## Indian Institute of Technology Bombay Invites

**Request for Proposal (RFP)** 

for

# Comprehensive Architectural Consultancy for the Proposed Academic Block- 1 & Academic Block-2 at IIT Bombay

RFP NO: IIT(B)/DEAN (IPS)/ARCH-CONSULTANCY/AB1&AB2/1

Dated: 2022 September 07



**RFP Invited by** 

Dean, Infrastructure Planning and Support (IPS)
Indian Institute of Technology Bombay
Powai, Mumbai 400076.

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#### 1. BACKGROUND

#### 1.1. PREAMBLE

#### Dates to Remember

| Intimation date for the invitation of RFP document | 2022 September 09 |
|----------------------------------------------------|-------------------|
| Last date for receipt of queries                   | 2022 September 23 |
| Pre-bid meeting date (11:30 Hrs, IPS office)       | 2022 September 23 |
| RFP queries Response date                          | 2022 September 30 |
| Receipt of RFP Proposals date (up to 15:30 Hrs)    | 2022 October 28   |
| Date of Evaluation of proposals by the committee   | 2022 November 04  |

<sup>\*</sup> Dates are tentative

**Indian Institute of Technology Bombay (IITB)** set up by an Act of Parliament, was established in 1958, at Powai, a northern suburb of Mumbai. Today the Institute is recognized as one of the centers of academic excellence in the country. Over the years, there has been dynamic progress at IIT Bombay in all academic and research activities. It is planned to have improvements to keep the Institute at par with the best institutions in the world.

The **Dean, Infrastructure Planning & Support (Dean IPS)** is entrusted with the creation of new infrastructure, in the IIT Bombay Campus. The infrastructure includes the construction of new buildings in the academic area, hostels for students, staff accommodation of various types, buildings for general facilities, roads, gardens, and playgrounds, along with related utilities such as water supply, and electricity supply for the whole campus.

- 1.2. **DEFINITIONS:** Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:
- a) "IITB" means, Indian Institute of Technology Bombay.
- b) "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.
- c) "Applicable Law" means the laws and any other instruments having the force of law in India, as they may be issued and in force from time to time.
- d) "Dean Infrastructure Planning Support" is authorized by Director to administer this contract. "Engineer-in-charge" means Dean IPS or his successors appointed by IITB for coordinating with agencies connected with project and interacting with consultants.
- e) "Party" means the IITB or the Consultant(s), as the case may be, and Parties means both of them.
- f) "Services" means the work to be performed by the Consultant pursuant to this Contract.
- g) "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.
- h) "Site" means the whole of the property belonging to the IITB on which the Services will need to be performed.

- i) "Month" shall mean a calendar month.
- 1.3. BRIEF SCOPE OF THE WORK: The scope of work consists of providing comprehensive Architectural design & drawings, obtaining statutory approvals, tender document preparation/processing, periodic inspection during execution stage for proposed Academic block (AB)-1 & Academic Block (AB)-2 at IIT Bombay, Powai, Mumbai-400076''. The proposed building i.e., Academic Block 1 and Academic Block- 2 has a composite built-up area of 18,550 SqM consisting of each block's Ground floor +6 floors. These blocks will be RCC framed structure with Masonry and other normal features as required by the allocated users.

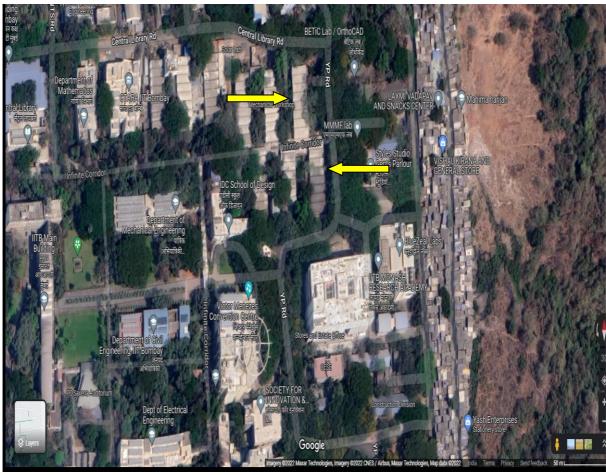


Figure 1 - Satellite Image of proposed location of AB1 & AB2 Google map link: <a href="https://goo.gl/maps/ZD83So9wMMBooV1B7">https://goo.gl/maps/ZD83So9wMMBooV1B7</a>

Each Building is of a G+6 structure with a total built-up area of 18550 sqm. AB-1 (9100 sqm.) AB-2 (9450 sqm.) for IITB, within IITB campus, Powai, Mumbai 400076. These blocks will be constructed after the demolition of the existing old sheds S1 and N1 marked in the below image. A satellite image is attached for reference. The exact area may change depending on the actual site condition.

#### 2. ELIGIBILITY & SELECTION CRITERIA

Dean (IPS), on behalf of Director, Indian Institute of Technology Bombay (IITB) requests proposals for the "Comprehensive Architectural Consultancy Services FOR THE "PROPOSED ACADEMIC BLOCK-1 & ACADEMIC BLOCK-2 AT IIT BOMBAY, POWAI, MUMBAI-400076 from the empanelled architectural Consultants in accordance with the terms & conditions as set out below:

Consolidated Honorarium of **Rs.100000/-** (**Rupees Lakh only**) shall be paid to all the participants who submit their Conceptual design and participate in the presentation and secure minimum marks in technical evaluation

#### 2.1. OBJECTIVES AND NATURE OF THE SELECTION

The objectives is to select best Architect and engineering design proposal for the proposed work based on the highest composite score (Technical & Financial) and enter into an agreement with the winning architect for Comprehensive architectural consultancy for the subject work.

#### 2.2. IMPORTANT INFORMATION

- 1. RFP documents duly completed in all respect to be submitted in hard copy to Dean (IPS) office, 1<sup>st</sup> Floor, Main Building, Indian Institute of Technology Bombay (IITB), Powai, Mumbai 400076. For any query/information, below mentioned email addresses are to be used for communication purpose: E-mail: dean.ips@iitb.ac.in with a copy to po.ips@iitb.ac.in and dean.ips.office@iitb.ac.in
- 2. Intimation regarding the invitation of RFP shall be forwarded to the empaneled Architects by e-mail and a link shall be provided for downloading the RFP document from the official website of IITB.
- 3. Agencies participating in the competition are required to familiarize themselves with the site conditions and study the design inputs given in this document. Queries, if any, related to this RFP must be submitted via e-mail or in writing to Dean (IPS) office, IITB by **dates mentioned in section 1.1.** No additional queries addressed after this date shall be entertained. A response addendum listing all queries received and IITB's response will be posted IITB website (<a href="https://www.iitb.ac.in/deanpl/tender.html">https://www.iitb.ac.in/deanpl/tender.html</a>).

#### 2.3. DELIVERABLES WITH RFP

The agencies shall submit the following deliverables along with the Conceptual design on the due date:

- Part Master plan showing proposed locations and general disposition of Academic Block AB-1 and Academic Block-2 and other existing buildings including traffic pattern, services etc.
- ii) Design-based report
- iii) Conceptual design and drawings (Architectural, Structural & location)
- iv) Walk around animation
- v) Cost estimates (Broad-based)
- vi) Proposed brief specifications

#### 2.4. REQUIREMENTS FOR PROPOSALS FOR THE SELECTION PROCESS

Applicants shall submit their duly completed proposals (hard copy/digital format) in response to RFP, so as to reach Dean (IPS) office, IITB on or before dates mentioned in section 1.1 at the following address:

Dean (IPS)
1st Floor, Main Building,
Indian Institute of Technology Bombay,
Powai, Mumbai 400 076.

The Concept Design, Technical and Financial proposals for the work shall be placed in three separate envelopes, and clearly written (1) "Concept Design Proposal" (2) "Technical Proposal (with the name of the building)" and (3) "Financial Proposal (with the name of the building)", respectively. The envelopes (2) & (3) shall thereafter be placed in one sealed envelope clearly superscribed on each of the envelopes as "COMPREHENSIVE ARCHITECTURAL CONSULTANCY FOR THE PROPOSED ACADEMIC BLOCK-1 & ACADEMIC BLOCK-2 AT IIT BOMBAY, POWAI, MUMBAI-400076" with the name of the applicant and contact details written thereof.

#### 2.5. OTHER IMPORTANT POINTS RELATED TO DESIGN CONSIDERATION:

- I. The consultants are required to provide the concept design for the proposed building on the specified location and plot size marked on the enclosed master plan (As per the layout attached).
- II. The break-up areas specified are for reference only and the consultants are encouraged to develop and demonstrate design that optimizes the room areas, circulation & common space areas.
- III. The consultants are free to explore various structures system suited to their Architectural design.
- IV. The consultants are requested to adhere to National Building code for providing number of Urinals, baths, WCs, provision of toilets for differently abled persons, fire safety norms etc.
- V. The concept design shall conform to green building norms of minimum GRIHA 3 rating. Any measures suggested by IITB to get a higher rating shall be incorporated by the consultant.
- VI. The consultant has to demonstrate that the preliminary estimated cost of the building based on DPAR 2021 of CPWD enhanced with the cost index of Mumbai for the proposed concept design is within +5% of the cost provided for the building in the RFP i.e., about **Rs.103 Cr.** (Civil+ MEP+land scaping works)

The Concept Design proposal should demonstrate that the proposer has developed an understanding of the institute's requirements with reference to the scope of services mentioned in the RFP document. The applicant shall submit a Power point presentation including the entire contents of the technical proposal in a USB drive along with a submission package for the technical proposal. All drawings, designs, and layouts must be submitted in (.dwg) and (.pdf) format.

The Concept design proposal should include the following point: (To be submitted in Envelope 1):

- I. Master plan for the redevelopment of proposed construction of Academic Block AB-1 and Academic Block -2 including future buildings within the land parcel of existing workshops with all other existing structures and services.
- II. The drawings covering the concept proposal for the proposed construction of Academic Block-1 & Academic Block-2, a maximum of three A0 size drawing panels covering the design proposal for each building. There shall be maximum of 2 (two) such drawings.
- III. The concept of Architectural design should be explained in the form of drawings, sketches with plans, sections, layout at a suitable scale, notes & views to show the Architectural character of the building.
- IV. Pen Drives containing soft copies of the design proposals (all drawings in high-resolution PDF format).
- V. Signed copy of RFP document and corrigendum/addendum, replies of Pre-bid queries, if any (Each page signed & stamped) by the consultant as proof of acceptance of all terms and conditions of the selection process.
- VI. A brief introduction about the Lead architects of firms proposed to work on this project (not exceeding 5 pages).
- VII. Approach to design including drawings, sketches, diagrams and any other information that can concisely and yet comprehensively explain the applicant's concept psychology and design approach.
- VIII. Key professionals and consultants proposed to be deployed for the project with their experience and details (not exceeding 10 pages).

#### 2.6. EVALUATION OF THE PROPOSAL:

The applicant is expected to make a presentation to the Evaluation Committee (constituted by the Institute). The Concept Design would be evaluated by the Evaluation Committee on the following broad parameters and any other factors that affect the quality:

- a. Methodology
- b. Aesthetics
- c. Functional Suitability
- d. Cost Effective Design
- e. Amenability to Green norms

The Concept Designs submitted by the applicants will be reviewed and evaluated by a committee formed and constituted by IITB Director.

The Concept Design proposal shall be allotted weightage of 80% (Eighty percent) as a quality score while the financial proposals will be allotted weightage of 20% (Twenty percent) as a cost score. Based on the evaluation criteria specified under the technical proposal, the Evaluation committee shall evaluate the detailed technical proposals separately and award the technical score (TS) and list them in order of merit. Proposals with the highest technical marks (as allotted by the evaluation committee) shall be given a score of 100 (Hundred) and other proposals to be given a technical score that is proportional to their marks with respect to the highest technical marks.

Depending upon the marks obtained in the technical evaluation of the RFP, a merit list shall be generated of the applicants as T1, T2, T3...... of the participants who score 75% or more.

Please note that for the participants who scored 75% and above, their financial proposals only will be opened. The discretion and decision of the Evaluation committee in respect of technical scores shall be final and binding on all without any Right to appeal. The technical scores (TS) of the applicants shall be announced before the opening of financial bids.

Financial proposals shall be opened in presence of the consultants or their representatives who choose to attend. Proposals with the lowest cost may be given a financial score of 100 (Hundred) and the other proposals are given financial scores that are inversely proportional to their prices with respect to the lowest offer.

The total score both, both technical & financial, shall be obtained by weighing the quality and cost scores and adding them up. On the basis of the combined weighted score for quality & cost, the consultant shall be ranked in terms of the total score obtained. The proposal obtaining the highest total combined score in the evaluation of quality and cost will be ranked as H-1 followed by the proposals securing lesser marks as H-2, H-3, etc. The proposal securing the highest combined marks shall be recommended for the award of contract. In the event two or more bids have the same score in the final ranking, the bid with highest technical score will be H-1.

An Evaluated Bid Score (B) will be calculated for each responsive Bid using the following formula, which permits a comprehensive assessment of the Bid price and the technical merits of each Bid:

$$\mathbf{B} = \left[\frac{F \ low}{F}\right] W + \left[\frac{T}{T \ high}\right] (1-W)$$

Where,

F = Evaluated Bid price

F low = the lowest of all Evaluated Bid Prices among responsive Bids

T = the total Technical Score awarded to the Bid

T high = the Technical Score achieved by the Bid that was scored best among all responsive Bids.

W = Weightage for the Price as specified

The Bid with the best-evaluated Bid score (B) among responsive Bids shall be the Most Advantageous Bid.

As an example, the following procedure shall be followed. In a particular case of selection of consultant, it was decided to have minimum qualifying marks for technical qualifications as 70 (Seventy) and the weightage of technical bids and financial bids was kept as 80:20 (Eighty: Twenty). In response to the RFP, three proposals, A, B & C were received. The technical evaluation committee awarded the following marks as under:

A: 75 Marks B: 80 Marks C: 90 Marks

The minimum qualifying marks were 70 (Seventy) thus, all the three proposals were found technically suitable. Using the formula  $T/T_{High}$ , the following technical points are awarded by the evaluation committee:

A: 75/90 = 83 points B: 80/90 = 89 points C: 90/90 = 100 points The final proposals of each qualified consultant were opened after notifying the date and time of bid opening to be successful. The price evaluation committee examined the financial proposals and evaluated the quoted prices as under:

A: Rs.120. B: Rs.100.

C: Rs.110.

Using the formula Flow/F, the committee gave them the following points for financial proposals:

A: 100/120 = 83 points

B: 100/100 = 100 points

C: 100/110 = 91 points

In the combined evaluation, thereafter, the evaluation committee calculated the combined technical and financial score as under:

Proposal A: 83\*0.20 + 83\*0.80 = 83 points. Proposal B: 100\*0.20 + 89\*0.80 = 91.20 points.

Proposal C: 91\*0.20 + 100\*0.80 = 98.20 points.

The three proposals in the combined technical and financial evaluation were ranked as under:

Proposal A: 83 points H-3 Proposal B: 91.20 points H-2 Proposal C: 98.20 points H-1

Proposal C at the evaluated cost of Rs.110 (Rs. One hundred ten) was, therefore declared as the winner and recommended for negotiations/approval, to the competent authority.

#### 2.7. ACCEPTANCE OF THE CONCEPT DESIGN:

The Concept Design as submitted by the successful applicant may not be deemed to be the final acceptable design proposal. The consultant has to meet and discuss with the institute's User committee/ Users and provide comprehensive architectural services as per the scope of work after duly understanding the requirements of the institute. The actual location for the construction of the proposed building may change depending on the requirement of the institute.

#### 2.8. AWARD OF CONTRACT

- 1. The selection as mentioned above, does not, in any way, automatically confer any right, whatsoever, on any applicant for an award of work.
- 2. Winning Architect, even though selected based on the quality evaluation of his concept design shall be contractually obliged to modify or redesign if found necessary by IITB.
- 3. IITB shall inform consultants through a "Letter of Acceptance of Offer" by email/Letter that it has been selected to be the consultant for the institute to the extent.
- 4. The consultant shall thereafter sign the contract agreement within 21 days of the issue of such letter.

In the event of the consultant getting selected for the Consultancy work, the consultant will have to deposit an amount equal to 5% of the offered and accepted value of the contract as a Performance Guarantee in the form of an Account payee Demand draft/Fixed Deposit Receipt or in the form of Bank Guarantee from Scheduled commercial bank.

The amount kept under the performance guarantee shall not bear interest and the same shall be returned to the consultant after satisfactory completion of the contract.

5. IITB does not bind itself to award the consultancy work to the selected architect/firm and IITB reserves the right to reject all the offers and no reason for this effect shall be furnished.

#### 2.9. GENERAL GUIDELINES

- 1. Each proposal whether layouts or services system or policy or any other, must be duly supported by clearly referenced data presented in a logical and quantifiable format.
- 2. All proposals must be based on clearly referenced global best practices and technologies, and must respect clearly identified and listed local constraints, resources and skills.
- 3. The institute reserves the right to seek more details regarding the proof of qualifications, experience and capabilities of the key personnel.
- 4. The institute reserves the right to issue corrigenda and addenda to this RFP document which shall be binding on all applicants.
- 5. The institute reserves the right to amend, alter, modify, add and/or delete in part or full any requirements or terms and conditions contained in the RFP document at any other time during the selection process, which shall be binding on all applicants.
- 6. All dates, places and time are subject to change and the latest information and clarifications, if any, shall be communicated to the applicants over email.
- 7. The documents and other information provided by IITB or all intellectual property rights of the scheme and proposals submitted during the process of selection submitted by the applicants to IITB shall remain or become the property of the institute.
- 8. No explanation and/or justification in any aspect relating to the selection process shall be given, and the decision of the institute shall be final and binding on all without any right to appeal.
- 9. The institute reserves the right to debar the applicant/terminate the agreement with the final applicant selected for award of work, at any period of time, should any of the document/certificates as submitted be found to be fabricated or false, or a material misrepresentation is made or discovered, or the applicant does not provide the requisite information as required by the institute within the stipulated period.
- 10. All provisions in this document are supplementary and complementary to each other and are not to be read in isolation.

## Indian Institute of Technology Bombay Invites

### **Request for Proposal (RFP)**

For

# Comprehensive Architectural Consultancy for the Proposed Academic Block- 1 & Academic Block-2 at IIT Bombay

RFP NO: IIT(B)/DEAN (IPS)/ARCH-CONSULTANCY/AB1&AB2/1

Dated: 2022 September 07

| Offer Notice | No   |  |
|--------------|------|--|
| VIICE INDUCE | . 10 |  |

#### **PART I- TECHNICAL BID**



RFP Invited by

Dean, Infrastructure Planning and Support (IPS)
Indian Institute of Technology Bombay
Powai, Mumbai 400076.

| Name o | of the | Architect | /Firm: |
|--------|--------|-----------|--------|
|        |        |           |        |

#### 3. GENERAL CONDITIONS OF CONSULTANCY CONTRACT

The **General Conditions of Contract (GCC)** are enclosed along with the following Appendices:

Appendix A: Description of Services

Appendix B: Deliverables by the Consultant

Appendix C: Guarantee for Performance of Services

#### 3.1. General Provisions:

#### 3.1.2. LAW GOVERNING THE CONTRACT

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

#### **3.1.3. 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), Indian Institute of Technology Bombay, 1st floor, Main Building, Powai, Mumbai- 400076.
- (ii) For ARCHITECTS:

Notice will deem to be effective as follows:

- i) In the case of personal delivery or registered mail, on delivery.
- ii) In the case of Facsimiles, 24 hours following confirmed transmission.

#### 3.1.4. 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 IITB: Dean (IPS)
- (b) For the Consultant: Person duly authorized by the consultant.

#### 3.1.5. TAXES AND DUTIES

The Consultant shall pay all taxes (other than GST), duties, fees and other impositions as may be levied under the applicable law, the amount of which is deemed to have been included in the fees. GST shall be paid by IITB to the consultant, if applicable.

### 3.2. COMMENCEMENT, COMPLETION, MODIFICATION & TERMINATION OF THE CONSULTANCY CONTRACT

**3.2.1. EFFECTIVENESS OF CONTRACT:** This Consultancy Contract shall come into effect on the 15<sup>th</sup> After the issue of workorder.

The Consultant getting selected for the consultancy work will have to provide a Performance Guarantee as detailed below:

3.2.2. **PERFORMANCE GUARANTEE:** An amount equal to 5% of the offered and accepted value of the contract shall be deposited as a Performance Guarantee in the form of an Account IITB RFP for Architectural consultancy of AB- 1 & AB2

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payee Demand draft/Fixed Deposit Receipt or in the form of a Bank Guarantee from a Scheduled commercial bank. The Performance Guarantee shall be refunded to the consultant soon after the completion of the work and recording of the completion certificate.

The amount kept under the performance guarantee shall not bear interest and the same shall be returned to the consultant after satisfactory completion of the contract.

#### 3.2.3. 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 the contract signed.

#### 3.2.4. EXPIRATION OF THE CONSULTANCY CONTRACT

Unless terminated earlier pursuant to Clause 3.2.5 hereof, this Contract shall expire when the Services have been completed in all respect at the end of such time period after the Effective Date, which may be suitably extended upon mutual agreement to complete the Assignment in all respects.

#### 3.2.5. TERMINATION

#### (A.) BY THE IITB

The IITB may terminate this Consultancy Contract, by serving 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 3.2.5.A and sixty (60) days in the case of the event referred to in (e) below.

- (a) If the Consultant fails to remedy a failure in the performance of their obligations under the Contract within fifteen (15) days of receipt after being notified or within the such further period as the IITB may have subsequently approved in writing;
- (b) If the Consultant becomes insolvent or bankrupt or enters into any agreements with their creditors for relief of debt or takes- advantage of any law for the benefit of debtors or goes into liquidation or receivership whether compulsory or voluntary;
- (c) If the Consultant submits to the IITB a statement that 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 Design Consultant are unable to perform a material portion of the Services for a period of not less than sixty (60) days;
- (e) If the IITB in its sole discretion and for any reasons whatsoever decides to terminate this Contract.

#### (B.) **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 paragraphs (a) and (b) below, terminate this Consultancy Contract:

(a) If IITB fails to pay any money due to the Consultant pursuant to this Contract and not subject to dispute pursuant to Clause 3.2.9 hereof within forty-five (45)

- days after receiving written notice from the Consultant that such payment is overdue:
- (b) If, as a result of Force Majeure, the Design Consultant are unable to perform a material portion of the Services for a period of not less than sixty (60) days.

#### 3.2.6. PAYMENT UPON TERMINATION

Upon termination of this Contract pursuant to Clauses 3.2.5. (A) or Clauses 3.2.5. (B) hereof, the IITB shall make the payment to the Consultant (after offsetting against these payments any amount that may be due from the Consultant to the IITB) i.e., for the stage of work performed upto the date of termination.

- 3.2.7. 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.
- 3.2.8. In the event of termination of Contract, after receipt of full payment of sums mentioned in Clauses 3.2.6 and 3.2.7 above from the IITB to the satisfaction of the Consultant, the Consultant shall furnish to all the design, drawings, data, documents and details as per the work completed & being paid for in clause 3.2.6.
- 3.2.9. Amicable settlement of Disputes: 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.

Dispute Settlement Mechanism: Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled amicably within thirty (30) days after receipt of a notice by one Party, the 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 herein contained or as to the rights and liabilities of the parties hereto shall be referred to a Sole Arbitrator to be appointed by the Chairman, Board of Governors, IITB, who shall decide the case in accordance with the contract provisions and subject to the provisions of the Indian Arbitration & Reconciliation Act, 1996 or any statutory modifications or re-enactment thereto or thereof for the time being in force and all proceedings in any such Arbitration shall be held in Mumbai.

#### 3.2.10. FAIRNESS & GOOD FAITH

#### (a) 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.

#### 3.3. OBLIGATIONS OF THE CONSULTANT

#### 3.3.1. 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-Consultants or Third Parties.

- a) Design Base: Specific attention has to be paid to ensuring flawless, technically sound, sustainable design provisions. Minute attention shall be paid to providing a maintenance-free robust structure, free from the adverse effect of changes in weather and maintenance issues like leakage of water, fragile components, etc. Specific write up shall be provided by the Architects towards these goals. Architect should assume professional responsibility for any defective design provisions.
- b) Duties shall include performance of all the Architects stages enumerated in stages of work.
- c) Making visits by Principal Architect or his/her competent representative to site and IITB office as required till finalization from Stage 1 to 4. Similarly, regular site visits during stage 5 for inspection and Progress Review Meetings with a frequency not less than one a week. In case, if the architect fails to visit the site, 5% deduction of forthcoming stage payment will be levied by IITB.
- d) Visit of Structural designer for pre-concreting inspection of all major pours and clearance of site visit of other MEP designers as and when felt necessary by IITB

#### 3.3.2. CONFIDENTIALITY

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

#### 3.3.3. DESIGN CONSULTANT'S ACTIONS REQUIRING 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 other than those coming under the main contract and the terms and conditions of the subcontract shall have been approved in writing by the 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.

#### 3.3.4. REPORTING OBLIGATIONS

The Consultant shall submit to the IITB the reports, documents, digital models and other deliverables, in the form, in the number, and within the time periods set forth in the technical conditions.

#### 3.3.5. COPYRIGHT

Copyright conditions shall be as per the prevailing law and Council of Architecture norms 2014. (Clause 12 of Comprehensive Architectural Services)

#### 3.3.6. RESPONSIBILITY FOR DATA & DESIGNS

- a) 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.
- 4. Liaison Work for getting the statutory clearances like commencement and completion certificate for the work from Statutory &GRIHA Authorities
- 5. Periodic visits to the project site for inspection of works and regular visits to the IITB office to attend Project Review Meetings.

#### 3.4. OBLIGATIONS OF IITB

#### 3.4.1. ASSISTANCE AND EXEMPTIONS

The IITB shall:

- (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.

#### **3.4.2. 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 Milestone of deliverables for Payments.
- b) GST will be paid by IITB to the consultant as per applicable law.

#### 3.5. PAYMENTS TO THE CONSULTANT

- 3.5.1. **FEES:** The fees for the Services payable are set forth in the Financial Bid.
- 3.5.2. **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 the Financial Bid: Milestones for payment of Consultancy Charges. The Consultant shall submit his 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 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.

#### 3.5.3. 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 of Financial Bid.

#### APPENDIX A: DESCRIPTION OF THE SERVICES

#### SCOPE OF WORK

The Detailed scope of work for Consultancy shall be as follows:

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

The complete design of the building includes a Detailed Survey, Geo Technical soil investigation, Master plan for the redevelopment of Academic Block-1 and Academic Block-2, Architectural design, Structural design, Sanitary, plumbing, drainage, water supply, and sewerage design, Electrical, electronic, communication systems and design, Heating, ventilation and air conditioning design (HVAC) and other mechanical systems, Elevators, escalators, and allied fields such as Landscape Architecture, Interior Architecture, Graphic Design, and Signage etc. It includes examining site constraints and potential and preparing a design brief for approval. A Master plan for the immediate surroundings shall be prepared showing all facilities like water supply, sewage, landscaping, drainage, roads, footpaths, power supply distribution, lighting, Airconditioning, Acoustics, Interior architecture & landscaping, preparation of BIM models at desired detail, 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 the market rate for a non-scheduled item, detailed specifications, etc., for the entire scope of work as a combined work or as individual items shall be submitted. All Rate Analysis shall be submitted along with a detailed estimate for these items. The scope of work includes the s preparation of tender documents and issue of tender drawings.

#### The stages of work are also mentioned herein as under

Concept Stage – Master plan, Conceptual Architectural drawings for civil works, including Landscaping and Interior Architecture, Preliminary Architectural Design Basis Report and preliminary cost estimate on area basis.

- a) Preliminary Design and drawings stage Modify and finalize the conceptual drawings incorporating the changes after discussions with the Client, detailed Site survey including tree demarcation, contours, existing features etc complete as required for Design & execution, Geo Technical soil investigation as required for Structural Design, submission of Design basis report for Structure, Services & landscape and revised preliminary cost estimate on an area basis. Develop LOD 300 BIM model incorporating the above said features.
- b) **Statutory Approval stage / Design development** Preparation and submission of Drawings for Statutory approval of State/Central/M.C.G.M, Chief Fire Officer, Tree Authority, as required for commencement, submission of revised Design basis report for Structure, services, and Landscape, submission of Proof checking drawings & documents of Structural and HVAC design to Proof checking Consultant and Registration for GRIHA. Develop Coordinated Clash-free LOD 350 BIM models
- c) Working drawings up to Tender document stage, Tender document preparation & Process & obtaining statutory approvals Working drawings up to Tender document stage and obtaining statutory approvals Detailed design & detailed estimates of Civil & Services supported with measurement sheets, cost estimated based on CPWD latest DSR for scheduled items and market rates for non-scheduled items with quotations and rate analysis. Development of LOD 400 coordinated clash-free BIM models to enable development of documents and drawings mentioned in this section. Submission of revised Proof checking documents and drawings incorporating all the revisions as per Proof checking Consultants for Structure and HVAC, detailed coordinated design & detailed

item-wise estimates of cost for civil & all services of each facility with rate analysis wherever necessary, preparation of Tender documents & drawings for tender purpose including conditions of contract, specification, schedule of quantities & rates, Tender processing from sale of tender document to finalization, preparing comparative statements for tender finalization, contract agreements, preparation and submission of all "Good for Construction" (GFC) drawings including Architectural & Structural drawings. Obtaining Statutory approval of State/Central/M.C.G.M, Chief Fire Officer, Tree Authority for commencement of work, notification to GRIHA for site inspection prior to construction.

#### d) Contract Finalization and Construction stage -

- **i.** Issue good for construction drawings for Civil works and other associated services such as public health, Electrical, HVAC, site development, etc. with minor revisions, if any.
- ii. Periodic Inspection of work during execution at intervals mutually agreed upon.
- iii. Approve samples of various elements and components.
- iv. Check and approve shop drawings submitted by the contractor/ vendors.
- v. (\*) Certification for Intermediate work done as per RA bills, Final bills of the Contractors in coordination with the Construction Supervision Agency to be appointed by the client separately.
- **vi.** Monitor the estimated quantities for Variation and justification for additional expenses if any.
- e) **Completion stage** Certification of final Contractor's bills in coordination with the Construction Supervision Agency, Submission of `As built` drawings for completion, and obtaining Final Statutory Clearance from M.C.GM, Chief Fire Officer, Tree Authority including documents for occupation and Certification from GRIHA.
  - 2. Providing adequate periodic supervision to all the works such as Architectural, Structural, Public health, Electrical, HVAC, Landscaping, 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 Construction of the said building or the installation of fitting, 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. Updated As-Built LOD 400 BIM model along with as-built drawings in appropriate digital format to be submitted to IIT.
  - **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 specified in the Contract of the said building or the said installation of the fitting entrusted to the Consultant by the IITB.
  - 7. The Consultant shall appoint the Services Consultant, within his scope for the services like Public Health works, Sanitary and Plumbing works, Electrical works, HVAC, Site development, and Landscaping, besides other services as specified in the Contract.
  - **8**. The Consultant agrees to perform his duties as Architect under these Presents promptly and diligently and to do everything in his power and authority to coordinate with the Construction Supervision Agency to ensure that the Contractor/Contractors complete the construction of the building and of installation of such fitting 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.

**9.** Preparation of As-built drawings for entire work.

#### Note:

- I. Prior to approval of BOQ, Cost of work and its scope shall be obtained before engaging the agency for Detail survey and Geo-Technical soil investigation. The contract cost involved shall be reimbursed by on submission of reports, drgs and original documents of payment, etc
- II. Proof checking of structural design to be carried out with directly contacting the concerned Dept Authorities. Fees paid to proof checking shall be reimbursed by IITB on submission of original documents of clearance and fees paid.
- III. Obtaining "GRIHA certification will be the scope of Architects" work inclusive of all expenditure towards obtaining certification. However fees payable to GRIHA shall be reimbursed on submission of original documents & the fees paid.

## 2. THE DESIGN CONSULTANT IS REQUIRED TO PROVIDE SERVICES IN RESPECT OF THE FOLLOWING:

#### 1. ARCHITECTURAL SYSTEM

- i) Master plan for the development of Academic Block -1 and Academic Block-2 building areas, Preparation of preliminary conceptual drawings which includes preparation of various floor plans, sections, elevations, perspectives etc. & Preliminary cost Estimates based on areas including Landscape& Interior Architecture Services.
- ii) Incorporation of revisions, and comments offered by IITB
- iii) Preparation of Municipal drawings for obtaining Clearance /No Objection from State/Central Statutory Authorities for commencement of work including of liaison works.
- iv) Registration with GRIHA and obtaining GRIHA rating (inclusive of all expenses. Fees paid for registration paid shall be reimbursed)

#### 2. DETAILED SURVEY & GEO-TECHNICAL SOIL INVESTIGATION

- i) Detailed site survey including tree demarcation, existing features, contours etc complete required for Design & Execution.
- ii) Geo Technical Soil investigation as required for structural design

Note. Prior approval for the investigation parameters Cost of work and its scope shall be obtained before engaging the agency for Detail site survey and Geo-Technicaloil investigation. The contract cost involved shall be reimbursed by on submission of reports, drawings and original documents of payment, etc.

#### 3. STRUCTURAL SYSTEM

i) Preparation of DBRs (Design Basis Report), detailed structural analysis of the total building, detailed design as per relevant Indian codes of practice of recent revisions, and submission for review and approval. On approval of the design details, detailed construction drawings shall be prepared and submitted.

ii) Proof checking of structural design to be carried out with directly contacting the concerned Dept Authorities of IITB or prior approval should be taken from IITB for engagement of the experts outside IITB for carrying out proof checking.

Note: Fees paid to proof checking shall be reimbursed by on submission of Original documents of clearance and fees paid.

#### 4. Public Health Engineering System

Scope includes Preparation of DBR's for providing both internal and external water supply and sewage system for the said buildings. Detailed DBR's shall be submitted for review and approval. Entire design shall be as per latest IS codal provisions.

#### 5. ELECTRICAL SYSTEM

Scheme for Preparation of DBR's, providing internal and external electrification system with necessary electrical rooms, cablings, power supply network including sub-station, street lighting etc., scope of work also includes preparation of conduit layouts for provision of telephone, computer cable, LAN, TV etc. Detailed DBR's shall be submitted for review and approval. Entire design shall be as per latest IS codal provisions and recommended Manufacturers.

#### **6. FIRE FIGHTING SYSTEM**

Scheme for fire-fighting system shall be as per relevant Indian Standards and as per the statutory authorities' requirements. Detailed DBR's shall be submitted for review and approval by the IITB

#### 4. HVAC & OTHER MECHANICAL WORKS

Scheme for the HVAC shall be as per Client's requirement and as per relevant IS including HVAC proof checking. This has to be carried out by directly contacting the concerned Dept. Authorities of IITB or prior approval should be taken from IITB for engagement of the experts outside IITB for carrying out proof checking.

Note: Fees paid to proof checking shall be reimbursed by on submission of Original documents of clearance and fees paid.

#### 5. Interior Architecture

Scheme for Design of fixed & loose furniture & interior related civil works shall be as per the Client's requirements. Detailed DBR's shall be submitted for review and approval by IITB.

#### 6. LANDSCAPE ARCHITECTURE

Scheme for open space Design, hard and soft areas and Planting design to be provided. Detailed DBR's shall be submitted for review and approval by IITB.

#### APPENDIX B: DELIVERABLES BY THE DESIGN CONSULTANT

For all disciplines of Engineering, the Consultant shall submit a Design Basis Report (DBR) and preliminary drawings for review and approval from the authority of IITB, incorporate the comments provided by the authority of IITB, provide detailed drawings, Bill of Quantities (BOQ), cost estimates, Rate Analysis, Technical specifications etc. The detailed construction drawings shall be issued for all the disciplines (Civil & E&M). Following table indicates the number of prints of drawings in hard copy and tracings/ dialers reports/design calculations required at each stage for Comprehensive Architecture and Design.

| DELIVERABLES                                                             | Timeline                    |
|--------------------------------------------------------------------------|-----------------------------|
| STAGE 1-Concept stage: Master plan, Conceptual Architectural             | Within <b>Two</b> Month     |
| drawings, preliminary Architectural design basis report, Preliminary     | From the date of issue      |
| cost estimate on area basis, LOD 200 BIM digital model (Submissions:     | of work order               |
| 3 hard copy and soft copy of the source along with pdf)                  |                             |
| STAGE 2-Preliminary Design & drawings Revised drawings                   | Within <b>two</b> Month of  |
| incorporating revisions, Detailed site survey, Geo technical soil        | approval of Stage 1         |
| investigation, Preliminary design basis report for Structure, services & |                             |
| landscape, LOD 300 BIM model. (Submissions: 3 hard copy and soft         |                             |
| copy of the source along with pdf)                                       |                             |
| STAGE 3-Statutory approval / design development                          | Within <b>two</b> months of |
| Submission of drawings for Statutory Approval, submission of revised     | approval of Stage 2         |
| design basis report for Structure, Services & landscape, Submission of   |                             |
| Proof checking Drawings & documents to Proof Checking Consultant         |                             |
| for Structure & HVAC, Registration of project with GRIHA,                |                             |
| Coordinated-Clash free LOD 350 BIM model (Submissions: 3 hard            |                             |
| copy and soft copy of the source along with pdf)                         |                             |
| STAGE 4A -Working drawings up to Tender document stage &                 | Within <b>Six</b> months of |
| Obtaining Statutory approvals (Submissions: 2 hard copy and soft         | Stage 3                     |
| copy of the source along with pdf)                                       |                             |
| i) Submission of revised Proof checking drawings & documents             |                             |
| incorporating revisions as per Proof Checking Consultant                 |                             |
| ii) Detailed coordinated design drawings                                 |                             |
| iii) Detailed Cost Estimate with Rate Analysis                           |                             |
| iv) Tender drawings & draft tender documents including specifications,   |                             |
| Schedule of quantities, conditions of contract                           |                             |
| v) Issue of tender drawings (15 hard copy)                               |                             |
| v) Obtaining Statutory approvals from MCGM, Tree authority, CFO          |                             |
| etc. for work commencement.                                              |                             |
| vii) Notification to GRIHA for site inspection prior to execution for    |                             |
| work commencement.                                                       |                             |
| viii) Good for construction (GFC) drawings package to be made ready      |                             |
| before drafting of work order by IITB for issuing to the contractor.     |                             |
| Coordinated Clash-free LOD 400 BIM Model                                 |                             |
| STAGE 4(B) -Tender document preparation & process                        |                             |
| i) Final Tender documents for invitation of bids including               |                             |
| specifications, schedule of quantities, conditions of contract           |                             |
| (Submissions: 5 hard copy and soft copy of the source along with         |                             |
| pdf)                                                                     |                             |
| ii) Tender processing consisting of Invitation of tenders, pre-bid       |                             |
| meeting and its clarifications, finalization of tenders & award of       |                             |
| work & contract agreements including preparation of comparative          |                             |

statements, Recommendations to client for approval. (Submissions: 2 hard copy and soft copy of the source along with pdf) STAGE 5-Contract Finalization and Construction stage For issue along with (Submissions: 5 hard copy and soft copy of the source along with pdf) work order 1. Issue of Good for construction (GFC) drawings package for Civil works and other associated services such as Public Health, Note: During the Electrical, HVAC, Site development etc. execution any 2. Issue revised construction drawings with minor revisions, if revisions mutually necessary for all works (including Architectural & Structural agreed upon within 7 drawings) and other associated services such as Public Health, davs Electrical, HVAC, Site Development etc. 3. Periodic site/IITB office visit for general quality assurance, weekly progress review meetings etc. Visits of structural designer for RCC pour clearances. 1. Periodic inspection of work during execution at regular intervals mutually agreed upon. 2. Approve samples of various elements & components 3. Check & approve shop drawings submitted by the contractor/vendors. 4. Certification for intermediate work done as per RA & Final bills of the contractors in co-ordination with the construction supervision agency to be appointed by the client separately 5. Monitor the estimated quantities for variation and justification for additional expenditure, if any. STAGE 6-Completion stage (Submissions: 3 original hard copy and Within one month of soft copy of the source along with pdf) stage 5 Certification of final contactor's bills in co-ordination with the supervising agency ii) Submission of As-built drawings on completion of work, Updated As-Built LOD 400 BIM model iii) Obtaining Final Statutory clearances / completion certificates from MCGM, Chief Fire Officer, Tree authority etc. including documents for occupation. iv) Certification from GRIHA (As per statutory and GRIHA norms)

- 1. Persons to receive them & review requirements: Dean (IPS) or his authorized persons.
- 2. All drawings /documents specified are included in the cost of Fees payable and if revisions are carried out revised GFC to be issued without extra cost.
- 3. **Technical Sanction**: The detailed estimate for Technical Sanction shall be based on the detailed drawings. The item descriptions shall be generally in line with the provisions of CPWD schedule of Rates enhancing w.r.t Cost Index and its latest specifications. In case of non-scheduled/special works the item description shall be framed as per good engineering practice supported with specifications and rate analysis as per reasonable market rates. Financial implications of quantity of variations/deviations of individual items exceeding beyond the Deviation limit as specified in works contract shall not be considered for working out Design Consultant's fees unless change attributed to the IITB.
- 4. Periodic visit by consultant: The consultant or identified Principal Architect shall periodically visit project site for inspection of works and also attend Project Review Meetings held at Dean (IPS) Office, IITB on regular basis as decided by IITB.
- 5. All materials to be incorporated shall be recommended & approved by the architect.

#### APPENDIX C: FORM OF PERFORMANCE SECURITY (GUARANTEE)

#### FORM OF BANK GUARANTEE BOND FOR PERFORMANCE SECURITY

| In consideration of the Dean (IPS), Indian Institute of Technology Bombay (hereinafter called "IITB") having agreed under the terms and conditions of Letter of Intent/ Workorder/ Agreement No dated made between Indian |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No dated made between Indian Institute of Technology Bombay and (hereinafter called "the                                                                                                                                  |
| said Consultant {s}") for the work for Indian Institute of                                                                                                                                                                |
| Technology Bombay (IITB) (hereinafter called "the said Letter of Intent/ Workorder/ Agreement")                                                                                                                           |
| having agreed to production of an irrevocable Bank Guarantee for                                                                                                                                                          |
|                                                                                                                                                                                                                           |
| Rs(Rupeesonly), as a security / guarantee from the                                                                                                                                                                        |
| consultant(s) 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 IITB an amount not exceeding                                                                                                                                                          |
| Rs (Rupeesonly) on                                                                                                                                                                                                        |
| demand by the IITB.                                                                                                                                                                                                       |
| demand by the HTB.                                                                                                                                                                                                        |
| 2. We (indicate the name of Bank) do hereby undertake to pay the                                                                                                                                                          |
| amount due and payable under this guarantee without any demur, merely on a demand from the                                                                                                                                |
| IITB stating that the amount claimed is required to meet the recoveries due or likely to be due from                                                                                                                      |
| the said Consultant(s). Any such demand made on the bank shall be conclusive as regards the                                                                                                                               |
| amount due and payable by the Bank under this guarantee. However, our liability under this                                                                                                                                |
| guarantee shall be restricted to an amount not exceeding Rs(Rupees                                                                                                                                                        |
| only)                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                           |
| 3. We, the said bank, further undertake to pay to the IITB any money so demanded notwithstanding                                                                                                                          |
| any dispute or disputes raised by the Consultant(s) in any suit or proceeding pending before any                                                                                                                          |
| Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.                                                                                                                      |
|                                                                                                                                                                                                                           |
| The payment so made by us under this bond shall be a valid discharge of our                                                                                                                                               |
| liability for payment there under and the 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 IITB under or by virtue of the said Agreement have been fully paid and its claims are                                                                                                                         |
| satisfied or discharged or till Engineer-in-charge on behalf of the IITB certifies that the terms and                                                                                                                     |
| conditions of the said Agreement have been fully and properly carried out by the said Consultant(s)                                                                                                                       |
| and accordingly discharges this guarantee.                                                                                                                                                                                |
|                                                                                                                                                                                                                           |
| 5. We (indicate the name of Bank) further agree that IITB 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 Consultant(s) from time to time or to postpone for any time                                                                                                                        |
| or from time to time any of the powers exercisable by the IITB against the said 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 Consultant(s) or for any forbearance, act of omission on the part of the IITB or any indulgence                                                                                                                      |
| by the IITB to the said 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.                                                                                                                                   |
| 6. This guarantee will not be discharged due to the change in the constitution of the Bank or                                                                                                                             |
| the Consultant(s).                                                                                                                                                                                                        |

| 7. We,                   | (indicate the name of Bank) lastly un                | dertake not to revoke this   |  |  |
|--------------------------|------------------------------------------------------|------------------------------|--|--|
| guarantee except with    | h the previous consent of the IITB in writing.       |                              |  |  |
| 8. This guarante         | ee shall be valid up to,                             | unless extended on           |  |  |
| demand by IITB. No       | twithstanding anything mentioned above, our liab     | ility against this guarantee |  |  |
| is restricted to _Rs     | is restricted to _Rs(Rupees                          |                              |  |  |
|                          | only), and unless a claim in writing is le           | odged with us within six     |  |  |
| months of the date of    | f expiry or the extended date of expiry of this guar | antee, all our liabilities   |  |  |
| under this guarantee     | shall stand discharged.                              |                              |  |  |
|                          |                                                      |                              |  |  |
| Signed and sealed        |                                                      |                              |  |  |
| Dated the of Bank) * * * | day of for                                           | (indicate the name           |  |  |
| (Note: The Le            | etter of Intent shall form part of the Agreement)    |                              |  |  |

#### 4. TECHNICAL PROPOSAL

The bidder shall submit Technical Proposal for the assignment as per the details provided in the Data Sheet.

## DESIGN BRIEF FOR THE PROPOSED CONSTRUCTION OF ACADEMIC BLOCK AB-1 & AB-2 AT IITB CAMPUS, POWAI MUMBAI 400076

Academic Block AB-1 and AB-2 are proposed to be of the Ground + six floors. At ground level both the blocks are separated by a corridor that is centrally located between both the blocks as per figure 1 ... However, on the upper floors, both the blocks are inter-connected by skybridge/walkway. The total built up area envisaged is 18,550 sqm. The split up Ground floor 2650 sqm and upper floors 15900 sqm. Both the academic blocks house laboratories, classrooms of various capacity, conference rooms, seminar halls, faculty rooms as per the table 2. Certain special requirements like clean room labs of class 10000 etc. The blocks shall also have passenger lifts and freight lifts, a fire fighting system with wet riser and sprinklers, an automatic fire alarm system, VRV/VRF/ central air conditioning system, AV and CCTV, access control, power requirement of single and three-phase, certain facility to have UPS back up and DG back up. On the ground floor, a monorail for lifting heavy equipment is to be provided. A footprint is also herewith enclosed as per Layout plan. The proposed buildings to be designed keeping in view overall permissible height ceiling of 30 meters, following norms for vertical construction as permitted by local authorities, and ensuring optimum utilization of space and Building footprint

**Note:** i) The floor-wise break-up of built-up area and facilities are given in Table 1 & Table 2 as per the end users' requirements. Consultants have to consider the data provided in Table 1 (Floor wise area distribution to each of the units) & Table 2 (Breakage of facilities required for each unit) in their conceptual design and closely adhere to the special requirements mentioned in remark. Minor changes in the unit-wise built-up area are permissible for better conceptual design. The part master plan shall also include the location of UG tank, substation, food stalls/canteen facility. Also, utilization of the space underneath the steps/waist slabs to be indicated.

#### 1) Technical Proposal Preparation:

- i) Consultant is expected to examine all terms and instructions included in the documents furnished with offer.
- ii) The estimated cost of construction or work for which the consultancy assignment is sought as well as the time to complete the assignment is stated in Data Sheet. Financial Proposal may be in accordance with this.
- iii)The key professional staff, listed in the offer, shall be made available for the entire duration of the execution of assignment. This shall preferably be the permanent employees of the firm
- iv)Proposed staff must have relevant educational qualification and experience, preferably under conditions similar to those prevailing at the locations of the assignment.
- v) No alternative to key professional staff may be proposed and only one CV may be submitted to each position.
- 2) Technical Proposal should provide the following information, but not limited to,
  - i) Any comments or suggestions on the scope of work & services, documents and details made available with this offer, as well as on the facilities to be provided by IITB.

- ii) A description of methodology (work place), which the consultant proposes to employ in performing the assignment, duly illustrated with bar charts of graphics or any other type of Graphics.
- iii) C.V. recently signed by the proposed key professional staff and countersigned by an authorized officer of the consultant. Key information should include: years with the firm/entity and responsibilities held in various assignments during last ten years.
- iv) Estimates of the total time effort (person x months) to be provided for the services for each stage or phase of assignment, supported by breakdown of effort proposed (person x months) for major items of work & services.
- v) Details of specific experience/expertise/information asked for in the Data sheet.
- vi) Confirmation/Submission on salient technical conditions mentioned in the offer document.
- vii) Quality assurance system/programme proposed to be employed in design, engineering, procurement, inspection & management activities.
- 3) The technical proposal shall not include any financial information.

## **DATASHEET -A** (Information to Consultants)

Name of Employer: Director, Indian Institute of Technology Bombay, 1<sup>st</sup> Floor, Main Building, Powai, Mumbai 400076

Name of Assignment: COMPREHENSIVE ARCHITECTURAL CONSULTANCY FOR THE PROPOSED ACADEMIC BLOCK- 1 & ACADEMIC BLOCK-2 AT IIT BOMBAY, POWAI, MUMBAI-400076".

Area: Total area to be developed is about 18550 sqm. For AB-1 and AB-2 buildings as per the attached layout plan

Estimated cost of construction of proposed AB-1 and AB-2 Building: Rs.103.00 Cr. (Civil +MEP +land scape works)

The Assignment to be completed within **48 Months** or as may be necessary to complete the assignment in all respects.

#### Schedule for completion of Major activities:

| Sr.<br>No. | DESCRIPTION OF ACTIVTY                                               | Period of Activity (In months) |
|------------|----------------------------------------------------------------------|--------------------------------|
| 1          | STAGE 1-Concept stage                                                | From 0 to 2                    |
|            | Master plan, Conceptual Architectural drawings, preliminary          | (Two month)                    |
|            | Architectural design basis report, Preliminary cost estimate on area |                                |
|            | basis. Revising the master plan, conceptual drawings and             |                                |
|            | resubmitting details, LOD 200 BIM model                              |                                |
| 2          | STAGE 2-Preliminary Design & drawings                                | From 2 to 4                    |
|            | Revised drawings incorporating revisions, Detailed site survey, Geo  | (Two months)                   |
|            | technical soil investigation, Preliminary design basis report for    |                                |
|            | Structure, services & landscape, LOD 300 BIM Model                   |                                |
| 3          | STAGE 3-Statutory approval / design development                      | From 4 to 6                    |
|            | Submission of drawings for Statutory Approval, submission of         | (Two month)                    |
|            | revised design basis report for Structure, Services & landscape,     |                                |
|            | Submission of Proof checking Drawings & documents to Proof           |                                |
|            | Checking Consultant for Structure & HVAC, Registration of            |                                |
|            | project with GRIHA, Coordinated Clash free LOD 350 BIM model         |                                |
| 4          | STAGE 4A -Working drawings up to Tender document stage &             | From 4 to 10                   |
|            | Obtaining Statutory approvals                                        | (Six months)                   |
|            | i) Submission of revised Proof checking drawings & documents         |                                |
|            | incorporating revisions as per Proof Checking Consultant             |                                |
|            | ii) Detailed coordinated design drawings                             |                                |
|            | iii) Detailed Cost Estimate with Rate Analysis                       |                                |
|            | iv) Tender drawings & draft tender documents including               |                                |
|            | specifications, Schedule of quantities, conditions of contract       |                                |
|            | vi)Obtaining Statutory approvals from MCGM, Tree authority,          |                                |
|            | CFO etc. for work commencement.                                      |                                |

|   | vi) Notification to CDIIIA for site inspection prior to execution for |               |
|---|-----------------------------------------------------------------------|---------------|
|   | vi) Notification to GRIHA for site inspection prior to execution for  |               |
|   | work commencement.                                                    |               |
|   | vii) Good for construction (GFC) drawings package to be made          |               |
|   | ready before drafting of work order by IITB for issuing to the        |               |
|   | contractor. Coordinated Clash Free LOD 400 BIM model                  |               |
|   | STAGE 4(B) -Tender document preparation & process                     | From 10 to 14 |
|   | i) Final Tender documents for invitation of bids including            | (Four months) |
|   | specifications, schedule of quantities, conditions of contract        |               |
|   | ii) Tender processing consisting of Invitation of tenders, pre-bid    |               |
|   | meeting and its clarifications, finalization of tenders & award of    |               |
|   | work & contract agreements including preparation of                   |               |
|   | comparative statements, Recommendations to client for                 |               |
|   | approval.                                                             |               |
| 5 | STAGE 5-Contract Finalization and Construction stage                  | From 14 to 47 |
|   | i) Issue of Good for construction (GFC) drawings package for          | (Thirty-three |
|   | Civil works and other associated services such as Public Health,      | months)       |
|   | Electrical, HVAC, Site development etc.                               |               |
|   | ii) Issue revised construction drawings with minor revisions, if      |               |
|   | necessary for all works (including Architectural & Structural         |               |
|   | drawings) and other associated services such as Public Health,        |               |
|   | Electrical, HVAC, Site Development etc.                               |               |
|   | iii) Periodic site/IITB office visit for general quality assurance,   |               |
|   | weekly progress review meetings etc.                                  |               |
|   | Visits of structural designer for RCC pour clearances.                |               |
|   | iv) Periodic inspection of work during execution at regular intervals |               |
|   | mutually agreed upon.                                                 |               |
|   | v) Approve samples of various elements & components                   |               |
|   | vi) Check & approve shop drawings submitted by the                    |               |
|   | contractor/vendors.                                                   |               |
|   | vii) Certification for intermediate work done as per RA & Final       |               |
|   | bills of the contractors in co-ordination with the construction       |               |
|   | supervision agency to be appointed by the client separately           |               |
|   | viii) Monitor the estimated quantities for variation and              |               |
|   | justification for additional expenditure, if any.                     |               |
| 6 | STAGE 6-Completion stage                                              | From 47 to 48 |
| U | v) Certification of final contactor's bills in co-ordination with the | (One month)   |
|   | supervising agency                                                    | (One month)   |
|   |                                                                       |               |
|   |                                                                       |               |
|   | Updated As-Built LOD 400 BIM model                                    |               |
|   | vii) Obtaining Final Statutory clearances / completion certificates   |               |
|   | from MCGM, Chief Fire Officer, Tree authority etc. including          |               |
|   | documents for occupation.                                             |               |
|   | viii) Certification from GRIHA                                        |               |

#### Tax Liability, Insurance – description or reference to documents:

i) The consultant and his personnel shall pay taxes and other impositions levied under existing, amended or enacted laws during life of assignment.

- ii) The consultant shall cover employer's compensation insurance for his or his sub-Consultant (if applicable) personnel in accordance with the provisions of relevant applicable laws.
- iii) GST shall be paid to the consultant as applicable along with the professional fee as per Financial Bid.

#### FORM OF CONSULTANCY CONTRACT (DRAFT)

This Contract (hereinafter called the "Contract") is made the------day of the month of------Two thousand-------between, on one hand, Dean (I.P.S.) (hereinafter called the-----, which
expression shall include his successors and permitted assigns), Indian Institute of Technology
Bombay, Powai, Mumbai and, on the other hand, M/s -------, having its Registered office at-----(hereinafter called "Consultant" which expression shall, unless repugnant to the context,
be deemed to include its successors and assigns).

#### **WHEREAS**

- (A) The ----has requested the consultant to provide certain consulting services as defined in the General Conditions of the Contract attached to this Contract (hereinafter called the "Services");
- (B) The consultant, having represented to the -----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 the 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 contract:

Part I Technical Bid- consisting

- i) General Conditions of the Contract (herein after called "GCC");
- **ii**) The following Appendices:

Appendix A: Description of the Services

Appendix B: Deliverables by the Consultant

Appendix C: Guarantee for Performance of Services

Part II financial bid: consisting

- a. Financial bid
- b. Milestone for Payment of Consultancy Charges
- c. Effecting payment of consultant
- d. Details of Reimbursable expenses

The mutual rights and obligations of 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. 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.

FOR AND ON BEHALF, I.I.T. (B)

|                           | Dean (I.P.S.)                     |
|---------------------------|-----------------------------------|
| In presence of<br>Witness |                                   |
| 1.                        |                                   |
| 2.                        |                                   |
|                           | FOR AND ON BEHALF OF (CONSULTANT) |
|                           | (Authorized Representative)       |
| In presence of<br>Witness |                                   |
| 1.                        |                                   |
|                           |                                   |
| 2.                        |                                   |

#### USER REQUIREMENT AND AREA DISTRIBUTION

Below is the break-up of user/department allocation of the floor with their respective total Built-Up-Area allotted, also, as proposed consumption of this area by the respective units/departments mentioned in Table 1 & Table 2. Consultants have to refer to these details in the preparation of a conceptual design of AB1 and AB2. Note: Minor changes in the area permitted to accommodate the efficient design and use of structure.

TABLE 1. THE FLOOR ALLOCATION TO USER DEPARTMENTS

| Block                                          | Floor<br>No. | User Department (area alloted)             |
|------------------------------------------------|--------------|--------------------------------------------|
|                                                | GF           | Metallurgy (1300 m2)                       |
|                                                | 1F           | Metallurgy (1300 m2)                       |
| API (C. C) with a new residuate la             | 2F           | Metallurgy (1300 m2)                       |
| AB1 (G+6) with approximately 1300 m2 per floor | 3F           | Metallurgy (742 m2) and Institute (558 m2) |
| 1300 m2 per 11001                              | 4F           | Chemical (1300 m2)                         |
|                                                | 5F           | ADCPS (1300 m2)                            |
|                                                | 6F           | Institute (1300 m2)                        |
|                                                | GF           | Institute (1350 m2)                        |
|                                                | 1F           | CMINDs (1350 m2)                           |
| AB2 (C+6) with an analysis of the              | 2F           | CMINDs(1350 m2)                            |
| AB2 (G+6) with approximatly 1350 m2 per floor  | 3F           | CMINDs(1350 m2)                            |
| 1330 III2 per 11001                            | 4F           | CMINDs(1350 m2)                            |
|                                                | 5F           | CMINDs(750 m2) + KCDH (600 m2)             |
|                                                | 6F           | KCDH (1350 m2)                             |

#### TABLE 2. USER REQUIREMENTS

(Note: 1. minor area changes in area are allowable, 2. Common area accounted for the difference between the BuA and Carpet area and should accommodate toilets, stairs etc.)

| Block | Floor  | User<br>Dept.                            | Space utilisation                                                     | Area in SQM                             | Special Requirements                                                     |
|-------|--------|------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------|
|       |        |                                          | Rolling mills (Min 5 m ceiling height)                                | 56                                      | NOTE:  1. All electrical units to be                                     |
|       |        |                                          | Hydroforming machine (Min 5 m ceiling height)                         | 49                                      | supplied with 3 phase electric supply  2. One additional large           |
|       |        |                                          | Deep Drawing                                                          | 25                                      | entry (2mx3m) required to                                                |
|       |        |                                          | Space for characterization unit                                       | 21                                      | allow hydra crane boom                                                   |
|       |        | GF WEWS                                  | Storage room                                                          | 13                                      | with road entry.                                                         |
| AB1   | AP1 GE |                                          | Store room for consumables, etc.                                      | 10                                      | 3. For Rolling mills and Hydroforming machine lab                        |
| ADI   | G.     | Z                                        | Regular labs for furnace and heating (Ventilation & Exhaust required) | 300                                     | of 11m x 10m area to be provided with heavy chain and pulley arrangement |
|       |        |                                          | CoEST lab                                                             | 95                                      | having 5T capacity with                                                  |
|       |        |                                          | Workshop                                                              | 30                                      | movement in X-Y                                                          |
|       |        |                                          | Classroom viva room                                                   | 25                                      | directions for transporting                                              |
|       |        | Students' Materials Innovation<br>Centre | 150                                                                   | equipment. 4. All Universal Power Plugs |                                                                          |
|       |        |                                          | Thermal analysis lab                                                  | 20                                      | ilugs                                                                    |

|       |    |                      | Materials for Extreme Conditions                                            | 116  |                                                                                             |
|-------|----|----------------------|-----------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------------|
|       |    |                      | Common Area                                                                 | 390  | -                                                                                           |
|       |    |                      | Total Floor area in Sq. M                                                   | 1300 |                                                                                             |
|       |    |                      | Microscopic lab                                                             | 36   |                                                                                             |
|       |    |                      | Meeting rooms                                                               | 56   |                                                                                             |
| AB1   | 1F | MEMS                 | Teaching and Research Steel Labs (Central Facility) - 3 Nos each of 273 SQM | 819  |                                                                                             |
|       |    |                      | Common Area                                                                 | 389  |                                                                                             |
|       |    |                      | Total Floor area in Sq. M                                                   | 1300 | -                                                                                           |
|       |    |                      | Faculty space -6 Nos each 54<br>Sqm                                         | 324  |                                                                                             |
| 4.54  |    | MS                   | Faculty space -6 Nos each 54<br>Sqm                                         | 324  |                                                                                             |
| AB1   | 2F | MEMS                 | Electronic Characterization & Thin Film Lab                                 | 280  |                                                                                             |
|       |    |                      | Common Area                                                                 | 372  |                                                                                             |
|       |    |                      | Total Floor area in Sq. M                                                   | 1300 |                                                                                             |
|       |    |                      | Corrosion lab                                                               | 30   | Vibration proof required                                                                    |
|       |    |                      | Manufacturing lab                                                           | 280  |                                                                                             |
| AB1   | 3F | SF WEWIS             | Device Fabrication Lab (Central Facility)                                   | 185  | Designed to be Cleanroom of 10000 class, Architect have to only allocate area for the same. |
|       |    |                      | Institute Space                                                             | 390  | To be designed as normal research labs.                                                     |
|       |    |                      | Common Area                                                                 | 415  |                                                                                             |
|       |    |                      | Total Floor area in Sq. M                                                   | 1300 |                                                                                             |
|       |    | ng                   | HS PIV Lab + Workarea                                                       | 70   |                                                                                             |
|       |    |                      | PLIF                                                                        | 40   | Rectangular layout with                                                                     |
|       |    | eeri                 | Blood culture lab- I                                                        | 42   | ceiling ht. of 4m                                                                           |
|       |    | gine                 | Blood Culture lab-II                                                        | 43   |                                                                                             |
| AB1   | 4F | Ë                    | Faculty offices                                                             | 175  |                                                                                             |
|       |    | Chemical Engineering | Research labs -3 Nos (180 SQM each)                                         | 540  |                                                                                             |
|       |    | 5                    | Common Area                                                                 | 390  |                                                                                             |
|       |    |                      | Total Floor area in Sq. M                                                   | 1300 |                                                                                             |
|       | 5F | SF SF ADCPS          | Faculty Offices<br>(Fulltime/Visiting/Adj) -18<br>rooms                     | 301  | Suggested size 3.7 x 4.6 m                                                                  |
|       |    |                      | Postdoc Offices- 02 Nos                                                     | 33   | Suggested size 3.7 x 4.6 m                                                                  |
| A D 4 |    |                      | Break out rooms - 03 Nos                                                    | 25   | Suggested size 3 x 2.7 m                                                                    |
| AB1   |    |                      | Library- 1 Nos                                                              | 33   | Suggested size 7.3 x 4.6 m                                                                  |
|       |    | •                    | Doctoral Student Lab- 4 Nos                                                 | 109  | Suggested size 7.3 x 4.6 m                                                                  |
|       |    |                      | MPP Student Lab-2 Nos                                                       | 67   | Suggested size 7.3 x 4.6 m                                                                  |
|       |    |                      | HoD Office + Meeting room- 1<br>Nos                                         | 42   | Suggested size 9.1 x 4.6 m                                                                  |

|     |            |                         | Office Staff + Record Room- 1<br>Nos                                                                                                                                            | 42                                    | Suggested size 9.1 x 4.6 m                                                                                           |
|-----|------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|     |            |                         | Project Staff- 2 rooms                                                                                                                                                          | 33                                    | Suggested size 3.7 x 4.6 m                                                                                           |
|     |            |                         | Seminar Room (adjacent-to be combined, when required)-2 Nos                                                                                                                     | 67                                    | Suggested size 7.3 x 4.6 m                                                                                           |
|     |            |                         | Lounge Area- 1 Nos                                                                                                                                                              | 25                                    | Suggested size 5.5 x 4.6 m                                                                                           |
|     |            |                         | Pantry- 1 Nos                                                                                                                                                                   | 17                                    | Suggested size 3.7 x 4.6 m                                                                                           |
|     |            |                         | Studio/Conference Room<br>(Sound Proof)- 1 Nos                                                                                                                                  | 98                                    | Suggested size 9.1 x 6.1 m                                                                                           |
|     |            |                         | Common Area                                                                                                                                                                     | 408                                   |                                                                                                                      |
|     |            |                         | Total Floor area in Sq. M                                                                                                                                                       | 1300                                  |                                                                                                                      |
| AB1 | 6F         | Insitute Space          | Insitute Space                                                                                                                                                                  | 910                                   | Currently to be designed as core and shell but can be allocated as class rooms/office space/or normal research labs. |
|     |            | lus                     | Common Area                                                                                                                                                                     | 390                                   |                                                                                                                      |
|     |            |                         | Total Floor area in Sq. M                                                                                                                                                       | 1300                                  |                                                                                                                      |
| AB2 | GF         | Insitute Space          | Insitute Space                                                                                                                                                                  | 945                                   | Ccurrently to be designed as class rooms of 80 seat and 150 seat capacity with 3:1 ratio.                            |
|     |            | nsi                     | Common Area                                                                                                                                                                     | 405                                   |                                                                                                                      |
|     |            | _                       | Total Floor area in Sq. M                                                                                                                                                       | 1350                                  |                                                                                                                      |
|     |            |                         | Faculty offices (Full time) -25<br>Nos                                                                                                                                          | 344                                   |                                                                                                                      |
|     |            |                         | Faculty offices<br>(Associated/Visiting) - 7 Nos                                                                                                                                | 69                                    |                                                                                                                      |
|     |            |                         | Postdoc office -10 Nos                                                                                                                                                          | 137                                   |                                                                                                                      |
|     |            |                         | Teaching Lab- 100 students - 2<br>Nos                                                                                                                                           | 382                                   | Prefer lower floors                                                                                                  |
|     | 15         |                         | Research Labs -10 Nos                                                                                                                                                           | 1527                                  | Prefer lower floors                                                                                                  |
|     | 1F,<br>2F, |                         | Meeting Rooms- 4 Nos                                                                                                                                                            | 76                                    |                                                                                                                      |
|     |            | 3F,   \( \frac{1}{2} \) |                                                                                                                                                                                 |                                       |                                                                                                                      |
| AB2 | 3F,        | JUL                     | Conference room -1 Nos                                                                                                                                                          | 61                                    |                                                                                                                      |
| AB2 | 3F,<br>&   | CMIND                   | Office Space- 1 Nos                                                                                                                                                             | 61<br>305                             |                                                                                                                      |
| AB2 |            | CMINE                   |                                                                                                                                                                                 |                                       |                                                                                                                      |
| AB2 | &          | CMINE                   | Office Space- 1 Nos Storage space for equipment                                                                                                                                 | 305                                   | Prefer lower floors                                                                                                  |
| AB2 | &          | CMINE                   | Office Space- 1 Nos Storage space for equipment and furniture- 1 Nos 200 students Class Rooms- 2                                                                                | 305<br>76                             | Prefer lower floors Prefer lower floors                                                                              |
| AB2 | &          | CMINE                   | Office Space- 1 Nos Storage space for equipment and furniture- 1 Nos 200 students Class Rooms- 2 Nos                                                                            | 305<br>76<br>458                      |                                                                                                                      |
| AB2 | &          | CMINE                   | Office Space- 1 Nos Storage space for equipment and furniture- 1 Nos 200 students Class Rooms- 2 Nos 40 students Class Rooms- 2 Nos 100 students Class Rooms- 2 Nos Common Area | 305<br>76<br>458<br>92                | Prefer lower floors                                                                                                  |
| AB2 | &          | CMINE                   | Office Space- 1 Nos Storage space for equipment and furniture- 1 Nos 200 students Class Rooms- 2 Nos 40 students Class Rooms- 2 Nos 100 students Class Rooms- 2 Nos             | 305<br>76<br>458<br>92<br>229         | Prefer lower floors                                                                                                  |
| AB2 | &          | CMIND                   | Office Space- 1 Nos Storage space for equipment and furniture- 1 Nos 200 students Class Rooms- 2 Nos 40 students Class Rooms- 2 Nos 100 students Class Rooms- 2 Nos Common Area | 305<br>76<br>458<br>92<br>229<br>1620 | Prefer lower floors                                                                                                  |

| ĺ   | İ  |      | 1                                                                            | ]    |  |
|-----|----|------|------------------------------------------------------------------------------|------|--|
|     |    |      | Pantry serving both lounges- 1<br>Nos                                        | 19   |  |
|     |    |      | Lounge- 2 Nos                                                                | 191  |  |
|     |    |      | Free seating Conference room - 1 Nos                                         | 139  |  |
|     |    |      | Admin seating area- 8 Nos                                                    | 74   |  |
|     |    |      | Meeting room -1 Nos                                                          | 42   |  |
|     |    |      | Visiting faculty cabins- 4 Nos                                               | 37   |  |
|     |    | КСDН | HOD cabin- 1 Nos                                                             | 14   |  |
|     |    | KC   | Server room- 1 Nos                                                           | 14   |  |
|     |    |      | COO cabin- 1 Nos                                                             | 9    |  |
|     |    |      | Pantry- 1 Nos                                                                | 5    |  |
|     |    |      | Storage- 1 Nos                                                               | 5    |  |
|     |    |      | Common Area                                                                  | 420  |  |
|     |    |      | Total Floor area in Sq. M                                                    | 1350 |  |
|     |    |      | Faculty office cum lab space for PhD and postdocs 15 Nos, each with 37 sq. m | 558  |  |
|     | 6F | KCDH | Computing lab -1 Nos                                                         | 223  |  |
| AB2 |    |      | Central lab/misc area -1 Nos                                                 | 93   |  |
| ADZ |    |      | Server room- 1 Nos                                                           | 14   |  |
|     |    |      | Pantry -1 Nos                                                                | 9    |  |
|     |    |      | Storage- 1 Nos                                                               | 5    |  |
|     |    |      | Common Area                                                                  | 449  |  |
|     |    |      | Total Floor area in Sq. M                                                    | 1350 |  |

## **LAYOUT MAP Ground floor layout**



## Indian Institute of Technology Bombay Invites

### **Request for Proposal (RFP)**

For

# Comprehensive Architectural Consultancy for the Proposed Academic Block- 1 & Academic Block-2 at IIT Bombay

RFP NO: IIT(B)/DEAN (IPS)/ARCH-CONSULTANCY/AB1&AB2/1

Dated: 2022 September 07

Offer Notice No

#### **PART I- FINANCIAL BID**



**RFP Invited by** 

Dean, Infrastructure Planning and Support (IPS)
Indian Institute of Technology Bombay
Powai, Mumbai 400076.

Name of the Architect/Firm: .....

#### 5. FINANCIAL PROPOSAL

The Financial proposal should be submitted on the consultant's letterhead and should be duly complete in all aspects, without any additional conditions except those mentioned in the RFP (Request for Proposal) & free from any computational errors.

In preparing the Financial Proposal, the Consultant is expected to take into account, besides technical requirements, commercial conditions specified in the offer document.

The Financial Proposal for the assignment and for additional works shall be all-inclusive, and should cover, but not limited to, remuneration of staff (in the field and at headquarters), gratuity, Provident fund, travel assistance, out-of-pocket expenses (per diem), Overheads, Profits, Accommodation (housing), transportation (for mobilization & demobilization), Communication, Equipment (vehicles, office equipment, furniture, consumables, etc.), the printing of documents, Surveys, training. The Financial Proposal shall also include the tax liability and cost of Insurance of the Consultants' firm and his personnel specified in the Datasheet.

The fee shall be quoted in in Percentage only. SCHEDULE OF FINANCIAL PROPOSAL

A: Financial Bid

B: Milestone for Payment of Consultancy Charges

C: Effecting payment to the Design Consultant

D: Details of Reimbursable expenses

#### A. FINANCIAL BID

## (Comprehensive Architectural consultancy for Proposed Construction of Academic Block-1 and Academic Block-2)

#### TENDER NO.:

| Sl. | Item Description                                     | Percentage of fee | Percentage of fee      |
|-----|------------------------------------------------------|-------------------|------------------------|
| No. |                                                      | in Figure         | <b>Amount in words</b> |
| 1   | Comprehensive Architectural Consultancy for the      |                   |                        |
|     | construction of proposed Academic Block AB-1         |                   |                        |
|     | and AB-2 for Indian Institute of Technology          |                   |                        |
|     | Bombay, Powai, Mumbai-400076, consisting of          |                   |                        |
|     | providing design, drawings, cost estimate,           |                   |                        |
|     | specifications, DBRs, reports, etc. consisting of    |                   |                        |
|     | Architectural, Civil, Structural, Public Health,     |                   |                        |
|     | Electrical, Mechanical, Fire Fighting System,        |                   |                        |
|     | Acoustic, etc. including Landscape Architecture and  | %                 | %                      |
|     | Interior Architecture complete.                      |                   |                        |
|     | (Note: % (Percentage) of Fees shall be quoted        |                   |                        |
|     | based on the Preliminary Estimated cost of           | '                 | (Percentage in         |
|     | Rs.103.00 Cr. (given in the Data Sheet) as per the   | figures)          | words)                 |
|     | scope of work defined in Technical Proposal -        |                   |                        |
|     | PART-A, subject to Note below)                       |                   |                        |
|     | Note: (Quoted percentage shall include all the taxes |                   |                        |
|     | applicable except GST which shall be added           |                   |                        |
|     | separately. Percentage quoted shall be written in    |                   |                        |
|     | words.)                                              |                   |                        |
|     | 11 111                                               |                   |                        |
|     | #Maximum amount payable will be restricted to the    |                   |                        |
|     | percentage of the actual cost executed through       |                   |                        |
|     | contracts or percentage on Technically Sanctioned    |                   |                        |
|     | cost which ever lower.                               |                   |                        |

Total Quoted Amount in words: Rs.103,00,00,000.00 X Percentage Quoted fee

Signature of Authorized Signatory with Designation, date & Seal

#### **B.** MILESTONES PAYMENT OF CONSULTANCY CHARGES

| Sl.     | STAGES OF                                                                                  | ACTIVITY                                                                                                                                                                                                                                                                                                                    | FEES PAYABLE                                                            |
|---------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| No<br>1 |                                                                                            | <ul><li>2. Prepare Conceptual Architectural drawings for civil works, including Landscaping and Interior Architecture</li><li>3. Prepare Preliminary Architectural Design Basis</li><li>Report</li></ul>                                                                                                                    | 10%(Ten ) of total<br>fees payable                                      |
| 2       | STAGE 2<br>Preliminary<br>Design And<br>Drawings stage                                     | changes necessary and prepare the preliminary drawings & sketches.                                                                                                                                                                                                                                                          | 20%(Twenty) of total fees payable less payment made at Stage 1          |
| 3       | STAGE 3<br>Statutory<br>Approval stage /<br>Design<br>Development                          | <ol> <li>Prepare drawings necessary for Statutory approvals</li> <li>Submission of revised design basis report for<br/>Structure, Services &amp; landscape</li> </ol>                                                                                                                                                       | 30% (Thirty) of total fees payable less payment made up to Stage 2      |
| 4       | STAGE 4 (A) Working Drawings up to Tender Documents and Obtaining statutory approval stage | <ul> <li>i) Submission of revised Proof checking drawings &amp; documents incorporating revisions as per Proof Checking Consultant</li> <li>ii) Detailed coordinated design drawings</li> <li>iii) Detailed Cost Estimate with Rate Analysis</li> <li>iv) Tender drawings &amp; draft tender documents including</li> </ul> | to Stage 3                                                              |
| 5       | STAGE 4(B) -<br>Tender document<br>preparation &                                           | <ul> <li>i) Final Tender documents for the invitation of bids including specifications, schedule of quantities, conditions of contract</li> <li>ii) Tender processing consisting of Invitation of tenders, pre-bid meeting and its clarifications, preparation of</li> </ul>                                                | 50% (**) (Fifty) of total fees payable less payment made up to Stage 4A |

|   | I              |                                                        | ,                     |
|---|----------------|--------------------------------------------------------|-----------------------|
| 6 | STAGE 5        | 1. Issue of Good for construction (GFC) drawings       | 95% (**)              |
|   | Contract       | package for Civil works and other associated           | (Ninty Five)          |
|   | Finalization & | services such as Public Health, Electrical, HVAC,      | of total fees         |
|   | Construction   | Site development etc.                                  | payable less          |
|   | Stage          | 2. Issue revised construction drawings with minor      | payment made up       |
|   |                | revisions, if necessary for all works (including       | to Stage 4. Fees      |
|   |                | Architectural & Structural drawings) and other         | will be paid in       |
|   |                | associated services such as Public Health, Electrical, | stages                |
|   |                | HVAC, Site Development etc.                            | proportionate to      |
|   |                | 3. Periodic site/IITB office visit for general quality | the quantum work      |
|   |                | assurance, weekly progress review meetings etc.        | executed as per the   |
|   |                | Visits of structural designer for RCC pour             | Contractor's          |
|   |                | clearances.                                            | certified bill value. |
|   |                | 4. Periodic inspection of work during execution at     |                       |
|   |                | regular intervals mutually agreed upon.                |                       |
|   |                | 5. Approve samples of various elements & components    |                       |
|   |                | 6. Check & approve shop drawings submitted by the      |                       |
|   |                | contractor/vendors.                                    |                       |
|   |                | 7. (*) Certification for intermediate work done as per |                       |
|   |                | RA & Final bills of the contractors in co-ordination   |                       |
|   |                | with the construction supervision agency to be         |                       |
|   |                | appointed by the client separately                     |                       |
|   |                | 8. Monitor the estimated quantities for variation and  |                       |
|   |                | justification for additional expenditure, if any.      |                       |
| 7 | STAGE 6        | 1. (*) Certification of final contactor's bills in co- |                       |
|   | Completion     | ordination with the supervising agency                 | (One Hundred)         |
|   | Stage          | 2. Submission of As-built drawings on completion of    |                       |
|   |                | work                                                   | payable less          |
|   |                | 3. Obtaining Final Statutory clearances / completion   | F                     |
|   |                | certificates from MCGM, Chief Fire Officer, Tree       | Stage 1 to 5          |
|   |                | authority etc. including documents for occupation.     |                       |
|   |                | 4. Certification from GRIHA                            |                       |

Note: If scope of work marked (\*) is not assigned then reduction in Consultancy fee shall be applicable as per financial bid.

(\*\*) The % Fee indicated in stages4(B), 5 & 6 shall be reduced by 2% (Two percent) of the Total fee payable, if the scope marked (\*) is not assigned and accordingly fee payable shall be worked out.

#### C. EFFECTING PAYMENT TO THE DESIGN CONSULTANT:

#### (Proposed Construction of Academic Buildings AB-1 and AB-2)

Comprehensive Design Service payment due to the Design Consultant at different stages will be computed on the following basis:

- [A] At Stage 1: On preliminary estimated cost.
- [B] At Stages 2 to 4: On preliminary estimated cost.
- [C] At Stages 5: Technical Sanction cost or Actual total cost, whichever is lower.
- [D] At Stages 6: Technical Sanction Cost or Actual total cost, whichever is lower.

The Client shall make progressive on account payments to the Design Consultant against any of the above stages based on the quantum of work done during that stage, as may be mutually agreed to between Client and the Design Consultant.

No deductions shall be made from the fee of the Design Consultant on account of penalty, liquidated damages, part rates or for the sums withheld from payment or recovered from Contractors / suppliers.

The actual cost of the completed works shall include cost of execution of assigned works, referred to in Scope of Work and also the cost of equipment & machinery such as Transformers, DG Sets, Sub-stations, Lifts, Air Conditioning Machines, Pumps & Motors, Water and Sewage Treatment Plant, etc., but excluding the cost of land.

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

#### D. DETAILS OF REIMBURSABLE EXPENSES

#### (Proposed Construction of Academic Buildings AB-1 and AB-2)

#### **REIMBURSABLE EXPENSES:**

- 1. Proof Checking of Structural Design & HVAC
- 2. Fees payable to Statutory Authorities such as Chief Fire Officer, MCGM etc.
- 3. GRIHA Registration Fees
- 4. Detailed Site Survey & GEO Tech Investigation & Topographic Survey.

#### Note:

The payment for the reimbursable expenses to the Design Consultant shall be paid within fifteen (15) days from the date of submission of the original invoice (received from the concerned agencies) to the Client.

| Signature              |  |  |
|------------------------|--|--|
| (Authorized Signatory) |  |  |
|                        |  |  |
|                        |  |  |
|                        |  |  |
| Full Name:             |  |  |
|                        |  |  |
| Designation:           |  |  |