NOTICE INVITING TENDER

Sealed two bid Item rate tenders are invited on behalf of the Director, National Institute of Health & Family Welfare from concerned agencies having experience of similar works.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Tender Number</th>
<th>Name of work</th>
<th>Estimated cost</th>
<th>Earnest Money</th>
<th>Period for contract</th>
<th>Cost of Tender form</th>
<th>Date of sale of tender</th>
<th>Last date of receipt of tender</th>
<th>Date &amp; time of opening of tender</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F.No.NIHFW/WS/2-04/2022</td>
<td>Comprehensive Annual Maintenance Contract of RO Plants installed in the NIHFW Campus.</td>
<td>Rs. 5,94,659/-</td>
<td>Rs.10,000/-</td>
<td>1 year</td>
<td>Rs.500/-</td>
<td>20/05/2022 to 08/06/2022 up to 5:00 PM</td>
<td>09/06/2022 up to 3:00 PM</td>
<td>09/06/2022 up to 3:30 PM</td>
</tr>
</tbody>
</table>

Eligibility
1. The agency should have experience of similar work at least one work more than the costing of 80% OR two work more than the costing of 60% each and three work more than the costing of 40% of the estimated cost mentioned above during the period of last three years.
2. Copy of PAN No. of the agency.
3. Experience certificate of similar works.
4. GST registration
5. As prescribed in technical criteria of the tender document.

Note:-
1. The cost of Tender document is Rs.500/- payable in form of Demand Draft in favor of Director, NIHFW.
2. Tender document can be downloaded from the Institute's websites or CPPP portal and a DD of Rs.500/- (non-refundable) should be kept with the EMD separately.
3. Interested agencies may visit the site at any working day during the period of 2:00 PM -5:00 PM.

Director
TENDER DOCUMENT

SUBJECT: Comprehensive Annual Maintenance Contract of RO Plants installed in the NIHFW campus.

Earnest Money Deposit : - Rs. 10,000/- (Rupees Ten Thousand only)

(The EMD must be enclosed with the Tender in form of Demand Draft of any Scheduled Bank payable at New Delhi in favour of Director, NIHFW)

Cost of Tender Document: Rs. 500/- (Tender document can be downloaded from the Institute’s website, a DD of Rs. 500/- in favour of Director, NIHFW should also be submitted along with the EMD and the Tender Document).

Details of the Earnest Money Deposit (EMD) and Tender Fee

<table>
<thead>
<tr>
<th>Particular Detail</th>
<th>Amount</th>
<th>DD No.</th>
<th>Date</th>
<th>Name of the Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tender Fee</td>
<td>Rs. 500/-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMD</td>
<td>Rs. 10,000/-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name of the agency / contractor: - _________________________________

Address of the agency & phone: - _________________________________

Note:- All the interested bidders for the said contract are requested to attend in the pre bid meeting of the tender on 09/06/2022 at 3.30 PM in the Institute. Bidders are also requested to visit institute website: www.nihfw.org regularly, any future clarification and/or corrigendum(s) shall be communicated through website only.

Date & time for sale of tender : - 20/05/2022 to 08/06/2022 up to 5:00PM
Last date & time for submission of tender:- 09/06/2022 up to 3:00 PM
Date & time for opening of Technical Bid:- 09/06/2022 up to 3:30 PM
Date & Time for opening of Financial Bid:- will be intimated to all eligible bidders separately by e-mail.
The National Institute of Health & Family Welfare is an Apex Body in the field of Health and Family Welfare which is located on the Baba Gang Nath Marg, Munirka, New Delhi. The Institute has Installed RO Plant System in the Institute Campus. The Institute intends to award Annual Maintenance Contract. The interested firms/company may quote their rates in the enclosed Performa. The AMC will be awarded on the following Terms and Conditions:

**TERMS AND CONDITIONS**

**Two bid tenders** (Technical Bid + Price Bid) are invited for “Comprehensive Annual Maintenance Contract of RO Plants installed in the NIHFW Campus at Munirka, New Delhi” on behalf of the Director N.I.H.F.W. from the Govt. agencies/approved and eligible agencies and having experience of similar work.

1. The estimated cost of AMC is Rs. 5,94,659/- per annum.

2. The Complete tender addressed to the Director, shall be submitted at Reception of Administration Block latest by **3:00 PM on 09/06/2022**. Tender has to be dropped in the Tender box kept at reception of Administrative Block of NIHFW, Munirka, New Delhi-67. Tender has to be submitted in a sealed envelope super scribed as “Comprehensive Annual Maintenance Contract of RO Plants installed in the NIHFW Campus” at Munirka, New Delhi” No tender will be allowed after the above date and time. The tender document duly signed on each page should be submitted in one envelope marked as Technical bid and another envelop marked as Price bid. The price bid and technical bid shall be submitted in third envelope (large size) marked on envelope as “Comprehensive Annual Maintenance Contract of RO Plants installed in the NIHFW Campus”. at Munirka, New Delhi”

3. The Tenderer has to filled all the required details in enclosed Performa (Annexure-A) for the technical bid and has to quote the rated in enclosed Performa (Annexure-B) for financial bid. The self attested copies of all necessary certificates also have to be enclosed with the bid.

4. The Price bid will be open for only those bidders who will qualify the technical criteria.

5. The opening dates of the price bid will be announced / informed separately.
COTRACT TECHNICAL CRETERIA

6. The minimum annual turnover of agency should be more than Rs. 10.00 lakhs on an average of last (03) three financial years (Attested CA certified copy for the same must be enclosed).

7. Copies of Registration of GST etc.

8. PAN No. of the agency and Income Tax Returns of last 3 years

9. Having experience of similar work at least (01) one work costing of more than 80% OR (02) two works costing more than 60% each OR (03) three works costing more than 40% of the total estimated cost mentioned, during the period of last five years.

10. The Tenderer has to submit EMD of Rs. 10,000/- (Rupees Ten thousand only) in favor of Director NIHFW in the form of Demand draft, failing which the quotation will not be considered for acceptance and will be out rightly rejected.

11. The bidder has to provide, the contact detail of concern govt. official along with the address of that organization on its own letter head, where the agency is currently executing the work.

12. The undertaking that the contractor/agency has not been blacklisted anywhere in the past.

SCOPE OF WORK

13. “Comprehensive Annual Maintenance Contract of RO Plants installed in the NIHFW Campus at Munirka, New Delhi”.

<table>
<thead>
<tr>
<th>LOCATION OF INSTALLED PLANT WITH CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 (250 LPH) 1 Academic Block terrace</td>
</tr>
<tr>
<td>05 (100 LPH)</td>
</tr>
<tr>
<td>1 Academic Block Terrace,</td>
</tr>
<tr>
<td>2 Teaching Block Terrace,</td>
</tr>
<tr>
<td>3 Hostel Block Terrace,</td>
</tr>
<tr>
<td>4 E-2 Block terrace,</td>
</tr>
<tr>
<td>5 D-block terrace</td>
</tr>
<tr>
<td>02 (25 LPH) 1 NCCVMRC, Animal House</td>
</tr>
<tr>
<td>2 Press Section, GF, Academic block</td>
</tr>
</tbody>
</table>
14. Replacement of Pre-filters / Filters is necessary in every 15 days.

15. Replacement of granule activated carbon, media for filters membrane (Membrane) for RO is once in a year OR as per the instruction made by the Engineer-in-charge after the Inspection of the same. (If replaced then, maximum replacement is 02 time in a year).

16. **Within 15 days of award of work, the successful bidder should have to deposit the following items with the Institute:**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Details</th>
<th>Quantity (For 06 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>250 LPH Membrane</td>
<td>01</td>
</tr>
<tr>
<td>2.</td>
<td>100 LPH Membrane</td>
<td>05</td>
</tr>
<tr>
<td>3.</td>
<td>25 LPH Membrane</td>
<td>02</td>
</tr>
<tr>
<td>4.</td>
<td>Raw water Pump (1/2 HP)</td>
<td>02</td>
</tr>
<tr>
<td>5.</td>
<td>High Pressure Pump (1.5 HP)</td>
<td>01</td>
</tr>
<tr>
<td>6.</td>
<td>PH dosing Pump</td>
<td>03</td>
</tr>
<tr>
<td>7.</td>
<td>Dosing Chemicals</td>
<td>15 Ltr.</td>
</tr>
<tr>
<td>8.</td>
<td>Spare Fitting, Fixtures.</td>
<td>In accordance with the no. of R.O plants installed in Institute.</td>
</tr>
</tbody>
</table>

17. After completion of 06 month the agency have to deposit the next stock/lot of above mentioned items (Clause-16 Sr. 01 to Sr. 08).

18. Repairing of worn parts/exhausted parts and accordingly changing of spares parts within the periodical (15 Days) servicing during the contract.

19. All chemical for servicing, backwash, cleaning of RO membrane, for dosing pump will be provided by the company.

20. Maintaining of ultra violet system installed for supporting RO system.

21. Cleaning and Maintaining of display system installed with RO system.

22. **Deployment of Staff:** It is mandatory for the agency to deploy the trained staff from 09:00 AM to 05:30 PM from Monday to Saturday.

23. TDS report in table/perform need to be maintained on each water cooler which are connected to each R.O plant. A register also need to be maintained by the agency.

**GENERAL CONDITIONS**

24. Before quoting the rates agency may visit the site on any working day during the period of 2:00 PM – 5:00 PM.
25. All entries in the tender form should be legible and filled clearly. If the space for furnishing information is insufficient, a separate sheet duly signed and stamped with company’s seal by the authorized signatory may be attached. No overwriting or cutting is permitted in the Financial Bid Form. The rate mentioned in Price bid Performa if written by hand to be covered by CELLO TAPE or should be typed.

26. The contract will be inclusive of all spares parts required for the maintenance of above said capacity RO System (Scope work).

27. TDS of all the water Purifiers should be always below 150.

28. TDS of all the R.O plants should be checked on daily bases and report for the same need to be submitted to Workshop & Maintenance Section. Further, a TDS report in table/perform need to be maintained on each water cooler which are connected to each R.O plant. A register also need to be maintained by the agency.

29. The Company has to maintain record of every activity made with the RO plant as well as works executed for preventive maintenance and same will be produce at the time of billing.

30. The engineer/mechanic/operator along with all spare parts of the agency must give their report related to the functioning of RO plants to the Institute Engineer, twice in week. Further, the deployed engineer/mechanic/operator shall have to ensure that system remains in working order.

31. Contractor will be responsible to bring to immediate notice of the Engineer-in-charge any abnormal functioning or faulty operation of any equipment and take timely steps to avoid breakdown/disruption.

32. Contractor shall be responsible for any damage to the equipment, machinery or system and Institute's property on account of negligence/ fault of the contractor's staff and the same will have to be made good at his risk and cost.

33. The earnest money of the firm/company whose quotations are not accepted will be refunded, within a period of one month from the date of finalization of the tender.

34. The antecedents of persons deployed should be properly verified and their details (names, addresses, telephone nos., photograph) will have to be provided by the contractor to Institute.

35. The successful bidder has to submit security deposit @ 10% of total AMC value security in the form of Bank Drafts in favor of Director NIHFW within a week of award of work. The total security money shall be 10% of tender value done. The EMD of the successful agency shall be part of the security deposit.
36. The Institute will recover TDS and other applicable taxes etc. as per govt. rule from the payment made to the firm/company.

37. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the tenderer who resort to canvassing will be liable to rejection.

38. All pages of the tender shall be signed at the lower right hand corner, wherever required and stamped by the Tenderer or his representative holding the Power of Attorney.

39. The Tenderer/contractor and his employees shall follow the Security instruction/orders issued by the Institute from time to time. The contractor will not employee any person booked by the police.

40. All the working staff deployed by the contractor should behave in a decent manner and should not consume alcohol during the working hours.

41. The rates should be quoted inclusive of all necessary taxes etc.

**PENELTY CONDITIONS**

42. If 100/250/25 Liter per Hours Capacity RO System remains unserviceable after complaints (more than 24 hrs), a penalty of Rs. 200/- per day will be imposed and the same will be deducted from the amount of CAMC.

43. A penalty @ Rs. 200/- per day may be deducted from the bill payment, in case of non attending of the compliant within 24 working hours. However, as per Institute requirement the mechanic on non working days and beyond office hours may also be called.

44. If the contractor fails to execute the compliant within 24 hrs of arising compliant, the work (compliant) will be got done / attended by the Department through alternate sources and at the risk/cost of the contractor and the contractor shall be obliged to pay additional expenditure made in this regard. Further, Institute has also right to pay the expenditure incurred for such compliant(s) and deducted from the bills.

45. Daily attendance of Deployed worker on all working days during 9.00 AM to 5.30 PM is essential, failing which a penalty @ Rs. 200/- per day may be deducted from the bill payment. In case of requirement of specialized staff for attending any arises-compliant on Non-working Hrs/days and beyond office hours, agency will bear the same at his own cost.
PAYMENT TERMS TO THE CONTRACTOR

46. The payment of the contract will be made quarterly after completion the quarter for which the firm/company shall have produce a bill in duplicate duly pre-receipted for arranging the payment. The firm/company also have to produce the list of consumable items, record job sheet along with the bill during the period.

47. Along with the Bill, following supporting documents is requires:-

   a. Deployed workers attendance Sheet

   b. Compliant Attended / Record sheet (Job sheet with user signature), through-out the billing period.

   c. If required, the agency have to produce the bills of materials consume during the period.

48. The Earnest money of the Tenderer may be forfeited

   a. If the Tenderer withdraws his tender during the period of tender validity specified in the tender document or does not respond/comply with the instructions to clarify/supplement the information etc. as asked for.

   b. In case of successful Tenderer, if the Tenderer fails to sign the Contract/Agreement and to commence the work as stipulated in accordance with the terms of the Contract.

   c. If the agency does not comply with scope of work like deployment of manpower and deposit of required items in advance as described/prescribed in Clause-19 of this tender documents within 15 Days from the date of Award Letter.

49. If the work done is not of required standard or to the satisfaction of Engineer In-Charge / Authorized representative of NIHFW or if the contractor commits a breach of any of the terms and conditions, NIHFW shall have the right to terminate the contract at any time by giving immediate written notice for termination of the contract and the Security Deposit, with EMD, available with NIHFW shall be forfeited and the Agency will be black listed.
50. The Contractor will not claim any compensation etc. on account whether the same is/are enforced by state/central Govt. not be entitled for any compensation due to enactment of any law regulation, during the tenure of the contract. Any other Tax like Sales Tax, Tax on works contract, Tax of levy, octroi, excise duty etc. on materials or any elements in respect of this contract shall be paid by the contractor and NIHFW will not entertain any claims whatsoever in this regard.

51. The Institute shall not be responsible for any compensation which may be required to be paid to the worker(s) of the Tenderer/contractor consequent upon any injury/mishap attributable to the job assigned by the contractor. The agency has to provide medical treatment to workers in case of any injury which is attributable to the job assigned by the contractor.

52. The agency will be responsible for compliance with the law related to the minimum wages, Bonus, ESI, EPF etc. It should be ensured that the payments are made to the workers in accordance with the law.

53. NIHFW reserves the right to ask the justification of quoted rates before finalization of tender.

54. No escalation in rate and no claim on account of fluctuation of rates of material and labour wages will be entertained during the course of work. In case of labour wages only difference of amount in wages (current and increased) shall be reimbursed, subject to the approval of competent authority of Institute.

55. At any time, prior to the deadline for submission of the bids the Institute, for any reason may modify the tender documents by suitable amendments and the same will be intimated on the Institute’s web site before due time. Tenderers will be required to acknowledge the receipt of any such amendment to the tender document, and shall submit the same with their tender duly signed.

56. On receipt of the ‘letter of acceptance’ the successful Tenderer will sign agreement on Rs. 100/- stamp paper while entering into a Contract with Institute and on the date and time to be intimated by the Institute for the purpose. The contractor(s) will sign each page of agreement as a token of acceptance.

57. Dispute, if any, arising out of the contract in question shall be resolved through an arbitrator to be nominated by Director, NIHFW.

58. The jurisdiction to any dispute arising in the contract will be executed under the Indian law at the courts located at New Delhi.
59. Tenders, in which any of the prescribed conditions is not fulfilled or any condition including that of conditional rebate is put forth by the tendered, shall be summarily rejected.

60. Director, NIHFW reserves rights to accept or reject any or all quotations without assigning any reasons.

Signature:______________________________________

Name: ___________________________________________

Designation: ____________________________________

Address: _______________________________________

Mobile No: _______________________________

Bidder’s Name with Seal: ________________________
ANNEXURE- A

F.No.NIHFW/WS/2-04/2022
PROFORMA FOR TECHNICAL BID

Sub: Comprehensive Annual Maintenance Contract of RO Plants installed in the NIHFW campus.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Details</th>
<th>Enclosed At Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Name of the Bidder/Agency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Registration for GST</td>
<td>Yes/No</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>PAN No. of the Bidder</td>
<td>Yes/No</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Copies of Income Tax return of last 3 years</td>
<td>Yes/No</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Having experience of similar work at least one work costing of more than 80% (Rs. 4,75,727.00) OR two works costing more than 60% (Rs. 3,56,795.00) each and three works costing more than 40% (Rs. 2,37,863.00) of the total estimated cost mentioned, during the period of last five years</td>
<td>Yes/No</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Undertaking on the agency letter head that the contractor/agency has not been blacklisted from any govt. organization in the past.</td>
<td>Yes/No</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>The minimum annual turnover of agency should be more than Rs.10,00 lakhs on an average of last (03) three financial years (CA certified copies for the same must be enclosed).</td>
<td>Yes/No</td>
<td>1 2019-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 2020-21</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 2021-22</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Average</strong></td>
</tr>
<tr>
<td>8.</td>
<td>EMD of Rs. 10,00/- in form of Demand Draft of a Scheduled Bank in favor of Director NIHFW payable at New Delhi</td>
<td>Yes/No</td>
<td>DD No.</td>
</tr>
</tbody>
</table>

**Undertaking:** I have carefully gone through & have understood all the Terms & Conditions governing the tender. I will comply the same and also I hereby confirm that I am authorized to sign the tender documents.

**Signature:**
____________________________________________________

**Name & Designation:**
____________________________________________________

**Contact No:**
____________________________________________________

**Address:**
____________________________________________________

**PAN No:**
____________________________________________________

**Bidder's Name with Seal:**
____________________________________________________

**DD No.**
____________________________________________________

**Amount:**
____________________________________________________

**Name of Bank:**
____________________________________________________

Page 11 of 15
**ANNEXURE- B**

**F.No.NIHFW/WS/2-04/2022**

**PROFORMA FOR FINANCIAL BID**

*Sub: Comprehensive Annual Maintenance Contract of RO Plants installed in the NIHFW campus.*

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description of work</th>
<th>Qty.</th>
<th>Unit</th>
<th>Annual Rate (Rs.)</th>
<th>G.S.T.</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Comprehensive Annual Maintenance contract of R.O.System of capacity 250 LPH in context of scope of work mentioned in the tender clauses.</td>
<td>1</td>
<td>Nos.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Comprehensive Annual Maintenance contract of R.O.System of capacity 100 LPH in context of scope of work mentioned in the tender clauses.</td>
<td>5</td>
<td>Nos.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Comprehensive Annual Maintenance contract of R.O.System of capacity 25 LPH in context of scope of work mentioned in the tender clauses.</td>
<td>2</td>
<td>Nos.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Up-gradation of Existing 100 LPH plant to 250 LPH plant as per specification given in Annexure-1</td>
<td>2</td>
<td>Nos</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Providing &amp; Fixing of branded new 25 LPH RO Water Purifier of approved make with all necessary fittings &amp; fixture. (Kent, Eureka forbs, livpure OR equivalent make with the approval of engineer in-charge)</td>
<td>1</td>
<td>Nos</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL (A+B+C+D+E)**

Rupees (In Word): 

**Undertaking:** I/We offer the rates of Comprehensive Annual Maintenance Contract and hereby accept all terms and conditions stipulated in the Quotation letter.

**Note:**

1. All entries in the tender form should be legible and filled clearly. If the space for furnishing information is insufficient, a separate sheet duly signed and stamped with company’s seal by the authorized signatory may be attached. No overwriting or cutting is permitted in the Financial Bid Form. The rate mentioned in Price bid Performa if written by hand to be covered by **CELLO TAPE** or should be typed.
2. The quoted rate should be comprehensive in all respect i.e. inclusive of all spare parts, chemicals, taxes and deployment of the trained staff from 09:00AM to 05:30PM from Monday to Saturday.

3. The agency have to deposit the required items in advance as described/prescribed in **Clause- 19** of this tender document within 15 Days from the date from the date of Award Letter.

Signature:  
_____________________________________________________

Name of the Agency  
_____________________________________________________

Contact No:  
_____________________________________________________

Address:  
_____________________________________________________

PAN No:  
_____________________________________________________

Bidder's Name with Seal:  
_____________________________________________________
SPECIFICATIONS FOR UPGRADE OF PLANT TO 100 LPH TO 250 LPH

Flow Rate: - RO 250 LPH,

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Particular</th>
<th>Purpose</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Raw Water Pump</td>
<td>To feed the dual media filter at pressure more the 2.0 bar, which is min operating pressure for filter</td>
<td>Horizontal Centrifugal&lt;br&gt;Power Required: 0.5 Kw&lt;br&gt;Qty: -01&lt;br&gt;Make: - Fisher/ Kirloskar &amp; Eqv.</td>
</tr>
<tr>
<td>2.</td>
<td>Media &amp; Carbon Filteration</td>
<td>To reduce the total suspended solids, dirt, iron and reduce silt density index which can foul the membranes</td>
<td>Make: - Aventura&lt;br&gt;Material of Construction: FRP&lt;br&gt;Dia &amp; Length: - 12*48&lt;br&gt;Testing Pressure: - 06Kg/cm2&lt;br&gt;Opening: -Top&lt;br&gt;Quantity: -1 No&lt;br&gt;Type: -Multiport Single lever valve&lt;br&gt;Size: -1.0 –1.5 Inches&lt;br&gt;Maximum Flow: -1000 LPH&lt;br&gt;Working: -Down Flow&lt;br&gt;Media: -Gravel, Pebbles, Quartz Sand, Anthracite, activated carbon etc Aventura/equ</td>
</tr>
<tr>
<td>3.</td>
<td>MICRON FILTER</td>
<td>To remove the fine particles up to 0.5 microns and reduce silt density index levels to acceptable level.</td>
<td>Cartridge Filter &amp; Housing: - Reputed Brand&lt;br&gt;Housing Big Blue :&lt;br&gt;Make : branded&lt;br&gt;MOC of housing: PP&lt;br&gt;Length: 20”&lt;br&gt;Diameter: 4”&lt;br&gt;Quantity: 2 Nos&lt;br&gt;Cartridge MOC: -Polypropylene&lt;br&gt;Length:20”&lt;br&gt;Diameter:4.0”&lt;br&gt;Micron Rating: 05 Micron&lt;br&gt;Quantity: 2 Nos</td>
</tr>
<tr>
<td>4</td>
<td>DOSING SYSTEM</td>
<td>To dose anticipant chemical to protect the scaling formation on RO membranes</td>
<td>MOC: - PP&lt;br&gt;Capacity: - 3 LPH&lt;br&gt;Pressure: -10 psig&lt;br&gt;Qty: - 1 No&lt;br&gt;Make: - Aster/ Eqv.</td>
</tr>
<tr>
<td>5</td>
<td>HIGH PRESSURE PUMP</td>
<td>To feed the Reverse Osmosis Membrane at pressure more than the osmotic pressure taking consideration flux rate, flow and recovery.</td>
<td>MOC: - CI&lt;br&gt;Type: Horizontal&lt;br&gt;Flow Rate: 1M3&lt;br&gt;Power Required: 2.2 Kw&lt;br&gt;Make: - Kirloskar/Laxmi/beta/equ</td>
</tr>
<tr>
<td></td>
<td><strong>RO MEMBRANE</strong></td>
<td>To remove the major part of TDS upto 95-98 % by reverse Osmosis Membranes arranged and designed to give adequate flow and recovery.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Type:</strong></td>
<td>Spiral Wound</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Dia. &amp; Length:</strong></td>
<td>40X40</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>No of membrane:</strong></td>
<td>1 Nos +</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Recovery:</strong></td>
<td>60-70 %</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Membrane Make:</strong></td>
<td>BURTON / OASIS. (Or Reputed Brand)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Salt rejection:</strong></td>
<td>90-95 %</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Hydranautics/ Flimtech-dow/equ</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>RO PRESSURE TUBE</strong></th>
<th>To pack reverse osmosis membranes and operate at high-pressure upto 350 psi.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>MOC :</strong></td>
<td>FRP Composite</td>
</tr>
<tr>
<td></td>
<td><strong>Pressure Vessels :</strong></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>membrane per vessel :</strong></td>
<td>1 , Hydranautics/equ</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>ULTRA VIOLET STERILIZER</strong></th>
<th>Ultraviolet (UV) sterilization is used to inhibit growth of microorganisms, remove ozone, chlorine and trace organics and reduce total organic carbon (TOC). The water to be “sterilized” is exposed to UV radiation in specially designed chambers that provide intimate contact of the water with the UV light source.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>STERILIGHT/equ</strong></td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>INSTRUMENTATION</strong></th>
<th>Rota Meter &amp; pressure gage : 2 nos (permeate &amp; Reject line )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Make :</strong></td>
<td>Flow star, Aster</td>
</tr>
<tr>
<td></td>
<td><strong>Pressure Switch :</strong></td>
<td>2 Nos</td>
</tr>
<tr>
<td></td>
<td><strong>Make :</strong></td>
<td>Indfos</td>
</tr>
<tr>
<td></td>
<td><strong>Pressure Gauges :</strong></td>
<td>2 Nos</td>
</tr>
<tr>
<td></td>
<td><strong>Aster/equ</strong></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>PLUMBING &amp; FITTINGS</strong></th>
<th>All in UPVC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>NRV’s pressure relief valves, where needed.</strong></td>
<td></td>
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<tr>
<td></td>
<td><strong>The system with be on common SS base frame</strong></td>
<td></td>
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</tbody>
</table>