must have valid class-III digital signature to submit the bid.
6. The bid can be submitted only after depositing e-tender Processing Fee in favor of ITI Limited and uploading the mandatory scanned documents as specified within the period of bid submission.
7. Copies of eligibility documents and EMD as specified in the notice inviting tender shall be scanned and uploaded on the e-tendering website within the period of tender submission. Bidders can upload documents in the form of JPG format, PDF format and any other format as permissible by the e-tendering portal.
8. Bidders must ensure to quote rate of each item. The column meant for quoting rate in figures appears in dark yellow colour and the moment rate is entered, it turns sky blue. In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO). After submission of the bid online the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
9. After submission of bid online, it can be revised any number of times before specified time on last date of submission of bid. While submitting the revised bid, bidder can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.
10. Financial bids shall be opened online only for bidders for whom EMD and other documents are found in order and who are found to be eligible to bid for work. On opening date, the bidder can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
11. If the contractor is found ineligible after opening of bids, his bid shall become invalid.
12. If any discrepancy is noticed between the eligibility documents as uploaded at the time of submission of bid and hard copies as submitted physically by the bidder, the bid shall become invalid and.
13. ***The Bidders shall have to submit original instrument for EMD and self-certified copies of all the scanned and uploaded documents on same Daye i.e. on 19th Dec 2019 in the office of Tender Opening Authority. List of Eligibility Documents to be scanned and uploaded within the period of bid submission :-***
- (a) Demand Draft of any scheduled Bank against EMD in favor of AIIMS, Bhubaneswar.
 - (b) **Certificates of Work Experience & Completion Certificate of Similar work from Client not below the Rank of Executive Engineer, as mentioned in Ser. No. - 4, Page No. - 7 refer under Eligibility Criteria.**
 - (c) Certificate of Registration for GST and acknowledgement of up to date filed return if required.
 - (d) Copies of Contractor's License or Registration of the Firm.
 - (e) Copies of ESI Registration.
 - (f) Copies of EPF Registration.
 - (g) The Bidder should have their registered Office/Branch in Bhubaneswar. If not, an Office should be opened in Bhubaneswar within 30 (Thirty) Days of the award of Work. Details of Address Proof of Office located at Bhubaneswar should be given.
 - (h) Declarations to be given by the Tenderers (as per Page 06).
14. Information & Instruction for Contractor will form Part of NIT.

Executive Engineer (Civil)

DECLARATIONS TO BE GIVEN BY THE TENDERERS

It is to certify that :-

(a) I /We have gone through CPWD W-8 amended up to correction Slip No.6 as available on website www.tenderwizard.com / www.aiimsbhubaneswar.nic.in or in the office of Superintendent Engineer and I/We agree with the terms and conditions of it and understood that it will form part of the agreement.

Date : _____

Signature of the Tenderer

(b) "I,S/o Shri resident of hereby certify that none of my Relative(s) as defined in Paragraph 14 of CPWD W-6 is/are employed in AIIMS Civil Zone, Odisha. In case at any stage, it is found that the information given by me is false/incorrect, AIIMS shall have the absolute right to take any action as deemed fit without any prior intimation to me".

Date : _____

Signature of the Tenderer

NOTE : - (To be certified by all the partners in case of partnership firms, by all the directors in case of companies).

(c) "I/We undertake and confirm that eligible similar Work(s) has/have not been got executed through another contractor on back to back basis. Further, it is stated that, if such a violation comes to the notice of Department, than I/We shall be debarred for bidding in AIIMS in future forever. Also, if such a violation comes to the notice of AIIMS, Bhubaneswar before date of start of work, the Superintending Engineer shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee".

Date : _____

Signature of the Tenderer

GENERAL RULES & DIRECTIONS

Superintending Engineer (I/C), AIIMS, Bhubaneswar invites on behalf of Director, AIIMS, Bhubaneswar invites Item Rate Tender from Firms/Contractor of reputed/experienced Registered Contractors/Firms and other eligible firms having successfully completed works of similar nature as per eligibility conditions.

1. **Name of Work : Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) of Hospital Complex, AIIMS, Bhubaneswar.**
2. The work is estimated to cost of **Rs. 23,73,199/-** (Rupees **FOURTEEN TWENTY THREE LAKH SEVENTY THREE THOUSAND ONE HUNDRED AND NINETY NINE** only). The estimate, however, is given merely as a rough guide.
3. Intending Bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority of having satisfactorily completed similar works.
4. **Eligibility Criteria.** Contractor who fulfill following requirement shall be eligible to apply :-
 - (a) Three (03) similar works, each of value **not less than 40%** of estimated cost put to tender or Two (02) similar works each of value **not less than 60%** of estimated cost put to tender or one (01) similar work of value **not less than 80%** of estimated cost put to tender ***in last 07 (Seven) Years ending 31st Mar 2019.*** The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 07% per annum, calculated from the date of completion to the last date of submission of bid. Similar work means ***"STP/ETP Operation and Maintenance Work in Govt. Institutions"***.
 - (b) The Bidder should have registration with **Employee Provident Fund (EPF) Commissioner** and **Employee State Insurance (ESI) Corporation.**
 - (c) The experience of similar work should be from Central Govt., State Govt., PSU and Autonomous Body.
 - (d) Agreements shall be drawn with the successful bidders for item/items on prescribed format. Bidders shall quote their rates as per various terms and conditions of the said form which will form part of the agreement.
 - (e) The site for the work is available.
 - (f) The bid document consisting of plans, specifications, the schedule of quantities of the various type of items to be executed and the set of terms & conditions of the contract to be complied with and other necessary documents.
 - (g) Conditional Bids shall not be considered and will be out-rightly rejected at the very first instance.
 - (h) The time allowed for carrying out the work will be One year further extendable to 01 (One) Year with mutual consent from the Date of Start (which shall be reckoned from **15th** day of issue of letter of acceptance) or from the First Date of Handing Over of the Site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents. The tender is initially for a period of one year and may be repeated for a further period of 12 Months with mutual consent, on the same Terms and Conditions and Rates.

5. **Preparation & Submission of Tender through Online.** The Tender should be submitted in 02 (Two) parts i.e. **Technical Bid** and **Financial Bid** Respectively. The Technical Bid should be sent by the Bidder through online as **“Technical Bid”** for **“Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) of Hospital Complex, AIIMS, Bhubaneswar”**.
6. **Earnest Money Deposit.** The bidder shall be required to submit the **Earnest Money Deposit (EMD)** for an amount of **Rs. 48,000/-** (Rupees **FORTY EIGHT THOUSAND** only) by way of Demand Drafts only. **Second Copy of the Demand Drafts must be uploaded/attached** with the Technical Bid. The EMD of the successful Bidder shall be returned after the successful submission of Bank Guarantee/Security Deposit and for unsuccessful bidder(s) it would be returned after Award of the Contract. Bid(s) received without Demand Drafts of EMD will be rejected.
7. **Performance Guarantee.** The successful contractor will be required to furnish a **Performance Guarantee of 05% (Five Percent) of Contract Value after receiving notification of award** in the form of Fixed Deposit Receipt or Bank Guarantee from any Nationalized Bank duly pledged in the name of the "All India Institute of Medical Sciences, Bhubaneswar" which shall be kept valid for a period of 60 days beyond completion of all the contractual obligations. The security deposit can be forfeited by order of this Institute in the event of any breach or negligence or non-observance of any condition of contract or for unsatisfactory performance or non-observance of any condition of the contract. Performance Security will be discharged after completion of contractor's performance obligations (including Warranty/Guarantee period) under the contract. In case the contractor fails to deposit the said performance guarantee within the period including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with tender shall be returned after receiving the aforesaid performance guarantee.
8. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost, all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions.
9. The Tender paper/documents can be seen/ downloaded from Official website & submitted through Online or Site. For any query, Superintending Engineer, Phone : 0674 - 2476666 **or** Executive Engineer (Civil), Phone : 0674 - 2476068 AIIMS, Bhubaneswar, may be contacted.
10. The competent authority on behalf of the Director, AIIMS, Bhubaneswar does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
11. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable to rejection.
12. The Competent Authority, The Director, AIIMS, Bhubaneswar reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.

13. The contractor shall not be permitted to bid for works in the AIIMS, Bhubaneswar responsible for award and execution of contracts, in which his near relative is posted as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazette officer in the AIIMS, Bhubaneswar. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.

14. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.

15. The bid for the works shall remain open for acceptance for a period of 180 days from the date of opening of bids.

16. This notice inviting bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of "The Notice Inviting bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and rate quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.

17. **List of Documents to be submitted along with the Technical Bid.**

- (a) Demand Draft of any scheduled Bank against EMD.
- (b) Form A & B duly filled in.
- (c) Certificates of Work Experience & Completion Certificate of Similar Work from Owner.
- (d) Certificate of Registration for GST and acknowledgement of up to date filed return if required.
- (e) All documents as per Ser. No. 13 (a) to (k) (Page - 05 refers).

Executive Engineer (Civil)
AIIMS, Bhubaneswar

FORM FOR DETAILS OF ALL WORKS OF SIMILAR CLASS COMPLETED DURING THE LAST 05 (FIVE) YEAR

Ser. No.	Name of Work/ Project	Location	Owner or Sponsoring Organization	Cost of Work in Lakhs	Date of Commencement as per Contract	Stipulated date of Completion	Actual date of Completion	Litigation/ Arbitration pending/ In progress with details	Remarks
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)
1.									
2.									
3.									
4.									
5.									
6.									
7.									

(Authorized Signature of the Bidder with Seal)

FORM FOR DETAILED INFORMATION BY BIDDER

Name of Firm/Contractor/Supplier	:
Complete Address and Telephone Number	:
Name of Proprietor/Partner/Managing Director/Director	:
Phone Number	:
Mobile Number	:
e-Mail ID	:
Name and address of service centre nearby Bhubaneswar	:
Whether the firm is a registered Firm (Yes/No. Attach Copy of Certificate)	:
PAN Number. (enclose the attested copy of PAN Card)	:
Service Tax Number. (enclose the attested copy of VAT Certificate)	:
GST Number (enclose the attested copy of VAT Certificate)	:
Whether the firm has Uploaded the Bank Draft/Pay Order/ Banker's Cheque of Earnest Money Deposit (EMD).	:
EPF No. (Enclose the attested copy of EPF Registration Certificate)	:
ESI Code.	:
Any other information, if necessary.	:

(Authorized Signature of the Bidder with Seal)

Percentage Rate Tender / Item Rate Tender & Contract for Works

e-Tender for the work of: Tender for “Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) at Hospital Complex of AIIMS, Bhubaneswar”.

To be submitted online by :

- (a) Time and date of online Opening of Technical Bids. : **19th Dec 2019 by 1400 Hours.**
- (b) Time and date of opening of Online Financial Bids. : **To be intimated later.**

T E N D E R

I/We have read and examined the notice inviting tender, schedule along with Appendices 'A' to 'D' as per Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, Clauses of Contract, Special Conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

A sum of **Rs. 48,000/-** (Rupees **FORTY EIGHT THOUSAND** only) is hereby forwarded in Bank Guarantee of scheduled Bank/Demand Draft of a scheduled Bank/Bank Guarantee issued by a scheduled Bank **as Earnest Money**. If I/We, fail to furnish the prescribed Performance Guarantee within prescribed period. I/We agree that the said Director, AIIMS, Bhubaneswar or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/We agree that Director, AIIMS, Bhubaneswar or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said performance guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in the tender form. Further, I/We agree that in case of forfeiture of Earnest Money & Performance Guarantee as aforesaid. I/We shall be debarred for participation in the retendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of AIIMS, Bhubaneswar, then I/We shall be debarred for tendering in AIIMS, Bhubaneswar in future forever. Also, if such a violation comes to the notice of AIIMS, Bhubaneswar before date of start of work, the Administrative Officer shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated : * _____

Signature of Contractor
with full Postal Address

Witness : *

Address : *
(* To be filled in by the Contractor.)

Occupation : *

FORM OF PERFORMANCE SECURITY (GUARANTEE)

1. In consideration of the Director, AIIMS, Bhubaneswar (hereinafter called " the Government ") having offered to accept the terms and conditions of the proposed agreement between _____ and _____ (hereinafter called " the said Contractor(s) ") for the work _____ (hereinafter called " the said agreement ") having agreed to production of a irrevocable Bank Guarantee for Rs. _____ (Rupees _____ only) as a security/ guarantee from the contractor(s) for compliance of his obligation in accordance with the terms and conditions in the said agreement.

I/We _____ (hereinafter referred to as Bank) hereby (Indicate the name of the Bank) undertake to pay to the Government an amount not exceeding Rs. _____ (Rupees only) on demand by Government .

2. I/We _____ do hereby undertake to pay the (Indicate the name of the Bank) amount due and payable under this Guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor (s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees only).

3. I/We the said bank undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor (s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.

4. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the contractor (s) shall have no claim against us for making such payment.

5. I/ We _____ further agree that the guarantee herein contained (Indicate the name of Bank) shall remain in full force and effect during the period that would be taken for the performance of the said agreement and it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid, and its claims satisfied or discharged, or till Engineer-in- charge on behalf of the Government, certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor (s) accordingly discharges this guarantee.

6. I/We _____ further agree with the Government that the (Indicate the name of Bank) Government shall have the fullest liberty without our consent, and without affecting in any manner our obligations hereunder, to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor (s) and to forebear or enforce any of the terms and conditions relating to the said agreement & we shall not be relieved from our liability by reasons of any such variation or extension being granted to the said contractor (s) or for any forbearance, act of omission on that part of the Government or any indulgence by the Government to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties would , but for this provision, have effect of so relieving us.

7. The guarantee will not be discharged due to the change in the constitution of the Bank or the contractor (s).

8. We _____ lastly undertake not to revoke this (Indicate the name of Bank) guarantee except with the previous consent of the Government in writing.

9. This Guarantee shall valid up to _____ unless extended on demand by Government, Notwithstanding anything mentioned above, our liability against this Guarantee is restricted to Rs. _____ (Rupees _____ only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this Guarantee all our liabilities under the Guarantee shall stand discharged.

Dated the _____ day of _____ for _____

(Indicate the name of Bank)

Additional Instruction to the Bidder

Name of Work : ***Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) of Hospital Complex, AIIMS, Bhubaneswar.***

1. **Scope of Work.** The Scope of Work shall be as detailed is enclosed at **Annexure-I.** the work shall be carried out as per direction of Engineer-in-Charge subject to Special Conditions of Contract given in **Annexure-II.**
2. **Quantity Variation.**
 - (a) Item Rate Contracts (O&M and Capital) - The Quantities mentioned in the Schedule are approximate in nature and may vary by a side margin within the Contract Value for which the Contract shall have no option but to execute the Works, as per direction of the Engineer-in-Charge at the same Rates, Terms & Conditions of the Order. Payment shall be released to the Contractor for the actual executed quantity only.
 - (b) Lump-Sum/Turn-Key Contracts (Capital) – In case of Lump-Sum/Turn-Key (LSTK), no adjustment in the contract Value shall be made unless there is written instruction by the Engineer-in-Charge to change the scope of Contract due to addition/deletion of Items. Adjustment to the Contract Value due to such change in Scope of Work shall be governed by the Provisions of GC C.
3. **Contract Period.** Time of Completion is the essence of the Contract. The Contract period for this Work shall be 01 (One) Year and shall be effective from the Date of Issue of our Work Order & Effective Date as mentioned in the Work Order. “Period of Completion” of Individual Items/Activities may be decided jointly by Engineer-in-Charge and Contractor, which shall be adhered to by the Contractor. The contract can be extended for another 01 (One) Year on mutual Consent and on same Terms & Conditions of Contract.
 - (a) Inspection & Test Procedures given in the relevant Clauses of the contract or BIS Codes or other Codes of Practices as specified in Scope of Work/Special Conditions of Contract should be strictly followed.
 - (b) Contractor shall use only calibrated instruments for Measurements/Tests/Inspection, Calibrated in a Laboratory, accredited to NABL/Laboratory approved by the Manufacturer.
4. **Quality of Work.** The Contractor shall execute the Job under adequate Supervision of Experienced and Qualified personnel in accordance with the best Engineering practices and the specification laid down in the enclosed Annexure. AIIMS may inspect the work at any time without notice to the contractor and may order re-execution of substandard work reserving the right to recover compensation in terms of GCC.

Executive Engineer (Civil)
AIIMS, Bhubaneswar

SPECIAL CONDITIONS OF CONTRACT

Name of Work : ***Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) of Hospital Complex, AIIMS, Bhubaneswar.***

1. **Nature and Scope of Work.** The Scope of Work of the contract generally includes but is not limited to Assistance/Support Services for Operation & Maintenance of **500KLD Sewerage Treatment Plant (STP) and 100KLD Effluent Treatment Plant (ETP).**

(a) Assistance/Support Services for Operation & Maintenance of **500KLD Sewerage Treatment Plant (STP) and 100KLD Effluent Treatment Plant (ETP).**

(b) All Preventive and Breakdown Maintenance/Minor repair of Valves, Pumps, Motors, Filters and other components of STP.

(c) Supply of all consumable Items under the Scope of the contract. The replacement of any Spare Parts components shall be permitted by Engineer-in-Charge, AIIMS on approval of Written Applications/Quotations from the Bidder.

(d) Maintaining of Daily Log Book for Operation and Schedule Maintenance of all Equipments, site cleaning, all Waste material Cleaning and Dumping at the suitable area, with smooth operation of STP.

(e) Routine Testing of Water Quality on site line PH, TDS, TSS & Dissolve Oxygen etc., also Periodical (Monthly) Testing of Water Quality like PH, BOD, COD, TSS and TDS from SPCB Lab/SPCB Authorized lab/any Govt. Recognized lab as per the Instructions of Engineer-in-Charge. The treated water quality standards are as follows **PH : 6.5 - 8.5, BOD : <30ppm, COD : <100ppm and TSS : <30ppm,**

(f) the Works are to be carried out as per different items of the Bill of Quantities, NIT Conditions, Instructions laid down in the 'Manual & Operational Instructions for 410KLD STP at Housing Complex of AIIMS, Bhubaneswar and as per the Instructions of Engineer-in-Charge.

2. **Special Conditions.**

(a) Special Conditions of Contract shall be read in conjunction with the General condition of Contract, Specification of Work, Drawing and Govt. Regulation, Labour Laws etc.

(b) Notwithstanding the sub-divisions of the documents into the separate sections and volumes each part shall be deemed to be supplementary to complementary of every other part and shall be deemed to be supplementary to complementary of every other part and shall be read with and into the Contract so far as it may be practicable to do so.

(c) All Tenderers and advised to thoroughly go through all pages of the Tender Documents including the following documents :-

- (i) Special Conditions of Contract.
- (ii) Manual & Operational Instructions for 410KLD STP at Housing Complex of AIIMS, Bhubaneswar.
- (iii) General Conditions of contract of AIIMS.
- (IV) Schedule of Work and Bill of Quantities.

(d) Where any portion of the special conditions of contract is repugnant to or at variance with any provisions of the general conditions of contract then unless a different intention appears, the provisions of this special condition of contract shall be deemed to override the provisions of the general condition of contract. In case of any discrepancy between various sections of the contract, the following order of preference shall be observed.

- (i) Schedule of Quantities.
- (ii) Technical Specifications.
- (iii) Special Conditions of Contract.
- (iv) General Conditions of Contract of AIIMS.

(e) **Acquaintance with Site.** The bidder should take into account the details of existing work sites while quoting their rates, terms and conditions. The contractor is advised to visit and inspect the existing Sewerage Treatment Plant at AIIMS Housing and its premises thoroughly to get fully acquainted with the site conditions before quoting of the bids. No compensation/ claim in regard to site conditions /constraints /rules and regulations etc. shall be entertained. The tenderers are specifically advised that they shall inspect the site so as to correctly assess the nature, volume and extent of work involved. Any clarification, in case sought for, will be given to the tenderers. Under no circumstances, any excuse on the ignorance of the nature, volume and extent of the work involved and site condition subsequent to submission of the tender will be entertained and no extra payment what so ever in this account will be paid to the contractor. The bidder may consult/ contact AIIMS regarding clarifications on the scope and nature of work or to seek any extra detail that may enable them to thoroughly appreciate the requirements of the proposed work.

(f) **Obligation of the Contractor.**

(i) It may be clearly stated that it is a job contract. The contractor is required to have strict supervision of the Labour force deployed, so as to achieve proper output and quality of work. A resourceful organization, proper planning, enforcement of discipline on the Labour and supply of spare parts/ consumables in time will be absolutely essential to maintain the standard of operation, maintenance and sanitation. The contractor should have minimum 3 years of experience of successful running STP/ETP of Hospital area. Govt. hospital experience will be added as bonus.

(ii) The material, operation & maintenance work shall satisfy the applicable standard as per manual contained herein. Where the technical specification stipulate requirements are in addition to those contained in the manual, the contractor has to meet these requirements without any extra cost.

(iii) Wherever it is mentioned that the contractor shall perform certain work or provide certain facilities, it is understood that the Contractor shall do so, at his own cost and contract price shall be deemed to include cost of such performance and provisions, so mentioned.

(iv) The contractor has to ensure the quality of the effluent as per environmental norms and to keep all the functional units of STP, its premises well maintained & clean.

(v) The contractor has to ensure that all the works are executed as per the manual & operation instruction provided with the tender document. They have also to ensure that all the units run effectively so as to optimize utilization of power.

(vi) If the operation is held up due to reason attributable to the contractor, then proportionate rate shall be deducted.

(vii) Contractor shall be held responsible if the pumps, motors, electrical panels, starter, mains & other accessories are damaged due to improper maintenance/ faulty operation (such as running of pumps/motors, electric panels, starters etc.), in such cases the cost due to such damages shall be recovered from contractor's dues either from bills or security deposit or from both.

(viii) All tools & tackles required for operation and maintenance of pumps & valves shall be provided by the contractor.

(ix) The contractor has to abide by all the statutory Labour rules & laws, the safety rules & regulations & the environmental rules & regulations as stipulated by the Central Govt., State Govt. & AIIMS from time to time. In case of any non compliance, the management has got every right to take action as deemed fit & if necessary may terminate the contract at any point of time.

(x) The quality of work should be of acceptable level of standards and performance. If at any time the Engineer-in-Charge of the company determines that the work of the contractor is falling, the Engineer-in-Charge may without any additional cost to the company instruct the contractor to take such steps as may be necessary to improve upon his performance, specifically require him to employ over time operations, increase number of labour force, increase the capacity of the tools, tackles and machines, etc. and require him to submit evidence demonstrating the manner in which compliance with the requirement of day to day operation of STP without any extra claim. In case of any lapses in quality, appropriate deduction against defective work will be made proportionately for each item.

(xi) The contractor is obliged to carry out and comply with the instructions regarding operation and maintenance of STP by the Engineer-in-Charge under the contract. Failure of the contractor to comply with same will be viewed as lack of diligence and in such a case management reserves the right to take appropriate action against the contractor.

(xii) If any unforeseen work comes up during the tenure of the contract, the contractor will be required to do the same as an extra item as per the Clause 60 of GCC of AIIMS.

(g) **Supply of Materials and Equipment.** The tenderer shall procure and provide all the materials required for works as per BOQ and conditions laid down in various sections of NIT documents. All materials shall be as per the specifications. Wherever it is not specified it shall be of approved make. The tenderer shall defray all charges, such as rent, taxes, excise duty, other payments and compensations, if any, in connection, with the procurement and handling of materials, execution of works or any method or process connected with the works or temporary works. Power and water will be supplied at STP to the contractor free of cost for operation, maintenance and cleaning work of STP only.

(h) **Manpower Deployment.**

(i) **Minimum Man Power.** The contractor has to deploy the following minimum manpower :-

(aa) One unskilled workers in General shift for all cleaning and other unskilled works within & around the STP area.

(ab) One semiskilled worker in each (i.e. A, B and C shift) on everyday including Sundays and holidays all throughout the contract period for operating the pumps, motors, valves, and other components of STP and their rectification as and when required.

(ac) One skilled worker who will render assistance/ support service for the operation (leave reliever/weekly offs etc & maintenance and other related jobs of STP). The skilled worker shall have basic skill regarding operation, repair and maintenance of pumps, valves, sewage lines and trouble shooting of the STP system and installations. He has to assist for checking sewage/ treated water sample, monitoring the biological process, preparing reports as per the instruction of Engineer-in-Charge. If the skill of the worker is not found adequate during the contract period, the contractor has to arrange for necessary training at no extra cost to AIIMS or to replace the worker with a skilled one.

(ii) In case the contractor fail to supply the minimum manpower in any shift as per clause no. 8.1 above, proportionate deduction shall be made from the bills with or without imposition of penalty as per the decision of Engineer-in-Charge.

(iii) The Management will not, in any manner, be responsible for any act, omission or commission of the workers engaged by contractor and no claim in this respect will lie against the Management. If any such claim is made against the Management by any worker or his heirs engaged/employed by the contractor, which the Management is obliged or discharge by virtue of any statute or any provision of law and rules due to mere fact of the workers of the contractor working at the Management premises or otherwise, the contractor will be liable to indemnify/ reimburse the Management all the money paid in addition to the expenses incurred by him.

(j) The bidders should take into account the cost towards the manpower requirement as per the previous clause (at the prevailing rate of AIIMS for minimum labor wages and other applicable Labour dues including OTA, leave wages, Cleaning allowance etc.) and the cost of materials (consumables and tools) while quoting the price bid.

(k) Un-Workable Price Bid. The tenderers must quote their most reasonable and workable rate. Overall total evaluated price for all items of schedule of quantities shall be the basis for determining the reasonableness of price and gradations of the tenders. In case the offered price of the tenderer(s) are found to be unworkable, based on the rate approved by AIIMS, the tenderer(s) may be asked to justify their quoted rates within ten days of issuance of letter to that effect. However if the offer is considered for placement of work-order in virtue of being the lowest bid, the bidder(s) shall be asked to give a performance Guarantee Bond in addition to Security Deposit in the form of Bank Guarantee from AIIMS approved Bank/Nationalized Bank, equal to the amount which will be the difference between the lower limit of workability decided by AIIMS and the quoted price of the L-1 tenderer. Such performance Guarantee Bond should be valid for the entire scheduled completion period of the work. EMD of such tenderer, who refuses to justify their quoted rate and / or to give Performance Guarantee Bond, shall be forfeited.

(l) **Tests & Inspection.**

(i) The work is subject to inspection by the Engineer-in-charge. The contractor shall carry out all instructions given during inspections and shall ensure that the work is being carried out according to the technical specifications of this tender, the technical documents and the relevant codes in practice.

(ii) All tests of materials required for the job concerning the execution of the work by the contractor shall be carried out by contractor at his own cost.

(iii) The Contractor shall provide for purpose of inspection access ladders, lighting and necessary instruments at his own cost for inspections of work.

(iv) Any work not conforming to the instruction manual, executions drawings, specifications or codes if any shall be rejected forthwith and the contractor shall carry out the rectifications at his own cost.

(v) Inspections and acceptance of the work shall not relieve the contractor from any of his responsibilities under this contract.

(m) **Billing Procedure.** The contractor shall submit monthly running bills and final bill periodically, for the work executed as per the conditions of contract. The Management shall verify the work executed by the contractor through its representatives. The Management shall have all rights to make adjustments from the bills in respect of the amounts due to it from the contract or any kind whatsoever :-

(i) The payment will be made as per actual site inspection taken jointly as per general condition of contract of AIIMS. RA bills may be paid periodically against submission of running bill and certification of Engineer-in-charge subject to compliance of all legal and other requirements. The final bill payment will be made after completion of work on actual basis and compliance to all legal requirements and other requirements as per the NIT conditions and G.C.C. of AIIMS for final bill.

(ii) The contractor shall submit the RA bill / final bill in required Performa/ computerized format in accordance with the terms and conditions. The same shall be processed for payment after checking work done subject to deductions towards security deposit, income tax, works tax etc. and any other deductions as applicable. The certificate /approval by Engineer-in-Charge (EIC) and passing amount so payable shall be final and conclusive on the part of the contractor. The bills has to be supported by certified copy of monthly wage sheets in support of the payments to the workmen duly certified by representative of principal employer.

(iii) The final bill after completion of work on actual measurement and compliance to all legal requirements, NIT conditions and other requirements as per G.C.C will be released for payment. The final bill shall be submitted by the contractor within one month of the completion of contract otherwise the contract may be closed ex-parte on the basis of the Engineer-in-Charge (EIC)'s certificate of the measurement and the amount payable or recoverable as certified by the EIC taking all recoveries into account shall be final and binding on the contractor.

(iv) The interpretation and decisions of the Engineer-In-Charge with regard to specification/ terms/ description for the purpose of execution of works and passing of bills shall be final and binding on the contractor.

(n) **Deduction Towards Unsatisfactory Performance.** In the event of unsatisfactory performance, proportionate deduction as per the decision of Engineer-in-Charge shall be made from the contractor's bill or any payment due to the contractor and this case the decision of the Engineer-in-Charge shall be final and binding on the contractor.

(o) **Loss of AIIMS's Property, Loss of Progress or Otherwise due to Contractor's Action.** If due to any action/incident caused by the Laborers' or any personnel engaged by the contractor or the contractor, the company sustains loss of property, loss of progress of work or any other loss on that account, the same with an additional 10% towards official expenses will have to be borne by the contractor and the amount thus involved will be recovered either from the bill or security deposit or from both of the contractor.

(p) **Corrupt & Fraudulent Practices.** It is expected that Bidders/ Contractors observe the highest standard of ethics during the execution of the contract in pursuance to the policy of “Corrupt & Fraudulent practices”, that is defined as follows :-

(i) Corrupt practice means the offering, receiving or soliciting of anything of value to influence the action of a public official in the contract execution.

(ii) Fraudulent practice means a misrepresentation of facts in order to influence the execution of a contract to the detriment of AIIMS, and includes collusive practices amongst the bidders (prior to or after bid submission) designed to establish bid process at artificial non-competition levels and to deprive AIIMS of the benefits of free and open competition.

(q) **Safety.** The contractor will take necessary safety precautions for his personnel's put on the job. He will be responsible for all first-aid/ medical treatment for his employees. He should provide all safety appliances required for the operation of the system.

(r) **Social Accountability.** As AIIMS is a SA 8000 certified company, the contractor has to abide by the various provision of Social Accountability as applicable for this contract from time to time.

(s) **Contract Period.** The period of the contract is for 01 (One) Year. The contract may also be extended by another 01 (One) Year by the Management based on requirement of the Organization.

(t) **Accommodation for Staff & Labour.** The Owner shall not provide residential accommodation either to the contractor himself and/or his supervisor or for any other staff and/or working under the contractor.

(u) **Payment of Wages to Engaged Labour at Site.** Payment of wages to the Labour employed by the contractor shall be as per the applicable minimum wages for different categories of Labour as notified from time to time including additional element as indicated below (as a part of wages). The contractor shall have to make Labour payment accordingly.

Executive Engineer (Civil)
AIIMS, Bhubaneswar

PROCESS

The process in the STP is briefly described as bellow :-

- (a) From the terminal man hole, sewage by gravity flows through Bar Screen Chamber to the sewage collection sump.
- (b) Sewage collected in sump well by opening the valve in between screen chamber and sewage collection sump. This valve shall be closed as soon as the sump is filled (Approx 200 m³) to avoid over flow.
- (c) Sewage shall be pumped to Oil & Grease chamber by gravity to EQT , from collection sump well of EQT . Pump operation shall be interchanged with standby pump within every six to eight hours.
- (d) Effluent Flow rate of the Raw Sewage Pump should be constant all the time i.e. it should be 20M³/Hr.
- (e) From Grit chamber sewage by gravity flows to Aerated Ground EQT-1. After completely filling the Holding Tank-shall be filled by opening/closing the valve.
- (f) From Holding Tanks 1&2 sewage fed to anaerobic reactor 1&2 and 3&4 with the help of feed pumps (2w+2sb). By adjusting/opening the valves, based on the water quantity in Holding Tanks 1&2, both aerobic reactors 1&2 are fed every half an hour alternatively.
- (g) Outlet water of aerobic reactor 1&2 by gravity collected in settling effluent tank for sludge separation. Treated effluent to treated effluent storage tanks and the sludge to Sludge Holding tank.
- (h) Outlet water of settling tank 1&2 by gravity the treated effluent is collected in common collection storage tank.
- (j) From the storage tank the treated effluent is pumped (20 KLH) through Pressure filters (Multi media filter and Activated carbon filter and stored at treated effluent storage tank.
- (k) Treated effluent shall be send to gardening with the help of treated effluent discharge pump. If treated effluent storage tank is full and the pump is not in operation, treated effluent will over flow to the soak pit through Outlet pipe.
- (l) Based on Organic matter present in raw sewage, biogas may generate in the nearby areas.
- (m) The sludge at the sludge collection tank is separated/dried up/caked by means of filter press, the sludge from the sludge holding tank is pumped to the filter press and periodical removal and recirculation of sludge to the system is done as per the plant treatment process requirement .

Executive Engineer (Civil)
AIIMS, Bhubaneswar

Operation

The following Operations shall be carried out for smooth running of STP :-

- (a) Raw Sewage Pumps and Air blowers with standby arrangements should be run alternatively within every 6 - 8 hours.
- (b) Checking of the pH of the raw effluent.
- (c) Priming – Filling of water into pumps for priming when needed.
- (d) After completely filling the Holding Tank-1 shall be filled by opening/closing the valve.
- (e) Recommended quantity of consumable chemicals should be applied in every shift.
- (f) Recommended quantity of 'biomass' should be applied as per requirement.
- (g) Both aerobic reactors 1 & 2 and 3 & 4 are fed every half an hour alternatively by running feed pumps.
- (h) Checking of the pH of the aerobic reactor outlet/ sample port.
- (j) Treated effluent shall be send to gardening with the help of treated effluent discharge pump as per requirement.
- (k) The operation of chlorinator unit with required chemicals and the cleaning of DO meter probes and sensors etc and all instrumentation as and when it is required.
- (l) The backwashing of each filter in every day once /or as required to be done daily.
- (m) Removal of sludge from settling tank and dislodging the same through filter press with the help of feed pumps and also the removal of dried sludge for composting to the specified area periodically as and when it is required.
- (n) The BOD, COD & pH of the treated effluent at outlet and inlet of raw sewage is to be tested in a SPCB authorized/Govt. Lab/ Approved Laboratory every month and test report is to be submitted.

Executive Engineer (Civil)
AIIMS, Bhubaneswar

Maintenance

The following maintenance activities shall be carried out as per requirement / as per instruction of Engineer-in-Charge or his authorized representative :-

- (a) Screen chamber, grit chamber and man holes shall be kept clean.
- (b) Remove large floatable suspended particle/matter from sewage sump, Screen Chamber and Grit Chamber.
- (c) Grit chamber sludge pipe line shall be discharged periodically by opening the valve depending upon sludge deposited in grit chamber bottom.
- (d) Mobil and/or grease should be applied to all moving parts.
- (e) Grease shall be applied for all the pumps as per pump specification.
- (f) Alignment – Check proper alignment for all pumps.
- (g) Lubrication – Check proper oil & grease for air blowers and all mechanical equipments.
- (h) All valves, connecting pipes shall be checked every day for damage/ leakage and shall be rectified.
- (j) The sand filter and disc filter connected to treated effluent discharge pump shall be cleaned every month /or once the pressure difference reaches 1 bar/sq. inch.
- (k) Checking and cleaning of the whole assembly periodically.
- (l) The wire mesh of flame arrestor shall be checked every month to see whether it is worn out. If so it shall be replaced with an equivalent.
- (m) The floors and basement of pumps, pump houses shall be cleaned and kept dry all time.
- (n) The installation i.e. terminal man hole, sewage collection sump, pump house, grit chamber, holding tank, aerobic MBBR reactor, Sludge settling tank, treated effluent storage tank, discharge pump, valves, pipe line, compost pit. The area adjacent to the installation shall be kept in a clean and hygienic condition.

Executive Engineer (Civil)
AIIMS, Bhubaneswar

Design Basis

1. **Raw Sewage Characteristics** : Parameter Unit Value Flow MLD 0.45 PH - 6.0 to 8.5 Suspended Solids Mg/ltr 100 to 300 COD Mg/Ltr. 350 to 550 BOD @ 27° C Mg/Ltr. 250 to 350 (Above parameters are assumed).
2. **Process** : The sewage treatment plant shall treat 20.5m³/Hr sewage effluent with above characteristics.
3. **Treated Effluent Characteristics** : Parameter Unit Value PH - 6.5 to 8.5 Suspended Solids Mg/Ltr. <100 COD Mg/Ltr. <100 BOD @ 27° C Mg/Ltr. 30.
4. **End Use Of Treated Effluent** : The treated effluent to be pumped out for Gardening/Green Belt Development as per requirement.

Annexure - II**Process Description**

Sewage treatment plant is designed to treat 0.45 MLD (450 m³/day) sewage effluents. Raw sewage from all section by gravity flow through bar screen chamber (BSC). At BSC, floatable matter gets screened with help of bar screen overflow from this unit collecting to sump well (SW) by gravity.

With help of feed pumps (2W+2SB) sewage will feed to aerobic reactor (AR) – Four nos. from Holding Tanks. Major parts of organic load will be removed at aerobic reactor. The aerobic bacteria will degrade the organic matter present in the sewage in the absence of oxygen. In this closed reactor plastic pall rings will be used as a medium to grow the microorganisms, plastic rings medium will increase contact of food (as COD/BOD) & Bacteria, which will in turn convert the complex organic matter into simple compound like methane (CH₄), CO₂ & H₂O. The pH of aerobic reactors should be 6.8 to 7.5. Biogas generated from aerobic process will neutralized feeding of Air through Air blowers and with diffusing mechanism, however, here generation of gas is very less. Gas generation depends upon the Organic Load fed to the reactor.

With help of sewage pump treated effluent collection tank (1W+1SB) sewage pumped through filters and chlorinated as per the for biological demand and for safe and tertiary treatment process needs as per the plant operation, one drain valve is provided at bottom of AC, sewage flows to holding tank (HT). The raw sewage should be around PH – 6.5 to 8.5 Suspended Solids Mg/Ltr. <100 COD Mg/ltr <100 BOD @ 27° C Mg/Ltr. 30.

This treated sewage collected to treated effluent storage tank (TEST) & this treated effluent is used for developing plantation/ gardening.

Executive Engineer (Civil)
AIIMS, Bhubaneswar

Civil Units, Serial Number, Unit/Equipment, Description & Quantity

- | | | | | | |
|----|--|---|---|---|---------------------------------|
| 1. | <u>Screen , O& G , Chamber Application</u> | : | MOC RCC Removal of suspended & floatable matter. After last manhole of sewage line. | = | 3 Nos. |
| 2. | <u>Sump Well & Pump House Application</u> | : | MOC RCC - Collection of Raw Sewage & Pump. After Screen Chamber. 12 Mtr. X 8 Mtr X 2.6 Mtr. | = | 1 No. |
| 3. | <u>Aeration Reactor</u> | : | BBR with plastic rongs and diffusers - MOC RCC | = | 4 Nos. |
| 4. | <u>Chemical Dilution Tank MOC RCC Separation/Settlement of Sludge from Effluent</u> | : | After Chemical dilution channel. 1.5 mtr Lx 5.0 mtr W x 4.5 mtr. RCC 2 nos Settling effluent separation tank with HDPE Tube settler medias Tank MOC RCC | = | 2 Nos. |
| 5. | <u>Storage of Semi-Treated Effluent</u> | : | After aerobic reactors and settling tanks 8 mtr x 4.5.0 mtr x 2.0 mtr width RCC | = | 2 nos
= 01 No. |

Executive Engineer (Civil)
AIIMS, Bhubaneswar

List of Mechanical Units, Serial Number, Unit/Equipment, Description & Quantity

1. Bar Screen Application Removal of suspended & floatable matter. Inside screen = **01 No.**
chamber Suitable to civil unit.
2. Raw Sewage Pump Location Type MOC Model Head Capacity Drive Make Raw = **02 Nos.**
Sewage Feed to Aeration chamber after Sump Well Non-clog, submersible KBL
3. Feed Pump Application. Location type MOC Model Head Capacity Drive Make. = **02 Nos.**
Sewage effluent feed to Moving bed bio Reactor after holding tank Non-clog,
submersible KBL
4. Pall Rings Application MBBR Unit. Location size Bulk density Medium for bacteria = -
attachment Inside moving bed reactors 28 mm dia. x 18 mm x 1.5 mm thick.
5. DO meter indicator Application Location Indication of temperature Top of MBBR = **02 Nos.**
reactors
6. Pressure indicator Application location. Indication of pressure Near raw sewage = **12 Nos.**
pumps, feed pumps, top of fixed film reactors, treated effluent discharge pump,
Media filter and filter press feed pumps.
7. Pressure relief valve. Application location Release of pressure Top of Air blowers - = **06 Nos.**
80mm
8. liquid chlorine concentrator and Dissolve oxygen monitor meter & Accessories = **02 Nos.**
9. Inter connecting. Piping location MOC Size Inter connecting STP unit. GI & HDPE 50 = **01 Lot.**
to 150 mm
10. Gate valves, Butter fly valves & non-return valves MOC Size CI and other 50 to 150 = **01 Lot.**
mm
11. MBBR Reactor. Application location Size MOC Accessories aerobic process After = **04 Nos.**
holding tanks . FB. MS Inside plastic pall ring (media) CPVC piping support for
diffused Air blow, MS ladder, safety devices. Drains & sample ports, manholes, Inlet
& Outlet etc.
12. Treated effluent discharge pump = **02 Nos.**
13. Application Location Type MOC Model Head Capacity Drive Make Discharge of = **02 Nos.**
treated effluent After treated effluent storage tank Non-clog, self-priming 20 KLH KB

***Executive Engineer (Civil)
AIIMS, Bhubaneswar***

List of Units

Ser. No.	DESCRIPTION	QUANTITY	SIZE IN METER
1	INLET CHAMBER	1	1.0 X 1.2 X 0.3+0.55
2	BAR SCREEN	1	1.5 X 1.2 X 0.3+0.45
3	OIL & GREASE TRAP	1	3.1 X 1.2 X 1.5+0.5
4	EQUALISATION TANK	1	12.5 X 6.0 X 2.5+0.55
5	MBBR-R1-R4	4	3.8 X 3.0 X 4.1+0.55
6	SETTLER	2	2.0 X 3.0 X 2.6+0.7
7	BALANCING TANK	1	6.3 X 2.0 X 3.3+0.8
8	SLUDGE HOLDING TANK	1	6.3 X 1.8 X 3.3+0.8
9	TREATED WATER TANK	1	5.0 X 15.0 X 2.0+0.3
10	SLUDGE DRYING BED	4	3.0 X 2.9 X 1.2+0.5
11	PLANT ROOM	1	14.2 X 8.3 X 3.9

Annexure - VI**Details of Manpower Required for Daily Operation & Maintenance**

Ser. No.	DESCRIPTION	Minimum Strength Required
1	Skilled Manpower	03 (Three) Persons
2	Semi-Skilled Worker	01 (One) Person
3	Un-Skilled Worker	01 (One) Person

Executive Engineer (Civil)
AIIMS, Bhubaneswar

AFFIDAVIT

(To be submitted on Letter Head of the Company/Firm)

I/We hereby certify that, the above firm has not been ever blacklisted by any Central/State Government/Public Undertaking/Institute on any account.

I/We also certify that, Firm will supply the item(s) as per the specification given by Institution and also abide all the Terms & Conditions stipulated in Tender.

I/We also certify that, the information given in Bid is true and correct in all aspects and in any case at a later date, it is found that any details provided are false and incorrect, any contract given to the concerned firm or participation may be summarily terminated at any state, the firm will be blacklisted and Institute may impose any action as per NIT Rules.

"I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee".

Business Address :-

Name :

(Signature of Bidder with Firm's Seal)

Place : _____

Dated : _____

(Specimen) **AGREEMENT**

This Agreement is made at **Bhubaneswar** on this day of 20__.

BETWEEN

Director, AIIMS, Bhubaneswar represented through Executive Engineer (Civil), AIIMS, BHUBANESWAR (hereinafter referred as the) (Address) "**Principal/Owner**", which expression shall unless repugnant to the meaning or context hereof include its success or sand permitted as signs)

AND

..... (Name and Address of the Individual/firm/Company) through (Hereinafter referred to as the (Details of duly authorized signatory) "**Bidder/Contractor**" and which expression shall unless repugnant to the meaning or context hereof include its success or sand permitted as signs)

Preamble

WHEREAS, the Principal/Owner has floated the Tender (NIT No. **AIIMS/BBSR/Engg./**____/2019-20 (herein after refer red to as "**Tender/Bid**") and intends to award, under laid down organizational procedure, contract for **Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) of Hospital Complex, AIIMS, Bhubaneswar**, hereinafter referred to as the "**Contract**".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the Land, Rules & Regulations, Economic use of resources and of fairness/ transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose afore said both the parties have agreed to enter to this Agreement (hereinafter referred to as "**Pact**"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

The Tendered Value which has been accepted by Competent Authority for "**Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) of Hospital Complex, AIIMS, Bhubaneswar.**" is Rs _____/- (Rupees _____ only).

NOW, THEREFORE, inconsideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under :-

Article - 1 : Commitment of the Principal/Owner.

1. The Principal/Owner commit itself to take all measures necessary to prevent corruption and to observe the following principles:

- (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

(b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.

(c) The Principal/Owner shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

2. If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal Code (IPC)/Prevention of Corruption Act, 1988 (P C Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article - 2 : Commitment of the Bidder(s)/Contractor(s)

1. It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standard and makes, and report to the Government/Department all suspected acts of **fraud or corruption or Coercion or Collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.

2. The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution :-

(a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind what so ever during the Tender process or during the execution of the Contract.

(b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.

(c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

(d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

(e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to, or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.

3. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

4. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice **means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.**

5. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may be fall upon a person, his/her reputation or property to influence their participation in the tendering process).

Article - 3 : Consequences of Breach.

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right :-

1. If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article-2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. **Such exclusion may before vigor for a limited period as decided by the Principal/Owner.**

2. **Forfeiture of EMD/Performance Guarantee/Security Deposit :** If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contractor has accrued the right to terminate/determine the Contract according to Article-3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.

3. **Criminal Liability :** If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article - 4 : Previous Transgression.

1. The Bidder declares that no previous transgressions occurred in the last 05 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.

2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender processor action can be taken for banning of business dealings/holiday listing of the Bidder/Contractor as deemed fit by the Principal/Owner.
3. If the Bidder/Contractor can prove that he has resorted/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/ Owner may, at its own discretion, revoke the exclusion prematurely.

Article - 5 : Equal Treatment of all Bidders/Contractors/Sub-contractors.

1. The Bidder(s)/Contractor(s) undertake(s) to demand from all sub-contractors a commitment in conformity with this Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-contractors/sub-vendors.
2. The Principal/Owner will enter in to Pacts on identical terms as this one with all Bidders and Contractors.
3. The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article - 6 : Duration of the Pact.

1. This Pact begins when both the parties have legally sign edit. It expires for the Contractor/Vendor 12 months after the completion of work under the contractor till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.
2. If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, AIIMS, Bhubaneswar.

Article - 7 : Other Provisions.

1. This Pact is subject to Indian Law, place of performance and jurisdiction is the **Bhubaneswar** of the Principal/Owner, who has floated the Tender.
2. Changes and supplements need to be made in writing. Side agreements have not be unmade.
3. If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
4. Should one or several provisions of this Pact turnout to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
5. It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Agreement/Pact, any action taken by the Owner/Principal in accordance with this **Agreement/Pact or interpretation thereof shall not be subject to arbitration.**

Article - 8 : LEGAL AND PRIOR RIGHTS.

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Pact.

IN WITNESS WHEREOF the parties have signed and executed this Pact at the place and date first above mentioned in the presence of following witnesses :-

.....
(For and on behalf of Bidder/Contractor)

WITNESSES:

.....
(Signature, Name and address)

Dated :

Place : Bhubaneswar

.....
(For and on behalf of Principal/Owner)

.....
(Signature, Name and address)

Dated :

Place : Bhubaneswar

PROFORMA OF SCHEDULES

(Separate Performa for Works in case of Composite Tenders)
(Operative Schedules to be supplied separately to each intending tenderer)

SCHEDULE 'A'

Schedule of quantities :- (ENCLOSED)

SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

Ser. No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue
(1)	(2)	(3)	(4)	(5)
NIL.				

SCHEDULE 'C'

Tools and plants to be hired to the contractor

Ser. No.	Description	Hire charges per day	Place of Issue
(1)	(2)	(3)	(4)
DELETED			

SCHEDULE 'D'

Additional Condition and specifications : Enclosed.

SCHEDULE 'E'

(Reference to General conditions of Contract.)

Name of Work : ***Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) of Hospital Complex, AIIMS, Bhubaneswar.***

Estimated Cost of Work : **Rs. 23,73,199/-**

- | | | | |
|-----|-----------------------|---|-------------------------------------|
| (a) | Earnest Money | = | <u>Rs. 48,000/-</u> |
| (b) | Security Deposit | = | <u>05% of Tendered Value</u> |
| (c) | Performance Guarantee | = | <u>05% of Tendered Value</u> |

SCHEDULE 'F'

GENERAL RULES & DIRECTIONS :

Officer Inviting Tender :- Executive Engineer (Civil), AIIMS, Bhubaneswar

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined :-

in accordance with Clause -12.2 &12.3 = 50%

Definitions

See below

2 (v)	Engineer-in-Charge	Executive Engineer (Civil) AIIMS,Bhubaneswar
2(viii)	Accepting Authority	Director AIIMS,Bhubaneswar
2(x)	Percentage on cost of materials and labor to cover all over heads and profit	15%
2(xi)	Standard Schedule of Rates	Central Public Works Department Schedule of Rates - 2016 at Delhi with up to date correction slips
9(ii)	Standard AIIMS Contract Form	GCC for CPWD Works - 2014 as amended and up to and including correction slip

Clause – 1.

- (i) Time allowed for submission of Performance guarantee, : 07 Days
Program Chart (Time & Progress) and applicable Labor
Licenses, Registration with EPFO, ESIC & BOCW Welfare
Board or proof of applying thereof from the date of issue
of letter of acceptance
- (ii) Maximum allowable Extension with late fee @ 0.1% of : 01 to 15 days.
Performance guarantee amount beyond the period
provided in (i) above.

Clause – 2.

Authority for fixing compensation under Clause 2 : Executive Engineer (Civil),
AIIMS, Bhubaneswar

Clause – 2A.

Whether Clause 2A shall be applicable : No

Clause – 5.

Time allowed for execution of work : 01 (One) Year.

Number of days from the date of issue of letter of acceptance for : 07 Days
reckoning date of start

Authority to decide fair & reasonable extension of time for : Executive Engineer (Civil)
completion of work AIIMS, Bhubaneswar

Clause – 6A.

Whether Clause 6A shall be applicable : No.

Clause – 7.

Gross work to be done together with net payment/adjustment of : Monthly/Periodical Basis.
advances for material collected, if any, since the last such payment
for being eligible to interim payment

Clause – 7A.

Whether clause 7A shall be applicable : YES.

Clause – 10.

Reinforcement steel to be used in the work shall have to be : TMT Bars manufactured by any
procured of the primary producer such as
SAIL, TISCO, RINL (VIZAG)

Clause – 10B(ii).

Whether Clause 10B(ii) shall be applicable : No.

Clause – 10C.

: Not applicable.

Clause – 10CA.

: Not applicable.

Clause – 11.

Specification to be followed for Execution of work as on the date : CPWD Specifications Volume I &
of opening of the tender. II 2009 with up to date correction
slips

Clause – 12.

12.2 & 12.3 Limit for value of any item of any individual trade : **50% (Fifty Percent)**
beyond which sub clauses (i) to (v) shall not be applicable

Clause – 16.

Competent Authority for deciding reduced rates : **Executive Engineer (Civil)**
AIIMS, Bhubaneswar

Clause – 25.

Settlement of dispute & Arbitration : **ERC headed by Director,**
AIIMS, Bhubaneswar

Clause – 36(i).

Requirement of Technical Staff and rate of recovery incase of non-compliance shall be as per the following table :-

Value of Work	Ser. No	Minimum qualification of Technical Representative	Discipline	Designation (Principal Technical/ Technical representative)	Minimum Experience in years	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36(i)	
							(Figures)	(Words)
For Agreement amount up to Rs 150 Lakhs	(a)	Graduate Engineer OR Diploma Engineer	Civil	Principal Technical representative	02 years for Graduate Engineer/ 05 years for Diploma Engineer	1	Rs 15,000/-	Rs Fifteen Thousand only
For Agreement amount between Rs 150 Lakhs to Rs 500 Lakhs	(a)	Graduate Engineer	Civil	Principal Technical representative	5 years	1	Rs 25,000/-	Rs Twenty Five Thousand only
	(b)	Graduate Engineer OR Diploma Engineer	Civil	Technical representative	02 years for Graduate Engineer/ 05 years for Diploma Engineer	1	Rs 15,000/-	Rs Fifteen Thousand only

Schedule of Quantities

AIIMS, Bhubaneswar

NIT No. : **AIIMS/BBSR/Engg./ 032 /2019-20**

Name of Work : Annual Maintenance and Operation Service of 500 KLD Sewerage Treatment Plant (STP) and 100 KLD Effluent Treatment Plant (ETP) (Round the Clock i.e. 24 x 07 for 12 Months) of Hospital Complex, AIIMS, Bhubaneswar.

Ser. No.	Description	Unit	Quantity	Rate per Unit (in Rs.)	Amount (In Rs.)
1. Maintenance & Operation					
(a)	Assistance/Support Service for Operation of 500KLD STP & 100KLD ETP capacity Round-the-Clock (24x7) Basis, 05 (Five) Persons to be engaged by the Agency for O&M work including making clean inside and outside around STP&ETP, Tools/ Tackles and all Manpower comprises as per the instruction of Engineer-in-Charge	Per Month	12		
(b)	On Call Service Expert	Per Day	18		
(c)	On Call Service Welder/Fitter with Machine	Per Day	18		
2. Supply of Consumable And Spare Parts (As when required item) estimated for 12 Months					
(a)	NACL @ 120 Kg/Regn.	Kg	2400.000		
(b)	Coagulant(Alum) @ 3Kg/Day	Kg	1200.000		
(c)	Nutrient Urea @ 600 Gm/Day	Kg	220.000		
(d)	Nutrient DAP @ 300 Gm/Day	Kg	115.000		
(e)	Biocides(Bacteria) @ 300 Gm/Day	Kg	115.000		
(f)	Hypochlorite Solution @ 1000 Gm/Day	Kg	365.000		
(g)	Calcium Hydroxide / Lime	Kg	700.000		
(h)	Grease & Lubricant, Gland Pickings' etc.	Kg	12.000		
(j)	Mobile & Gear Oils	Ltr.	80.000		
(k)	80mm Dia. CI Flange Type Non-Return Valve	Nos.	04		
(l)	80mm Dia CI Flange Type Butter Fly Valve	Nos.	04		
(m)	C.I. Coupling for Pump & Motor	Nos.	06		
(n)	Wide Range pH Test Paper Strip & Lab Chemicals	Nos.	240		
(o)	UPVC/PVC Discharge Pipe (63mm, 80mm Corrugated Suction Hose)	Mtr.	100		
(p)	Nut Bolts / Gaskets / rubber	Set	12		
(q)	Gate Valve Coupling 63mm / 80mm with Fittings	Nos.	06		
(r)	Anti Corrosive Paint EPOXY	Sq. M	150		
(s)	Butterfly Valve 80mm	Nos.	03		
(t)	Filter Media	Kg	800.000		
(u)	Carbon	Kg	400.000		
(v)	Softing Resin	Ltr.	300.000		
(w)	Top & Bottom Distributors with Fittings	Nos.	06		
(x)	Motor Coil Winding, Varnishing Instalation Charge Complete	Nos.	03		
(y)	Ozonator for (3/5/10 HP)/Fan/Card/PCB/ Blow Plates	Nos.	03		
(z)	Oxygenator 20hv Resin/Card/Compressor	Nos.	02		
(aa)	Pumb SS Impeller Shaft, Mechanical Seal, Locknut all complete for 5HP Motor	Nos.	03		

GRAND TOTAL (in figures) = _____

(The Rates quoted should be inclusive of GST as applicable)

(In Words) =(Rupees _____ only)

E-Tendering Instructions to Bidder(s)

General.

The Special Instructions (for e-Tendering) supplement 'Instruction to Bidders', as given in this Tender Document. Submission of Online Bids is mandatory for this Tender. E-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. Suppliers / Vendors will be the biggest beneficiaries of this new system of procurement. For conducting electronic tendering, AIIMS BHUBANESWAR has decided to use the portal www.tenderwizard.com /AIIMSBBSR through an ASP, M/s. ITI Ltd., Bhubaneswar.

Instructions.

1. **Tender Bidding Methodology.** Two Stage Online Bidding.
2. **Broad outline of activities from Bidders prospective:**
 - (a) Procure a Class III Digital Signature Certificate (DSC).
 - (b) Register on the e-Procurement portal www.tenderwizard.com/AIIMSBBSR.
 - (c) Create Users on the above portal.
 - (d) View Notice Inviting Tender (NIT) on the above portal.
 - (e) Download Official Copy of Tender Documents from the above portal.
 - (f) Seek Clarification to Tender Documents on the above portal. View response to queries of bidders, posted as addendum, by AIIMS, Bhubaneswar.
 - (g) Bid-Submission on the above portal.
 - (h) Attend Public Online Tender Opening Event (TOE) on the above portal - Opening of Technical Part.
 - (j) Post-TOE Clarification on the above portal (Optional) – Respond to AIIMS, Bhubaneswar's Post-TOE queries.
 - (k) Attend Public Online Tender Opening Event (TOE) on the above portal - Opening of Financial Part (Only for Technical Responsive Bidders).

For participating in this tender online, the following instructions are to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the above portal.

3. **Digital Certificates.** For integrity of data and authenticity / non-repudiation of electronic records, and to be compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC), also referred to as Digital Signature Certificate (DSC), of Class III, issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer <http://www.cca.gov.in>].
4. **Registration.** To use the Electronic Tender portal www.tenderwizard.com/AIIMSBBSR, vendors need to register on the portal. Registration of each organization is to be done by one of its senior persons vis-à-vis Authorized Signatory who will be the main person coordinating for the e-tendering activities. In the above portal terminology, this person will be referred to as the Super User (SU) of that organization. For further details, please visit the website/portal, and follow further instructions as given on the site. Pay Annual Registration Fee as applicable. (Rs 2000+ GST as applicable)

Note. : After successful submission of Registration details and Annual Registration Fee, please contact to the Helpdesk of the portal to get your registration accepted/ activated.

- (a) The Bidder must ensure that after following above, the status of bid submission must become - "Submitted".
- (b) Please take due care while scanning the documents so that the size of documents to be uploaded remains minimum. If required, documents may be scanned at lower resolutions say at 150 dpi. However it shall be sole responsibility of bidder that the uploaded documents remain legible.
- (c) It is advised that all the documents to be submitted are kept scanned or converted to PDF format in a separate folder on your computer before starting online submission.
- (d) The Financial part/BOQ may be downloaded and rates may be filled appropriately. This file may also be saved in a folder on your computer. Please don't change the file names & total size of documents (Preferably below 5 MB per document) may be checked.

5. Bid submission. The entire bid-submission would be online on the Tender wizard portal i.e. <https://www.tenderwizard.com> /AIIMS, Bhubaneswar.

6. Broad outline of submissions are as follows :-

- (a) Submission of Bid Parts (Technical & Financial).
- (b) Submission of information pertaining to Bid Security/ EMD.
- (c) Submission of signed copy of Tender Documents/Addendums.

7. The TECHNICAL PART shall consist of Electronic Form of Technical Main Bid and Bid Annexure. Scanned/Electronic copies of the various documents to be submitted under the Eligibility Conditions, offline submissions, instructions to bidders and documents required to establish compliance to Technical Specifications and Other Terms & Conditions of the tender are to be uploaded.

8. The FINANCIAL PART shall consist of Electronic Form of Financial Main Bid and Financial Bid Annexure, if any. Scanned copy of duly filled price schedule (Section VII) for both packages are to be uploaded. If required, additional documents in support of taxes, quoted duties etc may also be uploaded.

9. Tender Processing Fee. You pay processing fee (0.1% of ECV + GST as applicable (Min. 750/- & Max 7500/- + GST as applicable)) through online (Credit card/ Debit card/ Net Banking), when participating in the e-tender.

10. Public Online Tender Opening Event (TOE). The e-Procurement portal offers a unique facility for 'Public Online Tender Opening Event (TOE). Tender Opening Officers as well as authorized representatives of bidders can attend the Public Online Tender Opening Event (TOE) from the comfort of their offices. For this purpose, representatives of bidders (i.e. Supplier organization) duly authorized. Every legal requirement for a transparent and secure 'Public Online Tender Opening Event (TOE)' has been implemented on the portal. As soon as a Bid is decrypted, the salient points of the Bids are simultaneously made available for downloading by all participating bidders. The medium of taking notes during a manual 'Tender Opening Event' is therefore replaced with this superior and convenient form of 'Public Online Tender Opening Event (TOE)'. The portal a unique facility of 'Online Comparison Statement' which is dynamically updated as each online bid is opened. The format of the Statement is based on inputs provided by the Buyer for each Tender. The information in the Comparison Statement is based on the data submitted by the Bidders. A detailed Technical and / or Financial Comparison Statement enhance Transparency. Detailed instructions are given on relevant screens. The portal has a unique facility of a detailed report titled 'Online Tender Opening Event (TOE)' covering all important activities of 'Online Tender Opening Event (TOE)'. This is available to all participating bidders for 'Viewing/Downloading'. There are many more facilities and features on the portal. For a particular tender, the screens viewed by a Supplier will depend upon the options selected by the concerned Buyer.

Important Note. *In case of internet related problem at a bidder's end, especially during 'critical events' such as – a short period before bid-submission deadline, during online public tender opening event it is the bidder's responsibility to have backup internet connections. In case there is a problem at the e-procurement / e-auction service-provider's end (in the server, leased line, etc) due to which all the bidders face a problem during critical events, and this is brought to the notice of AIIMSBSR by the bidders in time, then AIIMS, Bhubaneswar will promptly reschedule the affected event(s).*

9. Other Instructions. For further instructions, the vendor should visit the home-page of the portal. The complete help manual is available in the portal for Users intending to Register / First-Time Users, Logged-in users of Supplier organizations. Various links are also provided in the home page.

Important Note. : *It is strongly recommended that all authorized users of Supplier organizations should thoroughly peruse the information provided under the relevant links, and take appropriate action. This will prevent hiccups and minimize teething problems during the use of the said portal.*

The following 'FOUR KEY INSTRUCTIONS for BIDDERS' must be assiduously adhered to :-

1. Obtain individual Digital Signature Certificate (DSC) well in advance of your first tender submission deadline on the portal.
2. Register your organization on the portal well in advance of your first tender submission deadline on the portal
3. Get your organization's concerned executives trained on the portal well in advance of your first tender submission deadline on the portal
4. Submit your bids well in advance of tender submission deadline on the portal (There could be last minute problems due to internet timeout, breakdown etc).
5. While the first three instructions mentioned above are especially relevant to first-time users on the portal, the fourth instruction is relevant at all times. Minimum Requirements at Bidders end Computer System with good configuration (Min P IV, 1 GB RAM, Windows XP) Broadband connectivity. Microsoft Internet Explorer 8.0 or above. Digital Certificate(s) Vendors Training Program Necessary training to each and every registered bidder under this portal shall be impacted by the ASP, M/s. ITI, Bhubaneswar, if required, before participation in the online tendering.
6. For any further assistance, please contact Mr. Swadesh Bala (07008064095 / 07377708585), Helpdesk - 011-49424365 ITI email ID for mailing communication:- twhelpdesk404@gmail.com / twhelpdesk680@gmail.com / twhelpdesk605@gmail.com.