

MADHYA PRADESH STATE AGRICULTURAL MARKETING BOARD**26, ARERA HILLS, JAIL ROAD, KISAN BHAWAN, BHOPAL – 462011**

NIT No / KAAVN/ 17-18 / 2547

Bpl, Dated: - 01.12.2017

SHORT NOTICE INVITING TENDER (2nd Call)

Online E - Tenders are invited from contractors registered with the Office of the Engineer in Chief, M.P. Public Works Department, Government of Madhya Pradesh (Centralized Registration Cell) for the **A.H.U (Air Handling Unit) Air Conditioner Works at State of Art and CPCSEA Compliance Laboratory Animal House, Jabalpur** under Krishi Anusandhan and Audhosanrachna Vikas Nidhi Deposit Scheme, so as to be received online up to **5:30 PM on 19.12.2017** & The last date to receive the hard copy of all documents is up to **5:30 PM on 19.12.2017** through **speed post / Registered post only**. The tender documents can be obtained online on the [http:// mpeproc.gov.in](http://mpeproc.gov.in) as per the Notice Published on the above Portal and detailed information can also be seen on website www.mpmmandiboard.gov.in

Tender System Number	Name of District	Name of Places where works are to be done	Probable Amount of Contract (Rs. In Lacs)	Earnest money deposit (EMD) (Rs.)	Cost of Tender Form (Rs.)	Time Period Excluding rainy season
1	2	3	4	5	6	7
3853 ✓	Jabalpur ✓	A.H.U (Air Handling Unit) Air Conditioner Works at State of Art and CPCSEA Compliance Laboratory Animal House, Jabalpur ✓	36.56 ✓	50000 ✓	5000 ✓	02Months ✓

Note: - (i) Any corrigendum in this NIT, if required, shall be displayed only in our above portal regarding any matter included in this NIT or otherwise. Other details of works and locations & key dates can also be seen on our website www.mpmmandiboard.gov.in

(ii) Amendment as per the below mentioned office orders will be applicable and will be part of a tender form. (Attached with tender form)

A. Office order no. 458 dt 15.02.2017 ✓

B. Office order no. 790 dt 25.03.2017 ✓

C. Office order no. 2253 dt 30.08.2017 ✓

1. **Scope of Work:** Supply, Installation and commissioning HVAC Systems for laboratory Animal House (housing of rat, mice, rabbit, guinea pig) for maintaining the temperature, humidity, air pressure and air changes as per CPCSEA :-

HVAC System-01 is to be designed for 100% fresh air with heat recovery wheel as per specification provided.

HVAC System-02 is to be designed on recirculation concept as per specification provided.

Details of works and locations may be seen in the Office of M. P. State Agricultural Marketing Board, Bhopal.

2. **Pre-qualifications criteria :-**

a) The firm/agency/contractor should have experience of similar works i. e. Installation / operation and maintenance of HVAC Systems along with AHU's for laboratory Animal House (housing of rat, mice, rabbit, guinea pig) for maintaining the temperature, humidity, air pressure and air changes as per CPCSEA in any Government Sector or large reputed Private Sector enterprises, for at least last two consecutive years satisfactorily. Necessary relevant documents to this effect to be enclosed.

b) Bidder's must be submitted last 3 years CA Certified Annual Turnover with balance Sheet i.e. from financial years 2014-15, 2015-16 & 2016-17 as per Annexure - I (Format: I-1).

c) Average annual turnover on the construction works not less than 50% of the probable amount of contract during the last 3 financial years (2014-15, 2015-16 & 2016-17).

[In case of new registration not fulfilling the above criteria, the bid will be disqualified as per terms & conditions of NIT]



d) Experience of having successfully executed:

- i) Three similar works, each costing not less than the amount equal to 20% of the probable amount of contract during the last 3 financial years (2014-15, 2015-16 & 2016-17); or
- ii) Two similar works, each costing not less than the amount equal to 30% of the probable amount of contract during the last 3 financial years (2014-15, 2015-16 & 2016-17); or
- iii) One similar work of aggregate cost not less than the amount equal to 50% of the probable amount of contract in any one financial year during the last 3 financial years (2014-15, 2015-16 & 2016-17)

3. **Submission of Documents:**

Envelope A:

Bidder must submit (Online upload and Hard Copy) self attested copy of:

1. Valid Registration, Registered with the office of ENC, MP PWD, Bhopal (as per NIT),
2. Valid PAN Number,
3. Valid GST registration of MP State.
4. Consent of any person or employee having Valid "A" Class electric license issued by the Chief Electrical Advisor to the State Government of MP for executing the electrical works(if any) and "A" Class Electrical License Copy.
5. The entire contractors must submitted an affidavit as per tender form Annexure - "B"
6. Valid EPF Registration.
7. Valid ESI Registration
8. Firm Establishment Registration.
9. Similar work experience certificate as per NIT
10. CA certified annual turnover certificate as per NIT
11. Balance Sheets and ITR for last 03 financial years as per NIT

Envelope B:

Online bidder must have submitted (Online upload and Hard Copy):

1. EMD in the form of FDR / TDR of any Scheduled Commercial Bank in favour of the **Accounts Officer, MP State Agricultural Marketing Board Bhopal.**

[No other form of EMD (Demand Draft, Bank Guarantee etc.) will be allowed]

Envelope C:

The Envelope No. A & B shall be sealed separately and placed in a third Envelope which also shall be sealed and duly super scribed with the name of the work and tenderer.

The last date to receive the hard copy of all above documents is **19.12.2017 up to 17:30Hrs** through speed post / Registered Post only.

4. **TERMS & CONDITIONS:**

1. **Earnest Money Deposit (EMD)**

EMD in the form of FDR / TDR of any Scheduled Commercial Bank in favour of the **Accounts Officer, MP State Agricultural Marketing Board Bhopal** should reach in MPSAMB office **upto 5:30 PM on 19.12.2017** (date). Scanned copy of EMD instrument shall be uploaded online along with the reference details.

2. The tenderers are required to quote the rate of each item in rounded off rupees (whole rupee) on the Bill of quantity schedule uploaded in Tender.

3. THE BIDDERS ARE REQUIRED TO OFFER THEIR BIDS EXCLUSICE OF APPLICABLE GST. THE GST SHALL BE PAID BY THE GOVERNMENT TO THE CONTRATOR SEPERATELY. But inclusive of all other taxes and duties (except GST).



4. In case of implementation of any new / amendment of tax rules (up to the date of NIT) by government, the same will be valid on the rate quoted by contractor / deemed to inclusive of the same. In this regard, the decision of Mandi Board will be final and binding.
5. TDS, LWF, SD etc. will be deducted from RA / Final Bills as per norms and rules
6. **Security Deposit:** 10% of the agreement value of the work (5% in the form of FDR at the time of agreement and 5% will be deducted from the running bills). No interest is payable for the deductions towards security deposit.
7. **Defect Liability Period:** 12 Months from the Completion / Handing Over certificate issued by concerned institute / university will be taken as defect liability period. The security deposit and performance guarantee will be refunded after the expiry of Defect Liability Period.
8. **Terms of Payment:** The payment schedule will be as follows:-
 - a. 70% of the contract value against supply and erection of all the items complete in all respect as per specifications.
 - b. 30% of the contract value after commissioning and final inspection and testing at site.
9. The quantities mentioned in "Bill of Quantities" are estimated quantities. However the payment shall be made as per actual quantities measured at site, after completion of work. All other conditions regarding submission of working drawings etc will be as per tender form.
10. All other terms and conditions will be as per tender form. In case of any discrepancy / dispute, the decision of Managing Director, MP State Agricultural Marketing Board will be final and binding on both the parties.

5. **CONTACT PERSONS:-**

Superintendent Engineer, M.P. State Agricultural Marketing Board Kisan Bhawan, 26, Arera Hills, Jail Road, BHOPAL (M.P.) 462 011 Mob -9425091637	Office of the Engineer-in-Chief, M.P. State Agricultural Marketing Board Kisan Bhawan, 26, Arera Hills, Jail Road, BHOPAL (M.P.) 462 011 Telephone-0755-4082126
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6. **Key Dates:**

1	Purchase of Tender Start Date & Time	03.12.2017, 23:30 Hrs	2	Pre-Bid Meeting Date & Time	07.12.2017, 15:00 Hrs
3	Purchase of Tender End Date & Time	11.12.2017, 17:30 Hrs	4	Online Bid Submission end Date & Time	19.12.2017, 17:30 Hrs
5	Physical Submission of Documents in Hard Copy End Date & Time	19.12.2017, 17:30 Hrs	6	Mandatory Submission Open Date & Time (Envelope- A&B)	20.12.2017, 11:00Hrs
7	Technical Bid open Date & Time	NOT APPLICABLE	8	Financial Bid open Date & Time	21.12.2017, 11:00 Hrs



Engineer-in-Chief
Madhya Pradesh State

Agricultural Marketing Board, Bhopal



TECHNICAL SPECIFICATION- SYSTEM-01

A. PREFILTERS

Pre Filters are viscous impingement filters which are designed to remove particles from air/gas streams at efficiency exceeding 95%. The incorporated filter comprises specially treated glass fiber media which inhibits growth of micro-organisms and is sandwiched between two layers of HDPE mesh. It is reinforced with anodized aluminum mesh and housed in a mild steel powder coated frame. HEPA filters should be provided

These filters can be cleaned with water, mild detergents or compressed air in reverse direction.

B. SUPPLY AIR PLENUM

Supply Air Filter Plenum made up of MS angles and CRCA sheets duly stove enamel painted to amount microbe filters.

C. MANOMETERS

ACRYLIC MANOMETERS

Inclined tube type manometers in acrylic construction complete with indicating scale, nozzles, adjustment knobs & cleats.

MAGNEHELIC MANOMETERS

Dwyer Make / Sensocn Make

D. MANOMETER BOARD

Manometer Board with PVC tubing.

E. ALUMINIUM CLADDING:

26 Gauge Aluminium Cladding for Outside Supply & Return Duct to.

F. SHEET METAL WORK DUCTING

Sheet metal work comprising GI ducting, angle rod, gaskets, fabricated & erected at site as per design.

G. NITRILE RUBBER INSULATION WORK

Nitrile rubber used for supply duct is 13mm & for return duct is 9mm. It is fixed to the clean surface of the duct with adhesive SR 505 tightly & the joints are sealed with nitrile rubber tape so that there will be no chances for condensation & also it is not intended to reflect hazards presented by this or any other material under actual fire conditions.

H. ALUMINIUM DIFFUSER WITH DAMPER

Aluminium supply air diffuser with damper.

I. G.I. Duct Riser

Factory fabricated 16 G GI risers comprises with box type dampers and perforated sheet for the grill will be well spaced within the clean-room for proper extraction of air.

J. ALUMINUM DIFFUSER WITH DAMPER

Aluminum Extruded Powder Coated Supply and Return Air diffusers with VCD and equipped with Anti Smudge ring (Removable Core Type) OPERATED FROM BOTTOM. All diffusers shall be fabricated out of 1.2mm powder coated aluminum extruded material. Diffusers shall be selected for an aerodynamic noise power value not in excess of NC 35.



K. DOUBLE SKIN AIR HANDLING UNIT WITH HEAT RECOVERY WHEEL.

The Double Skin type Air Handling Unit consists of blower section with KRUGER / NICOTRA or any other equivalent make forward curve DIDW centrifugal high static blowers, SIEMENS / CROMPTON

By ~~ARUN BIJLE~~ Equivalent make three phase induction motors, driving accessories, coil section with direct expansion type cooling coil; insulated condensate drain tray, filter section with 10 micron pre filter mounting frame, mixing box section, return air 90% & 10% F.A. cut outs and post filtration section will be having 3 micron Post filter set and hepa along with plenum. The fan assembly mounted on common base with vibration isolator, flexible canvas connection. The AHU frame should be aluminium hollow section with 43 mm thick PUF insulation (outer skin PPGI & inner skin G.I.) with enamel finish. Provision of service doors in blower and mixing box section wherever required and the doors and panels will be sealed with food grade rubber gasket in order to avoid air leakage.

L. DX TYPE A.C. SYSTEM (VOLTAS / BLUESTAR MAKE)

The air cooled type direct expansion type A.C. System consists of single phase drive axial flow fans, air cooled type condensing unit coil, hermetically / semi- hermetically sealed R-22 refrigerant compressor along with all compressor protection & safety devices

The accessories includes all copper fittings i.e. copper piping & 4 Core electrical wire only upto 3 meters & above 3 running meters shall be extra as applicable, hard copper supply / return liquid and gas line along with insulation, pipe support system, expansion devices, controls, for compressor safety outdoor unit support system along with condensate drainage system for air handling unit.

HVAC DATASHEET											
COLLEGE OF VETINARY SCIENCE JABALPUR											
Sr.No.	Room Description	Area Classification	Room Dimension in MM		Height in ft	Area Sq.ft.	Area Sq.mtr.	Room Vol. in cu.ft.	ACPH	Area CFM	A.C. in TR
			Length	Width							
SYSTEM - 01											
1	MOUSE BREEDING ROOM	class D	4470	3000	8	144.3	13.4	1154.8	20	385	
2	RAT BREEDING ROOM	class D	4500	3000	8	145.3	13.5	1162.5	20	388	
3	STOCK / BREEDING ROOM - 1	class D	4470	3000	8	144.3	13.4	1154.8	20	385	
4	STOCK BREEDING ROOM - 2	class D	4500	3000	8	145.3	13.5	1162.5	20	388	
5	GUL. EXPREMENTETION ROOM -1	class D	4470	3000	8	144.3	13.4	1154.8	20	385	
6	GUL. EXPREMENTETION ROOM -2	class D	4500	3000	8	145.3	13.5	1162.5	20	388	
7	RABBIT EXPREMENTETION ROOM	class D	4470	3000	8	144.3	13.4	1154.8	20	385	
8	RABBIT BREEDING ROOM	class D	4500	3000	8	145.3	13.5	1162.5	20	388	
TOTAL						1159	107.7	9269.1		3090	17

TECHNICAL SPECIFICATIONS (SYSTEM-02)

A. PREFILTERS

Pre Filters are viscous impingement filters which are designed to remove particles from air/gas streams at efficiency exceeding 95%. The incorporated filter comprises specially treated glass fiber media which inhibits growth of micro-organisms and is sandwiched between two layers of HDPE mesh. It is reinforced with anodized aluminum mesh and housed in a mild steel powder coated frame. HEPA filters should be provided.

These filters can be cleaned with water, mild detergents or compressed air in reverse direction.

B. SUPPLY AIR PLENUM

Supply Air Filter Plenum made up of MS angles and CRCA sheets duly stove enamel painted to amount microve filters.

C. MANOMETERS

ACRYLIC MANOMETERS

Inclined tube type manometers in acrylic construction complete with indicating scale, nozzles, adjustment knobs & cleats.

MAGNEHELIC MANOMETERS

Dwyer Make / Sensocon Make

D. MANOMETER BOARD

Manometer Board with PVC tubing.

E. ALUMINIUM CLADDING:

26 Gauge Aluminium Cladding for Outside Supply & Return Duct to.

F. SHEET METAL WORK

DUCTING

Sheet metal work comprising GI ducting, angle rod, gaskets, fabricated & erected at site as per design.

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Aluminium supply air diffuser with damper.

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I. DOUBLE SKIN AIR HANDLING UNIT

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DATA Sheet System-02

HVAC DATASHEET

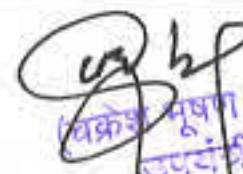
COLLEGE OF VETINARY SCIENCE JABALPUR

SYSTEM - 02

Sr.No	Room Description	Area Classification	Room Dimension in MM		Height in ft	Area Sq.ft.	Area Sq.m tr.	Vol. in cu.ft.	AC PH	Area CFM	A.C . in TR
			Length	Width							
1	PATHOLOGY STUDY ROOM	class D	4470	3000	8	144.3	13.4	1154.8	15	289	
2	PHARMACLOGY STUDY ROOM	class D	4500	3000	8	145.3	13.5	1162.5	15	291	
3	MICRO BIOLOGY STUDY ROOM	class D	4470	3000	8	144.3	13.4	1154.8	15	289	
4	EXPREMENTETION ROOM	class D	4500	3000	8	145.3	13.5	1162.5	15	291	
5	corridor 3	class D	18700	1870	8	376.4	35	3011.3	15	753	
TOTAL						955.7	89	7646		1911	5


(डी. के. वैष्णव)
अधीक्षण यंत्री

(बृजमूषण फौजदार)
उपयंत्री


(विक्रम मूषण शर्मा)
उपयंत्री