

**KERALA INDUSTRIAL INFRASTRUCTURE DEVELOPMENT CORPORATION(KINFRA)**  
**(A statutory body of Govt of Kerala)**

KINFRA HOUSE, TC 31/2312, Sasthamangalam, Thiruvananthapuram -695 010  
**Tel:** 0471-2726585 | **Fax:** 0471-2724773 | **Email:** kinfraannexe@gmail.com | **Web:** www.kinfra.org



**Notice Inviting Tender (NIT)**

**(KINFRA-6)**

- Tender No** : **KINFRA/KEPIP/OM/25/2023-24**
- Name of Work** : **Operation, Maintenance and Upkeep of the 6.5 MLD Water Supply Scheme & Associated Electro-mechanical equipment and Routine & Preventive Maintenance of Pumps & Motors and Electrical / Plumbing systems of KINFRA Export Promotion Industrial Parks, Kakkanad for 3 years.**
- PAC** : **Rs.1,16,60,193/- (for 3 years)**
- EMD** : **Rs. 50,000/-**
- Period of Completion** : **3 Years**
- Bis Submission Fee** : **Rs.5,900/- (inclusive of 18% GST)**



**KERALA INDUSTRIAL INFRASTRUCTURE DEVELOPMENT CORPORATION**  
(A Statutory Body of Govt. of Kerala)  
KINFRA HOUSE, TC NO.31/2312, SASTHAMANGALAM P.O,  
THIRUVANANTHAPURAM

- Tender No : **KINFRA/KEPIP/OM/25/2023-24**
- Name of Work : **Operation, Maintenance and Upkeep of the 6.5 MLD Water Supply Scheme & associated electromechanical equipments and Routine & Preventive Maintenance of Pumps & Motors and Electrical / Plumbing systems of KINFRA Export Promotion Industrial Parks, Kakkanad for 3 years.**
- Scope of work : **The work necessary includes Operation, Maintenance and Upkeep of the 6.5 MLD Water Supply Scheme of KEPIP which consists of the Water Treatment Plant, the pumping and distribution line network, associated electro-mechanical equipments and Routine & Preventive Maintenance of Pumps & Motors and Electrical / Plumbing systems of KINFRA Export Promotion Industrial Parks, Kakkanad for 3 years.**
- Locality : **KINFRA Export Promotion Industrial Parks Ltd, IX/159 A, Infopark P.O, Kakkanad, Cochin-42.  
Contact Number: 0484- 2415888**
- Last date of Submission : **05:00 PM on 19/12/2023**
- Name of Bidder : .....
- Address of Bidder with phone num : .....
- Contractor's Registration and Class : .....
- Validity period of Registration : .....

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## Tender Notice

 <b>kinfra</b> INSPIRING GROWTH	<b>KERALA INDUSTRIAL INFRASTRUCTURE DEVELOPMENT CORPORATION (KINFRA), Thiruvananthapuram, Kerala</b>		
<b><u>e-Tender</u></b>			
KINFRA invites item rate, online tenders from experienced and technically sound contractors/firms for the following work:			
<b>Operation, Maintenance and Upkeep of the 6.5 MLD Water Supply Scheme &amp; associated electromechanical equipment and Routine &amp; Preventive Maintenance of Pumps &amp; Motors and Electrical / Plumbing systems of KINFRA Export Promotion Industrial Parks, Kakkanad for 3 years.</b>			
PAC	Bid fee	EMD	Last Date
<b>Rs.1,16,60,193/- (for 3 years)</b>	<b>Rs. 5900/- (Inclusive of 18% GST)</b>	<b>Rs. 50,000/-</b>	<b>19/12/2023 at 5:00PM</b>
The tender document(s), can be downloaded from the e-Government Procurement (e-GP) website ( <a href="http://www.etenders.kerala.gov.in">www.etenders.kerala.gov.in</a> ).For more details visit the web site <a href="http://www.kinfra.org">www.kinfra.org</a> .			
Place: Thiruvananthapuram Date: 29/11/2023		<b>Sd/- Managing Director</b>	

## GENERAL GUIDELINES

1. The book of “General Conditions of Contract” is applicable to both types of tenders i.e.” Percentage rate tenders and Item rate tenders”. Accordingly, alternative provisions for conditions Nos. 4, 10 & 12 of the General Rules and Directions are given in this book. The appropriate alternatives will be applicable in specific cases depending on whether this is used for percentage rate tender (KINFRA-7) or item rate tender (KINFRA-8). “General Conditions of Contract” shall be available in downloadable manner from website “[www.kinfra.org](http://www.kinfra.org)”
2. KINFRA-6 abridged from KINFRA-7/8, Schedules A to F, special conditions/specifications and drawings will be issued to intending tenderers only. The standard form will not be issued along with the Tender Documents but the same shall form part of the agreement to be drawn and signed by both parties after acceptance of tender. The standard form shall be available in downloadable manner from website “[www.kinfra.org](http://www.kinfra.org)”
3. The intending bidders will quote their rates in Schedule A ie. Schedule of Quantities.
4. The proforma for registers and Schedules A to F are only for information and guidance. These are not to be filled in the Standard Form. The Schedules with all blanks, duly filled, shall be separately issued to all intending tenderers. For filling and returning in the manner prescribed. The **Schedule A** can be downloaded from website [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in)

## Information & Instructions to the Bidders for e-tendering (Forming part of Bid Document)-1.0

Managing Director, KINFRA invites online **Item rate** online tenders in **two cover bid system** for the following work in the prescribed form, from contractors/firms having experience with similar nature of O&M works including O&M of ETP/STP in State/ Central Government undertakings who fulfil the eligibility criteria prescribed in the NIT

NIT No	Name of work & Location	Estimated cost put to bid	EMD	Period of Completion	Last date & Time of submission of Tender document, EMD. Tender fee & Other documents as specified in Press Notice	Time & Date of opening of Technical Bid	Bid Submission Fee
1	2	3	4	5	6	7	8
KINFRA/KEPIP/OM/25/2023-24	Operation, Maintenance and Upkeep of the 6.5 MLD Water Supply Scheme & associated electro-mechanical equipments and Routine & Preventive Maintenance of Pumps & Motors and Electrical / Plumbing systems of KINFRA Export Promotion Industrial Parks, Kakkanad for 3 years	Rs.1,16,60,193 /-	Rs.50,000/-	36 Months	05:00 PM on 19/12/2023	10:30 AM on 22/12/2023	Rs.5,900/- (inclusive of 18% GST )

1. The intending bidder must read the terms and conditions of KINFRA-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
2. Information and Instructions for bidders posted on website shall form part of bid document.
3. The tender document(s), may be downloaded free of cost from the e-Government Procurement (e-GP) website ([www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in)). No payment is required for downloading the tender documents from the above website however a bid submission fee, as mentioned below in this document, is required to be remitted through online payment mechanism for e-procurement system of Govt. of Kerala. Only those bidders having a valid and active registration, on the date of bid submission, shall submit bids online on the e-GP website.

4. All bids shall be submitted online on the e-GP website only in the relevant envelope(s)/ cover(s), as per the type of tender. No manual submission of bids shall be entertained for the tenders published through e-GP system under any circumstances.
5. The e-GP system shall not allow submission of bids online after the stipulated date & time. The bidder is advised to submit the bids well before the stipulated date & time to avoid any kind of network issues, traffic congestion, etc. In order to avoid any system related or other complications during submission bids in the last moment, all bidders are advised to upload their bids/ relevant documents at least 3 hours before the bid submission cut off time. In this regard request for extension of time received through any mode of communication due to failure of submission during last minute will not be entertained. In this regard, KINFRA shall not be responsible for any kind of such issues faced by bidder.
6. Bidders who do not satisfy the eligibility criteria prescribed as per the NIT or do not possess valid & active registration, on the date of bid submission, are strictly advised to refrain themselves from participating in this tender. If such instances are noticed, such bids will be summarily rejected and the EMD will be forfeited. The bidders, who submit their bids for this tender after digitally signing using their Digital Signature Certificate (DSC), accept that they have clearly understood and agreed the terms and conditions including the Form/ Annexures of this tender. Mention of price details at any place other than the designated place, shall disqualify the bid and the bid shall be summarily rejected.
7. Tender duly signed using bidder's valid Digital Signature Certificate shall be submitted online on e-GP website [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in)
8. General Conditions of Contract (KINFRA- 7/8) shall be available in downloadable manner from [www.kinfra.org](http://www.kinfra.org) and shall form part of bid document.
9. Bidders while filling the price bid shall quote separately for each individual item as per the schedule of quantities (BOQ) for each year. No column should be kept blank and unquoted. If any item is found not quoted, it will be assumed that such item will be operated free of cost for the whole year and no claim shall be made subsequently. Further, while quoting the rate for the individual items and total for second year, the bidder should ensure that rate quoted shall not be below the rate quoted for first year and so also rate quoted for the individual items and total for third year shall not be below the individual item rate and total amount quoted for second year. The price bids with individual and total yearly rates for 3 years, quoted in the above manner will only be considered for further processing.

**List of Documents to be scanned and uploaded within the period of bid submission:**

#### **Cover 1**

- I. Registration Certificate of the Contractor
- II. A declaration from the contractor to the effect that he has not been debarred from tendering by any authority as per 2.3
- III. Certificate of Registration for GST.
- IV. Relevant experience certificate

#### **Cover 2**

- I. BoQ (Price bid)

## e-Government Procurement (e-GP) - Notice Inviting Tender (KINFRA 6)-2.0

Managing Director, KINFRA invites online **Item rate** online tenders in **Two cover bid system** for the following work in the prescribed form, from competent and eligible contractors/firms having experience with similar nature of O& M works including O&M of ETP/STP in State/Central Government undertakings who fulfil the eligibility criteria prescribed.

NIT No	Name of work & Location	Estimated cost put to bid	EMD	Period of Completion	Last date & Time of submission of Tender document, EMD. Tender fee & Other documents as specified in Press Notice	Time & Date of opening of Technical Bid	Bid Submission Fee
1	2	3	4	5	6	7	8
KINFRA/KEIP/OM/25/2023-24	Operation, Maintenance and Upkeep of the 6.5 MLD Water Supply Scheme & associated electro-mechanical equipments and Routine & Preventive Maintenance of Pumps & Motors and Electrical / Plumbing systems of KINFRA Export Promotion Industrial Parks, Kakkanad for 3 years	Rs.1,16,60,193 /-	Rs.50,000/-	36 Months	05:00 PM 19/12/2023	10:30 AM on 22/12/2023	Rs.5900/- (inclusive of 18% GST)

2.1 Registration of contractors should be valid on the last date of submission of bids. In case the last date of submission of bid is extended, the registration of contractor should be valid on the original date of submission of bids.



2.2 Intending bidders is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having

- A) Should have satisfactorily completed similar works including O&M of ETP/STP of magnitude specified below during the last SEVEN years ending previous day of last date of submission of bids:

Three similar completed works each costing not less than  
15.55 Lakhs/year

OR

Two similar completed works each costing not less than 23.32  
Lakhs/year

OR

One similar completed work not less than 31.09 Lakhs/year

*A certificate to this effect shall be produced by the bidder from an officer not below the rank of Executive Engineer in the Government of PSU's / Chief Project Manager or equivalent in other organisations.*

- B)
- a) Contractor should possess valid B (50 KVA and above) grade Electrical license issued by the Kerala State electricity Licensing Board with a minimum of 5 years experience in the O& M Service Contract in the electrical maintenance works involving high rated pumps and motors. In this case, the bidder should also have to engage a qualified plumber satisfying the requirements in clause B(b) of 2.2 of this NIT as his staff and his details are to be submitted along with the tender duly signed by the aforesaid qualified staff and the bidder.
- OR
- b) Contractor should possess Certificate from Polytechnic/ITI/ any other recognised institute from Govt. Of Kerala in Plumbing tradesmanship and a minimum of 5 years experience in the O&M service of Water Treatment plants and water distribution system Contract . In this case, the bidder should also have to engage a qualified electrician satisfying the requirements in clause B(a) of 2.2 of this NIT as his staff and his details are to be submitted along with the tender duly signed by the aforesaid qualified staff and the bidder.
- OR
- c) In case the bidder is having requisite experience in O&M service of Water Treatment plants and the water distribution system but not having specific qualification as described in clause B(a) & B(b) of 2.2 he should propose and engage a qualified electrician and plumber as per the qualification prescribed in clause B(a)& B(b) of 2.2 as his staff and their details are to be submitted along with the tender duly signed by the aforesaid qualified staffs and the bidder

A certificate to this effect shall be produced by the bidder from an officer not below the rank of Executive Engineer in the Government of PSU's / Chief Project Manager or equivalent in other organisations.

(Scanned copies of the certificates mentioned in 2.2 above to be uploaded at the time of submission of bid)

### 2.3

A declaration from the contractor to the effect that he has not been debarred from tendering by any authority.

*“I/we hereby declare that I/we have not been Black listed, debarred/suspended by any Central/State Govt Depts/ Central/State Govt PSUs, Autonomous and statutory bodies under State/ Central from participating in any tender during the last three years ending with the bid submission date”.*

(Scanned copy to be uploaded at the time of submission of bid)

### 2.4.

1. Before commencing the work and within a week from the date of receipt of the letter of acceptance, the bidder shall make the following:
  - Bio data of personnel proposed to be engaged in each of the required posts as detailed in clause 36(i) with their experience documents be submitted duly signed by the bidder and the qualified staff/ staffs as the case implies as detailed in 2.2
2. On acceptance of the above by KINFRA, contract will be awarded by KINFRA/KEPIP and after submitting the Performance Guarantee by the Successful Bidder in the manner and form, the successful bidder to whom the contract is awarded shall enter into an Agreement with KINFRA/KEPIP to carry out the work as per various terms and conditions contained in the Letter of award and those contained in the NIT .
3. The time allowed for carrying out the work will be **36 Months** from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
4. The site for the work is available.
5. The bid document consisting of specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen on website [www.etenders.kerala.in](http://www.etenders.kerala.in). General Conditions of Contract (KINFRA- 7/8) shall be available in downloadable manner from [www.kinfra.org](http://www.kinfra.org) and shall form part of bid document.
6. Tender documents and tender schedule may be downloaded free of cost from the e-GP Web site [www.etenders.kerala.go.in](http://www.etenders.kerala.go.in) . Tender fee of **Rs.5900/- (18% GST)** shall be remitted through **online payment mechanism for e-procurement system of Govt. of Kerala.**
7. The Technical bid submitted shall be opened on **10.00 AM on 22/12/2023.**

8. Earnest Money Deposit (EMD) amounting to Rs 50,000/- (Rupees Fifty Thousand only) to be remitted online through e-GP site by the bidder.

9. **Performance Guarantee :**

Performance Guarantee, the amount collected at the time of executing contract agreement, will be 5% of average amount of the value of contract for the first year, second year and third year quoted by the bidder valid for three years plus three months, which shall be returned after successful completion of three years O& M. At least 50% of this deposit shall be collected in the form of Treasury Fixed Deposit and the rest in the form of Bank Guarantee. The validity of BG shall be up to 3 months after defects liability period mentioned in Schedule F.. However applicable Government orders amended time to time shall prevail.

**b) Additional Performance Guarantee**

Additional Performance Guarantee will be required in all cases where quoted rate falls below 10% of the estimate cost. The 10% standard exemption will be applicable to all estimates quoted below estimate cost. If the rate quoted by the contractor is x% below estimate cost (x lies above 10% up to quoted rate) the additional performance guarantee for an amount equal to (x-10) % of the estimate amount shall be obtained from the contractor. 50% of Additional Performance Guarantee shall be in the form of Treasury Fixed Deposit and rest in the form of Guarantee issued from any Nationalized Bank/Scheduled Bank/ Kerala Financial Corporation or any other forms prescribed in the Kerala PWD Manual. This shall be collected before executing the agreement in the same form as Performance Guarantee and may be released at the end of the Contract period of 3 years. This is subjected to change as per government orders issued from time to time in this respect.

As per G.O.(P) No.168/2019/Fin dated 07/12/2019, for Item rate / DBOT contracts, if the rate quoted by the bidder for an item of work is “X%” below estimate cost where “X” lies above 10%, the Additional Performance Guarantee for that item of work is equal to (X-10)% of the estimate amount of that item of work. The total Additional performance guarantee for the whole work is the total of individual Additional Performance Guarantee for each item of work calculated as above.

10. .The bid submitted shall become invalid if:

- a) The bidder is found ineligible.
- b) The bidder does not upload all the documents as stipulated in the bid document.

11. **The description of the work is as follows:**

*The work necessary includes Operation, Maintenance and Upkeep of the 6.5 MLD Water Supply Scheme of KEPIP for 3 years which consists of the Water Treatment Plant, the pumping and distribution line network, associated electro-mechanical equipment and Routine & Preventive Maintenance of Pumps & Motors and Electrical / Plumbing systems of KINFRA Export Promotion Industrial Parks, Kakkanad .The scope covers all the preventive, routine, breakdown maintenance activities of the water supply system of KEPIP ie the Water Treatment Plant(WTP) and associated*

*distribution networks. The contractor is also responsible for attending complaints from consumers, establishing new metered service connections to the consumers as instructed by the KEPIP office. Maintaining and up keeping of necessary records, submission of reports to the engineer in charge on a daily basis, etc. The scope of the work also covers establishing 24 hours reliability of the water distribution systems of KEPIP and any other operation and maintenance work required to be performed for the proper functioning of the WTP and distribution system.*

12. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by KINFRA and local conditions and other factors having a bearing on the execution of the work.
13. The competent authority on behalf of Managing Director, KINFRA does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
14. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
15. The competent authority on behalf of Managing Director, KINFRA reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
16. The contractor shall not be permitted to bid for works if he/she is the near relative of an officer of KINFRA posted as Project Officer or Finance Officer.
17. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of Kerala is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of Kerala in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of Kerala as aforesaid before submission of the bid or engagement in the contractor's service.

18. ***The bid for the works shall remain open for acceptance for a period of 120 days from the date of opening of bids in case of single bid system.*** If any bidder withdraws his bid before the said period or issue of work order, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to KINFRA, then KINFRA shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.
19. This notice inviting Bid shall form a part of the contract document. The successful bidders/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
- a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
  - b) Standard KINFRA Form 7/8 or other standard KINFRA Form as applicable

KINFRA-7/8

**KERALA INDUSTRIAL INFRASTRUCTURE DEVELOPMENT CORPORATION**  
**Percentage Rate Tender/Item Rate Tender & Contract for Works-3.0**

(A) Tender for the work of :-

**Operation, Maintenance and Upkeep of the 6.5 MLD Water Supply Scheme & associated electromechanical equipment and Routine & Preventive Maintenance of Pumps & Motors and Electrical / Plumbing systems of KINFRA Export Promotion Industrial Parks, Kakkanad for 3 years**

(i) To be submitted/ uploaded  
by.....hours  
on.....to.....  
...../ upload at [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in)

**e-TENDER**

I/We have read and examined the notice inviting tender, schedule A, B, C, D, E & F Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for KINFRA within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for 120 days from the due date of its opening and not to make any modification in its terms and conditions.

A sum of Rs.50,000.00 has been deposited in prescribed manner as Earnest Money Deposit (EMD). If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that KINFRA shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/We agree that KINFRA shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

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

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

Date:  
Contractor  
Witness:  
Address:

Signature of  
Postal Address:

Occupation:

**Certificate of near relatives-4.0**

**DECLARATION**

(To be submitted by the Contractor regarding near relatives working in KINFRA as per clause 16 of KINFRA-6)

“I ..... s/o Shri.....Resident  
of.....hereby certify that none of  
my relative(s) as defined in clause 16 of KINFRA-6 is/are employed in concerned Department  
of KINFRA.

In case at any stage, it is found that the information gives by me is false/incorrect, KINFRA shall have the absolute right to take any action as deemed fit without any prior information to me.”

**Signature of Contractor**



### **Proforma Of Schedules-5.0**

*(Operative Schedules to be supplied separately to each intending tenderer)*

#### **SCHEDULE 'A'**

Schedule of quantities (as per BOQ)

#### **SCHEDULE 'B'**

Schedule of materials to be issued to the contractor.

**Nil**

#### **SCHEDULE 'C'**

Tools and plants to be hired to the contractor.

**Nil**

#### **SCHEDULE 'D'**

Extra schedule for specific requirements/document for the work, if any.

**Nil**

#### **SCHEDULE 'E'**

Reference to **General Conditions of contract** uploaded in [www.kinfra.org](http://www.kinfra.org)

**Name of work: Operation, Maintenance and Upkeep of the 6.5 MLD Water Supply Scheme & associated electromechanical equipments and Routine & Preventive Maintenance of Pumps & Motors and Electrical / Plumbing systems of KINFRA Export Promotion Industrial Parks, Kakkanad for 3 years**

**Estimated cost of work: Rs.1,16,60,193/- for 3 years**

**(i) Earnest money: Rs. 50,000/- (to be returned after receiving performance guarantee)**

**(ii) Performance Guarantee: 5% of Total Contract Value in the manner detailed in the tender document.**

## SCHEDULE 'F'

GENERAL RULES & DIRECTIONS: NIT shall be read with General Conditions of Contract for KINFRA (available in website [www.kinfra.org](http://www.kinfra.org))

Office inviting tender : **Managing Director, KINFRA**

### Definitions:

2(vi)	Engineer-in-charge	: Means the Engineer officer of KEPIP/ KINFRA who shall supervise and in charge of O&M
2(ix)	Accepting Authority	: Managing Director, KINFRA
2(x)	Department	: KINFRA/KEPIP
2(xiii)	Standard Schedule of rates	: CPWD DSR 2018 with cost Index - 1.3559 for Ernakulam.

**KINFRA 7/8**                      **General Rules and directions applicable to O& M**

### Clause 1

- |     |  |                |
|-----|--|----------------|
| i)  | Time allowed for submission of Performance Guarantee from the date of issue of work order  | <b>4 weeks</b> |
| ii) | Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above | <b>NA</b>      |

**Clause 1A,2,2A,3A**              Whether Clause shall be applicable              **No**

**Clause 3,4,8A,9A,10, 10D,11,13,14,15,16, 18 and sub clauses,19,19A,19B,1 9E,19K,19L,20,21,22, 23,24,25,26,27,28,29**              Whether Clause Shall be applicable              **Yes**

,31,33,34,36,37,38,3  
 9,40,41,42,44,45

**Clause**

[6,6A,7,8,8B,9,10A,1  
 0B,10 C,12 and sub  
 clause,17,19C,19D,19  
 F,19G,19H,19J,30,32  
 ,35,43]

Whether Clause Applicable

No

Time allowed for execution of work: **36 Months**

**Authority to decide:**

Extension of time : **MD, KINFRA**

Shifting of date of start in case of delay in handing over of site : **MD, KINFRA**

SIN o	Description	Required minimum qualification / experience	No. of personnel required.
1	<b>Supervisor (male)</b>	Degree/Diploma in any discipline with minimum 3 year experience in the supervisory cadre in laying of pipes/specials, operation/maintenance of WTP, electrical equipments etc	1
2	<b>Plant operator (WTP) (male)</b> 1 each / shift	KGTE in Automobile/ Mechanical Engineering having minimum two years experience in a Water Treatment Plant of similar or higher capacity in govt. / private institutions.	2
3	<b>Pump Operator (male)</b> - for Intake well- 1 each/shift /pump house - 2 shifts per day	Diploma holder in Electrical Engg: with minimum two years experience in a pumping station in the operation of turbine/centrifugal pump ORKGTE in <i>Electrical Engg.</i> preferably with a wireman license and having minimum three years of experience in a WTP / pumping stations of similar or higher capacity in government / private institutions.	2
4	<b>Painter (WTP Units and KEPIP building)</b>	Having previous experience in similar duties	1 (10 days in an year)

5	<b>Chemist</b> (WTP-KEPIP)	B.Sc. in chemistry & having minimum three years experience in a Water Treatment Plant of similar or higher capacity in govt. / private institutions.	<b>1</b> (50 days in an year)
6	<b>Plumber</b> - for O&M activities at KEPIP, for WSS.	KGTE in plumbing with minimum three years experience in a Water Supply Scheme of similar or higher capacity in govt. / private institutions.	<b>1</b> (30 days in an year as and when required)
7	<b>*Pipeline fitter</b> for Intake well site & WTP	Having minimum three years experience in a pipe line work of similar or higher capacity in govt. / private institutions.	<b>1</b> (30 days in an year as and when required)
8	<b>Helpers-cum-cleaner</b> (male)for WTP 1 each/shift	Minimum SSLC standard. Having previous experience in similar duties and familiar with O & M of WTP/Pump house etc.	<b>2</b>
9	<b>Electrician</b>	<i>Diploma/KGTE in Electrical Engg.</i> preferably with a valid wireman license and having minimum three years of experience in a WTP / pumping stations of similar or higher capacity in government / private institutions.	<b>1</b> (50 days in an year as and when required)
10	<b>Sweeper</b>	<i>He/She should have minimum literacy.</i>	<b>1</b>
		<b>TOTAL No. of Staff (A)</b>	<b>13</b>

## **Additional Conditions & Technical Specifications- 6.0**

### **6.1 Scope of work**

The capacity of water supply scheme of KEPIP is 6.5 MLD, which during the initial period of one year is likely to be only 4 MLD. As such, only 2 shift operations of the plant by working the old and new intakes simultaneously is proposed for the present which may be increased to 3 shifts as and when the demand increases.

The raw water for the 6.5 MLD water treatment plant is abstracted from Kadambayar through 2 separate intakes. The old 3 MLD Intake in Edachira branch and the new 3.5 MLD intake near Kadampayar downstream of Brahmapuram bridge. 3 nos. 20 HP centrifugal pumps are installed in the old pumphouse and the raw water is pumped through a 200 MM dia DI line to the water treatment plant. 2 nos of 50 HP vertical turbine pumps are installed in the new pump house, 1 working and other standby and the water is pumped through the newly laid 300mm DI main to the water treatment plant.

The water treatment plant consists of 2 cascade aerators, a chemical house, one flashmixer, one flocculator, two circular clarifiers and 4 nos. rapid sand filter units. Mechanical aeration through compressor and also Pre-chlorination are done in the aerator and post chlorination is done for disinfection. Combined air and water wash is practiced for back washing the filters and for this purpose two air blowers and a wash water tank are provided in the system. Proper coagulation, flocculation, sedimentation, filtration and disinfection are to be assured and the quality of treated water shall conform to standards prescribed in IS 10500. The treated water can be stored in a clear water reservoir of 400 m<sup>3</sup> capacity from where it is pumped to an overhead reservoir of capacity 280 m<sup>3</sup>. The treated water can be also gravitated to a ground level reservoir having capacity 840 m<sup>3</sup> located in the nearby vicinity.

The distribution of water from the scheme is through a network of PVC lines ranging from 300 mm to 40 mm on 24/7 basis within KEPIP, Infopark phase I area. In addition, the requirement of Infopark Phase II and 2MLD requirement of Hi-Tech Park, Kalamassery are supplied through independent pumping systems according to the necessity from the clear water reservoir of the water treatment plant. In KEPIP and Infopark phase I area, individual house connections are provided through metered connections. KEPIP propose to maintain the water supply scheme on a 24 hour basis for which two shift operations of water treatment plant and simultaneous pumping from the raw water pump houses are envisaged. The two shifts is considered presently and it may be enhanced to three shifts by the end of 3 year period. The staff proposed and included in the schedule are based on 2 shift operation per day and in case KEPIP propose to work on a single shift /3 shift basis, the required operators/helpers will have to be engaged by the contractor at the request of KEPIP and they shall be paid at the agreed rates. Please note that the payment of labour charge will be made only for the actual labours engaged at site.

The main scope of the operation and maintenance work proposed to be assigned to the contractor are as follows,

1. Operation and maintenance (Routine, Preventive and Break Down) of the two Intake wells and electromechanical equipments installed in the pump houses at KEPIP, Kakkanad.
2. Operation & Maintenance (Routine, Preventive and Break Down) of the pumping pipelines from Intake wells of KEPIP at Kakkanad to the Water Treatment Plant at KINFRA Export Promotion Industrial Park, Kakkanad approximately 3 km each of 200 mm and 300 mm DI pipes & specials.
3. Operation & Maintenance (Routine, Preventive and Break Down) of the 6.5 MLD Water Treatment Plant at KINFRA Export Promotion Industrial Park, Kakkanad.
4. Operation & Maintenance (Routine, Preventive and Break Down) of all electromechanical equipments including pumps, lights, fans, compressors etc installed in the WTP and clear water reservoir as per requirements.
5. Operation and Maintenance (Routine, Preventive and Break Down) of the water supply distribution lines of KINFRA Export Promotion Industrial Park area & Infopark Phase I area and water supply connection line to Smart city, Kakkanad.
6. Operation and Maintenance (Routine, Preventive and Break Down) of the water supply pumping line from KEPIP Kakkanad to Infopark Phase II, Kakkanad approximately 2.50 km of 200 mm DI Pipes & specials.
7. Operation and Maintenance (Routine, Preventive and Break Down) of the water supply pumping main from KEPIP Kakkanad to Hitech Park -Kalamassery approximately 7.5 km of 200 mm DI Pipes & specials.
8. Routine examination of raw water, treated water and water from the distribution system including recording the results hourly in proper format. The contractor has to carry out Jar test at least once in a day to fix the optimum dosage of chemicals.
9. Check all the water meters of consumers for ensuring the proper functioning and recording all the meter readings at every 15 days intervals.
10. Repair and maintenance of water supply installations (both inside and outside) supplying water to the administrative office of KEPIP.
11. Clearing grass and removal of rubbish away to outside the area cleared, in the premises of KEPIP Administrative block, WTP, two pump houses (old & new) etc required as per direction of KEPIP.
12. Clearing the waterweeds in the water bodies from the inlets of intake wells, removing and stacking it in the ground outside the intake well premises as per direction of KEPIP.
13. Any other incidental works that are necessary for the satisfactory O & M and upkeep of the water supply scheme and premises appurtenant to the same.
14. Onsite training of the staff of the succeeding contractor for atleast 15 days in O&M and proper handing over of records and other valuable to his successor.
15. Report any abnormalities in the meters, pump house, WTP, distribution lines, electrical fittings etc. to the Engineer in charge of KEPIP.

## 6.2 Scope of Personals engaged

### 1. Plant Operator

- a) Recording Hourly Flow meter readings.
- b) Hourly water quality analysis and record keeping.
- c) Conducting jar test for determining the optimum quantity of lime and alum to be added for the next shift onwards.
- d) Operating the valves in WTP units including back washing as and when required.
- e) Monitoring the operation of Filter beds and cleaning floors, walls, roof etc of WTP.
- f) Proper upkeep and maintenance of various units of WTP.
- g) Giving information to KEPIP officials as and when required.
- h) Operating Pumps and motors, compressors, chlorinators etc installed in the WTP and chemical house.

## 2. Pump Operator

- a) Operating pumps installed in pump houses.
- b) Operating various valves of Distribution line, Pumping line etc.
- c) Rectification of leakages in valves.
- d) Proper recording of pumping details.
- e) Reporting faults of mechanical, electrical equipments to KEPIP officials.
- f) Proper upkeep of pump house and surroundings.
- g) Maintaining proper records including daily log books in the prescribed format

## 3. Supervisor

- a) Reporting Pumping details, Attendance and Stock details to KEPIP officials.
- b) Overall Supervision of various units of WTP.
- c) Ensuring the duties of Plant operator, Pump Operator, Helpers etc.
- d) Supervising the daily maintenance of WTP including back washing personally.
- e) Reporting daily activities to KEPIP officials.
- f) Arranging routine testing of raw water and treated water samples in RAL & KWA.
- g) Arranging daily water quality testing from distribution line in the plant lab.
- h) Fortnightly meter reading of water connections and reporting to engineer in charge.

## 4. Helper

- a) Conveyance and adding chemicals etc as per direction of Plant operator/Supervisor/KEPIP officials.
- b) Assisting Operator in operating valves and back washing.
- c) Scrubbing and Cleaning side walls of filter bed during backwashing.
- d) Assisting plant operator in taking readings.
- e) Daily maintenance like Greasing motors & pumps, Tightening the nuts and bolts, Oiling if required etc.

## 5. Chemist

- a) Testing the various parameters of water quality , scientific jar test to fix dosage of chemicals and reporting to KEPIP officials.

## 6. Plumber

- a) Attending breakages, blockages and leakages in WTP units and KEPIP building, Water distribution system.

## 7. Fitter

- a) Attending breakages, blockages and leakages in WTP units and KEPIP building, Water distribution system.

## 8. Electrician

- a) Attending to electrical faults of units of Pump houses, WTP and KEPIP and maintenance of electrical installations including Street lights, Gate house, WTP, Park office etc.

## 9. Painter

- a) Painting works in WTP units and KEPIP building as per direction of engineer in charge.

## 10. Sweeper

- a) Cleaning and sweeping WTP units, pump houses (Old and new) etc on daily basis.

- 6.3 Period of Contract:** *Three years from the seventh day from the date of receipt of work order or till such time KEPIP makes alternate arrangement for the next O&M contract whichever is later. No increase in the contract rates will be allowed during the Contract Period and even during the extended period. However if the contract period is extended over 50% of the original Contract period, the rates shall be revised on mutually agreed rates.*
- 6.4** The bidders are requested to visit the site and familiarize themselves with the site conditions, the nature of the equipment used, etc. The specific requirements and conditions, specifications of the listed equipment, duties and obligations of the Contractor, General conditions of contract, terms of payment, plumbing lines, drawings etc. may be studied before they quote their rates. The maintenance procedure (Routine, preventive and breakdown) has to be well studied by referring to the O&M Manual available at the Park Centre of KINFRA Export Promotion Industrial Park, Kakkanad.
- 6.5** No claims whatsoever will be entertained by KEPIP as extra compensation over and above the quoted rates on any ground such as that the bidders have misjudged site conditions, the nature of equipment used, etc. or any other reasons whatsoever, for any item/s in the tender.
- 6.6** Bids not properly filled up, conditional and with incorrect calculations or generally not complying with the conditions of tender will be liable for rejection.
- 6.7 Validity of offer:** The bid shall remain valid for acceptance for a period of 4 months from the date of submission of the quote. If any bidder withdraws his tender before the said period or makes any modifications in the terms and conditions of the tender, then KEPIP has the liberty to forfeit the said Earnest Money Deposit
- 6.8 All inclusive rates:** The Contractor's rate must be firm and must include all taxes except **GST which will be paid extra** The rates quoted by the Contractor shall be firm throughout the Contract period or till subsequent O & M contract is settled and there shall be no upward revision of the rates quoted by the Contractor for any reason whatsoever. It should be clearly understood that any claim for extra taxes, duties etc. shall not be entertained in any case whatsoever once the bids are opened.
- 6.9** No alterations shall be made by the bidder in the Notice Inviting Tender, Specific requirement and conditions, Duties and Obligation of the Contractor, General Conditions of Contract, terms of payment or any part of this document and if any alterations are made or any additional conditions attached, such tender is liable to be rejected
- 6.10 Acceptance of tender :** KINFRA reserves the right to accept or reject the whole or any part of the bids received and the bidder shall be bound to perform the works awarded to him in part or whole, at the rates quoted.



#### 6.11 Contractor's personnel

The Contractor shall provide and employ personnel having skills and competences in their respective fields and as per KINFRA/KEPIP's requirements. KINFRA/KEPIP shall be at liberty to require the Contractors to remove forthwith from the site any person employed by the Contractor who in the opinion of KINFRA/KEPIP, misconducts himself or is incompetent or negligent in the proper performance of his duties or whose employment is otherwise considered by KINFRA/KEPIP to be undesirable and such persons shall be replaced by the Contractor without delay, with a competent substitute approved by KINFRA/KEPIP.

- i) KINFRA/KEPIP has the right to reduce / increase the total number of personnel required for the Contract as per requirement for a specific period, with prior intimation to the Contractor in writing. In such an event payment shall be made for only the actual number of O&M personnel employed at site.
- ii) It shall be the duty and responsibility of the Contractor to comply with all statutory requirements with regard to the employment of his personnel. He shall be liable for payment of ESI, PF, insurance, labour welfare fund and all other payments as necessitated by the relevant statutes or otherwise. For all purposes the personnel deployed by the Contractor is his / her employee.
- iii) All employees shall be of Indian Nationality and it will be Contractor's responsibility to give temporary and permanent address. Convicted or penalised persons shall not be employed.
- iv) The Contractor shall engage only the persons proposed in the manning details furnished in the tender for the works. In unavoidable circumstances and due to reasons beyond the control where the Contractor is unable to make available the service of a person proposed in the manning schedule he should apply to change the person with equal or more qualification and experience with the detailed bio-data of the substitute proposed to KINFRA/KEPIP and get the approval before the substitution is made. Non observance of this stipulation will account to breach of contract and the Contractor will be responsible for the consequences there of.
- v) Immediately on entering into agreement the Contractor shall submit 2 copies of passport size photograph of the Contractor and all his employees including part time employees to KEPIP. The Contractor should issue necessary identity cards to their operating staff and the ID cards should be worn by the Contractor and employees when they are within KEPIP premises..
- vi) For engaging casual labour for exigencies and such other works, their details are to be submit to KINFRA/ KEPIP and temporary passes obtained before they are allowed within the KINFRA/KEPIP premises. The Contractor shall supply necessary uniforms to the personnel engaged permanently such as Supervisor, Operator, Cleaner, Sweeper etc. However part time employees like Chemist, Plumber, Fitter, Electrician etc are exempted from wearing uniform. The uniform prescribed for the personnel are as follows,

Supervisor - Black Pant & Cream Shirt

Operators - Blue Pant & Grey Shirt

Helpers - Blue Pant & Blue Shirt

**6.12 Industrial Dispute:** It is laid down that in case any industrial dispute has arisen or is apprehended between the Contractor and the employees / workmen, the Contractor is liable to see that the dispute is settled or to submit himself to legal proceedings rising out of such industrial disputes and KINFRA/KEPIP shall not be liable or responsible, in any manner, whatsoever, in this regard.

**6.13 Insurance:** The Contractor shall take a Contractors All Risk (CAR) Policy, to cover the entire workmen's compensation act and also in respect of any other person on

account of accident at site and shall be deposited with KINFRA/KEPIP within 30 days from the date of receipt of Work Order.

**6.14 Preservation of peace** The Contractor shall take requisite precautions to prevent any riotous or unlawful behaviour by or amongst his workmen and / or others employed on the works by him, for the preservation of peace and protection of the inhabitants and security of property in the neighbourhood of the works.

**6.15 Age limit of labour:** The age limit for employment of labour shall be in strict accordance with the existing labour legislation.

**6.16 Attendance Register:**

The Contractor shall maintain attendance registers and should make available at any time for verification by KINFRA/ KEPIP and should be maintained at places as decided by KINFRA/ KEPIP of all those employed by him, on a daily and shift basis. The Contractor will be required to deploy his personnel, based on the requirements of the work, on all days including on holidays, Sundays and also during night hours.

**6.17 Sub Contracting**

Normally no subcontracting or assignment of work shall be allowed. However, in exceptional cases due to reasons beyond the control of the contractors, he may request KINFRA/KEPIP for subcontracting the work and KEPIP may consider such requests on merit. Such consent, if given, shall not relieve the Contractor from any liability or obligation under the contract and the contractor shall be liable for all the acts, defaults and neglects of the Sub Contractor, his agents, employees or workmen as full as they were the acts, defaults or neglects of the Contractor or his agents, servants or workmen.

For enabling KEPIP to consider the request for sub-contracting part of the work as above, the Contractor shall furnish documentary evidence to the satisfaction of KEPIP that the Sub Contractor possess qualification as per the contract requirement. But this will not be the sole consideration for KEPIP to decide whether to grant consent for sub-contracting work.

At any time of the Contract period the Contractor shall be responsible for the observance of the provisions of aforesaid clauses by the Sub Contractors employed by him in the execution of the contract.

**6.18 Materials, Spares and tools**

6.18.1 The Contractor shall be proactive to enable KEPIP to ensure that sufficient stock of spares, consumables and tools for the smooth functioning of the system is available at any time with KEPIP. While it is understood that, it is the responsibility of the Contractor to ensure sufficiency of spares, consumables and tools, the procurement of the spares/consumables shall be done by KEPIP at KEPIP's cost based on requests from the Contractor.

6.18.2 The Contractor shall maintain an account of all items, consumables, spares and tools, received from KEPIP and their usage. The accounts shall be made available to KEPIP, as and when required, for inspection.

6.18.3 The Contractor shall be responsible for the safe storage of all materials, spares, consumables and tools supplied by KEPIP.

6.18.4 Unless otherwise specified, all materials, tools, consumables and spares shall be transported by the Contractor from stores to the site within the scope of work specified at their own cost.

6.18.5 The tools required for the Contract shall be brought by the Contractors at their own cost.

6.18.6 Repair jobs other than those detailed under Section 5.0 of this document, such as motor rewinding, machining works etc. shall be arranged by KEPIP. In

case any of these works are entrusted to the Contractors, it shall be paid as extra based on actual after verification by Engineer-in-charge of KEPIP.

**6.19 Occupation and use of office space** KEPIP may, if necessary, provide office space to the Contractor, of such description and in such manner, as mentioned in the “General Conditions of Contract”, for the sole purpose of operating the Contract and stocking tools and spares for the duration of the contract, which shall be vacated and handed over to KEPIP on expiry of the period of Contract.

**6.20 Performance Evaluation**

The Contractor shall submit himself to a performance evaluation by KEPIP or an agency appointed by KEPIP for this purpose, at such times and in such manner as KEPIP may direct from time to time.

The Contractor shall upon the recommendation by KEPIP, take into account all recommendations and instructions of the performance audit agency and take all measures to meet the prescribed performance requirements.

**6.21 General**

6.21.1 All drawings and documents supplied to the Contractor shall be deemed to be the property of KEPIP. The Contractor shall not divulge, or use, except for the purpose of this contract, any information contained in the drawing.

6.21.2 All correspondence pertaining to this Contract shall be in the English/Malayalam and shall be in writing. No reference, communication, or complaint, which is not in writing, shall be recognized.

6.21.3 If the Contractor wants to quit from the Contract before the stipulated time of Contract, he shall give a written notice to KEPIP at least three months in advance showing valid reasons for quitting. However, KEPIP reserve the right to terminate the services of the Contractor by giving one month notice in the event the service is found unsatisfactory or for violation of contract conditions.

6.21.4 Any loss incurred to KEPIP by way of maloperation of the system/equipments or its parts against the procedure defined above or in the Operational and maintenance manual will be recovered from the Contractor as per the liability fixed by KEPIP and shall be recoverable from the Contractor from any amount due to him and thereafter through revenue recovery proceedings.

6.21.5 If the Contractor has abandoned the work or has failed to proceed with the work due to negligence or frequently neglecting to carry out the obligations under the contract, it shall be lawful for KEPIP to terminate the contract forthwith and carry out the work through alternate means at the risk and cost of the contractor loss sustained to KEPIP if any shall be recoverable from the Contractor from any amount due to him and thereafter through revenue recovery proceedings

**6.22 Salient Features**

**6.22.1 Minimum acceptable system availability**

The pumping from the Intake site to the Water Treatment Plant will be done on a daily basis. Normally not more than 2 shift pumping is required from the Intake wells to KEPIP’s WTP and operation of the WTP should be arranged accordingly. And pumping has to be done as per the requirement from the clear water tank of WTP to the overhead water tank of KEPIP, Info Park Phase II and Hi-tech Park, Kalamassery etc as per requirement. However, the timings are subject to change as specified by KEPIP from

time to time.

#### **6.22.2 Maximum permissible outage of service**

As specified by KEPIP from time to time

#### **6.22.3 Periodic reports / formats and periodicity**

To the satisfaction of KEPIP from time to time.

#### **6.22.4 Office space**

Portion of space available inside the water treatment plant can be used by the contractor during the contract period.

#### **6.22.5 Owner's supply**

Only diesel, consumables, Pipes, Specials and spares required for the operation and maintenance of the system will be supplied by KEPIP. However, their transportation from the nearest supply point and safe storage will be the sole responsibility of the Contractor.

### **Descriptions of the work involved in the Contract- 7.0**

#### **7.1 Description of works involved in the Contract**

##### **7.1A. For Electrical Works at KEPIP**

##### **CFC Building, WTP, Pump house, Security Cabins and other buildings.**

7.1A.1 Checking the luminaries, fans, switch boards, DBs, plug points, bathroom fittings, yard lights such as flood lights, decorative fitting wall mountings etc provided in and around the CFC Building, WTP, Pump house, Security Cabins and other buildings on a daily basis and rectify the faults if any.

7.1A.2 Cleaning the light fittings, fans etc provided in the buildings once a month.

7.1A.3 Operating the 25.0 KVA DG set and its accessories at least once in a week and when required by KEPIP.

7.1A.4 Ensuring the proper working condition of the UPS and its batteries in the CFC building/ WTP.

7.1A.5 Maintaining/rectifying the panel boards in the electrical rooms.

7.1A.6 Operating and maintaining of the above equipment as per the schedule detailed below at least once in a week.

##### **YARD LIGHT in WTP and Pump house(New Intake well and Old Intake well)**

7.1A.7 Ensuring the proper working of street lights at water treatment plant area and area of new intake well and old intake well, including its MCB, Contractors, DBs, ELCBs, timers etc on a daily basis and rectification of the faults if any, including replacements of luminaries/lamps inside the Park premises. However, the mobile trolleys / ladders, if required for replacement of luminaries / lamps shall be arranged by the Contractor, the rental of which will be paid by KEPIP, at actuals.

##### **7.1B. For General works at KEPIP:**

7.1B.1 Cleaning of overhead water tanks of, CFC Building as per the directions from KEPIP.

- 7.1B.2 Checking of water meter installed for each units in KEPIP/Infopark and others, if any.
- 7.1B.3 Clearing of toilet drainage including flushing out / removing chokes or blocks as and when required.
- 7.1B.4 Chlorination at the Clear water Sump/channel Water tank with chemicals provided by Owner through chlorinators.
- 7.1B.5 Checking and rectifying of plumbing lines in CFC building, Security Cabins etc listed, once a month.
- 7.1B.6 Providing tap off water supply points to entrepreneurs, on directions of KEPIP.
- 7.1B.7 Maintaining of internal distribution lines / pumping mains within the Park premises on a regular basis so that no breakdown occurs in the supply of treated water to entrepreneurs.
- 7.1B.8 Modifying/adding/extending any *plumbing/electrical facility* within the existing buildings/structures whenever required by KEPIP (material required for such work will be supplied by KEPIP).

#### **7.1C. For 6.5 MLD Water Treatment Plant (WTP), KEPIP**

- 7.1C.1 The treatment scheme adopted in the WTP is rapid sand gravity filter system and consists of cascade aerators, raw water measuring channel, flash mixer, flocculator, clarifiers, filter house and pump house, chemical house with laboratory facilities, pre-chlorination and post chlorination rooms with its units etc. Alum and lime dosing system has been provided for removal of turbidity along with pre chlorination and post chlorination.
- 7.1C.2 The Operation and Maintenance manual available at KEPIP / WTP, describes in detail, the process and instructions in connection with the Operation and Maintenance of the entire Water Treatment Plant. The primary aim of O&M operation is the running and maintenance of the Plant efficiently and economically, so that the water from the Plant meets the standards as stipulated in the O & M manual.
- 7.1C.3 The basic requirements for the successful Operation and Maintenance of the WTP, KEPIP are:
  - i. A thorough knowledge of the process.
  - ii. A thorough knowledge of the Plant and equipment provided in the treatment plant and their functions.
  - iii. Training of all operating staff in proper operating procedures and maintenance practices.
  - iv. Systematic and periodic inspection and strict adherence to servicing schedules.
  - v. Assignment of specific maintenance responsibilities to operating staff.
  - vi. Overall supervision of Operation and Maintenance schedules.
  - vii. Adequate stock of spare parts and chemicals for laboratory and daily use.
  - viii. Good housekeeping.
  - ix. Proper and adequate tools.
  - x. Proper logging of all operation / maintenance activities.
  - xi. Observation of safety precautions and procedures.
  - xii. Provision for water supply for drinking and other uses.
  - xiii. Emptying and cleaning of various units as per direction of KEPIP.

- 7.1C.4 The Plant operators should familiarize themselves thoroughly with the content of the O&M manual before handling the Plant units. A copy of the manual is readily available at the Plant office.
- 7.1C.5 Opening or closing of necessary valves when pumping is commenced or stopped.
- 7.1C.6 Pre-chlorination and post chlorination using chlorine gas from cylinders stored in the Chemical House.
- 7.1C.7 Alum and lime dosing to the requisite level by conducting Jar Test daily to fix the optimum dosage of chemicals as per the Jar test.
- 7.1C.8. Taking samples of raw water, chlorinated water, flocculated water and fully treated water, testing at WTP laboratory and recording of results in the register at required intervals.
- 7.1C.9. Operating of all pumps and motors alternately including standby ones.
- 7.1C.10 Cleaning of filter beds, plant premises, aerators, raw water channels, chemical house, laboratory, offices, filter house etc. regularly on a daily basis and as and when required by KEPIP.
- 7.1C.11 Backwashing of filter beds by water and air scouring after fixed time intervals by blowing air to the filter bed with the help of air blower for about 3 to 5 minutes to loosen the settled particles in the sand bed followed by water for about ten minutes by using the water in backwash O.H. tank provided in the Filter House, including scrubbing and cleaning the side walls, wash water troughs etc.
- 7.1C.12 Draining of backwashed water from the filter beds, clarifier & flocculator (when cleaning is done) etc into the storm water drain.
- 7.1C.13 Recording the raw water quantity in the Plant using the electromagnetic flow meter and recording in register and forward monthly abstract to KEPIP.
- 7.1C.14 Checking of sludge accumulation through the telescopic discharge pipe and de-sludging until clear water is obtained at required intervals.
- 7.1C.15 Following are the plant shutdown procedure as detailed below:
- i. Stopping the incoming raw water.
  - ii. Stopping the flash mixer and solution preparation agitators.
  - iii. Stopping the flocculator agitators and traction drive.
  - iv. Allowing the overflow from the Clarifier & flocculator to the filter beds and removing the water in the tank through sludge pipe.
  - v. Opening drain valves of alum and lime solution tanks and cleaning the tanks with process water.
  - vi. Performing backwash before every shutdown of the filter.
  - vii. Closing both inlet and outlet valves after backwashing is complete.

#### **7.1D For pumping stations - Old Intake Well and New Intake Well**

- 7.1D.1 There are two intake wells in the scheme the pumping stations of KEPIP includes the following major components.

- i. Lead Channel
- ii. Intake wells and Pump House's - 2nos(old and new)
- iii. River Protection Works.
- iv. All electromechanical equipment installed at new intake well includes 2 nos. of 50 HP raw water pump / motor and starter, Capacitors, Panel Board, ACB's, level indicators and the old pump house includes 3 no. of 20 HP raw water pump/motor and yard lights, flow meter, Capacitors, Panel board, ACB's etc.

Necessary logbooks as per format to be approved by KEPIP shall be maintained and monthly abstracts prepared and handed over to KEPIP. The register itself shall be handed over to KEPIP after the completion of assignment.

- 7.1D.2 The operation and maintenance manual available at KEPIP / Intake site describes in detail the process and instructions in connection with the operation and maintenance of the pumping station and its electromechanical equipment.
- 7.1D.3 Regular pumping is required from the intake well to WTP depending upon the water requirement at KEPIP. 2 nos. of 50 HP Vertical turbine pumps are installed at the intake well site, of which only one pump is intended to work at any point of time, while the 2<sup>nd</sup> pump is intended as a standby in the new raw water pump house. Also 3 Nos 20 HP Centrifugal pumps are installed in the old raw water pump house of which only 2 pumps are required to work at any point of time and the 3<sup>rd</sup> pump is intended as a standby. Normally 2 shift pumping is required for the requirement of KEPIP presently and the old and new raw water pump houses are to work simultaneously. However, the pumping time and hours are liable to change depending upon the discretion of KEPIP and the additional operators if engaged beyond 2 shifts will be paid separately at the rates quoted.
- 7.1D.4 Care should be taken to operate the plant during off peak hours to avoid voltage dip and thus avoid penalty from the electricity provider i.e. KINESCO / KSEB.
- 7.1D.5 Studying of specifications of all equipment and operating them as per instructions given in the manual before handling plant units. A copy of the manual is readily available at the Intake well site.
- 7.1D.6 Operating of the 3 nos. of inlet sluice valves provided as entry for water to the Intake well depending upon the water level in the river. Normally, the bottommost valve is kept shut in order to prevent entry of deleterious waste and sand into the well.
- 7.1D.7 Recording of the operation timing of the V.T/Centrifugal Pumps and entering in a register as per format required by KEPIP.
- 7.1D.8 Checking and identifying malfunctioning of all electromechanical equipment, meters, gauges, valves, switches etc., if any.
- 7.1D.9 Following are the procedure as below for the startup of the pumping station:
  - i. Inspecting all equipment in respect of oiling / greasing primarily.
  - ii. Ensuring that the inlet and gates / valves of the unit are open.
  - iii. Monitoring the water level in the well from the level gauge instrument provided.
  - iv. Ensuring required level of water in the well.
  - v. Ensuring availability of proper voltage.
  - vi. Starting the pumps one after the other successively, using soft starters provided for each pump with delivery valve closed.
  - vii. Opening the delivery valves gradually once the pump is stabilized in speed (can be

checked with pump pressure gauge).

7.1D.10 Objective and item wise operation of each unit of the Intake pumping station as detailed below:

**i. Inlet channel screen and gate**

a. Objective:

The unit provided is capable of handling peak flow and has function of receiving raw water through screen and gate.

b. Normal operation:

- Raw water automatically passes through and as such if gate is open, no special operation is required.
- Periodically, screen may need cleaning to avoid clogging.
- Removal of Sand accumulated during the process.
- Removal of water weeds that may accumulate in the water body in front of the inlet gates.

**ii. Pump house**

a. Objective:

The unit is provided for pumping and controlling flow of raw water and its measurement.

b. Normal operation:

- Flow through this unit is observed through pressure gauge and recording.
- Occasional lubrication of valve spindles.

7.1D.11 Abiding by the procedure stated from stratup in 4.1D.13 and looking for troubleshooting instructions listed in the table below for pumps and motors:

Sl. No.	Problem	Action
1.	Pump is running but flow is not coming out	Stop the pump immediately, check the liquid level in the well. It may be dry or suction may not be submerged. Allow liquid to be filled up to required level and then restart the pump as described under normal operation after ensuring removal of air, if any.
2.	Pump inefficiency	It may be due to trapped foreign materials at the NRV. Open, clean, reassemble and restart.
3.	Motor fails to start	<ul style="list-style-type: none"> <li>- Check for healthy power availability as well as healthy fuse.</li> <li>- Also check for starter functioning and refer manual for rectification.</li> </ul>
4.	Others	Refer pump and motor operation and maintenance manual available at site.

7.1D.12 Abiding by the following safety instructions to avoid any physical injury to operating



personnel.

- i. Using lifting tackle / hoist etc. for lifting / handling any heavy equipment.
- ii. Employing good housekeeping by maintaining walkways, steps, ladder rungs etc. free from grease / oil to avoid slips / falls etc.
- iii. Grounding of all electrical equipment and taping of any exposed wire, placing of rubber mats in front of MCC.
- iv. Ensuring availability of suitable number of fire hydrants / extinguishers, ready for use.
- v. Keeping fully equipped first aid box in the control room.
- vi. Providing periodical typhoid and tetanus inoculations to all employees concerned, to avoid contamination of water from infected personnel.
- vii. Providing protective garments / hand gloves / gum-boots etc., to workers working with floor / drain cleaning.

7.1D.13 Carrying out routine maintenance on the standby pump and ensuring that the standby pump is always rotated in use, so that during pumping the standby pump is changed each day, thus avoiding complete shutdown of the system.

7.1D.14 Maintaining the equipment as detailed hereunder along with other ancillaries at Intake site and as per O&M manual, a copy of which is available at site.

- i. Lubricating all equipment as per lubrication chart based on manufacturer's instructions with lubricant of approved grade.
- ii. Inspecting all equipment regularly for wear, tear and corrosion.
- iii. Checking for any abnormal sounds from any equipment, which may be normally due to loose mechanical parts and misalignment.
- iv. Checking occasionally for overheating of all driving units.
- v. Inspect all the valves frequently, removing the deposits, foreign materials etc. and regularly greasing / oiling all moving parts of the valves.
- vi. Getting acquainted with all spare parts and its replacement for each equipment as per manufacturer's manual.
- vii. Replacing / repairing all defective / broken or badly working parts.
- viii. Keeping ready related spare parts of equipment, particularly for pumps, in the site store.
- ix. Keeping in an easily accessible and operational manner all necessary tools such as hammer, spanner, pliers, crimping tools, soldering etc.

#### 7.1D.15 PUMPING MAIN AND DISTRIBUTION LINE

- i. Inspecting regularly the pipeline routes to ascertain any leakage / breakage of the pumping main, damage to water body, crossings etc., due to third parties working along the pipeline route or other wise.
- ii. Detecting any unauthorized tap out of water connection from the distribution line of KEPIP and reporting to KEPIP.
- iii. Checking all valves for their functioning, on monthly basis.
- iv. Cleaning of lines by operating the scour valves periodically or when directed by KEPIP in a safe manner.
- v. Checking of valves, flange joints of pipes, leaks etc. for attending to such leaks immediately and rectifying defects without causing any public inconvenience or pumping interruptions.
- vi. Lubricating of all valves at periodical intervals and wherever required by KINFRA/KEPIP.
- vii. Closing of the section of the transmission main, in the event of a burst / leak and draining out the water by operating the scour valve.
- viii. Immediately mobilizing required men and materials for the arrest of the leakage and completing all works within a span of 6 hours, including excavating of road, refilling of benches, obtaining emergency permission from road authorities, replacing all covers / slabs etc., liaisoning with Public / Panchayath to avoid any social problems, including

black topping of roads if required by the authorities. It is the duty of the Contractor to attend to such emergency work irrespective of time frame of duty i.e. day or night.

- 7.ID.16 The various valves along the pipeline route with their chainage and location description are available for ready reconnaissance.
- 7.1D.17. Following all safety precautions as detailed in the O&M manual before attending to any equipment at the pumping station.
- 7.1D.18. Following the preventive maintenance schedule for electrical equipment as detailed in Cl.4.2

**7.1E. For other works:**

- 7.1E.1 Satisfying all necessary safety requirements as per Govt. regulations.
- 7.1E.2 Extending the intended service to users, measuring the service provided and advising KINFRA/KEPIP on billing.
- 7.1E.3 Maintaining a team of trained personnel at places as required.
- 7.1E.4 Ensuring maximum system availability of the equipment.
- 7.1E.5 Undertaking preventive and breakdown maintenance.
- 7.1E.6 Ensuring sufficient stock of spares through timely intimation to KINFRA/KEPIP/Intake well site.
- 7.1E.7 Submitting periodic and exception reports.
- 7.1E.8 Providing support for expansions, modifications, upgradation and any other related work.
- 7.1E.9 Performing all such acts and functions which in the opinion of KEPIP are necessary to ensure the most efficient, effective, healthy operation and the optimum utilization of all the equipment and to be provided the intended service to the maximum satisfaction of the users.
- 7.1E.10 Endeavouring to promote safe and healthy working habits among the Contractor's personnel. All equipment, site and office spaces shall be kept safe, clean and tidy at all times. The Contractor shall take into account any suggestions, instructions or comments made by KEPIP in this regard.
- 7.1E.11 Based on the manufacturer's recommendations, manuals, data sheets etc. and in consultation with KEPIP, preparing a program for the Preventive Maintenance (PM) of each system and sub-system in the said Contract, including a maintenance schedule and description of the PM operations, based on which regular preventive maintenance shall be carried out. BIS codes of practice should be strictly adhered to wherever applicable.
- 7.1E.12 Attending to all breakdown and emergency maintenance requirements on priority basis. Such repairs shall be done expeditiously in every case to limit the extent of break of service to the minimum possible duration and minimum number of users.

7.1E.13 Convincing KEPIP as to the need for any spares, while filing each request, providing necessary technical support to process such requests and evaluating offers received from vendors, as and when required by KINFRA/ KEPIP. KINFRA/KEPIP will procure any such spares as deemed necessary based on the Contractor's request.

7.1E.14 Maintaining an account of all items, spares and tools received from KINFRA/KEPIP and their usage. This account shall be made available to KINFRA/KEPIP as and when required for inspection.

7.1E.15 Cleaning of the overhead water tank & GLSR periodically (every 3 months) or as and when required by KINFRA/KEPIP.

7.1E.16 Modifying / adding / extending any electrical & plumbing facility within the existing buildings / structures whenever required by KEPIP (material required for such work will be supplied by KINFRA/KEPIP).

## **7.2 Maintenance of the equipments**

### **7.2.1 Daily maintenance schedule:**

#### **a. Motors**

- Checking bearing temperatures.
- Checking for any undue noise or vibration.

#### **b. Panel, Circuit breaker, starter**

- Checking the phase indicating lamps.
- Noting readings of voltage, current, frequency and others.
- Checking the functioning of indication lamps.

### **7.2.2 Quarterly maintenance schedule:**

#### **a. Motor**

- Blowing away dust and clean any splashing of oil or grease
- Checking cable connections and terminals and insulation of the cable near the lugs; cleaning all contacts, investigating and rectifying if insulation is damaged by overheating. Ensuring that all contacts are fully tight.

#### **b. Panel, Circuit-breaker, Starter and others**

- Checking fixed and moving contacts of the circuit breakers / switches. Checking and smoothening contacts with fine glass-paper or file.
- Checking condition and quantity of oil, for starters.

### **7.2.3 Semi Annual:**

#### **a. Motors**

- Checking condition of oil or grease; and replacing if necessary taking care to avoid excessive greasing.
- Testing insulation by megger.

### **7.2.4 Annual:**

#### **a. Motors**

- Examining bearings for flaws, cleaning and replacing if necessary.
- Checking end-play of bearing and resetting by lock-nuts, wherever provided.

#### **b. Panel and others**

- Calibrating of all indicating meters.

## **7.3 Battery**

- Periodical cleaning of the battery used for UPS in the CFC Building.

- Cleaning of electrical connection for tightness.
- Smearing of terminals and connections lightly with petroleum jelly.
- Checking of water level in the battery and making up to required levels by adding distilled water if the water level is below normal level.

#### **7.4 Motors**

- Cleaning and tightening of all screw connections and terminals on controllers.
- Examining of fuse contacts and terminals for cleanliness and tightness.
- Checking the pump immediately after starting the motor, to see if the pump is generating the rated head, by reading the pressure gauge.
- Checking for any undue vibration of stuffing boxes.
- Checking of glands for overheating and leakage. Gland packing around the pump set is adjusted to permit only a slight leakage of droplets of water to cool and lubricate the shaft.
- Checking if the voltage fluctuation is within the permissible limit of 420 - 440 V.
- Checking of current rating and actual loading of motor to prevent overloading, by frequently monitoring the ammeter reading.
- Ensuring that the water level in the water source does not drop more than 1 meter above foot valve and water at the receiving end is not wasted by overflow.
- Dismantle and refitting of worn out motors.

#### **7.5 Pumps**

- Checking the bearings of the pump periodically and applying grease sufficiently.
- Checking the gland packing once in two months.
- Checking the valves and pressure gauges and tightening the gland at closer intervals when too much leak of water occurs.
- Checking the exhaust pump, its auxiliaries and impeller periodically.
- Operating of submersible pump once a week, and its maintenance.

#### **7.6 Valves**

- Operation of the valves according to necessity- checking the gland packing, greasing and maintain water tightness periodically. Checking of air valves for proper functioning and for any leaks.

#### **7.7 Other duties**

- Daily entries will be recorded in the logbook as per KINFRA/KEPIP's requirement and verified with KINFRA/KEPIP's Engineer-in-Charge.
- Any complaint noticed shall be reported before KINFRA/KEPIP.

#### **7.8 Electrical installations**

All electrical work shall be carried out as per IE Acts, instructions and requirements of statutory authorities i.e. Electrical Inspectorate and Kerala State Electricity Board.

#### **7.9 Handling of Chemicals**

Safety and facilities to the staff for handling of chemicals and equipment is an important consideration. Handling of chemicals need special attention. Following instructions are for guidance of the Contractor and observing them strictly at his cost.

### **7.10 Alum and lime**

Lime & Alum in block / powder form or in liquid form will be issued by KEPIP. Rubber apron, gloves, boots must be used and provided by the Contractor to his staff at his cost.

### **7.11 Chlorine**

Chlorine vapour is extremely hazardous. To avoid prolonged breathing of chlorine gas, gas masks may be used. Antichlor solution shall be kept ready for quick relief. Special precaution for keeping chlorine storeroom well ventilated, be seen before entering and smoke test to be carried out. It is essential that all operators working with chemical are considered to be familiar with the dangers of chlorine gas. It is imperative to have protection equipment always readily available at site and follow the instructions displayed in chlorine / chemical house for handling chlorine.

### **7.12 Cost to be met by KEPIP**

1. Power charges.
2. Water charges to State Irrigation Department.
3. Water cess to State Pollution Control Board.
4. Building tax to local bodies.
5. Annual inspection fee to Electrical Inspectorate and KINESCO/ KSEB.
6. Insurance charges for plant and machinery.

### **7.13 Materials supplied free of cost by KEPIP**

1. Alum
2. Lime
3. Chlorine gas
4. Chemicals and reagents required in the laboratory
5. Pipes & specials for DI/CI/ PVC and HDPE pipes
6. Pipes, specials and jointing materials for CI & DI pipes
7. Diesel for generators
8. Spares for electro-mechanical items

### **7.14 Minimum equipment to be possessed by the Contractor**

1.	Shear leg	1 set
2.	Pulley block	1 set
3.	Mechanical pull jack	2 nos.
4.	CI Pipe cutter upto 400 mm size	1 nos.
5.	Lead caulking tools and hammer	1 set
6.	Electrical wireman equipment	1 set
7.	Pipe wrenches 12" to 24"	2 sets
8.	Spanner 3 / 8" to 1"	2 sets
9.	Box spanner	1 set

10.	Screw driver - Large	2 sets
11.	Screw driver - Medium & small	2 sets
12.	Hydraulic jack 5 T	1 no.
13.	Shovels, chisels etc.	5 sets
14.	25 mm rubber hose 25 m long	2 sets
15.	Grease guns	2 sets
16.	Lubricating can with long necks	2 nos.
17.	Ladder aluminium telescopic	2 nos.
18.	1 ton capacity handcart	1 no.

Necessary vehicle for the conveyance of materials & labour.

## GENERAL GUIDELINES FOR E-Tendering 8.0

Prospective bidders willing to participate in this tender shall necessarily register themselves with e-procurement portal ([www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in)). The tender timeline is available in the critical date section of this tender published in [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in).

### A). Online Bidder registration process:

Bidders should have a Class II or above Digital Signature Certificate (DSC) to be procured from any Registration Authorities (RA) under the Certifying Agency of India. Details of RAs will be available on [www.cca.gov.in](http://www.cca.gov.in). Once, the DSC is obtained, bidders have to register on [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in) website for participating in this tender. Website registration is a one-time process without any registration fees. However, bidders have to procure DSC at their own cost.

Bidders may contact e-Procurement support desk of Kerala State IT Mission over telephone at 0471- 2577088, 2577188, 2577388 or 0484 – 2336006, 2332262 - through email: [etendershelp@kerala.gov.in](mailto:etendershelp@kerala.gov.in) for assistance in this regard.

### B). Online Tender Process:

The tender process shall consist of the following stages:

- i. **Downloading of tender document:** Tender document will be available for free download on [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in). However, tender document fees shall be payable at the time of bid submission as stipulated in this tender document.
- ii. **Pre-bid meeting:** As per NIT
- iii. **Publishing of Corrigendum:** All corrigenda shall be published on [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in) and shall not be available elsewhere.
- iv. **Bid submission:** Bidders have to submit their bids along with supporting documents to support their eligibility, as required in this tender document on [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in).
- v. **Opening of Technical Bid and Financial Bid:** The technical bid will be opened at same time mentioned in Information & instruction to the bidders.
- vi. Time of opening of financial bids of pre-qualified bidders will be intimate later.

### C). Tender Document Fees and Earnest Money Deposit (EMD)

The Bidder shall pay a tender document fees and Earnest Money Deposit. The Bid security is required to protect the purchaser against risk of Bidder's conduct, which would warrant the forfeiture of security.

### Online Payment modes:

All online payments specified in the tender document shall be made through Multi Option Payment System (MOPS) as per the requirement.



**Steps for making tender payments in e-tender system via SBI MOPS gateway**  
(SBI AND NON SBI ACCOUNT HOLDERS)

- Step 1** :- Click “Pay Online” when you reach the payment page while Online Bid Submission.
- Step 2** :- Click “Confirm to Pay” to proceed with the payment gateway.
- Step 3** :- Verify that the Tender fee and EMD shown are correct, as per tender document. Then, select the payment option **SBI MOPS** and Submit.  
*Note: In case of any mismatch in tender payments, with reference to tender documents, please contact TIA for clarifications.*
- Step 4** :- Check and Follow the **Terms and Conditions**, and then **Submit**.
- Step 5** :- Bidders may choose their respective bank for accessing Internet Banking Facility

**a) SBI**

- i. Bidders with SBI account may click SBI option to proceed to its Net Banking Page.
- ii. Bidders may enter SBI Net banking user ID and Password and Click on Login to proceed.
- iii. Please ensure that your account has sufficient balance, before proceeding further. After checking the same, Click Confirm button, to transfer payment. After account debit, MOPS gateway will automatically re-direct to the e-Procurement System, with the Success transaction.
- iv. You will receive bank response immediately by verifying the payment status, whether Success or not. In case, payment was debited from account and further, Payment Failure is shown, immediately contact the e-Procurement helpdesk, for resolution, before tender closing time.  
  
Click Next to go to Bid Preparation details.
- v. Please ensure that the Pay Online option is not shown after successful payment, for confirmation. From here, you may proceed with Encrypt and Upload to upload tender documents, and further submission process.

**b) OTHER BANKS :**

- i. Bidders with other bank account may click Other Banks option to proceed to SBI Net Banking Page. You may select the appropriate Bank from selection page. As an example, we are proceeding with ICICI Bank in the provided dropdown box of All Banks.
- ii. After selecting ICICI Retail Banking, Click Make Payment Button to proceed to its internet banking page. Further steps may depend on the Bank Procedure.
- iii. After, successful payment, system will direct you to payment confirmation page.

- iv. You will receive bank response immediately by verifying the payment status, whether Success or not. In case, payment was debited from account and further, Payment Failure is shown, immediately contact the e-Procurement helpdesk, for resolution, before tender closing time.

Click Next to go to Bid Preparation details.

- v. Please ensure that the Pay Online option is not shown after successful payment, for confirmation. From here, you may proceed with Encrypt and Upload to upload tender documents, and further submission process

**D). SUBMISSION PROCESS:**

For submission of bids, all interested bidders have to register online as explained above in this document. After registration, bidders shall submit their bid online on [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in) along with online payment of tender document fees and EMD.

For page by page instructions on bid submission process, please visit [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in) and click “Bidders Manual Kit” link on the home page.

**It is necessary to click on “Freeze bid” link/ icon to complete the process of bid submission otherwise the bid will not get submitted online and the same shall not be available for viewing/ opening during bid opening process.**

## **Requisition for e-Payment**

[ To be attached with tender form as per  
G.O (P) No.06/2012/PWD dated 10/01/2012 ]

Certified that I am having a Savings / Current Account in

<Name of Bank>

at <Name of Branch>

with IFSC Code

The Account Number is

I wish to receive all payments in this account through NEFT and RTGS  
systems, as the case may be, for all payments relating to this work.

Name of  
Bidder

Place:

Date:

## OTHER INSTRUCTIONS TO BIDDERS-9.0

1. All other relevant forms shall be in the format prescribed in CPWD Manual.
2. All Statutory approvals both initial & final wherever necessary for the execution of work from concerned authorities shall be obtained by Contractor at his own expense. However statutory fees will be reimbursed on submission of receipts.
3. For any details: **KINFRA Export Promotion Industrial Parks Ltd,**  
**IX/159 A, Infopark P.O, Kakkanad, Cochin-42**  
**Contact Number: 0484 - 2415888**

4. Important Dates

Last Date of submission	-	05:00 PM on 19/12/2023
Bid Opening	-	10:30 AM on 22/12/2023

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