TAMILNADU WATER SUPPLY AND DRAINAGE BOARD

(Modified Bid document as per Board's directions in the Board Meeting held on 18.02.2011 and 26.08.2011)

TENDER DOCUMENT



NAME OF	Outsourcing of Operation and Maintenance of CWSS to Vellur
WORK	and 24 other habitations in Musiri Union of Trichy District for
	the period from 01.04.2020 to 31.03.2021.

Last date of submission: Upto 3.00 p.m. on 23.03.2020.

TENDER DOCUMENT (49 pages)

EXECUTIVE ENGINEER, TWAD Board, MAINTENANCE DIVISION, TRICHY

INDEX

SI. No.	Description	Page No.
I.	Check List	4
II.	Tender call	8
III.	Letter of Application	13
IV.	Work Schedule	15
V.	Price Schedule	17
VI.	Submission of Tender	18
VII.	Opening of Tender and Award of Contract	19
VIII.	List of Certificates	20
IX.	Mandatory Duties of Contractor	21
Х.	Duties and Responsibilities of the Contract Worker	25

LIST OF ANNEXURES

Annexure No.	Description	
I.	Model Estimate	29
Ш.	Schedule of Maintenance	30
III.	List of Equipment's & Tools	35
IV.	List of Minor repairs to be attended	36
V.	Safety Measures	37
VI.	Contract Worker Welfare	38
VII.	Non-compliance to Schedule of work / Mandatory Duties	39
VIII.	Role of TWAD Board	40
IX.	Payment	42
Х.	Special Conditions	43
XI.	Evidence of Access to or Availability of Credit Facility	46
XII.	Performance Bank Guarantee (Unconditional)	47
XIII.	List of Outsourcing personal - I	48
XIV.	List of Outsourcing personal - II	48

CERTIFICATE

(FOR DOWN LOADING BID DOCUMENT BY THE BIDDER)

I / We do hereby certify to the effect that no correction/ alteration on the bid document as found in the web site has made by me/we and I/we shall abide by all the terms, conditions and stratification contained in the bid document.

Signature of bidder with seal.

I. CHECK LIST FOR THE GUIDANCE OF THE CONTRACTORS

The contractor shall go through the 'Check List for the Guidance of the Contractors' below thoroughly before participating in the Tender:

1.1.	The total number of items in the work schedule is 1 No. and the Departmental value works out to
	Rs.16,76,092.50 for Twelve (12) Months for the period from 01.04.2020 to 31.03.2021.
1.2.	Tenderers are requested to sign all pages in the tender schedule and must sign letter of
	application. Tenders which do not have the signature of the Tenderer in letter of application will
	be rejected.
1.3.	Tenderers are requested to verify the number of pages in the tender schedule and number of
	items in the work schedule. Any clarification and further information required may be obtained
	from the Office of the Executive Engineer, TWAD Board, Maintenance Division, Trichy, on any
	working day.
1.4.	The present tender document contains work schedule and price schedule. The tenderers are
	requested to quote the percentage variation over the Departmental value in words and figures in
	price schedule. If there is any discrepancy between words and figures, the lower among the
	words and figures will be taken into account.
	All entries should be made legibly in ink. Writing the percentage variation first in pencil and later
	over writing in ink should be avoided and also over writing the corrections may be avoided.
	Corrections if any should be made by neatly scoring out the unwanted matter and rewriting
	legibly. Every such correction should be attested by the full signature of the Tenderer.
1.5.	Eligibility:
	a) Physical Criterion:
	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. The contractor should have one
	year experience in the similar nature of work.
	b) Financial:
	The contractor 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 - XI
	Contractors registered in TWAD under Class III & above i.e., those who are eligible to take up the
	work costing upto Rs.30.00 lakhs 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.
1.6.	EMD should be paid for an amount Rs.16,800/ - (Rupees Eleven Thousands and two Hundred only) in
	any one of the form given below:
	EMD :: 1% of contract value
	Demand Draft drawn on a Nationalized Bank/Schedule Bank in favour of the Executive Engineer,
	TWAD Board, Maintenance Division, Trichy, Deposits at Call receipt of Scheduled banks pledged
	in favour of the Executive Engineer, TWAD Board, Maintenance Division, Trichy.
	\circ Government Security and National Savings Certificate pledged in favour of the
	Executive Engineer, TWAD Board, Maintenance Division, Trichy (Purchased
	within Tamilnadu)
	• Post office Savings Bank deposits pledged in favour of the Executive Engineer,
	TWAD Board, Maintenance Division, Trichy
	• Fixed deposit receipts from Scheduled banks pledged in favour of the Executive
	Engineer, TWAD Board, Maintenance Division, Trichy
	 Irrevocable Bank Guarantee as per Annexure – XII
	FDR 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.
	No cheque will be accepted towards Earnest Money Deposit.
1.7.	SECURITY DEPOSIT
	Security deposit equivalent to 2% of the value of the contract will be collected from the
	successful Tenderer in the following form and manner within 15 days from the date of receipt of
	work order:
	Form in which S.D. collected.
	In the shape of NSC/ Post office savings Deposits valid for the required contract period and
	pledged in favour of the Executive Engineer, TWAD Board, Maintenance Division, Trichy and shall

	have the necessary transfer endorsement of the Post Office (OR) Fixed Deposit for the required				
	period from Nationalized Bank/ in favour of Executive Engineer, TWAD Board, Maintenance				
	Division, Trichy				
Irrevocable Bank Guarantee as per Annexure - XII					
	The value of S.D will be as follows : for tenders with any p	lus percentage and upto (-)15%	over		
	departmental value @ 2% of the contract value.				
	Performance Security: (B.P. Ms.No.3/COM Wing/dated: 28.01.2015				
	a. For Tenders with any plus % & upto	2% of Contract value			
	minus 5% of Department value				
	b. For Tenders with minus 5% & upto minus	4% of contract value			
	15% of Dept. value				
	c. For Tenders with more than minus 15% of	5% of contract value.			
	Dept. value				
1.8.	Recovery to be made for Non-compliance to Schedule of wo	brk/ Mandatory Duties is furnishe	ed in		
	the Annexure VII. Tenderers are requested to take note of	the details. The above details wi	ill be		
	incorporated in the contract documents while executing agreement.				
1.9.	All Duties, Taxes such as VAT, Sales Tax and Service Tax	etc. and other levies payable by	y the		
	contractor under the contract or for any other cause shall be included in the rates, prices and				
	total quoted rates submitted by the Tenderer Any statu	tory variations in duties/taxes, w	/hich		
	take effect from a date subsequent to the due date for receipt of tender, shall be t				
	Board's Account.				
1.10.	The rate quoted by the contractor shall include paym	ent for measures like ESI, EPF,.	The		
	model estimate annexed as Annexure I shall be referred before quoting for the tender.				
1.11.	Tender Validity				
	Tenders shall remain valid for a period of not less the	nan ninety days (90 days) after	the		
	deadline date for Tender submission. A tender valid for	a shorter period shall be rejecte	ed by		
	the Employer as non-responsive.				
1.12.	Tenders with conditions are liable for rejection.				
1.13.	Site Visit:				
1.15.	The Contractor should visit the entire sites/areas of work involved in the operation and				
	maintenance of the CWSS at his own cost and obtain his own information regarding the				
	scheme and also collect details of Habitations served before quoting for the tender. The role				
	of TWAD Board is given in the Annexure - VIII				

1.14.	The Date of commencement of this programme will be the date of acceptance of tender by			
	the competent authority. However, the date of commencement of operation and			
	maintenance work is contingent upon the handing over of the CWSS for maintenance by the			
	concerned Executive Engineer of TWAD Board maintaining the CWSS to the contractor .The			
	period of contract maintenance will be reckoned from the date of handing over and taking			
	over of the scheme for maintenance by the concerned Executive Engineer of TWAD Board			
	and the contractor respectively.			
Date o	of commencement of operation & maintenance contract Period of contract			

01.04.2020 to 31.03.2021

12 Months

II. INVITATIONS FOR BIDS - SINGLE COVER PERCENTAGE TENDER SYSTEM

Bid No.	o. 9-1 / F. Outsourcing of CWSSs / JDO / 2019 / dt.04.03.2020			
Eligibilit	ty	Bidders having Sl.No.1 to 6 - Class IV and above and Sl.No.7 to 12 - Class III and above registration for the works in Government of Tamil Nadu / Other State Govt or State / Central Govt. Under takings		
Invitee				
Sale of	Bid &	06.03.2020 to 20.03.2020 at O/o the Executi	-	
Place of	f Sale	Division, Integrated Office Complex, No.35, J.K. Nagal or Demand Draft on any Scheduled/Nationalized b (Rs.1000 + GST 12 %). If bid documents are require be paid additionally.	ank payable at Tricc d by post an amount of	hy for Rs.1120/-
Down lo	oading	www.twadboard.gov.in	(free of cost)	
Bid Sub	omission	23.03.2020 before 3.00 PM at the office of the Tend office will not be held responsible for postal delay, if	any.	through post. This
Bid ope	ening	23.03.2020 at 3.30 PM at the office of the Tender Inv	itee	
SI No.		Name of work	Approximate value of work (Rs. in Lakhs)	Bid security (in Rupees)
		ration and Maintenance of the following CWSSs in Tric 04.2020 to 31.03.2021) – (12 Months).	chy District (For	
1.	CWSS to Pirattiyur and 15 wayside villages in Anthanallur and Rs.10.90 Rs.10.90		Rs.10.90	11,000/-
2.	CWSS to El of Trichy Di	urpatty and 27 other habitations inThottiyam union strict.	Rs.11.09	11,200/-
3.	CWSS to Thandalai and 26 other habitations in Musiri Union of Trichy District.		Rs.13.04	13,200/-
4.	CWSS to Kallakudi and Pullambadi and 6 Rural habitations in Pullambadi union of Trichy District.		Rs.13.10	13,200/-
5.	CWSS to Thanganagar and 10 other habitations in Uppiliyapuram Union of Trichy District.		Rs.13.81	14,000/-
6.	CWSS to Sriramasamudram and 28 other habitations in Thottiyam union of Trichy District.		Rs.14.82	15,000/-
7.	Trichy Distr		Rs.16.76	16,800/-
8.	CWSS to 43	habitations in Lalgudi, Pullambadi of Trichy District	Rs.18.35	18,500/-
9.		Irungalur and 24 wayside habitations in allur Union of Trichy District	Rs.20.49	20,500/-
10.	Ponnampat Headworks	4 Habitations in Manaparai, Marungapuri unions and ti RTP in Tirchirapalli District - Package I – , Kuppachipatti BS and pumping main, Booster main works to Athupatty.	Rs.21.80	22,000/-
11.		46 left out habitations in 9 Panchayats in bur union of Trichy District.	Rs.22.70	22,800/-
12.	Ponnampat	4 Habitations in Manaparai, Marungapuri unions and ti RTP in Tirchirapalli District Package III – mbu zone.	Rs.24.65	24,700/-

2.1. Downloading the documents from web site:

- 2.1.1. If the documents are downloaded from the web site by the tenderer and offer their tender duly filled and signed along with all required documents to the tender inviting authority as notified in the Bid document subject to the following.
- 2.1.2. 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.
- 2.1.3. No cost towards tender form shall be required to be paid by the tenderers who use the forms downloaded from the designated websites.
- 2.1.4. The bidder shall submit the tender to the tender inviting authority i.e. the Executive Engineer, TWAD Board, Maintenance Division, Trichy.

2.2. Method of Bidding:

- 2.2.1. If the bid is made by an individual, the bid documents shall be signed by the individual with his full name and current address.
- 2.2.2. 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 should accompany the bid documents. The signature of the proprietor shall be attested by a Notary Public and enclosed as documentary evidence.
- 2.2.3. 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.
- 2.2.4. 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.

- 2.2.5. If the bid is made by Joint Venture/consortium, it shall be signed by all the partners of the Joint Venture/Consortium along with the full names and the current address. In case of the partner holding power of attorney for signing the bid documents, a certified copy of the registered power of attorney should accompany the bid. It is also mandatory to enclose a certified copy of the registered Joint Venture/Consortium with the current address of the partners along with the bid.
- 2.2.6. The bids from the contractors / firms shall be accompanied by an attested copy of the Income Tax Clearance Certificate and Sales Tax Verification Certificate relating to the year prior to the previous financial year. In the case of Joint Venture, each partner shall provide the Income Tax Clearance Certificate and Sales Tax Verification Certificate relating to one year prior to the previous financial year.

2.3. Cost of Bidding:

2.3.1. 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.

2.4. Qualification of the Bidder:

- 2.4.1. Bidders shall provide the following as part of their bid in the prescribed formats.
- 2.4.2. A registered power of attorney authorizing the signatory of the bid to commit on behalf of the bidder should be enclosed.
- 2.4.3. Proof of registration of the firm/company under Companies Act should be enclosed.
- 2.4.4. Litigation details of the bidder with the details of the parties concerned and the amount involved should be furnished. The bidder should indicate clearly whether the bidder or any partner of the Joint Venture has been black listed, banned or debarred in any other organization Non-Production of this information (or) concealing the same will lead to disqualification.
- 2.4.5. Proposals to sub contract components of the works with experience details of the subcontractor in similar nature of works proposed to be sublet should be furnished. Any sub-contractor to whom one or more components are to be sublet by the main contractor, in such cases the sub-contractor should have completed particulars

component for a value of 40% of that component, in addition to satisfying the physical experience criteria.

- 2.4.6. Income Tax Clearance Certificate in currency as proof of having remitted the income tax for the year prior to the previous financial year (with reference to the year in which the bid is opened).
- 2.4.7. Sales Tax Verification Certificate as proof of having remitted the sales tax. In the case of not liable to the Sales Tax Department a valid certificate issued by the competent authority to this effect.
- 2.4.8. In the case of Joint Venture with two or more firms as partners, the following requirements shall be complied with:
- 2.4.9. The bid shall include all the information listed above and in addition.
- 2.4.10. The bid and, in case of a successful bid, the Agreement shall be assigned so as to be legally binding on all the partners.
- 2.4.11. One of the partners shall be nominated as the lead partner, and his authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners.
- 2.4.12. The lead partner shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the contract, including payment, shall be done exclusively with the lead partner. The Employer will have correspondences only with the lead partner.
- 2.4.13. All partners of the Joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the Authorization mentioned under above, as well as in the bid and in the Agreement (in case of a successful bid) and
- 2.4.14. A copy of the evidence for the registered joint venture shall be submitted with the bid.
- 2.4.15. Proof of License obtained from Labour Office.

2.5. Special Attention to Bidders

i. **Copies of Experience Certificates** obtained from the Officer not below the Rank of Executive Engineer of respective user departments / responsible person of the private organization must be attested by Notary Public and produced.

ii. 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	:Rs.
4)	Name of contractor with full address.	:
5)	Period completion as specified In the contract.	:
6)	Date of commencement of work :	
7)	Actual date of completion / Commissioning	:
8)	Reason for the delay if any	:
9)	Full details of components Executed under this contract	:
10)	Performance of the work should: Contain the following	
	Description	Performance on maintenance

1. Name of SchemeWhether maintained completedmaintainedSatisfactorily.

III. LETTER OF APPLICATION

To be delivered to the Executive Engineer, TWAD Board, Maintenance Division Trichy at or **before 3.00 P.M. on 23.03.2020.**

To The Executive Engineer, TWAD Board, Maintenance Division, Trichy

I/We the undersigned do hereby tender and undertake to perform, provide and execute all the works, materials matters and things described or mentioned in the **Work Schedule** (item IV) of Tender Document and the specifications thereto (which have been produced to and carefully examined by me/us) in strict accordance with and under and subject to the terms, provisions and conditions set forth or mentioned in the said Schedule specifications therein referred to, at the rates given in the **Price Schedule**

I/we undertake and agree that I/We will not withdraw this tender during the period that will be required for intimation, acceptance or non/acceptance as stipulated by the authority inviting Tender Notice or during such extended period as agreed to by me/us, such period to date from the last date by which tenders are due to be submitted to the Board and if I/We do so withdraw, I/We shall forfeit the Earnest Money Deposit to the Board.

I/We further undertake to produce the Income-tax Clearance Certificate or any other certificate found required by TWAD Board and agree to execute at my/our cost the agreement attached and to sign the documents therein referred to within 15 days after the notification of the acceptance of my/our tender has been received by me/us. In the event of my/our failing to make the Security Deposit or to execute the agreement in the said manner and sign the documents within the time specified for the purpose, the sum of **Rs.16,800**/- accompanying this tender as EMD shall be forfeited to the Board and this concluded contract shall in such case be considered, as having been cancelled or terminated and you may thereupon at such time or times, in such manner and on such terms as you may think fit, arrange either departmentally or by any other person or persons to carry out the works and provide, execute and do all works, materials, matters and things described or mentioned herein and I/We agree to be liable irrespective of the forfeiture aforesaid for all damages, losses, costs, charges and expenses arising from or by reason of such failure and arrangements.

CONTRACTOR

I/We undertake to assume full responsibility for the works I/ we carry out during the contract period.

I/We also undertake to do all extra or varied works which may be ordered as part of this contract upon the terms provided for in the conditions and specifications. The tenders shall be valid for a period of 90 days from the last date fixed for receipt of tenders. In case my/our tender for the work of **Outsourcing of Operation and Maintenance of CWSS to Vellur and 24 other habitations in Musiri Union of Trichy District** for the period from 01.04.2020 to 31.03.2021 (for a period of 12 Months") is accepted, I/We agree and guarantee to commence the said works within a period of seven days from the date of receipt of work order and carry out the agreed work as the above stipulated for a period from the date of commencement of work by me/us. I/We also agree that the performance is the essence of contract. If my/our performance is not to the best satisfaction of the TWAD officials, my/our contract shall be terminated at any point of time.

I/We have actually inspected the sites/areas of operation and maintenance, assessed the nature of the work and have tendered for the works after such inspection.

UNDERTAKING

I/We have gone through the copy of standard tender document received from the Office of the Executive Engineer, TWAD Board, Maintenance Division, Trichy and abide by the same for this contract also.

As witness my/our hand this.....day of......day.

Signature..... Name and address:

IV. WORK SCHEDULE

Outsourcing of Operation and Maintenance of CWSS to Vellur and 24		
other habitations in Musiri Union of Trichy District for the period fro		
01.04.2020 to 31.03.2021.		
0		

SI. No.	Description of work	Rate per Month (Departmental)	Amount for 12 Months
1.	Outsourcing of Operation and Maintenance of CWSS to Vellur and 24 other habitations in Musiri Union of Trichy District for the period from 01.04.2020 to 31.03.2021 (12 Months) by providing required skilled and unskilled personnel to perform the mandatory duties specified in the schedule. (12 Months)	Rs.1,20,150.00 (Rupees One lakh twenty thousand one hundred and fifty only)	Rs.14,41,800.00
	Total –I (Excluding ESI & EPF)		Rs.14,41,800.00
	ESI @ 3.25% of Total –I		Rs.46,858.50
	EPF @ 13.00% Total –I		Rs.1,87,434.00
	Total –II (Including ESI & EPF)		Rs.16,76,092.50

Note:

- a. The rate is Exclusive of ESI, EPF etc.
- b. The rate is for operation and maintenance of CWSS by providing minimum number of skilled and unskilled personnel.

4.1. Minimum Maintenance Personnel to Be Employed:

The following minimum personnel are to be engaged by the contractor to maintain the CWSS

SI.	Description of personnel	Nos./
No	Description of personnel	Day
1.	Electrical Superintendent	
2.	Electrician with Grade II	
3.	Pipe line Fitter Grade - II	
4.	Maintenance Assistant/Watch and Ward	9
5.	Turn Cock	
6.	Filter Bed Operator	

4.2. General Conditions:

The contractor has to train the personnel to be employed in maintenance at his own cost. Any repairs, damages caused due to unqualified person engaged by the contractor, the same should be rectified by the contractor at his risk and cost. If any personal is found to be unfit or disobedience to the instructions given by the TWAD Board Officers, they should be stopped from work immediately. Any injury or loss of life to the maintenance person/persons, during the maintenance period, TWAD Board is not responsible on any account. **The contractor /firm shall take "risk insurance" at their/his own risk and cost against loss of life or injury to the persons engaged for maintenance.** TWAD is not at all connected to any issues of the labour force engaged by the contractor in terms of job and it is complete responsibility of the contractor only.

During the maintenance period, the maintenance personnel available with TWAD Board elsewhere shall be posted to this maintenance work. In such cases necessary cost towards the payment for the personnel engaged by the TWAD Board shall be recovered from the contractor's bill as per the current TWAD SR for various category of maintenance personnel. The TWAD Board Officers shall also transfer any TWAD personnel from this maintenance work to elsewhere at any time whenever required.

4.3. SPECIAL CONDITIONS:

a) D.C.B.COLLECTION:

The Contractor has to receive the Water Demand Collection Bills (DCB) From the Maintenance Division, TWAD Board, Trichy before 2nd of EVERY MONTH and deliver the Water Demand Notice (Bill) and Collection of the Water Charges from the respective Panchayat and hand over to the Executive Engineer, TWAD Board, Maintenance Division, Trichy on or before 22nd of the same month and as directed by the TWAD Board officers.

b) JURISDICTION OF COURT:

In the event of any dispute arising between the parties like to 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 approval is concluded and by no other court.

V. PRICE SCHEDULE

I/We agree to carry out the work of Outsourcing of Operation and Maintenance of **CWSS to Vellur** and 24 other habitations in Musiri Union of Trichy District for the period from 01.04.2020 to 31.03.2021 (12 Months) as per the work schedule at a percentage over the departmental value furnished below :

SI. No. 1	Description of work	Departmental value for the period from 01.04.2020 to 31.03.2021 3	Percentage excess over/less than the Departmental value in figures & words 4
1	Outsourcing of Operation and Maintenance of CWSS to Vellur and 24 other habitations in Musiri Union of Trichy District for the period from 01.04.2020 to 31.03.2021 (12 Months)	Rs.14,41,800.00 (Rupees Fourteen Lakh forty one thousand and eight hundred only)	excess over/less than in figures% in words

NOTE:

- 1. The excess / Less % quoted against the department value by the contractor will be considered for comparison and for finalization of tender.
- 2. The column 4 should be filled by the contractor
- 3. If there is any discrepancy in percentage quoted in words and in figures, the lowest of the two will be considered.
- 4. The tenderer is requested to quote the percentage in figures and words.
- 5. If no percentage is quoted, the Departmental value will be taken as quoted price.
- 6. The rate quoted by the tenderer is **Excluding ESI @ 3.25%, EPF @ 13.00%.** The total contract amount will be calculated with ESI & EPF amount as mentioned in the IV work schedule.

Additional Note

- I. The percentage should be quoted up to **Two Decimal** only.
- II. The sum of period from 01.04.2020 to 31.03.2021 calculated by Excess/Less quoted in the price schedule should be taken as the FINAL VALUE for comparison and finalization of the Tender.
- III. The tenderer is requested to quote the percentage with the word either "excess or less".
- IV. If the tenderer failed to **score out the word** either "Excess or Less", the word **less should be taken** into Consideration.
- V. If two or more tenderers /firms have quoted the same percentage excess or less over the departmental rates in the abstract of BOQ then the successful tenderer will be decided by "LOT SYSTEM" provided they satisfy all other requirements in the Presence of tenderers or their authorized representatives who choose to be present during the tender opening.

VI. SUBMISSION OF TENDER

- a. The Tender should be submitted in the original tender documents as issued by the Executive Engineer.
- b. Under no circumstances, the tender documents are transferable.
- **c.** The tender documents should be placed in an envelope, pasted, sealed and super scribed properly as Outsourcing of Operation and Maintenance of CWSS to Vellur and 24 other habitations in Musiri Union of Trichy District for the period from 01.04.2020 to 31.03.2021.
- d. All the envelopes shall be addressed to the Executive Engineer, TWAD Board, Maintenance Division, Trichy.
- e. The envelope shall bear the name and address of contractor to enable the tender to be returned in case it is declared late.
- f. If the envelope is not sealed and marked as above, the Executive Engineer will assume no responsibility for the misplacement or premature opening of the tender
- g. The tender documents must be received by the Executive Engineer mentioned above not later than 15.00Hours on 23.03.2020. In the event of the specified date for submission of tender is declared a holiday for the Executive Engineer, the tender will be received upto to the specified time on the next working day.
- h. The Executive Engineer may extend the dead line for submission of tender by issuing amendment, in which case all the rights and obligations of the Executive Engineer and the tenderer previously subject to the original dead line then are subject to the new dead line.
- i. All tenders received by the Executive Engineer after the deadline prescribed for submission of tender will be returned unopened to the tenderer.

VII. OPENING OF TENDER AND AWARD OF CONTRACT

7.1. Tender opening

- 7.1.1. The Executive Engineer will open all the tender in the presence of tenderer or their representatives on the date at the time in the address specified
- 7.1.2. The tenderers' names, the tendered percentage over the departmental value and the presence or absence of EMD will be announced by the Executive Engineer at the time of opening.
- 7.1.3. Information relating to the comparison of tenders and recommendation for the award of contract shall not be disclosed to tenderers until the award of contract has been announced.

7.2. Award of Contract

- 7.2.1. The Executive Engineer will award the contract to the tenderer who has quoted the lowest percentage over the departmental value provided that the tenderer is eligible in accordance with the item no.5 in the check list for the contractors of this tender document
- 7.2.2. The Executive Engineer reserves the right to accept or reject any tender
- 7.2.3. The work order will be issued only on production of ESI/EPF registration numbers of the employees / workers proposed to be engaged by the contractor for operation and maintenance
- 7.2.4. The tenderer whose tender has been accepted will be notified of the award of the contract by the Executive Engineer by registered letter.
- 7.2.5. The successful tenderer, if not registered with TWAD Board, shall get registered in TWAD Board.
- 7.2.6. Within 15 days on the receipt of the award of the contract, the contractor shall pay the security deposit as specified in the item 7 in the check list for the contractors of this tender document
- 7.2.7. The tender along with the SD, shall deliver a non-judicial stamp paper of Rs.100/-(Rupees one hundred only) at his cost for executing the agreement.

7.3. Signing of agreement

7.3.1. The Executive Engineer on receipt of the SD and non-judicial stamp paper, will furnish to the tenderer the Agreement incorporating all terms and conditions between the Executive Engineer and the successful Tenderer.

- 7.3.2. Upon furnishing the SD by the successful tenderer, the Executive Engineer will notify the other tenderers that their tenders have been unsuccessful.
- 7.3.3. Failure of the successful tenderer to comply with the requirements of item 4, 5 & 6 of the Award of Contract Para, shall constitute a breach of contract, cause for annulment of the award, forfeiture of the EMD and any such other remedy the Executive Engineer may take under the contract.

7.4. Amendment to the Agreement

7.4.1. Any amendment shall be issued by mutual consent between the Executive Engineer and the contractor only without any contrary to the tender conditions.

7.5. Forfeiture of SD

7.5.1. The SD is liable to be forfeited in cases where the contractor fails to carry out the work in accordance with the terms and conditions of the contract leading to termination of the contract.

VIII. LIST OF CETRTIFICATES

- a. Certificate of Registration as contractor in TWAD Board/Govt.organisation
- b. Signature of all partners/power of attorney
- c. Income Tax clearance certificate.
- d. Copy of Work Order in the similar nature of work.
- e. Experience certificate in similar nature of work.
- f. Certificate for evidence of access or availability of credit facility offered from the bank in the prescribed form.

IX. MANDATORY DUTIES OF THE CONTRACTOR

- 1. After taking over of the CWSS for maintenance, the Contractor is the custodian of the CWSS.
- Must keep a copy of the relevant portions of the 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.
- 3. Should inform every day before 07:00 AM about the pumping status of the scheme from 6.00AM of previous day to 6.00AM of present day to the AE/AEE as per the prescribed format of online entry (beneficiary supply details).
- 4. In case of failure of electricity during emergency / calamity, he should take immense action to restore the electricity. Generators may be utilized for pumping the Designed quantity as and when required under approval of the EE and will be paid as per actual on submission of bills.
- 5. Inspect the Alignment and to check presence of any illegal tapping's in the alignment after takeover of the scheme for maintenance. If any found, it should be reported immediately to the AE/AEE. He should take immediate action to remove the Illegal Tapings for which the AE/AEE will co-ordinate. The total expenditure towards removal of the illegal connections vest with the contractor.
- 6. For any damages to the components of the CWSS made by any person / machinery and any illegal tapping, the contractor is solely responsible and the contractor should file FIR and give intimation to AE/AEE.
- 7. To ensure that the water is supplied to each beneficiary as per the designed quantity on normal condition.
- 8. The Quantity and quality of water supplied to the beneficiaries is the essence of contract, the contractor is solely responsible for the supplied quantity. The contractor should ensure designed quantity of supply to all the beneficiaries as per the scope. Contractor should maintain register showing the quantity of water delivered to each habitations as per design, duly signed by a responsible person/ SHG/ Tank Operator/ Panchayat secretary of the local body concerned and submitted to the Assistant Engineer before 28th of every month.
- 9. The Contractor should make arrangements to obtain the invoice / bill for electricity consumed and handover to the Assistant Engineer/ Assistant Executive Engineer for onward submission and for making payment to EB office without delay.
- 10. Ensuring that adequate manpower is available round the clock to carry out the above tasks and to prevent entry of unauthorized persons.
- 11. The Contractor has to train the labour employed in maintenance at his own cost.

- 12. If any labour is found to be unfit or disobedient to the instructions given by the TWAD Board officers, they should be replaced from work site immediately.
- 13. Operation on specified shifts / day and ensuring that back up teams would be available to take over during Sundays, Holidays and in the event of regular Operator / worker absence including watch and ward.
- 14. Attendance should be maintained by the contractor and the employees to sign it in every shift. It must be produced for verification as and when called for by the TWAD Engineers. The number of actual workers engaged for the maintenance of CWSS should be reported by the contractor daily to the concerned Executive Engineers.
- 15. Operate and maintain equipment with skilled staff so as to safeguard the equipments against single phasing, earth fault, phase reverse etc. in power supply.
- 16. To maintain plant and machineries, pump room and it's premises, Pumping main and valves and Treatment Units as per the Schedule of Maintenance annexed as **Annexure II**.
- 17. The contractor shall carry out minor repairs as listed Annexure-IV
- 18. Operate and maintain capacitor and allied switch gear so as to maintain a power factor of not less than 0.90 prescribed by TNEB.
- 19. The power factor will not decrease or increase suddenly and hence the contractor should monitor daily. If any decrease in the power factor is noticed, it should be informed to the Departmental Engineers (concerned Assistant Engineer/Assistant Executive Engineer).
- 20. If Genset is in the scope of contract, 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 required Diesel / Lube oil will be supplied by Board and the contractor should make necessary arrangement for conveying the same. However, in case of emergency, the contractor may arrange to purchase the required Diesel / Lube oil as directed by the Engineer in charge and the related cost will be paid as per actual on production of bills.
- 21. Make sure that the levels in the sumps are maintained in a safe required level and to ensure that overflowing of sump does not occur.
- 22. Care should be taken to prevent overflow of OHT.
- 23. The contractor shall maintain all registers under law towards attendance, salary of the workers, log book, etc. in the name of the contractor and the same shall be maintained and signed by the contractor and the same shall be periodically checked by the field engineers or officials of the Board above the rank of the field engineer.
- 24. Mandatory Regulations prescribed by CEIG and Inspector of Factories shall be followed without any lapse.

- 25. Each station should be provided with complete set of tools and equipments required for maintenance as listed in the **Annexure III.**
- 26. To adhere to safety measures as stipulated in Annexure V.
- 27. To adhere to the Contract welfare Laws as applicable to this scope of contract Annexure VI.
- 28. The bidder should furnish his local office and residential address along with Telephone Nos, email id and mobile Nos.

9.1. Bills, Payment and Registers

- The contractor should maintain the Attendance register, labour payment acquaintance register, EPF and ESI payment details specifically for this work and to maintain the log book in each and every pumping station.
- The contractor should pay the salary as per the payment of wages Act, 2017 to the workers before 7th day of the succeeding month.
- The contractor should pay the workers' insurance contribution amount immediately concluding the agreement in the concerned department and produce the same to Executive Engineer, TWAD Board.
- 4. The contractor should pay the minimum bonus as specified in the labour act through bank to the workers engaged by him at his own risk and cost.
- The contractor should submit the bills to the section office on or before 7th of each month. Payment will be processed on monthly basis on receipt of bills from the contractor by following the Board's procedures.
- 6. The contractor should submit the bill accompanied with the following documents.
 - i. Statement of work done by the Contractor
 - ii. Statement of wages of labours deployed him under the works contract, EPF/ESI no., statutory deductions etc.,
 - iii. EPF and ESI challans for previous month- for employees working in TWAD Board alone.
 - iv. Wage payment sheet for the previous month
 - v. Statement of material supplied by the contractor
 - vi. Copy of Labour Licence
 - vii. Challan of service tax payment (separate in respect of each works contract).
- 7. If the contractor notwithstanding the labours mentioned in this agreement, the TWAD Board will not pay for the employees not engaged.
- 8. In order to ensure, water supply to all the beneficiaries, the following payment schedule is also to be included.
 - a. 20% of the BOQ/ Agt. value on pumping of the Earmarked Quantity + Transmission loss at Head works/Treatment Plant.

- b. 20% of the BOQ/Agt. value on production of the evidence for having engaged the required number of laborers. Failing which the payment will be made only for the labours engaged actually.
- c. 20% of the payment on ensuring supply of Earmarked Quantity for the initial reaches beneficiaries fixed by the concerned Executive Engineer for the particular scheme.
- d. 20% of the payment on ensuring supply of Earmarked Quantity for the intermediate reaches beneficiaries fixed by the concerned Executive Engineer for the particular scheme.
- e. 20% of the payment on ensuring supply of Earmarked Quantity for the tail end beneficiaries fixed by the concerned Executive Engineer for the particular scheme.
- f. In case of ascertaining any short supply by the field Engineers in quantity of supply to be made to the Beneficiaries, then 90% of the payment only will be made proportionately, (Initial, Intermediate & Tail end reaches as finalized by the Executive Engineers of the concerned scheme/package) as below:

Bill Claim amount for supply based portion of BOQ/ Agt.

= 90% x (BOQ/Agt. Value for the reaches Concerned) x (Served qty in KL)

X. DUTIES AND RESPONSIBILITIES OF CONTRACT WORKER

- 1. He shall hold full responsibility of maintaining pump room pumpsets electrical motors and valves etc. as prescribed by the Board
- 2. To inform minor/major/repairs immediately and should be present at site until completion works of repair
- 3. He shall have full responsibility for maintaining maintenance schedule such as daily, weekly and monthly programmes.
- 4. He shall keep safety belt, gas mask, gas monitor and First Aid box to his custody and utilize whenever requires.
- 5. He shall be responsible for overall cleaning and keeping the station neat and tidy
- 6. To approach TNEB authority when power fails in TNEB structure/Board structure and ascertains early supply resumption.
- 7. He shall check up Power Factor everyday and to maintain at minimum 0.90 as prescribed by TNEB.
- 8. In charge shall be responsible to carryout mandatory duties of contractor in the individual pumping station
- 9. Up keeping the equipments and installations in pumping station such as air blowing motors, control panels, gland packing, changing Engine Oil and maintenance of battery.
- 10. Recording Log Book for every hours and including starting/stopping time of the pump sets.
- 11. Check the temperature/Noise of Running units and control panel
- 12. Record daily shift activity in Log Book
- 13. General cleaning of all equipments, buildings and the yard and keeping the premises clean and tidy
- 14. Ensuring that staff is available round the clock to carryout out the above task and to prevent entry of unauthorized persons.
- 15. Provide gland packing for the pumps, sluice valve etc. whenever required to avoid leakage of water.
- 16. Watering of plant and tree
- 17. Operating of sluice valves and non-return valves
- To go along pipe line system and check for any leak, burst and damage to the pipe to inform TWAD Engineers immediately for rectification.
- 19. Follow the instruction if any by the Engineers of TWAD Board

Duties of Pipe Line Fitter

- 1. He should report to duty to Contractor's Supervisor concerned and engage in work.
- 2. He should inspect Raw water/ clear water pumping main, transmission main, Feeder main, Branch

mains, Distribution main allocated to him.

- 3. He should travel along the above mentioned mains and should take a note on location on which leaks, burst occurred in the said mains and should inform to the officers concerned, should initiate steps for attending the same.
- 4. He should maintain leak/ burst Register which should be authenticated by the contractor's Supervisor. He should bring to the notice of Higher Officers about the present stage of leak/ burst occurred/ rectified.
- 5. He should attend minor leaks in sluice valve/ air valve/ scour valve/ etc. applying grease, packing glands as per direction of Higher Officers.
- 6. He should report immediately to the Contractor's Supervisor concerned about the occurrence of leaks/ bursts in the said mains and also nonfunctioning of sluice valves/ air valves/ scour valves and should take action for attending the same.
- He should bring to the notice of Contractor's Supervisor about the unauthorized connection made, damages occurred due to anti-social activities, should take action against the same by way of informing to the higher officers.
- 8. He should collect the DCB collection from the local body
- 9. Reporting and preventing illegal water supply connection

		By his				
		knowledge/	Whether		Date of	Whether
SI.	LS/Location at	experience	repeated	Size of	occurrence	informed
No.	which leak/ burst	leak/ bursts	occurrences	main	of leak/	to higher
	occurred	occurred	or not		burst	officer
		Reasons				
1	2	3	4	5	6	7

Leak/ bursts Register maintained by Line Fitter

Date of	Instruction	Date of rectification		Materials used for
inspecting higher officer	offered	Start	Finish	rectification
8	9	10	11	12

DUTIES OF TURN COCK

- He should inspect sluice valves/Air valves/ scour valves in Raw water/ clear water pumping main, transmission main, Feeder main, Branch mains, Distribution main as allotted (as per the annexure – IV B) for him every day.
- He should report to duty to the Contractor's Supervisor concerned and involve in work daily, as allotted (as per the annexure – IVB).
- 3. He should engage by himself by attending minor leaks in sluice valves/ air valves/ scour valves, applying grease, packing glands as per direction of higher officers.
- 4. He should report immediately to the Contractor's Supervisor concerned about the major leaks, damages, breaks non function of sluice valve/ air valves/ scour valves and should take action for attending the same.

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

DAILY REPORT OF TURNCOCK

DUTIES OF ELECTRICIAN

- 1. He should report to duty to Contractor's Supervisor concerned, and engage in work.
- 2. He is fully responsible for the pumping stations which are assigned for him(as per annexure-IV A).
- 3. He is responsible for the pumpsets, panel boards and all accessories in the pumping station.
- 4. He should inform the contractor's supervisor about the working conditions of the pumpsets. He is responsible for rectifying any defects noticed in the pumping station with the help of Contractor's concerned.
- 5. He should always be in contact with the Fitter/Turn cock concerned about the working condition of the scheme. He should monitor the situation arising out of information gathered from the line fitter/ turn cock and pass on to the contractor's supervisor then and there immediately.
- 6. At regular interval, he should record the reading such as volt meter, Ammeter, pressure gauge, energy meter etc. and should contact TANGEDCO and pass on suitable instructions to the Line

Data

Fitter/ Turn cock as well as to the contractor's supervisor in case of abnormal fluctuations

- 7. He should maintain Log book record and submit the same to Division office. He should submit monthly consolidated figures such as daily/ monthly pumping quantity, daily/ monthly energy consumption, problem faced and rectification done to the higher officers for raising DCB.
- 8. He is responsible for the periodical maintenance of Pumps and motors during the regular shut down.
- 9. He is responsible for power factor maintenance, getting EB bills from EB.

ANNEXURE-I

MODEL ESTIMATE

Sl.No	Description of Work	Quantity (No)	Month	Rate Rs. Ps.	Per	Amount Rs. Ps.
1	Electrical Superintendent with(C Certificate)	0	1 (one Month)	23,400.00	No / Month	0.00
2	Electrician Gr - II	0	1 (one Month)	16,110.00	No / Month	0.00
3	Fitter Gr – II	0	1 (one Month)	16,470.00	No / Month	0.00
4	Maintenance Assistant / Watch and Ward	9	1 (one Month)	13,350.00	No / Month	1,20,150.00
5	Turn Cock	0	1 (one Month)	12,780.00	No / Month	0.00
	SUB TOTAL - I					1,20,150.00
6	Workers' Welfare Fund @ 1.00% of Sub Total -I					1,201.50
7	ESI @ 3.25% as per Labour Act of Sub Total -I					3,904.88
8	EPF @ 13.00 % as per Labour Act of Sub Total -I					15,619.50
	SUB TOTAL - II					1,40,875.88
	SUB TOTAL - III for the period from 01.04.2020 to 31.03.2021 (12 Months)					1690510.50
	GRAND TOTAL					16,91,000.00

ANNEXURE II

SCHEDULE OF MAINTENANCE

ltem No.	Description of work	Daily	Weekly	Fort- nightly	Monthly
1	Pump House:				
1.1	Cleaning of site	\checkmark			
1.2	Cleaning of Pump House including Doors and Windows	\checkmark			
1.3	Cleaning of Panel Room, D.G. room etc.	\checkmark			
1.4	Check pump is operational	\checkmark			
1.5	Change over to standbye pumps	\checkmark			
1.6	Record hours run	✓			
1.7	Check operation of air release pipe	✓			
1.8	Lubricating of Rolling Shutters			\checkmark	
1.9	De-weeding of Pump Room premises and removal of cob webs etc in the Pump Room.				\checkmark
2	H.T.Structure, Transformer yard and Transformers:				
2.1	Cleaning of transformer yard, removal of grass and plants	\checkmark			
2.2	Check up and water the earth pits		✓		
2.3	Meggar - earth resistance check in the earth pits				\checkmark
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	\checkmark			
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		\checkmark		
3	H.T. Panel:				
3.1	Clean the panel externally and internally 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			\checkmark	
3.4	Check the internal connections			\checkmark	
3.5	Check the operations of doors and conditions of door gasket			✓	

ltem No.	Description of work	Daily	Weekly	Fort- nightly	Monthly
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			\checkmark	
4	LT Panel :				
4.1	Clean the panel externally and internally using blower	✓			
4.2	Check all the connections for tightness			\checkmark	
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	\checkmark			
4.5	Check all the indicator lamp bulbs and fuses and replace if necessary		\checkmark		
4.6	Check operation of all switches and bush buttons		\checkmark		
5	CAPACITORS:				
5.1	Check all the capacitors for oil leakage if any	\checkmark			
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:				
6.1	Clean the motor terminal box, check the cable connection to tightness	~			
6.2	Check body of the motor for firm connection			\checkmark	
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				\checkmark
6.6	Check air cooling fan for vibration and noise				\checkmark
6.7	Check meggar test for windings and earth				\checkmark
6.8	Cleaning of motor slipring, carbon brush, contacts and replace if necessary		\checkmark		
7.0	STARTERS AND OCB				
7.1	Clean the starter and check up the cable connection	\checkmark			

ltem No.	Description of work	Daily	Weekly	Fort- nightly	Monthly
7.2	Check contacts and replace if necessary		\checkmark		
7.3	Check for cable connection		\checkmark		
7.4	Check for OLR and No volt coil		\checkmark		
7.5	Check the level of transformer oil in the OCB and top up if necessary			~	
8.0	MAIN PUMPS				
8.1	Outside Cleaning	\checkmark			
8.2	Check Bearing Temperature	\checkmark			
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				\checkmark
8.6	Check foundation nuts and bolts for tightness and rusting		~		
8.7	Check inspection covers and check condition of impeller				\checkmark
8.8	Check the pressure and pressure gauges on suction and delivery side	~			
8.9	Clean the pump pit nd 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	\checkmark			
8.13	Check the condition of bearing oil and replace if required			✓	
9	SUMP PUMP				
9.1	Check the pump for operation	\checkmark			
9.2	Check the coupling and replace if necessary			\checkmark	
9.3	Clean the starter panel externally and internally	\checkmark			
9.4	Check the fuses and contacts, apply petroleum jelly if necessary		~		
9.5	Check the foot valve and replace if necessary	\checkmark			

ltem No.	Description of work	Daily	Weekly	Fort- nightly	Monthly
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		\checkmark		
10.5	Check fuel level in the diesel tank of DG set and top up if necessary		\checkmark		
10.6	Check engine oil level in the D.G. set and add if necessary			✓	\checkmark
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				\checkmark
11.7	Check the rope and apply grease if required				\checkmark
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			✓	

ltem No.	Description of work	Daily	Weekly	Fort- nightly	Monthly
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				\checkmark
12.8	Apply grease to the spindle if necessary			~	
12.9	Check for free movement			~	
13	PIPELINE:				
13.1	Check the pumping main, branch pumping main, feeder main for any leak /burst /damage	✓			
14.0	VALVES:				
14.1	Check the operation of non-return valve	~			
14.2	Check the disc for its smooth opening and closing operation		\checkmark		
14.3	Check the sluice valves	\checkmark			
14.4	Check the air valves	\checkmark			
14.5	Check the scour valves				\checkmark
15	SUMP:				
15.1	Check the cleaning				✓

ANNEXURE III

EQUIPMENTS AND TOOLS TO BE MADE AVAILABLE AT EACH PUMPING STATION

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

ANNEXURE IV

LIST OF MINOR REPAIRS TO BE ATTENDED

Minor repairs noticed in the maintenance of scheme should be reported to the AE/AEE in charge of the CWSS without any time lapse. The rectification work have to be carried out immediately as per the direction of the AE/AEE. Necessary entry for the repairs carried out has to be made in the Log Book concerned.

Electrical Works

- 1. Replacement of H.G. Fuses
- 2. Replacement of jumpers
- 3. Replacement of insulator (porcelein) one phase
- 4. Replacement of A-B switch one phase
- 5. Replacement of no-volt coil for A.C.B. and O.C.B.
- 6. Replacement of jumper with socket inside the panel
- 7. Replacement of cable lugs including terminations
- 8. Replacement of burnt-out H.R.C. fuses
- 9. Replacement of moving and fixed contacts or contactors Repairs to isolators

Pumpsets

- 1. Replacement of coupling bolt & nuts including rubber bushes
- 2. Replacement of worn-out impeller nut
- 3. Replacement of spindle nut in the sluice valve
- 4. Replacement of terminal plate in the motor
- 5. Replacement of carbon brushes and brush holder

Valves

- 1. Replacement of spindle nut in sluice valves
- 2. Replacement of glands in valves
- 3. Replacement of ball in air valves

DG Set

- 1. Replacement of burnt-out spares in the battery charger of D.G.
- 2. Rewinding of self-starter in the case of D.G.
- 3. Replacement of repairing of cut-out of D.G.

General

Replacement of bulb, choke, starter, etc.

Note: The old parts which have been replaced should be returned to the Board wherever applicable.

ANNEXURE V

SAFETY MEASURES TO BE ADHERED TO

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:

SI.No.	Name of Equipment	For			
51.110.		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. Responsibility for any health problem or death will solely rest with contractor.
- 2. Only experienced, skilled people have to be employed by the contractor. The contract labours should have minimum qualification as Electrician-grade II with ITI, Fitter grade II, Maintenance Assistant, Turn cock-All can read and write..
- 3. Safety belts, ropes, Gas mask, Torch lights, are to be provided by the contractor for laborers who get into wells.
- 4. All personnel should be covered by insurance under workmen compensation act.
- 5. All labour act provisions has to be met with.
- 6. Exhibit labels of "SAFETY FIRST"
- 7. First Aid Box should be available within the reach of the staff in all Pump Rooms and Booster Stations.
- 8. No medicine should be kept in the first aid box.
- 9. First Aid Chart should be displayed in the Pump Rooms

ANNEXURE VI

CONTRACT WORKER WELFARE

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 V. 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

- a. Workmen Compensation Act, 1923
- b. Payment of Wages Act, 1936 & 2017
- c. Industrial Disputes Act, 1947
- d. Minimum Wages Act, 1948
- e. Factories Act, 1948
- f. Employees PF and Miscellaneous Act, 1952
- g. Payment of Bonus Act, 1965
- h. Payment of Gratuity Act, 1972
- i. Equal Remuneration Act, 1979
- j. Maternity Benefit Act 1951
- k. Contract worker (Regulation & Abolition) Act 1970
- I. Industrial Employment (Standing Orders) Act 1946
- m. Trade Unions Act 1926
- n. Child worker (Prohibition & Regulation) Act 1986
- o. Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979
- p. The Building and Other Construction workers (Regulation of Employment and Conditions of Service Act 1996 and the Cess Act of 1996.
- q. Employee State Insurance Act, 1948
- r. The Tamil Nadu Manual Workers (Regulation of Employment and Conditions of Work) Act, 1982.
- s. The Bonded worker System (Abolition) Act, 1976
- t. The Employer's Liability Act, 1938.
- u. The contractor should abide by all the rules and regulations as stipulated in the Labour Laws in India.

ANNEXURE VII

PENALTY FOR NON-COMPLIANCE TO SCHEDULE OF WORK / MANDATORY DUTIES

If the contractor fails to carry out any work or part of work/mandatory duties, the Board shall have the power to carry out such parts of work departmentally and recover such amount including 10% as the supervision charges from the progressive bills.

If the absentees of total worker are less than 20% man days, recovery to be made at 1.5 times of worker rate (as per TWAD SOR of the current year for respective category) for first week and at 2 times for the second to fourth week. If the absenteeism continued beyond fourth week and also absenteeism is more than 20% action to be initiated for termination of outsourcing contract by giving prior notice.

ANNEXURE VIII

ROLE OF TWAD BOARD

- 1. A joint inspection will be had by TWAD Board with the contractor or his representative before handing over of the CWSS for maintenance.
- 2. The Executive Engineer to furnish the salient details and flow diagram of the CWSS to the contractor along with the list of habitations covered under the scope of this CWSS and the earmarked supply to them
- 3. To check the number of employees engaged by the contractor as per agreement. The Executive Engineer should get from the contractor daily report on the workers engaged by him for maintenance of the CWSS and in turn, should report the numbers to the TWAD Board Head Office daily after due verification.
- 4. The Executive Engineers shall inspect/check the salary register maintained by the contractor on or before 10th day of every succeeding month for which the salary is paid, to verify whether the workmen of the contractor are paid statutory wages due to the worker.
- 5. If the contractor fails to make any payments that may be due to their workmen/ worker and as a consequence, the principal employer, the Board is called upon as required to pay the same the said payment shall be recovered from the contractor from his dues, monthly running bills or otherwise or from his assets as may be decided by the Executive Engineer.
- 6. The breach of any of the terms of the agreement shall entitle the Board to terminate the contract immediately without any notice, as also withholding of the dues payable to the contractor and the security deposit by the contractor till the amounts due to the Board are recovered. In addition to this, the field officers/Assistant Accounts Officers/Executive Engineers should ensure that all the statutory requirements as per the licence issued by the competent authority and all the requirements of the Contract Worker (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/sanction before the competent authority. This is the only way to secure compliance of the terms of the contract worker (Regulation & Abolition) Act and the licence issued thereunder by the competent authority, by fixing responsibility for the verification thereof on the concerned officers of the Board.
- 7. TWAD Engineers shall closely monitor the Power Factor. If variation is noticed, suitable direction has to be given to the contractor to improve the Power Factor.
- 8. Power consumption charges will be paid by TWAD Board.
- 9. TWAD Board will arrange to provide the Telephone connection in the premises wherever found necessary and the entire telephone charges including the rent shall be paid by TWAD Board.
- 10. To conduct regular inspection to ascertain the effective functioning of system through Engineers of TWAD Board.

- 11. Payment will be processed on monthly basis on receipt of bills from the contractor by following Board's procedures.
- 12. The spares, grease, waste, glands for valves and fuse wires will be provided by the department.
- 13. If Diesel Generator (DG) set is maintained, supply of Diesel and Engine Oil etc. for DG set will be made available by TWAD Board.

ANNEXURE IX

PAYMENT

- 1. Payment will be processed and paid to the contractor on monthly basis by following Board's procedures.
- 2. The Executive Engineer on behalf of the Board shall recover any amount due from the contractor to the Board from monthly running bills of the contractor before effecting payment of his dues.
- 3. Any losses or damages to the properties of TWAD Board caused either due to slackness on the part of the contractor or his employees or due to improper operation of the system will be recovered from the contractor's bill of the subsequent month.
- 4. If the contractor fails to effect supply of the designed quantity to the habitations under the scope of this contract, unless and otherwise the cause is due to insufficient yield in sources, Power Supply, any natural calamity or any other reasons genuinely acceptable to the Executive Engineer, recovery will be made from the bill proportionate to the short supply against the earmarked supply.
- 5. Payment for the value of work completed in a satisfactory manner as per agreement will be paid. However, 5% (Five percent) of the value of work completed as per agreement will be withheld in every part payment. The 5% (five) of bill amount already withheld in the part bills will be released in the final bill and 2.5% (two and half) of the amount towards additional Security will be recovered in the final bill.
- 6. The above 2.5% amount towards additional Security deposit recovered in the final bill will be released after completing Six (6) months from the date of completion of work.
- 7. **Income tax recovery:** 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 Department.
- 8. In order to ensure, water supply to all the beneficiaries, the following payment schedule is also to be included.
 - a. 20% of the BOQ/ Agt. value on pumping of the Earmarked Quantity + Transmission loss at Head works/Treatment Plant.
 - b. 20% of the BOQ/Agt. value on production of the evidence for having engaged the required number of laborers. Failing which the payment will be made only for the labours engaged actually.
 - c. 20% of the payment on ensuring supply of Earmarked Quantity for the initial reaches beneficiaries fixed by the concerned Executive Engineer for the particular scheme.
 - d. 20% of the payment on ensuring supply of Earmarked Quantity for the intermediate reaches beneficiaries fixed by the concerned Executive Engineer for the particular scheme.
 - e. 20% of the payment on ensuring supply of Earmarked Quantity for the tail end beneficiaries fixed by the concerned Executive Engineer for the particular scheme.

f. In case of ascertaining any short supply by the field Engineers in quantity of supply to be made to the Beneficiaries, then 90% of the payment only will be made proportionately, (Initial, Intermediate & Tail end reaches as finalized by the Executive Engineers of the concerned scheme/package) as below:

Bill Claim amount for=90% x (BOQ/Agt. Value for the reachessupply based portion of BOQ/Agt.Concerned) x (Served qty in KL)

CONTRACTOR

ANNEXURE X

SPECIAL CONDITIONS

- 1. Ensuring that adequate manpower is available round the clock to carry out the agreed tasks and to prevent entry of unauthorized persons.
- 2. The contractor should furnish the list of employees, with their names, proposed to be employed by him as per the Annexure XIII & XIV. Unauthorized persons other than reported should not enter in the scheme's premises in the capacity as agent etc., But the substitute of an employee could be permitted with specific orders.
- 3. No employee of the contractor shall stake claim for employment in TWAD Board at any point of time because of having worked as worker in this CWSS. The contractor shall get an undertaking from his employee to this effect and furnish it to the Executive Engineer .All the issues related to the labours engaged by the contractor for this work have to be solved by the contractor only. So It is the sole responsibility of the contractor and TWAD has nothing to do in the issues of the labours engaged by the contractor.
- 4. The contractor should employ only skilled and qualified persons to ensure proper operation and maintenance of the CWSS
- 5. Any problem in the motor and pumps, electrical main boards and fixtures, 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 should be brought to the notice of the Asst. Engr/ Asst. Exe. Engr., immediately and initiate action for the restoration of water supply. Necessary entry should be made in the register.
- 6. Log sheet of pumping should be sent to the Asst Executive Engineer/ TWAD Bd. on the 26th day of every month (from 26th of the previous month to 25th of current month) without fail along with bill claims.
- 7. Any alternation/additions if needed to the existing arrangements, both in electrical and mechanical installations should be attended only after proper approval from the Executive Engineer.
- 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. Employment of child labour below the age of 14 years is forbidden and is a punishable act under Constitution of India, Part-3 of Article 24.
- 11. If the employees sustain any injury while on duty due to accidents, no compensation will be paid by the TWAD Board.
- 12. The contractors shall be fully responsible for operating and maintaining the scheme in a safe &

secure manner.

- 13. The consumables required for this scheme will be supplied by the Department every month free of cost and acknowledgement to be given to TWAD Board Officers by the Contractor.
- 14. In respect of leaks in PSC/AC/CI and PVC pipes earth work excavation will be carried out departmentally. The Contractor has to extend all the required co-operation for the leak rectification works.
- 15. The contractor should ensure designed quantity of supply to all the beneficiaries. Contractor should maintain register showing the quantity of water delivered to each beneficiary, duly signed by a responsible person of the local body concerned.
- 16. Subletting of contract:

Transfer of the contract is not permissible on any ground. However, the supplier/ contractor shall sublet any portion of the contract only with the written consent of the Engineer in charge. It should be clearly understood that any subletting shall in no way absolve the contractor of its/ his responsibilities and obligations under this contract.

17. Recovery of money payable to the 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 how so ever 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 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 or all the government promissory notes for the 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 government promissory notes or 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.

- 18. As per provision of the Contract worker Regulation and Abolition) Act 1970, (hereinafter referred to as the said act) Section 7 provides that the principal employer employing 20 or more contract worker as well as any contractor employing 20 or more workman shall mandatorily register themselves as principal employer and the contractor shall secure a licence under the said Act.
- 19. The Executive Engineer concerned or any other official who is in charge of maintenance of Water Supply Schemes, as the case may be, be directed to ensure that both the Board and the contractor are registered under the Act aforesaid.

The following clauses need to be added to the Tender / Agreement.

- 20. The agreement between the parties shall be for a period from 01.04.2020 to 31.03.2021, provided the contractor has in his possession a valid licence under the Contract Labour (Regulation and Abolition) Act. If the contractor does not have a valid licence under the Act as aforesaid, then the agreement between the parties shall be terminated by the Board without any intimation or notice.
- 21. At the time of signing of the agreement between the parties, the contractor shall possess a valid licence under the Provisions of the Contract Worker (Regulation and Abolition) Act 1970 giving details of the work for which the contract worker is allowed to be supplied, details of the period of licence and the number of workers allowed to be supplied by the contractor.
- 22. If, at the time of signing of the agreement, the contractor is unable to produce a valid licence under the Contract Labour Act as aforesaid, he shall be deemed to be not eligible for the award of the contract and the contract shall be awarded to the next eligible tenderer.
- 23. It is expressly understood between the parties that the worker supplied by the contractor are the workman of the contractor and the Board has neither any privities of contract nor any employer-employee relation with them.
- 24. The contractor shall obey all the provisions of various laws including Labour Laws as applicable to them. If the Board suffer any consequences of whatsoever 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.
- 25. The Contractor should abide by all the rules and regulations as stipulated in the Labour Laws in India. All the wages to paid in current coin or currency notes or by cheque or by crediting the wages in the bank account of the employee.
- 26. The contractor has to make Wages, ESI and EPF payments each and every month for the engaged labors as per the list furnished by him to the TWAD board without delay. Otherwise, the penalty will be imposed to the contractor.
- 27. The contractor has to make arrangements for periodic collection of water samples and sending to district water testing laboratories as instructed by the field engineers at free of cost.
- The Principle Employer and the contractor will follow all the provisions of the Contract Labour (Regulation and Abolition) Act 1970 and the Tamilnadu Contract Labour (Regulation and Abolition) Rules 1975.

ANNEXURE XI

SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT FACILITIES – CLAUSE 7.1.9

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 over draft / credit facilities to the extent of Rs...... to meet their working capital requirements for executing the above contract.

CONTRACTOR

EXECUTIVE ENGINEER

ANNEXURE XII

PERFORMANCE BANK GUARANTEE (UNCONDITIONAL)

То

The Executive Engineer, TWAD Board, Maintenance Division Trichy.

						(N	ame	of		Employer)
						(Address	ofer	mployer)		
WHER	EAS					(Name	and	address	of	contractor)
(hereinafter	called	"The	Contractor"	has	undertak	en, in	pu	rsuance	of	contract
No			dated				to	execute		
		(N	Name of contra	ct and	brief descr	ption of	work	<) hereina	fter	called "the

contract"

AND WHEREAS it has been stipulated by you in the said contract that the contractor shall furnish you with a Bank Guarantee by a recognized Bank for the sum specified therein, as security for compliance with his obligations in accordance with the contract.

AND WHEREAS the contractor has requested us to give the Bank Guarantee.

AND WHEREAS we have agreed to give the contractor such a Bank Guarantee unconditionally and irrevocably to guarantee as primary obligator and not as mere surety, all the payments to the

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the contractor, upto a total of _______ (amount of guarantee) _______ (amount in words such being payable in the types and proportion of currencies in which the contract price is payable, and we are undertake to pay you unconditionally and irrevocably upon your first written demand and without cavil or argument, any sum or sums within the limit of _______ (amounts or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt from the contractor.

ANNEXURE – XIII

List of Outsourcing personal - I

Name of Scheme : CWSS to ------ in------ in------ District

SI.	Name of HW/BS/TS/GS (Specifying the No. of Outsourcing Personal with required Qualification as per Department)	Electri	cian	Maintenance Assistant/ watchman		
No.		Name	Contact No.	Name	Contact No.	
1						
2						
3						
4						

ANNEXURE – XIV

List of Outsourcing personal - II

Name of Scheme : CWSS to ------ District

SI. No.	Name of Reach / LS Name	Fitter		Turn cock		Maintenance Assistant	
		Name	Contact No.	Name	Contact No.	Name	Contact No.
1							
2							
3							
4							
5							
6							