24.01.2022

**GOVERNMENT OF INDIA**

**INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, POWAI**

**OFFICE OF DEAN(IPS), IITB, MUMBAI**

**Notice Inviting Bids**

NIT NO- IIT(B)/Dean (IPS)/Comp. Consultancy/DESE-CESE/2021/01

**NAME OF ASSIGNMENT:**Comprehensive Consultancy for the Work of Exhaust Fume-hood Ducting job for DESE/CESE building of Indian Institute of Technology Bombay, Powai, Mumbai - 400076.

**ESTIMATED COST OF WORK: Rs. 3.86 Cr1466667314666673**

**TIME ALLOWED:** 12 Months

Dean (IPS)

IITB, Mumbai

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Dean (IPS)

IITB, Mumbai

**INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, POWAI, MUMBAI**

**INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING FORMING PART OF BID DOCUMENT**

Dean (IPS) Office, IITB, Powai, Mumbai, 1st Floor, Main Building, IITB Campus, Mumbai-400076, (Telephone No. **022-25764017**, email: dean.ips.office@iitb.ac.in) on behalf of the IITB, Powai, Mumbai invites turnkey bids in two bid system from specialized Agencies in India for the following work:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sl. No. | NIT No. | Name of Work & location | Last Date & time of submission of bid and other documents as specified in press notice | Time and date of opening of Financial bid |
| 1 | IIT(B)/Dean (IPS)/Comp. Consultancy/DESE-CESE/2021/01 | Comprehensive Consultancy for the Exhaust Fume-hood Ducting job for DESE/CESE building of Indian Institute of Technology Bombay, Powai, Mumbai - 400076. | Up to **17.00** Hrs on  **10-03-2022** | After **15.00** Hrs on **24-03-2022** |

**INDIAN INSTITUTE OF TECHNOLOGY BOMBAY**

**OFFICE OF DEAN (IPS)**

**Offer Notice No.** IITB/Dean (IPS)/Comp. Consultancy/DESE-CESE/2021/01

**PART – I**

**TECHNICAL BID**

**(ENVELOPE - I)**

**For**

Comprehensive Consultancy Services for

Exhaust Fume-hood Ducting job for DESE / CESE Building of

Indian Institute of Technology Bombay (IITB), Powai, Mumbai 400076

ISSUED TO

M/s.

**Dean (IPS)**

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**SECTION – 1: INFORMATION TO CONSULTANTS & DATA SHEET**

Name of Assignment: Comprehensive Consultancy Services for Exhaust Fume-hood Ducting job for DESE / CESE Building of Indian Institute of Technology Bombay (IITB), Powai, Mumbai 400076

**1.1. INTRODUCTION**

1.1.1 The INDIAN INSTITUE OF TECHNOLOGY BOMBAY (IITB) named in the “Data Sheet” will select a firm from among those short listed for this work.

1.1.2 Bidders are invited to submit a Technical Proposal & Financial Proposal for consulting services required for the Assignment named in the Data Sheet. The proposal will form

the basis for future discussions and ultimately, a contract between the IITB and the

selected firm.

1.1.3 The Assignment will be implemented in accordance with the phasing indicated in the Data Sheet. When the Assignment includes several phases, continuation of services for the next phase will be subject to satisfactory performance of the previous phase, as determined by the IITB.

1.1.4 Consultants must familiarize themselves with the local conditions and take these into account in preparing the proposals.

1.1.5 The IITB will provide the inputs specified in the Data Sheet and make available relevant project data, reports, design information etc.

1.1.6 Bidders may note that the costs incurred in the preparation of the proposal and subsequent discussions including a visit to the IITB’s office or proposed location(s) connected with the assignment, are not reimbursable, and for which the IITB is not bound to accept any claim.

**1. 2 CLARIFICATION & AMENDMENT OF OFFER DOCUMENT**

1.2.1 Bidders may request for clarifications on any of the Documents furnished to them up to the number of days indicated in Data Sheet, before the proposal submission date. Any request for clarification must be sent in writing or by e-mail to the IITB’s address indicated in the Data Sheet. IITB will respond by e-mail to such requests and copies of the response (including an explanation of query but without identifying the source of enquiry) will be sent to all invited bidders who intend to submit the proposal.

1.2.2 At any time before the submission of proposals, IITB may, for any reason, whether at its own initiative or in response to clarifications sought by an invited consulting firm, modify the documents, furnished with the offer, by an amendment. The amendment will be notified in writing by e-mail to all invited consulting firms and will be binding on them. IITB may at its discretion extend the deadline for the submission of proposals.

1.2.3 Pre-Bid meeting :A Pre-Bid meeting shall be held in the Conference room of

Dean (IPS) at **10:30 hours on 24.02.2022** to clarify any doubts if any, of intending

bidders. If further pre-bid meetings are required for complete and effective

interactions, the date and time of same will be communicated at the end of the pre

bid meeting.

**1.3. PREPARATION OF PROPOSAL**

Bidder shall submit a Technical Proposal and a Financial Proposal, written in the language specified in the Data Sheet.

1.3.1 **Technical Proposal (shall not include any financial information**)

1.3.1.1 Consultant is required to examine all terms and instructions included in the documents furnished with offer. Failure to provide any clarification / information sought by IITB may result in rejection of Proposal.

i) The estimated cost of work for which the consultancy assignment is sought as well as the time to complete the assignment is stated in the Data Sheet. Financial Proposal may be in accordance with this.

ii) The key professional staff, listed in the offer, shall be available for the entire duration of the execution of the Assignment. These shall preferably be the permanent employees of the firm.

iii) Proposed staff must have relevant educational qualification and experience, necessary for executing the work.

iv) Any change in key professional staff, if necessary, should be notified to IITB. The firm’s personnel shall have a good working knowledge of English.

1.3.1.2 Technical Proposal: Should provide the following information, but not limited to the same.

i) Comments or suggestions on the scope of work and services; documents and details enclosed with this tender; and the facilities to be provided by the IITB.

ii) A description of the methodology & time line which the Consultant proposes

to employ in performing the Assignment, duly illustrated with bar charts of

activities, Critical Path Method (CPM) or Project Evaluation and Review

Technique (PERT) or any other type of graphics.

iii) The composition of the proposed staff team by speciality, the tasks which would be assigned to each and their working hours.

iv) Curriculum Vitae (C.V.) recently signed by the proposed key professional staff and countersigned by an authorized officer of the Consultant. Key information should include: years of experience with the firm/entity and the position held in various assignments during the last ten years.

v) Estimates of the total time effort (person x months) to be provided for the services for each stage or phase of the Assignment, supported by breakdown of effort proposed (person x months) for major items of work & services.

vi) Details of specific experience/expertise/ information asked for in the Data Sheet.

vii) Confirmation/submission on salient technical conditions mentioned in tender document.

viii) Quality assurance system / programme proposed to be employed in design, engineering, procurement, inspection & management activities.

**1.3.2 Financial Proposal**

1.3.2.1 In preparing the Financial Proposal, Consultant is expected to take into account, besides technical requirements, commercial conditions specified in the tender Document. The Financial proposal should follow, but not limited to Part II Financial Bid

1.3.2.2 The Financial Proposal should be on a Lumpsum basis for the tender job and for manpower deployment basis as specified in the Financial Bid IIA. The amount/rates quoted in the Proposal shall be both in figures and words. The L1 vendor will be decided on the basis of overall lowest based on the quotation received in Price Bid Part II A.

1.3.2.3 The Financial Proposal, for the assignment and for additional works shall be all inclusive, and should cover, but not be limited to, remuneration for staff (in the field and at headquarters), gratuity, provident fund, travel assistance, out of pocket expense (per diem), overheads, profits, accommodation (housing), transportation (for mobilization and demobilization), communication, equipment (vehicles, office equipment, furniture, consumable etc.), printing of documents, surveys, training. The Financial Proposal shall also include the tax liability (except GST) and cost of insurance of Consultants’ firm and his personnel specified in Data Sheet.

**1.4. SUBMISSION, RECEIPT & OPENING OF PROPOSALS**

1.4.1 The original of the Part I Technical Bid (Envelope I) and Part II Financial Bid (Envelope II) must be prepared in indelible ink. The proposals should contain no inter-lineation or overwriting except as necessary to correct errors made by the Consultants themselves. Any such corrections must be initialed by the person or persons signing the Proposals.

1.4.2 An authorized representative of the firm must initial all pages of the Proposals. The representative’s authorization shall be confirmed by a written power of attorney accompanying the Proposals.

1.4.3 The Proposals shall be placed in a sealed outer envelope, which will bear the address and information indicated in the Data Sheet. This outer Envelope will include two separate envelopes, clearly marked (a) Technical Bid (Envelope I)and (b) Financial Bid (Envelope II).

1.4.4 The completed Proposals in two parts must be delivered at the submission address on or before the time and date stated in the Data Sheet. Any proposal received after closing time for submission will be returned unopened.

1.4.5 The Proposal must be valid for the number of days stated in the Data Sheet from the date of its submission during which you must maintain the availability of the key professional staff proposed for the Assignment. The IITB will make its best effort to conclude the proposal evaluation process within this period.

**DATA SHEET**

**(Information to Consultants)**

1. Name of the Employer : Dean(IPS) on behalf of Director, Indian Institute of Technology Bombay, 1st floor, Main Bldg, Powai, Mumbai-400076. **E-mail:** [**dean.ips.office@iitb.ac.in**](mailto:dean.ips.office@iitb.ac.in)
2. Name of the Assignment: Comprehensive Consultancy for Exhaust Fume-hood Ducting job for DESE / CESE Building of IIT Bombay, Powai, Mumbai – 400076.
3. The estimated cost of work: **a) Exhaust Fumehood Ducting System Rs. 3.86 Crores.**
4. The Assignment needs to be completed within 12 **(Twelve) Months o**r as may be required to complete the assignment in all respects as required by IITB. Time schedule for the Assignment is included herewith.
5. The proposal shall be submitted in two (2) parts; Part I Technical Bid (Envelope I) and Part II Financial Bid (Envelope II). These two separate envelopes containing the proposals shall be placed in a sealed outer envelope, bearing the address as mentioned above.
6. The proposal submitted shall be valid for a period of 60 (sixty) days from the tender opening date for the purpose of evaluation and award of work.
7. Any request by the bidder for clarification on any of the documents furnished to them, should be sent in writing to the IITB address or email mentioned above on or before the pre-bid meeting.

**Schedule for completion of Major Activities**

|  |  |  |
| --- | --- | --- |
|  | | **Schedule in months from Date of award of Consultancy** |
| **NAME OF ASSIGMENT** | | **Study and Design of Exhaust Fume hood Ducting job for DESE / CESE building of IITB, Bombay** |
| **TIME FOR ASSIGNMENT** | | **12 (Twelve) Months**  (From 0 to 12) – (in months) |
| **S.No.** | **Description of Activity** | **Period of Activity** |
| **A** | **Preparing Feasibility Report for Fumehood Exhaust ducting and gas treatment system for DESE/CESE bldg.** | **1 (One) Month**  **30 (Thirty) days** |
| a | Visit by Consultant’s team for interaction with Lab Heads to understand the issues and firm up their requirements of exhaust system. |  |
| b | Based on information obtained from above interaction, mapping the existing and proposed fumehood /cabinets, table top experiments, all the equipment on the terrace, and other miscellaneous requirements on the lab layouts provided by the client.. |  |
| c | Checking feasibility of providing new exhaust ducting on the basis of visual inspection and ‘As-built’ drawings’ provided by the client. |  |
| d | Preparation and submission of Feasibility report comprising operational details and cost-benefit analysis of the proposed solution. The report must also contain two viable alternatives depicting the following:  General Arrangement drawing showing location of fumehoods and associated equipment, duct routing, scrubber, blowers, stack etc. |  |
| e | Submission of Ground to 7th floor layout drawings with mapping done of all Fumehoods and equipment that need exhaust ventilation, as deliverables. |  |
| **B** | **Preparation of detailed engineering design based on Feasibility study.** | **1 (One) Month**  **30 (Thirty) days** |
| a | After approval of feasibility design by IITB, detailed engineering design to be submitted |  |
| b | Execution drawings after approval for Fabrication of Major Ducting works |  |
| c | Execution drawings after approval for other associated works such as Electrical panels, cabling etc |  |
| d | Gas treatment facilities prior to Exhaust |  |
| **C** | **Preparation of Tender documents with detailed drawings, BOQ, Rate analysis and Technical Specs. after acceptance and approval of Air Management solution for the building as submitted by the Consultant. The tender format to be as per the standard of IITB** |  |
| **D** | **Tender processing : Invitation of Tender, Prequalification of Agencies, Sale & Receipt of tenders, finalization of Tenders and Award of Work** | **3 (Three) Months**  **90 (Ninety) days**  **Period for both Stage C & D** |
| **E** | **Construction stage:** | **6 (Six) Months** |
| a | Checking and approving of shop drawings prepared by vendors |  |
| b | Day to day Inspection of work during execution |  |
| c | Exercising strict control over work quality, estimated quantities for variation and justification for additional expenditure if any. |  |
| d | Verification and certification of contractor’s interim and final bills after Joint inspection. |  |
| **F** | **Post-Construction stage:** | **1 (One) Month**  **30 (Thirty) days** |
| a | Supervision of Commissioning activities should be carried out by the Consultant on daily basis. |  |
| b | Submission of `As built` drawings and Final Statutory Clearance engineered by the Consultant. |  |
| c | Generating snag list towards the end of the project completion. |  |

8. The financial bid shall be opened on 24.03.2022 at 3.00 p.m. in the presence of the bidders or their accredited representatives.

9. Tax liability, insurance – description or reference to Documents:

i) The Consultant and his personnel shall pay the taxes and other impositions levied

under existing, amended or enacted laws during pendency of the Assignment.

ii) The Consultant shall cover employer’s compensation insurance for his and his sub

consultant (if applicable) personnel in accordance with the provisions of relevant applicable

laws.

**SECTION – 2: FORM OF CONSULTANCY CONTRACT (DRAFT)**

THIS CONTRACT (hereinafter called the "Contract") is made the \_\_\_\_\_\_\_ day of the month of \_\_\_\_\_\_\_\_\_ Two Thousand \_\_\_\_ between, on the one hand, The President of India (hereinafter called the "IITB", which expression shall include his successors and permitted assigns) acting through his duly authorized representative, Dean (IPS) IITB, Indian Institute of Technology (Bombay), Powai, Mumbai and, on the other hand, M/s. \_\_\_\_\_\_\_\_\_\_\_\_\_, having its Registered Office at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(hereinafter called the "Consultant" which expression shall, unless repugnant to the context, be deemed to include its successors and assigns).

*[Note: if the Consultants consist of more than one entity, the above should be partially amended to read as follows:*

*“… and, on the other hand, a joint venture consisting of the following entities, each of which will be jointly and severally liable to the IITB for all the Consultants’ obligations under this Contract, namely \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_ (hereinafter called the "Consultants"…)].*

WHEREAS

(A) the IITB has requested the Consultant to provide certain consulting services as defined in the Technical Proposal attached to this Contract (hereinafter called the "Services");

(B) the Consultant, having represented to the IITB that they have the required professional skills, personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract;

NOW THEREFORE the parties hereto agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this RFP and proposal from the Consultant :

Technical Bid:

(a) the General Conditions of Contract (hereinafter called “**GCC**”);

(b) the following Appendices:

Appendix A : Description of the Services

Appendix B : Deliverables by the Consultant

Appendix C : Guarantee for Performance of Services

Financial Bid:

1. Financial Bid
2. Milestones of Deliverables for Payment.
3. Details of reimbursable expenses
4. The mutual rights and obligations of the IITB and the Consultant shall be as set

forth in the Contract; in particular:

(a) the Consultant shall carry out the Services in accordance with the provisions of the Contract; and

(b) the IITB shall make payments to the Consultant in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

Dean (IPS)

FOR AND ON BEHALF OF IITB

* + - * 2. ***(Director)***

In presence of

Witness:

1.

2.

FOR AND ON BEHALF OF

[CONSULTANT]

***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

***(Authorised Representative)***

In presence of

Witness:

1.

2.

*[Note: If the Consultants consist of more than one entity, all of these entities should appear as signatories, e.g. in the following manner]:*

FOR & ON BEHALF OF EACH OF

THE MEMBERS OF THE CONSULTANTS

[Name of the Member]

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* + - * 1. ***(Authorised Representative)***

[Name of the Member]

**SECTION – 3: GENERAL CONDITIONS OF CONSULTANCY CONTRACT**

1. GENERAL PROVISION

1.1 **Definitions:** Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

1. “IITB” means, Indian Institute of Technology Bombay.
2. "Consultancy Contract" means the Contract signed by the Parties, to which these Conditions of Consultancy Contract are attached, together with all the documents of such signed Contract.

1. "Applicable Law" means the laws and any other instruments having the force of law in the India, as they may be issued and in force from time to time.
2. “Director” means director of IITB or his successors. “Dean –Planning” means Dean of planning department of IITB authorized by Director to administer this contract, “Engineer-in-charge” means an engineer so appointed by the IITB for coordinating with agencies connected with project and interacting with consultants.
3. "Party" means the IITB or the Consultant(s), as the case may be, and Parties means both of them.
4. "Services" means the work to be performed by the Consultant pursuant to this Contract.
5. "Personnel" means persons hired by the Consultant(s) or by any Sub-consultant(s) as employees and assigned to the performance of the Services or any part thereof.
6. “Site” means the whole of the property belonging to the IITB on which the Services will need to be performed.
7. “Month” shall mean a calendar month.

1.2 **Law Governing the Contract**

This Contract, it’s meaning and interpretation and the relation between the Parties will be governed by the Applicable Law and the jurisdiction shall be Mumbai.

1.3 **Notices**

(a) Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing and shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by speed-post or facsimile to such Party at the address (i) For IITB: Dean IPS, IITB, Mumbai 400076 (ii) For CONSULTANT: ---------------------------------------------------------------------------------------

(b) Notice will deem to be effective as follow:

* 1. in the case of personal delivery or registered mail, on delivery
  2. in the case of facsimiles, 24 hours following confirmed transmission.

1.4 **Authorized Representatives**

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the IITB or the Consultants may be taken or executed by the officials specified as under:

(a) For the IITB: Dean (IPS)

(b) For the Consultant: **--------------------**

1.5 **Taxes and Duties**

The Consultant shall include in his bid all taxes, duties, fees & other impositions as may be levied under the Applicable Law, the amount of which is deemed to have been included in the bid. GST as applicable shall be indicated separately.

2. **COMMENCEMENT, COMPLETION, MODIFICATION & TERMINATION OF THE**

**CONSULTANCY CONTRACT**

2.1 **Effectiveness of Contract**

This Consultancy Contract shall come into effect on the date the Contract is signed by both Parties.

2.2 **Commencement of Services**

The Consultant shall begin carrying out the Services at the end of such time period after the Effective Date as **15 days** from the date of contract signed.

2.3 **Expiration of the Consultancy Contract**

The period of Contract shall be over in all respects at the end of **12 months** from the Effective Date, which may be suitably extended upon mutual agreement to complete the Assignment in all respects.

2.4 **Termination**

2.4.1 By the IITB

The IITB may terminate this Consultancy Contract, by not less than thirty (30) days' written notice of termination to the Consultant, to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause 2.4.1 and sixty (60) days in the case of event referred to in (e) below:

(a) if the Consultant fail to remedy a failure in the performance of their obligations under the Contract within fifteen(15) days of receipt after being notified or within such further period as the IITB may have subsequently approved in writing;

(b) if the Consultant become insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;

(c) if the Consultant submit to the IITB a statement which has a material effect on the rights, obligation or interests of the IITB and which the Consultants know to be false;

(d) if, as the result of Force Majeure, the Consultant are unable to perform a material portion of the Services for a period of not less than sixty (60) days; or

(e) if the IITB, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

2.4.2 By the Consultant

The Consultant may, by not less than thirty (30) days' written notice to the IITB, such notice to be given after the occurrence of any of the events specified in paragraph (a) of this Clause 2.4.2, terminate this Consultancy Contract:

(a) if the IITB fails to pay any money due to the Consultant pursuant to this Contract and not subject to dispute pursuant to Clause 8 hereof within forty-five (45) days after receiving written notice from the Consultant that such payment is overdue;

2.4.3 Payment upon Termination

Upon termination of this Contract pursuant to Clauses 2.4.1 or 2.4.2 hereof, the IITB shall make the following payments to the Consultant after offsetting against these payments any amount that may be due from the Consultant to the IITB:

(a) Remuneration for Services satisfactorily performed prior to the effective date of termination; and

2.4.4 The IITB shall not be liable to pay any bonus, damage or other claims of

the Consultant for the loss of expected profit or interest in uncompleted

portions of the work and services.

2.4.5 In the event of termination of Contract, the Consultant shall furnish to the IITB all the design, drawings, data, documents and details as are existing with him on that date.

2.4.6 Amicable Settlement: The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or the interpretation thereof.

2.4.7 Dispute Settlement: Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party’s request for such amicable settlement may be submitted by either party for settlement in accordance with the following provisions: Any dispute or difference at any time arising between the IITB and the Consultant as to the construction, meaning or effect of the Contract or as to any clause, matter or thing hereincontained or as to the rights and liabilities of the parties heretoshall be referred to a Sole Arbitrator to be appointed by the Chairman, Board of Governance, IITB in accordance with and subject to the provisions of the Indian Arbitration & Reconciliation Act, 1996 as amended from time to time. All proceedings in any such Arbitration shall be held in Mumbai.

2.4.8 Fairness & Good Faith

1. Good Faith

The Parties undertake to act in good faith with respect to each other’s rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

(b) Operation of the Contract The Parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the currency of the Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but no failure to agree on any action pursuant to this Clause shall give rise to a dispute subject to arbitration in accordance with Clause above.

3. **OBLIGATIONS OF THE CONSULTANT**

3.1 **General**

Standard of Performance

The Consultant shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional techniques and practices. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the IITB, and shall at all times support and safeguard the IITB’s legitimate interests in any dealings with sub-Consultant or Third Parties.

3.2 **Confidentiality**

The Consultant, and the Personnel of either of them shall not disclose any information and data furnished to him by IITB to any third party nor shall disclose any drawings, reports, specification, manuals and other information developed and prepared for IITB by the Consultant and his Sub-contractors and the Personnel of either of them, without prior written approval of IITB.

3.3 **Consultant’s Actions requiring IITB’s prior Approval**

The Consultant shall obtain the IITB’s prior approval in writing before entering into a subcontract for the performance of any part of the Services, it being understood (i) that the selection of the sub-consultant and the terms and conditions of the subcontract shall have been approved in writing by the IITB prior to the execution of the subcontract, and (ii) that the Consultant

shall remain fully liable for the performance of the Services by the sub-

consultant and its Personnel pursuant to this Contract.

3.4 **Reporting Obligations**

The Consultant shall submit to the IITB the reports, documents and

other deliverable, in the form, in the numbers and within the time

periods set forth in the technical conditions.

3.5 **Documents prepared by the Consultant to be the Property of the IITB**

(a) All plans, drawings, specifications, designs, reports and other documents prepared by the Consultant in performing the Services shall become and remain the property of the IITB, and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to the IITB, together with a detailed inventory thereof. IITB reserves the right of repetitive use of these designs, drawings, specifications etc. without any financial obligation to the Consultant.

(b) The Consultant shall also return, along with the detailed inventory thereof, all plans, drawings, specification, reports etc. made available by the IITB for performing the Services, upon termination or expiration of the Contract.

(c) Copyrights and all proprietary rights of all design, drawings, specs,

software, program, reports, formats, manuals, documents etc.

developed and prepared by the Consultant for this assignment shall

vest with the IITB and shall not use these for any other purpose /

assignment without the written permission of the IITB. Any deviation

to this effect will be dealt within accordance with law.

3.6 **Responsibility for Data & Designs**

The final responsibility for the correctness, adequacy and accuracy of

the designs, drawings, technical specifications, etc. furnished by the

Consultant, shall lie with the Consultant.

The Consultant shall ensure that all designs and services rendered

by him, under this Agreement, are in compliance with the existing

statutory regulations of bodies, Safety Council/any other Safety

Authority. Inter-institutional coordination in the design &

development of codes/software etc. shall also be the responsibility of

the Consultant.

4. **OBLIGATIONS OF IITB**

4.1 **Assistance and Exemptions**

The IITB shall use its best efforts to:

(a) provide the Consultant, Sub-consultant and Personnel with work permits, pertinent data and such other documents as shall be necessary to enable the Consultant, Sub-consultant or Personnel to perform the Services;

(b) issue to officials, agents and representatives of the IITB all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services;

(c) give decisions on all matters laid before the IITB by the Consultant in such a reasonable time as not to delay the work of the Consultant.

4.2 **Payment**

(a) In consideration of the Services performed by the Consultant under this

Contract, the IITB shall make to the Consultant such payments and in

such manner as is provided by Milestones of deliverables for Payments.

5. **PAYMENTS TO THE CONSULTANT**

5.1 **Fees**:

The fees for the Services payable is set forth in the Financial Bid as per IIA.

5.2 **Mode of Billing & Payment**

Billing and payments in respect of the Services shall be made as follows:

(a) The payment to the Consultant will be made periodically as per the schedule of payment agreed upon in clause no II-B: Milestones for payment of Consultancy Charges. Consultant shall submit his progressive bill in triplicate along with supporting documents. IITB shall cause the payment to the Consultant to the amount indicated in the bill within thirty (30) days of receipt of the bill.

(b) The final payment under this Contract shall be made only after the final report and a final statement identified as such, shall have been submitted by the Consultant and approved as satisfactory by the Engineer-in-charge. The Services shall be deemed completed and finally accepted by the Engineer-in-charge– Dean(IPS) and the final report and final statement shall be deemed approved by the IITB as satisfactory ninety (90) days after receipt of the final report and final statement by the IITB unless the IITB, within such ninety (90) day period, gives written notice to the Consultant specifying in detail deficiencies in the Services, the final report or final statement. The Consultant shall thereupon promptly make any necessary corrections, and upon completion of such corrections, the foregoing process shall be repeated.

5.3 **Terms & Conditions of Payment**

Payments will be made to the account of the Consultant and according

to the payment schedule stated in the Milestones of deliverables for

Payments.

**SECTION – 4**: **Appendix A: DESCRIPTION OF THE SERVICES**

**1. SCOPE OF WORKS**

1. The scope of the work includes for Comprehensive Consultancy for the Exhaust

Fumehood Ducting for DESE /CESE building admeasuring= 19,216.28 **sq.m**

(approx.)within IITB campus Powai, Mumbai 4000076.

The scope of works for Consultancy shall be as follows :

**Project Brief and Design Development stage**:

a) Preparation and submission of Feasibility report comprising operational details and cost-benefit analysis of the proposed solution. The report must also contain two viable alternatives depicting the following:

General Arrangement drawing showing location of fumehoods and associated equipment, duct routing, scrubber, blowers, stack etc.

b)Preparation of detailed engineering design based on Feasibility study**:**

After approval of feasibility design by IITB, detailed engineering design to be submitted. Execution drawings to be submitted after approval for Fabrication of Major Ducting works and other associated works such as Electrical panels, cabling etc. by IITB.

c)Preparation of Tender documents with detailed BOQ and rates analysis, Technical Specifications including Design Basis Reports, Preliminary Cost Estimates of all services, Tender Working Drawings, Safety Reports & Project Schedule (PERT/CPM charts) after acceptance and approval of Exhaust Fumehood Ducting solution for the building as submitted by the Consultant.

d) Tender processing consisting of Invitation of Tender, Pre-qualification of Agencies, Sale & Receipt of tenders, Pre-bid meeting and its clarifications, finalization of Tenders and Award of Work and Contract Agreements, including preparation of Comparative Statements and Recommendation to IITB for approval.

**Construction stage:**

1. Execution drawings, after approval for Fabrication of Major Ducting works.
2. Execution drawings, after approval for other associated works such as Electrical panels, Cabling etc.
3. Checking and approving of shop drawings prepared by vendors.
4. Periodic Inspection of work during execution.
5. Exercising strict control over material and work quality, estimated quantities forvariation and justification for additional expenditure if any.
6. Verification & Certification of Contractor’s Interim and Final Bills in co-ordination

with and after taking Joint measurements with Contractor’s Supervisor and Engineer-

In-Charge to be appointed by IITB separately.

**Post Construction Stage:**

1. Supervision of Commissioning activities should be carried out by the Consultant on daily basis.
2. Checking of `As built` drawings and issuance of Final Statutory Clearance &

Certificate.

1. Generating snag list towards end of the Project completion.

2. Giving of complete and adequate daily supervision to all the works such as structural, electrical, installation of services etc. and the degree of such supervision commensurate with the nature and magnitude of works.

3. Advising the IITB on any other technical matter connected with the installation work, which may be entrusted to the Consultant, as may be required by the Institute from time to time.

4. Issuance of certificate of virtual completion of works after getting the entire work

approved by the Institute.

5. Indicating the defects in the work, if any, for prompt rectification by the Contractor during the construction and defect liability periods.

6. Rendering generally, as such, by the Consultant all technical services as may in any way relate to the said installation entrusted to the Consultant by the Institute.

7. The Consultant shall appoint services consultant, if felt necessary, at no Extra cost to the IITB, for the services like Public Health works, Sanitary and Plumbing works, Electrical works, etc., as may be required including periodic site visits or as required to supervise site works to enable the project to be completed in a satisfactory manner within the cost and time frame stipulated.

8. The Consultant agrees to perform his duties under these Presents promptly and diligently and to do everything in his power and authority to ensure that the Contractor/Contractors complete the installation work as may be entrusted to them according to the proper quality, specification and schedule of time given to them and that no unnecessary delay is caused by reason of the Consultant’s not furnishing decisions, details in regard to designs etc. to the Contractor, provided that such delay is not caused by the IITB.

**FACILITIES TO BE CONSIDERED**:

**DESE / CESE BUILDING**

The Exhaust Fumehood Ducting job for DESE / CESE building will be based on the concept submitted at the time of Project Brief and Design Development stage with necessary modification / changes or revisions in the design as required by IITB

|  |  |  |
| --- | --- | --- |
| **SN** | **Description** | **Total Carpet Area Sq. m.** |
| 1 | Laboratory Facilities of Environmental Engineering | 3825.76 (approx.) |
| 2 | Laboratory Facilities of Energy Engineering | 1457.98 (approx.) |
|  | Note: 1. This area is distributed from Ground to 7th floors | |
|  | **Time for completion: 12 Months** | |

**DETAILED SCOPE OF WORK:**

**1. The detailed scope of work shall include and not be limited to the following.**

The Exhaust Air Management of the building includes Designing exhaust ducting for fume-hoods, table-top experiments and Furnaces, Electrical supply system, electronics, Heating, ventilation and air conditioning design (HVAC) etc., as appropriate.

It includes examining site constraints and potential and preparing a design brief for approval. Study of Environmental impact. Master plan for the above shall be prepared showing all facilities like power supply distribution, lighting, Air-conditioning, interior architecture and preparation of preliminary and detailed working drawings, submission of BOQ, cost estimate which will conform to Schedule of Rate of either CPWD or State PWD and reference shall be furnished in case of Market Rates. For non- scheduled items detailed specifications etc., for the entire scope of work as a combined works or as individual as submitted by IITB. All Rate Analysis shall be submitted along with detailed estimate.

**The Consultant is required to provide services in respect of the following:**

**Fumehood& General Exhaust Ducting System**

i) Preparation of conceptual exhaust system drawings for ground to 7th floors which

includes preparation of various floor plans, sections, elevations, perspectives etc.

& Preliminary cost Estimates based on actual layout of the utility areas. Detailed

DBR shall be submitted for review and approval.

ii)Incorporation of revisions, comments offered by the IITB.

**Electrical System**

Scheme for providing associated electrification system with necessary electrical rooms, cablings, power supply network etc. Scope of work also includes preparation of conduit layouts for provision of electrical cable etc. Detailed DBR’s shall be submitted for review and approval. Entire design shall be as per latest IS code provisions and recommended Manufacturers.

**Mechanical Installation works**

Scheme for the same shall be as per IITB’s requirement and as per relevant IS including preparation of DBRs and submitting for review and approval by IITB.

**STAGES OF WORK:**

**A) Project Design Development Stage: Feasibility Stage**

i) Preparation of feasibility report, which includes understanding the fumes exhaust issues and firming up the requirements of additional exhaust if any, mapping of various floors Lab plans, preparation of layout drawings with mapping done of all Fume-hoods and equipment that need exhaust system & submission of Feasibility report.

ii) Preparation and submission of Feasibility report comprising operational details and cost-benefit analysis of the proposed solution. The report must also contain two viable alternatives depicting the following:

General Arrangement drawing showing location of fumehoods and associated equipment, duct routing, scrubber, blowers, stack etc

iii) Incorporation of revisions, comments offered by the IITB.

**B)Preparation of detailed engineering design based on Feasibility study :**After approval of feasibility design by IITB, detailed engineering design to be submitted, Execution drawings to be submitted after approval for Fabrication of Major Ducting works and other associated works such as Electrical panels, cabling etc. by IITB.

**C) Preparing Tender documents:** Prepare working drawings, specifications and schedule of quantities, rate analysis sufficient to prepare estimate of cost and tender documents including code of practice covering aspects like mode of measurement, method of payments, quality control procedures on materials & works and other conditions of contract.

**D)Tender processing:** Consisting of Invitation of Tender, Pre-qualification of Agencies, Sale & Receipt of tenders, Pre-bid meeting and its clarifications, finalization of Tenders and Award of Work and Contract Agreements, including preparation of Comparative statements & Recommendation to IITB for approval.

**E) Construction stage:**

a) Prepare and issue working drawings and details for proper execution of works during installation. (It is advisable to issue all site use drawing at the time of commencement of installation to avoid future litigation pertaining to non-availability of drawings / documents. It needs to be checked by authorized technical bodies from client side prior to issue site use drawing to site)

b) Approve samples of various elements and components.

c)Check and approve shop drawings submitted by the contractor/ vendors. (needs to be checked by authorized technical bodies from client side prior to issue site use drawing to site)

d)Visit the site of work on daily basis to inspect and evaluate the installation Works and where necessary clarify any decision.

e) In order to ensure that the work at site proceeds in accordance with the contract documents/ drawings and to exercise time and quality controls.

f) Verification & Certification of Contractor’s Interim and Final Bills in co-ordination with and after taking Joint measurements with Contractor’s Supervisor and Engineer-In-Charge.

g) Issue Certificate of Virtual Completion of works.

**F) Post Construction stage: Completion Stage:**

1. Supervision of Commissioning activities should be carried out by the Consultant on daily basis.
2. Checking of `As built` drawings and Issuing final Clearance/Completion certificates.
3. Generating snag list towards the end of the project completion.

**SECTION – 5: Appendix B: DELIVERABLES BY THE CONSULTANT**

For all engineering works the consultant shall submit DBR and preliminary drawings for review by the Department, incorporate the comments, provide drawings/ details, provide offer drawings, BOQ, cost estimates, Rate Analysis, specification etc. The detailed fabrication drawings shall be issued. Design calculations / details are also to be submitted with the drawings for review and approval.

1. Following table indicates the number of prints of drawings and tracings / dialers reports / design calculations required at each stage.

|  |  |  |  |
| --- | --- | --- | --- |
| **DeliverablEs**  **(Air Management System at DESE / CESE building)** | **No. of prints/ hard copies** | **Tracing/ Dialer/ soft Copy Requirement\*** | **Frequency** |
| **STAGE 1 Preparation of Feasibility Report**: i) Mapping the requirements on the lab layouts  ii)Submission of Feasibility report iii)Master Plan drwgs of ducting for fumehoods and equipment as reqd. | 3 | Soft copy | **Stage 1 -** Within **One** Month from the date of issue of work order |
| **STAGE 2 Preparation of Engg Design based on Feasibility study :**i) Submission of detailed engg design ii)Detailed drwgs for major ducting works & iii) electrical works | 3 | Soft copy | **STAGE 2 -** Within **One** month of approval of Stage 1 |
| **STAGE 3 Preparation of Tender documents:**  a)Proof Checking of Scheme Design  b) Detailed Design  c) Detailed BOQ with Tech. Specs.  d) Detailed Cost Estimate with Rate Analysis  e) Tender drawings  f) Tender Documents | a) 2  b) & c)  d) & e) & f)  3 | soft copy | **Stage 3 -** Within **Three** months of Scheme Approval by IITB for Stage 2. To also include Stage 4 in this period |
| **STAGE 4 Tender processing:**  a) Tender documents for sale  i) Prequalification of Agencies  ii) Tender documents & drgs to pre-qualified agencies  b) Tender Processing from sale of tender to finalization  c) Comparative statements for i) Prequalification & ii) Finalization of Tender iii) Award of Work Order  d)Contract Agreements | 1 No for all | soft copy of all | **Stage 4 -** Within **Three** months of Scheme Approval by IITB for Stage 2. To also include Stage 3 in this period |
| **STAGE 5 Construction stage:**  a)Construction drawings for commencement  b) Construction drawings for site use based on approval of vendor shop drwgs  c) Construction drawings site use –Revisions | 5  5  5 | Soft copy of all | **Stage 5 -** Within **Six** months after Approval by IITB for Stage 3 & 4. |
| **STAGE 6 Post Construction Stage :** i) Submission of checked  “As-built” drwgs  ii)Submission of snag list post completion | 8  3 | Yes, dialer & soft copy | Within O**ne** month after completion of Stage 5. |

\* Please provide soft copies of all the drawings and documentation

1. Persons to receive them & review requirements: Dean (IPS) or his authorized persons to receive & Review the Requirements.

2. All drawings /documents specified are included in the cost of Fees payable and actual cost of extra copies shall be reimbursable.

**SECTION – 6: Appendix C : Form of Guarantee for Performance of Services FORM OF BANK GUARANTEE BOND FOR PERFORMANCE SECURITY**  1. In consideration of the Director, IIT Bombay Powai Mumbai 400076 (hereinafter called “The IIT Bombay”) having agreed under the terms and conditions of Letter of Intent /Work Order/ Agreement No……………… dated…………….. made between …………...........…………and …….....................................……. (hereinafter called “ the said Consultant{s}“ ) for the work …............................................................................. (hereinafter called “ the said Letter of Intent / Agreement”) having agreed to production of an irrevocable bank Guarantee for Rs. ……………. (Rupees .………………………… only), as a security / guarantee from the Architect/Consultant for compliance of his obligations in accordance with the terms and conditions in the said agreement, we ……....……..(Indicate the name of the Bank) (hereinafter referred to as “the Bank”) hereby undertake to pay to the IIT Bombay an amount not exceeding Rs. ……….......... (Rs.....................................................................................only) on demand by the IIT Bombay.

2. We ………................................…….. (indicate the name of Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the IIT Bombay stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Architect/Consultant. 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………………… (Rupees.................................................................................only).

3. We, the said bank, further undertake to pay to the IIT Bombay any money so demanded notwithstanding any dispute or disputes raised by the Architect/Consultant 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 there under and the Architect/ Consultant(s) shall have no claim against us for making such payment.

4. We………………………. (indicate the name of 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 IIT Bombay 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 IIT Bombay certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Architect/Consultant(s) and accordingly discharges this guarantee.

5. We ………………………… (indicate the name of Bank) further agree with the IIT Bombay that the IIT Bombay shall have the fullest liberty without our consent and without affecting 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 Architect/Consultant(s)) from time to time or to postpone for any time or from time to time any of the powers exercisable by the IIT Bombay against the said Architect/Consultant(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 Architect / Consultant(s) or for any forbearance, act of omission on the part of the IIT Bombay or any indulgence by the IIT Bombay to the said Architect / Consultant(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.

* + 1. 6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Architect/Consultant(s).
    2. 7. We, …………………………. (indicate the name of Bank) lastly undertake not to revoke this guarantee except with the previous consent of the IIT Bombay in writing.
    3. 8. This guarantee shall be valid up to ……………………, unless extended on demand. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. ………………………..… (Rupees …………………………………only) 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.
    5. Signed and sealed
    6. Dated the ……....... day of ……....……. for ………..........(indicate the name of Bank)

\* \* \*

* + 1. (Note: The Letter of Intent / Work Order shall form part of the Agreement)

**INDIAN INSTITUTE OF TECHNOLOGY BOMBAY**

**OFFICE OF DEAN (IPS)**

**Offer Notice No** IIT(B)/Dean (IPS)/Comp. Consultancy/DESE-CESE/2021/01

**FINANCIAL BID**

**(ENVELOPE - II)**

**For**

Comprehensive Consultancy Services for

Exhaust Fumehood Ducting job for DESE / CESE building of

Indian Institute of Technology Bombay (IITB), Powai, Mumbai 400076

ISSUED TO

M/s.

**Dean (IPS)**

**PART – II**

**FINANCIAL BID**

**(ENVELOPE - II)**

# SCHEDULE OF FINANCIAL PROPOSAL

A: Financial Bid

B: Milestone for Payment of Consultancy Charges

C: Reimbursable expenses

**A. Financial bid**

**TENDER NO.:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sr. No. | Item Description | Unit | Amount in figure(in Rs.) | Amount in Words |
| **1.**  **2.**  **3.** | Conducting Feasibility study by visiting labs, Mapping requirements on lab layouts, Preparing conceptual design & drwgs of exhaust ducting for existing and additionally required Fumehoods, Table top experiments, Furnaces, General exhaust & gas treatment facility for fumehoods for ground to 7th floors of DESE/CESE bldg. and Submission of Feasibility Report as described in the technical documents for IITB’s approval.  After approval of IITB, Preparing detailed designs and execution drwgs of ducting routing, gas treatment system for IITB approved Exhaust air Management solution, cost estimate, rate analysis, Preparation of tender, specifications, DBR, BOQ, Safety Reports etc. and Project schedule (PERT/CPM charts), Pre- qualification of Agencies, Sale & Receipt of tenders, finalization of Tenders, Recommendation to IITB for approval and Award of Work and contract Agreements for the Installation works, Electrical works, Mechanical installation works and Commissioning etc. for the above mentioned works for Indian Institute of Technology, (Bombay), Powai, Mumbai 400076  Deployment of engineer for Supervision on monthly basis | Lumpsum basis  Lumpsum basis  12 Man-month basis |  |  |
|  | **Total**  Note: (Amount shall include all the taxes applicable except GST. GST shall be added separately) |  |  |  |

Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Authorised Representative)

Full Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**B. MILE STONES FOR PAYMENT OF CONSULTANCY CHARGES FOR ITEM No.1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.No** | **STAGES OF PAYMENT** | **ACTIVITY** | **\* CUMULATIVE FeEs Payable** |
| 1 | **STAGE1 Preparation of Feasibility Report** | 1.Visit by Consultant’s team to ascertain the user requirements, examine site constraints & potential.  2. Prepare report of site evaluation, mapping of existing fume-hood as well as additional fumehoods, general exhaust ducting, feasibility of providing new exhaust ducting based on as-built drawings provided by users.  3. Prepare & submit Feasibility of at least two alternate schemes with their comparison.  4. Prepare conceptual designs with reference to the requirements given and prepare drawings & rough estimate of cost for Gr to 7th floor ducting and gas treatment facility for fume-hood & equipment that need exhaust ventilation. | 90% (Ninety) |
| 2 | **STAGE 2 Commissioning of Approved Exhaust air Management system** | Complete Installation & Commissioning of the New Exhaust Air Management System. | 100% (Hundred) Less payment made upto Stage 1 |

**\* Fees indicated above shall be percentage of only Item No. 1**

**MILE STONES FOR PAYMENT OF CONSULTANCY CHARGES FOR ITEM No.2**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.No** | **STAGES OF PAYMENT** | **ACTIVITY** | **\* CUMULATIVE FeEs Payable** |
| 1 | **STAGE 1 Preparation of detailed engg. design & drwgs stage** | Prepare the detailed engg. design after approval of Feasibility design by IITB.  Prepare modified conceptual designs, execution drawings for exhaust ducting & associated electrical, cabling, ventilation etc.  Prepare Master plan of the project that is to be executed after approval by IITB. | 30% (Thirty) |
| 2 | **STAGE 2 Preparation of Tender documents stage** | Prepare detailed Design & working drawings, item wise Estimates, Rate analysis, Technical Specifications, schedule of quantities and tender documents consisting conditions of contract, tender drawings and time schedule, detailed BOQ, etc. as per IITB standard after acceptance and approval of Air Management solution for the building. | 50% (Fifty)  Less payment made upto Stage 1 |
| 3 | **STAGE 3 Tender Processing stage** | Tender processing consisting Invitation of Tender, Pre- qualification of Agencies, Sale & Receipt of tenders, Pre-bid meeting and its clarifications, finalization of Tenders and Award of Work and Contract Agreements, including preparation of Comparative statements, Recommendation to IITB for approval. Preparation and issue of all working drawings for execution prior to award of construction work | 60% (Sixty)  Less payment made up to Stage 2 |
| 4 | **STAGE 4 Construction Stage** | 1.Issue of working drawings to the contractor  2. Approve samples of various elements and components.  3.Check and approve shop drawings submitted by Contractor.  4.Visit the site of work daily to inspect, evaluate the construction works and where necessary clarify any decision, offer interpretation of the drawing/specification, attend meetings, ensure the project proceeds generally in accordance with the Conditions of contract.  5.Verifying & Certifying the running bills & Final bills of the contractors. | 90% (Ninety)  Less payment made up to Stage 3  Fees will be paid in stages proportionate to the quantum work executed as per the contractor’s certified bill  Certification of final bills of the contractors and on submission of Completion report. |
| 5 | **STAGE 5 Post Construction Stage** | i)Prepare and submit completion reports and as built drawings, working manuals of the project as required including submission of all documents for issuing final completion certificate for the project.  ii)Generating snag list towards the end of the project completion. | 100% (Hundred) Less payment made up to Stage 4.  On submission of as-built drawings & working manuals for issuance of Completion certificate. |

**\* Fees indicated above shall be percentage of Item No. 2**

**PAYMENT FOR MONTHLY SUPERVISORY CHARGES FOR ITEM No. 3**

|  |  |  |  |
| --- | --- | --- | --- |
| Sl.No | **STAGES OF PAYMENT** | **ACTIVITY** | **FeEs Payable** |
| 1 | **Every Month** | Daily Supervision of Exhaust Air Management system | Monthly |

Payment shall be released only after achieving defined deliverables. Payment will be released upon completion of the `activity/sub-activity’. An activity/sub-activity will be considered `complete’ when the same is checked, reviewed, and accepted / approved by the competent authority.

Consultant may list out the deliverables and numbers thereof, in case progressive payment is desired under any activity/sub-activity, so as to quantify the progress vis-à-vis the milestone.

**C: DETAILS OF AMOUNT REIMBURSABLE**

**REIMBURSABLE EXPENSES :** Cost of presentation models and computer simulation prepared if any, at the instance of the Client and pre-approved by client, for purposes other than the Design and execution of the project.

Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Authorized Representative)

Full Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_