



सिद्धिमूलं प्रबन्धनम्
भा. प्र. सं. इन्दौर
IIM INDORE

भारतीय प्रबंध संस्थान इंदौर

INDIAN INSTITUTE OF MANAGEMENT INDORE

Prabandh Shikhar, Rau-Pithampur Road, Indore - 453556 (M.P.), India

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Tender Notice No.
IIMI/Estate/19/2019/19 File No. 164

Name of Work: “Replacement of damaged Cooling Tower (01 no. 250 TR capacity) of HVAC Plant at Utility-II at IIM Indore.”

Certified that the NIT Document contains 19 pages serially numbered from 1 to 19

INDIAN INSTITUTE OF MANAGEMENT INDORE

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भारतीय प्रबंध संस्थान इन्दौर

प्रबंध शिखर, राऊ-पीथमपुर रोड, इन्दौर - 453 556 (म.प्र.), भारत

INDIAN INSTITUTE OF MANAGEMENT INDORE

Prabandh Shikhar, Rau-Pithampur Road, Indore - 453 556 (M.P.), India

Dated: June 08, 2019

NOTICE INVITING TENDER

Tender Notice No. IIMI/Estate/19/2019/19 File No. 164

IIM Indore invites item rate tender under two bid system (Part-I Earnest Money and Technical bid & Part-II Financial bid) for the under mentioned work at IIM Indore from the bidders eligible as per the eligibility criteria mentioned in the tender document. Schedule of item & quantity is attached as annexure -1 to this notice.

The tender is e-published on IIM Indore website under the URL: <http://iimidr.ac.in/tenders/>. Interested parties can download the same and submit by post or hand delivery before the due date & time.

Part "A" : NIT Details

1	NIT No.: IIMI/Estate/19/2019/19 File No. 164	
2	Name of Work	"Replacement of damaged Cooling Tower (01 no. 250 TR capacity) of HVAC Plant at Utility-II at IIM Indore."
3	Estimated Cost Put to Tender	Rs. 3,02,000 /- (Three Lakh Two Thousand Only)
4	Earnest Money Deposit (Rs.)	Rs. 6,040 /- (Rs. Six Thousand Forty Only) by e-payment through electronic mode.
5	Tender Processing Fee (Rs.)	Rs. 500/- by e-payment through electronic mode. (Non-Refundable)
6	Completion period	30 Days
7	Last date & time of receipt of tender	Up to 03:00 PM on June 18 , 2019 in a Sealed cover only addressed to the "Chief Engineer, IIM Indore Prabandh Shikhar, Rau-Pithampur Road Indore-453556, Madhya Pradesh."
8	Date & Time of opening of technical bid	June 18, 2019 on 04:00 PM in the Office of the Chief Engineer, Administrative Block, IIM Indore M.P. 453556
9	Date and Time of opening of financial bid of qualified bidders	Will be notified at a later date
10	Security Deposit	2.5% of tendered value from bills
11	Performance Guarantee	5% of tendered value on acceptance of bid

Part “B”: Tender Requirements

1. Criteria of eligibility for submission of bid documents:

In order to fulfil eligibility for acceptance, the following criteria will be followed. Bidders are required to submit relevant verifiable and self-attested documents.

a. Performance / Work Experience

The bidder must have experience of successfully completed works during the last 7 years ending last day of the month previous to the one in which applications are invited. *The works completed up to previous day of last date of submission of tenders shall also be considered.*

One similar completed work of aggregate cost not less than the amount equal to 2,41,600/-

OR

Two similar completed works, costing not less than the amount equal to 1,81,200/-

OR

Three similar completed works costing not less than the amount equal to 1,20,800/-,

Similar work shall mean: Supply, Installation, testing & commissioning of HVAC Cooling Tower.

Certificates of work experience (Completion Certificates) and other documents as specified in the tender document shall be submitted.

b. Annual Financial Turnover: Should have had average annual financial turnover at least 100% of the estimated cost put to tender during last three years ending March 31, 2018. (Copy of certificate from chartered accountant to be submitted)

c. Certificates: (copy of certificates to be submitted)

- i. IT returns for FY 15-16, 16-17 and 17-18
- ii. PAN (Permanent Account Number)
- iii. GST (Goods & Service Tax) Registration Certificate
- iv. Certificate of registration of firm/company
- v. Aadhar card copy of the authorized officer of the company who will be signing agreement etc.
- vi. E-payment details towards cost of tender processing fee & EMD.
- vii. Bank Account Detail.

2. Mode of payment of Tender processing fee and EMD:

Bidders may deposit the Tender Processing Fee and EMD through NEFT/ RTGS or Direct Credit. Details for the same are as below:

Name of beneficiary	: Indian Institute of Management Indore
Address	: Rau-Pithampur Road, Indore -453556, M.P.
Account No.	: 53018623445
Name of the Bank	: State Bank of India
Address of the bank	: IIM Indore Campus
IFSC Code	: SBIN0030525

Bidders will have to attach Payment details towards cost of tender processing fee & EMD during the submission of tender and the same will be accepted only on verification & confirmation by the Institute. Any delay in credit will not be entertained by the Institute.

3. The Tenderer is required to prepare two sealed cover comprising of the following:

Cover-I: Technical Bid

- i) EMD & Tender Fee details
- ii) Documents as mentioned above in the “Criteria of eligibility for submission of bid documents”

Cover-II: Financial Bid

- i) Financial Bid (in the format given at Annexure-1)

Both covers should be kept in one main sealed cover super scribed as “NIT No.: IIMI/Estate/19/2019/19 File No. 164, “Replacement of damaged Cooling Tower (01 no. 250 TR capacity) of HVAC Plant at Utility-II at IIM Indore.”

4. The tenderer has to drop the cover sealed in above manner in the Tender Box kept at the “Estate Department, IIM Indore, Administrative Block, Rau Pithampur Road, Indore -453556 M.P.” on or before the due date & time positively. The tender shall not be accepted beyond the stipulated date and time under any circumstances whatsoever. Any delay happened in the transition is at the risk of the tenderer and IIM Indore will not be responsible.
5. EMD of unsuccessful bidders shall be refunded after award of the contract / order to the successful bidder. No interest will be paid on the EMD.

Part “C”: Other Terms & Conditions

1. The bid submitted shall become invalid and tender processing fee shall not be refunded if:
 - (i) If the bidder is found ineligible.
 - (ii) If the documents submitted by the successful bidder does not match with the originals before the award of work.

2. The competent authority on behalf of the Director IIM Indore does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
3. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
4. The competent authority on behalf of the Director, IIM Indore reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
5. *The bid for the works shall remain open for acceptance for a period of Ninety (90) days.* If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the IIM Indore shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.
6. IF ANY INFORMATION FURNISHED by the applicant is found to be incorrect at a later stage, they shall be liable to be debarred from tendering/ taking up works in IIM INDORE.
7. TAXES :
 - i) This work comes under Works contract. The taxes as applicable shall be deducted from each bill paid to the contractor.
 - ii) Item rate should be without GST, GST shall be paid extra.
 - iii) Labour Welfare cess @ 1 % of gross value of work done shall be recovered from each bill paid to the contractor.
 - iv) Income Tax and cess as applicable shall be deducted from each bill paid to the contractor.
 - v) Contractor should be registered under EPF and as per law, shall pay EPF of contract workers to concerned Department from time to time.
 - vi) Any other taxes/cess as per Government directives shall be deducted from each bill paid to the contractor from time to time.
8. The specifications, Terms & Conditions, other regulations which are not herein mentioned will be guided by relevant CPWD / IS /Other Central Govt./state Govt. norms, OEM standards applicable for IIM Indore & the decision in this regard will be guided by the decision of the respective authority of IIM Indore which shall be final and binding to the contractor.
9. Performance guarantee in the form BG or FDR or DD @ 5% of tendered amount has to be furnished within 7 days of issue of LOA/LOI.
10. If called for, originals of the document submitted shall be produced.

11. General condition of contract (GCC) 2014 of CPWD will be applicable to the extent relevant to the job.
12. Deviation limit beyond which clauses 12.2 & 12.3 of GCC shall apply for work: 50 %.
13. Any dispute is subject to the jurisdiction of Civil Court Indore.
14. Location: IIM Indore.
15. The work shall be executed as per CPWD general specifications for Civil & electrical works with upto date amendments as per relevant IS and as per directions of Engineer-in-Charge. These additional specifications are to be read in conjunction with above. However, nothing extra shall be paid on account of these additional specifications & conditions as the same are to be read along with schedule of quantities for the work.
16. The Tenderer should in his own interest visit the site and familiarise himself with the site conditions before tendering.
17. No T&P shall be issued by the IIM Indore and nothing extra shall be paid on account of this.
18. Employer reserves the right to alter the mode of selection, accept or reject any or all bids without assigning any reason thereof.
19. Necessary clarification required by the IIM Indore shall have to be furnished by the Tenderer within the time given by the IIM Indore for the same. The Tenderer will have to depute his representative to discuss with the officer(s) of the IIM Indore as and when so desired. In case, in the opinion of the IIM Indore a Tenderer is taking undue long time in furnishing the desired clarifications, his bid will be rejected without making any reference.
20. The Tenderer will have to fill up their rates only in the price bid in BoQ format. Tenders in which the price bids are given in any other format are liable to be rejected.
21. A tenderer will also not be allowed to withdraw or modify any condition at a time after the technical bids have been accepted and the decision to open the price bid has been taken by the IIM Indore.
22. The IIM Indore reserves the right to reject any or all the price bids and call for fresh prices/ tenders as the case may be without assigning any reason.
23. All tools, plants and measuring or weighing equipment shall be arranged by the contractor himself and nothing extra shall be paid to the contractor on this account.
24. All materials, articles and workmanship shall be of respective best quality and kind for the class described in the schedule of quantities and specifications. All materials, so used in different items of work shall be subject to the approval of the Engineer-in-charge.
25. No chiselling or cutting or drilling of RCC columns, beams, girders and other principal structural members shall be done unless prior permission has been granted by the Engineer-in charge in writing.

26. Any item which is not available in the BOQ shall be paid as per DSR 2018 rates. If it is not available in BOQ & DSR 2018 then extra item shall be worked out as actual cost of the materials and actual cost of the labour plus 15% as overhead and profit and the GST will be paid extra. The decision of Engineer-in-charge will be conclusive and final binding on the contractor.

27. Terms of Payment:

Payment will be made after completion of the work and submission of final bill duly supported by work completion certificate issued by Engineer In-charge.

28. Security deposit:

- a. The security deposit will be collected by deductions from the final bill of the contractor at the rate mentioned below. The security deposit can also be deposited in cash or in the form of Government Securities, Fixed Deposit Receipts etc.
- b. A sum @ 2.5% of the gross amount of the bill will be deducted from final bill of the contractor. Such deductions will be made unless the contractor has deposited the amount of security at the rate mentioned in cash or Government securities or Fixed Deposit Receipts. This is in addition to the performance guarantee that the contractor is required to deposit as per clause mentioned in the tender document.
- c. The security Deposit shall be refunded to the contractor after the completion of defect liability period of 01 (ONE) year.

29. Performance Guarantee:

The tender shall guarantee among other things, the following:

- (a) Quality, strength and performance of the materials used.
- (b) Safe mechanical and stress on all parts under all specified conditions of operation.
- (c) Satisfactory operation & stability during the DLP period.

The contractor whose bid is accepted will be required to furnish performance guarantee of 5% (Five Percent) of the bid amount within Seven days of issue of LOI. This guarantee may be in the form of Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/ Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form in CPWD manual. In case the contractor fails to deposit the said performance guarantee within the period as indicated above, including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee. The performance guarantee shall be initially valid up to the actual date of completion plus 60 days beyond that. After that it may be refund.

30. Rates:

- a. Subject to the nomenclature of the item as per schedule of quantities, the specification indicated in the tender documents, the rates quoted shall include charges for forwarding, insurance, freight and delivery, loading, unloading through cranes, installation, testing, commissioning at site, cost of all materials including royalty & taxes if any, labor, sundry inputs, execution of work at all heights, levels, pattern and design for all leads, lifts and depths including overhead charges and contractor's profit. Nothing extra shall be paid on this account.
- b. The Defect Liability Period (DLP) will be of 12 months from the date of handing over. Nothing extra for this period shall be paid.

- c. The successful bidder should dismantle the existing Cooling tower, carry out the required foundation works and carry out suitable inlet & outlet water pipe line modification works required for the offered Cooling Tower. Hence the bidder should quote the buy back value for the existing cooling tower.
31. The Institute may on request of the contractor make available the room / proper storage space for storage of material and erection equipment's as per the availability. Watch and ward of the stores and their safe custody shall be the responsibility of the contractor till the final taking over of the installation by the IIM Indore.
 32. Proper safety will be exercised during the work and all the personnel protective equipment and tools like helmets, gloves, safety belts, shoes etc. will be provided by the contractor during the work at his own cost.
 33. Contractor will ensure proper cleaning of site and hygiene during the work on regular basis.
 34. In case of any damage to the property of IIMI / site of work by workers/personnel of contractor, the contractor will be solely responsible and appropriate damage cost along with penalty will be recovered from the contractor's bill/payment/SD etc.
 35. The contractor should make his own arrangement to work properly under all climatic conditions without affecting the quality and speed of work. The safety of all the materials used in executing the job will also be the responsibility of the contractor.
 36. All legal and other statutory responsibilities regarding securities of materials, labour, payments, accident, insurance and law suits during the work will be solely borne by contracting agency and IIM Indore shall not be responsible in any manner whatsoever. The contracting agency will ensure proper and disciplined behavior of the workman. If any damages are caused by the contracting agency to the property to the Institute, the same shall be recovered from contracting agency's bill.
 37. All the values of any tests as required will be recorded in front of IIM Engineers and it will be verified by them.
 38. Competency of Electrical / mechanical Staff: An accepted norm of good workmanship is required. The related electrical/ mechanical works shall be done by qualified and trained staff having sufficient competency in works.
 39. Any bidder wants to see the setup before quoting may visit during any working day between 10 AM and 5 PM.
 40. **Sample, Maintenance Manual, etc.**

On the award of the work the Contractor shall immediately submit the submission of sample (if required) with complete data sheet & test certificate shall be submitted to the Engineer for his approval to ensure that the works will be carried out in accordance with the specifications, including such changes as may have been mutually agreed upon. Prior to the completion of the work the contractor shall furnish four (4) sets comprehensive manuals, describing all components and furnishing a list of instructions for the operation and maintenance of the plant.

41. Existing Services:

Drains, pipes, cables, overhead wires and similar services encountered in the course of the works shall be guarded from injury by the Contractor at his own cost so that they may continue in full and uninterrupted use to the satisfaction of the owners thereof and the Contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.

Any damage by the Contractor, to any mains, pipes, cables or lines (whether above or below ground) whether or not shown on the drawings and the Contractor must make good or bear the cost of making good the same without delay to the satisfaction of the Engineer and of the owners.

42. Completion Period: The completion period of 30 Days indicated in the tender Document is for the entire work of “Replacement of damaged Cooling Tower (01 no. 250 TR capacity) of HVAC Plant at Utility-II at IIM Indore.” handing over of the entire system to the satisfaction of the Engineer-in-Charge.

43. Guarantee: The structure shall be guaranteed for a period of 12 months from the date of taking over by the institute against unsatisfactory performance and/or stability due to defective design, workmanship of material. The material or components, or any part thereof, so found defective during guarantee period shall be forthwith repaired or replaced free of cost, to the satisfaction of the Engineer-in-Charge. In case it is felt by the institute that undue delay is being caused by the contractor in doing this, the same will be got done by the IIM Indore at the risk and cost of the contractor. The decision of the Engineer-in Charge in this regard shall be final.

44. Extent of work:

a) The work shall comprise of entire labor including supervision and all materials necessary to make a complete installation as required. The term complete installation shall not only mean major items of the structure covered by specifications but all incidental sundry components necessary for complete execution and satisfactory installation whether or not those have been mentioned in details in the tender document in connation with this contract.

b) Defect Liability Period of one year from date of completion and handing over.

45. Compliance with regulations and Indian standards: All works shall be carried out in accordance with relevant regulation, both statutory and those specified by the Indian Standards related to the works covered by these specifications.

46. Indemnity: The successful tenderer/bidder shall at all times indemnify the IIM Indore, consequent on this works contract. The successful tenderer/bidder shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause and the IIM Indore shall not be responsible for any accident or damage incurred or claims arising there from during the period of erection, construction and putting into operation the structure and ancillary system under the supervision of the successful tenderer/bidder in so far as the latter is responsible. The successful tenderer/bidder shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer/bidder due to the above.

47. Mobilization advance: No mobilization advance shall be paid for this work.

AGREEMENT

THIS AGREEMENT made at Indore on the _____ day of _____ 2019 between Indian Institute of Management Indore Rau- Pithampur Road, Indore (hereinafter called "The IIM INDORE" which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) of the one part AND _____

(herein after called "The Contractor" which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns) of the other part.

WHEREAS

The IIM INDORE is desirous of carrying out the "NIT No. IIMI/Estate/19/2019/19, File No. 164 for the work of **"Replacement of damaged Cooling Tower (01 no. 250 TR capacity) of HVAC Plant at Utility-II at IIM Indore."**

The Works are to be executed as per the schedules mentioned in tender document, drawings and specifications describing the works to be done.

The Contractor has agreed to execute the said works subject to the provisions hereinafter contained and subject also to General Conditions of Contract, Special conditions of contract, Safety Code, Model Rules for the protection of health and Sanitary arrangements for workers, Specifications, Preambles and Schedule of Quantities and installation schedule (all of which are hereinafter collectively referred to as the 'said tender conditions') and strictly in accordance with the Scope of work annexed hereto at or for the respective rates set out in the Schedule of Quantities amounting to the sum as there under arrived at or such other sums as shall become payable there under (hereinafter referred to as the said tendered amount).

NOW IT IS HEREBY AGREED AS FOLLOWS: -

1. In consideration of the said tendered amount to be paid by The IIM INDORE to the Contractor at the time and in the manner set forth in the said tender conditions and in accordance with the Schedule of Payments to execute and complete the work shown upon the said Drawings strictly in accordance with the specifications and Schedule of Quantities.
2. The said tender conditions, scope of work and the annexures hereto shall be read and considered as forming part of this contract and the parties hereto shall respectfully abide by to the said conditions and perform the agreement on their part respectively contained in the said conditions.

3. The approved drawings if any, notice inviting tenders technical specification etc. shall also form the basis of this contract.
4. This contract is a Lump sum Contract and to be carried out and to be paid for according to the Schedule of Payments at the rates contained in the Schedule of Quantities.
5. The contract herein contained shall comprise not only the works mentioned above but all subsidiary works connected therewith within the same site as may be ordered to be done from time to time by the said Engineer In charge for the time being, even if such work may not be shown on the said Drawings or described in the said Specifications and Schedule of Quantities.
6. The IIM INDORE reserves to themselves the right of altering the specifications and the nature of the work by adding to or omitting from the scope of work any item of work or portions of the same without prejudice to this contract.
7. Time shall be considered as the essence of this contract and the Contractor hereby agrees to commence the work within 10 days from the date of work order or from the date of handing over of the site, as provided for in the said terms and conditions, whichever is later, and shall complete the entire work within the specified period, subject nevertheless the provisions for extension of time as may be agreed to by the IIM INDORE and as contained in the said conditions.
8. All payments by the IIM INDORE under this contract shall be made only at Indore.
9. All disputes arising out of or in any way connected with this contract shall be deemed to have arisen at Indore and courts in Indore only shall have jurisdiction to determine the same.
10. That the contract and several parts of this contract have been read by the contractor and fully understood by him. The contractor shall not be entitled for payment beyond tendered quantities unless ordered specifically by written instructions of Director IIM INDORE.
11. This contract shall be signed in duplicate, the original whereof shall be kept in the custody of the IIM INDORE, and the duplicate with the Contractor.

IN WITNESS WHEREOF the IIM INDORE has set his hands hereunto and two duplicates hereof through his duly authorized official and the Contractor has caused these presents and two duplicates hereof under his common seal by his duly authorized representative at the place and on the date month and year first herein above written.

SIGNED, SEALED AND DELIVERED by IIM INDORE, by the hand of

Signature:
Name:
Designation:

IN THE PRESENCE OF

(1) Signature:
Name:
Address:

(2) Signature:
Name:
Address:

SIGNED, SEALED AND DELIVERED BY the Contractor M/s. _____
_____.

Signature:
Name:
Designation:

IN THE PRESENCE OF

Name:

(1) Signature:
Address:

(2) Signature:
Name:
Address:

Form of Performance Security (Guarantee) Bank Guarantee Bond

In consideration of the Director, IIM Indore (hereinafter called "The IIM Indore") having offered to accept the terms and conditions of the proposed agreement between.....and (hereinafter called "the said Contractor(s)") for the work..... (hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs. (Rupees only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We, (hereinafter referred to as "the Bank") hereby undertake to pay to the IIM Indore an amount not exceeding Rs. (Rupees..... Only) on demand by the IIM Indore.

2. We,(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the IIM Indore stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupeesonly)

3. We, the said bank further undertake to pay the IIM Indore any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.

4. We, (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the IIM Indore under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in- Charge on behalf of the IIM Indore certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

5. We, (indicate the name of the Bank) further agree with the IIM Indore that the IIM Indore shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the IIM Indore against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the IIM Indore or any indulgence by the IIM Indore to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the IIM Indore in writing.

8. This guarantee shall be valid up tounless extended on demand by the IIM Indore. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged. Dated theday offor.....(indicate the name of the Bank).

Scope of work & Technical Specifications

The specification aims to replace the existing one circular shaped 250TR Induced draft counter flow type cooling tower on Supply, Installation, Testing and Commissioning (SITC) basis with a 100% technically suitable/ compatible system to serve the chilled water centralized Air-conditioning plant at IIM, Indore.

1. Scope of Work:

The scope of work shall include the following.

- a. "Supply, Installation, Testing & Commissioning of HVAC Cooling Tower" complete as per technical specifications and handing over to the IIM Indore.
- b. Any other work related to but not specifically mentioned above, required for completion of the job as per the scope of work.
- c. Dismantle/removing the existing Cooling tower(under buy back), carryout the required foundation works and carry out suitable inlet & outlet water pipe line modification works required for the offered Cooling Tower.
- d. Construction of MS & RCC Foundation & associated welding works required for installation of cooling tower.
- e. Providing all-inclusive service including all supplied materials, labour etc. during defect liability period (DLP) of 1 (ONE) years from the date of completion.

2. Essential Features:

- a. The offered product should be a well reputed make, meeting the specification and Field proven. The firm should enclose the client list to whom this product has been Supplied and functioning as on date. Any locally assembled and non-reputed Product will be summarily rejected.
- b. The offered cooling tower should be rectangular/circular shaped functioning on Induced draft counter flow cooling technology.
- c. The basin/sump and the casing of the cooling tower should be rugged, sturdy and Corrosion/rust free to resist water born bacteria & organisms. The supports should Be fabricated with heavy gauge cold rolled section hot dip galvanized steel for Providing long life and durability. The basin should have basic facilities for Overflow, drain and make up valve of brass make with plastic float.
- d. The Casing and Basin should be made out of Fiberglass reinforced plastic (FRP) With both sides Gel coated for smoothness from inside and pigmented from Outside.
- e. The cooling tower should use fills made of Poly Vinyl Chloride (PVC) to increase the surface area and time of contact between the air and water flows. The fill should be packed in such a way that efficient heat and mass transfer simultaneously. The cross fluted sheets shall be bonded together and edges double folded for strength and durability. The fills should be corrosion free and easily cleanable.
- f. The fan drive motor should be rugged, efficient and weather proof meeting IP55 standard with 'F' class insulation. The fan should be directly driven by the special extended shaft motor made from EN8 steel.
- g. The axial flow fan should be of dynamically balanced multi blade version with adjustable blade pitch, made of corrosion-resistant FRP. The fan should deliver large volumes of air at low power consumption. The fan should work smoothly with less running noise and longer bearing life including that of the supporting structure.

- h. The offered cooling tower must ensure a temperature reduction i.e. range of 5 degree C between the inlet hot water and outlet cold water. Similarly, the approach i.e. the difference in temperature between the outlet cold water and the wet bulb Temperature should be at least 4 degree C.
- i. The rotating water sprinkler head is preferred for evenly spraying the inlet hot water over the fills. However in case of rectangular tower, spray header and branches along with suitable type of moisture eliminator shall be supplied. The water shall be distributed over the fill by spray nozzles with large orifice openings to eliminate clogging. The pressure drop caused by the drift eliminator should be as low as possible.
- j. The air inlet louvers shall be made of PVC mounted in easily removable frames for providing easy access inside the basin for maintenance/repair purposes. The louvers shall be suitably angled to minimize water splash and to prevent direct sunlight on the cooled water collected in the basin.
- k. A suitable access ladder made of rust free GI (Rolled channels) material must be fitted with the cooling tower for proving easy access to the fan motor section.
- l. The structural of the tower support the casing, basin and motor mounting should be made of hot dip galvanized Mild Steel, so as to resist corrosion.

3. Technical Specifications:

1	Hot Water temperature	37.0 degree C
2	Cold Water temperature	32.0 degree C
3	Wet Bulb temperature	28.0 degree C
4	Water Flow rate	1,50,0000 LPH
5	No.of Cell	Single
6	Cooling Capacity	9,00,000Kcal/Hr
7	Approach	4.0 degree C
8	Delta T	5.0 degree C
9	Frame Work	MS Hot Dipped Galvanised(HDG)
10	Casing/Basin	FRP
11	Fill/Nozzles	PVC/PVC
12	Bolts,Nuts,Misc Hardware	GI
13	Water Inlet HDRS	PVC with FRP Lining
14	Fan Blades	FRP power saving
15	Fan Hub	FRP corrosion proof
16	Fan type	Axial flow, propeller
17	Fan Dia	1800mm
18	Air flow per fan	28.95 m ³ /sec
19	Motor type	TE IP55 surface cooled vertical flange mounted extended shaft motor (Direct Driven)
20	Motor HP	10HP
21	Motor RPM	710 RPM
22	Class of insulation	Class F
23	Evaporation Loss	0.90%
24	Drift Loss	0.01%
	Blow down	0.22% (only at the time of Blow down only)
25	Make-up water quantity	0.91% of circulation water flow
26	Operating Voltage	AC 3phase 415V,50Hz

Indian Institute of Management, Indore
Financial Bid

Name of Work: “Replacement of damaged Cooling Tower (01 no. 250 TR capacity) of HVAC Plant at Utility-II at IIM Indore.”						
NIT No.: IIMI/Estate/19/2019/19 File No. 164						
Name of Contractor:						
S.No.	Item Description	Unit	Qty	Rate (in Rs.)	Amount (in Rs.)	Amount in Words
1	<p>Supply, Installation, testing & commissioning of 250TR FRP Circular/Rectangular shape Induced draft counter flow Cooling Tower including packing, forwarding & insurance etc. complete as per technical specification of the tender and as per the direction of Engineer-in-Charge.</p> <p>(Scope of work also includes the following as per detailed hereunder :)</p> <ol style="list-style-type: none"> 1. Installation of 250TR Cooling Tower on Utility-II. 1 No. 2. Preparation & casting of foundation for 250TR Cooling Tower. 1 Job. 3. Assorted pipes required for installation of 250TR Cooling Tower. 1 Lot. 4. Preparation and making connection from existing 250TR Cooling tower water pipe line to new proposed 250TR Cooling Tower including material & labour. 1 Job. 5. Making Electrical connection to the Fan motor of the 250TR Cooling Tower including material & labour. 1 Job. 6. Any other assorted items essentially required. 1 Lot. 7. Any other assorted works essentially required. 1 Job. 	Job	1			

S.No.	Item Description	Unit	Qty	Rate (in Rs.)	Amount (in Rs.)	Amount in Words
2	Dismantling / removing of existing 250TR Cooling Tower (1 no.) under buy back scheme	Job	1			
Total Amount in Rs. (Excluding Goods & Service Tax)						

Name of Bidder Firm _____

Email Address _____

Authorized Person _____

Contact Number _____

Signature & Seal _____