

# INDIAN INSTITUTE OF TECHNOLOGY MADRAS ENGINEERING UNIT CHENNAI – 600 036

#### 1. Notice Inviting Tenders

Tender No: 47 / 2013 - 14 / Civil

EXECUTIVE ENGINEER, Indian Institute of Technology Madras, Chennai - 600 036 invites sealed items rate tenders from the eligible contractors who have executed similar nature of works upto 3.00 PM on 26.02.2014 for the following work.

#### 1. PARTICULARS OF WORK

1.1 Name of Work : Annual Maintenance Contract for cleaning

the Kitchen exhaust systems at Himalaya and Vindhya mess at IITM

1.2. Estimated Cost (For reference only) : Rs 7.69 Lakhs

1.3. Earnest Money Deposit (EMD) : Rs 15,400/-

1.4. Cost of Tender Document :Rs 525/- including VAT(Non –refundable)
(Both the EMD and Tender cost should be accompanied in the form of Demand Draft drawn in favour of Indian Institute of Technology Madras, Chennai-600036)

1.5. Time Period for Completion : 12 months

1.6. Validity of the Tender: 90 days from the date of opening of the tender

1.7. Date of Pre-bid Meeting : Nil

1.8. Date and Time of Receipt : Date : 26-02-2014-Time 3.00pm
1.9 Date of Opening : Date: 26-02-2014 - Time 3.10pm

1.10 Place of submission of tenders: Office of the Executive Engineer(Civil),

Engineering unit, Administrative Building 3rd Floor

IIT Madras, Chennai – 600 036.

**Executive Engineer (Civil)** 

# INDIAN INSTITUTE OF TECHNOLOGY MADRAS ENGINEERING UNIT, CHENNAI – 600 036

Annual Maintenance Contract for cleaning the Kitchen exhaust systems at Himalaya and Vindhya mess at IITM

## Tender No: 47 / 2013 – 14 / Civil

#### **INDEX**

S.N	Description	Page No
1	Notice Inviting Tender	1-3
2	Tender	4-5
3	Acceptance of Tender	6
4	Conditions of Contract	7-14
5	Schedules	15-18
6	Additional Specifications	19
7	Forms	20-23
8	Special Conditions	24-28
9	Insurance	29-31
10	Annexure I	32
11	Bill of quantities	33-34

#### 1.11 Deadline for submission of tender

Tenders must be received by the Employer at the following address not later than 3.00 PM on the date of opening mentioned. In the event of the specified date for the submission of the Tender being declared a holiday by the Employer, the Tenders will be received up to the appointed time on the next working day

#### 1.12. Address for Submission of Tender

The Executive Engineer (Civil)
Engineering Unit, Administrative Building, 3<sup>rd</sup> floor,
Indian Institute of Technology Madras
Chennai – 600036.

1.13. The Employer may extend the deadline for submission of Tenders by issuing an amendment in writing in which case all rights and obligations of the Employer and the Tenderer previously subject to the original deadline will be subject to new deadline.

#### 1.14. LATE TENDER

Tenders received late will not be accepted.

#### 2. TENDER

- 2.1. I/We have read and examined the notice inviting tender, schedules, Specifications applicable, drawings, Conditions of contract and other documents and rules referred to in the conditions of contract and all other contents in the tender documents for the work.
- 2.2. I/We hereby tender for the execution of the work specified for the Indian Institute of Technology Madras, within the time specified in Schedule 'F' and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in General Rules and Directions and in Clause 11 of Form 8 (General conditions of contract) and with such materials as are provided for, and in all respects in accordance with such conditions applicable.
- 2.3. I/We agree to keep the tender open for Ninety (90) days from the date of opening of tender and not to make any modifications in its terms and conditions
- 2.4. I/We agree that the EMD deposited by me/us be retained by IITM towards Security Deposit to ensure execution of all works referred to in the tender documents on the terms and conditions contained or referred to therein.
- 2.4. If I/We fail to furnish the prescribed performance guarantee as mentioned elsewhere within prescribed period, I/we agree that IITM shall, without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely.
- 2.5. I/we agree that in case of forfeiture of earnest money as aforesaid, I/we shall be debarred from participating in the re-tendering process of the work.
- 2.6. If I/we fail to commence work as specified in clause 3A of the contract, I/we agree that IITM shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance quarantee absolutely,

2.7. I/We agree to carry out such deviations as may be ordered, up to a maximum

percentage mentioned in Schedule 'F' and those in excess of that limit at the

rates to be determined in accordance with the provision contained in Clause 12.2

and 12.3 of the contract.

2.8. I/we hereby declare that I/we shall treat the tender documents, drawings and

other records connected with the work as secret / confidential documents and

shall not communicate the information derived therefrom to any person other

than a person to whom I/we am / are authorized to communicate the same or use

the information in any manner prejudicial to the safety of the State.

2.9. I/We hereby certify that the tender document downloaded is the exact copy of

the document published by the IITM and no alterations and additions have been

made by me / us in the tender document.

Contractor

Dated

Signature of the Tenderer
Postal Address

Witness

Signature

Name

Postal Address

Occupation

5

# 3. Acceptance

The above tender is accep-	ted by me for an on behalf of the Director, IITM for a sum
of	Rs
(Rupees	
	)
The letters referred to below	v shall form part of this contract Agreement:
a)	
b)	
c)	
For & on behalf of the Dire	ctor, IITM.
Signature	
Designation	
Date	

#### 4. Conditions of contract

#### 4.1. Definitions

In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-

- The expression 'works' or 'work' shall, unless there be something either in the subject or context
  repugnant to such construction, be construed and taken to mean the works by or by virtue of the
  contract contracted to be executed, whether temporary or permanent, and whether original,
  altered, substituted or additional.
- 2. The 'Site' shall mean the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
- 3. The 'contractor' shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
- 4. The 'Engineer-in-charge' means the Engineer who shall supervise and be in-charge of the work and who shall sign the contract on behalf of IIT as mentioned in Schedule 'F' hereunder.
- 5. 'Accepting Authority' shall mean the authority mentioned in Schedule.
- 6. 'Excepted Risks' are riots (other than those on account of contractor's employees), war, acts of God such as earthquake, lightening and unprecedented floods, and other such causes over which the contractor has no control and accepted as such by the Accepting Authority.
- 7. 'Market Rate' shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Schedule 'F' to cover all overheads and profits.
- 8. 'Schedules(s)' referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard schedule of Rates of the CPWD mentioned in schedule 'F' hereunder, with the amendments thereto issued up to the date of receipt of the tender.

- 9. 'Department' means IITM which invites the tenders.
- 10. 'District specification' means the specifications followed by the state of Tamil Nadu in the area where the work is to be executed.
- 11. 'Tendered value' means the value of the entire work as stipulated in the letter of award.
- 12. 'Employer means IITM
- 13. Where the context so requires, words imparting the singular also include the plural and vice versa. Any reference to masculine gender shall whenever required shall refer to feminine gender and vice versa.
- 14. Wherever the expression "Divisional Officer" appears in the Clauses, it should be substituted by the expression "EXECUTIVE ENGINEER
- 15. "Engineer in Charge" means EXECUTIVE ENGINEER, IITM, and the Engineer means the officer representing the Engineer-in-Charge of the Project.

#### 4.2. Authority to sign the tender document

The tender must be signed by the person / persons competent to sign as indicated below. Same stipulations will also apply in the case of Receipt of payments for the work done.

- 1. If the Applicant is an individual, he should sign above his full typewritten name and current address.
- 2. If the Applicant is a proprietary firm, the Proprietor should sign above his full typewritten name and the full name of his firm with its current address.
- 3. If the Applicant is a firm in partnership, the Documents should be signed by all the Partners of the firm above their full typewritten names and current addresses. Alternatively the Documents should be signed by a Partner holding Power of Attorney for the firm and in this case a certified copy of the Power of Attorney should accompany the tender documents. In both cases a

- certified copy of the Partnership Deed and current address of all the partners of the firms should be furnished.
- 4. If the Applicant is a limited Company, or a Corporation, the Documents shall be signed by a duly authorized person holding Power of Attorney for signing the Documents, accompanied by a copy of the Power of Attorney. The Applicant should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary

#### 4.3 Instructions for filling the Bill of Quantities (Schedule A)

- 1. Rate for each item shall be filled in words and figures and there shall be no discrepancy between the rate quoted in figures and words. However, if a discrepancy is found, the rate which corresponds with the amount worked out by the contractor shall unless otherwise proved, be taken as correct.
- If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct.
- 3. Where the rates quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rates quoted be the contractor, will, unless otherwise proved, be taken as correct and not the amount.
- 4. If no rate has been quoted for any item(s), leaving space both in figure(s), words(s) and amount, it will be presumed that the contractor has included the cost of this / these item(s) in other items and rate for such items(s) will be considered as zero and work will be required to be executed accordingly.
- 5. Amount must be quoted in full rupees only.
- 6. Special care should be taken to write the rates in figures as well as in words and the amount in figures in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word 'Rs' should be written before the figure of 'Rupees' and the word 'P' after the decimal figures, eg.' Rs 2.15P' and in case of words the word, "Rupees" should precede and the work 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only', it should invariably be up to two decimal places.

While quoting each rate in schedule of tender, the word 'only' should be written closely following the rate and it should not be written in the next line.

- 7. In the case of item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected
- 8. Tenders containing proposal for any alteration in the work or in the time allowed for carrying out the work, or which contain any other condition including conditional rebates, will be summarily rejected.
- The officer inviting tenders shall have the right to reject all or any of the tenders and will not be bound to accept the lowest or any other tender.
- 10. The tender for the work shall not be witnessed by a Contractor or Contractors who himself / themselves has/have tendered for the same work. Failure to observe this condition would render tenders of the Contractor tendering, as well as witnessing the tender, liable to summary rejection.
- 11. In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such tender is liable to be rejected.
- 12. The tenderers shall sign a declaration under the Official Secret Act, 1923, for maintaining secrecy of the tender documents, drawings or other records connected with the work given to them.

#### 4.4. Refund / forfeiture of EMD

- 1. In the event of a tender being accepted, a receipt for the Earnest Money forwarded therewith shall thereupon be given to that Contractor.
- 2. In the event of a tender being rejected, the Earnest Money forwarded with such unaccepted tender shall thereupon be returned to the Contractor remitting the same, without any interest.
- Tender for the work shall remain open for acceptance for a period of 90 days from the date of opening of the Tender.
- 4. If any tenderer withdraws his tender before the said period or issue of acceptance, whichever is earlier or makes any modification in the terms and conditions of the tender which are not acceptable to the Institute, then IITM, shall without prejudice to any other right or remedy, be at liberty to forfeit 50 % of the said earnest money.

#### 4.5 <u>Documents to be submitted upon acceptance of the tender.</u>

- On acceptance of the tender, the name of the accredited representative(s) of the Contractor who
  would be responsible for taking instructions from the Engineer in Charge shall be communicated
  in writing to the Engineer in Charge.
- 2. The Contractor shall give a list of IITM employees related to him.

#### 4.6 Signing of Agreement.

1. The successful contractor on acceptance of his tender shall within 14 days from the stipulated date of start of the work, sign the contract.

#### 2. Documents constituting the contract

- a. Non judicial stamp paper for value not less than Rs.100 containing the brief description of the contract duly signed by both parties to the contract.
- b. The notice inviting tender, the financial bid and all other the documents including drawings, if any, forming the tender as issued at the time invitation of tender and acceptance thereof together with any correspondence leading thereto.
- c. Decisions taken in the Pre-bid meeting if conducted.
- d. Letter of acceptance
- e. Letter of award (After submission of Performance Guarantee)

#### 4.7 Special conditions

- 1. Child Labour is strictly prohibited.
- 2. Construction labour shall not be permitted (except staff for watch and ward) to stay inside the campus and no labour camp shall be allowed to be set up inside the campus.
- 3. The construction activities and storage of materials shall be restricted within the area earmarked around the proposed building, which shall be barricaded with materials approved by IITM.
- 4. The contractor shall abide by the restrictions imposed by the security wing of the Institute on the working and on movement of labour, materials etc. and nothing extra shall be payable on this account. The contractor shall arrange for necessary photo identity passes for the labour for entry into the campus. Advance action for obtaining such passes shall be taken by the contractor and no claim on this account shall be entrained.
- Movement of labour should be restricted to the areas where work is carried out. Workers should be made to confine themselves to the work areas and should not wander into the near by areas / buildings/ forest.
- 6. The work should be executed during day time only. If the work is required to be carried out in the night, necessary permission of the Engineer-in-charge shall be obtained. Contractor will make his own arrangement for lighting the area and no extra amount for carrying out the work during

- night is payable. To the extent possible engaging women labour in the night shift should be avoided
- 7. The work shall be carried out with least hindrance to the adjoining buildings and offices and the contractor will be responsible for any damage, caused to the existing fixtures, electric fittings, cables, roads, pipelines etc. in the course of execution and the contractor shall make good any such damages for which nothing extra is payable.
- 8. Water for construction shall be arranged by the contractor. The contractor will not be allowed to use any of the water resources available within the campus nor will be permitted to dig any bore well inside the campus.
- No plot rent shall be charged for materials stocked in the institute land during the course of construction with the prior approval the Engineer. All such materials shall be removed at the time of completion of the work.
- 10. The contractor shall make his own arrangement for electricity required during the construction period.
- 11. Tenderers shall inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the site and shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not. Submission of a tender implies that the tenderer has read the complete contract documents and is aware of the conditions, specification of the work to be done and of the local conditions and other factors having a bearing on the execution of work. Any claim either for extra amount or for additional time for execution due to ignorance about the site and working condition is not payable.
- 12. All documents forming the contact shall be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scaled.
- 13. In the case of discrepancy between the schedule of Quantities, the specifications and/or the Drawings, the following order of precedence shall be observed.
  - i. Description of item in the Schedule of Quantities.
  - ii. Particular Specifications and special conditions, if any
  - iii. Drawings.
  - iv. C.P.W.D Specifications
  - v. Specifications of B.I.S.

- 14. If there are varying or conflicting provisions made in any one document forming part of the contract, the Engineer-in-charge shall be the deciding authority with regard to the interpretation of the documents and his decision shall be final and binding on the contractor.
- 15. Any error in description, quantity or rate in schedule of Quantities or any omission there from shall not vitiate the contract or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract. All such variations, errors additions, substitutions etc shall be decided as per the terms of the contract
- 16. The building work shall be carried out complying in all respects with the requirements of relevant bye-laws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-Charge and nothing extra will be paid on this account.
- 17. The work of water supply, internal sanitary installations and drainage work etc. shall be carried out as per the local body bye-laws and the contractor shall produce necessary completion certificate from such authorities after completion of the work, if required.
- 18. Where CPWD specifications are not available for fittings and fixtures, the same should conform to bye-laws and specification of the local Body. The contractor should engage licensed plumbers for the work.
- 19. The contractor shall comply with all legal orders and directions of the local or public authority or municipality and abide by them.
- 20. The contractor shall give a performance test of the installation(s) as per specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.
- 21. Any cement slurry added over base surface (or) for continuation of concreting to obtain better bond between old and new concrete is deemed to have been included in the items and nothing extra shall be payable or extra cement considered in consumption on this account
- 22. The Rate for RCC works includes cost of concreting in sloped & curved roof, chajjas & beams and no extra rate shall be payable for concreting in such situations.
- 23. The rate for Centering & shuttering under concrete items will be the same for Centering & shuttering in curves & arches also unless specified otherwise in the BOQ.
- 24. The contractor should construct proper mortar bands of lean mix with adequate depth & size over the roof for flooding with water & proper curing. In case of Arches, wet gunny bags shall be used for a period of two weeks.
- 25. Holes and chase for water supply and drainage, etc, shall be provided as directed during progress of work without any claim for extra for finishing
- 26. The rate quoted for tiling on walls shall include providing the bevel edges for the corners or the PVC corner strips. No additional payment shall be payable on this account.

- 27. Sample of all materials, fixtures, flooring tiles, wall tiles, doors, windows, sanitary fittings, roofing sheets electrical fittings etc, shall be got approved in advance from the Engineer-in-Charge before taking up the respective work. The contractor shall produce all the materials in advance so that there is sufficient time for testing and approving the materials and clearance of the same before their use in work.
- 28. The contractor shall be furnished, free of cost one certified copy of the contract documents except Standard Specifications, Schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract
- 29. For any dispute arising out of this agreement, the legal jurisdiction will be at Chennai in Tamil Nadu only.
- 30. It is not binding on the competent authority to accept the lowest or any other tender and any or all the tenders received can be rejected without assigning any reason.
- 31. Canvassing whether directly or indirectly, in connection with tender is strictly prohibited and the tenders of the contractors who resort to canvassing will be liable to rejection.
- 32. The competent authority reserves the right to accept part of the tender and the tenderer shall be bound to perform the same at the rates quoted.
- 33. The contractor shall associate an Electrical contractor of the appropriate class to carry out the electrical works. But it is the principal contractor who is responsible for completion of the Electrical work also as per contract. No agreement is created between the Electrical contractor associated by the tenderer and IITM in this regard.
- 34. Other agencies related to this project will also simultaneously execute their part of works and the contractor shall cooperate and allow smooth working of all such agencies. The contractor shall leave such holes, openings etc, for laying / burying of pipes, cable, conduits, clamps, boxes and hooks for fans etc. as may be required for other agencies. Conduits for electrical wiring shall be laid in such a way that they leave enough space for concreting and do not adversely affect the structural members. The rates quoted for the items of work are deemed to include charges for coordinating with all such agencies and nothing extra is payable on this account.
- 35. The following events will take place in the Campus which may hinder the progress of work.

The duration of the events are

a. Shaastra and Saarang - 10 days (normally in January)

b. Convocation - 2 days (normally in July)

The completion time stipulated in the contract is deemed to have included the above, if they happen during the duration of the contract.

#### 5. SCHEDULES

Schedule 'A' - The Bill of Quantities enclosed in this document.

**Schedule 'B' -** Schedule of materials proposed to be issued to the tenderer

NO MATERIAL SHALL BE ISSUED TO THE TENDERER BY IITM

Schedule 'C'- Schedule of tools and plants proposed to be hired to the tenderer

NO TOOLS AND PLANTS SHALL BE HIRED TO THE CONTRATOR BY IITM

Schedule 'D' - Extra schedules for specific requirements / documents for the work, if any.

**Schedule 'E'-** Price escalation Clauses – 10C Not applicable to this contract.

Schedule 'F'

Name of work: Annual Maintenance Contract for cleaning the Kitchen exhaust systems at Himalaya and

Vindhya mess at IITM

Estimated cost of work : Rs. 7.69 Lakhs

Earnest money : Rs.15,400/-

Performance Guarantee : 5% of the tendered value

Security Deposit : 5% of the tendered value

**General Rules and Directions:** 

Officer inviting tender : EXECUTIVE ENGINEER (Civil), IITM

Maximum percentage for quantity of items work
to be executed beyond which rates are to be
determined in accordance with clause 12.2 and 12.3.

_						
n	efi	n	iŧ	ī	^	n
u	C				u	

Engineer-in-charge EXECUTIVE ENGINEER

Accepting authority Director, IIT Madras

Percentage on cost of material and

labour to cover all overheads and profit 15%

Standard schedule of rates CPWD DSR 2013 / Market Rates

Department IIT Madras

Standard CPWD contract form CPWD form 8 with upto date

**Modification and correction (Annexure 1)** 

(Form 8 – Annexure 1 need not be enclosed in the Tender, however while signing the Agreement, this Annexure 1 also will be part of the agreement and signed copy will be enclosed with the agreement)

#### Clause 1

i.) Time allowed for submission of Performance

Guarantee from the date of issue of letter of

7 (seven)\_Days

acceptance in days.

(ii) Maximum allowable extension beyond the

period provided above 7(Seven) Days.

#### Clause 2

Authority for levying compensation under clause 2.: SUPERINTENDING ENGINEER

#### Clause 2a

Whether clause 2a shall be applicable : Yes applicable.

#### Clause 5

Number of days from the date of issue of

letter of acceptance for reckoning the date of start : 14 Days

#### Milestones to be achieved shall be as given below. NOT APPLICABLE

SI no	Cumulative financial progress of work	Cumulative Time allowed from date of start to achieve each milestone	Amount to be with held in case of non- achievement of mile stone
1.			In the event of not achieving the necessary progress 1% of
2.			the tendered value of work will
3.			be withheld for each milestone.

Time allowed for execution of work : 12 months

Authority to give fair and reasonable

Extension of time for completion of work : EXECUTIVE ENGINEER (CIVIL), IITM

Clause 6, 6A : Clause 6A shall be applicable.

#### Clause 7

Gross work to be done with net

payment after adjustment of advances for material

collected, if any, since the last such payments: Rs. 50000/-

for being eligible to interim payment.

#### Clause 10A - List of Testing equipments to be provided as listed in this

#### document - NOT APPLICABLE

SI.No Testing equipment / instruments		Quantity

#### Whether Clause 10B (ii) shall be applicable

Yes

Clause 10 C, 10CA, 10CC - **NOT** applicable to this work.

Clause 10 CA and clause 10C shall be **NOT** applicable for the extended period of contract if the extension so granted is without levy of compensation

Materials covered under clause

1. Cement : Grey cement2. Steel : Bars and Rods

Clause 10CC : Not applicable.

#### Clause 11

Specification to be followed for execution of work

CPWD Specifications 2009 Volume I to II and revised CPWD Specifications up to date, general specifications for electrical works part – I 2004, general specifications for electrical works part-IV Sub Station 2007.

#### Clause 12

Deviation limit beyond which clauses 50%

12.2 & 12.3 shall apply for building work

(Excluding foundation)

Deviation limit beyond which

Clauses 12.2 & 12.3 shall apply for  $\gt$  100%

Foundation work.

Clause 16

Competent Authority for EXECUTIVE ENGINEER (CIVIL)

deciding reduced rates for items which IITM

are not as per specification

Clause 36(i) Technical Personnel to be employed at site. - Not Applicable

#### 6. ADDITIONAL SPECIFICATIONS

The additional specification given below is not substitute to CPWD specifications or IS specifications. These shall be read along with CPWD specifications or IS specifications.

#### 6.1. GENERAL

- 1. The work shall be carried out using metric dimensions only and shall be measured and paid in metric dimensions. F.P.S. units, if any, mentioned in drawings etc are for guidance only.
- 2. Wherever any reference to any Indian Standard Specification occurs in the documents relating to this contract the same shall be inclusive of all amendments issued thereto or revision thereof if any, up to the date of receipt of tenders.
- 3. Unless otherwise specified in the schedule of quantities the rates for the various items are for execution at all heights, levels and locations.
- 4. Unless otherwise specified in the schedule of quantities the rate for the items of the work shall be considered as inclusive of pumping out or bailing out water during execution, if required, for which no extra payments will be made. This will include water encountered from any source, such as rains, floods, sub-soil water table being high or due to any other cause whatsoever.
- 6.2. FLY ASH CONCRETE BLOCK Not applicable
- 6.3. WATER PROOFING TREATMENT Not applicable
- 6.4. Electrical Conduits Laying Not applicable
- 6.5 Stainless steel handrail - NOT APPLICABLE TO THIS TENDER
- 6.6. CONDITIONS FOR CEMENT AND STEEL BROUGHT BY THE TENDERER FOR USE IN THE WORK Not applicable for this work.

**CEMENT & Steel Not applicable.** 

# 6. Forms

# 8.1 Guarantee bond

Form of performance security (guarantee) Bank guarantee bond

In consideration of the Indian Institute of Technology Madras (hereinafter called "The Institute")
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 a irrevocable bank Guarantee for Rs(Rupeesonly) as
security / guarantee from the contractor (s) for compliance of his obligations in accordance with the
erms and condition in the said agreement.
1) We(hereinafter referred to as "the Bank") hereby (Indicate the name of
the Bank) Undertake to pay to the Institute an amount not exceeding
Rs(Rupeesonly) on demand by the Institute.
2) Wedo hereby undertake to pay the amounts due and payable under this
Guarantee without any demure, merely on a demand from the Institute stating that the amount
claimed is required to that recoveries due or likely to be due from the contractor (s). Any such
demand on the Bank shall be conclusive as regard 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 to IITM 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 guarantee being absolute and unequivocal.
The payment so made by us under this bond shall be a valid discharge of our liability payment therein
under and the contractor (s) shall have no claim against us for making such payment.
4) Wefurther agree that the guarantee herein (indicate the name of the
bank) Contained shall remain in full force and effect during the period that would be taken for the said
performance of the said agreement and that it shall continue to be enforceable till all the dues of the
Institute under or by virtue of the said agreement have been fully paid and claims satisfied or
discharged or till Engineer-in-charge on behalf of the Institute certifies 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)	Wefurther agree with the Institute that (Indicate the name of the Bank) the
	Institute shall have the fullest liberty without our consent without effecting in any manner our
	obligations 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 Institute against the said contractor (s) and to
	forebear 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 Institute on any indulgence by
	the Institute 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.
	relating to sureties would, but for this provision, have effect of so relieving us.
•	This guarantee will not be discharged due to the change in the constitution of the bank or the contractor (s).
7)	Welastly undertake not to revoke this (Indicate the name of the
	Bank) Guarantee except with the previous consent of the Institute in writing.
	zam, camamaco emospermar ano promeso conserva en uno menuto in mining.
8)	This guarantee shall be valid up tounless extended on demand by Institute. Notwithstanding anything mentioned above, our liabilities under this guarantee are restricted to Rs (Rupees) and unless a claim of writing is lodged with us within six month of the date of expiry or extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharge.
Da	ted theday offor(Indicate the name of the Bank)

# 8.2. Form of guarantee bond for EMD

In consideration of the Indian Institute of Technology Madras (hereinafter called "The titute") Having offered to accept the terms and conditions of the proposed tender for the work of
eduction of an irrevocable bank Guarantee for Rs(Rupeesonly) as curity from the contractor (s) for compliance of his obligations in accordance with the terms and andition in the tender.
We (Hereinafter referred to as "the Bank") hereby (Indicate the name of the Bank) Undertake to pay to the Institute an amount not exceeding Rs
Wedo hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on a demand from the Institute stating that the amount claimed is required to that recoveries due or likely to be due from the contractor (s). Any such demand on the Bank shall be conclusive as regard 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
We, the said bank further undertake to pay to IITM 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 guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability payment therein under and the contractor (s) shall have no claim against us for making such payment.
Wefurther agree that the guarantee herein (indicate the name of the bank) Contained shall remain in full force during the <b>SIX months period.</b>
Wefurther agree with the Institute that (Indicate the name of the Bank) the Institute shall have the fullest liberty without our consent without effecting in any manner our obligations 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 Institute against the said contractor (s) and to forebear 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 Institute on any indulgence by the Institute 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)	Welastly undertake not to revoke this (Indicate the name of the
	Bank) Guarantee except with the previous consent of the Institute in writing.
8)	This guarantee shall be valid up to SIX months unless extended on demand by Institute.
	Notwithstanding anything mentioned above, our liabilities under this guarantee is restricted to
	Rs (Rupees) and unless a claim of writing is lodged with us within six month of
	the date of expiry or extended date of expiry of this guarantee all our liabilities under this
	guarantee shall stand discharge.
Da	ted theday offor(Indicate the name of the Bank)

#### 8.3 Special conditions

#### 9.1. Protection of Environment

- The debris / construction waste and other waste generated from the work spot should not be thrown inside the campus. All waste material should be taken out of the campus or should be dumped at a place earmarked by the Engineer in charge. All construction material should be stored only at places earmarked by the engineer in charge.
- Material like cement, aggregate, steel etc should not be stored in buildings that are in use. If any material stored in unauthorized location the same shall got removed at the cost of contractor and necessary rent shall be levied for the area used for storage.
- 3. For Intercarting of various materials use of animal drawn vehicles are strictly prohibited.
- 4. Preparation of concrete, mortars in the roads, pavements, bare floors under the building is strictly prohibited.
- 5. While transporting the materials along the road, spillage of material should be avoided. If any spillage occurs, the same should be got cleaned immediately.
- 6. No vegetation inside the campus should be damaged.
- 7. Smoking is strictly prohibited at workplace.

#### 10.0 Safety at the Site

- 1. The contractor must appoint a qualified person (full time) for taking care of implementation of Safety systems
- 2. The Contractor shall submit the **Project Safety Plan** stating the methodology of implementation of systems to ensure the safe and environment friendly work place. The Safety Plan must include the following.
  - a. Organization Chart
  - b. Reporting relationship of the safety enforcement personal in a flow chart
  - c. Safety Committee Structure Chairman, secretary and committee members

#### 10.1 Roles & Responsibilities of the Safety committee

Enforcement of

- 1. applicable Statutory requirements, standards and codes related to safety and its adherence,
- General safety rules and regulations concerning use of personal protective equipment and safety devices relevant to site activities, Awareness and Training Programs, Motivational schemes, programs for safe Access, Egress and workstation safety
- 3. Safe use of construction power supply and upkeep / maintenance of installations
- 4. Work permit systems
- 5. Use, maintenance and inspection of Plant & machinery
- 6. Scaffold & formwork norms
- 7. Use, maintenance and inspection of Lifting Tools
- 8. Fire Protection and prevention
- 9. Emergency preparedness
- 10.2 Status of Safety implementation at site will be discussed in the Weekly Review meeting. Contractor must submit the safety statistics every month in the enclosed format. Merit Certificate will be issued for the achievement of safety mile stones like 0.5 million safe man hours, one million safe man hours.1.5 million safe man hours and so on.
- 10.3 The General Guidelines governing the safety implementation shall include the following Rules. while preparing the safety plan.
  - All the workmen shall undergo Safety Induction, screening before engaging them on the job.
     Physical fitness of the person to certain critical jobs like working at height or other dangerous locations to be ensured before engaging the person on work.
  - 2. Sub-contractors shall ensure adequate supervision at workplace. They shall ensure that all persons working under them shall not create any hazard to self or to co-workers.
  - 3. Nobody is allowed to work without wearing safety helmet. Chinstrap of safety helmet shall be always on. Drivers, helpers and operators are no exception.

- 4. All labour should be dressed properly attending to work wearing dhotis, lungies should be avoided to the extent possible.
- 5. The workmen shall wear suitable protection devices like mask, gloves, shoes etc,
- 6. No one is allowed to work at or more than three meters height without wearing safety belt and anchoring the lanyard of safety belt to firm support preferably at shoulder level.
- 7. No one is allowed to enter into workplace and work at site without adequate foot protection.
- 8. Usage of eye protection equipment shall be ensured when workmen are engaged for grinding, chipping, welding and gas-cutting. For other jobs as and when site safety co-coordinator insists eye protection has to be provided.
- 9. All PPE like Safety shoes, Safety helmet, Safety belt, Safety goggles etc. shall be arranged before starting the job.
- 10. All excavated pits shall be barricaded & barricading to be maintained till the backfilling is done. Safe approach to be ensured into every excavation.
- 11. Adequate illumination at workplace shall be ensured before starting the job at night.
- 12. All the dangerous moving parts of the portable / fixed machinery being used shall be adequately guarded. Ladders being used at site shall be adequately secured at bottom and top. Ladders shall not be used as work platforms.
- 13. Erection zone and dismantling zone shall be barricaded and nobody will be allowed to stand under suspended loads.
- 14. Contractors should spray water using Water browser periodically in the site to reduce the dust rising due to wind.
- 15. Horseplay is completely prohibited at workplace. Running at the site is completely prohibited, except in the case of emergency.

- 16. Material shall not be thrown from the height. If required, the area shall be barricaded and one person shall be posted outside the barricading for preventing the tre-passers from entering the area.
- 17. Other than electricians with red helmet no one is allowed to carry out electrical connections, repairs on electrical equipment or other jobs related thereto.
- 18. All electrical connections shall be made using 3 or 4 core cables, having a earth wire.
- 19. Proper Earthling pits at site to be constructed. And the sensitivity must be maintained less than 1 ohm
- 20. Main panel boards should have MCB's and RCCB / ELCB's (30 mA sensitivity).
- 21. Inserting of bare wires for tapping the power from electrical sockets is completely prohibited.
- 22. All major, minor accidents and near misses to be recorded and reported to the IITM and the management must take necessary steps to avoid the recurrence.
- 23. Scaffoldings used should be of proper construction. No Casurina pole / bamboo scaffolding is permitted. It should be inspected by competent person(s) before use
- 24. All tools and tackles shall be inspected before use. Defects to be rectified immediately. No lifting tackle to be used unless it is certified by the competent authority.
- 25. All tools and tackles shall be tested and have a Identification no., SWL and date of next test marked on them.
- 26. A tools and tackles inspection register must be maintained and updated regularly.
- 27. Good housekeeping to be maintained. Passages shall not be blocked with materials. Materials like bricks shall not be stacked to the dangerous height at workplace.
- 28. Must have a reverse horn on all the Earth moving vehicles and Equipments used at site.

- 29. Debris, scrap and other materials to be cleared from time to time from the workplace and at the time of closing of work every day.
- 30. Adequate firefighting equipment shall be made available at workplace and persons are to be trained in fire fighting techniques with the co-ordination of site safety co-ordinator.
- 31. All the unsafe conditions, unsafe acts identified by contractors, reported by site supervisors and / or safety personnel to be corrected on priority basis.
- 32. No children shall be allowed to enter the workplace.
- 33. Other than the Driver / operator, no one shall travel in a tractor / tough rider etc.
- 34. All the lifting tools and tackles shall be stored properly when not in use.
- 35. Clamps shall be used on Return cables to ensure proper earthling for welding works.
- 36. Return cables shall be used for earthling.
- 37. All the pressure gauges used in gas cutting apparatus shall be in good working condition.
- 38. Proper eye washing facilities shall be made in areas where chemicals are handled.
- 39. Connectors and hose clamps are used for making welding hose connections.
- 40. Proper warning boards and caution notices to be displayed at required areas inside the site.
- 41. All cranes must have a trained signal man for signaling.
- 42. All underground cables for supplying construction power shall be routed using conduit pipes.
- 43. Spill trays shall be used to contain the oil spills while transferring / storing them.
- 44. Tapping of power by cutting electric cables in between must be avoided. Proper junction boxes must be used.
- 10.4 Any violation of above will attract levy of penalty by the engineer in charge on the contractor.

#### INSURANCE

#### 1. Insurance of Works

The Contractor shall effect Contractor's all risk insurance policy (CAR policy) in the joint names of the Employer and the Contractor, the name of the former being placed first in the policy, covering the following:

- (a) The Works at the contract price together with the materials for incorporation in the works at their replacement value.
- (b) All plants and equipment and other things brought to the site by the Contractor at their replacement value.

The insurance shall be against all losses or damages from whatever causes, other than excepted risks, as defined in Clause 2 of Conditions of Contract, for which the Contractor is responsible under the Contract. The insurance cover shall be for the period of contract and also for the period of maintenance, for loss or damage arising from a cause prior to commencement of the period of maintenance, and for any loss or damage, occasioned by the Contractor in the course of any operations carried out for the purpose complying with his course of any operations carried out for the purpose of complying with his obligations during maintenance period under Clause 17 of Clauses of Contract. Such insurance shall be effected with an insurer and with terms approved by the Employer. The Contractor shall, whenever required, produce the policy or policies and the receipts for payment of the current premiums.

#### 2. Third Party Insurance

Before commencing the execution of the Works, the contractor shall insure against the liability for any material or physical damage, loss or injury which may occur to any property or life including that of the Employer or to any person, including any employee of the Employer, by or arising out of the execution of the works or in the carrying out of the Contract. The sum insured will be for Rs.5 lakhs. Such insurance shall be effected with an insurer and in terms approved by the Employer. The Contractor shall, whenever required, produce before the Engineer-in-charge the policy or policies of insurance and the receipts of payment of the current premiums.

#### 3. Workmen's Insurance

The Employer's shall not be liable for any payment in respect of any damages or compensation payable according to law in respect or in consequence of any accident or injury or loss of life to any workman or other person in the employment of the Contractor or any subcontractor, except an accident or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall insure against such liability with an insurer approved by the Employer for sum of the established norms during the entire period till completion of Period of Maintenance.

#### 4. Recovery from the Contractor

Without prejudice for the other rights of the Employer against the Contractor in respect of default, the Employer shall be entitled to deduct from any sums payable to the Contractor the amount of any damages, compensation costs, charges and other expenses paid by the Employer and which are payable by the Contractor under this clause.

#### 5. Extension of time

The Contractor, in case of rebuilding or reinstatement, shall be entitled to such extension of time for completion as the Engineer-in-charge may deem fit, but shall, however not be entitled to reimbursement by the Employer of any shortfall or deficiency in the amount finally paid by the insurer in settlement of any claim arising as set out herein.

#### 6. Insurance by Sub-Contractors

Without prejudice to his liability under this clause the Contractor shall also cause all Sub-Contractors to effect, for their respective portions of the works, similar policies of insurance in accordance with the provisions of this clause and shall produce or cause to produce to the Employer such policies. The Contractor shall not permit a Sub-Contractor to commence work at the site unless the said insurance policies are submitted. In the event of failure of the Sub-Contractor to take out such a policy of insurance before commencing the works at the site, the Contractor shall be responsible for any claim or damage attributable to the said Sub-Contractor.

#### 7. Period of Policies

All the insurance covers mentioned above shall be kept alive during the complete period of the contract. If the Contractor shall fail to effect and keep in force the insurance referred to above, or any other insurance which he may be required to effect under the terms of the Contract, then and in any such case the Employer on advice of the Engineer-in-Charge may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any moneys due or which may become due to the Contractor, or recover the same as debt due from the Contractor.

#### 8. Damage to Persons and Property – Employer to be Indemnified

The Contractor shall indemnify the Employer against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto, except any compensation or damages for or with respect to:

- (a) The permanent use or occupation of land by the works or any part thereof.
- (b) The right of the Employer to execute the works or any part thereof on, over, under, in or through any land.
- (c) Injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents, such part of the compensations as may be just and equitable having regard to the extent of the responsibility of the Employer, his servant or agent or other Contractors, for the damage or injury.

# Annexure I – Approximate size and number of ducts in Messes

SI No	Location	No. of	Size	Length of	Length	Nos
		Hoods Size	(approx.)	HD's	of VD's	
		(approx)				
1	Himalaya Mess	3+8=11	3(2mx1m),	28m	8m	1
	G floor		8(1mx1m)			
2	Himalaya Mess	6+2=8	6(2mx1m),	31m	5m	1
	1 st floor		2(1mx1m)			
3	Himalaya Mess	6+2=8	6(2mx1m),	28m	2m	1
	2 nd floor		2(1mx1m)			
4	Vindhya mess	11+1=12	11(2mx1m),	45m	2m	1
			1(1mx1m)			

Signature of Contractor

**EXECUTIVE ENGINEER (CIVIL)** 

#### 17. BILL OF QUANTITIES

Tender No: 47/2013 – 14 / Civil / Annual Maintenance Contract for cleaning the Kitchen exhaust systems at Himalaya and Vindhya mess at IITM

SI NO	Quantity	Description of work	Unit	Rate	Amount
1	12	Cleaning the entire ducts at Himalaya and Vindhya mess	Month		
		at IITM using proper tools and plants, chemicals,			
		engaging expert workers. The rate inclusive of cleaning			
		the ducts using expert workers, providing adequate safety			
		measures for workers, disposing of dirt collected, taking			
		up the work during night hours, covering the surrounding			
		area properly, submitting the detailed report with photos			
		taken before and after cleaning etc. complete. Wherever			
		physically possible, including the vertical sections. The			
		vertical ducts should be cleaned using appropriate			
		methods such as rotating brush and high-pressure steam			
		nozzle, the other method involves a technician			
		descending the ducts depending upon the size of the duct			
		to manually clean the duct. If necessary access is not			
		inside the duct and the procedure includes installing			
		access panels or access doors to gain access. These			
		panels will be of similar material and thickness as the			
		ducts. The exact location and quantity can only be			
		confirmed when the job is being carried out and no			
		separate charge is made for this additional work.			

hood and ducts to be cleaned are given in Annexure I. The rate inclusive of disposal of the dirt collected by cleaning outside the campus.	
the above in Himalaya and Vindhya mess in all floors, ducts fixed in all locations. Approximate dimensions of	
3. A washing area and garbage bags for sludge disposal. Cleaning plan-Hoods and filters once in month, Ducts and fan unit once in a month. The rate quoted is for cleaning	
the tub/drum should be sufficient enough to soak at least 10-12 filters at once)	
The following facilities listed below should be arranged by the contractor / agency.  1. Hot water/equipment's to heat water.  2. Steel tub/ drum to soak filters in caustic soda (size of	
equipment etc. at multiple locations.  When cleaning the ducts the fans must be turned off, isolated and tagged out.  Provide waste disposal facility for water, grease deposits, rags and plastic etc.  Unrestricted access to the areas of work whilst work is in progress.	
The following Facilities will be provided by IITM: -□ 220 volts single-phase power for lighting, tools and	

#### **Total Amount**

Certified that the bid as published on the web contains 34 pages.

# Signature of the contractor

## **Executive Engineer (Civil)**

Engineering Unit, Administrative Building, 3rd Floor, Engineering Unit, IIT Madras, Chennai – 600 036.