

**Avadi City Municipal Corporation
Chennai, Tamil Nadu**

Tender Document

for

**DESIGN AND CONSTRUCT A PURIFICATION
EQUIPMENT WITH GREY WATER TREATMENT
AT CTH-AMBATTUR LAKE (40 KLD CAPACITY)
AT AVADI CITY MUNICIPAL CORPORATION
INCLUDING OPERATION AND MAINTAIN FOR A
PERIOD OF 5 YEARS**

**Avadi City Municipal Corporation
Chennai , Tamil Nadu**

TENDER DOCUMENT

COMPETITIVE BIDDING

NAME OF THE WORK	:	Design and Construct a Purification Equipment with Grey Water Treatment at CTH-Ambattur Lake (40 KLD Capacity) at Avadi City Municipal Corporation including operation and maintain for a period of 5 years
VALUE PUT TO TENDER	:	Rs.110.00 lakhs
E.M.D	:	Rs.1,10,000/- (Equivalent to 1% contract value) in favour of the Commissioner of Avadi City Municipal Corporation. payable at The Commissioner of Avadi City Municipal Corporation
BID PROCESSING FEES	:	Rs.5,000/-
PRE- BID MEETING	:	@ Office of the Commissioner of Avadi City Municipal Corporation at 11.00 AM on 10.01.2023
LAST DATE AND TIME FOR DOWN LOADING OF BID DOCUMENT	:	19.01.2023 Upto 3.00 Pm
LAST DATE AND TIME FOR RECEIPT OF BID	:	19.01.2023 Time :3.00 Pm
TIME AND DATE OF OPENING OF BIDS	:	19.01.2023 Time :3.30 Pm
PLACE OF OPENING OF BIDS	:	The office of Avadi City Municipal Corporation , Chennai , Tamil Nadu
OFFICER INVITING BIDS	:	The office of Avadi City Municipal Corporation , Chennai , Tamil Nadu

CHECK LIST FOR SUBMISSION OF BID

Bidder shall check the submission of relevant details and documents as mandated in the tender document, before submission of bids.

S NO	Compliance criteria as per clause	Details	Check
1	15.15.1	Earnest Money Deposit Whether Earnest Money Deposit at 1% of the contract value of work put to tender in the form of Banker's cheque, Demand Draft enclosed? (EMD in any other form will not be accepted)	YES / NO
2	4.1.A.1	Whether copy of Certificate of registration as class I contractor in TWAD/CMWSSB, valid certificate to be enclosed	YES / NO
3	4.1.A.2	Whether the firm to have prior experience and expertise in developing and / or designing and constructing and operating waste water, septage management, solid waste management projects in India. The Bidder should have commissioned at last Two project of the above specified in the last 3 (Three) years. Copies of firm orders/ contract along with Certificates, if any, issued by Government Organizations / Municipal Corporations or their equivalent / private entities to demonstrate its experience of developing / commissioning and operating the project in the last 5 (five) years and civil Engineering construction ((2017-18 to 2021-22)) enclosed?	YES / NO
4	4.1.A.3	Whether Proof for having an annual minimum financial turnover of not less than 50% of the value put to tender in a financial year in the preceding "Three" years ((2019-20 to 2021-22)) enclosed?	YES / NO
5	4.1.A.4	Whether prof for having satisfactory completed Liquid Waste Management and Civil Work(s) of not less than 50% of the value put to tender under a " single agreement " in any one of the preceding years ((2019-20 to 2021-22)) for a Government Department/Board/Government Undertaking enclosed?	YES / NO
6	4.1.A.5	Whether proof of the applicant for having working capital sufficient of finance at least 15% of value put to tender enclosed? [Working capital will be calculated by adding the amount available in the bank account of the applicant on the date if submission of application and the unutilized amount of overdraft / credit facility extended to the applicant by the Nationalized / Scheduled banks]	YES / NO
7	4.1.B	Whether all the certificates are Notarized?	YES / NO
8	4.1.C & D	Whether the proof/details of availability of Contractor's Major Equipments proposed for carrying out the works enclosed?	YES / NO

9	Annex 3	Whether Proof of OEM or Dealership Certificate from the OEM or Manufacturer's Authorization Letter	YES / NO
10	General	Whether the latest GST return enclosed?	YES / NO
11	General	Details of EPF and ESIC registration details and payment done proof for last 3 months from the date of tender published date	YES / NO
12	General	Whether Power of attorney / Authorization for	YES / NO
		• Persons signing the Tender enclosed?	YES / NO
		• For partner – in- charge if any, enclosed?	YES / NO
13		Whether the bidder has signed in all the pages of the tender document?	Yes/No
14	D.18.1 and 18.2	<p>Sealing and Marking of Bids in case of manual submission</p> <p>a. Whether the cover containing EMD, qualification and information etc., has been super scribed as “Technical Bid”?</p> <p>b. Whether the other cover containing the duly filled in tender schedule is super scribed as “Price Bid”?</p> <p>c. Whether the bids are put in 2 separate covers and outer cover is sealed?</p> <p>d. Whether both these covers are put in a single big envelope and bear the following identification:</p> <p>“Tender for Design and Construct a Purification Equipment with Grey Water Treatment at CTH-Ambattur Lake (40 KLD Capacity) at Avadi City Municipal Corporation including operation and maintain for a period of 5 years Bid Reference No. 9595/2021/E1</p> <p>DO NOT OPEN BEFORE 3.30 PM on 19.01.2023</p>	<p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p>

Disclaimer: This Check list is only illustrative and not exhaustive. Hence, the bidder is requested to go through the entire Document and submit all relevant documents and details.

Bidder's Signature

**Avadi City Municipal Corporation
Chennai , Tamil Nadu**

COMPETITIVE BIDDING

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INVITATION FOR BID

Avadi City Municipal Corporation
Chennai , Tamil Nadu
INVITATIONS FOR BIDS

Tender Notice No.

The Commissioner of Avadi City Municipal Corporation invites the bids from the competitive bidders for Establish a Grey Water Treatment Plant near the 40 KLD Capacity Compact, Ready To Install Type GWTP at CTH-Ambattur Lake in Avadi City Municipal Corporation Area to protect the Lake from entry of untreated waste water under General fund. Necessary Council Resolution and Administrative Sanction have been accorded.

Name of work: Design and Construct a Purification Equipment with Grey Water Treatment at CTH-Ambattur Lake (40 KLD Capacity) at Avadi City Municipal Corporation including operation and maintain for a period of 5 years

1. Form of contract : Single stage Two cover Tender system on EPC mode.
2. Period of sale of Bid documents From : From **04.01.2023 to 19.01.2023**
3. Bid Documents available with : The bid documents can be downloaded from the website **<https://tntenders.gov.in>**,
4. Last date and time, for submission of Bid Documents : 3.00pm on **19.01.2023**
5. Date and Time of Opening of Technical Bids(Cover – I) : 3.30pm on **19.01.2023**
6. Project Completion period : 3 Months
7. Bid/Application Should found enclosed with DD for EMD of **Rs.1,10,000/-** and DD for **Rs.5,000/-** as Non-Refundable RFP document cost, in favour of the Commissioner , Avadi City Municipal Corporation Payable at Chennai .
8. The qualification Criteria please refers section I of this document.

Commissioner/TIA

SECTION 1:
INSTRUCTIONS TO BIDDERS

SECTION 1:

INSTRUCTIONS TO BIDDERS

A. General

1. Scope of Bid

- To Maintain the Arabath Lake without intrusion of untreated waste water by any means
- To Monitor the flow of Grey water without any fecal sludge
- To Establish Grey water treatment facility near Arabath Lake in Avadi to ensure the entry of treated waste water by maintain the TNPCB standards.
- To operate and maintain the Grey water Treatment Facility sustainably by creating a quality control monitoring system.

2. Role of the successful Bidder:

- 2.1 **Quantity analysis** : Surveying the Households letting out the Grey water into the storm water drain which leads to the lake and quantifying the Grey water to be treated before letting to the lake
- 2.2 . **Quality analysis**: Samples of Grey water from the lead channel / storm water drain has to be collected at least in three different location and quality analytical tests to know the physical, chemical and biological parameter has to be conducted and shall be compared with the quality of inlet grey water already analyzed and furnished as base line data by the Corporation in Table 1.
- 2.3 **Methodology**: Suggest and provide a suitable technology to treat the Grey water so as to satisfy the physical and chemical parameter to the standard of TNPCB as indicated in Table 1.
- 2.4 **Design and detailed Drawing**: Design the Plant with modern technology and its components requirement to treat the 40 KLD of Grey water to achieve the TNPCB standards shall be submitted with detailed drawing and Land requirement details for the approval of Engineer appointed by the Tender inviting authority.
- 2.5 **Estimation**: List out the Equipments, Electrical instruments, Filter units Aeration units , other related civil structures like screen well, collection well, settling tank etc., proposed as per the technology, methodology suggested by the bidder and should get the approval of Engineer appointed by the Tender inviting authority. Estimate the cost equipment as per the approved list
- 2.6 **Procumbent and Construction**: Procure the equipments and electrical instruments and pipes as per the specification approved by the Department Engineer and carry out the construction of civil structures as per the standard specification.

2.7 **Commissioning:** The successful bidder will be expected to complete the works by the intended completion date specified in the Contract data and Train run should be done and necessary capacity building for the Corporation staff to be provided.

2.8 **Operation and Maintenance:** The Grey water Treatment established to the capacity of 40 KLD to be operated and maintained sustainably for a period of 5 years for the quoted processing fee in the financial quote II, by executing separate agreement

2.9 **Sustain the outcome:** The successful bidder should establish a lab and should collect sample in the inlet and out let points daily three times and to furnish the test report on various vital parameter insisted by the TNPCB.

Table 1 Showing the Parameter of Waste water at inlet and the expected standard at outlet

PARAMETER	UNIT	INLET	OUTLET
Flow	M3/day	5	5
pH	-	6.5-7.5	6.5-7.5
Suspended Solids (TSS)	Mg/L	50-100	<20
BOD (3 days @ 270C)	Mg/L	300	< 10
COD	Mg/L	450	< 50
Total Kjeld Hal Nitrogen (TKN)	Mg/L	-	< 05
Fecol Coliform	-	-	< 01

3 Role of the Corporation

3.1 To maintain the Storm water drain without sewage outflow

3.2 To Scrutiny the methodology and technology proposed by the bidders and select the technology without affecting the Socio Environment condition

3.3 To provide adequate land for establish the treatment facility as finalized.

3.4 To monitor the quality of lake water in the outlet point of the treated waste water

3.5 To provide the cost of construction of the treatment facility as estimated by the department engineers or as per the proposal, claim of the successful bidder, whichever is less.

3.6 To provide processing fee for sustainable operation and maintenance.

4. Source of Funds

Corporation Proposed to execute the facility and maintain the same from the 15th CFC fund with regular budgetary provision by obtain the necessary council resolution.

5. Qualification Criteria

(a) Technical Eligibility

- i. The Bidder shall be any person, Company, Corporate body, Joint Venture, Limited Company, Firm, and Organizations from India who are legally competent and entitled for entering into contract as per the law of contract prevailing in India.
- ii. The bidders having similar nature of work experience in execution and commissioning of Sewage Treatment Plant, Grey water Treatment plant with a minimum installed capacity of 50 percentage of proposed capacity in a single project in any city in India in the last 5 years.
- iii. The bidder should have experience in Operation and Maintenance of minimum 40 KLD capacity STP or GWTP in any one ULB in the past 3 years
- iv. The Bidder should submit copy of Manufacturer certificate/ Dealership certificate /Incorporation certificate/ Proprietorship copy & GST certificate are mandatory. Copy of this document necessary for execution of work.
- v. Should possess at least two Engineers with qualification of Bachelor Degree Civil/ Mech/ Environmental Engineering (with 5 years qualification) or Diploma in Civil/ Mech/ Environmental Engineering (with 10 years qualification) and having experience in the project related field
- vi. The Bidder should have Registration of ESI and EPF

(b) Financial Eligibility

- vii. The bidder should submit copy of latest Income Tax returns i.e. last financial year submitted to IT Dept. along with proof of its submission.
- viii. The bidder should have an average annual turnover equal to 100% of the value work put to tender of the proposed project, in the last three financial years and the same should be certified by a chartered accountant
- ix. The bidder should have net worth of minimum equal to 100% of the value work the same should be certified by a chartered accountant.

6. Rejection

- (a) The bidder must submit proof for all the above for evaluation in cover Technical Bid.
- (b) The certificate of performance/ work completion certificate indicating the required capacity of the GWTP/STP mentioned in the technical eligible criteria should be obtained not below the rank of Executive Engineer and submitted in cover Technical Bid.
- (c) The proof for the Annual financial turnover and net worth the certificates should be obtained from registered Chartered Accountant and submitted in cover Technical Bid
- (d) The above should be furnished in **Technical Bid -Cover** with necessary proof and Technology proposal

(e) The Bid Received without Proof of any one of above required eligible Criteria will be rejected and will not be considered for further Evaluation Process.

7. One Bid per Bidder

Each bidder shall submit only one bid for one work. A bidder who submits or participates in more than one Bid (other than as a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

8. Cost of Bidding

The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

9. Site visit

The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the proposal and Bid and entering into a contract for Supply of Equipments and Construction of the Grey water Treatment facility. The cost of visiting the Site shall be borne by the Bidder.

B. Bidding Documents

10. Content of Bidding Documents

10.1 The set of bidding documents comprises the documents listed in the table below and addenda issued in accordance with Clause 12: Invitation for Bids Sections

1	Instructions to Bidders	5	Specifications
2	Forms of Bid and Qualification Information	6	Bills of Quantities
3	Conditions of Contract	7	Forms of Securities
4	Contract Data		

11. Clarification of Bidding Documents

11.1 A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing or by cable (hereinafter "cable" includes telex, email and facsimile) at the Employer's address indicated in the invitation to bid. The Employer will respond to any request for clarification which is received at least 7 days prior to the deadline for submission of bids. Copies of the Employer's response will be forwarded to all purchasers of the bidding documents, including a description of the enquiry but without identifying its source.

11.2 Pre-bid meeting

11.2.1 The bidder or his authorized representative is invited to attend a pre-bid meeting if necessary which will take place at the office of The Commissioner Avadi City Municipal Corporation, on **10.01.2023** at 11:00 AM.

11.2.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

11.2.3 The bidder is requested to submit any questions in writing or by cable to reach the Employer not later than three days before the meeting.

11.2.4 Minutes of the meeting, including the text of the questions rose (without identifying the source of enquiry) and the responses given will be transmitted without delay to all purchasers of the bidding documents. Any modification of the bidding documents listed in Sub-Clause 12.1 which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 12 and not through the minutes of the pre-bid meeting.

11.2.5 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

12. Amendment of Bidding Documents

12.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda.

- 12.2** Any addendum thus issued shall be part of the bidding documents and shall be communicated in writing or by cable to all the purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum by cable to the Employer.
- 12.3** To give prospective bidders reasonable time to take an addendum into account in preparing their bids, the Employer shall extend as necessary the deadline for submission of bids, in accordance with Sub-Clause 22 below.

C. Preparation of Bids

13. Language of the Bid

13.1 All documents relating to the bid shall be in the English language.

14. Documents comprising the Bid

14.1 The bid submitted by the bidder shall comprise the following:

(i) **Cover A**

(a) The Bid (in the format indicated in Section 2)

(b) Bid Security (EMD);

(c) Qualification Information Form and Documents

(d) **Technical Proposal, Methodology, Estimation, schematic diagram and land requirement**

(ii) **Cover B**

Priced Bill of Quantities;

And any other materials required be completing and submitting by bidders in accordance with these instructions. The documents listed under Sections 2, 4 , 7 and 8 shall be filled in without exception.

14.2 Bidders bidding for this contract together with other contracts stated in the form of package will so indicate in the bid together with any discounts offered for the award of more than one contract.

15. Bid Prices

15.1 The contract shall be for the whole works as described in the scope of works and as per the successful bidder technical proposal accepted by the Tender Inviting authority based on the priced Bill of Quantities submitted by the Bidder.

15.2 The bidder shall fill in rates and prices and line item total (both in figures and words) for all items of the Works described in the **Bill of Quantities** along with total bid price (both in figures and words). for the individual *Items for which rates or prices is submitted in separate sheet in the Price bid cover by the bidder , based on that without exceeding the total rate quoted in the BOQ pymen will made according to mile stone by the Employer .*

15.3 The rates and prices quoted by the bidder shall be fixed for the duration of the Contract and shall not be subject to adjustment on any account except on account of change occurring in laws or taxes.

16. Currencies of Bid and Payment

16.1 The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees.

17. Bid Validity

17.1 Bids shall remain valid for a period not less than one twenty days after the deadline date for bid submission specified in Clause 22. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.

17.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request to extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid except as

provided in 17.3 hereinafter, but will be required to extend the validity of his bid security for a period of the extension, and in compliance with Clause 16 in all respects.

17.3 Bid evaluation will be based on the bid prices without taking into consideration the above correction.

18. Earnest Money Deposit – EMD

18.1 The Bidder shall furnish, as part of his Bid, Earnest Money Deposit at 1% (rounded off to next ten rupees) of the contract value of work put to tender. This bid security shall be in favor of **The Commissioner Avadi City Municipal Corporation**, and should be in the form of Demand Draft from any nationalized bank or scheduled banks payable at Chennai, drawn on or before **19.01.2023 15.00** hours on bid submission date.

18.2 The following categories of industries are exempted from payment of Earnest Money Deposit.:

- a. The Small Scale Industrial units located within the State and Registered with the Tamil Nadu Small Industries Development Corporation.
- b. The Small Scale Industrial units located within the State and Registered with National Small Industries Corporation (NSIC)
- c. The SSI units holding Permanent Registration certificate from the District Industries Centers of Directorate of Industries and Commerce in respect of those items for which the Registration Certificate has been obtained.
- d. Tiny Industries classified under SSI, registered with the State of Tamil Nadu, and Registration Certificate issued by Department of Industries and Commerce/Government of Tamil Nadu.
- e. Industries exempted from payment of EMD shall enclose duly attested Photostat copy of their Registration Certificate showing any one of the subject materials specifying capacity which they are permitted to manufacture and the period of validity of the certificate as proof of eligibility for exemption from payment of EMD.
- f. Those Tenderers who are exempted from payment of E.M.D shall furnish in lieu of EMD an undertaking in a non-judicial stamp paper of value not less than Rs. 100.00 (Rupees hundred only) in the prescribed format, as per Annexure furnished in this document, to the effect to pay penalty an amount equivalent to EMD in the event of non-fulfillment or non-observance of any of the conditions stipulated in the contract consequent to such breach of contract.
- g. Undertaking and proof of exemption of EMD shall be kept in the EMD cover as specified in clause 14.1. **TENDERS RECEIVED WITHOUT PROOF FOR EXEMPTION OF EMD AND UNDERTAKING WILL NOT BE READOUT AND WILL BE REJECTED SUMMARILY**
- h. Any bid not accompanied by an acceptable Bid Security shall be rejected by the Employer as non-responsive.**

18.4 The Bid Security of unsuccessful bidders will be returned on application within 28 days of the end of the bid validity period specified in Sub-Clause 17.1.

18.5 The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security only on application.

18.6 The Bid Security may be forfeited

- (a) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity;

- (b) If the Bidder does not accept the correction of the Bid Price, pursuant to Clause 29; or
- (c) In the case of a successful Bidder, if the Bidder fails within the specified time limit to
 - (i) Sign the Agreement; or
 - (ii) Furnish the required Performance Security.

19. Alternative Proposals by Bidders

19.1 Bidders shall submit offers that comply with the requirements of the bidding documents, including the basic technical design as indicated in the drawing and specifications. Alternatives will not be considered.

20. The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

D. Submission of Bids

21. Sealing and Marking of Bids

- i. Bidders shall **submit their bid through online e-Procurement Mode.**
- ii. Bidder should do the registration in the e – tender site using the option available. Then the Digital signature registration has to be done with the e-token, after logging into the site. The e-token may be obtained from one of the authorized Certifying authorities such as SIFY/TCS/n Code etc. The list of address of the DSC vendors can be seen in
 - a. **[https://tntenders.gov.in/nicge/app?component=%24DirectLink_1&page=DSCInfo & service =direct&session=T&sp=SDSCAddress.pdf](https://tntenders.gov.in/nicge/app?component=%24DirectLink_1&page=DSCInfo&service=direct&session=T&sp=SDSCAddress.pdf)**
- iii. Bidder then should login to the site using user id and the corresponding passwords.
- iv. The e-token that is registered should be used by the bidder and should not be misused by others.
- v. After downloading the tender schedules, the Bidder should go through them carefully and then submit the documents as directed; otherwise, the bid will be rejected.
- vi. If there are any clarifications, this may be obtained online through the e-tender site, or thro' the contact details. Bidder should take into account the corrigendum published before submitting the bids online.
- vii. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender schedule and they should be in the prescribed format. In the case of offline payment, the details of the D.D physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the bid submitted will not be acceptable.
- viii. The bidder should read all the terms & conditions mentioned in the bid document and accept the same to proceed further to submit the bids.
- ix. The Bidder has to submit the tender document online well in advance before the prescribed time to avoid any delay or problem during the e-submission process.
- x. The details of the bid security document should be submitted physically before the opening the tender. The scanned copies furnished at time of e-submission and the original bid security should be the same otherwise the tender will be summarily rejected.

- xi. **The Commissioner, Avadi City Municipal Corporation** will not be held responsible for any sort of delay or the technical difficulty faced in the submission of tenders online by the bidders.
- xii. The bidder may also submit the bid documents by online mode through the site (<https://tntenders.gov.in>)
- xiii. The tendering system will give an ACKNOWLEDGEMENT Message only after successful uploading of all the required bid documents. The ACKNOWLEDGEMENT is the bid summary. With the Bid No., Date & Time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed with the e-token of the bidder and then submitted.
- xiv. The ACKNOWLEDGEMENT should be printed and to be kept as a token of the submission of the bid. The ACKNOWLEDGMENT will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening date.
- xv. Bidder should log into the site well in advance for bid submission so that he submits the bid in time i.e. on or before the bid submission time. If there is any delay, due to other issues, bidder only is responsible.
- xvi. Each document to be uploaded thro' online for the tenders should be less than 2 MB, If any document is more than 2 MB, it can be reduced through zip format and the same can be uploaded. It may be however noted that. If the file size is less than 1MB the transaction uploading time will be very fast.
- xvii. The time setting fixed in the server side & displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system. The bidders should follow this time only, during bid submission.
- xviii. All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not viewable by unauthorized persons during bid submission & not be viewable by anyone until the time of bid opening. Overall, the submitted tender documents become readable only after the tender opening by the authorized individual.
- xix. The Confidentiality of the bids is maintained since the secured Socket layer 128 bit encryption technology is used. Data storage encryption of sensitive fields is done.
- xx. The bidders are requested to upload all related documents through e-tendering on line system to the tender inviting authority well **before 3.00 PM** (as per Server System Clock) **on 19.01.2023**

- xxi. Tender document shall be submitted in the designated two cover system on the e-Tender website on or before due date. The cover A shall contain the technical bid documents, supporting material relating to the eligibility criteria, Bid Security in the proper form, and other connected Certificates. The cover B shall contain the price bid alone.
- xxii. Tenders will be opened by the Tender inviting authority or his authorized officer(s) at **3.30 P.M. on 19.03.2022** in the presence of tenderers or their authorized representatives if any & members of Tender Scrutiny Committee.
- xxiii. No indication direct or indirect, implicit or explicit regarding the rates and prices should be made in the technical bid or any other documents submitted in the first cover.

22. Deadline for Submission of the Bids

- 22.1** Bids must be uploaded in the specified web site not later than 03.00 PM on **19.03.2022**. In the event of the specified date for the submission of bids being declared a holiday for the Employer, the Bids will be received up to the appointed time on the next working day.
- 22.2** The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 12, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

23 Late Bids

- 23.1** Any bid received by the Employer after the deadline for submission of bids will not be accepted.

24. Modification and Withdrawal of Bids

- 24.1** The tenderer may modify, substitute or withdraw their tender after submission by giving notice in writing before the deadline prescribed in **Clause 22**.
- 24.2** Each Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 21 & 22, with the outer and inner envelopes additionally marked "**MODIFICATION**" or "**WITHDRAWAL**", as appropriate.
- 24.3** No bid may be modified after the deadline for submission of Bids.
- 24.4** Withdrawal or modification of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity specified in Clause 17.1 above or as extended pursuant to Clause 17.2 may result in the forfeiture of the Bid security pursuant to Clause 18.
- 24.5** Bidders may only offer discounts to, or otherwise modify the prices of their Bids by submitting Bid modifications in accordance with this clause, or included in the original Bid submission.

E. Bid Opening and Evaluation

25. Bid Opening

25.1 The Tender Inviting Authority Will open all the bids received (Except those received late) On the due date and appointed time as specified in Clause 21, xxii the Employer will first open Technical bids *in e- Procurement Mode* including modifications made pursuant to clause 24 in presence of the Bidders or their representatives who choose to attend. In the event of the specified date for Bid opening declared a holiday by the Employer, the Bids will be opened at the appointed time and location on the next working day. The tender will be opening at the office of Commissioner, Avadi City Municipal Corporation.

25.2 The Employer shall prepare minutes of the Bid opening, including the information disclosed to those present.

26. Process to Be Confidential

26.1 Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

27. Clarification of Bids

27.1 To assist in the examination, evaluation, and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakup details of the unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 29.

27.2 Subject to sub-clause 27.1, no Bidder shall contact the Employer on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, should do so in writing.

27.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

28. Examination of Bids and Determination of Responsiveness

28.1 Prior to the detailed evaluation of Bids, the Employer will determine whether each Bid (a) meets the eligibility criteria/ qualification criteria defined in Clause 5; (b) has been properly signed; (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Bidding documents.

28.2 A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

28.3 If a Technical Bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

29. Correction of Errors

29.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:

- (a) where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and
- (b) where there is a discrepancy between the unit and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.

29.2 The amount stated in the Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security should be forfeited in accordance with Sub-Clause 18.6 (b).

30. Evaluation and Comparison of Bids

30.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause 28. The evaluation will be done on QCBS basis as detailed below:

Sl.No.	Qualification criteria	Proof	weightage	Max marks
1	The Bidder should submit copy of Manufacturer certificate/ Dealership certificate /Incorporation certificate/ Proprietorship copy/ Contractor registration certificate & GST certificate is mandatory. Copy of this document necessary for execution of work.	Relevant certificate and documents	10	10

2	The bidders having similar nature of work experience in Design, Engineering, execution and commissioning of Sewage Treatment Plant / Grey Water Treatment Plant with a minimum installed capacity of 50 percentage of proposed capacity in a single project in any city in India in the last 5 years.	Experience certificate obtained not below the rank of Executive Engineers	10	10
3	The bidder should have experience in Operation and Maintenance of minimum 40 KLD capacity STP or GWTP in any one ULB in the past 3 years	Experience certificate obtained not below the rank of Executive Engineers	10	10
4	The Methodology and Technology proposed (to be submitted with schematic diagram, components suggested, and Estimation cost, Time schedule for execution and land requirement) Installation and Operation/Maintenance methodology should be provided.	Submitted with Technical Proposal	Methodology with schematic diagram -5 Technology with component 20 Estimation 5 Land requirement 5 (for lesser area will score higher points) Operation & Maintenance 5	40
5	Should possess at least two Engineers with qualification of Bachelor Degree Civil/ Mech/ Environmental Engineering (with 5 years qualification) or Diploma in Civil/ Mech/ Environmental Engineering (with 10 years qualification) and having experience in the project related field.	Relevant certificate and documents	for one expert 5 marks , (4 x 5)	20
6	The bidder should have an average annual turnover equal to 100% of the value work and should have net worth of minimum equal to 100% of the value work put to tender of the proposed project, in the last three financial years	Certificate obtained from a chartered accountant	10	10

Note :

- 1. In the above technical evaluation the bidder who scores more than 75 percentages will be eligible for next level financial evaluation.**
- 2. The marks obtained in the technical evaluation will be given 50 % percentage weightage and the financial quote will be given 50 % weightage . The H1 bidder will be the successful bidder.**

30.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:

- (a) Making any correction for errors pursuant to Clause 29; or
- (b) Making an appropriate adjustments for any other acceptable variations, deviations; and
- (c) Making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub Clause 24.5.

30.3 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.

30.4 If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause 34 be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

F. Award of Contract

31. Award Criteria

- 31.1 The financial bid of the technically qualified bidder shall only be opened and comparison will be done on Quality Cost Based Selection to identify the H1 bidder.
- 31.2 The H1 bidder selected on QCBS basis shall be awarded the contract.
- 31.2 The Employer / Tender inviting authority reserves the right to consider to award the work to the H2 bidder , if the H1 bidder is not accept the award of contract within the stipulated time .

32. Employer's Right to accept any Bid and to reject any or all Bids

- 32.1 Notwithstanding Clause 31, the Employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

33. Notification of Award and Signing of Agreement

- 33.1 The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by cable, telex or fax confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- 33.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 34.
- 33.3 The Agreement will incorporate all agreements between the Employer and the successful Bidder. It will be signed by the Employer and kept ready for signature of the successful bidder in the office of employer within 28 days following the notification of award along with the Letter of Acceptance. Within 21 days of receipt, the successful Bidder will sign the Agreement and deliver it to the Employer.
- 33.4 Upon furnishing by the successful Bidder of the Performance Security, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful.

34. Performance Security

34.1 Within 21 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 5% of the Contract price

- a bank guarantee in the form given in Section 7;

34.2 If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued either (a) at the Bidder's option, by a Nationalized/Scheduled Indian bank or (b) by a foreign bank located in India and acceptable to the Employer or (c) by a foreign bank through a correspondent Bank in India [scheduled or nationalized] or (d) by a bank acceptable by the Employer.

34.3 Failure of the successful bidder to comply with the requirements of sub-clause 34.1 may constitute a breach of contract and probable cause for annulment of the award, forfeiture of the bid security and any such other remedy the Employer may take under the contract, and the Employer may resort to awarding the contract to the next ranked bidder.

35. Advance Payment and Security

35.1 No advance payment will be entertained.

36. Adjudicator

36.1 The Employer proposes that Mr. _____ be appointed as Adjudicator under the Contract, at a daily fee of *Rs. 1000 /- plus reimbursable expenses*. If the Bidder disagrees with this proposal, the Bidder should so state in the Bid. If in the Letter of Acceptance, the Employer has not agreed on the appointment of the Adjudicator, the Adjudicator shall be appointed by Institution of Engineers (India) Tamil Nadu Chapter, at the request of either party.

37. Corrupt or Fraudulent Practices

37.1 The Bank requires that Borrowers (including beneficiaries of Bank loans), as well as Bidders/Suppliers/Contractors under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Bank:

- (a) Defines, for the purposes of this provision, the terms set forth below as follows :
 - (i) “corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the

Employer, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.

- (b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Bank-financed contract.

SECTION 2:
CONDITIONS OF CONTRACT

Conditions of Contract

A. General

1. Definitions

1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

The **Adjudicator** is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in Clauses 36. The name of the Adjudicator is defined in the Contract Data.

Bill of Quantities means the priced and completed **Bill of Quantities** forming part of the Bid which includes the detailed component rate given by the bidder in a separate sheet for measurement and accounting purpose.

Compensation Events are those defined in Clause 44 hereunder.

The **Completion Date** is the date of completion of the Works as certified by the Engineer in accordance with Sub Clause 55.1.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.3 below.

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body who's Bid to carry out the Works has been accepted by the Employer.

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer.

The **Contract Price** is the price to complete the capital work excluding cost of Operation and maintenance, as stated in the Letter of Acceptance and thereafter as specified in accordance with the provisions of the Contract.

Days are calendar days; **months** are calendar months.

A **Defect** is any part of the Works not completed in accordance with the Contract.

The **Defects Liability Period** is the period named in the Contract Data and calculated from the Completion Date.

The **Employer/Commissioner/TIA** is the party who will employ the Contractor to carry out the Works.

The **Engineer** is the person named in the Contract Data (or any other competent person appointed and notified to the contractor to act in replacement of the Engineer) who is responsible for supervising the execution of the works and administering the Contract.

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to execute the Works.

The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Engineer by issuing an extension of time.

Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.

Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

Site Investigation Reports are those which were included in the Bidding documents and are factual interpretative reports about the surface and sub-surface conditions at the site.

Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Engineer.

The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.

Temporary Works are works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.

A **Variation** is an instruction given by the Engineer which varies the Works.

The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.

Operation and Maintenance of the established Grey Water Treatment Plant with functional condition to maintain the quality of treated water to the standard of TNPCB before let into the Lake. by doing the daily switch on off and by doing replacement of fault spares , by adding coagulants and attend the grievances of public within 24 hours.

2. Interpretation

- 2.1** In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about the Conditions of Contract.
- 2.2** If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works).
- 2.3** The documents forming the Contract shall be interpreted in the following order of priority:
- (1) Agreement
 - (2) Letter of Acceptance, notice to proceed with the works
 - (3) Contractor's Bid
 - (4) Contract Data
 - (5) Conditions of Contract including Special Conditions of Contract
 - (6) Specifications
 - (7) Bill of Quantities and
 - (8) any other document listed in the Contract Data as forming part of the Contract.

3. Language and Law

- 3.1** The language of the Contract and the law governing the Contract are stated in the Contract Data.

4. Engineer's Decisions

- 4.1** Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

5. Delegation

- 5.1** The Engineer may delegate any of his duties and responsibilities to other officials except to the Adjudicator after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

- 6.1** Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

- 7.** The contractor shall not be required to obtain any consent from the employer for:

- a) The provision of labour; and
- b) The purchase of materials which are in accordance with the standards specified in the Contract.

8. Other Contractors

8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors. The Contractor shall as referred to in the Contract Data, also provide facilities and services for them as described in the Schedule. The employer may modify the schedule of other contractors and shall notify the contractor of any such modification.

9. Personnel

9.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Contract Data to carry out the functions stated in the Schedule or other personnel approved by the Commissioner/TIA. The Commissioner/TIA will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.

9.2 If the Commissioner/TIA asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's Risks

10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

11.1 The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Contractor's employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

12. Contractor's Risks

12.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

13. Insurance

- 13.1** The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:
- (a) Loss of or damage to the Works, Plant and Materials;
 - (b) Loss of or damage to Equipment;
 - (c) Loss of or damage to property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
 - (d) Personal injury or death.
- 13.2** Policies and certificates for insurance shall be delivered by the Contractor to the Commissioner/TIA for the Commissioner/TIA's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 13.3** If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 13.4** Alterations to the terms of insurance shall not be made without the approval of the Commissioner/TIA.
- 13.5** Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports

- 14.1** The Contractor, in preparing the Bid, shall rely on any site Investigation Reports referred to in the Contract Data, supplemented by any information available to the Bidder.

15. Queries about the Contract Data

- 15.1** The Engineer will clarify queries on the Contract Data.

16. Contractor to Construct the Works

- 16.1** The Contractor shall construct and install the Works in accordance with the Specification and Drawings, and as per instructions of Engineer.

17. The Works to Be Completed by the Intended Completion Date

- 17.1** The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

18. Approval by the Engineer

- 18.1** The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the Specifications and Drawings.
- 18.2** The Contractor shall be responsible for design of Temporary Works.
- 18.3** The Engineer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 18.4** The Contractor shall obtain approval of third parties to the design of the Temporary Works where required.
- 18.5** All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

19. Safety

- 19.1** The Contractor shall be responsible for the safety of all activities on the Site.

20. Discoveries

- 20.1** Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

21. Possession of the Site

- 21.1** The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

22. Access to the Site

- 22.1** The Contractor shall allow the Engineer and any person authorized by the Engineer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

23. Instructions

- 23.1** The Contractor shall carry out all instructions of the Engineer which comply with the applicable laws where the Site is located.
- 23.2** The Contractor shall permit the bank to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Bank, if so required by the Bank.

24. Disputes

24.1 If the Contractor believes that a decision taken by the Engineer was either outside the authority given to the Engineer by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Engineer's decision.

25. Procedure for Disputes

25.1 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.

25.2 The Adjudicator shall be paid daily at the rate specified in the Contract Data together with reimbursable expenses of the types specified in the Contract Data and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision will be final and binding.

25.3 The arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

26. Replacement of Adjudicator

26.1 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not fulfilling his functions in accordance with the provisions of the Contract; a new Adjudicator will be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the Contract Data at the request of either party, within 14 days of receipt of such request.

B. Time Control

27. Program

27.1 Within the time stated in the Contract Data the Contractor shall submit to the Engineer for approval a Program including Environmental Management Plan showing the general methods, arrangements, order, and timing for all the activities in the Works along with monthly cash flow forecast.

27.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.

27.3 The Contractor shall submit to the Commissioner/TIA, for approval, an updated Program at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Program within this period, the Commissioner/TIA Avadi City Municipal Corporation may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted.

27.4 The Commissioner/TIA's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Commissioner/TIA again at any time. A revised Program is to show the effect of Variations and Compensation Events.

28. Extension of the Intended Completion Date

28.1 The Commissioner/TIA shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost.

28.2 The Commissioner/TIA shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Commissioner/TIA for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

29. Deleted

29. Delays Ordered by the Commissioner/TIA

29.1 The Commissioner/TIA may instruct the Contractor to delay the start or progress of any activity within the Works.

30. Management Meetings

30.1 Either the Commissioner/TIA or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

30.2 The Commissioner/TIA shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The

responsibility of the parties for actions to be taken is to be decided by the Commissioner/TIA either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

31. Early Warning

- 31.1** The Contractor is to warn the Commissioner/TIA at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of works. The Commissioner/ TIA may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.
- 31.2** The Contractor shall cooperate with the Commissioner/TIA in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Engineer.

C. Quality Control

32. Identifying Defects

- 32.1** The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.
- 32.2** The contractor shall permit the Employer's Technical auditor / Third party to check the contractor's work and notify the Engineer and Contractor of any defects that are found. Such a check shall not affect the Contractor's or the Engineer's responsibility as defined in the Contract Agreement.
- 32.3** The Engineer shall delegate inspection and testing of materials or Plant to an independent inspector / Agency. Any such delegation shall be considered as prerogative of the Engineer. The inspection charges / fees shall be payable by the contractor.
- 32.4** The contractor shall carry out the third party agency Laboratory Test report after delivery of all materials to the site and before fixing of it. The cost for the third party agency Laboratory testing fees expenses including transportation etc. shall be borne by the contractor. Before, third party Laboratory testing, quality assurance plan approval according to the technical specifications shall be obtained from approved Engineer of TIA.

33. Tests

33.1 If the Engineer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples.

34. Correction of Defects

34.1 The Commissioner/TIA shall give notice to the Contractor of any Defects before the end of the Defects Liability Period (365 days), which begins at Completion and is defined in the Contract Data. The Defects Liability Period (365 days) shall be extended for as long as Defects remain to be corrected.

34.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Commissioner/TIA's notice.

35. Uncorrected Defects

35.1 If the Contractor has not corrected a Defect within the time specified in the Commissioner/TIA's notice, the Commissioner/TIA will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

D. Cost Control

36. Bill of Quantities

36.1 The Bill of Quantities (BOQ1) shall be in a single specification in the Financial Bid format. However, after selection of H1 Bidder the BOQ shall be finalized as per the as per the technology proposed by the H1 bidder and approved by the authorized Engineer of TIA for the construction, installation, testing, and commissioning of Grey Water Treatment Plant . The BOQ cost should not exceed the cost quoted for the entire project as a single item in the financial quote.

36.2 The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

36.3 The Bill of Quantities (BOQ 2) shall contain items for Operation and Maintenance work to be done by the contractor.

37. Changes in the Quantities

37.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1% of Initial Contract Price, the Engineer shall adjust the rate to allow for the change.

37.2 The Engineer shall not adjust rates for changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the Prior approval of the Employer.

37.3 If requested by the Engineer, the Contractor shall provide the Engineer with a detailed cost breakdown of any rate in the Bill of Quantities.

38. Variations

38.1 All Variations shall be underwritten directions/orders/approval of the Engineer/Commissioner/TIA

38.2 All Variations shall be included in updated program produced by the contractor

39 . Payments for Variations

39.1 The Contractor shall provide the Commissioner/TIA with a quotation (with breakdown of unit rates) for carrying out the Variation when requested to do so by the Commissioner/TIA. The Commissioner/TIA shall assess the quotation, which shall be given within seven days of the request or within any longer period stated by the Commissioner/TIA and before the Variation is ordered.

39.2 If the work in the Variation corresponds with an item description in the Bill of Quantities and if, in the opinion of the Commissioner/TIA, the quantity of work above the limit stated in Sub Clause 37.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.

39.3 If the Contractor's quotation is unreasonable (or if the contractor fails to provide the Commissioner/TIA with a quotation within a reasonable time specified by the engineer in accordance with Clause 39.1), the Commissioner/TIA may order the Variation and make a change to the Contract Price which shall be based on Commissioner/TIA's own forecast of the effects of the Variation on the Contractor's costs.

39.4 If the Commissioner/TIA decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

39.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

40. Cash flow forecasts

40.1 When the Program is updated, the contractor is to provide the Engineer with an updated cash flow forecast.

41 . Payment Certificates

- 41.1** The Contractor shall submit the statements of the value of the work completed (as per mile stone) to the Commissioner/TIA
- 41.2** The Engineer shall check the Contractor's payment claim statement and within 14 days certify the amount to be paid to the Contractor after taking into account any credit or debit for the month in question in respect of materials for the works in the relevant amounts and under conditions set forth.
- 41.3** The value of work executed shall be determined by the Engineer.
- 41.4** The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
- 41.5** The value of work executed shall include the valuation of Variations and Compensation Events.
- 41.6** The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- 41.7** The Contractor shall submit to the Commissioner/TIA monthly bills during the Operation and Maintenance phase of the project.
- 41.8** The Engineer shall check the monthly bill and within 14 days certify the amount to be paid to the Contractor

42. Payments Mechanism:

- 42.1** The payment will be made by the concerned Commissioner/TIA after the concurrence of the Executive Engineer.
- 42.2** The following payment mechanism shall be followed for the Construction of Grey Water Treatment Plant of capacity 40 KLD

Event*	Payment
Mile stone 1 (within one month)	20% of total agreed cost or the actual value of work done whichever is less
Mile stone 2 (in the second month)	30% of total agreed cost or the actual value of work done whichever is less
Mile stone 3 (in the third month)	40 % of total agreed cost or the actual value of work done whichever is less
Commissioning after trail run for a period of two months	The total agreed cost minus the total cost received in the above three mile stone.

- **The milestone shall be determined based on the components to be done/executed as per the proposal submitted by the H1 bidder and approved by the department officials which shall be included as a part of agreement for payment terms.**

42.3 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.

42.4. After completion of work, by receiving the work order for O & M separately, the contractor shall claim bill for operation and maintenance for the agreement period, as per the rate quoted in the Financial bid BOQ 2

43. Compensation Events

43.1 The following are Compensation Events unless they are caused by the Contractor:

- (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
- (b) The Employer modifies the schedule of other contractors in a way which affects the work of the contractor under the contract.
- (c) The Engineer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
- (d) The Engineer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
- (e) The Commissioner/TIA unreasonably does not approve for a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of Letter of Acceptance from the information issued to Bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Engineer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
 - (i) The effect on the Contractor of any of the Employer's Risks.
 - (j) The Engineer unreasonably delays issuing a Certificate of Completion.
 - (k) Other Compensation Events listed in the Contract Data or mentioned in the Contract.

43.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Commissioner/TIA shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

43.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Commissioner/TIA and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Commissioner/TIA shall adjust the Contract Price based on Commissioner/TIA's own forecast. The Commissioner/TIA will assume that the Contractor will react competently and promptly to the event.

43.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Engineer.

44. Tax

44.1 The rates quoted by the Contractor shall be deemed to be exclusive of the GST and other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

45. Currencies

45.1 All payments shall be made in Indian Rupees.

46. Retention

46.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the Contract Data until Completion of the whole of the Works.

46.2 On Completion of the whole of the Works half the total amount retained is repaid to the Contractor and half when the Defects Liability Period has passed and the Engineer has certified that all Defects notified by the Engineer to the Contractor before the end of this period have been corrected.

46.3 On completion of the whole works, the contractor may substitute retention money with an "on demand" Bank guarantee.

47 Liquidated Damages

47.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the contract

data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor.

- 47.2** If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the over payment calculated from the date of payment to the date of repayment at the rates specified in Sub Clause 42.1 and 42.2

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48. Performance Securities

- 48.1** The Performance Security (including additional security for unbalanced bids) shall be provided to the Employer not later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until a date 28 days from the date of expiry of Defects Liability Period and the additional security for unbalanced bids shall be valid until a date 28 days from the date of issue of the certificate of completion.

E. Finishing the Contract

49 . Completion

- 49.1** The Contractor shall request the Commissioner/TIA to issue a Certificate of Completion of the Works and the Engineer will do so upon deciding that the Work is completed.

50 . Final Account

- 50.1** The Contractor shall supply to the Commissioner/TIA a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period (for the capital work). The Commissioner/TIA shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Commissioner/TIA shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Commissioner/TIA shall decide on the amount payable to the Contractor and issue a payment certificate, within 56 days of receiving the Contractor's revised account.

51 . Operation and Maintenance of GWTP

- 51.1 The contractor shall be given an order to the contractor after completion of construction and trial period of the GWTP as per the scope of work.

51.2 The Operation and Maintenance Contract period is 5 years. However every year renewal order will be given to the Contractor.

51.3 During the operation and operation period , if the waste water found discharge to the Lake without treatment or without maintain the quality as per the TNPCB norms a fine of Rs. 10,000 per day will be levied, if it continues more than two days in a month , then legal notice will be issued to the contractor to face the NGT cases arises.

52 . Termination

52.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

52.2 Fundamental breaches of Contract include, but shall not be limited to the following:

- (a) The Contractor stops work for 28 days when no stoppage of work is shown on the current program and the stoppage has not been authorized by the Engineer;
- (b) The Engineer instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 28 days;
- (c) The Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstitution or amalgamation;
- (d) A payment certified by the Engineer is not paid by the Employer to the Contractor within 56 days of the date of the Engineer's certificate;
- (e) the Commissioner/TIA gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Commissioner/TIA;
- (f) The Contractor does not maintain a security which is required;
- (g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be deducted as defined in the Contract data; and
- (h) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this paragraph : “corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.”

52.3 When either party to the Contract gives notice of a breach of contract to the Engineer for a cause other than those listed under Sub Clause 52.2 above, the Engineer shall decide whether the breach is fundamental or not.

52.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.

52.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

53 . Payment upon Termination

53.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

53.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

54 . Property

54.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

55 . Release from Performance

55.1 If the Contract is affected by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Engineer shall certify or the Contractor shall notify to the Employer and Engineer that the Contract has been affected. The Contractor shall stop work as quickly as possible after receiving such certification or give notification and shall be paid for all work carried out before issuing/receiving it and for any work carried out afterwards to which commitment was made.

F. Special Conditions of Contract

1. Labour :

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Commissioner/TIA, deliver to the Commissioner Avadia return in detail, in such form and at such intervals as the Commissioner Avadimay prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Commissioner Avadimay require.

2. Compliance with Labour Regulations:

During continuance of the contract, the Contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

- a) Workmen Compensation Act 1923: The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) Payment of Gratuity Act 1972: Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more or on death at the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- c) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are:
 - (i) Pension or family pension on retirement or death, as the case may be.
 - (ii) Deposit linked insurance on the death in harness of the worker.
 - (iii) Payment of P.F. accumulation on retirement/death etc.
- d) Maternity Benefit Act 1951: The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.

- e) Contract Labour (Regulation & Abolition) Act 1970: The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labour.
- f) Minimum Wages Act 1948: The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, and Runways are scheduled employments.
- g) Payment of Wages Act 1936: It lies down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) Equal Remuneration Act 1979: The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.
- i) Payment of Bonus Act 1965: The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33 % of wages and maximum of 20 % of wages to employees drawing Rs.3,500.00 per month or less. The bonus to be paid to employees getting Rs.2,500.00 per month or above upto Rs..3,500.00 per month shall be worked out by taking wages as Rs.2,500.00 per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. (Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.)
- j) Industrial Disputes Act 1947: The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) Industrial Employment (Standing Orders) Act 1946: It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.
- l) Trade Unions Act 1926: The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- m) Child Labour (Prohibition & Regulation) Act 1986: The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.

- n) Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979: The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, traveling expenses from home up to the establishment and back, etc.
- o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996: All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- p) Factories Act 1948: The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

3. Arbitration

The procedure for arbitration will be as follows:

- (a) In case of Dispute or difference arising between the Employer and a domestic contractor relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The arbitral tribunal shall consist of 3 arbitrators one each to be appointed by the Employer and the Contractor. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by President of the Institution of Engineers (India), Tamil Nadu Chapter.
- (b) If one of the parties fails to appoint its arbitrator in pursuance of sub-clause (a) and (b) above within 30 days after receipt of the notice of the appointment of its arbitrator by the other party, then the President of the Institution of Engineers (India) Tamil Nadu Chapter, both in cases of the Foreign Contractor as well as Indian Contractor, shall appoint the arbitrator. A certified copy of the order of the President of the Institution of Engineers (India) Tamil Nadu Chapter, making such an appointment shall be furnished to each of the parties.
- (c) Arbitration proceedings shall be held at _____, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.
- (d) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the

arbitral tribunal. However, the expenses incurred by each party in connection with the preparation, presentation, etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.

- (e) Where the value of the contract is Rs.50 Million and below, the disputes or differences arising shall be referred to the Sole Arbitrator. The Sole Arbitrator should be appointed by agreement between the parties; failing such agreement, by the appointing authority, namely the President of the Institution of Engineers (India) Tamil Nadu Chapter.
- (f) Performance under the contract shall continue during the arbitration proceedings and payments due to the contractor by the owners shall not be withheld, unless they are the subject matter of the arbitration proceedings.

SECTION 3
FORMS OF BID, & LETTER OF ACCEPTANCE

Table of Forms:

- **CONTRACTOR'S BID**
- **LETTER OF APPLICATION**
- **LETTER OF ACCEPTANCE**
- **NOTICE TO PROCEED WITH THE WORK**
- **AGREEMENT FORM**

Contractor's Bid

Description of the Work: -

To : The Commissioner/TIA,
Address: Avadi City Municipal Corporation,
Avadi,
Chenani -54

GENTLEMEN,

Having examined the bidding documents including addendum, we offer to execute the Works described above in accordance with the Conditions of Contract, Specifications, and Bill of Quantities accompanying this Bid for the Contract Price of _____ [in figures]
(_____) [in letters]¹.

We accept the appointment of _____ as the Adjudicator.

(OR)

We do not accept the appointment of _____ as the Adjudicator and propose instead that _____ be appointed as Adjudicator whose daily fees and biographical data are attached.

This Bid and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any Bid you receive.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud & corruption in force in India namely "Prevention of Corruption Act 1988".

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

<u>Name and address of agent</u>	<u>Amount</u>	<u>Purpose of Commission or gratuity</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

(if none, state "none")

We hereby confirm that this Bid complies with the Bid Validity and Bid Security required by the Bidding documents.

Yours faithfully,

Authorized Signature:

Name & Title of Signatory: _____

Name of Bidder _____ :

_____ :

¹ To be filled in by the Bidder, together with his particulars and date of submission at the bottom of the Form of Bid.

Letter of Application

(Letter head paper of the Applicant, including full postal address, telephone no., fax no., telex no., cable address, and E. Mail)

Dated: .01.2023s.

To

The Commissioner/TIA
Avadi City Municipal Corporation,
Avadi,
Chenani -54

Sir,

Being duly authorized to represent and act on behalf of
..... (Hereinafter "the applicant"), and
having reviewed and fully understood all the information provided, the undersigned hereby applies
for consideration as a bidder for the following contract.

Contract No

Contract Name

Attached to this letter please find copies of original documents defining

- The Applicant's legal status
- The principal place of business and
- The place of incorporation (for applicants who are _____) of the place of registration and the nationality of the owners (for applicants who are partnerships of individually owned firms).

Employer and its authorized representatives are hereby permitted to conduct any inquiries or investigations to verify the statements, documents and information submitted in connection with this application, and to seek clarification from the bankers and clients `regarding any financial and technical aspects. This 'Letter of Application' will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by yourselves to verify the statements and information provided in this application, or with regard to the resources, experience and competence of the Applicant.

This application is made in the full understanding that

- Bids by the applicants will be subject to verification of all information submitted for consideration, at the time of bidding.
- The applicant reserves the right to
 - Amend the scope and value of any contract bid under this project and reject or accept any application, to cancel the entire bidding process and reject all the applications and
 - The applicant shall not be liable for any such action and shall be under no obligation to inform the Applicants of the grounds for them.

It is hereby certified that the unit rates and prices for all the items covered in the Bill of Quantities set out in the Price Schedule have been furnished clearly in figures and words and it is hereby agreed to execute the works at the rates and prices mentioned therein and to receive the payments on measured quantities as per the Conditions of the Contract.

It is hereby distinctly and expressly declared and acknowledged that before the submission of the bid, the instructions therein have been carefully followed and the Conditions of the Contract and other terms and conditions have been read. It is also declared and acknowledged that careful examination of the bid documents has been carried out with reference to the specifications, quantities, location where the said work is to be done, investigation of the works to be done, materials required for this contract and their source and other requirements, covenants, stipulations and restrictions. It is distinctly agreed that no claim or demand will be made on the _____ the applicant, arising out of any misunderstanding or misconception or mistake of the said requirements, covenants, stipulations, restrictions, conditions etc on the part of the Applicant.

The EMD of Rs.1,10,000/- (Rupees One lakh Ten thousand Only) is enclosed in the shape of ,DD (Enter the form and other details of the bid security) drawn in favor of the Commissioner of Avadi City Municipal Corporation.

It is hereby agreed that in case the bid is accepted, the Performance Security to the value and in the manner/ form prescribed by the Employer will be submitted and agreement entered into within the time frame stipulated for the due fulfillment of the contract. It is agreed that in the event of non – remittance of the required Performance Security and execution of the Agreement within the stipulated time frame, the EMD deposited with the bid will be forfeited. In the event of non acceptance of the bid offered by the applicant, the Employer shall intimate the applicant of the rejection of his bid, upon which the applicant can get his EMD refunded on an application for the same. Any notice required to be served on the applicant shall be deemed to have been sufficient if

delivered personally or left at the address given herein or sent either by registered mail or by ordinary post. Such notice shall, if sent by post shall be deemed to have been served on the applicant at the time when in due course of post it would be delivered at the address to which it is sent. For all purposes, the address given herein will serve as permanent address and any change therein will be promptly intimated then and there.

It is fully understood and agreed that on receipt of communication of acceptance of the bid from the accepting authority, there emerges a valid contract between the Applicant and the Commissioner /TIA represented by the officer accepting the bid and is expressly agreed that the bid documents with the schedules, conditions of the contract, negotiation communications and other correspondence connected to this contract will all constitute the contract for this purpose and be the foundation of rights on both the parties.

It is agreed that times shall be considered as the essence of this contract and the work will be commenced immediately on getting information of the acceptance of the bid and any slow progress will be subjected to the relevant penal clauses contained in the conditions of the Contract.

It is hereby agreed that the professionally qualified personnel to execute and supervise the works shall be deployed as required in clause 10 of General Conditions of Contract.

The Applicant hereby agrees to undertake full responsibility for the stability and soundness of the works executed.

The Applicant hereby agrees that the bid will not be withdrawn during the period of validity as indicated in the bid documents and also during such extended periods agreed to by the applicant. The Applicant agrees that in the event of withdrawal of the bid during the validity period or extended period, the EMD is liable to be forfeited by Employer.

It is explicitly understood that the Employer is not bound to accept the lowest or any bid the The Commissioner of Avadi City Municipal Corporation may receive. It is hereby agreed that the Employer reserves the rights to reject any or all the bids without assigning any reasons therefore.

Dated this.....day of.....Month of Year.....

Signature of the Applicant
(To be signed by the authorized
Signatory with seal)

Letter of Acceptance

(Letterhead paper of the Employer)

_____ [date]

To:

[Name and address of the Contractor]

Dear Sir,

This is to notify you that your Bid dated ____ _ for **Design and Construct a Purification Equipment with Grey Water Treatment at CTH-Ambattur Lake (40 KLD Capacity) at Avadi City Municipal Corporation including operation and maintain for a period of 5 years** for the Contract Price of Rupees _____
(_____) [amount in words and figures], as corrected and modified in accordance with the Instructions to Bidders¹ is hereby accepted by Commissioner/TIA,

We accept/do not accept that _____ be appointed as the Adjudicator².

We note that as per bid, you do not intend to subcontract any component of work.

[Delete whichever is not applicable]

You are hereby requested to furnish Performance Security for an amount of Rs. _____ within 21 days of the receipt of this letter of acceptance valid up to 28 days from the date of expiry of Defects Liability Period i.e. up to..... And sign the contract, failing which action as stated in Para 34.3 of ITB will be taken.

We have reviewed the construction methodology submitted by you along with the bid in response to ITB Clause 2 and our comments are given in the attachment. You are requested to submit a revised Program including environmental management plan and time schedule for completion as per Clause 27 of General Conditions of Contract within 14 days of receipt of this letter.

Yours faithfully,

Authorized Signature

Name and Title of Signatory

Name of Agency

¹ Delete "corrected and" or "and modified" if only one of these actions applies. Delete "as corrected and modified in accordance with the Instructions to Bidders" if corrections or modifications have not been effected.

² To be used only if the Contractor disagrees in his Bid with the Adjudicator proposed by the Employer in the "Instructions to Bidders."

Issue of Notice to proceed with the work

(Letterhead of the Employer)

_____ (Date)

To

_____ (Name and Address of the Contractor)

Dear Sirs:

Pursuant to your furnishing the requisite security as stipulated in ITB clause 34.1 and signing of the contract agreement for the providing of _____ @ a Bid Price of Rs. _____, you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

(Signature, name and title of signatory authorized to sign on behalf of Employer)

Agreement Form

Agreement

This agreement, made the _____ day of _____, 20_____,
between _____

_____ [name and address of Employer]

(Hereinafter called “the Employer”) of the one part
and _____

_____ [name and address of contractor] (hereinafter called “the Contractor”) of the other part.

Whereas the Employer is desirous that the Contractor executes “**Design and Construct a Purification Equipment with Grey Water Treatment at CTH-Ambattur Lake (40 KLD Capacity) at Avadi City Municipal Corporation including operation and maintain for a period of 5 years**” (hereinafter called “the work) and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a contract price of Rs.....

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - i) Letter of Acceptance;
 - ii) Notice to proceed with the works;
 - iii) Contractor’s Bid;
 - iv) Contract Data;
 - v) Conditions of contract (including Special Conditions of Contract);
 - vi) The Technology proposal, Design, drawing, estimation and specification submitted by the successful bidder and approved by the departmental officers/ Engineers.
 - vii) Bill of Quantities; and
 - viii) Any other document listed in the Contract Data as forming part of the contract.

5. After completion of work the contractor has to execute agreement to operate and maintain the Grey Water Treatment Plant as per tis document

In witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of

Was hereunto affixed in the presence of:

Signed, Sealed and Delivered by the said

in the presence of:

Binding Signature of Employer

Binding Signature of Contractor

**SECTION 4:
CONTRACT DATA**

Contract Data

Items marked "N/A" do not apply in this Contract.

The following documents are also part of the Contract:

Clause Reference

·		
·	The Schedule of Other Contractors	N/A (5)
·	The Schedule of Key Personnel	[5]
·	The Methodology and Program of Construction & Environmental Management Plan	[2]
·	The Schedule of Key and Critical equipment to be deployed on the work as per agreed program of construction	[5]
·	Site Investigation reports	[2]

The Employer is

Name: The Commissioner/TIA,

Address:

Name of authorized Representative: The Commissioner/TIA,

The Engineer is

Name:

Address:

The Adjudicator appointed jointly by the Employer and Contractor is:

Name :

Address :

The name and identification number of the Contract is **“Design and Construct a Purification Equipment with Grey Water Treatment at CTH-Ambattur Lake (40 KLD Capacity) at Avadi City Municipal Corporation including operation and maintain for a period of 5 years”** and Bid Reference No: 9595/2022/E1

The Work defined and the scope of bidder defined in section 2 of ITB:

The 15th day from the date of issue of work order to the successful bidder shall be reckoned as the starting due date of the Project / Contract Period.

The Work defined and the scope of bidder defined in section 2 of ITB: must be completed in all respects within 3 (three) months from the start date

The mile stone for each component would be as under:

S.NO.	Time line	% of works should be completed
1.	First Month (from the date of work order)	25 %
2.	Second Month (from the date of work order)	50%
3.	Third Month (from the date of work order)	100%

The following documents also form part of the Contract:

Letter of Acceptance;

- ii) Notice to proceed with the works;
- iii) Contractor's Bid;
- iv) Contract Data;
- v) Conditions of contract (including Special Conditions of Contract);
- vi) The Technology proposal, Design, drawing, estimation and specification submitted by the successful bidder and approved by the departmental officers/ Engineers.
- vii) Bill of Quantities; and
- viii) Any other document listed in the Contract Data as forming part of the contract.

The Contractor shall submit a revised Program including Environmental Management Plan for the Works (in such form and detail as the Engineer shall reasonably Prescribe) within 14 days of delivery of the Letter of Acceptance. [27]

The Site Possession Dates shall be the date of issue of notice to proceed with the work [21]

The Site is located near by the Arabath lake and is defined in drawings enclosed.[1]

The Defects Liability Period is 24 months from the date of certification of completion of works. (Where sectional completion certificate is issued this will apply from those Dates for those sections). [34]

Insurance requirements are as under: [13]

The following events shall also be Compensation Events: [43]
None

The period between Program updates shall be 30 days. [27]

The language of the Contract documents is English [3]

The law which applies to the Contract is the laws of Union of India [3]

The currency of the Contract is Indian Rupees. [45]

Fees and types of reimbursable expenses to be paid to the Adjudicator [25]
Rs. 500 per day plus transport boarding and lodging as per actual.

Appointing Authority for the Adjudicator Chairman, Institution of Engineers (India)[26]
Tamil Nadu Chapter.

The proportion of payments retained (retention money) shall be nil from each bill [46]

The maximum amount of liquidated damages for the whole of the works is [47]
Five (5) percent of final contract price.

The Securities shall be for the following minimum amounts equivalent as a percentage of the Contract Price: [48]

Performance Security for 5% percent of contract price plus Rupees/- (a fixed amount)

The standard form of Performance Security acceptable to the Employer shall be an unconditional Bank Guarantee of the type as presented in Section 8 of the Bidding Documents.

The percentage to apply to the value of the work not completed representing the Employer's additional cost for completing the works shall be 5 percent. [53]

**SECTION 5:
SPECIFICATIONS**

GENERAL:

The Technical specifications covering the materials and the workmanship aspects as well as method of measurements and payments are included in this section. These specifications cover the items of electrical and non-electrical works coming under scope of this document. All work shall be carried out in conformity with the same. These specifications are not intended to cover the minute details. The works shall be executed in accordance with good practices followed for achieving high standards of workmanship, thus ensuring safety and durability of the construction. All codes and standards referred to in these specifications shall be the latest thereof, unless otherwise stated.

The equipment and accessories covered by this specification shall be designed, manufactured and tested in accordance with Indian Standards and codes of practice published by the Indian Standards Institution wherever available, in order that specific aspects under Indian Conditions are taken care of.

In case where Indian Standards are not available, then equipment and accessories shall conform to the latest publications and codes of practice by any other recognized National Standards Institutions.

All electrical equipment and installation shall also conform to the latest Indian Electricity Rules as regard Safety, earthing and other essential provisions specified therein for installation and operation of electrical/mechanical plants.

All the civil works shall be carried out as per relevant specifications and to the satisfaction of the Engineer. The specification of the material shall be as per relevant Indian Standard specification as applicable.

MODEL SPECIFICATION

Model specification and for the assumed Process is given below for the reference of Bidder to suggest and recommend the suitable technology for Grey water treatment plant Arabath Lake in Avadi City Municipal Corporation after having the site visit and conducting the flow survey to study the quantum and quality.

1. MANUAL BAR SCREEN CHAMBER:

Providing/ Constructing the manually operated bar screen chamber using FRP/SS/ Brick material to prevent the suspended particles/articles in the incoming raw sewage/ Grey waste water, the size of the bar screen chamber shall be 1*1 square mtr in brick work below the surface. The depth of the screen chamber will depends on inward level. A screen made out of vertical bars should be places across the sewage flow. The gap between the bars should be of 10-15 mm. Bar screen racks should be fabricated out of 25 mm x 6 mm bars of epoxy-coated mild steel. The screen frame is fixed in the bar screen chamber at an angle of 60° to the

horizontal, leaning away from the incoming side.

2. COLLECTION CUM SOLID SEPERATION ZONE

Providing Collection well to receive the raw sewage from the bar screen well / grid well using the brick work as per the standards and to act as primary settling tank with minimum detention period. the size of the tank shall be ___ in dia and ___ in depth with sludge arrangement at bottom

3. AERATION ZONE

Water from Solid Separation Zone/ Collection well shall flow to fixed film Aeration zone housed in FRP Tank with air blowers facility to keep this as aerobic zone along with plastic media installed inside the tank which in turn increases the surface area and retain micro-organism long Enough to digest the organic substance remained or this may provided as cascade construction system so as to permit the flow towards the secondary settling tank .

4. SEDIMENTATION ZONE

Water from Aeration zone shall flow to Final Sedimentation zone housed in same FRP Tank and divided by FRP Partition. Final stage involves the sedimentation where organic wastes are settled in the Sedimentation zone. The settled waste in the bottom of the tanks shall be pumped back to Solid Separation Zone by providing submersible pump connected with a timer in the control panel. This will work as a return sludge having active biomass (MLSS) to increase the efficiency of the system and ensure the effluent quality meets the stipulated standards.

4. FITER TANK

. Dual Media Filter will be provided for removal of traces of suspended solids, turbidity & odour. Filters shall be a Mild steel epoxy painted pressure vessel with dished ends.

DMF is provided with filter media i.e. sand + activated carbon

5.FLOCCULATION TANK

Alum Dosing shall be done in this tank resulting in formation of flocculates which will dissolve all the chemicals in the incoming effluent from Operation Theatre, Laundry and Laboratories. (Removal of all the chemicals from the Effluent / Grey Water is mandatory as chemicals do any allow bacterial formation in the MBBR Aeration tank and without the bacterial formation the system canNot work)

6.COAGULATION TANK

The flocculates from the flocculation tank along with the sewer / effluent shall Flow to the coagulation tank where polyelectrolyte dosing shall convert the flocculated particles into heavy coagulates.

In this tank tube deck media shall be arranged in a way that once the coagulates formed in the coagulation tank Flow into this tank the coagulates settle down and the efficient Flows to the MBBR Aeration Tank without any chemicals.

7.MBBR TECHNOLOGY BASED AERATION TANK

MBBR based on high rate activated sludge process shall be provided for stabilization of organic matter

i.e. BOD and COD. The tank is designed on the principle of aeration process to get better efficiency of BOD /COD reduction and stabilized sludge to avoid digestion of sludge. In MBBR tank plastic media shall be provided to increase the surface area for immobilization of bacterial film. A rectangular Tank of will be provided and will be equipped with fine bubble membrane diffuser system for aeration and moving media. The diffusers shall be mounted on Grid of Pipe and Air shall be supplied using rotary twin lobe type blower.

8.LAMELLA CLARIFIER

A Lamella Clarifier shall be provided for settlement of fully aerated Grey Water from the MBBR Unit. Part of the settled sludge at the bottom of the settling tank will be pumped to the MBBR unit and part of it will be discharged on sludge drying beds as per operational requirement. This sludge being fully mineralized is suitable for sun drying on sand drying beds. The Lamella clarifier shall be provided with PVC media.

9.SLUDGE DISPOSAL SYSTEM

Settled sludge from Lamella Clarifier will be removed by pumping to the sludge centrifuge and from there the water shall Flow back to the Raw Grey Water Sump and solidified sludge shall have to be removed from the Sludge Centrifuge Manually.

10. CHLORINE CONTACT TANK

The treated Effluent will further be subjected to chlorination of the treated effluent. Chlorine solution will be added to the treated Effluent. Chlorine dose will be adjusted to maintain the residual Chlorine concentration of 0.5-1.0 ppm.

SECTION 6: BILL OF QUANTITIES

(in separate booklet)

SCHEDULE -A 1 (BOQ 1)

NAME OF WORK:- “Design and Construct a Purification Equipment with Grey Water Treatment at CTH-Ambattur Lake (40 KLD Capacity) at Avadi City Municipal Corporation”

SI. No	PROBABLE QUANTITY	Description of Work	TNBPC No & Specification	Unit - Figure & word	RATES in Rs			Amount	
					In Figure		In words	Rs.	Ps
					Rs.	Ps			
1	2	3	4	5	6		7	8	
1	one unit	Supply and installation of 40 KLD Capacity prefabricated system based on MBBR with reaction tank construction of roto moulded polyethylene and having hydrophilic sponge media enclosed inside polypropylene cage balls as bio carriers, top mounted aeration blowers provided with bubble mixers for efficient aeration and having an inbuilt clarifier with spiral media made of high density polyethylene to achieve the quality specified in section II of this document and as per TNPCB with necessary civil construction by occupying minimum land area including the cost for providing the suitable Technology, Design and drawings construction, installation of mechanical and electrical equipments components spares and commissioning as per specification approved by the departmental officers including cost and conveyance of all materials and cost labour for installation and construction of	Specification (Enclosed in the bid document)	Each					

	civil works with social environmental protection. Supply and Installation of TTP (multi media filter). Installation supervision (pipng and wiring material within 5 meter battery limit)							
--	--	--	--	--	--	--	--	--

Note : The Rate quoted are excluding the GST

Signature of the Bidder (or bidder's authorized person)

with Company/Firm seal

SCHEDULE -A 2 (BOQ 2)

NAME OF WORK:-	Part II - :- “Operation and maintain of Purification Equipment with Grey Water Treatment at CTH-Ambattur Lake (40 KLD Capacity) at Avadi City Municipal Corporation, including operation and maintain for a period of 5 years including the cost of labour for operation, cost of consumable , cost of operation of quality control system and cost of consumption of electricity ”
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SI. No	PROBABLE QUANTITY	Description of Work	TNBPC No & Specification	Unit - Figure & word	RATES in Rs			Amount	
					In Figure		In words	Rs.	Ps
					Rs.	Ps			
1	2	3	4	5	6		7	8	
2	60 months	Operation and maintain of Purification Equipment with Grey Water Treatment at CTH-Ambattur Lake (40 KLD Capacity) at Avadi City Municipal Corporation, for a period of 5 years including the cost of labour for operation, cost of consumable , cost of operation of quality control system and cost of consumption of electricity as per the direction of departmental officers and TNPCB guidelines.	-	one month					

Note :

1. The Rate quoted are excluding the GST
2. Exclusion of Electricity Bill charges in Operation and Maintenance

Signature of the Bidder (or bidder’s authorized person)

with Company/Firm seal

SECTION 7:
FORMS OF SECURITIES

PERFORMANCE BANK GUARANTEE

To: _____ [name of Employer]
 _____ [address of Employer]

WHEREAS _____ [name and address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. _____ dated _____ for "**Design and Construct a Purification Equipment with Grey Water Treatment at CTH-Ambattur Lake (40 KLD Capacity) at Avadi City Municipal Corporation including operation and maintain for a period of 5 years**" (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of _____ [amount of guarantee]¹ _____ [in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [amount of guarantee]¹ as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until (i.e.) 28 days from the date of expiry of the Defects Liability Period.

Signature and seal of the guarantor _____
 Name of Bank _____
 Address _____
 Date _____

1 An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract and denominated in Indian Rupees.

PERFORMANCE BANK GUARANTEE (for unbalanced items)

To: _____ [name of Employer]
 _____ [address of Employer]

WHEREAS _____ [name and address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. _____ dated _____ for **“Design and Construct a Purification Equipment with Grey Water Treatment at CTH-Ambattur Lake (40 KLD Capacity) at Avadi City Municipal Corporation including operation and maintain for a period of 5 years**(hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of _____ [amount of guarantee]¹ _____ [in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [amount of guarantee]¹ as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until (i.e.) 28 days from the date of issue of the certificate of completion of works.

Signature and seal of the guarantor _____

Name of Bank _____

Address _____

Date _____

1. An amount shall be inserted by the Guarantor, representing additional security for unbalanced Bids, if any and denominated in Indian Rupees.

ORIGINAL EQUIPMENT MANUFACTURER (OEM)'S AUTHORISATION

FORM (in Original Letter Head of OEM)

(To be **mandatorily** submitted along with the Technical Bid document)

To

The Commissioner
Avadi Corporation,
Avadi.

Dear Sir,

Subject: **Direct Manufacturers Authorization for the Installation**

Name of the work: - _____

We M/s an established and reputable manufacturer of professional (Product) having Corporate/Registered office at do hereby authorize M/s..... as our Distributor / Dealer to submit the above bid no: _____ dated _____ and subsequently negotiate and sign the contract with you for the supply of goods manufactured by us.

We hereby confirm and extend our full guarantee and warranty for 2 years as per standard service procedure for the products offered for supply by the above firm only against the invitation for bids _____ dt _____ and only duly authorize the said firm to act on our behalf in fulfilling any or all installation, technical support and maintenance obligation as required by the contract & the defect liability period of two years.

Yours faithfully,

For

Signature of Officer Authorized to sign this Document on behalf of the **OEM**.

SECTION 8:

FORMS

(to be Enclosed for Technical Evaluation)

Tech Form 1

PERFORMANCE OF THE BIDDER SHOWING VALUE OF SIMILAR WORK IN THE LAST FIVE YEARS

Year	Value of Work (Rs. In Lakhs)

Tech Form 3

COMMITMENTS OF WORKS ON HAND

Sl. No.	Contract No. and Name of the Project	Description of Work	Name of the Employer with full address	Value of the contract (Rs. In Lakhs)	Date of issue of Work Order and stipulated Period of completion	Value of Works remaining to be completed (Rs. In Lakhs)	Anticipated Date of completion

Tech Form 5

LIST OF EQUIPMENT AVAILABLE WITH BIDDER

Sl. No.	Equipment Name	Requirements for the Project	Availability Status	Remarks
		Nos. Capacity	Owned/Lease/ To be Procured Nos. and Capacity Age/ condition	

Tech Form 6

QUALIFICATION / EXPERIENCE OF KEY PERSONNEL PROPOSED FOR TECHNICAL AND ADMINISTRATIVE FUNCTIONS UNDER THIS CONTRACT

Sl. No.	Name of the person	Position for which proposed	Qualification	Total years of Experience	Years of Experience in the proposed position	Remarks

