

TAMILNADU WATER SUPPLY AND DRAINAGE BOARD

PERFORMANCE BASED BID DOCUMENT

NAME OF WORK: Outsourcing for Operation and Maintenance of CWSS to 159 rural habitations in Thoothukudi District including repair and rectification for the period from 6/2022 to 03/2023 (10 Months)

EXECUTIVE ENGINEER, TWAD BOARD,
MAINTENANCE DIVISION THOOTHUKUDI

Last date of submission: Up to 03.00 P.M on 09.06.2022.

Opening date: At 3.30 P.M on 09.06.2022.

CHECK LIST TO BE ENCLOSED BY BIDDER (along with Bid Document)

The check list is only indicative and to assist the bidder in satisfactorily enclosing all required major documents for Technical Qualification. The list is not exhaustive and the bidder should read all clauses of the bid document so as to enclose all documents as required:

A. BID SECURITY

- i) Bid security for a value of Rs.39,000/- to be furnished
- ii) Furnish the details of Bid Security as under

Sl. No.	Name of the Bidder	Amount and type of security	Issued By

Sl. No.	Description	Page Nos. in the Bidder's Document
1.	Affidavit as an undertaking given by the Contractor should be certified by the Notary duly stamped on a Notaries Stamp (Annexure-XI)	

List of Certificates to be enclosed by the Bidder (Notarized as per requirement)

Sl. No.	Description	Page Nos. in the Bidder's Document
1.	Signature of the proprietor or proprietress attested by the Notary public.	
2.	Signature of all the partners / power of attorney attested by the Notary public	
3.	Registration of the firm, Signature of all the authorized person attested by the Notary public	
4.	A copy of the listed Power of Attorney authorizing the signatory of the bidder.	
5.	Proof of Registration of firm / company	
6.	Audited Balance sheets	
7.	Credit line certificate from Financial institutions	
8.	Income Tax clearance certificate.	
9.	Valid GST registration certificate.	
10.	Certificate of performance issued by not less than the rank of Executive Engineer / Responsible person of the organization.	

SIGNATURE OF TENDERER

Tenderer

Sd/Executive Engineer, TWAD Bd

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1	Signature of the Proprietor or Proprietress attested by the Notary Public	
2	Signature of all the Partners/Power of attorney attested by the Notary Public.	
3	Registration of the firm, signature of the authorized person attested by the Notary public.	
4	A copy of the listed Power of Attorney authorizing the signatory of the bidder	
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TAMIL NADU WATER SUPPLY AND DRAINAGE BOARD
TENDER CALL FOR OPERATION AND MAINTENANCE OF WATER SUPPLY SCHEMES
/COMBINED WATER SUPPLY SCHEMES

FORM OF CONTRACT: PERCENTAGE Tender (Single cover system)

INVITATION FOR BID NO: NO.1/ F. Out Sourcing 2022-23/JDO/Dt 19.5.2022

1. For and on behalf of Tamil Nadu Water Supply and Drainage Board, sealed (wax sealing) bids are invited by the Executive Engineer, TWAD Board Maintenance Division, Thoothukudi under percentage Tender System for operation and Maintenance of Water Supply Scheme/ CWSS as appropriately notified.
2. This Operation and Maintenance Contract will follow the procedure prescribed under The Tamil Nadu Transparency in Tender Act, 1998 and Tamil Nadu Transparency in Tenders Rules 2000 and subsequent amendments thereon.
3. Bidding documents in English may be purchased by interested bidders on submission of written application accompanied with a separate Demand Draft for each Work from any Nationalized/Scheduled bank drawn in favour of the Executive Engineer, TWAD Board, Maintenance Division, Thoothukudi for the work as appropriately notified.
4. Cost of tender document per Work is Rs.1,180 (1000+18%GST).
5. The bid documents can also be downloaded at free of cost from www.tenders.tn.gov.in
6. Earnest Money Deposit : Rs.39,000/-
Up to Rs. 100 Crore : 0.75 % of value of work
7. Period of contract is 10 months.
8. Further details about each Work can be seen in bidding documents and can also be got from the office of the Executive Engineer, TWAD Board, Maintenance Division, Thoothukudi.

Sl No	Name of work	Tender value in Lakhs	Period of sale and contact person	Last date for submission of bids	Date and time of opening of bids
1.	Outsourcing for Operation and Maintenance of CWSS to 159 rural habitations in Thoothukudi District including repair and rectification for the period from 6/2022 to 03/2023 (10 Months)	38.88	From 23.5.2022 to 8.6..2022 Executive Engineer, TWAD Board, Maintenance Division, No;25 Chidambaranagar, 2 nd street, Thoothukudi	09.06.2022 at 3.00PM	09.06.2022 at 3.30PM

Executive Engineer, TWAD Board,
Maintenance Division, Thoothukudi.

Tenderer

Sd/Executive Engineer, TWAD Bd

II. LETTER OF APPLICATION

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

Dated:

To
The Executive Engineer
TWAD Board, Maintenance Division, Thoothukudi.
Sir,

Being duly authorised to represent and set on behalf of

(herein after-the Applicant)],
and having reviewed and fully understood all the information provided, the undersigned hereby
apply for consideration as a bidder for the following:

INVITATION FOR BID No: NO.1/ F. Out Sourcing 2022-23/JDO/Dt 19.5.2022

Outsourcing for Operation and Maintenance of CWSS to 159 rural habitations in Thoothukudi District
including repair and rectification for the period from 6/2022 to 03/2023 (10 Months)

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 corporation) or the place of registration
and the nationality of the owners (for applicants who are partnerships or individually
owned firms)

Your Agency and its authorized representatives are hereby authorized 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.

Your Agency 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
- Your Agency 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 Excess/ Less percentage for the Total Amount and price 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, 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 TWAD Board by 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 Income Tax Clearance Certificate and Valid GST Registration Certificate in currency are enclosed

The Bid Security of Rs.39,000 /-(Rupees Thirty nine Thousand only) is enclosed in the shape of (enter the form and other details of the bid security) drawn in favour of the Executive Engineer, TWAD Board, Maintenance Division, Thoothukudi. 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 Bid Security 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 Bid Security 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 by post either by registered mail or ordinary. 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 TWAD Board represented by the officer accepting the bid and is expressly agreed that the bid documents with the schedules, conditions of the contract, negotiations, 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 providing earmarked quantity of water supply to all the beneficiaries under the scope in the list of WSS/CWSS shall be considered as the essence of this operation and maintenance contract and will be commenced immediately on getting information of the acceptance of the bid and any deficiency in supply due to contractor's operation and maintenance will be subjected to the relevant penal clauses contained in the Conditions of the Contract.

It is hereby agreed that the qualified personnel to operate and maintenance shall be deployed as required.

The Applicant hereby agrees to undertake full responsibility for the safety of the scheme components and the operating staff during the contract period.

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 understands that the withdrawal of the bid after bid submission is not permitted.

It is explicitly understood that the Tender Inviting / accepting Authority is not bound to accept the lowest or any bid received.

It is hereby agreed that the Tender Inviting / accepting Authority reserves the rights to reject any or all the bids without assigning any reasons there for.

Dated this day of Month of

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

NAME OF WORK:

OPERATION AND MAINTENANCE of Outsourcing for Operation and Maintenance of CWSS to 159 rural habitations in Thoothukudi District including repair and rectification

for the period from 6/2022 to 03/2023 (10 Months) TO SUPPLY EARMARKED QUANTITY OF WATER NOTED AGAINST EACH CWSS IN THOOTHUKUDI DISTRICT BY CARRYING OUT ALL THE NECESSARY WORKS SUCH AS PUMPING, ATTENDING TO LEAK AND BURST, ATTENDING TO ELECTRICAL AND MECHANICAL REPAIR WORKS, PROVIDING DISINFECTION, PREVENTIVE MAINTENANCE OF ALL INSTALLATIONS, SUMP CLEANING AND DELIVERANCE OF EARMARKED QUANTITY OF WATER TO THE BENEFICIARIES AS PER SCHEDULE AND STANDARD OPERATING PROCEDURES AND AS DIRECTED BY THE TWAD BOARD OFFICERS FOR A PERIOD OF 10 MONTHS YEAR FROM 6/2022 TO 03/2023 .

III . INSTRUCTIONS TO BIDDERS**A. GENERAL****1. Scope of the Bid**

This is an operation and maintenance of the following of CWSS to 159 rural habitations in Thoothukudi District including repair and rectification for the period from 6/2022 to 03/2023 (10 Months) Water Supply Schemes/ Combined Water Supply Schemes Contract and the contractor is responsible for providing earmarked quantity of water supply to all the beneficiaries under the scope of the Water Supply Scheme/ Combined Water Supply Scheme by carrying out all the necessary works, such as pumping , attending leaks and bursts in the pipelines inclusive of materials and workmen, attending all repair works in the pump set, valves and all other machineries related to the maintenance, and inclusive of spares/materials, accessories, cleaning of all storage structures like sumps, MSR, BPT, stand post etc. lubricants, chemicals, as and when required in accordance with the specifications as appropriately applicable to the Quality Parameters of the relevant BIS, TNBP, Bid Documents and deliverance of earmarked quantity of water to the beneficiaries as per schedule etc for successful operation and maintenance of the schemes for the specified period

1.1 The Executive Engineer, TWAD Board, Maintenance Division, Thoothukudi (herein after referred as - Employer (in these documents) invites bids for the operation and maintenance of CWSSs (as defined in these documents and referred as -the works) as detailed in the Bill of Quantities. The bidder shall offer their/his percentage Excess / Less for the total amount in the Bill of Quantities in figure and word.

1.2 Down loading the documents from website.

1.2.1. The bidder shall furnish a certificate to the effect that no correction/ alteration on the bid document as found in the web site was made by him and he shall abide by all the terms, conditions and specifications contained in the bid document.

1.2.2.No cost towards bid document shall be required to be paid by the bidders who are using the forms downloaded from the designated website.

The bidder shall submit the tender to the tender inviting authority as prescribed in the Invitation for Bid.

1.3 The Bid Document can be purchased from the Executive Engineer, TWAD Board, Maintenance Division, Erode by remitting the required cost of Bid Document as stipulated in the Invitation for Bid.

2. Method of Bidding

2.1 If the bid is made by an individual, the bid documents shall be signed by the individual with his full name and current address.

2.2 If the bid is made by a proprietary concern, the bid documents shall be signed by the proprietor with his full names as well as the name of the firm and full address. In the case of an authorized person holding power of attorney signing the bid documents, a certified copy of the registered power of attorney including still in existence certificate should accompany the bid documents. The signature of the Proprietor shall be attested by a notary public and enclosed as documentary evidence.

2.3 If the bid is made by a partnership firm, the bid documents shall be signed by all the partners of the firm along with their full names and current address with specific mention on the registered address of the firm. In the case of a partner holding power of attorney signing the bid documents, a certified copy of the registered power of attorney should accompany the bid. It is also mandatory to furnish a certified copy of the registered partnership deed, current address of the partners, and registered address of the firm along with the bid. The signature of all the partners/ power of attorney shall be attested by a notary public and enclosed as documentary evidence.

2.4 If the bid is made by a limited company or a limited corporation, it shall be signed by a duly authorized person holding power of attorney for signing the bid documents in which case a certified copy of the registered power of attorney shall accompany the bid. Such limited company or corporation may be required to enclose satisfactory evidence of its existence along with the bid.

2.5 The bids from the contractors / firms shall be accompanied by an attested copy of the Income Tax Clearance Certificate relating to the previous financial year and Valid GST Registration Certificate.

3. One Bid per Bidder

Each bidder shall submit only one bid for this work. A bidder who submits or participates in more than one bid will be disqualified.

4. Cost of Bidding

The bidder shall bear all the costs associated with the preparation and submission of his bid. The Employer will in no case be responsible for those costs, regardless of the conduct or the outcome of the bidding process.

5. Site Visit.

The bidder, at the Bidder's own responsibility and risk is advised to visit and examine the site of works and its surroundings and obtain on his own all information that may be necessary for preparing the bid and entering into contract for this operation and maintenance works. The costs of visiting the site and its surroundings shall be at the bidder's expense. Data made available are only for the information of bidder and the employer is not responsible for its correctness.

The bidder and any of his personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the bidder will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs and expenses incurred as a result of the inspection.

The bidder should carefully inspect the site to assess the prevalence of ground reality of the scheme to be operated and maintained to quote the rate appropriately and no extra rate will be paid on any account at a later date during contract period.

B. Eligibility / Qualification Criteria

6. Eligible Bidders

6.1. The Invitation to Bid is open to any bidder who meets the Physical and Financial eligibility criteria mentioned in the following clause 7

6.2. Joint Venture / Subletting of contract is not permitted.

7. Qualification of the Bidder

7.1 General

Bidders shall provide the following as part of their bid in the prescribed formats.

- 7.1.1 A registered Power of Attorney authorizing the signatory of the bid to commit on Behalf of the bidder should be enclosed.
- 7.1.2 Proof of Registration of the firm/company under Companies Act should be enclosed.
- 7.1.3 List of equipments available with the bidder for deployment in the project should be furnished in Annexure-VI.
- 7.1.4 Evidence of access to lines of credit and availability of other financial resources, credit line certificates from financial institutions should be enclosed in the prescribed Annexure-VIII.
- 7.1.5 Litigation details of the bidder with the details of the parties concerned and the amount involved and any Bank Guarantee executed for any purpose should be furnished in Annexure-IX.
- 7.1.6 The bidder should declare clearly whether the bidder has been black listed, banned or debarred in Central Government Department/Under- taking/ Organization or any State/ Union Territory/ Department Undertaking/ Organization in Annexure-X.
- 7.1.7 Income Tax Clearance Certificate in currency as proof of having remitted the income tax for the previous financial year (with reference to the year in which the bid is opened)
- 7.1.8 Valid GST registration certificate issued by competent authority and latest GST filing return should be produced.
- 7.1.9 GST is not applicable for Maintenance Contracts (and) in case of composite contracts where the value of materials involved is less than 25%, as per Government of India Notification No:2/ 2018-Central Tax (rate) New Delhi, 25th January 2018.
- 7.1.10 Affidavit as an undertaken is to be given by the contractor as per Annexure XI and it should be certified by the notary duly stamped an a notary stamp.

Performance Eligibility:

a. Physical Criterion:

i) The contractor who has executed the CWSS for which , the Tender is now called for Operation & Maintenance, is NOT eligible during its defect liability period.

ii) The contractor should have minimum one year experience in similar nature of work of O&M of CWSS / Execution in TWAD Board,

b) Financial:

The Bidders should have a cash flow of 3 months of the O& M cost of Tender now called for. Evidence of access line of credit and availability of other financial resources, credit line certificates from the Financial Institutions should be enclosed in the prescribed format Annexed as Annexure - VIII

Contractors registered in TWAD under Class II and above i.e., those who are eligible to take up the work costing more than Rs. 30.00 lakhs and above are eligible to tender for this work. Contractors registered in other Departments and Undertakings of the Central or State Government in the corresponding class for taking up such work, who have carried out similar works of the same or higher magnitude are also eligible to tender for this work. Contractors not Registered in the Board and who intend to participate in the tender, subject to their eligibility as above are requested to obtain a copy of the tender document from the office referred before submitting their Tender. They should furnish proof of their registration in the appropriate class and experience as indicated above while submitting their tenders, otherwise their tenders will be treated as non-responsive. The tender received from ineligible contractors will be treated as non-responsive. However, the successful Tenderer will have to get himself registered in the Board in the appropriate class.

i. In case of experience certificate of a Private Organization, the following criteria should be satisfied:

- a)** The Photographs of the works undertaken for the Private Organization should be enclosed as a proof.
- b)** The certificate of the work done for the Organization be enclosed by a Senior Official who should be at least of the rank of the General Manager or Equivalent.
- c)** The above certificate should be countersigned by a Government Department

Tenderer

Sd/Executive Engineer, TWAD Bd

Engineer at least of the rank of Assistant Executive Engineer and should also be notarised.

- ii. For the experience certificates furnished by the bidders which are obtained from the Departments outside the State, clarification will be obtained by the Employer from the concerned Department whenever felt necessary as to whether the details furnished in the certificates are genuine, before finalization of evaluation.
- iii. The bills/ claims should be prepared by the contractor as per Agreement and in accordance with the agreement executed and submitted to the Department.

7.3. Disqualification:

Even though the bidders meet the above qualifying criteria, they are subject to be disqualified at any point of time if they have

- 7.3.1.** made misleading or false representation in the form statements and attachments submitted and/or
- 7.3.2.** Record of poor performance during the last 5 years as on the date of application such as abandoning the work rescinding of contract for which the reasons are attributable to the non performance of the Contractor inordinate delays in completion, consistent history of litigation awarded against the applicant or any of its constituents or financial failure due to bankruptcy etc.
- 7.3.3.** been debarred / blacklisted as on the date of application by any Central / State Government Department/ Undertaking/ Organization and their bid will not be taken up for evaluation.

8. SPECIAL ATTENTION TO BIDDERS.

- 8.1. Copies of experience certificates obtained from the Officer not below the Rank of Executive Engineer of respective user departments must be attested by Notary Public and produced.

8.2. These Certificates should contain the following details

- 1) Name of Scheme (Name of the State also to be specified) :
- 2) Contract No. and date :
- 3) Value of Contract :
- 4) Name of Contractor with full address :
- 5) Period of completion/ maintenance as specified in the Contract :
- 6) Date of commencement of work :
- 7) Actual date of completion & commissioning/ of maintenance :
- 8) Reason for the delay if any :
- 9) Full details of components : executed / maintained under this contract :
- 10) Performance of the work should contain the following details :

Signature of Officer with Seal

C. BID DOCUMENTS

9. Contents of Bid Documents

The Bid Documents will comprise the following documents & addenda issued in accordance with clause 11 below:

- 1) Invitation for Bids
- 2) Instruction to Bidders
- 3) Eligibility/Qualification Criteria Forms of Bid
- 4) General Conditions of contract
 - a) Part I - Roles and responsibilities of the Contractor
 - b) Part II - Payment mode for Contractor
 - c) Part III - Role of TWAD Board
 - d) Part IV - Labour Laws to be followed
 - e) Part V - Special Conditions of Contract
 - f) Part IV - List of Beneficiaries and earmarked quantity of water to be supplied under this contract
- 5) Schematic/Flow Diagram
- 6) Bill of Quantities
- 7) Forms of Agreement

10. Clarification of Bid Documents.

A prospective bidder requiring clarification may raise the same in writing or by Electronic Mail to Tender Inviting Authority at the address indicated in the invitation for bid. The employer will respond to any clarification sought for.

11. Amendment to Bid Documents

- 11.1. At any time prior to 48 hours to the deadline for submission of bids, the Employer may amend the bid documents by issuing Addenda.
- 11.2. Any Addendum thus issued shall be part of the bid documents and shall be communicated in writing or by cable to all purchasers of the bid documents. Prospective bidders shall promptly acknowledge the receipt of each addendum by cable to the Employer.
- 11.3. To give prospective bidders reasonable time in which 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 Clause 21.2 of Submission of Bids.

D. PREPARATION OF BIDS

12. Language of the Bid

The bid, and all correspondences and supporting documents related to the bid exchanged by the bidder and the Employer shall be written in English. Supporting documents and printed literature furnished by the bidder may be in other language provided they are accompanied by an accurate translation of the relevant passages in either English or Tamil language, in which case, for purpose of interpretation of the bid, the translation shall prevail.

13. Documents comprising the Bid

The bid submitted by the bidder shall comprise the following:

- i. The Bid Documents duly filled and signed
- ii. List of Annexure as below:

1.	List of equipments available with the bidder – (7.1.3) (Annexure – VI)
2.	Sample Format for evidence of access to or availability of credit facilities- (7.1.4) (Annexure – VIII)
3.	Details of Litigation if any – (7.1. 5) (Annexure – IX)
4.	Declaration by the bidder pertaining to blacklisting / debarment etc., - (7.1.6) (Annexure – X)
5.	Affidavit as an undertaking given by the Contractor should be certified by the Notary duly stamped on a Notaries Stamp (7.1.10) (Annexure-XI)

- iii. List of Certificates.

- a. Signature of the Proprietor or Proprietress attested by the Notary Public (2.2)
- b. Signature of all the Partners/Power of Attorney attested by the Notary Public – (2.3)
- c. Registration of the firm, signature of the authorised person attested by the Notary Public –(2.3)
- d. A copy of the listed Power of Attorney authorising the signatory of the bidder – (7.1.1)
- e. Proof of Registration of firm/Company(7.1.2)

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- f. Credit line Certificate from Financial Institutions – (7.1.4) (Annexure VIII)
 - g. Income Tax Clearance Certificate –(7.1.11)
 - h. Latest GST filing returns Certificate –(7.1.12)
 - iv. Certificate of performance issued by not less than the rank of Executive Engineer of the Government organization concerned / responsible person of the private organization
- Bid Security (17.1)
- v. Any other material required to be completed and submitted by the bidders in accordance with these instructions.
 - i. Priced Bill of Quantity duly signed.
 - ii. The Bid should be submitted only in the original documents as issued by the Tender Inviting Authority or as downloaded from the website. No alteration or correction should be made under any circumstances in the Bid Documents issued by the Tender Inviting Authority.
 - iii. Conditional tenders are liable for rejection

14. Bid Prices

- 14.1 The contract shall be for the whole works as described in sub clause (1.1), based on the priced bill quantities submitted by the bidder.
- 14.2 The bidder shall fill in Excess / Less percentage for the total amount (both in figures and words) Corrections, if any, shall be made by crossing out and initialing.
- 14.3 All duties, taxes and other levies payable by the contractor, under the contract for any other cause shall be included in the rates, prices and total bid price submitted by the bidder.
- 14.4 The rate and prices quoted by the bidder is firm till the completion of contract period and price adjustments are not allowed.

15. Currencies of Bid and Payment

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

16. Bid Validity

16.1. "Bids shall remain valid for a period not less than ninety days from the date of opening of Bid, as per Sec. 14.2 of Tamil Nadu Transparency in Tenders rules 2000.

16.2. A bid validity for a shorter period shall be rejected by the employer as non-responsive."

16.3. In exceptional circumstances, prior to expiry of the original time limit, the Employer may request the bidders to extend the period of validity for a specific additional period. The request and the bidders' response shall be made in writing or by cable. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend his bid security for; the period of extension.

17. Bid Security

17.1 The bidder shall furnish, as part of his bid, as bid security of Rs.39,000/- (Rupees Thirty Thousand only) duly pledged in favour of the Executive Engineer, TWAD Board Maintenance Division, Thoothukudi in any one of the following forms.

17.1.1. Demand draft / Deposit call receipt / Fixed deposit receipt (FDR) / Bank Guarantee (Prescribed format of the Bank Guarantee (Unconditional) for the bid security issued by a Nationalised Bank/Scheduled Bank located in India/National savings certificate/Post office Savings Bank deposits.

17.1.2. Unconditional Bank Guarantee in the prescribed format for the bid security issued by a Nationalised Bank/Scheduled Bank located in India & valid for 45 days after the end of the validity period of the bid.

17.1.3. FDR and deposits at call receipts should contain lien certificate issued by the Bank for encashment by department. The FDR furnished by the firm should also bear the signature of the authorized signatory on a revenue stamp at the back of the FDR. (The contractors produced FDR in the name of Executive Engineer whether it may be accepted)

17.2 Any bid not accompanied by bid security in stipulated form shall be rejected by the Employer as nonresponsive

17.3 The bid security of the unsuccessful bidders will be returned as promptly as possible, but not later than 30 days either after the expiration of the period of bid validity or after finalizations of the bid whichever is later.

17.4 The bid security of the successful bidder will be returned after the bidder has furnished the required performance security and signed the agreement. No interest is payable on Bid security by the Employer.

17.5 The bid security shall be forfeited:-

17.5.1. In the case of bidder withdrawing or modifying his bid during the period of bid validity.

17.5.2. If the bidder does not accept the corrections of the bid price, pursuant to clause 28 of "Bid Opening and Evaluation".

17.5.3. In the case of a successful bidder failing to furnish the performance security in the specified form within the stipulated time.

17.5.4. In the case of successful bidder failing to enter into agreement within the stipulated time.

17.5.5. In the case of the bidder severing the conditions after intimation of the acceptance of the bid.

18. Format and Signing of Bid

18.1. The bid document submitted to the Employer shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the bidder in accordance with-Instructions to Bidders||. All pages of the bid and where entries or corrections have been made shall be initialed by the person signing the bid.

18.2. The bid shall contain no alteration or additions, except those to comply with the instructions issued by the Employer and wherever necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person signing the bid.

18.3. Bids as issued by the Employer should be submitted duly signed at the bottom of each page, failing which the bids will be summarily rejected.

E. SUBMISSION OF BIDS

19. Sealing and Marking of Bids

20.1. The bids should be submitted in the original bid documents as issued by the Employer.

20.2. The bid documents under no circumstances are transferable.

The cover containing the Bid should be pasted, sealed and super-scribed properly.

20.3. Format and signing of Tender

20.8.1 The Tenderer shall submit one original as described in the Instruction to Tenderers, bound in a format as stipulated.

20.8.2 All bidders will be provided with an electronic copy of the schedule of prices. Cells that contain permanent information are protected and cannot to be changed by the Bidder.

20.8.3 Cells into which the bidder can enter percentage Excess/ less (where these may vary), will be left unprotected. However, the Employer will not enter any formulae in the spread sheets.

20.8.4 The Bidder is entirely responsible to ensure that the calculations presented in the Schedule of Prices are correct, and that the Bidder's offer is complete in all respects.

20.8.5 The Price Bid completed in computerized printout, adopting the format of the Bid document in total and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder.

20.8.6 The Tenderer shall submit the Price bid in one original. The BOQ in the format which is uploaded.

20.8.7 The Bidder will need to submit the completed Schedule of Prices together with the bound copy of the Price Proposal which has been issued by the Employer along with the separate Priced Schedule of Prices, and to affix his signature on all pages of his submittal.

20.8.8 The Tender shall contain no alternations, omissions or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the Tenderer, in which case such corrections shall be initialed by the person or persons signing the Tender.

20.8.9 The envelope shall be addressed to the Employer namely "THE Executive ENGINEER, TWAD BOARD, Maintenance Division, Thoothukudi" and bear the following identification

Bid for- Outsourcing for Operation and Maintenance of CWSS to 159 rural habitations in Thoothukudi District including repair and rectification for the period from 6/2022 to 03/2023 (10 Months)

INVITATION FOR BID No: NO.1/ F. Out Sourcing 2022- 23/JDO/Dt 19.5.2022

Do Not Open Before	09.06.2022	(Time and date of bid opening as per Clause
	at 3.30 pm	24 of Bid Opening and Evaluation)

and should be submitted to the following Address:

"THE EXECUTIVE ENGINEER, TWAD Board,
Maintenance Division, Thoothukudi.

20.8.10 In addition to the Identification required in sub clause above, the envelope shall indicate the name and address of the bidder to enable the bid to be returned in case it is declared late, pursuant to Clause 22 of Submission of Bids.

20.8.11 If the envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the bid.

20. Deadline for Submission of the Bids

21.1. Bids must be received by the Employer at the address specified in clause 20.8 above not later than 3.00 PM on 09.06.2022. In the event of the specified date for the submission of bids declared a holiday for the Employer, the bids will be received up to the appointed time on the next working day.

21.2. The Employer may extend the deadline for the submission of bids by issuing amendment in accordance with clause 11 of Bid Documents 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.

21. Late Bids

22.1. All bids received by the Employer after the deadline prescribed in clause- 21 of Submission of Bid will be returned unopened to the bidder.

22.2. TWAD Board will not be held responsible for any Postal/other modes delay leading to delayed submission of Bids after the deadline prescribed.

22. Modification/ Substitution of Bid before opening

- 23.1. No Tenderer shall be allowed to withdraw the tender after submitting the tender.
- 23.2. The Bidder may modify or substitute his bid after submission provided that written notice of the modification and substitution is received by the Employer prior to the Deadline of submission of Bid.
- 23.3. The Bidder's modification or substitution notice shall be prepared, sealed, marked and delivered in accordance with the provision clause – 21 & 22 of "Submission of Bids", with the envelope additionally marked "MODIFICATION" or "SUBSTITUTION" with name of work as appropriate.
- 23.4. Modification / Substitution for Price Bid cover should be super-scribed as "PRICE BID MODIFICATION COVER"/ "PRICE BID SUBSTITUTION COVER" with name of work
- 23.5. Modification / Substitution for Technical Bid cover should be super-scribed as "TECHNICAL BID MODIFICATION COVER"/ "TECHNICAL BID SUBSTITUTION COVER" with name of work
- 23.6. No Bid shall be modified /substituted after the deadline for the submission of Bids.
- 23.7. Modification / Substitution of a Bid between the Deadline for submission of Bids and the expiration of original period of validity specified in the Clause – 16.1 "PREPARATION OF BIDS" or as amended pursuant to the Clause 16.2 "PREPARATION OF BIDS" may result in the forfeiture of the Bid security pursuant to the Clause – 17 "PREPARATION OF BIDS".

F. BID OPENING AND EVALUATION**23. Bid Opening**

- 24.1. The Employer will open all the bids received (except those received late) in the presence of the bidders or their representatives who choose to attend on the date at the time in the address specified in clause 21 of Submission of Bids. (In the event of specified date of bid opening being declared a holiday for the Employer, the bids will be opened at the appointed time and location on the next working day). Envelopes marked as substitution or modification shall be opened and read out first.
- 24.2. The Bidders' names, the Bid prices, the total amount of each Bid, any discounts, bid modification / substitution, the presence or absence of Bid Security and such other details as the Employer may consider appropriate, will be announced by the Employer at the time of opening. Bids and modifications received

pursuant to clause -23 of "Submission of Bids" that are not opened and not read out at the bid opening will not be considered for further evaluation regardless of the circumstances.

24. Process to be Confidential

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 person 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.

25. Clarification of Bids.

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 breakdown of 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-28 of "Bid Opening and Evaluation".

26. Examination of Bids and Determination of Responsiveness

27.1. Prior to detailed evaluation of Bids, the Employer will determine whether each Bid

- (a) meets the eligibility criteria set out in clause – 7 "Qualification of the Bidder",
- (b) has been properly signed,
- (c) is accompanied by the required securities and
- (d) is substantially responsive to the requirements of the Bid Documents,

27.2. A substantially responsive Bid is one which conforms to all the terms, conditions and specifications of the Bid Documents, without material deviation or reservation.

A material deviation or reservation is one

27.2.1 which affects in any substantial way the scope, quality or performance of the works.

27.2.2 which limits in any substantial way, inconsistent with the Bid Documents, the Employer's rights to the Bidder's obligations under the contract, or

27.2.3 whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive Bids.

27.3. If a 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. The decision of the Employer on the issue whether the Bid is responsive or not will be final and binding on the bidders. The Employer is not bound to disclose the reason in case a bid is determined by him as non-responsive.

27. Correction of Errors

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

- If any variation is found in the between words and figures, the lesser of the two will only be taken in to consideration.

28.2. The amount stated in the Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount of the Bid, his bid will be rejected and his bid security will be forfeited in accordance with Clause -17.5 of "Preparation of Bids".

28. Evaluation and Comparison of Bids

29.1. The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause- 27 of-Bid Opening and Evaluation.

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

- 29.2.1. Making any correction for errors pursuant to Clause -28 of "Bid Opening and Evaluation". Or
- 29.2.2. Making appropriate adjustments to refer discounts or other price modifications offered in accordance with Clause -23 of "Submission of Bids"
- 29.2.3. The Employer reserves the right to accept or reject any variation/deviation.

29.3. If the Bid of a successful Bidder is found highly unbalanced in relation to the TWAD Board's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the methods of operation and maintenance of the CWSS and schedule proposed.

29.4. After evaluation of the price analysis, the Employer may require that the amount of the Performance Security set forth in Clause - 34 of "Award of Contract" 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.

29.4.1. For tenders received with any plus percentage & up to minus 5 percentage of the Departmental Value, the successful tenderer should remit 2% of contract value as performance security.

29.4.2. For tenders received with minus 5% & up to minus 15% of departmental value the successful tenderer should remit 4% on contract value as performance security.

29.4.3. For tenders received with minus 15 % and more of Dept. Value, the successful tenderer should remit 5% of contract value as performance security.

G. AWARD OF CONTRACT

29. Award Criteria.

Subject to Clause 29 of-Bid Opening and Evaluation, the Employer will award the contract to the Bidder, whose Bid has been determined to be substantially responsive to the Bid Documents and who has offered the lowest evaluated Bid Price, provided that such Bidder has been determined to be (a) eligible in accordance with the provision of clause-6 of Eligibility / Qualification Criteria and (b) qualified in accordance with the provisions of Clause-7 of Eligibility/ Qualification Criteria.

30. Employer's Right to Accept any Bid and to Reject any or all Bids

The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to 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.

31. Notification of Award

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 e mail 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 to the contractor in consideration of the Operation and maintenance of the works by the Contractor as prescribed by the Contract (hereinafter and in the conditions of Contract called the-Contract Price.)The notification of award will constitute the formation of the Contract.

Tenderer

Sd/Executive Engineer, TWAD Bd

32. Registration in TWAD

The successful contractor/ firm, if not a registered contractor in Tamil Nadu Water Supply and Drainage Board, he / she/ they should get himself / herself/ themselves registered in TWAD Board, before concluding the agreement

33. Performance Security

34.1. Within 28 days from the date of the Letter of Acceptance, the successful bidder shall deliver to the Employer a Performance Security as detailed below:-

34.1.1. For tenders received with any plus percentage & up to minus 5 percentage of Department Value, the successful tenderer should remit 2 percentage of contract value

34.1.2. For tenders received with minus 5 percentage & up to minus 15 percentage of departmental value the successful tenderer should remit 4 percentage on contract value.

34.2 For tenders received with minus 15 % and more percentage of Department Value, the successful tenderer should remit 5 percentage of contract value.

The Performance security should be in the form of

34.2.1. National Savings Certificate/Post Office Savings Deposit account purchased within the State of Tamil Nadu and pledged in favour of the Executive Engineer, TWAD Board, Maintenance Division, Thoothukudi.

(OR)

34.2.2. Unconditional and irrevocable bank guarantee issued by any one of the branches of Nationalised Bank or scheduled Bank within the State of TamilNadu, provided they are in prescribed format (enclosed in this Document) for an amount equivalent to Excess/Less percentage of the total value of the contract in favour of the Executive Engineer, TWAD Board, Maintenance Division, Thoothukudi.

34.2.3. FDR and deposits at call receipts should contain lien certificate issued by the Bank for encashment by department. The FDR furnished by the firm should also bear the signature of the authorized signatory on a revenue stamp at the back of the FDR.

34.2.4. The bidder along with the performance security, shall deliver a non judicial stamp paper for Rs.100/- (Rupees One Hundred only) at his cost for executing the agreement.

35. Signing of Agreement

- 35.1. The Employer on receipt of the performance security and non-judicial stamp paper, will furnish to the bidder the Agreement in the form prescribed, incorporating all terms and conditions between the Employer and the successful bidder.
- 35.2. The Bidder should remit the performance security prescribed by the Employer in the form as in Clause 34 above and sign the agreement in the presence of the Employer within 28 days from the date of Letter of Acceptance notifying the award of contract.
- 35.3. Upon furnishing the performance security by the successful bidder, the Employer will promptly notify the other bidders that their bids have been unsuccessful.
- 35.4. Failure of the successful bidder to comply with the requirements of Clauses- 34 & 35 and 35.2 of "Award of Contract" shall constitute a breach of contract, cause for annulment of the award, forfeiture of the bid security and any such other remedy the Employer may take under the contract.

Amendment to Agreement:

- 35.5. Any amendment shall be issued by mutual consent between the Employer and the contractor only without any contrary to the bid conditions.
- 35.6. Such amendment should not lead to change in rates and prices of the successful bidder.

36. Forfeiture of Performance Security

The performance security is liable to be forfeited in cases where the firm/contractor fails to carry out the work in accordance with the specifications, terms and conditions of the contract leading to termination of the contract.

37. Foreclosure of Works

The Employer shall have the right to issue notice to the contractor, for any reason whatsoever does not require the whole or part of the contract to be carried out after the award of the contract. The contractor shall not have any claim towards compensation or whatsoever, on account of any profit or advantage, which he might have derived from the carrying out of such portion. For the portion already carried out in view of the foreclosure, the contractor shall be paid an eligible amount as certified by the Engineer in charge.

38. Termination of Contract

The employer may terminate the contract, when it is opposed / contrary to the covenant of the terms of the contract.

The employer shall issue notice of 15 days time to rectify and in the event of failure to rectify / comply the terms of the contract, the contract stands terminated on the 16th day from the date of issue of notice.

On termination of the contract, the employer shall withhold the amount payable to the contractor and the security deposit by the contractor till the amounts due to the Board are recovered.

39. Release of Performance Security

On successful completion of contract for the assigned period and after handing over the entire scheme with all its infrastructures and installations in good and operating condition to TWAD Board, the performance security will be refunded after three months from the date of handing over the scheme.

40. Recovery of money payable to TWAD Board

All losses, costs, damages and expenses and other money payable to the Board by the contractor under any stipulation in the contract, may be retained out of any money due or which may subsequently become due from the Board to the contractor under any contract or otherwise whatsoever and in case such money then due or to become due to the contractor by the Board shall be insufficient to pay such losses, costs, damages, and other money payable to the TWAD Board by the contractor, it shall be lawful for the Engineer in charge without any further consent on the part of the contractor to sell or dispose of any securities deposited in the Board by the contractor as aforesaid and with and out of the proceeds of such sale, after payment of all expenses connected therewith or reimburse and pay to the Board all such losses, cost, damages and expenses and other money payable to the contractor. And in case such proceeds of sale of the said securities shall be insufficient for such purpose then and in that case it shall be lawful for the Board to recover the residue thereof, if necessary by legal proceedings and or by resorting to revenue recovery act against the contractor.

41. TDS on Income Tax

41.1. During the course of the contract period, deduction of income tax shall be made at the prevailing rates from every payment as may be specified by the Income Tax Act and as amended from time to time.

- 41.2. GST is not applicable for Maintenance Contracts (and) in case of composite contracts where the value of materials involved is less than 25%, as per Government of India Notification No:2/ 2018-Central Tax (rate) New Delhi, 25th January 2018.

42. Mobilization Advance

Mobilization advance will not be provided under this contract

43. Price Adjustment:

Price adjustment is not applicable under this maintenance contract.

44. Dispute

44.1. Dispute Redressal Committee

A) In order to ensure a dispute Redressal mechanism, for tenders of value up to and Rs.1 Crore the Regional Technical Committee will be the " Dispute Redressal Committee" in order to resolve any disputes between the Employer / Engineer – in charge concerned and the contractor and the appeal committee is as in (B).

B) In order to ensure a dispute redressal mechanism, , for tenders of value more than Rs.1 Crore a Committee headed by the Managing Director / Joint Managing Director and consisting of Engineering Director, TWAD Board and Engineering Director, CMWSS Board as Member, will comprise the " Dispute Redressal Committee" in order to resolve any disputes between the Employer / Engineer – in charge concerned and the contractor.

44.2. Arbitration: In view of the above Dispute Redressal Committee, arbitration is not part of this Contract

44.3. Jurisdiction of Court

In the event of non settlement of any dispute by the Dispute Redressal Committee arising between the parties hereto in respect of any matter comprised in the contract, the same shall be settled by a competent court having jurisdiction over the place where the contract is awarded and agreement is concluded and by no other court.

45. Force Majeure

Neither party shall be liable to the other for any loss or damage caused by or arising out of Acts of God such as unprecedented flood, cyclone, volcanic eruptions, earthquake or other special risks referred above which prevent the performance of the contract and which could not have been foreseen or prevented by the prudent person. If a Force Majeure situation arises, the contractor shall promptly notify the Employer in writing of such condition and the cause thereof, Unless otherwise directed by the Employer in writing, the contractor shall continue to perform the obligations as far as it is reasonably practical and shall seek all reasonable alternative means for performing those not prevented by Force Majeure.

46. In the event of belated settlement of dues to the contractor, the contractor shall not claim interest for the belated payment.

47. The directions of the Hon'ble court in WMP. Nos. 11584 & 10723 of 2022 in WP No. 11128 of 2022 should be implemented scrupulously.

47.1. The wages paid to the labourers should not be less than minimum wages.

47.2. In case the contractor engaged the labourers already worked in the CWSS, the wages already paid to the labourers should not be reduced at any cost.

48. Contractor dying, becoming Insolvent or Insane

In the event of death or insanity of the contractor, the contract may be terminated by notice in writing, pasted at the site and advertised in the issue of the local newspaper. All acceptable works shall thereafter, be paid at appropriate rates after recovering all the contractor's dues to Employer, to the persons entitled to receive and give a discharge for such payments.

In the contractor is imprisoned because insolvent compound with his creditors has a receiving order made against him or carriers on business under receiver for the benefit of the creditors of any of them or being a corporation goes into liquidation or commences to be wound up not being a voluntary winding up for the purpose only of amalgamation or reconstruction, the employer shall be at liberty.

To give such liquidator, receiver or other persons in whom the contract may become vested the option of carrying out the contract or a portion there of to be determined by the employer, subject to his providing an appropriate guarantee for the performance of such contractor.

To terminate the contract forthwith by notice in writing to the contractor the liquidator, the receiver or person in whom the contract may become vested and take further actions as provided in the clause pertaining to default by contractor, treating as if this termination is ordered under the respective clause. (This condition may be included)

VI. LIST OF ANNEXURES

Annex No.	Description	Para No.
VI.	List of equipments available with the bidder	7.1.3
VIII.	Sample Format for evidence of access to or availability of credit facilities	7.1.4
IX.	Details of Litigation if any	7.1.5
X.	Declaration by the bidder pertaining to blacklisting / debarment etc.,	7.1.6
XI.	Affidavit as an undertaking given by the Contractor should be certified by the Notary duly stamped on a Notaries Stamp (Annexure-XI)	7.1.10

VII. LIST OF CERTIFICATES

Sl. No.	Description of Certificate	Para No.
1	Signature of the proprietor or proprietress attested by the Notary Public	2.2
2	Signature of all the partners/power of attorney attested by the Notary Public	2.3
3	Registration of the firm, signature of the authorised person attested by the Notary Public	2.3
4	A copy of the listed power of attorney authorising the signatory of the bidder	7.1.1
5	Proof of registration .	7.1.2
6	Credit line Certificate from Financial institutions	7.1.4
7	Income Tax Clearance Certificate (Latest)	7.1.11
8	Valid GST registration Certificate	7.1.12
9	Certificate of performance issued by not less than the rank of Executive Engineer/Responsible person of the private organisation.	7.2

Tenderer

Sd/Executive Engineer, TWAD Bd

Annexure VI (Para No 7.1.3)

List of Equipment Available with Bidder

Sl. No.	Equipment Name	Requirement for the project		Availability Status			Remarks
		Nos.	Capacity	Owned/ leased/ be Procured	Nos and To capacity	Age/condition	

Seal of the firm

Signature of the bidder with date

Tenderer

Sd/Executive Engineer, TWAD Bd

Value of contract	Qualification and No. of Technical supervisor / Assistant to be employed by the Contractor.
1. Upto Rs. 1.00 lakh	No Technical Assistant need be employed. If situation and nature of work warrants. 1) A Diploma holder in Civil Engineering or 2) A retired Junior Engineer may be employed..
2. From Rs.1.00 lakh to Rs.5.00 lakhs	1) One diploma holder in Civil Engineering or 2) Not less than one retired Junior Engineer.
3. From Rs.5.00 lakhs to Rs.10.00 lakhs	1) One B.E (Civil) Or 2) Equivalent degree holder. Or 3) Not less than one retired AEE/ADE 4) One diploma holder with three years experience.
4. From Rs.10.00 lakhs to Rs.25.00 lakhs	1) One B.E. (Civil) with 3 years experience plus one Diploma holder in Civil Engineering Or 2) Equivalent degree holder with 3 years experience plus one Diploma holder in Civil Engineering Or 3) Not less than one retired AEE/ADE plus one diploma holder in civil Engineering. 4) Two diploma holders in in civil Engineering with 3 and 5 years experience respectively.
5. From Rs.25.00 lakhs to Rs.50.00 lakhs	1) One B.E. (Civil) with 3 years experience plus two Diploma holder in Civil Engineering or 2) One B.E. (Civil) with 3 years experience plus two retired junior Engineers. or 3) Equivalent degree holder with 3 years experience plus two Diploma holder in Civil Engineering / two retired junior Engineers. or 4) One retired AEE or ADE plus two diploma holders in Civil engg. or 5) One retired AEE or ADE plus two retired Junior Engineers.
6) Above Rs.50 lakhs	(To be examined in individual cases depending upon the nature of work and the technical skill involved and defined in the tender notice regarding the No. of qualified technical personal to be employed by the contractor.
7) Penalty	The rate for failure on the part of the contractors to employ technical assistant 1) For Diploma holder - Rs 2000/- per month 2) For Degree holder - Rs 5000/- per month

ANNEXURE VIII (Para No 7.1.4)

SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT FACILITIES

– CLAUSE 7.1.4

(To be furnished in the Letter Head of Bank)

BANK CERTIFICATE

This is to certify that M/s is a reputed company with a good financial standing.

If the contract for the work, namely..... is awarded to the above firm, we shall be able to provide overdraft/ credit facilities to the extent of Rs. to meet their working capital requirements for executing the above contract.

Signature of the Authorised Officer of the Bank.

Date:

Seal of the Bank.

ANNEXURE IX (Para No 7.1.5)

Details of Litigation, if any.

Sl. No	Name of the Govt. Dept./Private Organisation(Other party)	Cause of the litigation	Amount involved (Rs. In lakhs)	Award for (or) against bidder	Remarks / present stage

Note: Should be attested by the Notary Public.

Seal of the firm

Signature of the bidder with date

Tenderer

Sd/Executive Engineer, TWAD Bd

ANNEXURE X (Para No 7.1.6)

Declaration by the Bidder:

It is to certify that our firm.....

.....has not been black listed / banned / debarred by any Central/ State
/ UT Government Department or Undertaking /Organization.

Seal

.....

.....

(Signature of the Bidder)

ANNEXURE-XI (Para No 7.1.10)

(Affidavit as an undertaking given by the Contractor should be certified by the Notary duly stamped on a Notaries Stamp)

Model

(to be typed in Rs 100 Non-Judicial Stamp Paper)

AFFIDAVIT OF _____ (Name of Contractor).

I/We _____ (Name of Contractor) Son of (Hindu) aged about years, Partner/Proprietor/Authorised signatory of ----- having our office at no..... do hereby solemnly affirm and sincerely states as follows:-

I /We state that We have entered in to Operation and Maintenance of WSS/CWSS contract with TWAD Board on date.

I/We state that I/We will be the Principal Employer as referred in the labour laws in respect of any operating staff / work person engaged for the purpose of delivery of services under this contract.

I/We state that there will not be any employer and employee relationship between TWAD Board and the workmen employed by us. We will take all responsibilities relating to present Labour Laws with regard to our employees.

I/We state that the workers employed by us in connection with performance of this contract will not claim any right of employment with TWAD Board.

I/We state that this Affidavit can be used as a Document before any Court of Law or Tribunal to defend the TWAD Board.

Solemnly affirm and signed by me on this day of 2022

DEPONENT

BEFORE ME

NOTARY PUBLIC

GENERAL CONDITIONS OF CONTRACT

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PART I

ROLES AND RESPONSIBILITIES OF THE CONTRACTOR

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1.1. INTERPRETATION OF TERMINOLOGIES

- 1.1.1. In these conditions of contract the following definitions shall apply:
- 1.1.2. The *Tender inviting authority* and *Tender Accepting Authority* means the Executive Engineer, Superintending Engineer/ Chief Engineer of Tamil Nadu Water Supply and Drainage Board
- 1.1.3. The *Implementing authority/ Department* means the Executive Engineer, Superintending Engineer/ Chief Engineer of Tamil Nadu Water Supply and Drainage Board
- 1.1.4. The *contract* means the agreement concluded between the authority and the contractor, including all specifications, patterns, contractor's samples, plans, drawings and other documents incorporated or referred to there in.
- 1.1.5. The *contractor* means the person/agency who have been awarded the work and undertakes the Operation and maintenance of the CWSS.
- 1.1.6. The *contract price* means the price mentioned in the price schedule of the agreement for the respective items of works carried out, that is payable to the contractor by the authority under the contract for the full and proper performance by the contractor or its part of the contract.
- 1.1.7. The *work* means the work of supplying earmarked quantity of water to all the beneficiaries covered under the scope of the project, attending leaks/ bursts occurred during the maintenance period, attending repair works on the goods and equipments that the contractor is required to provide under the contract to establish the above mentioned service.
- 1.1.8. *MLD* is Million litres per day which equals 10,00,000 litres in one day.

1.2. Responsibilities of the Contractor regarding O&M of this Scheme.

- 1.2.1. A joint inspection to be conducted by the Contractor with TWAD Board Officials before taking over of the CWSS for maintenance.
- 1.2.2. The Contractor should take over the scheme after award of work for maintenance and handover the scheme in good condition, on completion of agreement period.

- 1.2.3. Before taking over the CWSS/WSS, inspect the Alignment and to check presence of any illegal connections (any connections other than the scope of the project) in the alignment during takeover of the scheme for maintenance. If any illegal connection found during the course of taking over, the same shall be removed at the cost of TWAD Board.
- 1.2.4. After taking over of the CWSS for maintenance, the Contractor is the custodian of the CWSS.
- 1.2.5. After taking over the scheme by the contractor, for any damages to the components of the CWSS made by men, machinery, etc., the contractor is solely responsible for rectification at his own risk and cost, except for damages caused by other line departments under the Government of Tamil Nadu, National Highways and NHAI.
- 1.2.6. Damages caused to the underground utilities by the contractor during rectification is to be rectified by the contractor under own risk and cost.
- 1.2.7. After taking over the scheme by the contractor if any illegal connection found, it should be reported immediately to the AE/AEE so as to file the FIR by the Department early. However, the Contractor should take immediate action to remove such Illegal connections at his risk and cost only. Continual illegal Tapping/Connection will lead to cancellation of agreement, as the maintenance of Pipeline is the sole responsibility of the contractor.
- 1.2.8. The CWSS taken over by the contractor is only for maintaining the scheme and to supply the earmarked quantity to all the beneficiaries. The contractor should not make any alterations in the CWSS / supplying water to any other beneficiaries/ supplying water through any other mode without the approval of the Executive engineer incharge of the CWSS in writing.
- 1.2.9. Ensure that the water is supplied to all beneficiaries covered under the project as per the earmarked quantity on normal condition.
- 1.2.10. Under all the circumstances, the supply to all beneficiaries including Tail end ~~critical~~ habitations shall be ensured as per the PART –VI of the GCC.
- 1.2.11. Should inform every day before 08.00 AM about the pumping status of the scheme from 06.00 AM of previous day to 06.00 AM of present day to the AE/AEE through WhatsApp and through online entry as per the prescribed format (beneficiary supply details).
- 1.2.12. If Diesel Generator (DG) is available in the scope of contract it should be maintained in working condition. Test run of Genset should be carried out for a

minimum of 30 minutes per week while in idle condition or as recommended by the manufacturer / directed by TWAD Engineer. The contractor should make necessary arrangement for Diesel / Lube oil required for operating the generator and the related cost will be reimbursed as per actual on production of original bills.

- 1.2.13. In case of failure of electricity during emergency / calamity, the contractor shall take immediate action to restore the electricity by approaching the TANGEDCO authorities. In case of non availability of generators, the Contractor shall engage generators for pumping the Earmarked quantity (MLD) as and when required under approval of the Executive Engineer and the hire charges will be paid as per the rate approved for this case.
- 1.2.14. The contractor shall submit the operating methodology to carryout in full this contract as per the prevailing guidelines, CPHEEO guidelines and got it approved by the Engineer in charge. The Operating Staff should have the required minimum qualification as the case may be as Electrician with-C-Certificate, Electrician-grade II, Fitter grade II, Maintenance Assistant, filter bed operator, turncock, watchman as per the requirement of works to be performed. All shall read and write.
- 1.2.15. Must keep a copy of the relevant portions of the latest CPHEEO manual on Operation and Maintenance of Water Supply Systems at work site and carry out the O&M works in accordance to the guidelines prescribed in the Manual.
- 1.2.16. The Quantity of water supplied to the beneficiaries is the essence of contract, and the contractor is solely responsible for the supplied quantity. The contractor should ensure earmarked quantity (MLD) of supply to all the beneficiaries as per the scope. Contractor should maintain and furnish register showing the quantity of water delivered to each habitations duly signed by Panchayat Secretary/ Panchayat President of the local body concerned or a person authorized by the Panchayat President and submitted to the Assistant Engineer for preparing the water charges demand by 26th of every month (from 26th of the previous month to 25th of current month)..
- 1.2.17. The Contractor should maintain Pumping quantity register, pump set operation register, Leak & burst register, Consumables register, Electro mechanical repair register, preventive maintenance register, water retaining structure cleaning register, pumpset panel boards repair register, valves inspection and rectification register etc. and the same shall be maintained and signed by the contractor/authorized person and the same shall be furnished during the

inspection of TWAD Board Officer. The format for maintaining the above registers shall be got approved from the Executive Engineer in charge.

- 1.2.18. The Contractor should obtain the invoice / bill for electricity consumed and handover to the Assistant Engineer / Assistant Executive Engineer for onward submission for making payment and the contractor should make arrangements to submission of Cheque / Demand Draft to Electricity Board office without delay.
- 1.2.19. All the repair works whenever it occurs in the pumping machineries, Electro-mechanical items should be attended immediately under intimation to TWAD Board Engineers as all the works are included in the essence of contract.
- 1.2.20. The contractor should attend the Leaks and Bursts whenever it occurs, within the stipulated period, and necessary photos shall be taken before during and after attending the works with latitude / longitude and the same must be uploaded online in the link <http://117.236.90.36/Maint-Projects/frmLeakBurst.aspx>, through the Assistant Engineer/Assistant Executive Engineer concerned.
- 1.2.21. For attending the leaks/ burst, the contractor shall procure the minimum quantity of materials and keep advance stock which may require to attend all types of maintenance works at the earliest.
- 1.2.22. All the tools and equipments required for this contract shall be arranged by the Contractor at his own expense.
- 1.2.23. Contractor shall maintain the water meters in good working condition. The Quantity pumped will be ascertained based on water meter reading only. However in special circumstances if the water meter is not functioning / available, the supply quantity will be checked using portable flow meter provided by the contractor.
- 1.2.24. Operate and maintain capacitor and allied switch gear so as to maintain a power factor of not less than 0.90 and as prescribed by TANGEDCO.
- 1.2.25. The power factor will not decrease or increase suddenly and hence the contractor should monitor it daily. If any decrease in the power factor is noticed, it should be informed to the Departmental Engineers (concerned Assistant Engineer/Assistant Executive Engineer) and rectification to be carried out by the contractor which will be paid for as per the agreement. Any penalty levied by TANGEDCO for non-maintenance of power factor, will be recovered from the Contractor.
- 1.2.26. Mandatory Regulations prescribed by CEIG and Inspector of Factories shall be followed without any lapse.

- 1.2.27. To maintain periodically plant and machineries, pump room and it's premises, Pumping main and valves and Treatment Units etc. as per the list detailed in clause 1.3 and as per the Schedule of Maintenance detailed in clause 1.4 of General Conditions of Contract.
- 1.2.28. Each station should be provided with complete set of tools and equipments required for maintenance as listed in the clause 1.5 of GCC.
- 1.2.29. To adhere to safety measures as stipulated in clause 1.6 of GCC.
- 1.2.30. Recording Register including starting/stopping time of the pump sets etc as per standard format.
- 1.2.31. Checking the temperature/Noise of Running units and control panel
- 1.2.32. To Provide gland packing for the pumps, sluice valve etc. whenever required to avoid leakage of water.
- 1.2.33. The Contractor shall report any problem in the motor and pumps, electrical main boards and fixtures etc, leaks and burst if any occurred in the pipe line, leaks and repairs in valves and any other damages caused to the water supply system, shall be brought to the notice of the Assistant Engineer/ Assistant Executive Engineer, immediately and take immediate action for the rectification and restoration of water supply within the prescribed time limit. Necessary entries shall be made in the corresponding register.
- 1.2.34. Any alternation/additions if needed to the existing arrangements, both in electrical and mechanical installations shall be attended only after proper approval from the Executive Engineer.
- 1.2.35. The contractor shall obtain the license from the competent authority of Labour Department in the respective District.
- 1.2.36. The contractor shall provide Technical Supervisor with minimum technical qualification of Diploma/Degree in Civil/Electrical/Mechanical Engineering as per the value of work mentioned under Annexure – VII. (The tender calling authority shall specify the requirement of technical supervisors to be engaged by the Contractor under this clause and the penalty for non employment of technical supervisors by the Contractor)
- 1.2.37. The Contractor should also provide photo identity card to his own labour

mentioning the name and category along with the name of the Contractor without mentioning the TWAD Board name and Logo, etc.,.

- 1.2.38. If any labour is found to be unfit or disobedient to the instructions given by the TWAD Board officers, they shall be replaced by the contractor immediately.
- 1.2.39. The contractor shall provide required safety equipments to the labours engaged by him.
- 1.2.40. Operation on specified shifts / day as per labour law and ensuring that back up teams are available to take over during Sundays, Public Holidays and in the event of regular Operator's absence including watch and ward.
- 1.2.41. Operate and maintain pumping equipment with skilled staff with required qualifications and experience so as to safeguard the equipments against single phasing, earth fault, phase reverse etc., in power supply as well as their personal safety.
- 1.2.42. The contractors shall be fully responsible for operating and maintaining the scheme in a safe & secure manner.
- 1.2.43. The contractor shall obey all the provisions of various laws including Labour Laws as applicable to them. If the Board suffer any loss what so ever of nature, monetary or otherwise, as a result of direct or indirect action or inaction of the contractor in failing to comply with or not properly complying with any law, rules, regulations, notifications, instructions, circulars, G.Os, Board Proceedings, etc. issued by the Government or Board or any other authority as applicable to them as mandated by the law or otherwise, the said laws shall be computed in terms of money and recovered from the contractor.
- 1.2.44. Temporary Diversion of Roads and Commencement of Work.
 - 1.2.44.1. During attending leaks, burst and any other repair works, the contractor/firm shall make at his cost all necessary provision for the temporary diversion of roads, car tracks, footpaths,. drains, water courses, channels etc.,
 - 1.2.44.2. If the contractor/firm fail to do these arrangements, the same shall be done by the Engineer in charge and the cost thereof shall be recovered

from the contractor/firm.

1.2.45. Notice to Telephone, Railway and Electric Supply Undertaking.

During attending leaks, burst and any other repair works, the Contractor / firm shall give all prior notices through Assistant Engineer/ Assistant executive Engineer required by any law or custom or as directed by the Engineer in charge, to other departments, who may be affected, prior to commencement of the works.

1.2.46. Watching and Lighting

The Contractor/firm shall at his expense, shall provide at the site of works sufficient fencing, barricading, watching and lighting during day and night. The contractor/firm shall in every respect conform to the police regulations in these matters, for which the Board will not take any responsibility. If the contractor/firm fail/neglect to do these arrangements, the same shall be carried out by the Engineer in charge and the costs thereof shall be recovered from the contractor/firm and prevent entry of unauthorized persons

1.2.47. Risk Insurance

TWAD shall not be liable for risks of loss or damage to any belongings and of personal injury and death to the persons employed by the contractor for this work and the public if any during the contract period. Copy of such insurance shall be produced to the Executive Engineer.

1.4 Schedule of Maintenance

Item No.	Description of work	Daily	Weekly	Fort-nightly	Monthly
1	Pump House:				
1.1	Cleaning of site	▪			
1.2	Cleaning of Pump House including Doors and Windows	▪			
1.3	Cleaning of Panel Room, D.G. room etc.	▪			
1.4	Check pump is operational	▪			
1.5	Change over to stand bye pumps	▪			
1.6	Record hours run	▪			
1.7	Check operation of air release pipe	▪			
1.8	Lubricating of Rolling Shutters			▪	
1.9	De-weeding of Pump Room premises and removal of cob webs etc in the Pump Room.				▪
2	H.T.Structure, Transformer yard and Transformers:				
2.1	Cleaning of transformer yard, removal of grass and plants	▪			
2.2	Check up and water the earth pits		▪		
2.3	Meggar - earth resistance check in the earth pits				▪
2.4	Check and operate the AB switch in the structure for its smooth operation and replace contacts if necessary		▪		
2.5	Check up dropout fuses and H.G. fuses and replace if necessary	▪			
2.6	Check up insulators and lightning arrestor in the structure and replace if necessary			▪	
2.7	Check the transformer for any leakage of oil and top up if necessary		▪		
2.8	Check the temperature of transformer oil from dial thermometer and record		▪		
3	H.T. Panel:				
3.1	Clean the panel externally and internally	▪			

Item No.	Description of work	Daily	Weekly	Fort-nightly	Monthly
	using blower				
3.2	Carryout visual check of observe over all condition of the breakers and clean the breakers thoroughly	▪			
3.3	Grease/Oil joints and sliding surfaces			▪	
3.4	Check the internal connections			▪	
3.5	Check the operations of doors and conditions of door gasket			▪	
3.6	Check Volt Meter, Ammeter etc. in the panel for its working and replace if necessary	▪			
3.7	Check all the indicator lamp and control fuses and replace if necessary	▪			
3.8	Check the operation of relays			▪	
4	LT Panel :				
4.1	Clean the panel externally and internally using blower	▪			
4.2	Check all the connections for tightness			▪	
4.3	Check the contacts switches for tightness and apply petroleum jelly if necessary			▪	
4.4	Check Volt Meter Ammeter and respective P.T. and CTS for its working and connection	▪			
4.5	Check all the indicator lamp bulbs and fuses and replace if necessary		▪		
4.6	Check operation of all switches and bush buttons		▪		
5	CAPACITORS:				
5.1	Check all the capacitors for oil leakage if any	▪			
5.2	Clean the insulator with dry cloth and check the connections for tightness			▪	
5.3	Check the fuses and meggar the units?	▪			
6	MOTORS:				

Item No.	Description of work	Daily	Weekly	Fort-nightly	Monthly
6.1	Clean the motor terminal box, check the cable connection to tightness	▪			
6.2	Check body of the motor for firm connection			▪	
6.3	Check the foundation bolt and nut for tightness	▪			
6.4	Check normal sound and vibration	▪			
6.5	Check the bearing grease and replace if necessary				▪
6.6	Check air cooling fan for vibration and noise				▪
6.7	Check meggar test for windings and earth				▪
6.8	Cleaning of motor slipring, carbon brush, contacts and replace if necessary		▪		
7.0	STARTERS AND OCB				
7.1	Clean the starter and check up the cable connection	▪			
7.2	Check contacts and replace if necessary		▪		
7.3	Check for cable connection		▪		
7.4	Check for OLR and No volt coil		▪		
7.5	Check the level of transformer oil in the OCB and top up if necessary			▪	
8.0	MAIN PUMPS				
8.1	Outside Cleaning	▪			
8.2	Check Bearing Temperature	▪			
8.3	Check & Top up Bearing grease or replace grease		▪		
8.4	Check gland for leak and add gland layer if required	▪			
8.5	Replace gland packing completely				▪
8.6	Check foundation nuts and bolts for tightness and rusting		▪		

Item No.	Description of work	Daily	Weekly	Fort-nightly	Monthly
8.7	Check inspection covers and check condition of impeller				▪
8.8	Check the pressure and pressure gauges on suction and delivery side	▪			
8.9	Clean the pump pit and pump floor	▪			
8.10	Check for coupling Bolts and nuts, coupling tyre and replace the tyre if required		▪		
8.11	Check for vibration and noise of the pump	▪			
8.12	Pump out leaked water from the pump pit	▪			
8.13	Check the condition of bearing oil and replace if required			▪	
9	SUMP PUMP				
9.1	Check the pump for operation	▪			
9.2	Check the coupling and replace if necessary			▪	
9.3	Clean the starter panel externally and internally	▪			
9.4	Check the fuses and contacts, apply petroleum jelly if necessary		▪		
9.5	Check the foot valve and replace if necessary	▪			
10	Diesel Generator Set, Battery and Emergency light:				
10.1	Clean the Battery, top up, distilled water in the battery if necessary	▪			
10.2	Remove the connection of battery terminals, clean thoroughly and reconnect after applying petroleum jelly		▪		
10.3	Clean the emergency lights internally and externally	▪			
10.4	Check the light, indicator lamp for its proper working and attend if necessary		▪		

Item No.	Description of work	Daily	Weekly	Fort-nightly	Monthly
10.5	Check fuel level in the diesel tank of DG set and top up if necessary		▪		
10.6	Check engine oil level in the D.G. set and add if necessary			▪	▪
11	OHT CRANES:				
11.1	Carry out thorough cleaning of crane including girders, trolley, platform other equipments and control panels			▪	
11.2	Check all the cable connections for tightness		▪		
11.3	Check contacts and fuses and replace if necessary		▪		
11.4	Inspect gearbox for any leakage of oil				▪
11.5	Check the connection of limit switch				▪
11.6	Check panels internally and externally and apply petroleum jelly if required				▪
11.7	Check the rope and apply grease if required				▪
12	SUCTION & DELIVERY VALVES AND ACTUATOR:				
12.1	Check the condition of gland packing and tighten or replace if necessary	▪			
12.2	Check actuator gear box for leakage		▪		
12.3	Check the condition of limit switches			▪	
12.4	Check the condition of oil and grease, replace if necessary			▪	
12.5	Check the bolts and nuts for tightness			▪	
12.6	Check cable terminals at motor terminal box of actuator			▪	
12.7	Check clutch and gear arrangement for manual operation				▪
12.8	Apply grease to the spindle if necessary			▪	

Item No.	Description of work	Daily	Weekly	Fort-nightly	Monthly
12.9	Check for free movement			▪	
13	<i>PIPELINE:</i>				
13.1	Check the pumping main, branch pumping main, feeder main for any leak /burst /damage	▪			
14.0	<i>VALVES:</i>				
14.1	Check the operation of non-return valve	▪			
14.2	Check the disc for its smooth opening and closing operation		▪		
14.3	Check the sluice valves	▪			
14.4	Check the air valves	▪			
14.5	Check the scour valves				▪
15	<i>SUMP:</i>				
15.1	Check the cleaning				▪

1.5 Equipments and tools to be made available at each pumping station

Sl. No.	Description	Set/no.
1	Ultrasonic Flow detector	1 set
2	Double end spanner (6 mm to 32 mm)	1 set
3	Screw driver (6", 8", 12")	1 set
4	Pipe wrench (14", 18", 24")	1 set
5	Cutting pliers	1 set
6	Long nose pliers	1 no.
7	Hammer (2 Kgs)	1 no.
8	Test lamp with 15m wire	1 no.
9	Megger (1000 V)	1 no.
10	Multimeter	1 no.
11	Tong tester	1 no.
12	Hacksaw frame with 3 nos. blade	1 no.
13	Spade (Manwetty)	2 nos.
14	Crow bar	1 no.
15	Sickles	2 nos.
16	Ring spanner (6mm to 32mm)	1 set
17	Caution Board (Men at work)	1 no.
18	Grass cutter	1 no.
19	Country knife	2 nos.
20	Iron chutty	2 nos.
21	Grease gun	1 no.
22	Wheel barrow	1 nos.
23	Torch light with 3 cells	2 nos.
24	Hand blower	1nos.

1.6 SAFETY MEASURES TO BE ADHERED:

1.6.1 All electrical safety equipments like hand gloves, testers and other electrical needs are to be provided by the contractor in the Pumping Stations as stated below:

Sl. No	Name of Equipment	For	
		HT Supply	LT Supply
1	Safety belt with rope	2 nos	1 no.
2	Gas Mask	1 no.	1 no.
3	Shock proof hand gloves (11 KV grade gloves)	1 pair	1 pair
4	Disposable hand gloves	2 pairs	2 pairs
5	Gum boot	2 pairs	1pair
6	Electrical line tester	1 no.	1 no.
7	Earth discharge rod	1 no.	1 no-
8	First Aid Box	1 no.	1 no.
9	Emergency light	1 no.	1 no.
10	Fire Extinguisher	2no.	1no.
11.	Rubber Mat of suitable size	as per requirement	

Note: The above is only an illustrative minimum list. The contractor must note that it is their responsibility to ensure the lives and safety of the workers employed by them. The premises should be maintained as per CEIG norms and requirements. If any failure/ Penalty due to non adherence of CEIG norms will have to be borne by the contractor. Towards this end, all the equipments of appropriate specifications should be procured and made available to the workers in usable conditions throughout the period of contract. Responsibility for any health problem or death will solely rest with contractor.

1.6.2 Only experienced, skilled people have to be employed by the contractor.

1.6.3 Safety belts, ropes, Gas mask, Torch lights, are to be provided by the contractor for laborers who get into wells.

1.6.4 All personnel shall be covered by insurance under workmen compensation Act.

1.6.5 All labour act provisions has to be met with.

1.6.6 Exhibit labels of "SAFETY FIRST"

1.6.7 First Aid Box should made available within the reach of the staff in all Pump Rooms and Booster Stations.

1.6.8 No medicine beyond the expiry date should be kept in the first aid box

1.6.9 First Aid Chart should be displayed in the Pump Rooms.

- 1.7 Specifications for repairs to Electro Mechanical equipments and for attending Leaks and burst in pipelines.

(Note:It is the responsibility of the tender calling authority to furnish the detailed specifications with respect to the repairs, rectification works and consumables for the following items of works.)

1.7.1 Detailed Specification for repair works

- a) Rectification of Leaks in pipelines
- b) Rectification of Bursts in the pipelines
- c) Rewinding of Motors
- d) Repairs and reconditioning of Pump sets
- e) Repairs and reconditioning of Panel Boards
- f) Repairs and reconditioning of Sluice valves
- g) Repairs and reconditioning of Air Valves
- h) Other items of works.

1.7.2 Payment for repair and rectification works:

The payment shall be made as per the rate quoted by the Contractor in the price schedule for each items of works as specified. As per the actual condition, during repairs and rectification works, If any material / work is omitted as not necessary, then the amount of such items shall be deducted based on the rate / cost in the sanctioned estimate along with tender premium.

1.7.3 Payment for supply, delivery and utilization of consumables

The items mentioned under the supply and delivery of consumables for various category of works shall be paid as per the rate quoted in the bid. These consumables are to be utilised during regular O&M works, preventive maintenance and attending minor repairs and shall be carried out by the operating staff and no additional payment will be made.

1.8. Formats for Registers to be maintained by the contractor at Site

1.8.1 Leak/ bursts Register

Sl. No.	LS/Location at which leak/ burst occurred	Reasons	Whether repeated occurrence or not	Size of main	Date of occurrence of leak/ burst	Date and Time of Information to the Assistant Engineer concerned	Date of inspection Field Engineer	Instruction issued	Date of rectification		Materials used for rectification
									Start	Finish	
1	2	3	4	5	6	7	8	9	10	11	12

1.8.2 Pump Set, Panel Boards Repair Register

Sl. No.	Location and Details of Pump set	Type of repair and reasons	Whether repeated occurrence or not	Date of occurrence of Repair	Date and Time of Information to the Assistant Engineer concerned	Date of inspection Field Engineer	Instruction issued	Date of rectification		Materials used for rectification
								Start	Finish	
1	2	3	4	5	6	7	8	9	10	11

1.8.3 Valves inspection and rectification Register

Sl. No.	No. of valves/ sluice valves/ Air scour inspected	No. of minor leak in any valves	No. of minor leaks attended	No. of gland packing/ applying grease valves in	No. of defective valves still to be attended
1	2	3	4	5	6
1					

1.8.4 Log Book Formats for Pump set operations, Genset Operation, etc shall be included and specified by the Tender Calling Authority.

1.9. Uploading of data in Online Entry Formats in <http://117.236.90.36/Maint-Projects/frmLeakBurst.aspx>,

1.9.1 Online Entry Format for Leak and Burst Details

Sl no	Leak ID	Project	Reach	Location	Date of Leak/Burst	Latitude	Longitude	Pipe Material	Diameter (mm)	Class of Pipe	Reason	Remarks

1.9.2. Online Entry Format For Pump set Repair

SL NO	Component	Location of Pump set	Pump set Type	Main /Stand bye	Discharge in LPM	Head in M	HP OF PUMPSET	Erection Year	Pump set Serial No. (As Mentioned in Name Plate)	Reason for Pump set Repair	Component of Pump set / Panel Board / Cable under Repair	Date of Repair occurred	Date of repair rectified and erected	Remarks

1.9.3. Other formats prescribed during contract period, such as

Pumping quantity register

Pumpset operation register

Consumables register

Electro mechanical repair register

Preventive maintenance register

Water retaining structure cleaning register

shall have to be maintained by the Contractor and carry out the online entry for such formats also.

PART II

PAYMENT MODE FOR THE CONTRACTOR

S.no	Contents	Page no
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2.2.	Quantification of value of work done and Penalty	
2.3.	Payment for the value of work	

2.1. Measurement and Bill:

The payment to the contractor will be made based on the following basis.

2.1.1 Measurement:

2.1.1.1. The Measurement shall be recorded by the Assistant Engineer based on the works carried out every month as per the BOQ. The Contractor shall produce all relevant documents, registers, invoices, vouchers as the case may be for recording measurements.

2.1.1.2. The details to be uploaded online in the link <http://117.236.90.36/Maint-Projects/frmMain.aspx>, shall be completed by the Contractor, through the Assistant Engineer concerned, which will be one of the precondition for recording of measurements.

2.1.2 Bill Submission:

2.1.2.1 The contractor shall submit the O & M bills once in a month with proper records enclosed i.e., Pumping quantity register, ESI, EPF payment details, Leak & burst register, Consumables register, Electro mechanical repair register and sump cleaning etc .

2.1.2.2. Based on the bill submitted by the Contractor the Assistant Engineer shall prepare and submit the bills in relevant forms after deducting any penalty imposed towards the work as the case may be.

2.2 Quantification of value of work done:

2.2.1. The quantity of water drawn/supplied will be calculated monthly, based on the quantity of water supplied daily.

2.2.2. The contractor will not be penalised for the lesser quantity of water supplied to the beneficiaries on the following reasons, which should be approved by the Engineer / Employer.

a) Non availability of power supply for more than 6 hours in respect of 18 hours designed pumping and 12 hours in respect of 12 hours designed pumping or in the case of staggered power supply for the above mentioned designed pumping hours.

- b) Any leak or burst when attended and water supply is restored within the stipulated time frame mentioned in clause 2.2.5
- c) When the availability of water at the drawal or first tapping point of this contract package is less than the earmarked quantity.
- d) Shifting and replacement of pipeline due to development activities of other departments.
- e) Any Force Majeure situation such as riots, War, Earthquake, Land slide, Cloud Burst etc., which leads to non operating condition of the equipments.

2.2.3. If the contractor fails to effect the supply of earmarked quantity of water to the beneficiaries under the scope of this contract, unless and otherwise due the reasons mentioned in clause 2.2.2, then 90% of the payments will be made proportionately (Initial, Intermediate and Tail End beneficiaries as finalised by the Executive Engineer as below:

"Bill Claim Amount for supply based portion of BOQ / Agreement =

90% x (BOQ or Agreement value for the reaches concerned ~~as per clause 2.1.3~~) x ((served Quantity in KL) / (Earmarked Quantity in KL))".

2.2.4 If the contractor fails to carry out the Preventive maintenance as per the Schedule of Maintenance listed in the Clause 1.4 of GCC then the payment will be deducted as below as the case may be:

- (i) Daily scheduled activities not done fully : (10 %)
- (ii) Weekly scheduled activities not done fully : (5 %)
- (iii) Fortnightly scheduled activities not done fully : (2.5 %)
- (iv) Monthly scheduled activities not done fully : (2.5 %)
- Total : (20 %)

The following formula will be adopted for making payment to each of the above four category in case of failure in schedule of Maintenance in that category:

"Bill Claim Amount for supply based portion of BOQ / Agreement =

90% x (BOQ or Agreement value for the schedule of Maintenance as per clause 1.4) x ((% of schedule of Maintenance done for four category in total / 20%))".

2.2.5. For attending leak/ Burst works in the pumping and Feeder mains:

S.No	Description of the Pipes	Scheduled time for attending one leak work	Scheduled time for attending one Burst work
1.	For pipes from 50mm OD PVC to 110 mm OD PVC and GI	Within 12 hours	Within 24 hours
2.	For pipes 140 mm OD PVC, 160 mm OD PVC and 200 mm OD PVC and GI	Within 12 hours	Within 24 hours
3	HDPE pipes / AC pipe/ above 200 mm dia PVC Pipes and GI	Within 24 hours	Within 36 hours
4	For all size of DI / CI pipes	Within 24 hours	Within 36 hours
5	All sizes of MS pipe /PSC pipes/BWSC pipes	Within 36 hours	Within 48 hours

2.2.6. For attending pump set repairs:

S.No	Description of the Pump sets and allied accessories	Scheduled time for attending repair works
1.	For Submersible Pump sets and allied accessories	
a.	Minor repair works	With in 24 hours
b.	Major repair works with replacement of parts	With in 48 hours
c.	Coil rewinding works	4 – 6 days
2.	For Vertical Turbine Pump sets and allied accessories	
a.	Minor repair works	With in 48 hours
b.	Major repair works with replacement of parts	4 – 6 days
c.	Coil rewinding works	5 – 7 days
	For HSC Pumpsets and allied accessories	
a.	Minor repair works	within 24 hours
b.	Major repair works with replacement of parts	3 - 4 days
c.	Coil rewinding works	5 - 7 days

2.2.7. For attending the repair/ replacement works in Gate Valves, Sluice Valves, air valves, Non Return Valves, Scour Valves etc., it should be completed within 24 hours.

2.2.8. Penalty:

- 2.2.8.1. Non attending repairs within the specified period – 1% of value of work as per price schedule / day for unfinished portion or Rs.1000/day till the work is completed whichever is higher.

- 2.2.8.2. The transmission losses due to leaks or burst in pipeline, valves, and other installations, over flow of sumps during power failure should not exceed 7% of the quantity to be supplied calculated on monthly basis. If the transmission losses in the said situations exceed

7% - 10 % as calculated above, amount will be deducted at Rs.10/ KL (for the excess quantity more than 7 %.)

10% - 12 % as calculated above, amount will be deducted at Rs.30/ KL (for the excess quantity more than 7 %.)

12% - 15 % as calculated above, amount will be deducted at Rs.80/ KL (for the excess quantity more than 7 %.)

More than 15 % as calculated above, amount will be deducted at Rs.150/ KL (for the excess quantity more than 7 %).

- 2.2.8.3. In the case of wastage of water by Over flow of sumps / OHTs due to failure on the part of contractor shall be Rs.150 per KL of such over flown/ wasted water.
- 2.2.8.4. If any damage occurred in the scheme components, damage shall be rectified immediately by the contractor at his own cost. Penalty shall also be imposed for the default caused as per relevant clauses of this contract. If defect is not duly rectified by the contractor within the specified time, the work will be carried out by TWAD Board and the cost will be recovered as determined by TWAD Board including all escalations and losses.
- 2.2.8.5. If the contractor fails to attend the rectification works of the Electro mechanical items, cleaning the sumps etc a fine will be imposed as decided by the Executive Engineer depending on the value of such repair works / cleaning of sump works.
- 2.2.8.6. If the contractor fails to ensure the required residual chlorine at all delivery points including the tail end, a penalty will be imposed at "double the cost of one day consumption of Disinfectants" under the scope of this contract. If the supply and delivery of chemicals is not included under the scope of the agreement, the same will be supplied departmentally.

2.3. Payment for the value of work:

2.3.1 95% of the amount will be paid to the contractor for the ~~works~~ completed O & M works and the remaining 5% of the amount will be withheld for each and every part of the payment as in 2.3.2.

2.3.2 Under normal condition, payment will be made as follows subject to the conditions stipulated in the item no 2.2.

Category	As mentioned in PART-VI	Payment Value
A	At Head Woks / Treatment Plant / Tapping Point	20% of the Agreement value for Item No.1 of BOQ.
B	Completion of Preventive Maintenance and schedule of Maintenance as per Clause 1.4 in GCC	20% of the Agreement value for Item No.1 of BOQ.
C	Initial Beneficiaries	20% of the Agreement value for Item No.1 of BOQ.
D	Intermediate Beneficiaries	20% of the Agreement value for Item No.1 of BOQ.
E	Tail end Beneficiaries	20% of the Agreement value for Item No.1 of BOQ.

2.3.3 Withheld amount:

2.5% of the withheld amount will be released in the final bill. The Balance 2.5% will be released after 3 months from the date of taken over of the scheme.

2.3.4 Income tax:

During the course of the contract period, deduction of income tax shall be made at the prevailing rates from every payment as may be specified by the Income Tax Act and as amended from time to time.

Part III

ROLE OF TWAD BOARD

1. A joint inspection will be made by the Assistant Engineer/ Assistant Executive Engineer or the Executive Engineer incharge of O & M of CWSS with the contractor or his representative before handing over of the CWSS / WSS for operation and maintenance.
2. The Executive Engineer or his Authorised representative shall furnish the salient details, components and flow diagram of the CWSS to the contractor along with the list of beneficiaries covered under the scope of this CWSS and the earmarked quantity required to be supplied to those beneficiaries. (PART –VI)
3. The field officers / Assistant Accounts Officers / Executive Engineers should ensure that all the statutory requirements as per the license issued by the competent authority and all the requirements of the Contract Labour (Regulation & Abolition) Act have been complied with by the contractor and a certificate to that effect may be directed to be incorporated by the concerned officer along with the running bills of the contractor, when the bill is sent for passing / sanctioning before the competent authority.
4. Power consumption charges will be paid by TWAD Board. However if penalty is imposed by the TANGEDCO due to reduction in maintaining the Power Factor, it will be recovered from the contractor.
5. The cost of Diesel consumption for operating Generators will be reimbursed by TWAD Board to the Contractor on submission of original voucher from the authorised seller.
6. Regular inspection will be conducted to ascertain the effective functioning of system through Engineers of TWAD Board.
7. Payment will be processed on monthly basis on receipt of bills from the contractor by following Board's procedures.

PART IV

LABOUR LAWS TO BE FOLLOWED

The rights and benefits conferred on the workmen employed by the contractor under the provisions of various Labour Laws are the responsibility of the contractor. The Contractor has to indemnify the TWAD Board in case of loss or any damages. It is the responsibility of the contractor to take insurance policy under Workmen's Compensation Act, 1923 for each labour engaged by the contractor. The Contractor will be responsible for any deficiency of safety measures to be adhered as stipulated in Annexure D. A Photocopy of the insurance under workmen's compensation Policy should be furnished to the Board. The policies should be kept alive till completion of the contract.

The Contractor shall adhere to following Laws wherever applicable

- 1) Workmen Compensation Act, 1923,
- 2) Payment of wages Act, 1936,
- 3) Industrial Disputes Act, 1947,
- 4) Minimum Wages Act, 1948,
- 5) Factories Act, 1948,
- 6) Employees PF and Miscellaneous Act, 1952,
- 7) Payment of Bonus Act, 1965,
- 8) Payment of Gratuity Act, 1972,
- 9) Equal Remuneration Act, 1979,
- 10) Maternity Benefit Act, 1951,
- 11) Contract Labour(Regulation & Abolition) Act, 1970,
- 12) Industrial Employment (Standing Orders) Act, 1946,
- 13) Trade Unions Act, 1926.
- 14) Child Labour (Prohibition & Regulation) Act, 1986,
- 15) Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act, 1979.
- 16) The Building and Other Construction workers (Regulation of Employment & Conditions of Service) Act, 1996 and the Cess Act of 1996,
- 17) Employee State Insurance Act, 1982,
- 18) The Tamil Nadu Manual Workers(Regulation of Employment and Conditions of Work) Act, 1982,
- 19) The Bonded Labour System (Abolition) Act, 1976,
- 20) The Employer's Liability Act, 1938.

PART V

SPECIAL CONDITIONS

1. The works which are not covered in the BOQ, but required for this scheme should be done by the contractor whenever required as supplemental works.
2. The Contractor shall pump or deliver additional quantity of water to the beneficiaries during festivals, emergencies, etc as directed by the TWAD Board Officials for which no additional payment will be made under the price schedule item no:1. The consumables for disinfection will be paid as per the rate in the BOQ / supplied departmentally.
3. If the reporting Data furnished by the Data operator under the Contractor is found to be False / Incorrect, necessary penalty (clause to be adopted) at the rate (as decided by the Executive Engineer) of Rs. 1,000 per instance.
4. Online Entry of daily pumping quantity should be consolidated, cross checked by the Supervisor/Technical Assistant and the data should be updated by the contractor in the TWAD web page in consultation with the section officer.
5. The EB reading should be noted / EB Demand should be received from the respective EB Section Office by the contractor and the same should be reported to the Section Officer, TWAD Board without any omission/delay.
6. Every month, the Water Demand raised should be distributed to the respective beneficiary of the TWAD Board and the acknowledgement of the demand should be reported to the section officer, TWAD Board. Then the Cheque / DD for the respective demand raised should be received from the beneficiaries and submitted to the Section officer, TWAD Board without any omission/delay by the contractor.
7. Contractor shall do watering of plants, trees, grass, etc., in the premises under the scope of this contract.
8. Any public representatives (Panchayat President, Union Chairman, District Chairman, M.L.A, M.P or any other socially responsible approaches) in connection with water supply problems they should be treated courteously and proper reply should be given.
9. No advance payment will be made.
10. Subletting of contract is not allowed under this contract.
11. Transfer of the contract is not permissible on any ground.
12. The directions of the Hon'ble court in WMP. Nos. 11584 & 10723 of 2022 in WP No. 11128 of 2022 should be implemented scrupulously.
 1. The wages paid to the labourers should not be less than minimum wages.
 2. In case the contractor engaged the labourers already worked in the CWSS, the wages already paid to the labourers should not be reduced at any cost.

Note: Other Special conditions for the items of work to be carried out as per the BOQ specifications and the corresponding deduction for the work not required to be carried out for repairs and reconditioning works, etc., shall be included under special conditions by the Tender calling authority.

Part-VI

LIST OF BENEFICIARIES AND EARMARKED QUANTITY OF WATER TO BE SUPPLIED UNDER THIS CONTRACT.

Note:

- 1) *It is the responsibility of the tender calling authority to furnish the details of beneficiaries and quantity of water to be supplied with respect to the scope of the work to be covered under this O&M contract without any omission.*
- 2) *The details and categorisation of the Initial Reach, Middle Reach and Tail End beneficiaries has to be clearly mentioned so as to process the payment as per the payment conditions.*
- 3) *Any additional condition necessary shall be included in the tender documents under Special Conditions without detrimental to the interest of Board and the rules in force.*

Name of Scheme : Outsourcing for Operation and Maintenance of CWSS to 159 rural habitations in Thoothukudi District including repair and rectification for the period from 6/2022 to 03/2023 (10 Months)

CWSS to 159 Rural Habitations in Thoothukudi District

Sl.NO	Name of the component	Quantity	Location	Remarks
I	Infiltration well	4 Nos	Ponnankuruchi	4.5m Dia
II	Sump Details	1 NO	Subramaniapuram	150000 Litres capacity
		1 NO	Aathinathapuram	100000 Litres capacity
		1 NO	Thirukaloor	100000 Litres capacity
		1 NO	Kurumbur	300000 Litres capacity
		1 NO	Ammanpuram	100000 Litres capacity
		1 NO	Paramankurichi	200000 Litres capacity
		1 NO	Vellalanvilai	200000 Litres capacity
		1 NO	Poochikadu	100000 Litres capacity
		1 NO	camellabad	150000 Litres capacity

Tenderer

Sd/Executive Engineer, TWAD Bd

III	Pumproom Details	1 NO	Subramaniapuram	8m x 5m
	Pumproom Details	1 NO	Aathinathapuram	1.8m x 1.5m
		1 NO	Thirukaloor	1.8m x 1.5m
		1 NO	Kurumbur	6m x 4m
		1 NO	Ammanpuram	4m x 3m
		1 NO	Paramankurichi	1.8m x 1.5m
		1 NO	Vellalanvilai	1.8m x 1.5m
		1 NO	Poochikadu	6m x 4m
		1 NO	Cambellapath Sump	1.8m x 1.5m
IV	Pumpset Details		Headworks at Subramaniapuram	
	Pumpset	4 Nos	Infiltration Wells	5HP x 513 LPM x 15m OWS
		1 NO	To Ammanpuram	25HP x 2052 LPM x 38m Centrifugal
			Athinathapuram Sump	
		1 NO	To Chinnamadankudiruppu	125 LPM x 65m Submerisble
		1 NO	To Senkulam	94 LPM x 25m Submerisble
			Cambellapath Sump	
		1 NO	To Kurangani	5HP x 119 LPM x 34m Submerisble
		1 NO	To Mookuperi	3HP x 274 LPM x 32m Submerisble
			Kurumbur Sump	

	1 NO	To Sethukuvaithan	3HP x135 LPM x 29m Submerisble
	1 NO	To Suganthalai	3HP x 153 LPM x 18m Submerisble
	1 NO	To Pattakarai	5HP x 214 LPM x 36m Submerisble
	1 NO	To Veeramanickam	3HP x 210 LPM x 22m Submerisble
	1 NO	To Nalumavadi	3HP x140 LPM x 32m Submerisble
		Ammanpuram Sump	
	1 NO	To Poochikadu	10HP x 960 LPM x 22m Centrifugal
	1 NO	To Moolakarai	3HP x 126 LPM x 22m Submerisble
		Poochikadu Sump	
	1 NO	To Vellalanvilai	7.5HP x 624 LPM x 35m Submerisble
	1 NO	To Nalumoolaikinaru	3HP x 124 LPM x 25m Submerisble
	1 NO	To Pallipathu	3HP x 90 LPM x 21m Submerisble
	1 NO	To Therikudiyiruppu	3HP x127 LPM x 22m Submerisble
	1 NO	To Keelanalumoolaikinaru	3HP x124 LPM x 25m Submerisble
		Paramankurichi Sump	
	1 NO	To Elluvilai	5HP x 211 LPM x 33m Submerisble
	1 NO	To Perumalpuram	3HP x 277 LPM x 19m Submerisble
		Vellalanvilai Sump	
	1 NO	To Zion Nagar	3HP x 189 LPM x 23m Submerisble

		1 NO	To N.Muthaiapuram	5HP x 361 LPM x 37m Submerisble
			Palkulam Sump	
		1 NO	a) Mudalaimozhi	3HP x 66 LPM x 28m Submerisble
		1 NO	b) Nadumoolaikinaru	3HP x 114 LPM x 18m Submerisble
V	Genset Details	1 NO	Athinathapuram BS	20KVA
	Genset	1 NO	Thirukkalur BS	20KVA
		1 NO	Campallapathur BS	15KVA
		1 NO	Paramankuruchi BS	15KVA
		1 NO	Vellanvillai BS	15KVA
		1 NO	Ammanapuram BS	20KVA
		1 NO	Poochikadu BS	20KVA
		1 NO	Kurumbur BS	25KVA
		1 NO	Subramaniapuram BS	100KVA
VI	Pipeline Details	CI	250 mm Dia CI Pipe	5.27Km
		AC	(200mm & 250mm)	23.19Km
		PVC	(140mm-50mm)4KSC	148.69Km

CWSS to 159 Rural habitations

Sl.No	Name of the equipments, installations, structures, pipelines, appurtenances etc., to be operated and maintained along with the details of specifications such as type, make, HP, Head, discharge, capacity length, size and other relevant details such as hours of pumping, pressure, quantity & quality of water, etc.,	Quantity	Location
PUMPSETS			
1			Headworks at Subramaniapuram
2	5HP x 513 LPM x 15m OWS	4 Nos	Infiltration Wells
3	25HP x 2052 LPM x 38m Centrifugal	1 NO	To Ammanpuram
4			Athinathapuram Sump
5	125 LPM x 65m Submerisble	1 NO	To Chinnamadankudiruppu
6	94 LPM x 25m Submerisble	1 NO	To Senkulam
7			Cambellapath Sump
8	5HP x 119 LPM x 34m Submerisble	1 NO	To Kurangani
9	3HP x 274 LPM x 32m Submerisble	1 NO	To Mookuperi
10			Kurumbur Sump
11	3HP x 135 LPM x 29m Submerisble	1 NO	To Sethukuvaithan
12	3HP x 153 LPM x 18m Submerisble	1 NO	To Suganthalai
13	5HP x 214 LPM x 36m Submerisble	1 NO	To Pattakarai
14	3HP x 210 LPM x 22m Submerisble	1 NO	To Veeramanickam
15	3HP x 140 LPM x 32m Submerisble	1 NO	To Nalumavadi

16			Ammanpuram Sump
17	10HP x 960 LPM x 22m Centrifugal	1 NO	To Poochikadu
18	3HP x 126 LPM x 22m Submerisble	1 NO	To Moolakarai
19			Poochikadu Sump
20	7.5HP x 624 LPM x 35m Submerisble	1 NO	To Vellalanvilai
21	3HP x 124 LPM x 25m Submerisble	1 NO	To Nalumoolaikinaru
22	3HP x 90 LPM x 21m Submerisble	1 NO	To Pallipathu
23	3HP x 127 LPM x 22m Submerisble	1 NO	To Therikudiyiruppu
24	3HP x 124 LPM x 25m Submerisble	1 NO	To Keelanalumoolaikinaru
25			Paramankurichi Sump
26	5HP x 211 LPM x 33m Submerisble	1 NO	To Elluvilai
27	3HP x 277 LPM x 19m Submerisble	1 NO	To Perumalpuram
28			Vellalanvilai Sump
29	3HP x 189 LPM x 23m Submerisble	1 NO	To Zion Nagar
30	5HP x 361 LPM x 37m Submerisble	1 NO	To N.Muthaiapuram
31			Palkulam Sump
32	3HP x 66 LPM x 28m Submerisble	1 NO	a) Mudalaimozhi
33	3HP x 114 LPM x 18m Submerisble	1 NO	b) Nadumoolaikinaru
SUMPS			
1	150000 Litres capacity	1 NO	Subramaniapuram
2	100000 Litres capacity	1 NO	Aathinathapuram

3	100000 Litres capacity	1 NO	Thirukaloor
4	300000 Litres capacity	1 NO	Kurumbur
5	100000 Litres capacity	1 NO	Ammanpuram
6	200000 Litres capacity	1 NO	Paramankurichi
7	200000 Litres capacity	1 NO	Vellalanvilai
8	100000 Litres capacity	1 NO	Poochikadu
9	150000 Litres capacity	1 NO	Cambellapath Sump

Note : It is the responsibility of tender calling Authority to fill the above details with respect to the scope of the works to be covered under this O&M contract without any omission.

CWSS to 159 Rural habitations

Sl No	Name of Habitation	Designed qty (in KL)
Initial Reach		
1	Athinatha puram kanavoor	15.10
2	Ammankoil	10.80
3	Pudu colony	7.20
4	Karadiyoor H	7.20
5	Navalakshmi puram	7.20
6	Alagappapuram	7.20
7	Periakuppathu vilai	7.20
8	Ankamangalam	15.12
9	Pitchivilainagar	12.20
10	Kurumbur (Ankamangalam)	30.96
11	Cambalapath	44.56
12	V.Kadayanodai	7.20
13	Kurukaatur	7.20
14	Kulalar kudiruppu	7.20
15	Rajankapuram	7.20
16	Nalumavadi	49.68
17	Shanmugapuram	7.92
18	Lakshmipuram	7.20

19	Vellakoil	7.20
20	Vellakoil sukanthalai	9.36
21	Manalkundu	24.48
22	Paulkulam lakshmi thoppu	17.28
23	Thirukkalur indra colony	15.84
24	Chokkanur	7.20
25	Ammanpuram	33.60
26	Kannanvilai	12.00
27	Pudur	12.00
		397.30
Middle Reach		
1	Manathoor	10.80
2	subramaniapuram	7.20
3	Thattankulam	7.20
4	Kurumburmylodai	30.96
5	Kadayanodai	7.20
6	Kulathukudiruppu	7.20
7	Murugancolony	7.20
8	Thadian colony	7.20
9	Katchana vilai	27.36
10	Duraisami puram	7.20
11	Idayanvilai	7.20
12	Pattakarai	12.96
13	Vadalivilai	9.36
14	Kannivilai	12.24
15	Kurippankulam H	7.20
16	Cinnamadan kudiyruppu	10.08
17	Irاندامپانا vilai	7.20
18	V.Kottur	7.20
19	Muthurama lingapuram	7.20
20	Kuttialaganur	10.08
21	Thottiam kudiruppu selvanagar	14.40
22	Malavaraya natham	8.64
23	Malavaraya natham-H	8.64
24	Sundararaja puram	14.40
25	Kila nalumavadi	7.20
26	Thirumala puram	7.20
27	Puraiyur	12.24
28	Palaynoor	7.20
29	Pandaravilai	7.20
30	Puraiyur colonu Panneerapuram	7.20

31	Nettaiyandicolony	7.20
32	Rajapathi	10.08
33	Karavilai	7.20
34	Sethusubra maniapuram	7.20
35	Thiruvilayan vattam	7.20
36	Suganthalai	7.20
37	Maranthalai	10.80
38	Arasannagar	7.20
39	Sornampudur	7.20
40	Themankulam	10.08
41	Thangaiahpuram	7.20
42	Udayarkulam	42.48
43	Varandiavel	23.04
44	A.Gopalapuram	14.40
45	Petchiammal puram	7.20
46	Thanneerpanthal	7.20
47	M.N.Kudiyiruppu	9.36
48	Thalavoipuram	33.60
49	Thalavoipuram pudur	12.00
50	Moolakarai	45.60
51	Kanthan kudiyiruppu	12.00
52	Kulaikanthapuram	7.20
53	Nagakannia puram	7.20
54	Nallur	7.92
55	Kuranganthattu	7.20
56	Sasthakoil vilai	7.20
57	Muthumalaivilai	7.20
58	Pallipathu	12.00
59	Pallipathu AD Colony	12.00
60	Kudiyirupuvilai	12.00
61	Nathankinaru	12.00
62	Poochikadu	12.00
63	Perialodaivilai	12.00
64	Pandaranvilai	12.00
65	Jerusalam	12.00
66	Cherivilai	12.00
		751.92
Tail end		
1	Neivilai	7.20
2	Punnaiyadi	7.20
3	Kurippankulam	7.20
4	Pudupatchri	7.20

5	Maravar colony	7.00
6	Kurangani Thottiam kudiruppu	7.00
7	Manjuvilai	3.60
8	Kurankani	7.00
9	Vala subramania puram	7.00
10	Manathi	7.00
11	Sethukkuvaitan	14.40
12	Nedunkarai	7.00
13	Nedunkarai colony	7.00
14	Cholaikurichi	7.00
15	Chokka palankarai	7.00
16	Pudunagar colony	15.12
17	Mudalaimozhi	7.92
18	Nadumoolakarai	7.00
19	Cinnamathi koodal	8.00
20	Senkulam H (udayarku pt)	7.00
21	Keela nadu nalumula kinaru	27.60
22	Nadu nalumula kinaru	27.60
23	Anthaikinaru	9.00
24	Muthaiapuram	33.84
25	Nallur vadakku	7.00
26	Suyambu lingapuram	7.00
27	Veeramanikkam	21.60
28	Ambalapurappu	9.36
29	Pichivili	41.04
30	Pichivilai pudur	18.72
31	Elluvilai	10.08
32	Pungammal puram	10.08
33	Sundaraja puram	7.20
34	Solaikudiyiruppu	11.52
35	Manadu	7.20
36	Seerkatchi	35.28
37	Vijaya Rragunathapuram	7.20
38	Nainapathu	20.16
39	Manadu	7.20
40	Vellalanvilai I	71.28
41	Paramankurichi	66.24
42	Murugesapuram	32.40
43	Kulathankara vilai	7.00
44	Potharangan vilai	32.40
45	Singarajapuram	54.00
46	Perumalpuram	7.00

47	Gurunathapuram	18.72
48	Seerudayr puram	37.44
49	Veerappanadar kudiyruppu	25.20
50	Karisalvilai Ramanathapuram	17.28
51	Pitchuvilaimaravanvlai	103.68
52	Vellalanvilai	14.40
53	Vattanvilai	15.84
54	Zionnagar	34.56
		1010.96
	Total	2160