



TATA MEMORIAL CENTRE

Advanced Centre For Treatment, Research And Education In Cancer. (ACTREC)

Kharghar Node, Navi Mumbai – 410210

A GRANT-IN-AID INSTITUTE UNDER DEPARTMENT OF ATOMIC ENERGY, GOVERNMENT OF INDIA

NAME OF WORK:

**Construction of 21 Lakh Litre Domestic water tank and allied water
distribution network at ACTREC, Kharghar,
Navi Mumbai - 410210**

E-TENDER NOTICE

No. : TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021

NAME OF THE AGENCY	



Engineering services, Second Floor, Khanolkar Shodhika, Phone: 6873/2740 5011, 6873/2740 5067,

E. Mail : pghadi@actrec.gov.in, hkelkar@actrec.gov.in, engineering@actrec.gov.in,



TATA MEMORIAL CENTRE
Advanced Centre For Treatment, Research and Education In Cancer
(ACTREC)

A GRANT-IN-AID INSTITUTE UNDER DEPARTMENT OF ATOMIC ENERGY,
GOVERNMENT OF INDIA

NAME OF WORK:

**Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC,
Kharghar, Navi Mumbai - 410210**

Tender No:	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
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LIST OF DOCUMENTS

NAME OF THE AGENCY		
Sr. No.	List of Documents	Page No.
Technical Bid. (Hard copy also to be Submitted).		
I	E.M.D. for Rs 6,60,00/-	
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	Section – IV : Book containing Conditions of Contract	80 pages
	Section – V : Technical specifications	22 pages
VOLUME II – Schedule of Quantities		
1	Hard copy of Technical Bid is to be submitted and endorsed at security main gate before last date of submission and must be signed with stamp/seal on all pages.	
2	It may please be noted that both hard copy and soft copy of technical bid are required i.e uploaded version in Tenderwizard and Hard copy submission before due date and time. If agency is unable to do so will be disqualified.	
3	EMD in original is to be submitted in separate envelop along with hard copy of technical bid before due date and time. If agency is unable to do so will be disqualified.	
4	Financial bid to be submitted ONLINE ONLY and hard copy are NOT to be submitted. Bids of agencies submitting hard copy of filled up financial bid shall be summarily rejected (Agency will be disqualified)	



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E-TENDER NOTICE.

NAME OF THE AGENCY	
1	NIT No. TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
2	Name of work Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210
3	Estimated cost put to tender (Including GST) Rs - 3,30,00,000/-
4	<p>Earnest Money Deposit (EMD)</p> <p>EMD of Rs. 6,60,000/- to be submitted in the form of Fixed Deposit Receipt/ DD issued by a Scheduled bank in favour of Accounts Officer, TMC-ACTREC, Payable at Navi Mumbai</p> <p>However the bidders may submit the EMD as follows:</p> <p>i) Rs.6,60,000/- in the form of FDR/DD as prescribed above.</p> <p>or</p> <p>ii) a) 50% of EMD Amount i.e., Rs.3,30,000/- in the form of Demand Draft/ Bankers Cheque or Fixed Deposit Receipt as prescribed above and</p> <p>b) Balance amount 50% of EMD Amount i.e., of Rs. 3,30,000/- in the form of Bank Guarantee (BG) issued by a Scheduled Bank drawn in favour of 'Accounts Officer, ACTREC</p> <p>Note: 1) Bank Guarantee should strictly in accordance with the prescribed format otherwise it shall not be accepted.</p> <p>2) EMD in the form of cheque will not be accepted.</p> <p>3) As per Rule 170 of General Financial Rules (GFRs) 2017, Micro and Small Enterprises (MSEs) and the firms registered with concerned Ministries/ Departments are exempted from submission of Bid Security. Further, in lieu of Bid Security, Bidders to sign "Bid Security Declaration" accepting that if they withdraw or modify their bids during period of validity etc., they will be suspended for the period ONE YEAR from opening of Financial bid.</p>
5	Completion period 8 Months (including monsoon period if any)
6	i) Performance Guarantee 3% of Tender Value (The successful bidder is to submit the Performance guarantee within prescribed timeline and will be returned without interest on settlement of contractor's final bill and issuance of completion certificate)
	ii) Security Deposit. 2.50% of Tender Value (will be deducted from each running bill and will be returned without interest on successful completion of Defect liability period)
7	Tender Processing Fee Rs xxx/- in the form of online payment.

8	Warranty and After Sales Service	Works should have 1 year Comprehensive Warranty for overall project after completion and handing over of project.
9	Dates of availability of Tender Documents for view and download	From 23-02-2021 time 15:00 Hrs. to 08-03-2021 up to 17:00 Hrs on website www.tenderwizard.com/DAE . Detailed NIT is also available on website www.actrec.gov.in for view only.
10	Site visit	Bidder should visit the site to ascertain scope of work before putting up the Bid in working hours with prior intimation. For any queries regarding the same Bidders can contact Engineering Dept, ACTREC. Agency can contact on 022 - 27405011/27405067 - Mr Pratik Ghadi, Engineer 'C'
11	Local (Mumbai/ Navi Mumbai Region) Address of Bidder	
12	Pre Bid Meeting	A. Pre-Bid query: Till 01-03-2021 on pghadi@actrec.gov.in/hkelkar@actrec.gov.in. B. Pre Bid Meeting will be held on 03-03-2021 (11:00 hrs to 13:00 Hrs). Pre Bid meeting will be held at engineering Dept ACTREC C. Post pre-bid query : Till 05-03-2021 on pghadi@actrec.gov.in/hkelkar@actrec.gov.in. Navi Mumbai.
13	Dead Line for submission of Original DD etc. towards Tender EMD. And technical bid hard copy.	On or before 11-03-2021 (17:00 Hrs.) in the Office of OIC ES ,2nd floor, Khanolkar Shodhika, ACTREC, Navi Mumbai 410210
14	Last date and time of closing of online submission of tenders:	On or before 11-03-2021 (17:00 Hrs.)
15	Date and time of online opening of Technical Bid.	On 12-03-2021 (10:30 Hrs.)
16	Date of opening of Financial Bids of qualified bidders.	Will be notified at a later date.

Note: 1. Director-ACTREC reserves the right to accept or reject the tender(s) in full or in part, without assigning any reason thereof. Tenders with any condition including conditional rebate shall be rejected forthwith.



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Tender No:	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
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Tender Name:	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210
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GENERAL INSTRUCTIONS TO TENDERER

NAME OF THE AGENCY	
Important	THE LOCATION OF WORK TO BE EXECUTED IS CANCER PATIENTS AREA. EXTRA CARE SHALL BE TAKEN WHILE EXECUTING THE WORK. IT IS REQUESTED TO VISIT THE PLACE OF WORK BEFORE SUBMITTING THE TENDER.
1	Tender Documents can be viewed on our web site www.actrec.gov.in
2	Conditions of Contract may be downloaded from our website www.actrec.gov.in (in case of difficulty please contact on 2740 5011 - Mr. Pratik Ghadi Engineer 'C' - Civil.
3	Registered contractors can only purchase /download & upload tenders documents.
4	Interested agencies may visit www.tenderwizard.com/DAE for registration.
5	Contact for assistance/ clarifications/registration on 09969395522/ 022-25487363 (Shri. Rudresh), e-mail: rudresh.tenderwizard@gmail.com
6	Bidders who fulfill the following requirements shall ONLY be eligible to apply. (Joint ventures are not accepted).
7	For further information, please contact on (022) 68735011 during office hours. The existing "SECTION - 1: NOTICE INVITING TENDERS" OF "CONDITIONS AND CLAUSES OF CONTRACT - 2008" (P.5 & 6) in use for 2/3 bid TENDERING has been modified as per the requirement of e-Tendering. The modified VERSION OF THE SAME" is enclosed as CS-13 (Correction Slip - 13 to Conditions and Clauses of Contract -2008).
8	Proof of registration/associations with Government / Semi Government / Corporate Hospitals & having experience in execution of similar nature and magnitude of works.
9	Should have satisfactorily completed the works as mentioned below during the last seven years ending 31.03.2020 and on going works till the date.
10	Three similar works each costing not less than Rs. 132.0 Lakh each, or (40% of Estimation Cost)
11	Two similar works each costing not less than Rs. 198.00 Lakh each, or (60% of Estimation Cost)
12	One similar work costing not less than Rs. 264.00 Lakh (80% of Estimation Cost)
13	Similar works shall mean Following:
13 (i)	RCC work including construction of underground RCC water tank or RCC sewage tank or RCC industrial waste tank.
14	BOQ for similar work as described in clause 13(i) may include electromechanical work and allied civil works such as pumphouse, ware house etc.

15	The value of executed works shall be brought to the current costing level by enhancing the actual value of work at a simple rate of 7% per annum ; calculated from the date of completion to the last date of receipt of tender.
16	Annual turnover as per ITCC or profit & loss statement for the last 5 years (Average annual turn over for the last 3 financial years should be at least Rs. 1.65 Crores , not having incurred any loss in more than 2 years during last 5 years ending 31.03.20 (last Financial year).
17	The bidding capacity shall be equal to or more than the above respective estimated cost. The bidding capacity shall be worked out by following formula
	Bidding capacity = (A x N x 2) - B
	Where
	A- Maximum value of similar works executed in any one year during last 5 years taking into account as completed as well as works in progress.
	N- Completion of works in years.
	B- Value of existing commitments and ongoing works to be completed during the period of completion of work.
18	Should not have incurred any loss in more than two years during the last five years ending 31st March, 2020.
19	Networth certificate: Networth certificate of minimum 15% of the estimated cost put to tender issued by certified Chartered Accountants (on the format prescribed in form B-1)
20	List of similar works in hand & similar works carried out by them for last 7 years indicating i) Agency for whom executed, ii) Value of work, iii) Completion time as stipulated and actual, or present position of the work.

21	List of construction plant, machinery, equipment, accessories & infrastructure facilities possessed by the agency to complete the work in time.
22	List of Technical staff they possess.
23	CERTIFICATES: (Scanned copy of original certificates to be uploaded)
i)	Performance Certificates
ii)	GST registration certificate
iii)	PAN (Permanent Account Number) Registration
iv)	OEM authorization certificate (For Supply, installation, Service) as may be the case.
V)	Company Registration certificate
24	UNDERTAKING as under:- (Scanned copy to be uploaded at the time of submission of bid).
	I/We undertake and confirm that the contracted works shall not be got executed through sub- contractor on back to back basis. Further that, if such a violation comes to the notice of Director-ACTREC, I/we shall be liable to be debarred & black listed as the case may be for bidding in future. Also if such 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.
25	The intending bidder must read the terms and conditions as per “SECTION - 1: NOTICE INVITING TENDERS” OF “CONDITIONS AND CLAUSES OF CONTRACT - 2008” carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required. Director-ACTREC reserves the right of Non-consideration of Tender documents of the agencies who are not fulfilling the NIT stipulations and / or having adverse report on the works carried out by them in the past.
26	Information and Instructions for tenderers posted on website shall form basis of of tender document.
27	Hard copies of Technical Bid shall be submitted in ACTREC before due date and time. Hard copies shall include all documents as uploaded online.
28	OBTAINING OF STANDARD DOCUMENTS: In addition to the above, the prospective bidders are required to possess all documents which form part of Tender Documents for this work. The required documents (Condition of Contract) can be downloaded from the ACTREC’s website (tender section on www.actrec.gov.in). In case the agencies already possess these standard documents with them, the same need not be downloaded / purchased again. Printed books are available at the Engineering Services, TMC-ACTREC, Kharghar, Navi Mumbai- 400 210.
29	The bid can only be submitted after uploading the mandatory scanned documents such as Demand Draft or Pay order or Banker`s Cheque or Fixed Deposit Receipts and Bank Guarantee of any Scheduled Bank towards cost of tender document and EMD in favor of “ACCOUNTS OFFICER, TMC-ACTREC” and Processing Fee in favor of “ITI LIMITED, NEW DELHI” and other documents as specified.
30	Those bidder who are not registered on the website mentioned above, are required to get registered. If needed, they can be imparted training for online bidding process as per details available on the website.
31	The intending bidder must have valid class-III digital signature to submit the bid.
32	On opening date, the bidder can login and see the bid opening process.

33	Certificate of Financial Turn Over: At the time of submission of bid, bidder may upload Undertaking / Certificate from CA mentioning Financial Turnover of last 3 years and including profit & loss statements and further details if required may be asked from the contractor after opening of technical bids. There is no need to upload entire voluminous balance sheet.
34	Bidder must ensure to quote rate of each item. The column meant for quoting rate in figures appears in YELLOW colour and the moment rate is entered, it turns SKY BLUE . In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0" . Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO). in the schedule of quantities, if rates are not quoted for items or if a firm quotes " NIL/N.A./Not applicable/----/ Leaving blank space etc." charges, the bid shall be treated as unresponsive and will not be considered. DO NOT use vague terms. Insert required information with clear meaning in technical bid & financial bid.
35	The Director-ACTREC reserves the right to accept / reject any prospective application without assigning any reason thereof.
36	Short listing of the bidders shall be subject to thorough verification of their credentials and inspection of works carried out by them, through a Technical Evaluation Committee of experts, constituted by ACTREC
37	IF ANY INFORMATION FURNISHED by the bidder is found to be incorrect at a later stage, they shall be liable to be debarred from tendering / taking up works in TMC.
38	PROSPECTIVE BIDDER SHALL SATISFY THEMSELVES OF FULFILLING ALL THE NIT CRITERIA BEFORE SUBMISSION OF TENDER. Director-ACTREC reserves the right of non consideration of tender of the bidder not fulfilling the stipulated criteria.
39	Any Additional work needs to be executed for completion of work, CPWD DSR 2018 rates will be considered and if the rates are not available then Engineer-incharge may refer the rates of work orders of other central govt. agencies or may obtain quotation from market whichever is lowest quote will be applicable and binding to the contractor.
40	TMC-ACTREC does not guarantee opening of the tender immediately after the closing date and time due to reasons beyond its control and hence tenders can be opened after the due date and time also. It will however will be ensured that no offers are submitted after tender closing date and time. Bidder cannot submit/modify any offer or attach any file to it after closing date and time as stipulated in the tender notice. System does not permit any alternation, modification, deletion of any entry or condition, offered by the tenderer in the e-tender, after closure of the virtual date and time.
41	ACTREC will not be responsible for any kind of technical problem at Bidder's end in case of difficulty in up loading of tender. Bidders are adviced to finish the uploading of tender well before time. No tender will be accepted by ACTREC at later stage that could not be uploaded because of unforeseen technical problems.
42	Bidders who have successfully up loaded the tender documents and forwarded physical (hard) copies of the Technical Bid before due date and time will only be considered. Please note that bidder will have to finish both the activities to proceed further. Otherwise bidders will be disqualified.
43	All papers submitted with the tender should bear the signature and stamp/seal of the bidder on every page.
44	All information in this tender shall be in English only.
45	Rate quoted should be in Indian currency only.

46	Tender containing clerical errors, typographical error/ arthrmelial mistake may be libile to be rejected.
47	All the rates quoted shall be inclusive of all taxes except GST which will be paid extra as applicable.
48	Only one rate shall be offered for the Item. Multiple rates against one items shall be rejected.
49	The bidder shall quote rates which shall remain valid for acceptance by ACTREC for a period of 150 days or stipulated time limit as mentioned in the tender documents.
50	Only lowest offer may be considered for further proceedings.
51	Performance Gaurantee: Performance Gaurantee will have to be submitted at the rate of 3% of the contract value valid for 2 Months after completion of work to be submitted within 15 days of issue of Letter of Intent.
52	Security Deposit will be deducted @ 2.5% of work order value from the running bills and will be refunded after completion of defect liability period of one Year.
53	Submission of more than one Tender by a particular Tenderer under different names is strictly prohibited. In case it is detected later that this condition has been violated all the tenders submitted by Tenderer would be rejected or cancelled and earnest money or security deposit will be forfeited in addition to such legal action as may be deemed fit and proper.
54	Canvassing in connection with tender/quotation is strictly prohibited.
55	Director-ACTREC reserves right to reject any or all the quotations or allot part of the work to different agencies without assigning any reason.
56	Mode of measurement will be as per the guidelines laid in the Departmental conditions of contract & technical specification.
57	Awarding work order will be strictly as per "L1 criteria"

I have read the Above instructions carefully and understood in right perspeticve.

Date:

Seal and Signature.



TATA MEMORIAL CENTRE

ADVANCED CENTRE FOR TREATMENT RESEARCH AND EDUCATION IN CANCER (ACTREC).

A GRANT-IN-AID INSTITUTE UNDER DEPARTMENT OF ATOMIC ENERGY, GOVERNMENT OF INDIA

Tender No.	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
Name of Work	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210.

LETTER OF TRANSMITTAL

NAME OF THE AGENCY	
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To
The Officer Incharge,
ACTREC,
Kharghar, Navi Mumbai - 410210

Subject: Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210.

Having examined the details given in qualification Press-Notice and qualification document for the above work, I / we hereby submit the qualification document and other relevant information.

- 1) I / We hereby certify that all the statements made and information supplied in the enclosed forms A to H and accompanying statement are true and correct.
- 2) I / We have furnished all information and details necessary for qualification and have no further pertinent information to supply.
- 3) I / We submit the requisite certified Networth certificate and authorize the Officer Incharge- Engineering services, ACTREC, to approach individuals, employers, firms and corporation to verify our competence and general reputation.
- 4) I / We proposing following works in support of our qualification for the subject works.

Sr. No.	Name of Work	Client Details	Date of Completion	Final cost of works

Date:

Seal and Signature.



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Tender No:	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
Name of Work	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210
FORM A :- Financial Information	
NAME OF THE AGENCY	

1) Financial Analysis - Details to be furnished duly supported by figures in balance sheet / profit & loss Account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department [Copies to be attached].

Particulars	Financial Year				
	2015-16	2016-17	2017-18	2018-19	2019-20
i) Gross Annual turnover on Construction work					
ii) Profit / Loss					

2) Financial arrangements for carrying out the proposed work.

3) The following certificates are enclosed :

- a) Profit & Loss account certificate by CA & as submitted to Income Tax Department
- b) Current Income Tax Clearance Certificate.
- c) Networth certificate - Form "B-1"

Date:

Seal and Signature.



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ADVANCED CENTRE FOR TREATMENT RESEARCH AND EDUCATION IN CANCER (ACTREC).

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FORM-B1

Tender No.	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
Name of work:	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210

Name of the Vendor	
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Form "B-1"

FORM FOR CERTIFICATE OF NET WORTH FROM CHARTERED ACCOUNTANT.

" it is to certify that as per the audited balance sheet and profit & Loss account during the financial year _____, the Net Worth of M/s _____(Name & registered Address of individual/firm/company), as on _____ (the relevant date) is RS. _____ after considering all liabilities. It is further certified that the Net Worth of the company has not eroded by more than 30 % in the last three years ending on _____. (the relevant date)."

Signature of Chartered Accountant.

Name of Chartered Accountant.

Membership No. of ICAI

Date and Seal.

[illegible]

[illegible]



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FORM E	
PERFORMANCE REPORT OF WORKS REFERRED TO IN FORM "C" & "D"	
NAME OF THE AGENCY	

1)	Name of work / Project & Location	
2)	Agreement No.	
3)	Estimated cost	
4)	Tendered cost	
5)	Date of start	
6)	Date of completion	
	a) Stipulated date of completion	
	b) Actual date of completion	
7)	Amount of compensation levied, for	
8)	Amount of reduced rate items, if any	
9)	Performance Report	
	a) Quality of work	Outstanding/Very Good /Good /Poor
	b) Financial Soundness	Outstanding/Very Good /Good /Poor
	c) Technical Proficiency	Outstanding/Very Good /Good /Poor
	d) Resourcefulness	Outstanding/Very Good /Good /Poor
	e) General behavior	Outstanding/Very Good /Good /Poor

Executive Engineer or Equivalent or Client

Dated:

Note: The Performance Certificate issued by Consultant(s) will not be considered.



TATA MEMORIAL CENTRE

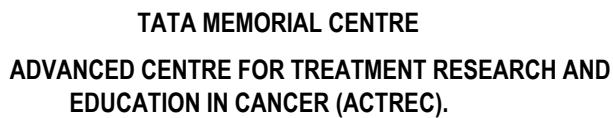
ADVANCED CENTRE FOR TREATMENT RESEARCH AND EDUCATION IN CANCER (ACTREC).

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Name of Work	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210
FORM "F" STRUCTURE & ORGANIZATION	
NAME OF THE AGENCY	

1)	Name & Address of the applicant			
2)	Telephone No. / Fax No./E-mail ID			
3)	Legal Status of the applicant [Attach copies of the original document defining the legal status]			
	a) An individual			
	b) An proprietary firm			
	c) A firm in partnership			
	d) A Limited Company or Corporation			
4)	Particulars of Registration with various Govt. Bodies	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; height: 40px;"></td> <td style="width: 50%; height: 40px;"></td> </tr> </table>		

	Organization / Place of Registration	Registration No.
	a)	
	b)	
	c)	
5)	Names and Titles of Directors & Officers with designation to be concerned with this work.	
6)	Designation of individuals authorized to act for the organization. :	
7)	Was the applicant ever required to suspend construction for a period of more than six months continuously after you commenced the construction ? If so, give the name of the project and reasons of suspension of work.	
8)	Has the applicant, or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons of abandonment.	
9)	Has the applicant, or any constituent partner in case of partnership firm, ever been debarred/black listed for tendering in any organization at any time? If so, give details.	
10)	Has the applicant, or any constituent partner in case of partnership firm, ever been convicted by a court of law ?. If so, give details.	
11)	In which field of Civil Engineering construction the applicant has specialization and interest ?. :	
12)	Any other information considered necessary not included above :	



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Name of Work	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210
FORM G	
NAME OF THE AGENCY	

FORM "G"

Details of Technical and Administrative Personnel to be employed for the work

[illegible]

Signature of Applicant

[illegible]

6										
7										
8										
9										
10										
Signature of Applicant [s]										



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Vendor Details

Tender No:	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
Tender Name:	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210

Sr No	List of Documents to be scanned & uploaded within the period of bid submission:	Details (to be given mandatorily)
1	Name / Title of the Bidder/ Type of Establishment	
2	We have quoted for all the items in Financial bid in the prescribed format of the Tender documents (say 'Yes/No') (Partial/Incomplete offers are liable for rejection)	
3	Full Address	
4	Name of the person authorized to deal/undertake business for and on behalf of the Bidder	
5	Telephone & Mobile Number	
6	Fax. No.	
7	Email Address	
8	Legal entity of Bidder whether Firm/Society/Company/SSI unit	
9	Establishment Registration Number	
10	Authority with whom Registered	
11	Main Business of the Bidder	
12	Authorized area of Operation in India	
13	Name & Address of Bankers	
14	PAN No. / TAN No.	
15	GST Registration Number:	
16	Networth certificate: Networth certificate of minimum 15% of the estimated cost put to tender issued by certified Chartered Accountants (on the format prescribed in form B-1)	
17	No. of Man power employed by Bidder	
	a) Scientific	
	b) Technical	
	c) Administrative	
	d) Financial	
18	Experience of the Bidder in dealing with the tendered item/works	
19	Performance Certificates / Work Completion Certificates.	
20	QUALIFYING EXPERIENCE ANY ONE OF THE FOLLOWINGS.	
	a) THREE Similar Works costing 40% of 'Tendered Value' i.e. RS. 132.0 lakh	
	b) TWO Similar Works 60% of 'Tendered Value' i.e. Rs 198 lakh	
	c) ONE Similar Works 80% of 'Tendered Value' i.e. Rs. 264.0 lakh	
	Similar Works shall be as per the clause 13 of General instructions to tenderers.	
21	Turn over in the last 5 years	
	2014-15	
	2015-16	
	2016-17	
	2017-18	

	2018-19	
22	Average Turn Over for Last 3 Years, certified by CA.	
23	Details of work orders in the last 3 years, amount, Name of Authority, Completion Period etc (separate sheet)	
24	List of plant & machinery of bidder (attach separate sheet)	
25	Demand Draft/BG/FDR Number for EMD, Amount, Date, Bank, etc	
26	There are no deviations of specification/type etc in any of the items of Financial Bid. (Deviations, if any, shall be mentioned in Technical Bid. The agency has to quote separately for the those items and enclose with Financial Bid)	

Certified that the above information is correct & true to the best of my knowledge and belief. Nothing has been concealed and fabricated and in case any information is found incorrect. I, the under signatory will be personally responsible.

Date

Signature

Name of authorized person for bidder with seal



TATA MEMORIAL CENTRE
Advanced Centre For Treatment, Research and Education In Cancer (ACTREC)
 A GRANT-IN-AID INSTITUTE UNDER DEPARTMENT OF ATOMIC ENERGY, GOVERNMENT OF INDIA

NEFT FORM

APPLICATION FORM FOR DEPOSITING PAYMENT AGAINST BILLS IN BANK ACCOUNT BY ELECTRONIC CLEARING		
1	Name of the Bidder	
2	Bidder Address & Other Particulars	
3	PAN NO.	
4	GST NO.	
5	Mobile No.	
6	Email ID	
7	Account Holder's Name (Title of the Account)	
8	Bank Account No.	
9	Bank Name, Branch & Address	
10	9-Digit MICR code of the bank	
11	Account type (CURRENT)	
12	IFSC Code (attach xerox copy of cheque)	

Certified that the particulars furnished above are correct as per our records.

Signature of the authorised official from the bank.

Bank stamp :

Date :

Note : Xerox copy of cheque may be attached, without which the form will not be accepted.



TATA MEMORIAL CENTRE
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CHECK LIST FOR LIST OF DOCUMENTS SUBMITTED

NIT No.	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021		
NAME OF WORK:	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210		
Name of Agency			
SN	PARTICULARS	REMARKS	
I	Name of the Bidder		
II	Postal address		
III	Contact with STD code		
IV	Fax with STD code		
V	Name of Contact person		
VI	Mobile No.		
VII	e-mail ID		
	BELOW GIVEN DOCUMENTS TO BE SCANNED AND UPLOAD IN THE WEBSITE www.tenderwizard.com/DAE WITHIN THE PERIOD OF SUBMISSION	Details to be fill-up	Scan copy attached "YES" OR "NO"
1	Financial Turn Over Certified by CA		
	2014-15		
	2015-16		
	2016-17		
	2017-18		
	2018-19		
2	Profit & Loss Statement Certified by CA		
	2014-15		
	2015-16		
	2016-17		
	2017-18		
	2018-19		
3	Networth certificate: Networth certificate of minimum 15% of the estimated cost put to tender issued by certified Chartered Accountants (on the format prescribed in form B-1)		



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FORM-B

Tender No.	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
Name of work:	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210

Name of the Vendor	
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BID DECLARATION DECLARATION
<p>To OIC-ES ACTREC KHARGHAR ACTREC/TMC/Department of Atomic Energy</p> <p>Dear Sir,</p> <p>I/We have gone through the tendering conditions pertaining to the Tender and General Conditions of Contract, Special Conditions of Contract and Additional Conditions of Contract, if any.</p> <p>I/We hereby agree to execute the contract in accordance with the tender specifications incorporated along with of the tender document and also agree to abide by General Conditions of Contract, Special Conditions of Contract contained in the Tender document and Additional Conditions of Contract, if any.</p> <p>I/We hereby agree to keep our above mentioned bid valid for the period mentioned in the NIT.</p> <p>Prices applicable are indicated in the price bid format of the tender.</p> <p>I/We are also uploading herewith all the leaflets/catalogue, etc. pertaining to the stores offered.</p> <p>If I/We withdraw or modify the bid during the period of validity or if I/We are awarded the contract and I/We fail to submit a PSDBG before the deadline mentioned in the contract, I/We shall be suspended for a period of one year from being eligible to submit bids for contracts of Department of Atomic Energy/TMC/ACTREC</p> <p>Yours faithfully</p> <p>SIGN & STAMP OF BIDDER</p>



TATA MEMORIAL CENTRE

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INDIA

Salient Governing Features of the Tender Proforma of Schedules

Tender No.	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
Name of work:	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210

Name of the Vendor	
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SCHEDULE 'A' :		
SN	TITLE	PARTICULARS
1	NIT No.	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021 dated 16/02/2021
2	Notice Inviting Tender (NIT) details	i) NIT as uploaded on Web Site ii) NIT as published in News Papers
3	Scope and location of the work:	As per NIT
4	Time Schedule for the work:	As per NIT
5	List of drawings	NA
6	List of changes in conditions of contract	NA
7	List of changes in specifications	As shown below
	a. Civil work	As per NIT

	b. PH works	NA		
	c. Electrical works	NA		
8	Schedule of Quantities		Please refer Financial Bid	
SCHEDULE ‘B’ :		Not Applicable		
Schedule of materials to be issued to the contractor				
S.	Description of item	Quantity	Rates at which the Materials	Place of issue
No			will be charged to the contractor	
1	2	3	4	5
1	Cement in bags	Nil		
2	Re-Bars for RCC	Nil		
3	Electricity	As required	Contractor has to make his own arrangement for the electricity required for work by forming tri-party agreement with MSEDCL or by hiring own DG sets.	
	4 Water Supply		Contractor has to make his own arrangement for water supply for all construction work and for labours	Borewell may installed with prior permission from ACTREC. However test to be conducted to use the water for construction purpose. Alternatively water tankers may be procured at cost to contractor. No extra payment shall be made.
SCHEDULE ‘C’ :		Land earmarked for temp. infrastructures and Tools & plants to be hired to the contractor		
S.No	Description		Hire charges	Place of issue
1	2		3	4
1	Area for storage / site office (SCC-11)		Rs. 1.00 per month	ACTREC Campus
2	Temporary Buildings (SCC-12)		Rs. 1.00 per month	ACTREC Campus
3	Labour hutments (SCC-12)		No labour huntments will be allowed in the campus	
SCHEDULE ‘D’				
Extra schedule for specific requirements /documents for the work, if any Particularly for Security guidelines, Gate pass, lift, tower crane etc.				As per NIT / SOQ

SCHEDULE ‘E’ :	Reference to the Book of “TMC Conditions & Clauses of Contract” to be followed for this work		
Name of Work: Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210		As per NIT	
Estimated cost of work :	<i>Rs.330.00 Lacs</i>	As per NIT	
i) Earnest money	<i>Rs.6,60,000/-</i>	As per NIT	
ii) Performance Guarantee	<i>3% of tendered value</i>	As per NIT	
iii) Security Deposit	<i>2.5% of tendered value</i>	As per NIT	
SCHEDULE ‘F’ :			
General Rules & Directions :			
Tender inviting authority:		<i>Director , ACTREC</i>	
Maximum percentage for quantity of Items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3.		<i>See Clause-12 below</i>	
Definitions :			
2(v)	Engineer-in-charge	<i>As nominated by OIC-ES</i>	
2(viii)	Accepting Authority	<i>Director, TMC</i>	
2(x)	Percentage on cost of materials and labour to cover all overheads & profits	<i>15% (Fifteen percent)</i>	
2(xii)	Department	<i>TMC</i>	
9(ii)	Standard Contract Form of Deptt.	<i>Item Rate Tender</i>	
Clause –1			
i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance / WO.		<i>15 days</i>	
ii) Maximum allowable extension beyond the period (provided in –i) above with late fee @ 0.1% per day, of performance guarantee amount.		<i>15 days</i>	
Clause – 2	Authority for fixing compensation under clause 2.	<i>Director,TMC /Director ACTREC</i>	
Clause – 5	Number of days from the date of issue of letter of acceptance / WO for reckoning date of start.	<i>Immediate/7/15 days</i>	
Mile stone(s) as per table given below:			
Table of Mile Stone(s)			
Sl. No.	Description of	Time Allowed in days(from date of	Amount to be with-held in case of

	Milestone (Physical)	start)	non achievement of milestone
1			
2			
Clause applicable – (6 or 6A):	Clause 6 for Manual Billing or		6A
Clause – 7:	Gross work to be done together with net payment / adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment.		Rs. 30.00 Lakh
Clause – 10A:	List of testing equipments to be provided by the contractor at site lab		
Cube mould 4 Set		Slump Cone	Tape , Vernier Calliper
Weighing Machine		Scale	Hammer
Clause – 10B(ii):NOT APPLICABLE			(Mobilisation Advance)
Whether Clause 10 B (ii) shall be applicable (If yes, Clause of Tender Condition to be followed along with following terms & conditions)			No
Clause – 10C:	Component of labour expressed as percent of value of the work		NOT APPLICABLE
Clause – 10CA:NOT APPLICABLE			
S. No	Materials Covered under this Clause	Nearest Materials for which All India	Basic Rate
1	Cement	Grey Cement	NOT APPLICABLE
2	Steel reinforcement bars	Steel (Rebars)	NOT APPLICABLE
3	Structural steel		
*Important Note: Escalation of prices is not applicable for this tender			
Clause – 10CC:.			

Clause 10 CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column.				NOT APPLICABLE
1				
2				
Clause – 11:				
Specifications to be followed for execution of this work				a) Civil Works
				b) Electrical Works
				c) Installation of pumps etc.
Clause –12:				
12.2 & 12.3	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for Building works			30%
12.5	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work			100%
12.5	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for maintenance work			50%
Clause – 16:	Competent Authority for deciding reduced rates :			Director,TMC
Clause – 18:	(to be incorporated by the Units, based on merit of the particular work)			
List of mandatory machinery, tools		Electrical Vibrators 04 Nos	Concrete Mixer	
Welding Machine		Barbending & Cutting	Hammer/ Drill/ Chisel	

Clause – 36(i):	Requirement of Technical Representative(s) & recovery Rate
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Sl.	Minimum Qualification of Technical Representative Designation (Principal Technical/ Technical representative)	Min.	No.	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36(i).
No.		Exp. In yrs.		
1	BE Civil Engineer	5	1	<i>Rs.25,000/-per month</i>
2	BE/ Diploma Civil Jr Engineer	2	1	<i>Rs.15,000/-per month</i>
3 <i>Supervisory/administrative staff – As required</i>				
Note: i) Assistant Engineers / Scientific Officer- “C” & above, retired from Govt. services that are holding Diploma, will be treated at par with Graduate Engineers.				

Clause –42:				
(i)	(a) Schedule/statement for determining theoretical quantity of cement on the basis of :			Civil works Specifications for TMC
(ii)	Variations permissible on theoretical quantities.			
A	Cement			
	i) for works with estimated cost put to tender not more than <i>Rs.5 Lakhs</i>			<i>5% plus / minus</i>
	ii) for works with estimated cost put to tender more than <i>Rs.5 Lakhs</i>			<i>3% plus / minus</i>
b	Bitumen for All works			<i>2.5% plus only & nil on minus side</i>
c	Steel reinforcement and structural steel sections			<i>(+) 5% for wastage, over & above (+) 5%/ (-) 4% being variation in wastage.</i>
D	All other materials.			Nil
RECOVERY RATES				

S. No.	Description of Item		<i>Rates in figures & words at which recovery shall be made from the Contractor</i>
		Excess wastage beyond	Less use Beyond permissible Limit
1	Cement		<i>Rs. 560/- per bag</i>
2	Steel reinforcement		<i>Rs. 96000/-/ Ton</i>
3	Structural Sections		



TATA MEMORIAL CENTRE

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Tender No:	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
Name of Work	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210
ACCEPTANCE FORM	
NAME OF THE AGENCY	

To,
The Director,
Advanced Centre for Treatment, Research & Education in Cancer (ACTREC),
Tata Memorial Centre,
Kharghar, Navi Mumbai- 410208.

Tender Ref: -----

Name of Work: Construction of Delay Decay tank for RRU Building at ACTREC

I/We read the various conditions to tender including general conditions and hereby agree to abide by the said conditions. I/we also agree to keep this tender open for acceptance for a period of 150 (One hundred Fifty) days from the date fixed for opening the same and in default thereof. I/we will be liable for forfeiture of my/our "Security Deposit" to Tata Memorial Centre, ACTREC. I/We will execute the work as per the quoted rates and hereby bind myself/ourselves to execute the work in all respects during the period of contract from the date of issue of letter of acceptance of the tender. I/we also hereby agree to abide DAE general conditions of the contract as amended from time to time and to carry out the work according to the drawings, specifications and special conditions of the contract laid down by ACTREC.

A sum of _____ - is hereby forwarded as Earnest Money in the form of D.D/ Bank's P.O. through receipt No. _____ dated _____ for Rs. _____ The full value of Earnest Money shall stand forfeited without prejudice to any other rights to remedies if:-

A) I/we do not execute the contract documents immediately after getting information from ACTREC.

B) I/we do not commence the work within 15 days after issue of the letter including work order to that effect. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed between us indicated in the letter of acceptance of my/our offer for this work.

Date:

Seal and Signature.



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CANCER (ACTREC).**

A GRANT-IN-AID INSTITUTE UNDER DEPARTMENT OF ATOMIC ENERGY, GOVERNMENT OF INDIA

Tender No:	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
Tender Name:	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210

SPECIAL CONDITIONS OF CONTRACT

NAME OF THE AGENCY	
1	<u>ELIGIBILITY CRITERIA:</u>
a)	It must be noted that the tenderer should not have been blacklisted by any Government Agency/Institutions of local self Government / Public Sector in India under any contractual relation with them or facing process of penal action as such on complaints of quality. Director, ACTREC reserves the right for insisting upon submission of Satisfactory Performance Certificate issued by any such agency.
b)	There shall be a screening/verification committee appointed by Director ACTREC to examine the list of documents and to verify credibility of the tenderer based on the performance certificate issued/site visit and desirable as per terms & conditions attached to the Tender and to report in details on the eligibility of tenderers for further examination to the competent authority. The Tenderers are required to produce the original documents for verification if required for the screening/verification committee.
c)	Tenderer who carried out similar nature works shall mean as given in clause 13 and 14 of General instruction to tenderer.
d)	Awarding work order will be strictly as per "L1 criteria" .
e)	Bidders preferably should have their office / technical support team in the vicinity of Navi Mumbai/Mumbai area.(MMRD)
f)	Competent Authority reserves right to accept or reject the offer in whole or in part and award the work in whole or in part, as per norms/policies accepted by the centre.

2	<u>Scope of Work:</u>
a)	construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC as per the technical specification and other tender documents.
b)	Detailed Scope shall be as mentioned in the General Conditions of Contract and as per the technical specification document which are binding to the contractor.
c)	All related work Electrical, mechanical, and Civil including Piping are part of total work and contractor has to ensure completion of all the components so that the project is completed in all respect.
d)	Technical specification as mentioned in financial bid/BOQ shall be followed stringently.
e)	Transportation of related materials from the factory/ customs (if imported) to ACTREC, Kharghar installation site , unloading, keeping the same at site appropriately for execution and installation thereafter.
f)	Bidder to give 1 year comprehensive warrantee after completion and handover of project. i.e.Agency to provide maintenance service alongwith replacement of units, providing and fixing spare parts etc. during defect liability period free of cost. Any defects to be rectified within 24 hours. Failure to do the same may incurr penalty of Rs 10,000/day till the amount reaches total amount of security deposit.
g)	All the features/functionalities must be shown and tested before completion certificate is issued for settlement of final payment. Bill will be settled as per actual measurement.
h)	ACTREC is a running institution which includes hospital activities etc. hence, Bidder should appoint qualified and experienced project manager to schedule and implement the project with least disturbance to ongoing works/patients and their relatives.
i)	Bidder should submit all the necessary catalogues, Brochures , as laid drawings/schematic, test reports, certificates, undertakings etc. as required before settling of payment. All liasoning work to obtain NOC/CC/OC approval, license etc. from related authorities if required statutorily.
j)	Bidder should provide training to Engineering for operation & maintenance. Operational training to ACTREC staff is to be given in ACTREC itself.
k)	Material delivery may be done at sites accordingly. Once the order is issued, bidder to contact respective engineer-in-charge for administrative activities, challans, gate pass, submission of bills, any other site related activities etc.
l)	During the execution process damage on ACTREC property shall be repaired by the contractor without any additional cost.

m)	Bidder must be capable to handle this turnkey job that includes related civil works for tank, electrical and mechanical work with desired functionality and pipeline work of domestic water pipe lines.
n)	Schematic/SLD/block or conceptual Dia/layout/GA drawing to be prepared by the bidder. Approval must be sought on the drawings before actual commencement of work along with plan of execution.
o)	After water proofing of tanks as per BOQ items, test shall be conducted to identify any leakage and same to be addressed considering all the remedial measures including but not limited to application of micro concrete or polymer modified mortar as per the instruction of engineer incharge no additional payment shall be given for the same.

3	<u>PRICE BID</u>
a)	The tenderer should quote the price inclusive of all taxes and levies but exclusive of GST of the each items on the Schedule of Quantity enclosed with the tender documents and signature & stamp thereon each page, in separate sealed cover, super scribing name of work indicating 'PRICE BID'. (Price bid submitted other than above form will be rejected). Partial/incomplete offers are liable for rejection as the entire work is considered as one work and L1 will be decided by adding rates/amounts quoted for entire items of Schedule of Quantity as a composite work. If the tenderer does not qualify himself in the technical bid, the price bid offered will not be entertained. In case of unsuccessful bidders in the technical bid, price bid will not be opened. Price Bid is only in the form of ON LINE version.
b)	In the schedule of quantities, if rates are not quoted for items or if a firm quotes " NIL/N.A./Not applicable/----/ Leaving blank space etc." charges, the bid shall be treated as unresponsive and will not be considered.
c)	Validity of rates: 240 Days from the opening of the tender.
d)	Defect Liability Period: 1 Year comprehensive warranty after completion and handing over of project.
e)	Stipulated time for completion of work : 8 Months.
4	<u>LIQUIDATED DAMAGE</u>
a)	Successful tenderer will have to commence/execute the work as per the order placed by email/soft copy/LOI/Work order within the stipulated time period mentioned in the order. In failure to do so, the performance security submitted by the firm will be forfeited. In the event of the contractor fail to comply with conditions of this contract, he shall be liable to pay a compensation for non commitment of work as per order or for the delay an amount equal to 1.0% per month delay to be computed on per day basis, provided that the entire amount of compensation to be paid shall not exceed 10% of the estimated cost of the work. If the work is not completed within the stipulated time period as mentioned in the work order or inferior nature of work, the engineer in-charge has the right to terminate the whole work or part and get the work done from other agency at the risk and cost of tenderer and access money will be recovered from any dues. Liquidated damage can be recovered from EMD, Performance Security, Security Deposit or running bills of the Tenderer. Extension in delivery of work will not be given except in exceptional circumstances. The defaulting tenderer will be debarred from participant of any tender of ACTREC.

5	<u>ARBITRATION</u>
a)	In the event of any dispute arising between ACTREC and the contractor in any matter covered by this contract or arising directly or indirectly there from or connected or concerned with the said contract in any manner of the implementation of any terms and conditions of the said contract, the matter shall be referred to the Director, ACTREC who may himself act as sole arbitrator or may name as sole arbitrator an officer of ACTREC/TMH notwithstanding the fact that such officer has been directly or indirectly associated with this contract and the provisions of the Indian Arbitration Conciliation Act, 1996 shall apply to such arbitration. The contractor expressly agrees that the arbitration proceedings shall be held at MUMBAI/NAVI MUMBAI.
6	<u>DIRECTOR-ACTREC/THE TENDER COMMITTEE / TENDERING AUTHORITY / UNDERSIGNED RESERVE THE RIGHT:</u>
a)	To reject any / or all the Tenders at any stage without assigning any reason there of and not accept the lowest Tenders.
b)	To procure any item of the tender directly from State / Central govt. Undertaking at government rate even if a tender of other parties for the same item has been offered / accepted / approved.
c)	To reject abnormally low price of an item quoted by the tenderer in the Tender with some malafide intention.
d)	Officer authorised on behalf of the Director-TMC does not bind himself/herself to accept the lowest or any other offer & reserve the right to cancel, reduce or split the contract on more than one source without assigning any reason for such action.
e)	DIRECTOR-TMC reserves right to accept the tender in full or part with out assigning any reason.
7	<u>RISK PURCHASE</u>
a)	In the event of failure to execute the contract to the satisfaction of the engineer in-charge he has the reserves the right:
b)	To reject any part of the contract executed and withhold payment for such portion of the contract till such time the defects are rectified to the satisfaction of the Engineer In-charge.
c)	To terminate the contract by giving 2 weeks notice in writing without assigning any reason and to get the contract executed by other agency at the risk and cost of the contractor.

8	<u>GENERAL LIEN</u>
a)	Whenever under this contract any sum of money is recoverable from and payable by the contractor, ACTREC shall be entitled to recover such sum by appropriating in part or in whole the security deposit of the contractor, if a security is taken from the contractor. In the event of the security being insufficient or if no security has been taken from the contractor, the balance or the sum recoverable, as may be shall be deducted from any sum due to the contractor or which at any time thereafter may become due to the contractor under this or any other contract with the ACTREC. Should this sum be not sufficient to cover the full amount recoverable, the contractor shall pay to the ACTREC on demand the remaining balance due.
9	<u>RECTIFICATION OF WORK/REPLACEMENT OF DEFECTIVE SUPPLY</u>
a)	In any supply item or any part of work is found defective or fails to meet the requirements of the contract before it is accepted, the ACTREC shall give the contractor a notice setting forth details of such defects or failures and the contractor shall forthwith arrange to set right the defective work or replace the defective supply by the good one to make it comply with the requirements of the contract. This in any case shall be completed within a period not exceeding one month from the date of the initial report pointing out the defects. The replacement or rectification shall be made at site by the contractor at free of cost. Should the contractor fail to do the needful within this stipulated time frame, ACTREC reserves the right to reject the work/equipment in full or in part and get it replaced at the cost of the contractor. The cost of any such replacement made by the ACTREC shall be deducted from the amount payable to the contractor against this work order.
10	<u>TERMINATION FOR DEFAULT</u>
a)	ACTREC, may without prejudice to any other remedy for breach of contract, by written notice of default, sent to the contractor, for termination of this contract in whole or in part;
b)	If the bidder fails to deliver any or all the work within the time period (s) specified in the contract, or any extension thereof granted by ACTREC.
c)	If the bidder fails to perform any other obligation(s) under the contract.
d)	If the bidder in either of the above circumstances, does not remedy his failure within a period of 15 days (or such longer period as ACTREC may authorize in writing) after receipt of the default notice from ACTREC on a notice period of 30 days.
e)	In the event of ACTREC terminate the contract in whole or in part pursuant to above para the ACTREC may execute the work upon such term and in such manner as it deems appropriate work similar to those undelivered and bidder shall be liable to ACTREC for any excess cost for such similar work. However, the bidder shall continue the performance of the contract to the extent not terminated.

11	<u>ADDITIONAL OR EXTRA WORK</u>
a)	ACTREC reserve the right to place extra items other than schedule quantity for completion of given work order. In such cases the Engineer In-charge calculate the expenditure for supply and execution of such work by taking quotation from local agency and adding applicable levies, labor charges, incidental expenditure, profit etc. as per the normal procedure to arrive suitable rate. He may also obtain the expenditure of the extra item either from CPWD manual or from the work order executed for government organization for similar work in the recent past. If the quantity of work is exceeding more than 10%, Engineer-in-Charge should be informed the same and execution should be done only after prior approval.
b)	ACTREC also has the reserve to modify the quantity of items in work order to add/reduce/cancel as per the site requirements or execute and add quantity related to rate only item quoted by bidder. Such additional quantity will be settled at the same rate and terms & conditions of the order on completion of work after taking final joint measurement.
c)	Bidder to inform in advance before executing additional/substitute/Quote rate quantity. Prior approval for the same should be obtained from ACTREC before execution.
12	<u>PAYMENT TERMS</u>
a)	100% payment on execution or on pro rata basis of each particular item as listed in Part A of financial bid.
c)	60% against delivery and satisfactory certification by engineer-In charge. (the contractor has to forward their bill enclosing the challans duly endorsed at security gate with receiver signature) for each particular item as listed in Part B of financial bid.
d)	20% against installation, Testing & commissioning with certification by Engineer In- Charge and consultant for each particular item as listed in Part B of financial bid.
e)	20% against completion/handover of project and submission of NOC/License/Approval certificates and handover of the system. (After all the parameters & functionalities has been checked and shown & confirmed with Dept.) for each particular item as listed in Part B of financial bid.
i)	Payment will be done as per actual measurement.
j)	Payment term other than above mentioned will not be accepted.
13	<u>FAIR WAGES</u>
	The bidder shall pay the monthly wages to the labours employed by him as per the minimum wages enforced by Labor Enforcement Authority of India on time to time in front of an ACTREC official, together with ESIC, Provident Fund, and Bonus etc. as applicable. The contractor will forward his bills for the work executed by him by attaching copies of salary slip signed by the worker for the current/previous month for early settlement of his bills.

	<u>Other Special conditions (This conditions overrule other condition specified anywhere in contract as applicable)</u>
1	The work to be carried out as per the instruction of Engineer-incharge
2	Material delivery challans to be submitted along with running and final bills
3	Deployed workers must have company Identity cards and should follow all safety as per the labour laws.
4	Material to be used of approved make with ISI mark as mentioned in schedule of rate and as per the instruction of Engineer-incharge.
5	Space for storage of material during execution of work will be provided if available in the ACTREC Premises to the contractor. But risk of theft/damage is the contractor's risk and TMH/ACTREC is not responsible for any theft/damage/fire.
6	During execution of works, contractor has to take adequate care of ongoing patients care services.
7	No mobilisation or secured advance will be paid to contractor.
8	The Contractor should depute Supervisor/Engineer at site during execution of works on each and every day and night as per the instructions given by Engineer - in charge.
9	If the contractor fails to clear the debris from premises then fine of Rs 10,000/truck will be charged and recovered.
10	Agency to bring his manpower to execute the works irrespective of quantity of work allotted.
11	Engineer incharge may prioritise one type of work over the other and the contractor has to abide as per the requirements.
12	Escalation is not applicable since the time period is less than 18 months for execution. Quoted/Negotiated Prices will remain firm for entire contractual period.

I have read the Above instructions carefully and understood in right perspective and agreed.

Date:

Seal and Signature.



**TATA MEMORIAL CENTRE
ADVANCED CENTRE FOR TREATMENT RESEARCH AND EDUCATION IN CANCER
(ACTREC).**

A GRANT-IN-AID INSTITUTE UNDER DEPARTMENT OF ATOMIC ENERGY, GOVERNMENT OF INDIA

Compliance form - 1

Tender No.	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
Name of work:	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210

Name of the Vendor		
Sr. No	Description	Compliance from agency
1	We have understood technical requirements and understood the same in right perspective.	
2	We have quoted for all the items in Financial Bid in the prescribed format of the tender documents.	
3	We have read the financial bid thoroughly before filling it and understood the same in right perspective	
4	We understood that partial/incomplete/vague offers are liable for rejection.	
5	We have understood the eligibility criteria as well as criteria for identifying lowest bidder.	
6	There are deviations from our(bidder) side.	
7	Deviations have been mentioned on separate page and attached with technical bid in detail. Deviation is supported with necessary documents, catalogues etc.	
8	We have noted that accepting or rejecting the deviation and consequently rights to qualify and disqualify the agency remains with competent authority of TMC- ACTREC.	
9	We have understood and accepted that accepting the tender & issuing order in full or in part will be decided by the TMC-ACTREC competent authority as per policy of the centre.	

Date

Signature



TATA MEMORIAL CENTRE
ADVANCED CENTRE FOR TREATMENT RESEARCH AND EDUCATION IN CANCER (ACTREC).

A GRANT-IN-AID INSTITUTE UNDER DEPARTMENT OF ATOMIC ENERGY, GOVERNMENT OF INDIA

Compliance form-2

Tender No.	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021	
Name of work:	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210	

Name of the Vendor				
Item No.	Description	Offered List of Make	We have read all item specification (Yes/No)	we have quoted against each item.(Yes/No)
1	Excavation mechanically (using excavators like JCB /Poclain/with bucket) in all types of soil, including murrum, soft rock for foundations, wall, columns, plinth beams, basement, raft, ducts, trenches, underground sumps, septic tanks, soak well including shoring and strutting, bailing out water/pumping off water if required, removing and stacking or Disposing simultaneously the excavated soil anywhere within the ACTREC Campus and/or spreading soils in layers for site development. All complete as per specification and as directed by the Engineer-incharge. (Dimension of tank will be measured for volumetric measurement payment for excess excavation will not be made)			
1a	For depth upto 1.5m.			
1b	For depth exceeding 1.5 upto 3m.			
1c	For depth exceeding 3m. upto 4.5m.			
2	Earth work in excavation by mechanical means in hard rock for foundations, wall, columns, plinth beams, basement, raft, ducts, trenches, underground sumps, septic tanks, soak well including shoring and strutting, bailing out water/pumping off water if required, removing and stacking or disposing simultaneously the excavated stuff anywhere within the ACTREC Campus and/or spreading soils in layers for site development. All complete as per specification and as directed by the Engineer-incharge. Blasting prohibited.			
2a	For depth exceeding upto 3m.			
2b	For depth exceeding 3m. upto 4.5m.			
3	Filling in plinth & superstructure under Floors/ Roads with selected excavated earth available within site, in layers of 15 cms. to 20 cms. Including watering, ramming consolidating to 15cm thick or so , by manually compaction or using mechanical plate compactor / vibro-roller etc (manual compaction will be permitted under special condition and as per engineer written instruction), finished to desire levels all as per drawings to get MPD of 95% as per detailed drawings. Including cost of transportation anywhere within site. all complete as per specification or as directed. (Note : Each Tank plinth area to have at least one set of test of MPD conducted irrespective of plinth area or for every 500 sqm of compacted area and part there of).			
4	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.			
5	Providing and laying in position ready mixed M15 grade plain cement concrete, with cement content as per approved design mix and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for plain cement concrete work, including pumping of R.M.C. from transit mixer to site of laying and curing, including the cost of centering, scaffolding, shuttering and finishing, including cost of curing, admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineerin-charge. (M15 grade at all locations upto plinth level). Including concreting for thrust block.			

Item No.	Description	Offered List of Make	We have read all item specification (Yes/No)	we have quoted against each item.(Yes/No)
6	Providing and laying in position ready mixed M-40 grade concrete for reinforced cement concrete work, cement content as per approved design mix, and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, including the cost of centering, scaffolding, shuttering, finishing, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate / retard setting of concrete, improve workability without impairing strength and durability and including supply and installation of PVC water stopper all as per direction of the Engineer - in - charge.			
6a	All works for Raft and haunch			
6b	All works for Wall			
6c	All works for Slab and beams etc.			
7	Providing and Fixing of reinforcement steel including material fabricating, trasporting, loading, unloading, storing on raised steel rack platform, handling, straightening, cutting to length, bending, making hooked ends, hoisting into place at all levels and heights and binding in position (including Providing & using 18 gauge binding wire) reinforcement bars of all diameters (IS 1786 ,Fe 500 of all grade) to shape and size as per approved bar bending schedules and structural drgs. for all kinds of works at all heights & depths as specified including cost of approved quality PVC/Concrete cover blocks, spacers, chairs at regular interval as per relevant IS code and such other works that are required to make it complete. Quantity of steel as per drawing, approved BBS and with authorized overlaps only shall be measured and paid for. Quantity for chairs and spacer bars will not be paid. The measurement shall be as per IS 1200 and reinforcement hooks and bends shall comply with the requirement of IS 2502 unless clearly specified above.			
8	Providing and applying internal water proofing with integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. Two Coat with 1.1Kg/Sqm. The product should be compatible for use in domestic tank (should be of food grade quality)			
9	Providing box type waterproofing on external face of Underground Water Tank side walls upto plinth level including preparation of surface as required of following operations: a) About 20 mm thick Shahabad stone slabs shall be fixed with cement sand grout 1:4 (1 cement : 4 sand). Grout mixed with water proofing compound 4% by weight by cement and joint well grouted and cured. b) External surface shall be plastered 20 mm thick with cement sand mortar 1:4 (1 cement : 4 sand) mixed with 4% by weight of water proof compound and in ratio roughened. c) Vertical joints shall be well cleaned and grouted to make sure it forms a continuous treatment. If required, joint may be treated with sealant. d) Treatment shall be taken about 300 mm above finished level. e) All pipes etc. coming out of walls shall be sealed by grouting with sealant.			
10	Dry stone rubble soling/pitching of 150 mm to 230mm size shall be approved quality, hard, free from cracks, durable, preferably black trap. Rubble shall be laid on leveled base close to give compact, surface. If base is not properly leveled same will have to be done without any extra cost. Voids in the joints shall be filled with selected chips. A sample of paving shall be prepared and got approved before proceeding ahead. After stones are laid with thickness of 200mm and packed with chips, sand shall be spread and watered to fill remaining voids. Sand shall be allowed to go into joints till final packing is obtained. Rate quoted shall be for materials, labour, watering, leveling site, before paving, consolidating etc. complete.			

Item No.	Description	Offered List of Make	We have read all item specification (Yes/No)	we have quoted against each item.(Yes/No)
11	Providing and fixing 560mm diameter CI Heavy Duty Cover over the tank as per specified size. Making the cover operatable in a manner of open/close with necessary fixtures & fittings. The opening area to be measured. The drawing to be approved by EIC.			
12	Internal epoxy coated (after applying primer) Ladder to enter the tank with approved design as per the instruction of Engineer incharge.			
13	External Ladder to enter the tank with approved design as per the instruction of Engineer incharge.			
14	Providing and constructing AAC Light weight Block Masonary with 75mm/100mm/150mm/200mm/300mm thick at all levels in by using approved block laying polymer modified adhesive mortar, including 75mm thick Patli / Stiffeners of M-15 Grade at every 1000mm with 2 nos 8mm steel bars all to be considered in the cost and no separate measurement will be done for steel and patli, also including scaffolding, racking out joints, curing with curing compound etc. in line, level and plumb, All complete as per specification for all height of floor or as directed etc. (Rate includes the cost of stiffners hoop). (No holes for scaffolding will be permitted into the blockwork)			
15	Providing and applying Internal 12 mm to 15mm thick plain/smooth cement plaster finish at all heights and below highest plinth level in cement mortar using Ready mix plaster as per manufacturer specification including 150mm PVC Chicken mesh on both sides of joint, making pattas, bends, grooves, over any bricks or concrete surfaces in single layer as specified smooth finished including preparing the surfaces close hacking of concrete surfaces, curing, double scaffolding to the walls, beams, stair, column, pardis, bends, moulds, pattas, grooves etc. in line, level and plumb, all complete as per specification or as directed. (No holes for scaffolding will be permitted into the blockwork)			
16	Providing and applying External 18 mm thick sand face cement plaster in two coats at all heights below and above highest plinth level with first coat of 12 mm thickness with cemet mortar, using readymix plaster mixed as per manufacturer specifications including roughening by cross hatch line to receive top coat of 6 mm thickness with cement mortar and 10-12mm thick single coat plaster under chajja soffit, including 150mm PVC Chicken mesh on both sides of joint, recron fibre, mixing with additional waterproofing compounds including making drip moulds, bends, pattas, grooves (grooves have to be finish with neat cement mixed with waterproofing compound) as per drawing/ details,including double scaffolding , curing with curing compound etc. in line, level and plumb, all complete as per specification or as directed. (No holes for scaffolding will be permitted into the brickwork)			
17	Providing & Applying one / two coats of primer & thereafter two coats of paint as mentioned below of approved make First quality Asian Paints (Apolite) / Goodlass Nerolac/ ICI to the required colour scheme and as per manufacturers instructions / specifications to the walls, beams, columns, ceilings, partitions doors etc. including thoroughly scrapping the existing surface with sand papers, removing old paint, filling up crevices and levelling with waterproof putty / plaster of paris of necessary to obtain smooth surface etc. complete job including removal of stains, painting spots on floors,aluminium window frame & glass etc as to the entire satisfaction of engineer in charge Two Coat Acrylic Emulsion paint			
18	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate, 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacture's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.			
19	Providing and Applying and Levelling the existing surface with Birla White Cement based / Coloured waterproof Putti of average thickness of 1 mm of approved thickness, brand and manufacture, over the plastered wall surface to prepare the surface even and smooth ready for painting purpose etc complete (Rate inclusive of Scaffolding Matetrial, Labour Charges) Etc.			

Item No.	Description	Offered List of Make	We have read all item specification (Yes/No)	we have quoted against each item.(Yes/No)
20	Providing and laying cement water-proofing (including grouting) of average 115 mm thick for balcony, terrace, returns (watta), khurras etc at all the levels including grouting with layer of 20 mm thick cement mortar 1:3 (1 part cement : 3 part coarse sand) mixed with water proofing compound of approved make and as specified by the manufacturer, laying brick bats of required size impregnating in to the base mortar bed with gap of 12 mm all around according to slope, level and curing the same, the gaps around brick bats filled with cement mortar 1:3 (1 part cement : 3 part coarse sand) mixed with waterproofing compound, 15 to 20 mm water proof screed layer above brick bats and finishing top with neat cement @ 2.75 Kg/Sq.M. making square 300 x 300 mm chequered finish marks with string, finishing around rain water outlets, curing etc. in line, level and plumb / slope, complete including furnishing of guarantee for 10 years. The work should be carried out through an approved specialised agency like India Water Proofing Co. or equivalent. (note: The above rates shall be inclusive of Providing and mixing of waterproofing compound as per manufacturer's specifications) (Mode of Measurement : Only the plan area will be measured and No additional measurements will be done for wattas, khurras etc)			
21	ALUMINUM OPENABLE WINDOWSPROVIDING & fixing in position aluminium openable window shutter fully glazed / aluminium grills with using 5.5mm thick glass sheet of approved make and quality plain / frusted / bajari glass of approved make Triveni / Shri Vallabh /J / A/ G/ pilkinten fixed with aluminium beeding channels with two way rubber gasket / PVC lining to ensure water tightness and Nos rattling for aluminium grill fixing with Fchannel beeding using satin finish aNosdized 15 micron jindaL sections for shutters and frame of required size and section including using aluminium / S.S. hinges of required size of Archies make, tower bolt of required size of Archies make , C type alum handle for shutter of Archies make and other necessary hardware as per requirement etc.with granite frame Openable windows with glass shutters complete all as per specified and directed by Engineer in charge.			
22	SITC for Rubber Isolation Pads for Pump Foundations as per the instruction of Engineer in charge.			
23	Cable Trench with Removable Chequered Plate Covers as per the instruction of engineer incharge			
24	Suction Pipe Nozzles with Puddle Flanges 250 mm dia			
25	Inlet Pipe Nozzles with Flanges 75 mm dia			
26	Tanker Water Inlet Nozzles at the Top Slab 150 mm dia			
27	Top Slab Vents with Mosquito Net Covers 75 mm dia			
28	Overflow Pipe Sleeves 100 mm dia			
29	SITC of Conventional Earthing System with the Provision of watering facility and Inspection chamber as per specification mentioned (including tinned copper plate 600X600X3mm and copper strip 25X3mm) Earthing work including all the necessary fixtures and copper strip lining work complete as per the instruction of Engineer incharge.			
30	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters. 80x1.20 mm M.S. laths with 1.20 mm thick top cover			
31	Providing and fixing P.V.C. pipes 100mm dia for pipes having wall thickness of 2.2 to 2.7 mm confirming to I.S. 13592- 1992 including proper rainwater receiving recess with P.V.C. plug, bend, necessary fittings, such as, offsets, shoes, including fixing the pipe on wall using approved wooden cleats projecting 25mm to 40mm from face of wall a fixing with clips of approved quality and number ,filing the joint using rubber gasket with solvent cement and properly resting the shoe of pipes on C.C. or masonry blocks, including necessary scaffolding and maintenance for 3 yrs for any leakages or dislocations of pipes. All the P.V.C. fittings and additional 2 piece socket clips shall be got approved from engineer in charge etc. complete. (Pipes to laid in Shaft for Risers- 6kg for AC drain & Vent pipe)			
32	RCC Pump Foundations for Pumps, Pressure Tank & Panel as per the instruction of Engineer incharge.			

Item No.	Description	Offered List of Make	We have read all item specification (Yes/No)	we have quoted against each item.(Yes/No)
33	Excavation of Road crossing (1.2 mX 1.2m), Backfilling, Soling below PCC / Road, M-15 PCC below Hume pipe and RCC Slab, M-25 grade 150 mm thk. RCC Slab including shuttering and Reinforcement & Complete.for both Fire Pipe & Electrical Cables			
34	Thrust block to support pipe where pipe changes direction, minimum 600mm with RCC supports the dead ends and under pillar hydrants			
35	Providing Mechanical Scaffolding, Scissor Lift or Boom Lifts with supervisory, safety manpower as per ACTREC Safety Standards wherever required.			
36	SITC of Transfer Pump & Motor System (from Existing Water Tank to Proposed Water Tank) 100 M3/Hr. @ 50 m head (1W + 1S) Main Potable Water Centrifugal Pump & Motor Set of 30 HP each ,PN 16 rated with Bronze Impeller, Cast Iron Housing pump set with fixed speed and Dedicated Control Panel for Transfer Pump & Motor Set , with IE3 Motors, Efficiency of Systems shall be above 70% for potable water system with a dedicated control panel as per NBC 2016 Pump & Controllers to be EN/ISI Approved and as per specification with CI Body, Bronze impeller, SS 304 shaft and 300 Liter with 10 Bar Pressure Tank with pressure gauge and intelligent pressure transmitter . Both tor & Pump Provided on common base frame including Skid of SS 304 Polished coupling, With SS Suction & Discharge Valves & NRV for Individual pumps as per P & ID , anti vibration pad, seismic bracing, coupling guard, pressure transmitter with indication LED light, necessary flanges, gaskets, GI nut/bolts, pipe fittings , railing & coupling guards for pumps and motors,. Pumps & Motors should be provided with required GI/SS foundation bolts and installation plates as necessary for mounting on civil foundation platform. SS Name plate shall be provided of size 3 Inch X 4 Inches for each pump Glving Flow Rate in M3/Hr and Head in mtrs, with Motor ratings in KW & HP, Make : Ebara, Kirloskar, Grundfos.No parts or system shall be of Chinese origin			
37	SITC of Hydro Pneumatic (HPN) Pump & Motor System for Delivering Water from Proposed Water Tank to Phase 1 Network 60 M3/Hr. @ 100m (1W + 1S) head Main Electric motor driven Vertical Inline Potable Water Centrifugal Pump & Motor Set of 30 HP each, Bronze Impeller,SS Shaft pump set with VFD per Motor & pump set and Dedicated Main Control Panel for HPN System & Jockey Pump as in 2b.System will be PN 16 rated. All pumps will be with IE 3 Motors for potable water system with a dedicated control panel as per NBC 2016 Pump & Controllers to be ISI Approved and as per specification with Bronze Impeller, SS 304 shaft, , Bottom & Top Casing in CI, and 500 Liters, 16 Bar Pressure Tank with prssure gauge Provided on common base plate including Skid of SS 304 Polished coupling, With SS 304 Valves in Suction & DIscharge and NRV for Individual pumps , integral pressure transmitter with LED light anti vibration pad, seismic bracing, coupling guard, necessary flanges, gaskets, GI nut/bolts, pipe fittings , railing & guards for pumps,. Pumps should be provided with required GI foundation bolts and installation plates as necessary for mounting on civil foundation platform. SS Name plate 2 Inch X 3 Inches for each pump Glving Flow Rate in M3/Hr and Head in mtrs, with Motor ratings in KW & HP, Make: Ebara, Kirloskar. No parts or system shall be of Chinese origin			
38	SITC of 20 M3/Hr @ 100 m head, 15 HP Electric motor driven Vertical Inline Jockey Pump & Motor set integrated in central control panel of HPN pumps as per NBC 2016 , IS and as per specification with Bronze impeller, SS shaft SS Chamber , CI Top & Bottom Casing, with VFD for Pump and all Valves in Suction & Discharge & NRV, foundation bolt, etc with SS Name plate 12 Inch X 6 Inches for each pump, motor Giving Flow Rate in M3/Hr and Head in mtrs, with Motor ratings in KW & HP .The package shall include the controller, VFD Drive as per specifications Given. Auto & Manual Operation , Make: Ebara, Kirloskar, Grundfos. No parts or system shall be of Chinese origin			
39	150 mm SS 316 Bourdon type Glycerin Filled Pressure gauge (150mm dial) with gauge cock - range 0-16 kg/sq.cm(g), gauges should be fitted on both suction and discharge headers . Gauges in Suction shall be compound type, Make: Wika, H - Guru, Waree			
40	150 mm SS 316 Bourdon type Glycerin Filled Normal Pressure gauge (150mm dial) with gauge cock - range 0-16 kg/sq.cm(g), gauges should be fitted on both suction and discharge headers . Gauges in Suction shall be compound type, Make: Wika, H - Guru, Waree			

Item No.	Description	Offered List of Make	We have read all item specification (Yes/No)	we have quoted against each item.(Yes/No)
41	Piping in the pump house (aboveground) : SITC of SS 304 External Polished & Buffed Pipe Conforming to (ASTM A312) , Heavy Class, Upto 150 NB Schedule 10. For 100 NB , 80 NB, 25 NB shall be Schedule 40 including fitting, elbows, tees, reducers, painting, support, nuts, bolts, washers, gaskets etc as required with Argon Gas Welding and Welding Electrodes as per tender requirements, Al Pipes shall be despatched with End caps Make: Tata/Jindal/Roopam Steel			
41a	200mm dia.			
41b	150mm dia.			
41c	100mm dia.			
41d	80 mm dia.			
41e	50 mm dia.			
41f	25mm dia.			
41g	15mm dia.			
42	SITC of Cast Steel (may include SS 304 component) Gate Valves with flanged ends with matching companion flages as per API 600, Class 150 , PN 20 rating OS & Y Type Raising Stem type Gate Valve , Maximum Working Pressure 300 psi, Hydrostatic pressure 600psi for Potable Water Service, Refer Datasheet for detailed specifications			
42a	200mm dia.			
42b	150mm dia.			
42c	100mm dia.			
42d	80mm dia.			
42e	50mm dia.			
43	SITC of Cast Steel (may include SS 304 component) Check Valve as per BS 1868 with flanged ends with matching companion flanges, Class 150 , PN 20 rating , Maximum Working Pressure 300 psi, Hydrostatic pressure 30 bar for Potable Water Service, Refer Datasheet for detailed specifications			
43a	150 mm dia			
43b	100 mm dia			
43c	80 mm dia			
44	SITC of Cast Steel (may include SS 304 component) Y Type strainer with flanged ends with matching companion flanges, Class 150 , PN 20 rating , Maximum Working Pressure 300 psi, Hydrostatic pressure 30 bar for Potable Water Service, Shall have SS 304 Mesh of 1.5 mm holes and mesh shall be removable and cleanable. Refer Datasheet for detailed specifications			
44a	150 mm dia			
44b	100 mm dia			
44c	80 mm dia			
45	SS 304, Ball Typ Non return valve with matching flanges , PN 20 rating, fittings, nuts, bolts, washers etc., Make : Valves - Hawa / L& T Audco / Kirloskar / Azbil/ Flowserve			
45a	150 mm dia.			
46	Supplying and installing SS 304 double flanged Ball typ NRV valve PN 20 rating with matching flanges of following sizes conforming to ISI mark, having SS body and SS working parts with matching flanges, nut bolts, gaskets, etc. complete in all respect , Make : Valves - Hawa / L& T Audco / Cair Automation / Kirloskar / Azbil/ Flowserve/Rapid			
46a	150mm dia.			
46b	50mm dia.			
47	SITC of 150 mm dia Electro magnetic type flow meter with flange connections for the test header and meter range shall be 50% - 200% of the nominal flow and direct digital display, 4- 20 mA & HART output, direct reading type as per datasheet			
48	SS 304 Ball valves as per IS:9890 - screwed type			
48a	25mm dia.			
49	12 Nos Upright Type Sprinklers K115, UL Listed or FM Approved operating at 79 degC inside the pump house with required piping, alarm valve, gong bell, reducer, test sprinkler, flow switch flushing line, etc tapp off from main sprinkler line from fire pump house			
50	4 Nos of Smoke Cum heat addressable detector, Manual Call point , control Module, Horn & Strobe of Notifier Make with alarm & 2 C X 2.5 sq mm FRLS Copper cabling in 25mm GI conduit in pump house to be installed and integrated with main complex fire alarm system of plant, all connections to be provided in terminating junction boxes, all excavations as needed for taking cabling to nearest panel shall be in vendors scope			

Item No.	Description	Offered List of Make	We have read all item specification (Yes/No)	we have quoted against each item.(Yes/No)
51	Electrical Hoist Fitted on Hook with Chain Pulley System for Maintenance of Pumps & motors on Pump House Ceiling			
52	SS Nozzles & SS pipe Sleeves as required for Suction, Delivery, Flow Meter, Overflow, Inlet, Outlet, Bypass, with individual puddle flange			
53	SS Pressure Reducing Valves with Adjustable pressure range from 2 - 12 Bar, pressure gauge to be provided with adjustable range control Make: Vanaz, Claval, Newage			
54	SITC of Power Distribution Board free standing type MCC Panel as per IS/IEC 61349, Copper Busbars, Copper rods of 16mm for panel earthing, Caution signages and Electrical Safety built within panel, Siemens Grey Colour of MS 1.6mm CRCA thickness with 7 tank process of manufacture, colour powder coated to Siemens Grey with 100mm Base frame, minimum dimensions of 2100X 2000 X 800 (H X W X D) mm with base frame of 100mm with gland plate MCCB/Breaker, Load Manager, Overload relays, Contactor, Star Delta Starter etc in Type 2 coordination for individual motor loads (all motors are IE3 Motors, so all compnents shall be accordingly selected) as shown in distribution board drawing (for Controllers & Curret Meter, Pumps of Transfer Pumps (30 HP 1W + 1S) & Hydropneumatic Pumps (30 HP 2W) & Jockey Pump (1No. 15 HP) . It may happen that Transfer Pumps, HPN Pumps & Jockey Pump can run simultaneously at one time. Lighting Load 63A, Emergency Back Up System ligting lod 32A , Space Heater, Inside lighting on Door Open and Auto Supply Cut off switch, Auto Transfer Switch 400A with two incomers of main & standby power wired directly from two individual feeders , 400 A Incomer MCCB, 200 A MCCB for Transfer Pumps and 200A for Hydropneumatic System, Pump House Lighting & Exhaust Fan MPCB 63 A. spare 3 phase 63 A Connection for connecting 3 phase loads as per enclosed drawing and in line with NBC, CIDCO, ACTREC Electrical & Safety Standards. All cable glands SS 304, IP 65 and Double compression type. Panel shall have removable lifting eyebolts. Two Place grounding on panel Panel board should have access below the panel of at least 1000mm and hence panel should be rested on required supports or RCC with access platform in RCC			
	The Control Panel Manufacturer shall have CPRI , CE , Approval, Company Shall be ISO 9001 certified. The Panel shall be of the following .Consider BMS contacts around 30 Nos for PLC system. Manufacturer shall have CPRI , CE , Approval, Company Shall be ISO 9001 certified. The Panel shall be of the following Make Only. : L & T, Siemens, Schneider, Elecmec			
55	SITC Of Micro Plc System with CPU, Redundant Power Supply of 24VDC 10A, 2 Nos Analog Inputs, 8 Nos Digital Inputs and 8 Nos Digital Outputs in Wall Mounted IP 55 Panel with surge protection and UPS power provided through 230V AC, 50 Hz connection			
56	Level Switches with Capacitance detection provision, Settable Alarm Limits, Probe Lengths as per Tank depth , LL & HH Alarm Outputs in form of pot free contacts, built in DC power supply, 230 VAC, 50 hz or 24VDC operation for Water Service with IP 68 protection , with Controller and alarm			
57	Level Transmitters with Ultrasonic detection provision, Digital Display of Levels . Settable Alarm Limits, Probe Lengths as per Tank depth , LL & HH Alarm Outputs in form of pot free contacts, built in DC power supply, 230 VAC, 50 hz or 24VDC operation for Water Service with IP 68 protection , with Controller and alarm			
58	SITC of Armoured PVC/XLPE Insulated FRLS Copper Cable, 1100V, Tinned Copper, Shielded (for Instrumentation) , Twisted (for communication) , Wherever in building in 25mm GI Conduit for LV System, LT Cables on GI Cable Trays or Excavated in Soft soil , Road crossing, Remaking of road, Make : Polycab/Metaplast/ Lapp/Belden/ Supercab/Ramco			
58a	3C X 2.5 sq mm			
58b	3C X 4 Sq mm			
58c	3C X 10 sq mm			
58d	3C X 16 Sq mm			
58e	3C X 150 Sqmm			
59	SITC of CAT 6 Cable Armoured			
60	SITC of GI Perorated Cable Trays 50 X 50mm X 16 SWG with coupler plates, all mounting accessories for wall , column mounting			
61	SITC of GI Perorated Cable Trays 300 X 50mm X 14 SWG with coupler plates all mounting accessories for wall , column mounting			
62	SITC of Copper strip of size 25mmX3mm, copper strip shall be ETP grade only.			

Item No.	Description	Offered List of Make	We have read all item specification (Yes/No)	we have quoted against each item.(Yes/No)
63	SITC of 2 Port Switches , Make : CISCO, D Link, Synergy			
64	SITC of 24 Port Switches , Make : CISCO, D Link, Synergy			
65	SITC of Pentium Computer , 8GB RAM, 2 TB HDD, 21 Inch Colour LED Monitor, Keyboard, Mouse, Licensd WINDOWS10 Software, Licensed Copy of MS Office, Antivirus, GUI Software with SCADA Performance, MIMIC Screen made for the entire water management system, 2 KVA UPS with 30 minuyetes Back up and Laserjet Printer, Make: Dell, HP			
66	SITC of Electrical Fittings for Pump house like 4 X 18 W LED tubelights, 1250 CFM X 2 Nos Exhaust Fans, with wiring, switches complete in all respect			
67	SITC of Dry powder type (gas cartridge) with cylinder initially fully charged with dry chemical powder (ABC type) complete with standard discharge valve with tube, as per NFPA 10 & also should be suitable for Supply, O & M as per IS 2190			
67a	6 kg. Capacity			
67b	9 kg. Capacity			
68	SITC of Carbon dioxide type with cylinder initially fully charged with CO2 gas complete with squeeze lever discharge valve, pressure gauge, discharge tube/horn, CI bracket for wall mounting etc.			
69	Sand Fire Buckets 4 Nos outside the pump House, Owens & Briquette Store,			
70	Electrical Fire Safety Auto Glow Signage's Illuminents of size 255 X 190 mm for EXITS, ELECTRICAL SAFETY, DANGER SIGNS, SLIP, TRIP & FALL, CAUTION 440V, UP, DOWN, as per MIDC Requirement and IS Standards 9457, IS 12349, IS 12407			
71	Underground Pipe : 150mm dia Domestic Yard Headers Underground with wrapping coating Type SS 304 Sch 10 Pipe as per above specifications type Scheule 10 along with fittings & with anticorrosive wrapping & coating as per IS 1standards 1/3rd overlap with 150mm wide and 4mm THICK TAPE.			
71a	150mm dia Domestic Yard Headers Underground with wrapping coating Type SS 304, Sch 10 Pipe as per above specifications type Schedule 10			
72	Supplying, installing and testing & commissioning above ground .Steel Pipe of Schedule 10 for domestic line of following sizes conforming to ASTM A 312 along with all fittings & with distinctly painted Sea Green Band at every 10 meter interval to IS: 2379 standard .Pipes will be polished externally and buffed with shining finish. The line will include all welding works of entire network with pipes, with welding electrode for SS lines, necessary fittings like Tee Branch, Tee Run, Elbow 45 & 90 degrees, Reducer, Coupling, flanges as required complete in all respects , 12mm Pipe Support Clamps with nuts for clamping on RCC Supports etc complete in all respect			
72a	150mm dia Domestic Yard Headers Type SS 304, Sch 10 Pipe as per above specifications type Scheule 10			
73	SITC of 80mm dia Domestic Wet Riser for Buildings in UPVC , Sch. 40, with all UPVC Fittings , GI Clamps 6mm thick included with saddling, clamping arrangements, with fixing glue Make: Astral, Finolex, Polycab			
74	SITC of Cast Steel Gate Valves, as per BS 1873 /BS 1868 with flanged ends with matching companion flages as per API 600, Class 150 , PN 20 rating OS & Y Type Raising Stem type Gate Valve , Blue Painted SS Steering wheels, LOTO to be provided for all valves Maximum Working Pressure 300 psi, Hydrostatic pressure 600psi for Potable Water Service, Refer Datasheet for detailed specifications			
74a	200 mm dia			
74b	150mm dia.			
74c	100mm dia.			
74d	80mm dia.			
75	SITC of SS 304 Y Strainer. With Wire Mesh Screen 40 , low pressure drop, easily maintainable, PN 16 rating with matching flanges			
75a	80mm dia.			
76	SS 304 Double Wafer Type NRV for Back flow prevention			
76a	80mm dia.			
77	SITC of Crash Guard for Road side Tapping Point s 6 Inch Pipe in Parking area			
78	GI Supports including angle, channel, beam, special fitting, plates & clamps required to support the pipe, skid			
79	SITC of 150mm SS 316 Glycerin filled Bourdon type Pressure gauge (150mm dial) with gauge cock - range 0-16 kg/sq.cm(g) for indicating pressure at 6 remote points, Make WIKA, H Guru, Waree			

Item No.	Description	Offered List of Make	We have read all item specification (Yes/No)	we have quoted against each item.(Yes/No)
80	SITC of SS 304 Pressure Relief Valve 6 " Inlet and 1" outlet to regulate pressure on over ground lines (on 4 corners of the network) due to water getting heated during summer times, water should not be wasted and should be diverted either to the tank or sumps, Make : Newage, Claval, Audco, Tyco			
81	SITC of SS 304 Drain Valves 6 " Inlet and 2 " outlet for maintenance and flushing of domestic line as per locations suggested by ACTREC, Make : Newage, Claval, Audco, Tyco			
82	SITC of Providing Blind flanges of 80mm dia. UPVC			
83	SITC of Providing Reducer 80 X 50 mm for UPVC network			
84	RCC Supports: For the Pipe upto 150 mm Dia with all mounting accessories , clamps, bolts, supporting beams, complete excavation, refilling, soling of 230mm, 100mm PCC, depth upto top of pipe of 750mm and final finishing in RCC on road/hard soil or enclosing with soft soil as required, rates can be renegotiated by Lupin on size of supports is reduced due to site conditions. GI Supports wherever RCC Supports are not possible ISMC 75 X 40			
85	NP2 class RCC hume pipes with collar complete provided with Inspection Chamber to check water leakage, pipe lengths should be suitable for required individual road width, no pipe length should be left loose during burying of hume pipe underground, adequate support system and packing, should be able to take load bearing of the vehicular movements on the specific road , burial depth 1000mm minimum or as per Company Civil standards with complete soling, PCC, RCC Work			
85a	450 mm dia, thickness 75mm as per IS458 latest edition			
86	Supplying, installing and testing & commissioning above ground .GI pipe of Schedule 10 for domestic line of following sizes conforming to ASTM A 312 along with all fittings & with distinctly painted Sea Green Band at every 10 meter interval to IS: 2379 standard .Pipes will be polished externally and buffed with shining finish. The line will include all welding works of entire network with pipes, with welding electrode for GI pipelines, necessary fittings like Tee Branch, Tee Run, Elbow 45 & 90 degrees, Reducer, Coupling, flanges as required complete in all respects , 12mm Pipe Support Clamps with nuts for clamping on RCC Supports etc complete in all respect			
86a	150mm dia Domestic Yard Headers Type GI pipe, Sch 10 Pipe as per above specifications type Scheule 10			

Date

Signature



TATA MEMORIAL CENTRE
ADVANCED CENTRE FOR TREATMENT RESEARCH AND
EDUCATION IN CANCER (ACTREC).

Tender No.	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
Name of work:	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210

List Of Makes

List of makes are only applicable if brand name is not mentioned specifically in the list of items as given in financial bid and also The following manufacturers are acceptable provided their products meet or exceed the Specifications and the Contract drawing schedules, ACTREC Kharghar reserves the right to suggest the preferred makes among the approved vendors.

Make of the items which are not covered in this tender, shall got approved from Engineer incharge before use.

Name of the Vendor		
S.No	Details of equipment/ material	Make/Manufacturer
1	For Main, Standby & Jockey Pumps with VFD wherever specified, Motors, Air Tank and Panel	Ebara, Grundfos, Kirloskar
2	SS 304 Pipes & Fittings	Sumitomo/Jindal/Tata/Roopam Steel
3	U PVC and CPVC Pipes & Fittings	Supreme/Astral/Finolex/Prince
4	SS Clamps	Hitech, United or equivalent with ISI mark
5	SS 304 Valves & Actuators (Gate, Sluice, Ball, Globe, Butterfly, NRV, Air Relief) :	L & T, Rapid Valves, Rotork, Kirloskar Valves, Hawa, , Claval, Normex, Audco, Gecomini, Cair Euromatic,
6	Pressure Switches	Danfoss/Indfoss/System Sensor(Honeywell)
7	Glycerin Filled Pressure Gauges	Warree, Baumer, Wika
8	Pot/Y Strainers	Armstrong, Bombay Chemical & Equipment Co., Acme, Wermer, Tecmara
9	Level, Pressure Transmitters	Siemens, Azbil, Honeywell, Wika
10	Water Dispensing RO System	Kent, Eureka Forbes
11	Aluminium Frame	Jindal, Hindalco
12	Glass	Modi, Saint Gobain, HNGIL
13	Stainless Steel	Jindal, SAIL, Indian Stainless Steel
14	SS Hardware	Godrej, Hettich, Dorma
15	Plumbing Fittings	Kohler, Jaguar, Grohe, Hindware
16	Ceramic, Vitrified Tiles	Kajaria, Somany, Johnson
17	SS Bolts Washers Nuts	Kundan Puja, Atul
18	Anchor Fastner/Dash Fastner/Pipe Support	Hilti / Fischer /Bosch/Mupro
19	Anti – Termite Treatment	It should be done by permanent members of IPCA as approved by Engineer-in-Charge/ As per CPWD/PWD specifications and ISI marked. Preapproval from EIC

20	Back up rod	Supreme Industry/Preapproval required for other brands
21	Batch Mix Concrete (BMC) / Ready Mix Concrete (RMC)	The RMC shall be procured from the source as approved by Engineer – in Charge. RMC Producing plants of the main Cement producers shall be preferred. L&T/ Lafarge/ ACC/ Birla/Ultratech
22	Brass - Stop & Bib Cock	Zoloto / Sant / Jaquar
23	C I Pipes & Fittings	Electrosteel/ Kapilansh/ NECO/ RIF
24	CI Valves (Full way, Check and Globe Valves)	Leader / Kirloskar/ Kartar
25	Cement	ACC / Ultra tech / JK Cement / Ambuja / Lafarge /Birla/RAMCO
26	Cement: White	Birla White / JK
27	Concrete Additive	Pidilite / Fosroc / Fairmate / MC Bauchemie/Sika/Cico
28	Cover /Spacer Block	Conbextra as manufactured by M/s Fosroc Chemicals India Ltd. / ASTRA
29	Epoxy Flooring	Fosroc/ Dr. Beck/ Flamaflor/ STP
30	Grout: Non-Shrink	Fosroc / Sikka or equivalent
31	Grouting Compound	Bal Endura/ Pidilite/ Laticrete/ Unitile
32	Paver blocks / Tiles (All Types)	KK / Uni Stone Products (India) Pvt. Ltd/ Hindustan Tiles/ NITCO/ Tile Italia/ Basanth
33	Pre-coated Galvanised Steel Sheet	Tata BlueScope / Llyod Insulations India Ltd / S.R.Metals
34	Reinforcement Steel / Structural Steel	SAIL/ RINL/ TATA Steel Ltd./ Jindal Steel & Power Ltd./ JSW Steel Ltd./ESSAR
35	Sealant: Poly-sulphide	Pidilite / Fosroc / CICO / Sikka / Choskey
36	Silicon sealants /Weather Sealant / Structural Glazing Sealant	GE- Silicon / Pidilite / Forsoc / Cico /Dow Corning / Sikka/ Wacker
37	Stone Adhesives	Fosroc / Sikka/Pidilite
38	Super plasticizer	CICO/ Roffes Construction Chemicals/ Pidilite / Vam Organics
39	Water Proofing Materials (Bitumenistic)	BASF/ Fosroc / Sikka / CICO / Pidilite
40	Pipe coat material (pipe protection)	RPG Raychem/Pypkote/Makphalt/Lwl
41	Pipe Fittings: GI	R/Unik/Zoloto/K.S./Sun/Swastik
42	Pipe:- GI	Jindal / Tata / Prakash Surya/SAIL/ Swastik
43	Pipes: MS	Jindal / Prakash – Surya /TATA
44	Pipes: RCC	Indian Hume Pipe / Pragati Concrete Udyog Daya/ KK / JSP
45	Electrical Contactors, Switchgears MCB, MCCB,ELCB, RCCB, RCBO Load Manager	Siemens, L & T/ Legrand
46	Electrical power & Control Cables	Polycab, Lapp, Metaplast, Belden, finolex, CCI
47	LT Motors	Siemens, Ebara, Grundfos, Kirloskar, WEG
48	PC & Monitor	Dell/HP/Lenovo
49	UPS	Emerson (Vertiv) Power, Siemens, APC
50	Electrical Instrumentation Panels & Cabinets	Rittal, Arrow Engineers, L & T, Schneider, Siemens, Elecmech Controls
51	Printer	HP. Epson, Canon
52	PLC & SCADA Devices	Siemens, Azbil
53	Flow Meter	Siemens, Azbil, Endress & Hauser
54	Filters (Sediment, Membrane, Carbon)	Thermax, Ion Exchange
55	Cable Gland	Comet / Braco / Dowell / 3D

56	Cable lugs	Comet / Braco / Dowell / 3D
57	Indicating lamps	Technik / L&T / IEC/ Seimens
58	Terminal blocks	Elmex / Wago/ Connectwell
59	Lighting Fixtures with electronic ballast	Wipro / Philips / Bajaj/ Cisca/ Crompton
60	Lighting distribution boards	Seimens / GE/ L&T
61	Annunciation	Minielec / Peacon /ICA
62	Power Capacitor	CG/L & T/ ABB/ Unister
63	Current / Potential Transformer	Kappa / Silkans / ABB / AE / Ashmore
64	Selector Switch	Kaycee / Hickson / L & T
65	Push Buttons	Tecknic /L&T/ Seimens
66	Timer	GEC, Siemens, L&T, Legrand
67	Cable Tray	Profab/Ercon/OBO Bettermann/Sadhna/Globe
68	Fire Alarm System	Honeywell/Notifier/Bosch
69	Exhaust Fan	Crompton/Almonrod/Bajaj



TATA MEMORIAL CENTRE
ADVANCED CENTRE FOR TREATMENT RESEARCH AND
EDUCATION IN CANCER (ACTREC).

Tender No.	TMC/ACTREC/ENGG/PG-68/ET-27/Domestic_water_tank/2021
Name of work:	Construction of 21 Lakh Litre Domestic water tank and allied water distribution network at ACTREC, Kharghar, Navi Mumbai - 410210

SR.NO.	DESCRIPTION	Item Data Sheet
1	Type	Pressure Reducing Valve with Glycerin filled SS Gauge with Tamper proof Glass Bezel
2	Pressure Adjustment Range of PRV	25 - 100 PSI
3	PRV Size	1/2 Inch, 3/4 Inch, 1 Inch, 2 Inch
4	Water Temperature	70 degree maximum
5	Environmental	Ambient: 0...70 °C
6		Humidity :99% RH max
7	Material	Case & Bezel:SS 304, Bourdon : SS 316L, Movement : SS 304, Socket : SS316:
8	Removable Bottom Plug for Cleaning	Required
9	Over Pressure Limit	30Bar
10	Body Material	Low Lead Bronze, Disc : EPDM,
11	Accessories Required	Inline mesh strainer, SS Tag plate, Gauge Connection with Glycerin filled 63mm SS pressure gauge for installing on downstream of PRV , Locking Cap
12	Service	Drinking Water
13	Maximum Inlet Pressure	25 Bar
14	Accuracy	1%, Calibration Certificate to NABL Lab traceability required
15	Approved Makes	Claval, Vanaz, Newage

SR.NO.	DESCRIPTION	Item Data Sheet
1	Type	Pressure Relief Sprig loaded Diaphragm Type Relief Valve with Glycerin filled SS Gauge with Tamper proof Glass Bezel
2	Pressure Adjustment Range of PRV	20 - 400 PSI
3	PRV Size	1 Inch
4	Water Temperature	70 degree maximum
5	Environmental	Ambient: 0...70 °C
6		Humidity :99% RH max
7	Material	Case & Bezel:SS 304, Bourdon : SS 316L, Movement : SS 304, Socket : SS316:
8	Removable Bottom Plug for Cleaning	Required
9	Over Pressure Limit	30Bar
10	Body Material	Low Lead Bronze, Trim :SS 303, Rubber Buna N Synthetic Rubber

11	Accessories Required	Inline mesh strainer, SS Tag plate, Gauge Connection with Glycerin filled 63mm SS pressure gauge for installing on downstream of PRV , Locking Cap
12	Service	Drinking Water
13	Maximum Inlet Pressure	25 Bar
14	Accuracy of Set Pressure	1%, Calibration Certificate to NABL Lab traceability required
15	Approved Makes PRV	Claval, Fraser Langer, Newage
16	Approved Makes Pressure Gauge	Warre, Wika, H Guru, Dwyer

SR.NO.	DESCRIPTION	Item Data Sheet
1	Type	Glycerin filled SS Gauge with Tamper proof Glass Bezel
2	Measuring Range for Pressure	0 - 16 kg/cm ²
3	Dial Size	100mm or 4 Inch
4		
5	Environmental	Ambient: 0...70 °C
6		Humidity :99% RH max
7	Material	Case & Bezel:SS 304, Bourdon : SS 316L, Movement : SS 304, Socket : SS316:
8	Protection Class	IP - 65
9	Over Pressure Limit	30Bar
10	Body Material	SS , Socket shall be directly welded to case
11	Accessories Required	Overload protector needle valve, Gauge cock, Siphon, SS Tag plate
12	Service	Drinking Water
13	Accuracy	1%, Calibration Certificate to NABL Lab traceability required
14	Approved Makes	Wika, H Guru, Warree, Dwyer

SR.NO.	DESCRIPTION	Item Data Sheet
1	Type	Y Type SS Strainer
2	Rating	PN 20
3	Material	SS CF8M
4	End Connections	SS Flanged with 2 Nos of Companion Flanges
5	Environmental	Ambient: 0...70 °C
6		Humidity :99% RH max
7	Screen	Mesh 40
8	Removable Bottom Plug for Cleaning	Required
9	Hydro Test Pressure	30Bar
10	Maximum Working Pressure	300 PSI
11	Body Material	SS
12	Accessories Required	Spare Mesh Filter, Spanner for removing bolts
13	Service	Drinking Water
14	Maximum Inlet Pressure	25 Bar
15	Sizes	150mm, 100mm, 80mm, 50 mm
16	Approved Makes SS Strainer	Kirloskar, Newage, Amtech, Bombay Chemical Co, Precision Controls

SR.NO.	DESCRIPTION	Item Data Sheet
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1		WTP will consist of complete skid of DMF & ACF Filters with Automatic Backwash System, Civil RCC/PCC Foundation as required by OEM, with all required SS Piping, SS Valves(Gate,NRV, Ball type, Glycerin Filled SS 150mm Pressure Gauges, SS Anchor Fasteners, SS Nuts, Bolts, Washers for fixing, Pumps if necessary for backwashing, complete in all respect
2	Active Charcoal Filter	
3	Type	Active Charcoal Filter (ACF) , working on Surface Absorption Principle
4	Flow rate	Minimum 20 Cu M/Hr and Maximum 200 Cu M/Hr
5	Filtration of	Oil, Colour, Residual Chlorine, etc
6	Environmental	Ambient: 0...70 °C
7		Humidity :99% RH max
8	Body Material	MS Painted with 3 Coats of Epoxy Paint and then 3 coats of marine grade paint
9	Service	Drinking Water
10	Delta P	Not More than 1 Bar
11	Approved Makes	Thermax , Ion Exchange
12	Dual Media Filter	
13	Type	Dual Media Filter (DMF) with Sand & Anthracite as Filter Medium
14	Flow rate	Minimum 20 Cu M/Hr and Maximum 200 Cu M/Hr
15	Filtration Level for Turbidity	40 - 100 NTU
16	Environmental	Ambient: 0...70 °C
17		Humidity :99% RH max
18	Body Material	MS Painted with 3 Coats of Epoxy Paint and then 3 coats of marine grade paint
19	Service	Drinking Water
20	Delta P	Not More than 1 Bar
21	Approved Makes	Thermax , Ion Exchange

SR.NO.	DESCRIPTION	Item Data Sheet
1	General	
2	Working principle	Float Type Level Measurement Using Permanent Magnet
3	Construction	Stainless Steel Construction SS 316
4	Environmental	Ambient: 10...70 °C
5		Humidity :95% RH max
6	Service	Drinking Water
7	Approved Makes	Wika/Switzer/Honeywell/Siemens/Indfoss
8	Float Switch Probe unit	
9	Electrical Connection	PVC Cable
10	Approvals	CE, BVI, DNV, PESO
11	Process connection and material	Mounting Thread 1/2 Inch NPT
12	Guide Tube Diameter	12 mm
13	Guide Tube Length	3000 - 3500mm
14	Float Sensor Material	SS 316
15	Float Diameter	50mm
16	Contact Output	4X NO or NC
17	Power Supply	230V AC, 50 Hz

18	Mounting	Vertically Mounted
19	Switch Position	L1, L2, L3 (starting from top)
20	Ingress protection	IP- 68
21	Wetted parts	Sensing and shield element:316SS
22		Insulational
23		PTFE- Process temperature below 200°C
24		Ceramic - Process temperature above 200°C upto 500°C
25		Guard with process connection:Refer ordring matrix
26	Process connection and material	Refer ordering matrix
27	Permissible process pressure	0.1 bar maximum
28	Temperature stand-off for probe electronics	280mm extended height
29	Enclosure	Aluminium pressure die cast weatherproof, RAL5012
30	Ingress protection	IP65
31	Mounting	Top/side
32		
33	Control unit	
34		
35	Power	230V AC
36	Or	18to 36 V DC (option)
37	Connection	M 20 X 1.5
38	Number of Set points	Three (Low, Low - Low, High)
39	Connected to	PLC/SCADA/BMS System

SR.NO.	DESCRIPTION	Item Data Sheet
1	General	
2	Type	Corrossion Resistant SS Outside Screw & Yoke Design Gate Valves
3	Design Standard	API 603, ASME B 16.34
4	Environmental	Ambient: 0...60 °C
5		Humidity :99% RH max
6	Service	Drinking Water
7	Approved Makes	Azbil/L & T/Rapid Valves/Kirloskar/Hawa/Cair Automation
8	Gate Valves	
9	ASME Class	150
10	Size	6 Inch, 4 Inch, 2 Inch
11	Ends	Flanged provided with companion flanges & gaskets
12	End Flange Dimensions	As per ASME B16.5
13	Testing Standard	API 598
14	Fugitive Emissions	API 624, ISO 15848
15	Material of Body	SS 304 , CF8Mas per A 351
16	Material of Gate	SS 304 , CF8Mas per A 351
17	Stem Material	A 182 Gr F 316
18	Material of Bonnet	CF8M or SS 304
19	Packing	PTFE/Graphite
20	Gland	A 276, Type 316
21	Gland Flange	SS 304 , CF8Mas per A 351
22	Hand wheel Material	SG 400 - 15, A 536 Gr 60 - 40-18, SS 304
23	Plate for Identification	A 240 TP 316
24	Hand Wheel Nut	A 276 TP 316

25	Weight	6 Inch : 65 - 75 Kg, 4 Inch : 35-40 Kg, 2 Inch: 11- 15 Kg
26	Working Pressure	10 Kg/cm2 Nominal, Maximum 16 Kg/cm2
27	Hydro Test Pressure	30 Kg/cm2

SR.NO.	DESCRIPTION	Item Data Sheet
1	General	
2	Type	Corrosion Resistant SS Outside Screw & Yoke Design Globe Guided Disc Valves
3	Design Standard	API 603, ASME B 16.34
4	Environmental	Ambient: 0...60 °C
5		Humidity :99% RH max
6	Service	Drinking Water
7	Approved Makes	Azbil/L & T/Rapid Valves/Kirloskar/Hawa/Cair Automation
8	Globe Valves	
9	ASME Class	150
10	Size	6 Inch, 4 Inch, 2 Inch
11	Ends	Flanged provided with companion flanges & gaskets
12	End Flange Dimensions	As per ASME B16.5
13	Testing Standard	API 598
14	Fugitive Emissions	API 624, ISO 15848
15	Material of Body	SS 304 , CF8M as per A 351
16	Material of Gate	SS 304 , CF8Mas per A 351
17	Stem Material	A 182 Gr F 316
18	Material of Bonnet	CF8M or SS 304
19	Packing	PTFE/Graphite
20	Gland	A 276, Type 316
21	Gland Flange	SS 304 , CF8Mas per A 351
22	Hand wheel Material	SG 400 - 15, A 536 Gr 60 - 40-18, SS 304
23	Plate for Identification	A 240 TP 316
24	Hand Wheel Nut	A 276 TP 316
25	Weight	6 Inch : 85 - 90 Kg, 4 Inch : 45-50 Kg, 2 Inch: 18- 20 Kg
26	Working Pressure	10 Kg/cm2 Nominal, Maximum 16 Kg/cm2
27	Hydro Test Pressure	30 Kg/cm2

SR.NO.	DESCRIPTION	Item Data Sheet
1	General	
2	Working principle	Magnetic Flow Measurement with 2 wire system operation
3	Construction	SCS 13 Stainless Steel, Measuring Pipe Material SUS 304
4	Environmental	Ambient: 0...60 °C
5		Humidity :99% RH max
6	Service	Drinking Water
7	Approved Makes	/Honeywell/Siemens/Azbil/E & H
8	Transmitter Unit	
9	Electrical Connction	PVC Cable
10	Approvals	FM, CE, CSA
11	Size of Flow meter	80 mm
12	Operates	Between 18 -30V DC, Nominal Supply 24 VDC

13	Measuring Range for Level	0 - 500 Cu M/Hr
14	Output	4- 20mA, HART, Pulse, Digital
15	Accuracy	10mm
16	Contact Output	4X NO or NC
17	Power Supply	24 VDC Nominal (18 - 30V), 2 Wired Loop Powered System
18	Mounting	Vertically Mounted
19	Switch Position	L1, L2, L3 (starting from top)
20	Ingress protection	IP- 65
21	Cable Inlet	2X M20 Cable Glands with 1.5 Sqmm
22	Weight	Vendor to Specify
23	Response Time	5 seconds maximum
24	Temperature Compensation	Required
25	Display Maximum Operating Temperature	0 - 60 degC
26	Grounding Connection	Required at both Flow meter and PLC/BMS end
27	Permissible process pressure	16 bar maximum
28	Enclosure	SS
29	Memory	Non Volatile EEPROM, without battery
30	Mounting	At inlet of the buiding
31		
32	Control unit	
33		
34	Power	230V AC
35	Input	4- 20mA from Flow Meter/ Transmitter for local alarm
36	Size	96 X 96 mm Wall mounted in Pump House
37	Alarms	Audio Visual type for Setpoints given (Separate alarms for Low, Low- Low, High)
38	Retransmission Output	4- 20 mA, Isolated required for PLC/SCADA/BMS
39	Number of Set points with Relay Output	Three (Low, Low - Low, High)
40	Connected to	PLC/SCADA/BMS System

SR.NO.	DESCRIPTION	Item Data Sheet
1	General	
2	Type	Corrossion Resistant SS Swing Check Design with Integral body Seat
3	Design Standard	API 603, ASME B 16.34
4	Environmental	Ambient: 0...60 °C
5		Humidity :99% RH max
6	Service	Drinking Water
7	Approved Makes	Azbil/L &T/Rapid Valves/Kirloskar/Hawa/Cair Automation
8	Non Return Valves	
9	ASME Class	150
10	Size	6 Inch, 4 Inch, 2 Inch
11	Ends	Flanged provided with companion flanges & gaskets
12	End Flange Dimensions	As per ASME B16.5
13	Testing Standard	API 598
14	Fugitive Emissions	API 624, ISO 15848
15	Material of Body	SS 304 , CF8M as per A 351
16	Material of Gate	SS 304 , CF8Mas per A 351
17	Disc Material	A 351 Gr CF8M
18	Material of Hinge	A 276, Type 316

19	Material of Cover	A 351 Gr CF8M
20	Material of Cover Gasket	Graphite/PTFE
21	Hinge Pin	A 276 Type 316
22	Bracket	A 351 Gr CF8M
23	Plate for Identification	A 240 TP 304
24	Hex Head Screw	A 276 Type 316
25	Weight	6 Inch : 85 - 90 Kg, 4 Inch : 45-50 Kg, 2 Inch: 18- 20 Kg
26	Working Pressure	10 Kg/cm2 Nominal, Maximum 16 Kg/cm2
27	Hydro Test Pressure	30 Kg/cm2
28	Flow Direction Arrow	Marking Required

SR.NO.	DESCRIPTION	Item Data Sheet
1	General	
2	Type	Corrosion Resistant SS 304, ERW/Welded tyoe
3	Design Standard	ASTM A 312
4	Environmental	Ambient: 0...60 °C
5		Humidity :99% RH max
6	Service	Drinking Water
7	Approved Makes	Tata/Jindal/Roopam Steel
8	SS 304 Pipes (TP 304)	
9	ASME Class	150
10	Size	6 Inch, 4 Inch, 2 Inch, 1 Inch, 15mm
11	Lengths	6.1 meters
12	Schedule	Schedule 10 for 6 & 4 Inches, 40 for 3 Inches & 2 Inches, 1 Inches, 15mm
13	Finish	Mirror Matt
14	End Caps	Required
15		
16	Thickness of Pipe (150, 100, 80, 50mm)	150mm Pipe - 3.4 mm ; 100mm Pipe - 3.05 mm ; 80mm Pipe - 3.05 mm ; 50mm Pipe - 2.77 mm
17	Weight in kg/m of Pipe (150, 100, 80, 50mm)	150mm Pipe - 13.84 kg/m;100mm Pipe - 8.36 kg/m; 80mm Pipe - 6.45 kg/m;50mm Pipe - 3.93 kg/m;
18	Maximum Working Pressure for Schedule 10, Schedule 40 pipes	For Schedule 10 , 6 Inch Pipes : 566 psi or 39 bar 0 - 60 degC; For Schedule 10 , 4 Inch Pipes : 747 psi or 51.5 bar 0 - 60 degC; For Schedule 40 , 80mm, 50mm, 25 mm: 1321 psi or 91.1 bar 0 - 60 degC
19	Tolerance in Thickness & Weight	As per ASTM A 312
20	Pipe & Filler Matrial Specifications	As per ASTM A 312
21	Chemical Composition	As per ASTM A 312
22	Quality Assurance Plan	Test as per ASTM A 312
23	Welding	By Argon Gas Welding

SR.NO.	DESCRIPTION	Item Data Sheet
1	General	
2	Working principle	Ultrasonic/Displacement Level Measurement
3	Construction	Poly Butylene Terephthlatae (PBT)
4	Environmental	Ambient: 10...70 °C
5		Humidity :95% RH max
6	Service	Drinking Water
7	Approved Makes	Wika/Switzer/Honeywell/Siemens/Indfoss/Azbil

8	Ultrasonic/Displacement Transmitter Unit	
9	Electrical Connction	PVC Cable
10	Approvals	FM, CE, CSA
11	Process connection and material	Mounting Thread 2 Inch NPT
12	Guide Tube Diameter	12 mm
13	Measuring Range for Level	0.2 - 3.0 Meters
14	Output	4- 20mA, HART
15	Accuracy	10mm
16	Contact Output	4X NO or NC
17	Power Supply	24 VDC Nominal (18 - 30V)
18	Mounting	Vertically Mounted
19	Switch Position	L1, L2, L3 (starting from top)
20	Ingress protection	IP- 68
21	Cable Inlet	2X M20 Cable Glands with 1.5 Sqmm
22	Weight	Vendor to Specify
23	Response Time	5 seconds maximum
24	Temperature Compensation	Required
25	Display Maximum Operating Temperature	0 - 80 degC
26	Process connection and material	Refer ordering matrix
27	Permissible process pressure	0.1 bar maximum
28	Temperature stand-off for probe electronics	280mm extended height
29	Enclosure	PBT
30	Memory	Non Volatile EEPROM, without battery
31	Mounting	Top of Tank
32		
33	Control unit	
34		
35	Power	230V AC
36	Input	4- 20mA from Ultrasonic /Displacmeent Level Transmitter for local alarm
37	Size	96 X 96 mm Wall mounted in Pump House
38	Alarms	Audio Visual type for Setpoints given (Separate alarms for Low, Low- Low, High)
39	Retransmission Output	4- 20 mA, Isolated required for PLC/SCADA/BMS
40	Number of Set points with Relay Output	Three (Low, Low - Low, High)
41	Connected to	PLC/SCADA/BMS System

1	Pump type	Vertical Multi stage
2	Numbers of pumps /Reserve	1/0
3	Flow CuM/h	60
4	Head m	100
5	Geodetic head m	0
6	Inlet pressure (pin) bar	0
7	Available system NPSH	0
8	Ambient temperature C	20
9	Fluid	Water, clean
10	Liquid temperature C	20
11	Kin. Viscosity m/s	0.022
12	Vapour pressure bar	7
13	PH v alue	1

14	Density kg/dm	0
15	Solids weight %	Vendor to Specify
SR.NO.	DESCRIPTION	Item Data Sheet

Hydrompneumatic pump

PUMP

1	Pump Make	Ebara/Kirloskar/Grundfos
2	Design	Vertical Multi stage
3	Manuf acturer	Vendor to Specify
4	Speed RPM	2950
5	No. of stage	4
6	Connection Suction side	
7	Connection Discharge side	
8	Max working pressure bar	16
9	Shut-off head bar	11.91
10	Total weight 1kg	See the table of "Dimension "
11	Shaft power KW	21.84
12		
13	Required pump NPSH m	2.6
14	Frequency Hz	50
15	Installation type	Loose flange
16	Impeller Diameter	140
17	Flow	60
18	Head	100
19	Max. Shaft power at max. inpeller kw	23
20	Efficiency	75%

aterials

1	Impeller	AISI 304
2	Intermedicate casing	AISI 304
3	Bottom casing	EN1.4308(ASTMCF8)
4	Casing cover	AISI 304
4	Shaft	AISI 304
5	O-ring	EPDM

MOTOR

1	Manuf actures	ATB
2	Type	TEFC-EVMS64 4.0/22-400-Three phase
3	Spec if ic design	IE3/50Hz /Pole pairs 1
4	Rated power kw	22
5	Number of poies	2
6	Speed 1/min	2950
7	Degree og protection	IP56
8	Insulation class	F

9	Phases	3-
10	Frame size	180
11	Weight kg	135
12	Electric voltage V	400
13	Electric current A	38.5

Transfer Pump		
SR.NO.	DESCRIPTION	Item Data Sheet
1	Pump type	End Suction Volute Pump
2	Numbers of pumps /Reserve	1/0
3	Flow CuM/h	100
4	Head m	55
5	Geodetic head m	0
6	Inlet pressure (pin) bar	0
7	Available system NPSH	0
8	Ambient temperature C	20
9	Fluid	Water, clean
10	Liquid temperature C	20
11	Kin. Viscosity mm/s	0.022
12	Vapour pressure bar	7
13	Maximum Working Pressure bar	16
14	Density kg/dm	0
15	Solids weight %	Vendor to Specify
PUMP		
1	Pump Make	Ebara/Kirloskar/Grundfos
2	Design	Vertical Multi stage
3	Manuf acturer	Vendor to Specify
4	Speed RPM	2950
5	No. of stage	4
6	Connection Suction side	
7	Connection Discharge side	
8	Max working pressure bar	16
9	Shut-off head bar	11.91
10	Total weight 1kg	See the table of "Dimension "
11	Shaft power KW	19
12		
13	Required pump NPSH m	5.0
14	Frequency Hz	50
15	Installation type	With ISO Base, motor
16	Impeller Diameter	140
17	Flow	100
18	Head	55
19	Max. Shaft power at max. inpeller kw	23
20	Efficiency	Above 75%
Materials		
1	Impeller	FC 200
2	Intermedicate casing	FC 200
3	Bottom casing	EN1.4308(ASTMCF8)
4	Casing cover	AISI 304
4	Shaft	SUS 431

5	O-ring	NBR
MOTOR		
1	Manuf actures	ATB /Ebara/Grundfos/Kirloskar/WEG
2	Type	Three phase
3	Spec if ic design	IE3/50Hz /Pole pairs 1
4	Rated power kw	22
5	Number of poies	2
6	Speed 1/min	2945
7	Degree og protection	IP55
8	Insulation class	F
9	Phases	3-
10	Frame size	180M
11	Weight kg	175
12	Electric voltage V	380
13	Electric current A	42