INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM) PASHAN, PUNE-411 008
PROPOSED INTERIOR AND FURNISHING WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE
Tender No. CE/IITM/Project/Students Hostel/Interior/2015/09

TENDER FOR INTERIOR AND FURNISHING WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE FOR INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008

e-TENDER NOTICE CE/IITM/Project/Students Hostel/Interior/2015/09

Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, Pashan, Pune-411 008, (India). Invites sealed separate tenders for following work (Part-I – Technical Bid, Part-II – Commercial Bid) in separate sealed covers from Contractors registered in the approved list of contractors of PWD/MES/ CPWD/Railways/P&T/Industrial Experienced contractors and any other government departments inappropriate class for following work:

Name of work: INTERIOR AND FURNISHING WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE

Tender documents can be downloaded from the institute website http://www.tropmet.res.in or e – procurement web site http://eprocure.gov.in and can also be obtained from the civil wing of the institute.

The tender document fee: Rs.5,000-/, (Rupees Five Thousand only) [Non Refundable] by demand draft drawn in the favour of Director, IITM Pune.

Date of issue of tender documents :09.09.2015

Pre - Bid Meeting :16.09.2015 (11:00Hrs)

Venue of Pre-Bid meeting : Indian Institute of Tropical Meteorology,

Dr.HomiBhabhaRoad Pashan-

Pune411008

Last date of receipt of Tender at IITM, Pune: 30.09.2015 at 12.30 Hrs. Opening of Tenders (Technical Bids only): 30.09.2015 at 15.00 Hrs.

The Institute reserves the right to reject any or all tenders without assigning any reason thereof.

Civil Engineer For Director

Email:anupam@tropmet.res.in

TENDER FOR INTERIOR AND FURNISHING WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE FOR INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008

TECHNICAL BID

Volume 1

(Invitation for Bid, Instruction to bidders , General conditions of contract & Special conditions)

TENDER FOR INTERIOR AND FURNISHING WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE FOR INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008

Tender No. : CE/IITM/Project/Students Hostel/

Name of work : INTERIOR AND FURNISHING WORKS FOR

STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT

IMD COLONY, PASHAN, PUNE

Tender document fee: Rs.5,000-/ (Rupees Five Thousand only) [Non Refundable] by

Demand draft drawn in the favour of Director, IITM, Pune-411008.

Date of issue of tender documents :09.09.2015

Pre - Bid Meeting :16.09.2015 (11:00 Hrs).

Venue of Pre-Bid meeting : Indian Institute of Tropical Meteorology,

Dr. Homi Bhabha Road Pashan-

Pune411008

Last date of receipt of Tender at IITM, Pune: 30.09.2015 at 12.30 Hrs

Opening of Tenders (Technical Bids only): 30.09.2015 at 15.00 Hrs.

Estimated Cost: Rs. : 180 Lakhs

COMPLETION PERIOD : 4 Months from the date of handing over of site

by the Institute to contractor for work

commencement.

Earnest Money Deposit (EMD) Rs. 3.60 Lakhs by demand draft (DD) or Bank

Guarantee (BG) from Nationalize/Schedule Bank in favour of The Director IITM, Pashan, Pune-

411008.

INVITATION FOR BID

(IFB)

NOTICE INVITING TENDER FOR INTERIOR AND FURNISHING WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE FOR

INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008

TWO COVER SYSTEM

Tender Notice No. CE/IITM/Project/Students Hostel/Interior/2015/09

- Indian Institute of Tropical Meteorology, Pune, Maharashtra is setting up interior and furnishing works at Students Hostel Building at IMD colony, Pashan, Pune. Director Indian Institute of Tropical Meteorology, Pune Invites bid for the said work under the **Two Cover System** item rates composite Tender from the Contractors, who are eligible as per the minimum requirements defined in clause 2 & 3 below and who are on approved list of the appropriate class of PSUs or Government department
 - Average annual financial turnover during the last 3 years ending 31st March 2015 of the previous should be at least 30% of the estimated cost.
 - ii) Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:-

The BIDDER should have three similar completed works costing not less than the amount equal to 40% of the estimated cost.

Эr

Two similar completed works costing not less than the amount equal to 60% of the estimated cost.

Or

One similar completed work costing not less than the amount equal to 80% of the estimated cost.

The bidder should produce Banker's Solvency Certificate or Revenue Solvency Certificate of The value of Rs. 70 LAKHS. Solvency Certificate must have been obtained not earlier than 1st April 2015.

The successful bidder shall ensure that, the direct subcontractors engaged in the works, Complies with all conditions as specified in the Agreement between the employer and the Successful bidder.

1. Salient Features

Name of Work	INTERIOR AND FURNISHING WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE FOR INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008	
Period of Completion	4 Months from the date of handing over of site by the Institute to contractor for work commencement.	

2. Tender documents can be purchased from the Civil Engineering office, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, NCL post, Pashan, Pune – 411008. INDIA

Α	Cost of Tender Documents (Non – Refundable)	Rs.5,000/-(Rupees Five Thousand only) by Demand Draft drawn from any Nationalized or Scheduled Banks In India payable at Pune in favors of Director, Indian Institute of Tropical Meteorology, Dr. Homi BhabhaRoad, NCL post, Pashan Pune – 411008. INDIA
В	Period of Issue of Tender Documents	Date of issue of tender documents :09.09.2015
С	Earnest Money Deposit (EMD)	Rs. 3.60 lakhs By Demand Draft, drawn from any Nationalized Or Scheduled Banks in India payable at Pune in favor Of The Director, IITM (or) By Irrevocable Bank Guarantee from any Nationalized or Scheduled Banks in India.
D	Pre-Bid Meeting	Pre - Bid Meeting :16.09.2015 at 11:00 hrs Venue of Pre-Bid meeting : Indian Institute of Tropical Meteorology, Dr.HomiBhabhaRoad Pashan- Pune411008
E	Last date for submission of bids	Bids to be submitted on or before 30.09.2015 at 12.30 Hrs at —DISPATCH SECTION Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, NCL post, Pashan Pune – 411008. INDIA
F	Opening of Technical bid	Opening of Tenders (Technical Bids only): 30.09.2015 at 15.00 Hrs.

^{*}Only one set of document will be issued. Contractors have to take additional copies.

^{1.} The Director, Indian Institute of Tropical Meteorology, reserves the right to accept/reject Anyone /all the tenders without assigning any reason thereof.

DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR. HOMI BHABHA ROAD,NCL POST, PASHAN, PUNE – 411008.INDIA

Definitions

Terms which are defined in the Contract Data are not defined in the Conditions of Contract But keep their defined meanings. Capital initials are used to identify defined terms.

The **Adjudicator** is the person appointed jointly by the Employer and the Contractor to Resolve disputes in the first instance. The name of the Adjudicator is defined in the Contract Data.

Bill of Quantities means the priced and completed **Bill of Quantities** forming part of the Bid.

Compensation Events are those defined in Clause 44 of Conditions of Contract (Vol-II).

The **Completion Date** is the date of completion of the Works as certified by the Architect and IITM Authorities in accordance with Sub Clause 55.1 of Conditions of Contract (Vol-II).

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.3 of Conditions of Contract (Vol-II).

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body who's Bid to carry out the Works has been accepted by the Employer.

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer.

The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; **months** are calendar months.

A Defect is any part of the Works not completed in accordance with the Contract.

Defects Liability Period is the period named in the Contract Data and calculated from the Date of handing over of site to the Institute.

The **Employer** is the party who will employ the Contractor to carry out the Works. In this Contract The Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, NCL post, Pashan, Pune, is the Employer

The **Architect** shall mean the Consultants engaged by the Employer.

Contractor's Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.

Drawings mean the employer's drawings of the works included in the contract and any Variations to such drawings given by an Architect.

Party means either employer or contractor.

Country means the country in which the site is located.

Employer's Liabilities means those mentioned in sub clause 11.1 of Conditions of Contract (Vol-II).

Force Majeure means an exceptional events or circumstance which is beyond a Party's control, which such Party could not reasonably have provided against before entering in to the contract; which, having arisen, such party could not reasonably have avoided or overcome; and, which is not substantially attributable to the other party.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall Complete the Works. The Intended Completion Date is specified in the Contract Data. H **Materials** are all supplies, including consumables, used by the contractor for incorporation in the Works.

Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Architect.

The **Start Date** it is the date from the date of receipt of handing over of site by IITM, Pune to commence the work **(LOI + Agreement + work order)**

IITM PUNE

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to

carry out a part of the work in the Contract which includes work on the Site.

Temporary Works are works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.

A **Variation** is an instruction given by the Architect with the approval of IITM authorities which varies the Works.

The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.

SECTION 1:

INSTRUCTIONS TO BIDDERS

(ITB)

A. General

1. Scope of Bid

- 1.1 On behalf of INDIAN INSTITUTE OF TROPICAL METEOROLOGY. The Director, INDIAN INSTITUTE OF TROPICALMETEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008, India invites bids for Construction of Students Hostel building at IMD colony Pashan, Pune for Indian Institute of Tropical Meteorology, (IITM), Pune-411008.
- 1.2 The successful bidder will be expected to complete the works by the intended Completion date specified in the Contract data.
- 2. Source of Fund: Indian INSTITUTE OF TROPICAL METEOROLOGY, PUNE

3. Eligible Bidders`

- 3.1 This Invitation for Bids is open to all reputed well established and experienced Contractors, who satisfy the qualifying criteria stipulated in Clause 4
- 3.2 All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a statement that the Bidder is not associated, nor has been associated in the past, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the Project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Employer to provide consulting services for the preparation of tender documents, supervision and certification of the works, and any of its affiliates, shall not be eligible to bid.
- **3.3** Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by Government in accordance with sub-clause 34.1.

3.3. Qualification of the Bidder

- **4.1** All bidders shall be provided in Section 2 Forms of Bid and Qualification Information, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.
- **4.2** Since the Employer has not undertaken pre-qualification of potential bidders, all bidders shall include the following information and documents with their bids in Section 2
- (a) Copies of original documents defining the constitution or legal status, place of registration and principal place of business.
- (b) Written power of attorney of the signatory of the Bid to commit the Bidder.

- (c) Total monetary value of construction work performed for each of the last five years.
- (d) Experience in works of a similar nature and size for each of the last seven years, and details of works under way or contractually committed; and clients who may be contacted for further information on those contracts;
- (e) Major items of construction equipment proposed to carry out the Contract;
- (f) Qualifications and experience of key site management and technical personnel proposed for the Contract;
- (g) Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past three years;
- Evidence of adequacy of working capital for this contract (access to line (s) of credit and availability of other financial resources);
- (i) Information regarding any litigation or arbitration resulting from contracts executed by the Bidder in the last three years or currently under execution. The information shall include the names of the parties concerned, the disputed amount, cause of litigation, and matter in dispute;
- (j) Proposals for subcontracting components of the Works which in aggregate add to more than 20 percent of the Bid Price (for each, the qualifications and experience of the identified sub-contractor in the relevant field should be annexed; no vertical splitting of work for sub-contracting is acceptable); and
- (k) The proposed methodology and program of construction including Environmental Management Plan backed with equipment, materials and manpower planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.
- 4.4 Bids from Joint ventures are not acceptable'.

4.4 A. To qualify for award of the contract, each bidder in its name should have in the last three years i.e., 2012-13, 2013-14 and 2014-2015.

- (a) The BIDDER should be a well-established and reputed INTERIOR Contractor, registered as a legal entity in India for a minimum period of five years, and having experience of minimum ten years and capacity in Interior works
- (b) The BIDDER should have an annual turnover of Rs.5 Crores (Rupees Five Crores) in all kinds of Interior and furnishing works during any two of the past three financial years, ending on 31st March 2015

4.4 B The bidder should produce Banker's Solvency Certificate or Revenue Solvency Certificate of the value of Rs. 50 Lakhs. Solvency Certificate must have been obtained not earlier than 1st Jan. 2015.

4.4 C. Each bidder should further demonstrate:

(a) Availability (either owned or leased or by procurement) of the following key and critical equipment for this work:

MOTE: Based on the studies, carried out by the Engineer the minimum suggested major equipment to attain the completion of works in accordance with the prescribed construction schedule are shown in the above list. The bidders should, however, undertake their own studies and furnish with their bid, with addition if any a detailed construction planning and methodology supported with layout and necessary drawings and calculations (detailed) as stated in clause 4.2 (k) above to allow the employer to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.

- (b) availability for this work of 1 Project Manager with not less than FIVE years' experience in construction of similar civil engineering, Mechanical, Electrical and allied works and other key personnel with adequate experience as required. The bidders are to produce organization chart for the execution of the project with responsibilities included.
- 4.5 Sub-contractors experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria except to the extent stated in 4.4 (a) (e to h) above.
- 4.6 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:
 - made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
 - Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
 - participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.
- 4.7 Each bidder shall submit only one bid for one contract.

5. Cost of Bidding

5.1 The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

6. Site visit

6.1 The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

Bidding Documents

7. Content of Bidding Documents

7.1 The set of bidding documents comprises the documents listed in the table below and addenda issued in accordance with Clause 10:

Invitation for Bids

Section

Volume I

- 1 Instruction to Bidders
- 2 Forms of Bid and Qualification information
- 3 Conditions of Contract & Special conditions
- 4 Contract Data
- 5 Forms of Securities

Volume II

6 Technical Specifications

Volume III

7 Tender Drawings

Volume IV

8 Bills of Quantities

7.2 Bidding documents supplied should be completed and returned with the bid.

8. Clarification of Bidding Documents

8.1 A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing at the employers address indicated in invitation to Bid.

8.2 **Pre-bid meeting**

- 8.2.1 The bidder or his official representative is invited to attend a pre-bid meeting,
- 8.2.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 8.2.3 The bidder is requested to submit any questions in writing or by cable to reach the Employer not later than one day before the pre bid meeting.
- 8.2.4 Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given, will be transmitted without delay to all purchasers of the bidding documents. Any modification of the bidding documents listed in Sub-Clause 8.1 which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 10 and not through the minutes of the pre-bid meeting.
- 8.2.5 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder. However bidder must attend the pre-bid meeting to get the clear understanding about the project requirements.

9. Amendment of Bidding Documents

- 9.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda.
- 9.2 Any addendum thus issued shall be part of the bidding documents and shall be communicated in writing to all the purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum in writing to the Employer.
- 9.3 To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer shall extend as necessary the deadline for submission of bids, in accordance with Sub-Clause 19.2 below.

10. Language of the Bid

10.1 All documents relating to the bid shall be in English language only.

11. Documents comprising the Bid

11.1 The bid submitted by the bidder shall comprise the following:

A. Technical Bid. (Envelope One)

- (a) Technical Bid documents, tender drawings duly signed on each page with company seal.
- (b) EMD, Tender fee;
- (c) Priced Bill of Quantities, duly signed on each page with company seal.
- (d) Qualification Information Form Documents and company profile.
- (e) Copy of pre bid M.O.M. duly signed on each page with company seal.
- (f) Bar chart of 4 month to complete the work and handing over of completed work site to the IITM.

And any other materials required be completing and submitting by bidders in accordance with these instructions. The documents listed under Sections 2, 4 and 7 of Sub-Clause 8.1 shall be filled in without exception.

B. Commercial Bid. (Envelope Two)

Commercial Quote hard copy in duplicate and one soft copy in the form of C.D.

12. Bid Prices

- 12.1 The contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced Bill Quantities submitted by the Bidder.
- 12.2 The bidder shall fill in rates and prices and line item total (both in figures and words) for all items of the Works described in the **Bill of Quantities** along with total bid price (both in figures and words). Items for which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed Covered by the other rates and prices in the Bill of Quantities. Corrections, if any, Shall be made by crossing out, initialing, dating and rewriting.
- 12.3 The bidder shall quote the rates as per prescribed price bid format, the basic cost and taxes shall be shown seperately. All duties, taxes, and other levies payable by the contractor under the contract, or for any other cause shall be quoted as per prescribed price bid format.
- 12.4 The rates and prices quoted by the bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 47 of the Conditions of Contract.

12.5 The rates of electrical/Mechanical part of the work shall include guarantee for 3 years for spares and labor, as specified by manufacturer.

13. Currencies of Bid and Payment

13.1 The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees.

14. **Bid Validity**

- 14.1 Bids shall remain valid for a period not less than **120 days** after the deadline date for bid submission specified in Clause 19. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- 14.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable.
- 14.3 Bid evaluation will be based on the terms & condition of tender and bid prices.

15. Bid Security

- 15.1 The Bidder shall furnish, as part of his Bid, a Bid security in the amount as shown in column 4 of the table of IFB for this particular work. This bid security shall be in favor of the **DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008. and may be in one of the following forms:
- 16.1 Demand draft/Bank Guarantee from nationalized / scheduled bank located in India in favor of. **DIRECTOR** INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR. HOMI BHABA ROAD, PASHAN, PUNE-411008.
- 16.2 Bank guarantees issued as surety for the bid shall be valid minimum period of 4 months.
- 16.3 Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub-Clauses 16.1 and 16.2 above shall be rejected by the Employer as nonresponsive.
- 16.4 The Bid Security of unsuccessful bidders will be returned after award of work to successful bidder.
- 16.5 The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.
- 16.6 The Bid Security may be forfeited

- (a) If the Bidder withdraws the Bid after Bid opening during the period of Bid validity;
- (b) If the Bidder does not accept the correction of the Bid Price, pursuant to Clause 26; or
- (c) In the case of a successful Bidder, if the Bidder fails within the specified time limit to
 - (i) sign the Agreement; or
 - (ii) furnish the required Performance Security.

17. Format and Signing of Bid

- 17.1 The Bidder shall prepare one original and one copy of the documents comprising the bid as described in Clause 12 of these Instructions to Bidders, bound with the volume containing the Form of Bid, and clearly marked "ORIGINAL" and "COPY" as appropriate. In the event of discrepancy between them, the original shall prevail.
- 17.2 The original and copy of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder, pursuant to Sub-Clauses 4.2. All pages of the bid where entries or amendments have been made shall be initialed by the person or persons signing the bid.
- 17.3 The Bid shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

Submission of Bids

18. Sealing and Marking of Bids

18.1 The bid shall be two cover / two part Bid system.

Part-I Technical Bid (Volume-1) and Conditions of contract, Contract Data and Forms of Securities (Volume-2) and Part-II Price Bid. Both the parts each in separate sealed cover duly marked Part-I (Cover-1) and Part-II (Cover-2). Both the sealed covers have to be submitted together in a common third sealed cover.

Part-I: - Technical Bid (Volume-1) and Conditions of contract, Contract Data and Forms of Securities (Volume-2).

Part-II:-The Price bid along with Bill of Quantities (Volume-3), Drawings (Volume-4) and Technical specifications (Volume-5).

18.2 **The inner and outer** envelopes / cover shall

(a) be addressed to the Employer at the following address:

- (b) bear the following identification:
 - Bid for[name of contract]
 - Bid Reference No.....[insert number]
 - DO NOT OPEN BEFORE.....[time and date for bid opening, per Clause 22]
- 18.3 In addition to the identification required in Sub-Clause 18.2, the inner envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared late, pursuant to Clause 20.
- 18.4 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the bid.
- 18.5 Bidder will be supplied with one set of Bid Document the Bidder should treat this as **Original**. One additional copy of the Bid Document will be taken by the Bidder and make this copy as duplicate. The Duplicate copy will also contain one inner and outer cover like the Original.

19. Deadline for Submission of the Bids

- 19.1 Bids must be received by the Employer at the address specified above. In the event of the specified date for the submission of bids declared a holiday for the Employer, the Bids will be received upto the appointed time on the next working day.
- 19.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

20. Late Bids

20.1 Any Bid received by the Employer after the deadline prescribed in Clause 20 will not be considered.

21. Modification and Withdrawal of Bids

21.1 Bidders may modify or withdraw their bids by giving notice in writing before the deadline prescribed in Clause 19.

- 21.2 Each Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 17 & 18, with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL", as appropriate.
- 21.3 No bid may be modified after the deadline for submission of Bids.
- 21.4 Withdrawal or modification of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity specified in Clause 15.1 above or as extended pursuant to Clause 15.2 may result in the forfeiture of the Bid security pursuant to Clause 16
- 21.5 Bidders may offer discounts to, or modify the prices of their Bids only by submitting Bid modifications in accordance with this clause, or included in the original Bid submission.

Bid Opening and Evaluation

22. Bid Opening

- 22.1 The Employer will open all the technical Bids received (except those received late), including modifications made pursuant to Clause 21, in the presence of the Bidders or their representatives, the technical bids will be opened on 16.09.2015 at 15.00 hours at Indian Institute of Tropical Metrology, Dr.Homi Bhaba Road, Pashan, Pune-411008.
 - In the event of the specified date of Bid opening being declared a holiday for the Employer, the Bids will be opened at the appointed time and location on the next working day.
- 22.2 Envelopes marked "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause 21 shall not be opened. Subsequently all envelopes marked —Modification|| shall be opened and the submissions therein read out in appropriate detail.
- 22.3 The Bidders' names, the Bid prices, the total amount of Bid, any discounts, Bid modifications and withdrawals, the presence or absence of Bid security, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening. No bid shall be rejected at bid opening except for the late bids pursuant to Clause 20. Bids [and modifications] sent pursuant to Clause 21 that are not opened and read out at bid opening will not be considered for further evaluation regardless of the circumstances.
- 22.4 The Employer shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Sub-Clause 22.3.

23. Process to Be Confidential

23.1 Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

24. Clarification of Bids

- 24.1 To assist in the examination, evaluation, and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of the unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 26.
- 24.2 Subject to sub-clause 24.1, no Bidder shall contact the Employer on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.
- 24.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

25. Examination of Bids and Determination of Responsiveness

- Prior to the detailed evaluation of Bids, the Employer will determine whether each Bid (a) meets the eligibility criteria defined in Clause 3; and 4.4 A, (b) has been properly signed; (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Bidding documents (e)Technical bid scrutiny, presentation and site visit.
- 25.2 A substantially responsive Bid is one which confirms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

25.3 If a Bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

26. Correction of Errors

- 26.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:
 - (a) where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and
 - (b) where there is a discrepancy between the unit and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
- 26.2 The amount stated in the Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security may be forfeited in accordance with Sub-Clause 16.6 (b).

27. Evaluation and Comparison of Bids

- 27.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause 25.19
- 27.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
 - (a) making any correction for errors pursuant to Clause 26; or
 - (b) making an appropriate adjustments for any other acceptable variations, deviations; and
 - (c) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub Clause 21.5.
- 27.3 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.
- 27.4 The estimated effect of the price adjustment conditions under Clause 47 of the Conditions of Contract, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.

27.5 If the Bid of the successful Bidder is seriously unbalanced in relation to the Architect's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, the Employer may require that the amount of the performance security set forth in Clause 31 be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

Award of Contract

28. Award Criteria

28.1 Subject to Clause 29, the Employer will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid Price, provided that such Bidder has been determined to be (a) eligible in accordance with the provisions of Clause 3, and (b) qualified in accordance with the provisions of Clause 4.

29. Employer's Right to Accept any Bid and to Reject any or all Bids

29.1 Notwithstanding Clause 28, the Employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the Employer's action.

30. Notification of Award and Signing of Agreement

- 30.1 The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- 30.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 31.
- 30.3 The Agreement will incorporate all agreements between the Employer and the successful Bidder. It will be signed by the successful within 28 days following the notification of award along with the Letter of Acceptance.

30.4 Upon the furnishing by the successful Bidder of the Performance Security, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful.

31. Performance Security

- 31.1 Within 7 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 5% of the Contract price plus additional security for unbalanced Bids in accordance with Clause 27.5 of ITB and Clause 52 of Conditions of Contract:
 - a bank guarantee in the form given in Section 8; or Demand draft/Bank Guarantee, from nationalized / scheduled bank located in India in favour of **DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008.
- 31.2 Failure of the successful bidder to comply with the requirements of sub-clause 31.1 shall constitute a breach of contract, cause for annulment of the award, forfeiture of the bid security and any such other remedy the Employer may take under the contract, and the Employer may resort to awarding the contract to the next ranked bidder.

32. Advance Payment and Security

- 32.1 No advance payment will be made.
- 32.2 Running payment will be made towards completed work up to value not less than of Rs.50 lakhs and above. Total number of bill not more than 4 numbers upto final bill.

33. Corrupt or Fraudulent Practices

- 33.1 The Employer requires that Bidders, Suppliers, Contractors, and Consultants observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the Employer
 - (a) Defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) Corrupt practice|| means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
 - (ii) Fraudulent practice|| means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;

- (iii) Collusive practice|| means a scheme or arrangement between two or more Bidders, with or without the knowledge of the employer, designed to establish bid prices at artificial, non competitive levels.
- (iv) Coercive practice|| means harming or threatening to harm, directly or indirectly persons or their property to influence their participation in the procurement process or affect the execution of a contract;
- (b) Will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question;
- (c) will have the right to require that a provision be included in Bidding Documents and in contracts requiring Bidders, Suppliers, Contractors to permit the Employer to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Employer

34. Penalty Clause:

If the work is not completed within the aforesaid period the contractor shall pay liquidated damage of 1% per week subject to a maximum 10% of value of work order in case of delays beyond the accepted completion period for reasons solely attributed to him

35. Extra Items

The rate of extra items shall be worked out in accordance with the following rules.

- a. The rates for the extra items shall be derived from the rate of an appropriate item of the similar class for which the rate has already been accepted, where same can be directly derived.
- b. The contractor shall be bound to carry out any extra items of work as per site requirement. The rate for extra items shall be derived from the rate already quoted. Where the items are not specified in the BOQ the rate shall be worked out at cost of material + labour + Taxes +10% overheads, 10% wastage and transportation & profit.
- c. Wherever applicable the basic rate difference in materials (mentioned in tender) shall be payable plus-minus without any profits, overheads etc., on said rate difference.
- d. Variation and Non- Tendered items, if any, shall be carried out under specific written instruction by architects and prior sanction by the Institute. Sanction for all extra items shall be sought by the contractor within seven days from the occurrence such necessity. Maximum limit of non tender items/extra items shall be 10% of the ordered value.

SECTION 2:

FORMS OF BID, QUALIFICATION INFORMATION AND LETTER OF ACCEPTANCE

Table of Forms:

- CONTRACTOR'S BID
- QUALIFICATION INFORMATION
- LETTER OF ACCEPTANCE
- NOTICE TO PROCEED WITH THE WORK
- AGREEMENT FORM

Contractor's Bid

NAME OF WORK: TENDER FOR INTERIOR AND FURNISHING WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE

To: **THE DIRECTOR**,

Address: INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008.

Sir,

Having examined the bidding documents including addendum, we offer to execute the Works Described above in accordance with the Conditions of Contract, Specifications, Drawings and Bill of Quantities accompanying this Bid.

This Bid and your written acceptance of it shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any Bid you receive.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

We also undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely —Prevention of Corruption Act 1988||.

We hereby confirm that this Bid complies with the Eligibility, Bid Validity and Bid Security required by the Bidding documents.

Yours faithfully,

Authorized Signature: Name & Title of Signatory: Name of Bidder:

(A)

Qualification Information

The information to be filled in by the Bidder in the following pages will be used for purposes of qualification criteria as provided for in Clause 4 of the Instructions to Bidders. This information will not be incorporated in the Contract.

To be eligible for Qualification, BIDDERS shall provide evidence to suitability of their meeting the Criteria indicated in Clause 4.0 and furnish details giving their full biodata, organizational set up, technical experience, availability of plant and equipments etc. to establish their capacity and competence, and possession of adequate resources to carry out the contracts effectively and for this, the BIDS submitted shall include the following:(\square)

1.	Letter of tender ; as in Appendix A			
2.	For Individual Bidders			
2.1	Constitution or legal status of Bidder Information shall be submitted in the Statemen	nt -A attached separately		
2.2	Total value of Interior works executed and payments received in the last three years (in Rs. Crores)	2012-2013 2013-2014 2014-2015		
2.3.1	Year wise work performed as prime contracto of a similar nature over the last five years. In the Statement –D attached separately	,		
□Attach certificate(s) from the Employer □□Immediately preceding the financial year in which bids are received. Attach certificate from Chartered Accountant.				
2.4	Information on Bid Capacity (works for which works which are yet to be completed) as on the			

(B) Works for which bids already submitted but yet to be finalized. Information to be given in the statement given below.

Information shall be submitted in the **Statement–E** attached separately.

Existing commitments and on-going works:

Descriptio n of Work (1)	Place & State (2)	Name and Address of Employer * (3)	Estimate d value of works (Rs. Crores) (4)	Stipulated period of completio n (5)	Date when decision is expecte d (6)	Remark s if any (7)

2.5 Information of Contractor's Equipment, available Plant and Machinery is essential for carrying out the Works. The Bidder should list all the information requested below.

Refer also to Sub Clause 4.2 (d) of the Instructions to Bidders. Information shall be submitted in the **Statement –F** attached separately

- 2.6 Qualifications and experience of key personnel proposed for administration and execution of the Contract. Attach biographical data. Refer also to Sub Clause 4.2 (e) and 4.4 (B) (b) of instructions to Bidders and Sub Clause 9.1 of the Conditions of Contract. Information shall be submitted in the **Statement B** attached separately
- 2.7 Proposed subcontracts and firms involved. [Refer ITB Clause 4.2 (j)] Information to be given in the statement given below.

Sr. No.	Sections of the works	Value of Sub- contractor	Sub- contractor (name and address)	Experience in similar work

- 2.8 Financial reports for the last five years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporation), etc Information shall be submitted in the **Statement –C** attached separately
- 2.9 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List them below and attach copies of support documents [sample format attached].

^{*} Attach certificate(s) from the Employer.

- 2.10. Name, address, and telephone, telex, and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.
- 2.11 Information on litigation history in which the Bidder is involved. Information shall be submitted in the **Statement –H attached** separately
- 2.12 Details of termination of contract by previous client if any in last five years Information shall be submitted in the **Statement –G attached** separately
- 2.13 Statement of compliance under the requirements of Sub Clause 3.2 of the Instructions to Bidders.
- 2.14 Proposed work method and schedule. The Bidder should attach descriptions, drawings and charts as necessary to comply with the requirements of the Bidding documents. [Refer ITB Clause 4.1 and 4.2 (k)].
- 3.0 Additional Requirements
- 3.1 Bidders should provide any additional information required to fulfill the requirements of Clause 4 of the Instructions to the Bidders, if applicable.
- 3.2 Certificates in support of suitability, technical know-how and capability for having successfully completed the works during the last five years under Annexure A'.
- 3.3 A detailed description on the approach, methodology to the construction technology proposed, schedule and type of equipment to be used, names and responsibilities and detailed qualifications of the proposed subcontractors, if any etc.
- 3.4. A detailed description of any method of approach specially devised by the contractor to speed up the work.
- 3.5 Current solvency certificate or letter of support from the BIDDER'S Banker for an amount of Rs 30 Lakhs, not older than three months from the last date of submission of Bid.
- 3.6 Details of cases of having been barred or black listed from the Bidding process, if any. Black-listed Agencies' Tender is liable to be rejected.
- 3.7 The tender should be submitted in English only. Supporting documents such as Annual accounts, Balance sheets, Client's certifications, Testimonials etc., if attached in any other language, should be translated in English.
- 4.0 The BIDDERS must provide evidence of having adequate experience. This should include supporting certificates of reports relating to financial, technical and other capability of the BIDDERS. At least three certificates to be produced.

5.0 The BIDDERS for qualification shall provide all facilities to **THE DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD,PASHAN,PUNE-411008. for verification of the information / details furnished by them and also for inspection of their works carried out / in progress if requested.

6.0 Nature of Submissions:

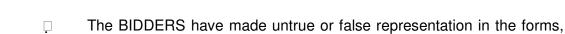
- 6.1. The submissions from the BIDDER in response to the Clause-4 shall be in the form of a statement signed by the authorized signatory on behalf of the BIDDER, who shall hold the Power of Attorney to sign such documents. The Power of Attorney documents shall also be attached.
- Note :The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 or his authorized representatives reserves the right to verify any part of the information furnished by the BIDDER in the above statements without any prejudice to the terms and conditions of the Contract. The BIDDER is deemed to have given his consent for the right of verification by the The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 or his authorized representative when the BIDDER submits the above statements. If it comes to the notice of **The DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 that the BIDDER has suppressed any information or furnished misleading or inaccurate information, or in case whether any litigation currently in progress at the time of submission of BIDS lead to the decree by the Court of Law against the BIDDER, the The **DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI** BHABA ROAD, PASHAN, PUNE-411008 reserves the right to nullify the Qualification and to disqualify the BIDDER. If such information becomes available to The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 prior to issue of Letter of Intent, the BIDDER will be disqualified and will not be considered for award of work. If such information comes to the knowledge of the Client after the award of work, The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY.DR.HOMI BHABA ROAD. PASHAN. PUNE-411008 of the BIDDER and such action would include but not Ltd to forfeiture of all deposits, guarantees etc. furnished in any form. The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 will also reserve the right to recover any Retention Money, Mobilization Advance paid by invoking of Bank Guarantees submitted, including invoking of the Performance Bond.

The entire work executed upto the stage of such termination including materials procured and delivered at site will be taken over by **The DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 and adjusted towards any payment due, as per contract conditions **The DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 can thereafter arrange for a bidding process for completion of the

7.1

balance works, for which any additional financial burden to be met by **The DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 will also be recovered from the Contractor, who has been terminated, without prejudice to the other rights of **The DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 under the Contract.

7.0 PARTICULAR ATTENTION



Employer reserves its rights to disqualify any BIDDER if:

statements and attachments submitted in proof of the qualification and requirements;

- The BIDDER's track record of poor performance such as abandoning the work, not properly completing the contract, inordinate delays in completion or financial failures etc.
- The BIDDERS have suits lodged / admitted / pending against it in a Court of Law for proceedings for declaration of Bankruptcy, etc or any suit which challenges the basic existence of the BIDDER and substantially influences its capacity to implement the **Works** satisfactorily. Information on the legal matters is to be submitted as per Statement-I.
- The BIDDER shall unconditionally waive all rights in respect of challenging in any court any matter concerning this BID evaluation and award / termination of Contract. The aggrieved bidder can approach **The DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 for their appeal against any order.

8.0 FINAL DECISION MAKING AUTHORITY

- 8.1 The main criteria for the selection of Contractors for the work will be on the consideration of their ability to fulfill their obligations under the contract. And competence to do good quality works within specified time schedule resources committed evaluation of technical submission etc. in addition to consideration given for competitiveness of bid price.
- 8.2 Selection for qualification will be made by a Tender evaluation committee on the basis of competence of individual bidders.
- 8.3 **The DIRECTOR,** INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 reserves the right to accept or reject any Bid or to reduce the scope/ cancel the exercise without

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having to incur any cost or to assign any reason for its decision to any party whatsoever and

The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 decision on qualifying contractors will be final and binding on all the contractors.

APPENDIX - A

LETTER OF TENDER

\Box	ata:	

To

The Director, Indian Institute of Tropical Metrology, Dr.Homi Bhaba Road, Pashan, Pune.

Sub: SUBMISSION OF BID FOR, INTERIOR AND FURNISHING WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE

Sir, 1	I / Wehaving examined the details given in the Invitation to BIDDERS, we hereby submit the following information and relevant documents.
a	I/We hereby certify that all the statements, information and data provided in the enclosed Statements A to G. and accompanying sheets are true and correct to the best of my / our knowledge.
b	I/We

- c I/Wehave also no objection if enquiries are made on all the projects and works listed by me / us in the accompanying sheets or any other enquiry on the information furnished herewith in the accompanying sheets.
- d I/We have furnished all information and details as asked for and have no further pertinent information to provide.
- l/We submit the requisite certified solvency certificate and authorize **THE DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 to approach the Bank issuing the solvency certificate to verify the correctness thereof. I/We also authorize **THE DIRECTOR**, INDIAN INSTITUTE OF TROPICALMETROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 to approach individuals, employers, companies, and corporation to verify my / our competency and general reputation.

- f I/We submit in Annexure 'A' the certificates in support of my / our suitability, technical know-how and capability for having successfully completed the works during the last five years.
- g I/We also agree that the decision of **THE DIRECTOR**, INDIAN INSTITUTE OF TROPICALMETROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 in the Qualification and selection of Contractors will be final and binding upon me / us.
- h I/We agree that **THE DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 reserves the right to qualify any contractor or to cancel the exercise without assigning any reason for doing so or to incur any liability to any party whatsoever.
- i I/We agree not to withdraw from the contract after issue of LOI and before signing the agreement. If so we abide by the condition that liquidated damages shall be claimed against us by THE DIRECTOR, INDIAN INSTITUTE OF TROPICAL METROLOGY, DR. HOMI BHABA ROAD, PASHAN, PUNE-411008
- j The following are enclosed as enclosures to the letter of tender
 - 1. Certificate of Incorporation from Registrar of Companies
 - 2. Memorandum of Association
 - 3 Annual Report / Audited Balance Sheet & Profit and Loss Statement for the past5 years
 - Solvency Certificate from Bankers for the value of Rs 50 LAKHS, current and dated not earlier than three months from the last date of submission of bid.
 - 5. Support Certificate from Bankers for Credit facilities available and cash flow of Rs ------ LAKHS per month.
 - 6. Proof of filing Income Tax returns for the previous three years.
 - 7. Sales Tax /Works Contract Tax / VAT / PAN Registration and Clearance certificate.
 - 8. PERT/BAR Charts and quality Formats used at site such as pour card for Concrete etc.,
 - 9. Testimonials from Clients / Consultants for completion of works included in Statement -D
 - 10 LOI / Work Order issued by the Clients for ongoing works included in Statement E'

- 11. Organization Chart of Company showing the Officer in-Charge who will have direct link with and control of, site organization.
- 12. Organization Chart and Curriculum Vitae of top two officers, viz, .Project Manager and Coordinator.
- 13. Method Statement: Programming & Planning and Progress monitoring plan, weekly and monthly; Management of direct subcontractors from selection through execution of work; Coordination with Specialist contractors like Electrical, Air-conditioning, lifts etc.; Quality control & quality Assurance at site; Safety Plan;
- 14. Statements A to H with complete details., and any certificates other than that listed above.

I / we hereby agree to abide by the decisions of The Director, INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008. in all matters relating to this Qualification

Date of Submission

Signature of BIDDER with Official Seal

Senior Bank Manager Address of the Bank

SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT FACILITIES -CLAUSE 4.5 [B] [c] OF ITB

BANK CERTIFICATE

This is to financial	•	M/s		is a reputed	l company with	h a good
shall be a	able to provi	contract de overdraft/credi equirements for e	t facilities to	is awarded the extent o	of Rs.	•
Sd	_					
Name of	Bank					

STATEMENT - A

ORGANISATION STRUCTURE (BIDDER)

S.No	Details required	To be filled by the Bidder
1	Name of the Bidder's Company	
2	Nationality of Bidder	
3	Establishment of the Company	
	i) Year	
	ii) Location	
4.	The Bidder is a company	Yes / No
	(Please enclose attested copy of registration / incorporation under	
	appropriate laws of the Bidder's country)	Enclosed/ Not enclosed
5	Address of the Bidder:	
i)	Registered Office Address	
''	Telephone Number	
	Fax Number	
	E-mail Address	
	Web site	
ii)	Local office address:	
	Telephone Number	
	Fax Number	
	E-mail Address	
iii)	Office address through which this work will be handled and name of officer incharge.	
	Telephone Number	
	Fax Number	
	E-mail Address	

S.No	Details required	To be filled by the Bidder
iv)	The Bidder has to furnish a detailed note on how it will handle the project in India, if successful bidder, in terms of	
	(i) Finance,	
	(ii) Manpower,(iii) Tools & equipment,(iv) Use of local agencies and labour,(v) Project control and managementplan	
6	Details of the Board of Directors	
	i) Name of the Director	
	ii) Qualification	
	iii) Organization	
	iv) Office address	
	v) Telephone Number	
	vi) Fax Number	
	vii) E-mail Address	
7	Enclose Company's Organization Chart showing the structure of the organization including the names of the Directors / Chief Executive Officer and position of Officers.	Enclosed / Not Enclosed
8	Number of years of experience and other Details.	
a.	As a Principal Contractor (Contractor shouldering major responsibility)	Yes / No
	i. In own country	Yes / No No. of Years :
	ii. Other countries (If yes, pl. specify country)	Yes / No No. of Years : Country :
9	Average number of permanent employees in the last 12 months.	
	i) Managerial	Nos.
	ii) Technical	Nos.

S.No	Details required	To be filled by the Bidder
	iii) Administration	Nos.
	iv) Financial	Nos.
	v) Quality Control and Quality Assurance Engineer	Nos.
	vi) Safety Officer	Nos.
	vii) Industrial Relations Officer	Nos.
	viii) Supervisors	Nos.
	ix) Foreman	Nos.
	x) Skilled Labours	Nos.
	xi) Un Skilled Labours	Nos.
	xiii) Others (to specify)	1. Nos. 2.
		Nos. 3. Nos.
10	i) How many years has your Company been in business of similar work under its present name & address.	Years
	ii) What were your fields of activities from when your Company was established?	1. 2. 3.
	iii) Whether any new fields were added in your Company? and if so, when and in what fields?	1. 2. 3.
11	Area of business activities other than construction works, if any.	Yes / No
	(If yes please furnish specific information).	
12	In which fields of Interior engineering works do you claim specialization and	1. 2.
	interest?	3.

S.No	Details required	To be filled by the Bidder
13	Whether registered with any Government / Public Sector Undertaking / Local bodies like CPWD / MES / PWD or equivalent applicable in the Bidder's country. If yes, please furnish details class and	1. 2.Yes / No. 3.
14	type of Registration. Registration Details: i) Sales Tax Registration No or equivalent applicable in the Bidder's country & Valid up to ii) PF Registration No or equivalent applicable in the Bidder's country & Valid up to iii) ESI Registration No or equivalent applicable in the Bidder's country & Valid up to iv) Service Tax registration No or equivalent applicable in the Bidder's	
15	country & Valid up to Whether adequate and satisfactory evidence to indicate financial capacity of the organization to undertake the said construction work is enclosed.	Yes / No
16	Do you have plans for sub-contracting the work including specialized nature of building / infrastructure works? If yes, pl specify the quantum of contract in terms of percentage of works. Also, pl furnish the value of work sub-contracted in various works. Details of credentials of the subcontractors proving their ability to handle the component of this project.	Yes / No % Rs
17	Do you have Latest Survey instruments and Equipment to set out levels at any heights and all type of Special structures?	Yes / No If yes mention the name of equipment and the quantity possess.
18	Do you material in stock? If yes, pl. furnish details of your own plant. If no, please specify name of manufacturer for sourcing and the dependency of the manufacture by the Bidder.	Yes / No

S.No	Details required	To be filled by the Bidder
19	Do you have R & D department?. If yes, give details.	Yes / No
20	i) Do you have and adopt Quality Control and Quality Assurance Manual?	Yes / No Enclose QA Plan
	ii) Is your company an ISO certified Company?	Yes / No
	If yes, please furnish the ISO certification no.	
	iii) Do you follow Quality Assurance System as per the appropriate ISO series of standards?	Yes / No
21	i) Do you have and follow Safety	Yes / No
	Manual?	Enclose Environmental
	If yes, please give details of health and safety facilities available with you.	Health and Safety Plan.
	ii) Was there any major, fatal accident during execution in the last five years? If yes, furnish Details.	Yes / No
	iii) Whether corrective action taken immediately and first-aid facilities provided in the site?	Yes / No
22	Propose Methodology:	Enclose Statement
	i) Whether the Programming and planning plan will be prepared in the form of Pert Chart or Bar Chart?	Yes / No
	ii) Whether the coordination plan & report plan will be prepared in the standard format?	Yes / No
	iii) Whether the technically qualified Sub- Contractors are engaged to carry out the work?	Yes / No
	iv) Please specify method for control and management of Sub-Contractors.	
23	Were you ever required to suspend work for a period of more than three months	Yes / No. 1. Name of Project :

S.No	Details required	To be filled by the Bidder
	continuously after you started? If yes, Please furnish the name of project and reasons thereof.	Reasons 2. Name of Project : Reasons
24	Have you ever left the work awarded to you incomplete? If yes, Please furnish the name of project and reasons thereof.	Yes / No. 1. Name of Project : Reasons 2. Name of Project : Reasons
25	Were any penalties imposed for delays on the completion of the project? If yes, Please furnish the name of project and reasons thereof	Yes / No. 1. Name of Project : Reasons 2. Name of Project : Reasons
26	Were there any termination of Contracts by the Employer? If yes, please furnish the details	Yes / No. 1. Name of Project : Reasons 2. Name of Project : Reasons.
27	Litigation initiated by the Company and against the Company if any?	
	i) Whether cases of litigation proceedings have arisen in your projects during the last three financial years?	Yes / No
	ii) If Yes, How many cases of litigation arisen during the last three financial years?	Nos.
	iii) Furnish the details of the highest claim of Litigation during the last three financial years	. Rs.
	iv) If the Bidder is a multinational company, please furnish the litigation history initiated by the Company and against the company in India, if any	
28	Arbitration:	
	i) Whether cases of arbitration proceedings have arisen in your projects during the last three years?	Yes / No
	ii) If Yes, How many cases of arbitration arisen during the last three years. Furnish name of work, name of the Client, cost of work, amount of claim.	Nos.
	iii) Furnish the details of the highest claim of arbitration during the last three years.	Rs.

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S.No	Details required	To be filled by the Bidder
29	Details of the Banker	
	Name of the Banker	
	Contact person	
	Office Address	
	Telephone Number	
	Fax Number	
30	Are you a Recipient of any Award in appreciation of your work? If yes, please furnish the details	Yes / No
31	Please give atleast three references of Clients (Engineers, Architects or top Officials of Organisation) for whom you may have executed construction works of importance and similar nature from whom Superintending, Engineer, P.W.D, Building (Construction & Maintenance)Circle can verify	1) Name: Designation: Company: 2) Name: Designation: Company: 3) Name: Designation: Company:
32	Any special information, which you may like to provide.	

Place :	Signature of the Bidder wi		

Date:

STATEMENT-B

PERSONNEL TO BE DEPLOYED FOR THE PROJECT

S.No.	Details required	To be filled by Bidder
Α	Managerial Level – General	
1	Individual's Name	
2	Age	
3	Qualification	
4	Present position	
5	Professional experience in the similar nature of works.	
6	Years with the Bidder	
7	Language known	
8	Name two recent works and nature of involvement of the person	
В	Managerial Level – Technical	
1	Individual's Name	
2	Age	
3	Qualification	
4	Present position	
5	Professional experience in the similar nature of works.	
6	Years with the Bidder	
7	Language known	
8	Name two recent works and nature of involvement of the person	
С	Managerial Level - Administration & Finance	
1	Individual's Name	
2	Age	
3	Qualification	
4	Present position	
5	Professional experience in the similar nature of works.	

Details required	To be filled by Bidder
Years with the Bidder	
Language known	
Name two recent works and nature of involvement of the person	
Managerial Level - Quality Control and Quality	
Assurance	
Individual's Name	
Age	
Qualification	
Present position	
Professional experience in the similar nature of works.	
Years with the Bidder	
Language known	
Name two recent works and nature of involvement of the person	
Managerial Level - Safety Officer & Industrial	
Relation Officer	
Individual's Name	
Age	
Qualification	
Present position	
Professional experience in the similar nature of works.	
Years with the Bidder	
Language known	
Name two recent works and nature of involvement of the person	
Managerial Level – Planning	
Individual's Name	
Age	
	Years with the Bidder Language known Name two recent works and nature of involvement of the person Managerial Level - Quality Control and Quality Assurance Individual's Name Age Qualification Present position Professional experience in the similar nature of works. Years with the Bidder Language known Name two recent works and nature of involvement of the person Managerial Level - Safety Officer & Industrial Relation Officer Individual's Name Age Qualification Present position Professional experience in the similar nature of works. Years with the Bidder Language known Name two recent works and nature of involvement of the person Managerial Level - Planning Individual's Name

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S.No.	Details required	To be filled by Bidder
3	Qualification	
4	Present position	
5	Professional experience in the similar nature of works.	
6	Years with the Bidder	
7	Language known	
8	Name two recent works and nature of involvement of the person	

Note

- 1) CV of each of the above key personnel and details of their experience should be included in the submission.
- 2) Organization Chart (both office and site) specific for this project for all the divisions of work (Main works & Direct Sub works) as an Annexure to this format must be attached.

Disco	0'
Place:	Signature of the Bidder Common seal of the Company

Date

STATEMENT-C Financial Information

SI. No.	Description	Details to be filled in by Bidder
Α	Annual Turnover in the last five financial years (In INR crores)	
1	Year : April 2012 - to March 2013	
2	Year : April 2013 - to March 2014	
3	Year : April 2014 - to March 2015	
В	Financial Information (In INR Crores)	
1	Year : April 2012 - to March 2013	
	a. Total assets	
	b. Current assets	
	c. Total Liabilities	
	d. Current Liabilities	
	e. Profits before taxes	
	f. Profits after taxes	
	g. Net worth	
	h. Working Capital	
II	Year : April 2013 - to March 2014	
	a. Total assets	
	b. Current assets	
	c. Total Liabilities	
	d. Current Liabilities	
	e. Profits before taxes	
	f. Profits after taxes	
	g. Net worth	
	h. Working Capital	
Ш	Year : : April 2014 - to March 2015	
	a. Total assets	
	b. Current assets	
	c. Total Liabilities	
	d. Current Liabilities	

SI. No.	Description	Details to be filled in by Bidder
	e. Profits before taxes	
	f. Profits after taxes	
	g. Net worth	
	h. Working Capital	
С	Solvency Certificate (in INR Crores) a. Name of Banker with address	
	b. Date of Certificate	
	c. Amount	
D	Credit facilities available to Bidder – Fund and non-fund based such as Cash Credit, Working capital term loans, LCs and Bank Guarantees - Banker's or Bankers' Letter must be produced - (In INR Crores)	
	a. Name of Banker with address	
	b. Date of Letter of Support	
	c. Amount	
Е	Bidder's Financial resources for this project	
	a. Own resources	
	b. Banker's or Bankers' credits	
F	a. Approximate total value of on-going works	
	 b. Total Value of works to be completed as of now Note: 1) The Bidder should furnish the value of work to be completed as of now along with break-up details of each work. 2) The Bidder has to ensure that the list of works covered in this Proforma should be same as the ones listed in STATEMENT - E (List & details of Ongoing works) with Performa of each work. 	
G.	Anticipated total value of new works for the next financial year.	

Place :	Signature of Bidder

Date: Official Seal

Note: Balance sheet, Profit and loss statement, auditor's report etc. duly signed by Charted Accountant is required to be attached separately

STATEMENT-D

Details of completed works in last five years

S.No	Details required	To be filled by the Bidder
1	Name of work	
2	Country and location	
3	Client's name and address	Name:
		Address :
4	Consultants name and address.	Name:
		Address :
5	Total tendered cost of work	INR Crores
	Agreement No.	Agreement No:
	Date	Date :
6	Total actual cost of work after completion.	INR Crores
7	Excess / less in percentage.	%
8	Explain if Excess / less is higher by 20% of the tendered cost of work.	
9	Date of commencement	
10	Period of completion	
11	Stipulated date of completion	
12	Actual date of completion	
13	Extended by the contractor, if any. Reason for non-completion of work in stipulated time limit / extended time limit, if so furnish details	Yes / No
14	Extension of time granted by the Client, if any. If yes, please specify the reason for extension of time.	Yes / No
15	Brief description of works including principal features and quantities of main items	

S.No	Details required	To be filled by the Bidder			
	of the work				
16	Name of Contractor's Engineer in-charge of the Project & Qualifications	Name :			
		Qualification:			
17	Details of specialised work executed under this Contract.				
18	Details of specialised work executed by their own divisions under the Contract				
19	Whether the Programming and planning plan was followed in the form of Pert Chart or Bar Chart?	Yes / No			
20	Whether the Quality Control and Quality Assurance function was carried out? If yes, Please give details and copies of quality formats used in anyone project	Yes / No			
21	Whether the safety measures were followed? If yes, Please give details	Yes / No			
22	i) Were there any labour strikes? If yes, Please give details.	Yes / No			
	Whether corrective action taken immediately?	Yes / No			
23	Were there any penalties / fines / stop notice / compensation / liquidated damages imposed during execution of the project?	Yes / No Amount :			
	If Yes, Please give amount, details and reason.	Reason :			
24	Whether the contract of the work was terminated?	Yes / No			
	If Yes, furnish the details.	Name of the Project :			
		Reason:			
25	Please specify the details of litigation / arbitration cases, if any, pertaining to works completed. If Yes, furnish the details i.e. Nature of litigation / arbitration. Please furnish whether the litigation is initiated by the Company or against the Company.	Yes / No			

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S.No	Details required	To be filled by the Bidder
26	Attach client's certificate, as may be available (Not below the rank of Director or equivalent)	Yes / No

Place:	Signature of Bidder

Date: Official Seal

STATEMENT-E

Details of On-Going works

S.No.	Details required	To Be filled by the Bidder				
1	Name of work					
2	Country and location					
3	Client's name and address	Name :				
		Address :				
4	Consultants name and address	Name :				
		Address :				
5	Total tendered cost of work					
	(Agreement No. and Date)	INR Crores				
6	(a) Brief description of works including principal features and quantities of main items of the work.					
7	i) Percentage of physical completion					
	ii) Amount billed for the work completed.					
	iii) Cost of work remaining to be executed as on the date of submission					
	iv) Stipulated date of completion					
	v) Anticipated date of completion					
8	Name of Contractor's Engineer in-charge of the Project & Qualifications.	Name :				
		Qualification:				
9	Details of specialised works under this Contract					
10	Specialised works being executed by their own divisions					
11	a. Details of the sub-contracted specialised works by the Bidder					
	i) Total value of work sub-contracted.ii) Trade-wise value of work sub-contracted.	INR Crores 1.INR. Crores				

S.No.	Details required	To Be filled by the Bidder
		2.INR
		4.INR Crores.
	iii) Trade-wise Name of sub-contractors Use separate sheet for details of such subcontractors experience, capability,	1.
	testimonial.	3.
		4.
12	15 i) Were there any labour strikes? If yes, Please give details.	Yes / No
	ii) Whether corrective action taken immediately?	Yes / No
13	Were there any penalties / fines / stop notice / compensation / liquidated damages imposed? If Yes, Please give amount, details and reason.	Yes / No Amount :
		Reason :
14	Please specify the details of litigation / arbitration cases, if any, pertaining to works ongoing	Yes / No
15	Attach client's certificate, as may be available (Not below the rank of Director or equivalent)	Yes / No

Place :	Signature of the Bidder
Place:	Signature of the Blode

Date : Official seal

STATEMENT- F A - PLANT, MACHINERY & EQUIPMENT

			Equipment Information		Current Position			/		
S.No.	S.No. Item of Equipment	Qty	Name of Manufacturer	Make & Model	Capacity	Year of Manufacture	Location	Present Condition	Availability for this	Source of the Equipment PI. Mention Owned / Leased
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										

 ${\sf B}-{\sf Details}$ of manpower like carpenters , , false ceiling agency, Electrical agency, etc. If the Machinery, Equipments, Plants etc are leased or rental attach copy of agreement

Signature of the Bidder with seal

STATEMENT-G Details of Termination of contract by previous Client in the past, if any

S.No.	Particulars	To be filled by the Bidder
1	Name of work	
2	Name of the Client	
3	Value of Contract in INR Crores	
4	Period of Contract	
5	Terminated at what stage	
6	Reasons / grounds for termination	
7	Approx. value of work completed at the time of termination in INR Crores	
8	Approx. value of balance work not completed in INR Crores	
9	Remarks	

Place :	
Date :	Signature of the Bidder with seal

STATEMENT- H

STATUS OF CURRENT LITIGATIONS, IF ANY

The Bidder is required to disclose as part of bid submission all cases filed against the BIDDER in any Court of Law in any country. The BIDDER shall give the information in the

following format in separate sheets for each litigation as applicable:

I General Information

- (1) Name of the Petitioner:
- (2) Name of the Court in which case has been admitted.
- (3) Name / designation of the Presiding Authority of the Court
- (4) Date of Filing of the case and date of Admittance of the case.
- (5) Expected date of next hearing:
- (6) Has hearing already commenced? If so, when was the last hearing?
- (7) Name & Address of the BIDDER'S Counsel
- (8) Name & Address of the Petitioner's Counsel
- (9) Current status of the litigation – Whether any interim injunction or injunction award has been given. If so, give the details?
- (10) Has any appeal been filed against any interim injunction or such award?
- (11) Value of litigation / damages claimed / out standings and disputes, as per the Petitioner

(12) Any arrest warrant or any property attachment or any insolvency proceedings or any such decree issued against the BIDDER? Give the details.

II. Financial Value of Dispute / Claim / Damages:

The BIDDER should furnish the sum total of claims / damages involved, on account of the litigations currently in operation.

III. Net Worth:

The BIDDERS shall furnish the percentage of the total sum of disputes / litigations / claim, currently under litigation in proportion to the average net worth of the Company for the last three years.

Place:	
Date :	Signature of the Bidder with seal

Date:

STATEMENT-I

IV. BIDDER'S Legal Status on account of the	Litigation:
---	-------------

The BIDDERS shall furnish information whether the litigation in question affects / threatens the fundamental existence / operation of the company (For E.g.: insolvency, decree of criminal nature etc.) Place:		_		_		
Place:	threatens the f	undamental	existence	/ operation		
Place:						
Place :						
Place :						
Place :						
Place :						
Place :						
Place :						
Place :						
Place :						
Place :						
Place :						
Place :						
Place :						
Place :						
Place :						
Place :						
	Place :					

Signature of the Bidder with seal

Place:

ANNEXURE - 'A'

CERTIFICATES

Enclose Certificates in support of suitability, technical knowhow and capability for having successfully completed similar nature of works in the last five years.

Also furnish the following details in the enclosed certificate.

S.No.	Name of Works	Period of Construction	Name of Client / Owner.

Date :	Common seal of the Company

Signature of the Bidder

Letter of Acceptance

(letterhead paper of the Employer)

[date]
o:
ear Sirs,
his is to notify you that your Bid dated for execution of the
ne contract and identification number, as given in the Instructions to Bidders] for the ontract Price of Rupees
) [amount in words and figures], as corrected and modified in coordance with the Instructions to Bidders1 is hereby accepted by our Agency.
/e accept/do not accept that be appointed as the djudicator2.
e note that as per bid, you do not intend to subcontract any component of work. [OR]
/e note that as per bid, you propose to employ M/saub-contractor for executing
ou are hereby requested to furnish Performance Security, plus additional security unbalanced bids in terms of ITB clause 27.5, in the form detailed in Para 31.1 of B for an amount of Rs.———— within 21 days of the receipt of this letter occeptance valid up to 28 days from the date of expiry of Defects Liability Period i.e to
We have reviewed the construction methodology submitted by you along with the big response to ITB Clause 4.2[k] and our comments are given in the attachment. You re requested to submit a revised Program including environmental management an as per Clause 27 of General Conditions of Contract within 14 days of receipt chis letter.
ours faithfully,
uthorized Signature ame and Title of Signatory ame of Agency

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- 1. Delete "corrected and" or "and modified" if only one of these actions applies. Delete "as corrected and modified in accordance with the Instructions to Bidders" if corrections or modifications have not been effected.
- **2.** To be used only if the Contractor disagrees in his Bid with the Adjudicator proposed by the Employer in the "Instructions to Bidders."

Issue of Notice to proceed with the work

(letter head of the Employer)

(lotter fload of the Employer)
(date)
То
(name and address of the Contractor)
Dear Sirs:
Pursuant to your furnishing the requisite security as stipulated in ITB clause 31.1 and signing of the contract agreement for the construction of —————— @ a Bid Price of Rs.————, you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.
Yours faithfully,
(Signature, name and title of signatory authorized to sign on behalf of Employer).

Agreement Form

Agreement

This agreement, made the	day of	20
, between		_[name and
address of Employer] (hereinafter called —the name and address		
—the Contractor) of the other part.		
Whereas the Employer is desirous that the Contra AND FURNISHING WORKS FOR STUDENT/TR. IITM AND IMD AT IMD COLONY, PASHAN, PUN of Contract] (Hereinafter called —the Works) and Bid by the Contractor for the execution and comp remedying of any defects therein, at a contract pr	AINEE HOSTEL BUI IE [name and identifi d the Employer has a letion of such Works	LDING FOR cation number accepted the

NOW THIS AGREEMENT WITNESSETH as follows:

- 1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
- 2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
- 3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
- 4. The following documents shall be deemed to form and be read and construe as part of this Agreement, viz.:
 - i) Letter of Acceptance;
 - ii) Notice to proceed with the works;
 - iii) Contractor's Bid:
 - iv) Contract Data:
 - v) Conditions of contract (including Special Conditions of Contract);
 - vi) Specifications;
 - vii) Drawings;
 - viii) Bill of Quantities; and

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ix)

contract.

Binding Signature of Contractor

In witness whereof the parties thereto have caused this Agreement to be the day and year first before written.	executed
The Common Seal of	
was hereunto affixed in the presence of:	
Signed, Sealed and Delivered by the said	
in the presence of: Binding Signature of Employer	

Any other document listed in the Contract Data as forming part of the

CONDITIONS OF CONTRACT & CONTRACT DATA

Conditions of Contract

A. General

1. Definitions

1.1 Terms which are defined in the Contract Data are not defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

The **Adjudicator** is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in Clauses 24 and 25. The name of the Adjudicator is defined in the Contract Data.

Bill of Quantities means the priced and completed **Bill of Quantities** forming part of the Bid.

Compensation Events are those defined in Clause 44 hereunder.

The **Completion Date** is the date of completion of the Works as certified by the Engineer in accordance with Sub Clause 55.1.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.3 below.

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body who's Bid to carry out the Works has been accepted by the Employer.

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer.

The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; **months** are calendar months.

A Defect is any part of the Works not completed in accordance with the Contract.

Defects Liability Period is the period named in the Contract Data and calculated from the date of handing over the site to IITM.

The **Employer** is the party who will employ the Contractor to carry out the Works. In this contract The Managing Director, Indian Institute of Tropical

Meteorology, Dr. Homi Bhabha Road, NCL post, Pashan ,Pune. is the Employer

The **Architect** shall mean the Consultants engaged by the Employer. In this case M/s C.R.NARAYANA RAO,CONSULTANTS PVT LTD , MYLAPORE , CHENNAI 600004

Contractor's Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.

Drawings means the employer's drawings of the works included in the contract and any variations to such drawings given by an Architect.

Party means either employer or contractor.

Country means the country in which the site is located.

Employer's Liabilities means those mentioned in sub clause 11.1.

Force Majeure means an exceptional events or circumstance which is beyond a Party's control, which such Party could not reasonably have provided against before entering in to the contract; which, having arisen, such party could not reasonably have avoided or overcome; and, which is not substantially attributable to the other party.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Engineer by issuing an extension of time.

Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.

Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Architect.

The **Start Date** It is the date from the date of handing over of the site by IITM, Pune to contractor to commence the work.(LOI+ Agreement + work order).

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.

Temporary Works are works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.

A **Variation** is an instruction given by the Architect which varies the Works. The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data. Maximum limit for non tender/extra item shall not be more than 10% of the ordered value

2. Interpretation

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Architect will provide instructions clarifying queries about the Conditions of Contract.
- 2.2 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following order of

Priority:

- (1) Agreement
- (2) Letter of Acceptance, notice to proceed with the works
- (3) Contractor's Bid
- (4) Contract Data
- (5) Conditions of Contract including Special Conditions of Contract
- (6) Specifications
- (7) Drawings
- (8) Bill of Quantities and
- (9) any other document listed in the Contract Data as forming part of the Contract.

3. Language and Law

3.1 The language of the Contract and the law governing the Contract are stated in the Contract Data.

4. Engineer's Decisions

4.1 Except where otherwise specifically stated, the institute authorities will decide Contractual matters between the Employer and the Contractor in the role representing the Employer.

5. Delegation

5.1 The Architect/Employer may delegate any of his duties and responsibilities to other people except to the Adjudicator after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

6.1 Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

7. Subcontracting

- 7.1 The Contractor may subcontract with the approval of the Architect but may not assign the Contract without the approval of the Employer in writing. Subcontracting does not alter the Contractor's obligations.
- 7.2 The contractor shall not be required to obtain any consent from the employer for:
 - a) The sub-contracting of any part of the Works for which the Sub-contractor is named in the contract;
 - b) The provision of labour; and
 - c) The purchase of materials which are in accordance with the standards specified in the Contract.

Beyond this if the contractor proposes sub-contracting any part of the work during execution of works, because of some unforeseen circumstances to enable him to complete the work as per terms of the contract, the Engineer will consider the following before according approval:

- The contractor shall not sub-contract the whole of the Works.
- The contractor shall not sub-contract any part of the Work without prior consent of the Engineer. Any such consent shall not relieve the contractor from any liability or obligations under the contract and he shall be responsible for the acts, defaults and neglects of any sub-contractor, his agents or workmen as fully as if they were the acts, defaults or neglects of the contractor, his agents or workmen.

- The Architect should satisfy whether (a) the circumstances warrant such subcontracting; and (b) the sub-contractors so proposed for the Work possess the

experience, qualifications and equipment necessary for the job proposed to be entrusted to them in proportion to the quantum of work to be subcontracted.

- If payments are proposed to be made directly to that sub-contractor, this should be subject to specific authorization by the prime contractor so that this arrangement does not alter the contractor's liability or obligations under the contract.

(Note: 1. All bidders are expected to indicate clearly in the bid, if they propose sub-contracting elements of the works amounting to more than 20 percent of the Bid Price. For each such proposal the qualification and the experience of the identified sub-contractor in the relevant field should be furnished along with the bid to enable the employer to satisfy himself about their qualifications before agreeing for such sub-contracting and include it in the contract. In view of the above, normally no additional sub-contracting should arise during execution of the contract.

- 2. However, [a] sub contracting for certain specialized elements of the work is not unusual and acceptable for carrying out the works more effectively; but vertical splitting of the works for subcontracting is not acceptable. [b] In any case, proposal for sub-contracting in addition to what was specified in bid and stated in contract agreement will not be acceptable if the value of such additional sub-contracting exceeds 25% of value of work which was to be executed by Contractor without sub-contracting.
- 3 Assignment of the contract may be acceptable only under exceptional circumstances such as insolvencies / liquidation or merger of companies etc.

8. Other Contractors

The Contractor should employ only the approved sub contractors.

9. Personnel

- 9.1 The Contractor shall employ the key personnel named in the STATEMENT B in Instruction and Information to Bidders (Volume-1). The Engineer will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.
- 9.2 If the Architect/Employer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's Risks

10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

11.1 The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, interior war, riot commotion or disorder (unless restricted to the Contractor's employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

12. Contractor's Risks

12.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

13. Insurance

- 13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, for the following events which are due to the Contractor's risks:
 - (a) loss of or damage to the Works, Plant and Materials;
 - (b) loss of or damage to Equipment;
 - (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
 - (d) Injury or death of a person working on the site of work. This also includes the supervisory staff employed by the Employer.
- 13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Employer for the Architects approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

13.4 Alterations to the terms of an insurance shall not be made without the approval of

the Architect/Employer

13.5 Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports

14.1 The Contractor, in preparing the Bid, shall rely on any site Investigation Reports referred to in the Contract Data, supplemented by any information available to the Bidder. (Site Investigation Report is enclosed as Annexure in Technical Specifications- Volume 5)

15. Queries about the Contract Data

15.1 The institute authorities will clarify queries on the Contract Data.

16. Contractor to Construct the Works

16.1 The Contractor shall construct and install the Works in accordance with the Specification and Drawings, and as per instructions of an Architect

17. The Works to be Completed by the Intended Completion Date

17.1 The Contractor may commence execution of the Works after fulfilling the contract conditions and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

18. Approval by the Architect

- 18.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Architect and Institute authorities and take approval from the Architect /Institute authorities who are to approve them if they comply with the Specifications and Drawings.
- 18.2 The Contractor shall be responsible for design of Temporary Works.
- 18.3 The Architects approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 18.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works where required.
- 18.5 All Drawings prepared by the Contractor for the execution of the temporary Works, are subject to prior approval by the Architect before their use.

19. Safety

19.1 The Contractor shall be responsible for the safety of all activities on the Site, as per safety norms and Building Code No:......

20. Discoveries

Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

21. Possession of the Site

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

22. Access to the Site

22.1. The Contractor shall allow the Employer / Engineer / Architect and his / their authorized representative access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

23. Instructions

23.1 The Contractor shall forthwith comply with and duly execute any work as instructed by the Employer / Engineer / Architect. All instructions will be in writing. Instructions if orally given then contractor shall confirm them within seven days from the date of such instructions.

24. Disputes

24.1 If the Contractor believes that a decision taken by the Engineer /Architect was either outside the authority given to the them by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Engineer's / Architect's decision.

25. Procedure for Disputes

- 25.1 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
- 25.2 The Adjudicator shall be paid daily at the rate specified in the Contract Data together with reimbursable expenses of the types specified in the Contract Data and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may

refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision will be final and binding.

25.3 The arbitration shall be conducted in accordance with the arbitration procedure tated will be final and binding. in the Special Conditions of Contract in page 21.

26. Replacement of Adjudicator

26.1 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not fulfilling his functions in accordance with the provisions of the Contract, a new Adjudicator will be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the Contract Data at the request of either

party, within 14 days of receipt of such request.

B. Time Control

Program

- 27.1 Within the time stated in the Contract Data the Contractor shall submit to the Architect for approval a Program including Environmental Management Plan showing the general methods, arrangements, order, and timing for all the activities in the Works along with monthly cash flow forecast.
- 27.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- 27.3 The Contractor shall submit to the Architect /Engineer, for approval, an updated Program at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Program within this period, the Employer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted.
- 27.4 The Architect's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Architect again at any time. A revised Program is to show the effect of Variations and Compensation Events.

28. Extension of the Intended Completion Date

28.1 The Employer / Architect shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it

impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost.

The Employer / Architect shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Employer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

30 Delays Ordered by Institute Authorities

30.1 The Employer may instruct the Contractor to delay the start or progress of any activity within the Works.

31. Management Meetings

- 31.1 Either the Employer / Architect or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 31.2 The Employer / Architect shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Employer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

32. Early Warning

- 32.1 The Contractor is to warn the Employer / Architect at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of works. The Employer /Architect may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.
- 32.2 The Contractor shall cooperate with the Employer / Architect in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Engineer.

C. Quality Control

33. Identifying Defects

- 33.1 The Architect/Employer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Architect may instruct the Contractor to search for a Defect and to uncover and test any work that the Architect considers may have a Defect.
- 33.2 The contractor shall permit the Employer's Technical auditor to check the contractor's work and notify the Employer/ Architect and Contractor of any defects that are found. Such a check shall not affect the Contractor's or the Architect's responsibility as defined in the Contract Agreement.

34. Tests

34.1 The testing of materials shall be carried out by approved laboratories at Contractor's cost and the results will be binding. The test results in original will be

sent to the Employer by the laboratory and a copy of the same sent to the Contractor - If the Architect instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples.

34.3 All material is required to be tested according to the frequency and record to be maintained by the contractor

35. Correction of Defects

35.1 The Employer/ Architect shall give notice to the Contractor of any Defects before

the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as

Defects remain to be corrected.

35.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified in the Employer/ Architect's notice.

36. Uncorrected Defects

36.1 If the Contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

Note: Where in certain cases, the technical specifications provide for acceptance of works within specified tolerance limits at reduced rates Architect will certify payments to Contractor accordingly.

D. Cost Control

37. Bill of Quantities

- 37.1 The Bill of Quantities shall contain items for the construction, installation, testing, and commissioning work to be done by the contractor.
- 37.2 The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

38. Changes in the Quantities

38.1 If requested by the Architect / Employer, the Contractor shall provide the Architect / Employer with a detailed cost breakdown of any rate in the Bill of Quantities.

39. Variations

39.1 All Variations shall be included in updated Programs produced by the Contractor.

40. Payments for Variations

- 40.1 The Contractor shall provide the Architect / Employer with a quotation (with breakdown of unit rates) for carrying out the Variation when requested to do so by the Architect / Employer. The Architect shall assess the quotation, which shall be given within seven days of the request or within any longer period stated by the Employer and before the Variation is ordered.
- 40.2 If the work in the Variation corresponds with an item description in the Bill of Quantities and if, in the opinion of the Architect / Employer, the quantity of work above the limit stated in Sub Clause 38.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in form of new rates for the relevant items of work.
- 40.3 If the Contractor's quotation is unreasonable (or if the contractor fails to provide the Architect /Employer with a quotation within a reasonable time specified by the Architect in accordance with Clause 40.1), the Employer may order the Variation and make a change to the Contract Price which shall be based on Architect's own forecast of the effects of the Variation on the Contractor's costs.
- 40.4 If the Architect / Employer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and will be decided on mutually agreed rates.

40.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

41. Cash flow forecasts

41.1 When the Program is updated, the contractor is to provide the Architect / Employer with an updated cash flow forecast.

42. Payment Certificates

- 42.1 The detailed measurements will be taken for all the works executed by the authorized representatives of the architect and recorded in the measurement books and acceptance for these measurements will be obtained from the contractor. Due check measurement of these measurements will be done as per the procedure in practice.
- 42.2 Contract bills will be prepared by the contractor's engineers at frequent intervals and submitted to the Employer for making payment.
- 42.3 The value of work executed shall be determined by the Architect after due check measurement of the quantities claimed as executed by the contractor.
- 42.4 The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
- 42.5. The value of work executed shall include the valuation of Variations and Compensation Events as specified in clause 44.
- 42.6 The Architect/Employer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

43. Payments

- 43.1 Payments shall be adjusted for deductions for advance payments, retention, other recoveries in terms of the contract and taxes, at source, as applicable under the law.
- 43.2 The contractor shall submit his running bills not less than 50 lakhs towards completed work. 5% amount will be retained from each running bill, retention amount will be released after defect liability period after certified the work by the PMC. Architect and Institute authorities.
- 43.3 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

44. Compensation Events

- 44.1 The following are Compensation Events unless they are caused by the Contractor:
 - (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
 - (b) The Architect / Employer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
 - (c) The effect on the Contractor of any of the Employer's Risks.
 - (d) The Architect / Employer unreasonably delays issuing a Certificate of Completion.
- 44.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Architect / Engineer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 44.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Architect / Employer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Architect / Employer shall adjust the Contract Price based on Architect's own forecast. The Engineer will assume that the Contractor will react competently and promptly to the event.
- 44.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Engineer.

45. Tax

45.1 The rates quoted by the Contractor shall be deemed to be inclusive of all taxes and duties that the Contractor will have to pay for the performance of this Contract.

46. Currencies

46.1 All payments shall be made in Indian Rupees.

47. Price Adjustment

47.1 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the

contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

48. Retention

- 48.1 5% of value of total work done which will be released after defect liability period of twelve month from the date of handover of site with clearance of institute.
- 49. Time is the essence of the work. All the works shall have to be completed within the stipulate time from the date of LOI (Appendix-A). If the work is not completed within the aforesaid period the contractor shall pay the owners liquidated damages of 1.0% of the balance work value per week subject to a maximum of 10% of value of work order in case of delays beyond the accepted completion period for reasons solely attributed to him.
- 50. The Performance Security shall be provided to the Employer not later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until the date 7 days from the date of expiry of Defects Liability Period and the additional security for unbalanced bids shall be valid until the date 7 days from the date of issue of the certificate of completion.

51. Works during Night

If it is essential to execute the work during night hours prior approval of the Employer has to be obtained.

52. Cost of Repairs

52.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

53. Finishing the Contract

53. Completion

53.1 The Contractor shall request the PMC /Employer to issue a Certificate of Completion of the Works and the Employer / PMC will do so upon deciding that the Work is completed.

54. Taking Over

54.1 The Employer shall take over the Site and the Works within fifteen days of the PMC issuing a certificate of Completion.

55. Final Account

55.1 The final bill will be settled after Testing and commissioning of all the items of work contemplated in the agreement to the satisfaction of the engineer and taking over of the building by the Employer.

56. Operating and Maintenance Manuals

- 56.1 If —As built|| Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.
- 56.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Architect's approval, the Architect shall withhold the amount stated in the Contract Data from payments due to the Contractor.

57. Termination

- 57.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 57.2 Fundamental breaches of Contract include, but shall not be limited to the following:
 - (a) the Contractor stops work for 14 days when no stoppage of work is shown on the current program and the stoppage has not been authorized by the Architect;
 - (b) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (c) the Architect/Employer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Architect/Employer;
 - (d) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
 - (e) if the Contractor, in the judgment of the employer has engaged in fraud and corruption, as defined in GCC Clause 63, in competing for or in executing the Contract.
- 57.3 When either party to the Contract gives notice of a breach of contract to the Architect for a cause other than those listed under Sub Clause 59.2 above, the Architect shall decide whether the breach is fundamental or not.
- 57.4 Notwithstanding the above, the Employer may terminate the Contract for Convenience & in the public interest.

57.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

58. Payment upon Termination

- 58.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Architect/Employer shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.
- 58.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Architect shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

59. Property

59.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

60. Release from Performance

60.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.

61. Fraud and Corruption

- 61.1 The Employer requires the Contractors and suppliers observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the Employer:
 - (a) Defines, for the purposes of this provision, the terms set forth below as follows:

- (i) —corrupt practice|| means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
- (ii) —fraudulent practice|| means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
- (iii) —collusive practice|| means a scheme or arrangement between two or more Bidders, with employer designed to establish bid prices at artificial, non competitive levels; and
- (iv) —coercive practice|| means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;
- (b) will cancel the contract if it determines at any time that representatives of the contractors engaged in corrupt, fraudulent, collusive or coercive practices during the procurement or the execution of that contract, without the taken timely and appropriate action satisfactory to the satisfaction of the Employer to remedy the situation;
- (d) will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time they have, directly or through an agent, engaged, in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, contract; and
- (e) will have the right to require that Contractors to permit the Employer to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Employer.

INDIAN INSTITUTE OF TROPICAL METEOPOLOGY (IITM) PUNE

SPECIAL CONDITIONS OF CONTRACT

LIST OF ANNEXURES

ANNEXURE-III HAND BOOK ON HEALTH AND

SAFETY AT WORK

Note to the successful tenderer.

Before starting of the work, the successful tenderer has to do the mock up for the below mentioned to get the necessary approval from the Architect / IITM. The cost incurred for the mock up work shall not be paid separately and this will deemed to be considered in the rates quoted for the BOq items .

- 1) Typical Student room with furniture
- 2) VIP room with furniture
- 3) Common dining
- 4) Texture paint shades
- 5) Different type of false ceiling

GENERAL

These special conditions supplement the General Conditions of Contract and shall be considered as part of the contract document. Where these special instructions are at variance with the corresponding conditions, stipulations, and specifications elsewhere in the tender document, these special instructions shall prevail.

2. SCOPE OF WORK

The scope of work is described in Section-V, Technical Specifications and Section-VIII, Schedule of Quantities and Rates.

3. LAYOUT

The contractor shall layout his work from base pillar established by IITM and shall be responsible for all measurement and survey work in connection therewith. The contractor shall at his own expenses furnish all stakes, templates, platforms, equipment, arrange labour that may be required in setting or laying out any part of the work. The contractor shall be held responsible for proper execution of the work to such lines and grades as may be established or indicated in the drawings and specifications.

4. SPECIFICATIONS TO BE FOLLOWED

The work shall be carried out strictly in accordance with the Contract Specification. In the absence of any specification for any work or material, relevant Indian Standard Specifications or CPWD specification will be applicable and where no Indian Standard Specification exists, relevant International Standard Specifications will apply.

Further, in absence of any mention of specification in these specifications provided for the contract regarding work, material or workmanship, the decision of adaptability of relevant IS, BSS, American Standard Specifications or International standard etc, will be entirely at the discretion of Engineer in charge-in-charge and the same shall be binding on the Contractor.

5. CLARIFICATIONS

The tenderer shall note that if any clarifications regarding specifications, conditions of contract, schedule of quantities, scope of work etc. are required, the tenderer should get it clarified in pre-bid meeting which is to be held as per the schedule indicated in the Notice Inviting Tender in the office of the Director Indian Institute of Science Education And Research Pune.

No claim on accounts of any ambiguity in any respect will be entertained after the submission of the tender

6 **QUANTITIES**

The schedule of quantities indicated in Section-VIII is only indicative and may vary. Payment will be made for actual quantities executed. Contractor's quoted rate shall remain firm for all such variation limits as specified under clause 10 of Section-III General Conditions of Contract of the tender.

7 CARE IN SUBMISSION OF TENDERS

Before submitting the tender, the tenderer will be deemed to have satisfied himself by actual inspection of the site, locality of the works, the geological and weather conditions of the site, approaches, availability of materials, camping facilities for the labour force etc. and ensure that all conditions liable to be encountered during the execution of the work are taken into account and that, the rates he enters in the tender form are adequate and all inclusive to comply with the provisions of the special and general conditions of the contract for the completion of the works to the satisfaction of the Engineer in charge.

8 SITE INSPECTION

The tenderer shall ensure that he has satisfied himself as to the nature and location of the work, the general and local conditions, particularly those bearing upon transportation, disposal, handling and storage of materials, availability of labour, water, electric power, roads and uncertainties of weather, or similar physical conditions of the site, the conformation and conditions of the ground character, the quality and quantities of surface and sub-surface materials to be encountered, including the sub-soil water level, the character of equipment/facilities needed, preliminary to and during the progress of the work, and all other matters upon which information is

reasonable obtainable and which can in any way affect the work or his cost thereof under contract. Any failure of the contractor to acquaint himself with all the available information concerning these conditions will not relieve him of the responsibility of estimating properly, the difficulty or cost of successfully performing the work.

The tenderers should visit the site at own cost and familiarize themselves thoroughly with the site conditions, before submitting their tenders. Non-familiarity with site conditions shall not be considered as a reason for extra claims or for not carrying out the work in strict conformity with the drawings and specifications.

Sub-soil investigation report carried out by IITM is enclosed as Annexure II only for reference to the tendere

9 SPECIFICATIONS AND DRAWINGS

- 9.1 The work shall conform to the contract specifications enclosed in Section-
- 9.2 The work shall also conform to the enclosed drawings in Section-VI, and to such other drawings relating thereto as may be furnished from time to time by the Engineer in charge in explanation of details or modifications, including such modifications as the Engineer in charge may consider necessary to meet the conditions encountered during the execution of the work.
- 9.3 It shall be understood that drawings furnished to the contractor shall be interpreted by the use of given dimension and nomenclature only and that the drawing shall not be scaled.
- 9.4 Most of the construction drawings will be issued one month prior to concreting of a particular pour for planning purpose. In case of delay in supply of drawings, the Contractor will be eligible for suitable extension of time only, if in the opinion of the Engineer in charge (whose decision shall be final) such a delay has affected the progress of work. The grant of extension of time shall, however, be governed by the provisions of the General Conditions of Contract.
- 9.5 Prior to the execution of the work, the contractor shall check all drawings and shall immediately report all errors, discrepancies and/or omissions discovered therein to the Engineer in charge. All such errors, discrepancies and/or omissions will be adjusted by the Engineer in charge. Any adjustment made by the contractor without prior approval of the Engineer in charge shall be at his own risk and the settlement of any complications arising from such adjustment shall be made by the contractor at his own expense.

9.6 In case of difference between drawings and specifications, clause 8.1 Definition of Condition of Contract in General Conditions of Contract (GCC) of Section III shall be followed.

10 CONSTRUCTION PROGRAMME

- 10.1 The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be deemed to be the essence of the contract on the part of the Contractor and shall be reckoned from the 15th days from the date of issue of work order to the Contractor. All work shall be completed in accordance with approved construction schedule, which forms a part of the contract. Monsoon or inclement weather will not be considered for extension of time.
 - On award of the work, the contractor shall submit a construction time schedule, keeping the phasing of the work for approval of the Engineer in charge-in Charge. The contractor shall strictly adhere to such an approved programme.
- 10.2 The Contractor is required to record the hindrance if any, while carrying out the construction work as well as executing the work in respect of design, engineering, procurement and supply related issues, in the hindrance register maintained by the Engineer-in-charge. The Contractor shall record hindrances in the Hindrance Register(s) and get it approved/ endorsed by the Engineer-in-Charge, as the case may be.
- 10.3 Hindrances recorded in the register shall form the basis for granting extension of time. The format of the hindrance register is **below mentioned**.

FORMAT FOR 'HINDRANCE REGISTER'

Nature of hindrance
Date of occurrance
Date of removal
Period of hindrance
Overlap-ping period if any
Net extension
Dated sign of Contract-or with name
Dated sign of Engr. with name
Remarks

11 SECURITY RULES

The contractor shall follow at site all security rules as may be framed by the IITM from time to time regarding removal/movement of materials and equipment from site, issue of identity cards, control of entry of personnel and all similar matters.

The contractor and his personnel shall abide by all security measures imposed by the Engineer in charge or his duly authorized representative from time to time any other statutory orders. Nothing extra will be payable on account of stoppage/hindrance of the work.

The contractor, his employees and agents shall not disclose any information or drawings furnished to him by the IITM Any drawings, reports and other information prepared by the contractor/by the Corporation or jointly by both for the execution of the contract shall not be disclosed without the prior written approval of the Engineer in charge. No photographs of the works or plant within the site premises will be taken without the prior written approval of the Engineer in charge.

12. TEMPORARY APPROACH ROADS

The contractor shall construct and maintain at his own cost, the temporary access roads and approaches to the work site, offices, workshop etc. wherever necessary and in his camp area.

The contractor may use the roads formed by the Corporation in the vicinity of the works for transport of equipment and materials.

If additional haulage roads are required by the Contractor, he shall construct them at his own cost. Location of such roads shall be subject to the prior approval of the Engineer in charge. All roads at the work site including any road formed by the contractor will be made use of by the project, other contractors and agencies at site and the contractor is not entitled for any payment as compensation on this account.

Contractor shall clean the spill over concrete and the other materials over the roads used by him regularly.

13. REPLACEMENT OF METRIC UNITS BY BRITISH EQUIVALENTS

Wherever dimensions for materials, fittings fixtures to be used in work are given in metric units, materials with nearest British dimensions may be used with specific prior approval of the Engineer in charge. No extra claim or variation in the rates will be entertained on account of this change.

14. Deleted-

15. MAINTENANCE OF CLEAN SITE CONDITION

During the construction stage the Contractor shall keep the entire site in neat and tidy conditions by proper housekeeping & stacking of construction materials at the construction site and will remove all debris and waste materials from the site regularly. He will also remove the water in the buildings

and maintain the site in hygienic condition. Accumulation and piling of construction materials /debris will not be permitted except only at the locations approved for this purpose from time-to-time.

Cost of maintaining the clean site condition is deemed to have been included in the rates quoted by the contractor.

16. CONTRACTOR TO PROVIDE LABOUR AND ASSISTANCE

The contractor shall provide necessary labour and assistance to the Engineer in charge for checking layout, alignments, levels and other survey works connected with execution of work and also for taking measurement for finished works at no extra cost to the Corporation.

17. MODE OF MEASUREMENT

Mode of measurement when not specified in the tender shall be in accordance with relevant Indian Standard Specifications and where not spelt out in IS; Engineer in charge's decision shall be final and binding on the contractor.

18. VALIDITY OF RATE:

The tenderer shall note that the tender rates quoted by him shall be valid for the period of contract from the date of opening of the tender

The rate for all items of work shall unless clearly specified otherwise, include cost of all labour, materials, tools & plant appliances, transport, equipment, taxes, duties, contractor's supervision, overheads, profits and all that are necessary for the satisfactory completion of the job.

The rates quoted by the tenderer in the schedule shall be inclusive of sales tax on all materials, Value added tax, Royalty octroi duty and/or other duties levied by the Central State Government or other public bodies. Unless otherwise stated in the schedule of quantities, rates for all items shall be for the complete work including supplying and fixing of all materials, etc.

The contractor, when called for by IITM shall furnish detailed analysis in support of the rates quoted by him against each item of the tender. IITM reserves the right to utilize the analysis thus supplied in setting any deviations or claims arising on this contract

The rates for the items included in the Section-VIII 'Schedule of Quantities and Rates' are inclusive of all material, labour, plant and equipment, transport and storage of materials and equipment, necessary supervision by Contractor's / manufacturers authorized representatives, overheads, profits and all incidental expenditures(s) as may be required for the complete and satisfactory execution of the work covered under this contract.

19 LAND FOR SITE ESTABLISHMENT & LABOUR

- 19.1 No land will be made available by IITM for Setting up of contractor's labour camp. Contractor should make his own arrangement of land for labour camp anywhere outside IITM Premises. Rent for the land and cost of transport of labour to site daily to and fro from the labour camp is deemed to have included in the rates quoted for the work.
- 19.2 IITM shall give suitable and limited land within the premises for Contractor's timber and steel yards, aggregate yards, workshop, office, site office, toilets, godowns and for erection of equipments etc, required for the work. Qualified vendor shall submit the layout plan showing all the space requirements to IITM before the commencement of work for their prior approval.
- 19.3 Contractor shall be solely responsible for security and safe storage of all his materials and all his establishments.
- 19.4 The Contractor shall arrange adequate facilities for medical aid and treatment for his staff and workers engaged on the project, both at work site, as well as at the labour camp.

20 WATER SUPPLY

- 20.1 The contractor shall make his own arrangements for construction water supply and water to meet the domestic requirements for his employees/workers. Contractor may be permitted to drill bore wells for construction, domestic and fire fighting water requirement by IITM in their premises However permission if any required from local Authorities for use of underground water shall be obtained by contractor at no extra cost to IITM
- 20.2. The contractor shall at his own cost arrange to draw and distribute the water and shall lay and maintain water supply lines to his construction site. He shall construct suitable storage tanks to meet at least 4 day's requirement at work site. To ensure adequate water supply at all levels on the works for the purpose of construction, he shall install necessary pumps, for delivery of water at all levels with requisite pressure. Water supply scheme proposed by the contractor shall be subjected to the approval of the Engineer in charge. The contractor shall provide necessary number and capacity of electrical/diesel operated high lift pumps to ensure supply of water at the highest point of the structure. To ensure uninterrupted water supply in the event of power failure, contractor is directed to install diesel pumps as a stand by measure. The contractor shall ensure availability of potable quality of water as specified and required for all his construction activities at all times. Chemical analysis of the water likely to be available at site is enclosed in Annexure 1. This information is for general guidance of the tenderer, who will have to verify the quality before quoting to assess the cost for arranging construction water. In general the contractor shall make his own arrangements for water supply for labour camp. The Contractor shall make his

own arrangement to receive, treat, test, pump and distribute the water required for the Camp. He shall construct at his own cost storage tank(s) of adequate capacity to meet 4 day's requirement .He shall also lay at his own cost the distribution lines and maintain the same during the currency of the contact.

21. FIRE FIGHTING

- 21.1 The contractor shall make his own arrangements for fire fighting and fire prevention both at the construction site and at his camp. He shall have storage of adequate capacity dedicated to meet the fire fighting and fire prevention requirement, both at the construction site and labour camp at his own cost
- 21.2 The equipment and piping required for this purpose will be installed and maintained by the contractor during the entire construction period till the works are handed over to the IITM. Not with standing this, the contractor shall be entirely responsible for the consequences arising due to fire, if it occurs during the period of construction and no payment will be made, or claim will be entertained on any account by the IITM. Fire fighting lines shall not be used for any other purpose. The quoted rates shall be deemed to have taken into account these measures for Fire Fighting / Fire Prevention.

22 SUPPLY OF ELECTRIC POWER

22.1 The contractor shall make his own arrangement for required power to all his works at his own expenses as per norms of MICDCL.

23. CONTRACTOR'S SITE ORGANIZATION

- 23.1 In view of the quantum and nature of work involved and time frame, it is essential that the site organization is necessarily headed by a senior Engineer in charge of the Company. The site in-charge will have to be senior enough to liaise the management directly and shall be vested with powers to take prompt decision. In addition to posting of a senior Engineer in charge with sufficient field experience/ background in the asking to head the site organization, it is also incumbent upon the Contractor that the progress of the project is reviewed fortnightly with the project authorities with appropriate senior level representation from the contractor so that necessary prompt corrective actions could be initiated.
- 23.2 It is to be noted that the time is essence of contract and in order to meet the schedules and to meet targets the Contractor has to plan for work at least in two shifts. Necessary supervisory staff and the labour force will have to be deployed in each shift to ensure that the schedules are met with.

- 23.3 The construction manpower shall be planned taking in to consideration the commencement and completion of various activities
- 23.4 The Contractor shall furnish along with the tender a detailed site organization he proposes to deploy on the works. The organisation shall include the number and category of personnel of different grades for supervisory works up to the grade of Foreman/Asst. Foreman
- 23.5 The Contractor will also submit along with the tender his assessed phase wise, induction of skilled, semi-skilled, un-skilled work force of all categories for the satisfactory and timely completion of the contract

Contractor should submit along with the tender information regarding Manpower deployment in the format enclosed at Annexure IV.

24 LIABILITY FOR LOSS, DAMAGE, ACCIDENT ETC

24.1 During the execution of the contract, and until completion certificate is issued, the contractor will be fully liable to compensate all concerned, for any loss, damage or destruction of "works", structures, materials, plant & machinery, persons, property etc. Including third party risk arising due to causes attributable to the Contractor as may be decided by the Engineer in charge whose decision in this regard shall be final. No claim shall be made against IITM Pune on this account. The contractor shall immediately on award of work take out at his own cost a "Contractor's all risk insurance policy" for an amount equivalent to work order value plus the cost of free issue materials of the works with an insurer acceptable to IIESR Pune contract wherein IITM Pune shall be named as "co-assured". The taking out of such policy shall not in any way limit or diminish the responsibility of the Contractor for any loss or damage. The Contractor shall obtain insurance for their plant and machinery deployed by them, including third party risks at their own cost.

25. PLANT AND MACHINERY

25.1 The tenderer should submit along with the tender, phase wise deployment chart of plant & machinery as per Annexure V. He should also indicate all the technical specifications for special and conventional equipment viz. Type, capacity, year of manufacture / purchase of the plant and

25.2 Notwithstanding the approval of equipment listed by the tenderer in his deployment chart, to enable timely completion of work, the tenderer should also bring and deploy additional plants and equipment, at no extra cost to IITM Pune, as may be deemed necessary by Engineer in charge.

26. MOBILIZATION

Contractor shall bring all plant machinery and personnel required for the satisfactory completion of the work as mentioned in specification schedule of quantities and drawings. The contractor shall provide for all the transports required for bringing the above initially to site and for final removal of the same from site after completion of works under relevant schedule items. He shall maintain all the plant; equipment and machinery in good working condition throughout the period of his work at his own cost and same shall be available for inspection of the Engineer in charge.

27. METHODOLOGY FOR CONSTRUCTION WORK.

27.1 The tenderer shall submit along with the tender a detailed comprehensive write up/bar chart for successful and timely completion

28.0 - DELETED -

29. REMOVAL OF TEMPORARY WORK, PLANT AND SURPLUS MATERIALS

- 29.1 Prior to final acceptance of the completed work but excepting as otherwise expressly directed or permitted in writing, the contractor shall at his own expense, remove from the site and dispose off the temporary structure, including all false work and scaffolding, grid work, all plant and material and debris for which he is responsible, to the satisfaction of the Engineer in charge.
- **30. TAXES-**Taxes shall be quoted as per commercial bid contract/format of tender document.

30.4 DEDUCTION OF INCOME TAX

As per Income-Tax Act, as amended by Ministry of Finance from time to time, Income Tax at the applicable rate, as notified, will be recovered on the gross value of work done from the R.A. Bills. A certificate for the amount so recovered will be issued by IITM Pune to the contractor on demand.

31. CONSULTANTS APPOINTED BY IITM

IITM has engaged M/s. C R Narayana Rao Consultants Pvt.Ltd, Chennai as Architect and design consultant for the work. Representative of Architect will be visiting site and give direction regarding architectural and structural works. Contractor shall follow the direction and instruction given by the Architects

representative at site. However if any financial implications are involved due to such instruction contractor shall bring the same to the notice of IITM before executing. PMC M/s LKS will be supervising the construction work. They will be deploying project Manager & site engineers to overall supervision on work, day to day checking of all Construction activities, quality control, testing of materials, billing, reporting process Etc. Project Manager appointed by. PMC shall be acting on behalf of IITM and will look after the work as per contract specification & agreement. Contractor shall follow all the instructions from Project Manager and site engineers appointed by PMC consultants. However if any financial implications are involved any time during the work the contractor shall bring the same to the notice of IITM before execution.

32. RIGHTS OF OTHER AGENCIES

The contractor shall note that several other agencies may also be simultaneously working within and around the structures covered under the present contract.

The contractor shall permit as directed by the Engineer in charge from time to time, such works to be carried out without any hindrance and fully co-ordinate his activities and extend all his co-operation to the other agencies working therein. In case of dispute in such co-ordination, the Engineer in charge's decision shall be final and binding on the contractor.

33. SAFETY MEASURES

- 33.1 To avoid possible accidents to staff and labour employed during execution of work, it is imperative to observe the safety code provisions specified under General Conditions of Contract and Section
- 33.2 The contractor shall follow the safety regulations as prescribed in the tender and Indian Standards. He shall provide necessary safety appliances to his employees as instructed by the Engineer in charge-in-charge/Safety Officer deputed by the IITM Pune depending upon the nature of work. Chains/ ropes or other lifting materials used for the suspension must be of adequate strength and suitable quality and shall be of tested quality. Contractor shall employ minimum following staff for the work

Safety Officers: Qualifications: Degree in Engineer in

charging and Diploma in Industrial safety. One number with minimum 2

years experience.

Safety Supervisors: Qualifications: Diploma in Engineer

in chargeing and Diploma in

Industrial Safety or 6 years experience. 2 numbers

32.3 These safety personnel shall not be assigned any other responsibility The cost of such safety measures shall be included by the tenderer in his rates quoted for items in the schedule of quantities and rates.

34. GOVERNMENT LABOUR ACTS / LAWS

The contract shall strictly follow the Government Labour Acts which are in force at present and introduced from time to time, such as Acts enforced by Regional Provident Fund commissioner, Directorate of ESIS and Enforcement Officer of Contract Labour Act and all necessary arrangements for Labour Security Insurance will have to be made by the Contractor at his own cost.

The contractor shall strictly comply with all provisions of labour laws given– General Conditions of Contract and subsequent statutory requirements in this regard.

The contractor should take into account the provisions of the labour laws while quoting his rates.

LICENSE TO EMPLOY LABOUR

Contractor shall arrange labour license for the labourers employed by him directly or through one or more sub-contractors or agents or any other person, before he undertakes execution of the job.

The Contractor shall get a license from the competent authority of the area where the work is undertaken under sub section 12(i) of the contract labour (Regulation & Abolition) Act, 1970, in case twenty or more workmen are employed by him directly or through one or more sub-contractors or agents or any other person, before he undertakes execution of the job.

- 35. -Deleted-
- 36 -Deleted-

37. QUALITY MANAGEMENT REQUIREMENTS

The contractor is responsible for planning and developing a programme that assures that all his management; design and technical responsibilities for quality executed effectively.

38. QUALITY ASSURANCE

- 38.1 Assuring reliability and quality of work carried out under this package is the primary responsibility of the contractor. Contractor shall have a documentation quality system addressing the mechanism to achieve the required quality level and the work carried out conforming to the best manufacturing and work practices prevailing at the time of execution of contract.
- 38.2 Contractor shall have a well-structured organization of Personnel and resources to specify, achieve, verify and document all work. This should also include the approval from IITM Pune wherever required. Quality system can be in line with National / International standards
- 38.3 The Contractor / Vendor / Sub-vendors shall have an independent Quality Control Inspection and testing organization. They should also make provision for setting up a test facility wherever required.
- 38.4 The Contractor shall furnish along with this bid an organization chart which includes the structure and size of the Manpower of the Quality Department for detailed scrutiny / approval and acceptance of IITM.
- 38.5 wherever found essential the contractor may have to provide for hiring outside inspection agency.

39 QUALITY PLAN

- 39.1 The Contractor shall
 - a) Plan the inspection and test activities.
 - b) Identify in the quality plan the inspections and tests to be performed on the items listed in the contract, in compliance with contractual and / or technical requirements.
 - c) Submit the plan for the Engineer in charge's concurrence / approval following the award of the contract and before the work starts. Referenced inspection and test specifications and / or procedures shall be made available to the quality assurance representative during the implementation of the quality plan. This quality plan shall identify at appropriate stage witness points and hold points and also give clearly the acceptance standards for all inspections, tests and examinations performed.
 - d) Update the plan during the life of the contract to reflect current conditions of manufacturing, construction, inspecting and testing and resubmit the plan to the Engineer in charge.

The Quality Plan shall be on a format to be approved by the Engineer in charge.

The quality plans for subcontracted items, when concurred with by the contractor, shall be submitted to the Engineer in charge as applicable, for concurrence and insertion of witness and hold points.

39.3 QUALITY ASSURANCE PROCEDURES

The contractor shall have procedures for the following specific requirements should they apply to the contract:

- Document control
- Procurement
- Measuring and testing equipment
- Inspection and test
- In-process inspection
- Final inspection
- Inspection status
- Identification and traceability
- Preservation, handling and storage during construction
- Construction
- Special Processes
- Quality records
- Non-conformances
- NPC-supplied items
- Corrective actions.

Each QA procedure shall define, as applicable, such things as; its purpose and scope; who is responsible for what; how all steps are to be performed; what materials, equipment and documentation are to be used; how it is all controlled.

QA procedure shall be updated when necessary.

39.4 MEASURING AND TESTING EQUIPMENT

All measuring and testing equipment and devices used to verify characteristics that can affect item quality shall be controlled and maintained. At prescribed intervals, or prior to use, they shall be calibrated and adjusted against certified equipment having a known valid relationship to nationally recognized standards. Where no national standards exist, the basis employed for calibration shall be documented.

- 39.5 Calibration requirements are mandatorily applicable only to the following equipment and instruments.
 - Laboratory scale
 - Compression test machine
 - Tensile test machine
 - Concrete batching plant

For all other equipment and instruments, the requirements are non-mandatory but they may be used as a guide.

INSPECTIONS AND TEST

- 39.6 The Contractor shall provide for the performance of inspections and tests as specified in the quality plan. These inspections and tests shall be carried out in accordance with written procedures that define the acceptance / rejection criteria.
- 39.7 Inspections and tests shall be documented in inspection and test reports that identify as a minimum the item inspected or tested, applicable drawings, specifications or procedures, the date of inspection or test, the inspector, tester or data recorder, the type of observation, the results, the acceptability and the action taken in connection with any deficiencies identified.

40 IN-PROCESS INSPECTION

For Concreting Activities:

a) The Contractor shall establish adequate measures for pre-concreting, in process and post-concreting inspections to be performed as applicable.

41 FINAL INSPECTION

The contractor shall

- 41.1 Identify, inspect and / or test the completed item as required by the quality plan.
- 41.2 Verify that the item has been inspected at all points shown in the quality plan and that the records are adequate and completed.
- 41.3 Provide for measures for controlling status indicators including the authority for application and removal of tags, stamps or other marking.
- 41.4 Identify non-conforming items until their conformity is established.

42 IDENTIFICATION AND TRACEABILITY

42.1 The contractor shall establish and maintain an adequate system to:

Identify Each Item (lot, component or part) to the applicable drawing, specification or other technical document, throughout the whole construction process.

43 PRESERVATION HANDLING AND STORAGE

The contractor shall:

43.1 Establish, maintain and document a system for the preservation, storage and handling of all items from the time of receipt through the entire construction process and subsequent storage to prevent abuse, misuse, damage deterioration or loss.

44 QUALITY RECORDS

The Contractor shall:

- 44.1 Maintain quality records as evidence that:
 - a) The quality assurance programme meets the requirements of these Quality Management Requirement (manual, procedures, quality plan).
 - b) The items or services meet contractual or other applicable technical requirements) specifications, drawings, calculations, manufacturing, inspection and test procedures).
 - c) Personnel and procedures for special processes are qualified.
 - d) Measuring and testing equipment is calibrated.
 - e) The procurements meet the requirements.
 - f) Corrective actions are being taken and are effective as required.
 - g) Audits are performed as required.
- 44.2 Maintain Final performance quality records which include as appropriate:
 - a) As built records
 - b) Material test reports or certificates.
 - c) Non-destructive examination records or certificates.
 - d) Inspection and test records
 - e) Non-conformance reports
 - f) Concrete batch plant printout.

Items (c) and (d) apply to those operations performed after receipt materials from the supplier.

45 NON-CONFORMANCE

45.1 The Contractor is responsible for the identification and disposition of all nonconforming items, including those of subcontractors. Final acceptance of the contractor's disposition of those items that violate contractual requirements is the prerogative of the Engineer in charge.

46 CORRECTIVE ACTION

The contractor shall:

46.1 Investigate the causes of significant or recurring non-conformances and take appropriate action to prevent repetition.

47 AUDIT

47.1 There shall be provision for having periodic internal audits conducted on the Quality Assurance System and the activities affecting quality of this package. These audits may be carried out once in six months by independent group of the contractor.

48 ADDITIONAL REQUIREMENTS/INFORMATION

- 48.1 Total responsibility with regard to quality surveillance/quality control, inspection shall be with the Contractors.
- 48.2 IITM will be represented by a Quality Surveyor designated by the Engineer in charge. The Quality Surveyor and his designated staff will be responsible for checking the quality of work to the extent necessary as per relevant procedures and inspection plans to assess compliance with the provisions of the specifications. His surveillance shall not be limited only to examination of the end product but he shall have complete access to the work and the right to intervene where bad practice is detected. He shall also have the right to conduct or require the contractor to perform, any additional inspection or testing he deems necessary. Any unacceptable defects noted by such tests shall be rectified by the contractor without any extra cost to IITM Pune. The surveillance provided by the Engineer in charge or the approval by the Quality Surveyor of finished work shall not relieve the contractor of any of his responsibilities under this specification. The rejection of any work not meeting these specifications is possible at any time. The contractor shall maintain quality control records, which shall have details of all the quality control operations that were performed. The quality surveyor shall have the right to witness any such operation and call for such record.
- 48.3 Right in the tendering stage itself, the contractor shall give an organization chart including number of persons to be deployed on the work, qualification along with their experience, justifying the adequacy to meet the construction schedule.

- 48.4 Minimum number of personnel to be deployed by the contractor, requisite educational qualification and experience shall be subjected to the verification of IITM
- 48.5. IITM's responsibility to quality will be only in the form of QA function.
- 48.6 All efforts shall be made by the contractor to keep the laboratory facility available throughout the contract period. In the event of testing machine being out of order, contractor shall arrange the testing of materials at his cost at any laboratory approved by IITM
- 48.7 List of pre-qualified/approved test houses, organizations will be given by IITM. If contractor proposes any other standard/certified laboratory, such laboratories will be evaluated for their adequacy in fulfilling the requirements. On fulfilling the requirements, IITM will approve such laboratories for further testing. Cost of evaluation shall be borne by the contractor.
- 48.8 Contractor shall submit the approved construction methodology and required procedures well in advance of commencement of work. At first instance, it shall be treated as a part of mobilization. These documents shall be revised whenever need arises.
- 48.9 To achieve speedy implementation of commissioning in the schedule time, the contractor shall be responsible for completion relevant systems to the fullest extent before taking up pre-commissioning.
- 48.10 Contractor shall have a clear cut documentation policy which shall include generation of reports, completeness at appropriate time, and careful storage of records.
- 48.11 Contractor shall propose procedures for pre-qualification, procurement/ storage/testing and handling of the materials required for the present package at the time of tendering.
- 48.12 The contractor shall have in-built facilities for internal audit of all the reports documents at least once in six months to see that his quality Assurance system is working, the works are proceeding in proper direction and non-conformances are being identified and corrective actions are in vogue. Times in a year. Contractor shall be responsible for audit, feedback, implementation status, traceability of records.

49. PRICE ADJUSTMENT CLAUSE

- 49.1 No cost Escalation is payable as per General Conditions of Contract till completion of the project.
- 49.2 Every month after the award of Contract, the Contractor shall submit to the Engineer in charge-in-charge, a written notice of the changes, if any, that have occurred in the specified indices of Material /POL and in minimum wages of labour during the previous reporting period containing the effective date of such change, the amount of change for the claim of the amount of contract price adjustment with authenticated documentary evidence of the relevant published indices / minimum wages to substantiate the price adjustment.

- 49.3 In the event of price of materials, POL and / or wages of labour required for execution of the work decreases, there shall be downward adjustment of the cost of work so that such price of materials and / or wages of labour shall be deductable from the cost of work under this contract as per Clause 10CC in GCC.
- 49.4 Price Adjustment(s) shall be calculated for the quantum of works executed during the month of the bill.
- 49.5 Additional, altered or substituted items of work, derived from the agreed Bill of quantities and rates attached in work order will also attract price adjustment as per this clause. Extra, altered or substituted item for which the rate has been derived from the market rate, shall not be subject to price adjustment within 12 months from the actual commencement of execution or date of its communication to the contractor whichever is earlier.
- 49.6 In the case of materials brought to site for which any secured advance is included in the bill, the full assessed value of such advance shall be added to the cost of work shown in the bill for operation of this Clause. Similarly, when such materials are incorporated in the work and secured advance is deducted from the bill, the full assessed value should be deducted from the cost of the work shown in the bill, running or final.
- 49.7 In case of advance payment is given for the work done but not measured the full value of such unmeasured work shall be added to the cost of work shown in the bill for operation of this Clause. When such work is measured and paid the full value of such work shall be deducted from the cost of work shown in the bill, running or final.
- 49.8 Provided further that such payment/refund shall not be operative and payable after the Schedule expiry of the contract period including authorized extended contract period.
- 49.9 In case where the reasons for extension of the contract is attributable to the force majeure and Contractor, the Contractor shall be paid the contract price adjustment for the extended period at the frozen indices applicable for the month preceding to the last date of stipulated completion period or extended completion period attributable to IITM Pune whichever is later. In case the prevailing price indices are lower than the frozen indices, as stated above, the lower shall be considered.

50. -Deleted-

51. MATERIAL SUPPLIED BY THE CONTRACTOR

All materials required for the work shall be supplied by the contractor from approved source. The bidder may please note that major

IITM PUNE

items e.g. cement, reinforcement steel, paints, caulking, etc. shall be procured directly from the manufacturers.

Contractor shall supply free samples of material to be used on his works whenever asked for. Failure of any sample to pass the specified requirements for a particular use will be sufficient cause for rejection. The materials so rejected shall be removed from the site by the contractor immediately, failing which the same shall be removed by the Engineer in charge at the risk and cost of the Contractor. List of Approved Makes for materials is Enclosed as Annexure –III.

ANNEXURE II

LIST OF APPROVED MAKES

Interior/Furnishings

1) Hardware : Hafele / Hetitch/Ebco or equivalent

2) Flush Door : Jacson/ Diamond / Green lam /Uniboard or equivalent

3) BWR Plywood: Greenply / Centuryply/ Archidply or equivalent

4) Laminates/veneer :Merino/ Century/ greenlam/ Archidlam or

equivalent

5) Gypsum Board: Saint-Gobain / Lafarge /USG or equivalent

6) Aluminium Sections: Jindal,/ Indal or equivalent

7) Adhesive: Fevicol SH/ Araldite of Hindustan CIBA-

Geigy Ltd/ Vamicol or equivalent

8) Paint : Asian / Dulux/ Berger or equivalent

9) Melamine / French Asian / Berger / ICI or equivalent

Polish:

10) Mineral Fibre ceiling: AMF/ Armstrong/USG or equivalent

11) Metal false ceiling: Hunter douglas /Armstrong / Daiken /

intertouch or equivalent

12) Vinyl floor: Tarket / Armstrong/LG/ Poly floor or equivalent

13)Glass: Saint gobain /Modiguard or equivalent

14) Fabric: Response or equivalent

15)Graphics: 3M or equivalent

Furniture

1) Wardrobe : Nilkamal/Godrej/ Wipro or equivalent
2) Study Table : Godrej/ wipro / Nilkamal or equivalent
3) Cafeteria Table : Monarch / Nilkamal/ Wipro or equivalent
4) Cafeteria Chair : Steelcase/Hayworth/ Posh or equivalent

5) Study room chair: Godrej /Wipro/Nilkamal or equivalent

6) Student Cot : Godrej / Nilkamal/furniture kraft or equivalent

7) VI	P Room cot :	Godrej / Nilkamal/furniture kraft or equivalent
8) S	ofa :	Nilkamal/Godrej /Wipro or equivalent
9) Co	onference chair :	Steel case/ Hayworth /Posh/ or equivalent
10) C	enter/side tables :	Godrej /Wipro/Nilkamal or equivalent
11) c	consultation/warden table:	Godrej /Wipro/Nilkamal or equivalent
,	Patient examination bed: em or equivalent	Gayatri surgical/standard steel/carevel medical
13) V	/isitor chair :	Godrej /Wipro/Nilkamal or equivalent
Furnish	nings	
1) N	Mattress:	Sleepwell/Kurlon/Nilkamal or equivalent
2) F	Pillows :	Recron/Nilkamal/kurlon or equivalent
3) E	Bedsheets/ pillow covers :	Bombay dyeing/raymonds/Mafatlal or equivalent
4) E	Blanckets :	sleepinns/mink/Bombay dyeing or equivalent
5) C	Curtains :	D-décor/Bombay dyeing/Swayam or equivalent
Note:		
1. A	All materials shall be of the 1st qu	uality and ISI marked.
2. F	Preference will be for the makes	mentioned in the BOQ
C	Contractor shall produce nece	for finishes / hardware are not mentioned, the ssary samples of the products for approval by Not withstanding the final choice, the quoted prices
4. C	Consultant has the Right to choo	se the make.
PLACE	:	
DATE :		SIGNATURE(S) OF CONTRACTOR(S)

HAND BOOK ON HEALTH AND SAFETY AT WORK

FOR

CONTRACTORS WORKING IN THE PROJECT

SECTION - 1

INTRODUCTION:

This document defines the operations undertaken by Principal Contractors and their sub-vendors on Project premises, which can give rise to hazards to those engaged in the work and others who may be working, standing or passing in the vicinity.

Compliance with NBC norms on construction safety for ensuring safety during construction

It is the **IITM's** Endeavour to secure a high standard of safety at site. Therefore, Contractors and sub-Contractors must know their duties under common law, both for establishments, and their own employees and to conduct their business and methods of work to conform to the best practices.

Before the **IITM**, allows any contracting or sub- contracting firm to carry out work on its premises, the **IITM** insists that Contractors and sub-Contractors understand their duties regarding safe practices for themselves, others and regulations covering the type of work they will be carrying out.

In furtherance to this policy, rules herein have been devised to bring to the notice of Contractors and sub-Contractors, some of the more common hazards, and appropriate preventive measures in connection with the erection, construction, cleaning, painting, alteration or demolition of plant, machinery and buildings.

The **IITM** is confident that the observance of these rules will be no hindrance to progress the work, but will assist in the avoidance of accidents.

IT IS IN A TERM OF ALL CONTRACTS BETWEEN THE **IITM** AND CONTRACTORS THAT THEY AND ANY SUB-CONTRACTORS, APPOINTED BY THEM COMPLY WITH THESE RULES AND THEIR CO-OPERATION IS THEREFORE OBLIGATORY IN CARRYING OUT THE PRECAUTIONS LAID DOW

SECTION 2

RULES FOR GENERAL OPERATIONS:

2.1 ACCESS:

Nothing shall be done or omitted to be done by Contractors or Sub-Contractors or their employees to render unsafe or obstruct:

- Any means of access to the places at which people are required to work.
- The passage of people and / or vehicles whether on a defined gangway or not, unless permission is obtained from the designated safety officer.
- Access for emergency apparatus, such as firefighting equipment.
 - Contractors and sub-Contractors shall nevertheless provide adequate fencing, lighting and warning signs to ensure safety at all times.

2.2 ACCIDENT AND INCIDENT REPORTING:

All notifiable accidents, dangerous occurrences and potential hazard situations shall be reported to the safety officer at site.

Injuries are to be treated by experienced medical staff available at site.

2.3 CONTRACTORS AND SUB-CONTRACTORS' TOOLS AND EQUIPMENTS:

All Contractors and sub-Contractors tools and equipments must comply with statutory regulations and approved codes of practices.

2.4 **HAZARDOUS MATERIALS:**

The Contractor must inform the safety officer, prior to commencement of work, procurement of materials connected with the contract work of a hazardous nature. The Contractor will have to secure storage for any such material.

2.5 **DUST AND FUME CONTROL:**

Contractors and sub-Contractors must inform the safety officer at the Project site of all processes producing dust or fumes, and under the conditions as laid down in the relevant Act of Government the safety precautions are to be fulfilled.

2.6 FIRE HAZARDS AND PRECAUTIONS:

When at site, all fire regulations, as well as regulations under relevant Sections of the relevant Act of Government of must be observed at all times.

2.7 MACHINERY SAFETY:

Contractors and sub-Contractors working at the Project site must not remove or displace any guard, fencing or other safety equipment which is designed to protect personnel or machinery or any place where safety equipment has been provided without the written permission of the safety officer or his designated representative.

On completion of any work, any guards that had to be removed must be replaced immediately and whilst work is being carried out, machinery must not be operated. The requirement of the relevant Act must be followed:

2.8. **HOUSE-KEEPING:**

The House-keeping standards employed by Contractors and sub- Contractors, must be as good as the **IITM**. Care must be taken by all responsible people to ensure that the standard of house-keeping for all establishments is known and understood.

2.8.1 House keeping and hygiene go hand in hand with safe working practices. Contractors and sub-Contractors must leave work areas in a clean, tidy and safe condition at the end of each working period.

- 2.8.2 Special attention must be paid to potential fire hazards, trip points and equipment left in a hazardous condition.
- 2.8.3 Contamination of any product (by drill swarf sawdust, oil, salient, paints and materials etc.) must be avoided at all costs, and the officers of the **IITM** are empowered to stop any activity which could result in contamination.

2.9. **NOISE:**

Contractors and sub-Contractors working at the Project site must obtain permission from the safety officer if the processes being employed to carry out that work significantly increase the ambient noise level in that area being worked.

2.10. OVERHEAD WORKING:

No work may be carried out above the heads of people or over gangways or roads, until all precautions have been taken to ensure the safety of the persons below, and until permission is given by the safety officer. Each specific site of overhead working will require consent from the safety officer. This will be given after satisfactory inspection.

Work may be carried out in the vicinity of power cables only when permission is obtained from the safety officer and/or **IITM** Project Engineer.

Work connected with overhead safety includes the movement of long metal objects, machinery, jibs, masts, arms or other elevated parts.

2.11 **WORKING AT HEIGHT:**

All temporary structure, erected by Contractors or sub-Contractors for the purpose of allowing their staff to work at heights of more than 2 M. above floor level, must be constructed in accordance with the Safety Regulations laid down.

Whenever possible, ladders are to be made of wood and in good condition. Metal ladders must not be used where there is any possibility of the ladder coming into contact with an electrical conductor.

Roof working must be properly supervised.

2.12 SAFETY CLOTHES AND EQUIPMENT:

This will be supplied by Contractors and sub-Contractors who are working on sites and must be adequate for the well being of their staff engaged in the type of work contracted for.

The equipment and its use must comply with the regulations and codes of practice as laid down that apply to the conditions of work being undertaken.

Contractors and sub-Contractors will be responsible for the use of any tools and equipment that is supplied by them, or their staff to the exclusion of all responsibility of the **IITM**. Tools will be maintained to the highest standard of safety. Whilst in the possession of such tools, the person so using said tools is responsible for the continued maintenance of safety standards.

It is the individual's responsibility to ensure that the tools he works with are suitable for the job and in a safe condition prior to work commencement. All necessary tools and equipment to complete a contract should be supplied by the Contractor. Due provision must be made during contract preparation.

2.13 **PLANT SERVICES:**

Before using plant services such as electricity, permission to do so must be obtained from the appropriate authority, **IITM** Project Engineer or Safety Officer.

2.14 **SUPERVISION:**

Contractors working at the Project site must ensure that their staffs are adequately supervised.

2.15 WARNING SIGNS AND NOTICES:

Suitable warning signs are to be displayed warning of potential hazards.

1.16 The ACMV Contractor shall at his own expense arrange for complying with all the occupational safety, health and welfare legislations of Government including the Electrical code and the Occupational Safety, Health and Welfare Act.

SECTION - 3

TOOLS

3.1 ELECTRICALLY DRIVEN PORTABLE TOOLS:

Permission is to be obtained from the nominated person before any Contractor or sub-Contractor's electrical hand tools can be connected to the electricity supply.

Connection must be by 3-core and 3-pin plugs and sockets, except when tools are double insulated on a 2-wire supply. Where the supply is 3-phase, 4-core cable and 4-pin plugs and sockets with earth connections must be used.

Make-shift connections are prohibited.

The use of extension cables is discouraged, but sometimes necessary.

Portable electric lamps must be the 'Gripper' type with caged wire protection for the bulk and precautions as laid down under relevant section of the relevant Act of Government must be observed.

In all cases, with the exception of double insulated tools, the metal work of the tools must be effectively earthed; also any flexible metallic cable coverings must be earthed.

3.2 COMPRESSED AIR TOOLS

Contractors and sub-Contractors must obtain permission to use any compressed air supply at the Project site.

Contractors and sub-Contractors must also provide suitable noise suppression for pneumatic hammers, drills etc.

3.3 PERCUSSION CARTRIDGE TOOLS

Permission to use percussion tools must be obtained from the designated safety representative prior to the use of these tools.

Also when using percussion tools, it is the individual's duty to ensure that the charges used in said tools are correct. These tools are to be handled as dangerous weapons, never leave tools unattended, never leave tools charged or store charged, never point tools at personnel, always lock up when finished both tool and charges

3.4 HOISTING AND LIFTING:

Permission must be obtained prior to the use of Plant and equipment, from the **IITM** Project Engineer or other nominated responsible person.

Equipment must be adequate for the purpose required and anchorage approved by the site safety officer.

All equipment so used must have been examined by a competent person, and where necessary a certificate obtained in accordance with relevant sections of the relevant Act of Government.

No object is to be left unattended whilst using lifting equipment.

3.5 MOVEMENT OF PLANT AND MACHINERY

Permission must be obtained prior to the movement of construction materials, plant or equipment in and around Project site.

3.6 **POWERED INDUSTRIAL TRUCKS**

Permission must be obtained prior to the use of lift-trucks by Contractors or sub-Contractors at the Project site.

Trucks must only be driven by competent licensed personnel, and must comply with statutory regulations.

SECTION - 4

CONTRACTORS AND SUB-CONTRACTORS GUIDELINES

- 1. Safe working practices must be observed at all times
- 2. It is the responsibility of the Contractors and sub-Contractors staff to use appropriate personal protection. It is the Contractors and sub-Contractors obligation to supply necessary protective equipment and clothing.
- 3. Certain areas are designated hazardous (eg. noisy areas) and warning signs must be obeyed.
- 4. Where the Contractors and sub-Contractors work presents a potential hazard, appropriate notices must be supplied and displayed, and the area made secure as far as is reasonably possible.
- 5. The **IITM** will not provide tools, materials, lifting or access equipment, fixings or raw materials, unless by previous arrangement.
- 6. Any equipment brought to site by Contractors and sub-Contractors must not be used by untrained persons, and attention is drawn to the indemnity clause of the **IITM** orders, which states that the Contractor is liable for any consequent damage or loss to people, equipment or buildings.
- 7. All welding, burning and grinding operations which could potentially cause fire must be reported to security.
- 8. No alcohol is permitted at site, and anyone deemed to be under the influence of alcohol will be required to leave the site.
- 9. Vehicle parking will be in designated areas only.
- 10. No smoking is allowed in work areas.
- 11. No food is to be consumed or left in work areas.
- 12. Warning signs and speed restrictions must be observed.
- 13. Place of work to be left in a tidy and safe condition at the end of each work period.
- 14. Care to be taken against contamination of any product of paint, oil, etc.
- 15. All injuries must be reported to the authorities as per law applicable.
- 16. A health and safety officer shall be employed on such conditions as circumstances require.

The above has been rece	ived and read by	Contractor / Sub-	Contractor,	we agree to
comply with these Rules (See foot-note)			

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The Contractor will ensure that sub-Contractor receive and sign a copy of these Rules.

MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS EMPLOYED BY CONTRACTORS

1. FIRST-AID-FACILITIES

- 1.01 At every work place there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 labourers or part thereof ordinary employed.
- 1.02 The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipment, :-
- 1.02.01 For work places in which the number of labour employed does not exceed 50, each first-aid box shall contain the following equipments:-
 - 6 small sterilized dressings
 - 3 medium size sterilised dressings

- 3 large size sterilized dressings
- 3 large size sterilized burn dressings
- 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
- 1 (30 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
- 1 snakebite lancet
- 1 (30 gms.) bottle of potassium permanganate crystals
- 1 pair scissors
- 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
- 1 bottle containing 100 tablets (each of 5 gms.) of aspirin.
- Ointment for burns
- A bottle of suitable surgical antiseptic solution
- 1.02.02 For work places in which the number of labour exceed 50. Each first-aid box shall contain the following equipments.
 - 12 small sterilised dressings
 - 6 medium size sterlised dressings
 - 6 large size sterilised dressings
 - 6 large size sterilised burn dressings
 - 6 (15 gms.) packets sterilised cotton wool
 - 1 (60 ml.) bottle containing a two per cent alcoholic solution of iodine.
 - 1 (60 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 - 1 roll of adhesive plaster
 - 1 snakebite lancet
 - 1 (30 gms.) bottle of potassium permanganate crystals
 - 1 pair scissors
 - 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes / Government of India.
 - A bottle containing 100 tablets (each of 5 gms.) of aspirin.
 Ointment for burns
 - A bottle of suitable surgical antiseptic solution
- 1.03 Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.
- 1.04 Nothing except the prescribed contents shall be kept in the First-aid box.

- 1.05 The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- 1.06 A person in charge of the First-aid box shall be a person trained in First-aid treatment, in the work places where the number of contract labour employed is 150 or more.
- 1.07 In work places where the number of contract labour employed is 750 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained Compounder. The Compounder shall be on duty and shall be available at all hours when the workers are at work.
- 1.08 Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

2.00 DRINKING WATER

Water quality shall conform to Indian standards. Drinking: IS 10500-1991, Irrigation: IS 11624-1986

- 2.01 In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of water fit for drinking.
- 2.02 Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.
- 2.03 Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn form it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and waterproof.
- 2.04 A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

3.0 WASHING FACILITIES

- 3.01 In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of labour employed and supervisory staff separately therein.
- 3.02 Separate and adequate cleaning facilities shall be provided for the use of male and female labourers and supervisory staff.
- 3.03 Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition.

4.0 LATRINE AND URINALS

This facility shall Compliance with NBC norms based on population of workers at site on construction safety for ensuring safety during.

- 4.01 Latrines shall be provided in every work place on the following scale namely:-
- 4.02 Where females are employed there shall be at least one latrine for every 25 females.
- 4.03 Where males are employed, there shall be atleast one latrine for every 25 males.
- 4.04 Provided that where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females as the case may be upto the first 100, and one for every 50 thereafter.
- 4.05 Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.
- 4.06 Construction of latrines: the inside walls shall be constructed of masonry or some suitable heat-resisting nonabsorbent materials and shall be cement washed inside and outside. Standard sanitary fixtures & fittings shall be provided.
- 4.07 Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women only" as the case may be.
- 4.08 The notice shall also bear the figure of a man or of a woman, as the case may be.

- 4.09 There shall be atleast one urinal for male workers up to 50 and one for female workers upto fifty employed at a time, provided where the number of male or female workmen, as the case may be exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females upto the first 500 and one for every 100 or part thereafter.
- 4.10 The latrine and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
- 4.11 Latrine and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities.
- 4.12 Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrine and urinals.
- 4.13 Disposal of excreta shall be arranged either by connection to a municipal sewer with permission from the local sanitary authority, or by providing connection to a covered soak pit.
- 4.14 The contractor shall at his own expense, carry out all instructions issued to him by the **IITM** to effect proper disposal of night soil and other conservancy work in respect of the contractor's workmen or employees on the site. The contractor shall be responsible for payment of any charges which may be levied by Statutory Authority for execution of such on his behalf.

PROVISION OF SHELTER DURING REST

At every place there shall be provided, free of cost, four suitable sheds, two for males and the other two for rest separately for the use of men and women labour. The height of each shelter shall not be less than 3 metres from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 sq.m per head.

Provided that the **IITM**/ Architects may permit subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

CRECHES

At every work place, at which 20 or more women worker are ordinarily employed; there shall be provided two rooms of reasonable dimensions for the use of their children under at the age of six years. One room shall be used as a play room for the children and the other as their bedroom. The rooms shall be constructed with painted masonry walls with light weight roofing.

The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.

The contractor shall supply adequate number of toys and games in the play room.

The contractor shall provide one ayah to look after the children in the crèche when the number of women workers does not exceed 50 and two when the number of women workers exceeds 50.

The use of the rooms earmarked as crèches shall be restricted to children, their attendants and mothers of the children.

CANTEENS

In every work place where the work regarding the employment of labour is likely to continue for six months and where in contract labour numbering one hundred or more is ordinarily employed, an adequate canteen shall be provided by the contractor for the use of such labour.

The canteen shall be maintained by the contractor in an efficient manner.

The canteen shall consist of at least a dining hall, kitchen, and pantry and washing places separately for workers and utensils.

The canteen shall be sufficiently lighted at all times when any person has access to it.

The floor shall be made of smooth and impervious materials and inside walls shall be lime-washed or colour washed.

The premises of the canteen shall be maintained in a clean and sanitary condition.

Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.

Suitable arrangements shall be made for the collection and disposal of garbage.

The floor area of the dining hall shall be suitably provided with furniture.

Sufficient tables, stools, chair or benches shall be available for the number of diners to be accommodated.

There shall be provided and maintained sufficient utensils crockery, furniture and any other equipment's necessary for the efficient running of the canteen.

The furniture utensils and other equipment shall be maintained in a clean and hygienic condition.

Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.

A service counter, if provided, shall have top of smooth and impervious material.

Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipments.

The food stuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.

The charges for food stuffs, beverages and any other items served in the canteen shall be based on 'No Profit, No Loss' and shall be conspicuously displayed in the canteen.

In arriving at the price of foodstuffs, and other article served in the canteen, the following items shall not be taken into consideration as expenditure namely:-

The depreciation and maintenance charges for the building and equipments provided for the canteen.

The cost of purchase, repairs and replacement of equipments including furniture, crockery, cutlery and utensils.

The water charges and other charges incurred for lighting and ventilation.

The interest and amounts spent on the provision and maintenance of equipments provided for the canteen.

8.0 Minimum Safety Requirements (To be made a part of Tender conditions and BOQ of works related package to address the inclusion of PPE, Scaffold, Electrical safety measures, House keeping as a minimum)

Prior to commencing work on Site, the Contractor must make himself aware of all the requirements for the Works and the Site relating to Environment, Health & Safety (EH&S) matters including all relevant legislation and standard codes of practice.

Contractor shall comply with all the EH&S Requirements listed below which shall be deemed a fundamental condition of this Contract.

Contractor must comply in full with all applicable Health & Safety (H&S) local and national legislation. (e. g. Labour Licence, Insurance Policy under Workmen Compensation Act, etc.)

In circumstances where there is a conflict between local or national legislation and these Minimum Safety Requirements (MSR), the higher (more protective) requirement shall prevail.

Guardrails are to be provided at all working places and other locations where persons or materials could fall more than 2.0m / 6'6". Where this can physically not be achieved, suitable and sufficient fall protection devices that do not rely on individuals should be provided and used to establish a safe place of work. (Examples include Safety Nets closely installed under height works, Stretched wire ropes installed to hook up safety harnesses while workers move from one location to another at height, Use of full body safety harnesses with double lanyards etc.)



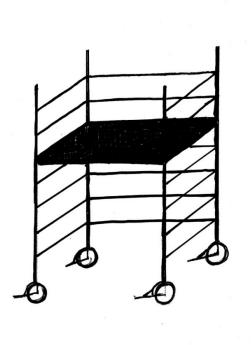


Full body harness with double lanyard workplatform

Proper Access to

All persons working on suspended scaffolds/cradles/gondolas must wear and use appropriate fall prevention equipment so as to protect them effectively at all times when they are at risk from any failure of any part of the scaffold/cradle/gondola, including its suspension system.

Free-standing scaffold towers used externally must not be higher to the top platform level than three times the minimum base dimension, unless secured to a permanent structure. For internal use only, the height to platform may rise to 3.5 times the minimum base dimension. Wheels must be locked when towers are in use. No person is permitted to remain on a tower platform while a tower is being moved.





Mobile Scaffolds

Holes, shafts and edges from or through which persons could fall a distance of more than 2 metre /6ft 6in must be clearly marked with signage or other means **and** be adequately protected by covers or barriers so as to prevent falls of persons and materials.



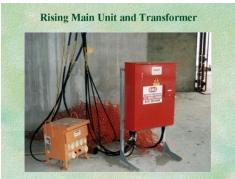
Holes, Shafts, Floor Penetrations

All temporary electrical circuits must include a Residual Current Device, Earth Leakage Circuit Breaker or Ground Fault Circuit Interrupter at source.











Temporary Electrical System

Powered Lifts and hoists, aerial platforms and scissors lifts must have a competent driver, certified by a qualified third party. Additionally, the above items must be certified as safe to use by a local government approved third party.

Adequate lighting must be provided to enable safe access to and egress from every place on a site where persons are liable to work, this is in addition to task lighting.

Induction/Orientation

All workers shall receive site-specific safety induction/orientation, before they are involved in any activity at site. They must be made aware of site safety rules, provisions of first aid and welfare facilities such as drinking water, washing place, toilets, rest rooms, etc.

Task related Safety Instruction

Contractor shall ensure all workers shall receive at least one specific task-related training/skilling session per week. This may be achieved by using Toolbox talks &/or induction to Safe Work Method Statement.

Incident/Injury Reporting & Investigation

Contractor shall report and record all incidents, which have potential to cause injuries and damages and also injuries including first aid cases.

Lost Time Injury (LTI) or serious injury must be intimated immediately as soon as possible by phone. (If an injured person doesn't likely to report to work in his next following shift, it is to be recorded as Lost Time Injury)

Job Safety Analysis & Safe Work Method Statement

Contractor must produce detailed Job Safety Analysis / Safe method of work for approval and use only approved work methods only. No work shall start without approved Job Safety Analysis / Safe Work Method

Statement. All workers and supervisors must be inducted to Job Safety Analysis / Safe method of work.

(iii) Oxygen / Acetylene / Fuel Gases/ Compressed or Liquefied Gases

(a) All gas cylinders shall be stored, transported and handled as per the requirements of Gas Cylinder Rules, 1981

Additional Special Conditions

- 1 CONTRACTOR to provide supervisor for each work group / area.
- All Employees of the CONTRACTOR shall wear badge showing name, profession, date of training, work order no., work description, valid from _____ to _____, name of the Contractor, name of supervisor.
- Welding transformer, if any brought to the site, shall have a valid test certificate
- 4 CONTRACTOR should provide detailed plan of material handling during time of contract. Material manual handling shall conform to State Regulations.
- 5 Pre-commissioning test report shall be provided for all electrical systems. Including cables, wire, motors, transformers, voltage stabilizers.
- All rotating and moving parts with a nip must be guarded, such that even a little finger cannot come in contact with any moving part.
- Section 32 of the Factory Act regarding ladders, platforms/stairs and scaffolding to be followed strictly. (For e.g. Ladders should have uniform step height of not over 300mm. All fixed ladders to have railings at a height of 910-1050mm. Ladders over 3m height to be roped.)
- All portable ladders shall be of aluminum with rubber shoes and flat treads as per IS3696 part 2 (1991) except where these could come in contact with live electrical. In such situations, only carbon fiber or insulated ladders to be used. Wooden and Bamboo ladders are not to be used. Portable ladders to be stored in a place where it is easily accessible.
- **9** All platforms, walkways to have toe-boards of 100 to 150mm and hand rails at a height of 910mm to 1150mm. A spring return bar gate to be provided at every access to the ladder.
- All scaffolds to be of metallic construction and conform to IS2750-1964. Safe access by means of stairway to be provided if the height is more than 4m. Working platform with handrails at a height of 910mm to 1150mm and toe boards of 100-150mm to be provided.

- Methods statement to be produced for all high risk activities (including risk assessment of critical activities). Approximate PPE usage for all critical activities to be compiled with.
- Lifting gears, tools and tackles and equipment like cranes shall conform to requirements of section 28 and 29 of the Factory Act.
- Noise level at 1 Mtr. distance from the equipment should not exceed the level indicated elsewhere in the specification.

Any further clarification on Environment, Health and Safety guidelines can be sought from unit, Environment Health and Safety Manager and Employer's guidelines on EHS.

Signature of Tenderer

With Date and Seal

CONTRACT DATA

Contract Data

Items marked "N/A" do not apply in this Contract.

The following documents are also part of the Contract: Clause Reference

• The Schedule of Operating and Maintenance Manuals [58]

• The Schedule of Sub Contractors [7]

• The Schedule of Key Personnel [9]

• The Methodology and Program of Interior and furnishing works [27]

• The Schedule of Key and Critical equipment to be deployed on [27] the work as per agreed program of construction

The Employer is

Name: The Director,

Indian Institute of Tropical Meteorology (1.1)

Address: Dr. Homi Bhabha Road, NCL post, Pashan, Pune.

Name of authorized Representative:

Mr. Anupam Saxena,

Civil Engineer,

Indian Institute of Tropical Meteorology.

The Architect is (1.1)

Name: M/s.C.R.Narayana Rao Consultants private Ltd

Address: 10, Karpagambal Nagar, Luz, Mylapore, Chennai- 600004

Name of Authorized Representative: Mr. C.S.Raghuram, Director

The Adjudicator appointed jointly by the Employer and Contractor is: Name (1.1)

Address:

The name and identification number of the Contract is

The Works consist of INTERIOR AND FURNISHING WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE

The Start Date shall be the date of receipt of L.O.I. (1.1)

The Intended Completion period for the work is 45 days from the receipt date of L.O.I.

[17, 28]

The following documents also form part of the Contract: [2.3]

1. Agreement

2. Letter of Acceptance, notice to proceed with the works

- (1) Contractor's Bid
- (2) Contract Data
- (3) Conditions of Contract including Special Conditions of Contract.
- (4) Specifications
- (5) Drawings
- (6) Bill of Quantities

The Contractor shall submit a revised Program including Environmental Management Plan for the Works (in such form and detail as the engineer shall reasonably prescribe) within _15_ days of delivery of the Letter of Acceptance. [27]

The Site Possession Dates shall be: 7 days from signing of agreement [21]

The Site is located at Indian Institute of Tropical Meteorology, Rajinder Nagar, New Delhi.

The Defects Liability Period is 365 days from the date of certification of completion of works. (where sectional completion certificate is issued this will apply from those dates for those sections). [35]

The period between Program updates shall be _15_ days. [27]

The language of the Contract documents is English [3]

The law which applies to the Contract is the laws of Union of India [3]

The currency of the Contract is Indian Rupees. [46]

Fees and types of reimbursable expenses to be paid to the Adjudicator [25]

Rs. 2000/- per day plus conveyance of Rs. 250/- per day.

Appointing Authority for the Adjudicator :- THE DIRECTOR

Indian Institute of Tropical Meteorology

Dr. Homi Bhabha Road, NCL post, Pashan, Pune.

The proportion of payments retained (retention money) shall be 5% from each bill subject to a maximum of 5% of final contract price.

The liquidity damages.-clause 49

The amounts of the advance payment are: [51]

Nature of Advance Amount (Rs.) Conditions to be fulfilled

1. Mobilization

advance for Plant No Mobilization

advance.

Machinery and Equipment

2. Secured advance No secured advance.

for non- perishable materials brought to site

The Securities shall be for the following minimum amounts equivalent as a percentage of the Contract Price: [52]

Performance Security for 5 per cent of contract price [in terms of ITB Clause 27.5].

The standard form of Performance Security acceptable to the Employer shall be an unconditional Bank Guarantee of the type as presented in Section 8 of the Bidding Documents.

The date by which operating and maintenance manuals are required is within 14 days of issue of certificate of completion of whole or section of the work, as the case may be.

[58]

The date by which —as-built|| drawings (in scale ...) in 2 sets are required is Within 14 days of issue of certificate of completion of whole or section of the work, as the case may be. [58]

The amount to be withheld for failing to supply —as built|| drawings and/or operating and maintenance manuals [58]

The following events shall also be fundamental breach of contract: [59.2]

The Contractor has contravened Sub-clause 7 of GCC read with SCC and Clause 9.0 of GCC

The contractor does not adhere to the agreed construction program and agreed environmental management plan (Clause 27 of GCC) and also fails to take satisfactory remedial action as per agreements reached in the management meetings (Clause 31) for a period of 60 days.

3 The contractor fails to carry out of the instructions of Engineer Within a reasonable time determined by the Engineer in accordance with GCC Clause 16.1 and 23.1.

The percentage to apply to the value of the work not completed representing the Employer's additional cost for completing the Works shall be 20%. [60]

FORMS OF SECURITIES

Forms of Securities

Acceptable forms of securities are annexed. Bidders should not complete the Performance and Advance Payment Security forms at this time. Only the successful Bidder will be required to provide Performance and Advance Payment Securities in accordance with one of the forms, or in a similar form acceptable to the Employer.

Annex A: Bid Security (Bank Guarantee)

Annex B: Performance Bank Guarantee

Annex C: Performance Bank Guarantee for Unbalanced Items

Annexure A

BID SECURITY (BANK GUARANTEE)

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	his fi dema claim	rst writter .nd, proviced by him	to pay to the demand ded that in is due to s, specifying	, without his de him	out the emand owing	Employ the Emploot to the oc	er havi loyer wi currenc	ng to s Il note of e of on	substant that the ie or an	tiate his amoun
				2 days	s after	the dead	line for	submis	sion of	Bids as
			s stated in						•	

the above date.

DATE	SIGNATURE OF THE BANK
WITNESS	_SEAL

Any demand in respect of this guarantee should reach the Bank not later than

[signature, name, and address]

The Bidder should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 16.1 of the Instructions to Bidders.245 days after the end of the validity period of the Bid.

Annexure B

PERFORMANCE BANK GUARANTEE

To:	
NO	The Director Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road,
NCL	post, Pashan, Pune, India.
	REAS [name and address of Contractor] nafter called "the Contractor") has undertaken, in pursuance of Contract No. dated to execute Interior and furnishing works for nt/trainee hostel for IITM and IMD at IMD colony, Pashan, Pune.
(Herei	nafter called "the Contract");
Contra	WHEREAS it has been stipulated by you in the said Contract that the actor shall furnish you with a Bank Guarantee by a recognized bank for the specified therein as security for compliance with his obligations in accordance ne Contract;
AND V	WHEREAS we have agreed to give the Contractor such a Bank Guarantee;
you, o guarar the typ we ur argum guarar	THEREFORE we hereby affirm that we are the Guarantor and responsible to the behalf of the Contractor, up to a total of [amount of ntee]1 [in words], such sum being payable in pes and proportions of currencies in which the Contract Price is payable, and indertake to pay you, upon your first written demand and without cavil or neent, any sum or sums within the limits of [amount of ntee]1 as aforesaid without your needing to prove or to show grounds or need for your demand for the sum specified therein.
	ereby waive the necessity of your demanding the said debt from the Contractor presenting us with the demand.
the Co docum releas	rther agree that no change or addition to or other modification of the terms of contract or of the Works to be performed there under or of any of the Contract nents which may be made between you and the Contractor shall in any way e us from any liability under this guarantee, and we hereby waive notice of any change, addition or modification.
_	uarantee shall be valid until (i.e.) 28 days from the date of expiry of the ts Liability Period.
Signat	ture and seal of the guarantor

Name of Bank	
Address	
Date	

□ An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract and denominated in Indian Rupees.

Annexure C

PERFORMANCE BANK GUARANTEE (for unbalanced items)

To: THE DIRECTOR, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, NCL post, Pashan ,Pune, India.
WHEREAS [name and address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No dated to execute Interior and furnishing works for student/trainee hostel for IITM and IMD at IMD colony,Pashan,Pune. (hereinafter called "the Contract");
AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;
AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;
NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of [amount of guarantee]1 [in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [amount of guarantee]1 as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.
We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.
We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.
This guarantee shall be valid until (i.e.) 28 days from the date of issue of the certificate of completion of works.
Signature and seal of the guarantor
Name of Bank
Address

Date			

1. An amount shall be inserted by the Guarantor, representing additional security for unbalanced Bids,

1.00 **SCOPE**

This specification covers the general requirements for woodworks.

2.00 **GENERAL REQUIREMENTS**

- 2.01 The contractor shall furnish all materials, labour, operations, equipment, tools and plants, scaffolding and incidental necessary and required for the completion of all carpentry and joinery work as called for in the drawings and Bills of Quantities.
- 2.02 The Contractor shall strictly follow, at all stages of work, the stipulations contained in the Indian Standard Safety Code and the provisions of the Safety Rules as specified in the General Conditions of the Contract for ensuring safety of men and materials.
- 2.03 The Carpentry and joinery work shall include the provision of fixing of fastening devices and hardware in accordance with the drawings and attached hardware schedule. Hardware and other materials will be supplied by the contractor after obtaining prior approval of the Architect of samples for each item of hardware.
- 2.04 Any approval, instructions, permission, checking, review etc. whatsoever by the Architect shall not relieve the Contractor of his responsibility and obligation regarding adequacy, correctness, completeness, safety, strength, workmanship etc.

3.00 **CODES AND STANDARDS**

- 3.01 All standards, specifications, acts, and codes of practice referred to herein shall be the latest editions including all applicable official amendments and revisions.
- 3.02 List of certain important Indian Standards, Acts and Codes applicable to this work is given below. However, the applicable standards and 0codes shall be as per but not limited to the list given below:

IS: 205	Non-ferrous metal butt hinges
IS: 281	Mild steel sliding door bolts for use with pad locks
IS: 287	Permissible moisture content for timber used for different purposes
IS: 303	Plywood for general purposes
IS: 848	Synthetic resin adhesives for plywood.
IS:883	Code of practice for design of structural timber in building
IS: 1003	Timber paneled and glazed shutters
IS:1141	Seasoning of timber - Code of practice
IS: 1328	Veneered decorative plywood.

IITM PUNE

IS: 1659 Block boards. IS: 2202 Wooden flush door shutters IS: 2835 Flat transparent sheet glass. IS: 3087 Wooden particle boards (medium density) for general purposes IS: 3097 Veneered particle boards. IS: 3809 Fire resistant test for structures IS: 4021 Timber door, window and ventilator frames

4.00 SAMPLES AND SHOP DRAWINGS

The contractor shall prepare the shop drawing for all factory made works, before proceeding with the work; contractor has to prepare the sample for submit to the Architect for his approval for complete samples of the various materials including hardware and fastening devices.

5.00 MATERIALS

5.01 **Timber**

Timber used shall be of type as stated in the Schedule and of best quality. All timber shall be of natural growth and uniform in texture and shall be well and properly seasoned. It shall be free from large, loose, dead, or cluster of knots, waves, injurious open shakes, borer holes, rot, decay, knots, discolouration, soft or spongy spots, hollow pockets with or centre heart and all other defects and blemishes. Timber shall conform to IS 883.

The seasoning of timber shall be as laid down in IS: 1141.

5.02 Teak wood

Teak should be from the forests of Dandeli and Mysore in Karnataka, Malabar in Kerala, Ballarshah in MP, and Bulsar in Gujarat. It shall have uniform colour reasonably straight grains and shall be free from large loose dead knots cracks, shakes, warp, twists, bends bore holes, sap wood. For first class no individual hard and sound knot shall be more than 1 Sq.cm and the aggregate area of all knots shall not exceed 1/2% the area of piece and for second class 1.5 Sq.cm and 2% respectively. It shall be close grained and there shall not be less than 2 growth rings per cm width.

The wood shall be well seasoned. It shall be considered well seasoned if its moisture content does not exceed the limits as per IS 287. The moisture content shall be determined as per IS 287. Unless otherwise specified tolerance for door and window frames and shutters should not exceed provisions in IS 4021 & IS 1003 (part I & II)

a)	Frames	14%
b)	Planking, shutters etc.	12%

5.03 Malaysian Sal

Malaysian Sal is wood that are not classified as teak wood, honey wood, nandi and mathi wood. It shall have uniform colour, reasonably straight grains and shall be generally free from large loose deadknots, cracks, shakes, warp, twists, bends, bore holes, sap wood. No individual hard and sound knot shall be more than 1.5 Sq.cm and the aggregate area of all knots shall not exceed 2% of the area of piece. It shall be close grained and there shall not be less than 2 rings per cm width.

The wood shall be well seasoned. It shall be considered well seasoned if its moisture content does not exceed the limits as per IS 287. The moisture content shall be determined as per IS 287. Unless otherwise specified tolerance for door and window frames and shutters should not exceed provisions in IS 4021 & 1003 - Part I & II.

5.04 Glass

All glass shall be of superior quality from approved manufacturers like Saint Gobain, Guardian, Pilkington or approved equivalent, having uniform refractive index and free from flaws, speaks and bubbles. Sheet glass for glazing and framing purposes shall conform to IS: 2835 latest edition. The glass shall be brought to site in the original packing from the manufacturer and cut to size at site. The cut edges shall be straight and free from chips, spalls or any other damages. Wherever clear sheet glass is specified, it shall be flat drawn sheet glass and shall be atleast 4 mm thick or as specified. Where wire glass is mentioned, it shall be thick rolled glass with centrally embedded wire mesh or Georgian type. Where obscure glass is mentioned it shall have a cast surface on one side. The Contractor shall submit samples of glass for prior approval of the Architect.

5.05 Putty

In general, the putty shall conform to IS: 420 latest editions. The putty shall be of best quality from approved manufacturer. It shall be brought to site in the manufacturer's original packing. Quick setting putty shall be used for windows and sashes except when glare reducing glass is used where it shall be of non-setting type.

6.00 DOORS, WINDOWS AND VENTILATORS

6.01 Doors, windows and ventilators etc. shall be in accordance with the drawing in every detail and all joiners' work shall be accurately set out, framed and finished in a proper workman like manner. Frames of doors, windows and ventilators, shutter styles and rails shall be of best solid wood of quality specified in the schedule of quantities. The scantlings shall be accurately planed smooth. Rebates, roundings and mouldings shall be made as shown on the drawings. Patching or plugging of any kind shall not be allowed.

Joints shall be simple, neat and strong. Framed joints shall be coated with suitable adhesive like glue or synthetic resin before the frames are put together. All mortice and tenon joints shall fit in fully and accurately without wedging or filling. The joints shall be pinned with hard wood or bamboo pins of 10 mm to 12 mm dia. or rust resisting star shaped metal pins of 8 mm diameter. All portions of timber abutting against or embedded in masonry or concrete shall be treated against termites by giving a coat of an approved wood preservative, for which no extra cost will be paid. Putty shall not be used to cover any defects. Unless otherwise specified, all door frames shall have six holdfasts. Holdfasts shall be provided to the ventilators if directed. Size of holdfasts shall be 400 mm x 40 mm x 5 mm M.S. flat bent to shape with fish tail and shall be fixed to frame with sufficient number of screws as directed. When door/window frames are to be fixed to RCC column or RCC wall, holdfasts shall be substituted by suitable arrangements such as coach screws, rawl bolts/grip bolts etc. to secure frames to RCC column or RCC wall as directed by the Architect. The frame shall be fixed only after getting the approval of the Architect.

- 6.02 -Deleted-
- 6.03 -Deleted-
- 6.04 -Deleted-
- 6.05 Architraves

Architraves shall be cut and planed from best quality seasoned timber to sizes as shown in the drawings and fixed to the door or window frames with wood screws. Screw heads shall be sunk into frames. The side abutting the frame shall be finished with a coat of wood primer.

- 6.06 -Deleted-
- 6.07 -Deleted-

7.00 PANELLING FOR WALL LINING AND PARTITION

The boarding for wall lining shall be of commercial plywood, black board, plywood with teak veneer, laminate or any other materials as directed; fixed on to the frame. The boarding shall be of sizes shown in the drawing or as directed. In case of partitions, the facing materials like plywood with approved teak veneers, or Formica, or any other material as directed shall be fixed.

8.00 INSTALLATION

All timber for joinery work or wrought form work shall be of best Indian Teakwood unless otherwise specified and or specified quality, carefully selected free from sap and

subject to inspection and approved before delivery. All teakwood to be used in this work shall be seasoned in an approved manner.

All workmanship pertaining to wood work shall be of best standard and all joinery work shall fit freely and without wedging or filling and of the kind directed by the Architect. Wood work in frames shall be wrought and all frames joints shall be put together with white lead and pinned with hard wood pins. All exposed faces of joinery shall be thoroughly planed. Jointing shall be by means of mortice and tenon, dovetailed joints or as directed by the Architect.

The joinery work shall be framed and put together immediately but not to be wedged up until required for fixing. The approval of the Architect shall be obtained before any primer coat is applied.

The whole of joinery to be finished to the dimensions and sizes indicated in the drawings are subject to a tolerance to 1.50 mm of each planed face, but no allowance shall be given to flush doors, shutters, ply and other manufactured board etc.

All block boards etc. shall correspond to respective IS specifications. Flush doors shall correspond to relevant IS specifications. Samples of all black board, plywood, flush doors, etc. Shall be got approved by the Architect before placing order. All such items shall be of standard manufacture of reputed quality. Unless otherwise specified, all flush shutters shall be teak veneered on both sides. All flush shutters shall be of solid core and shall be provided with teakwood external lipping.

If after execution any shrinkage or bad workmanship is found, the Contractor shall forthwith replace or refix the same at his own cost, all as directed by the Architect.

Rate quoted shall include for all framing, usual waste and cuttings and no extra rates or claims will be entertained on this account.

The rate for wood work shall include the cost of all sawing, planning, jointing, framing, labour and materials for raising and fixing and all workmanship and fixing and supplying of all strips, bolts, nails, trenails, spikes, keys, wedges, pins, screws etc. necessary for the framing as per specification and drawings. Edges of the beams, joists, posts, frames etc. shall be rounded, moulded or chamfered as directed without extra charges.

The Contractors shall be responsible to deliver all items at site of work. The Contractor will submit a programme of work in such a way that requirements for each floor commencing from ground floor is completed before the requirement of the next floor and arrange to have them fixed in position as the General Builders work progresses.

Timber in contact with masonry or concrete shall be treated with solignum paint or any approved anti-termite treatment before fixing.

The Contractor will be making necessary holes in concrete and masonry for fixing in position and grouting. The Contractor will be responsible for the proper fixing of partitions true to plumb and alignment until completion and grouting pockets with cement concrete and make good affected portions without claim to any extra.

The iron monger fittings shall be of heavy type cast brass oxidised and of approved manufacture. Samples of all ironmongery items shall be got approved by the Architect prior to procurement.

9.00 HARDWARE FITTINGS

All hardware fittings and fixtures shall be made with structural properties to sustain safety and withstand strains and stresses to which they are normally subjected to such as opening and closing, wind pressure etc. The fittings shall generally conform to relevant specifications.

They shall be made true, clean, straight, with sharply defined profiles and unless otherwise shown or specified, with true smooth surfaces and edges, free from defects, screw holes shall be counter sunk to suit the head of wood screws.

The metal shall be treated with finish as specified in the Bill of Quantities.

9.01 Mortice Lock for Euro Profile Cylinder, S S Ball Bearing Hinges:

These shall be treated with finish as specified in the Bill of Quantities.

S.S Butt hinges shall be manufactured from S.S sheets of approved gauges. Hinges shall be finished as specified in the respective items. The size of butt hinges shall be taken as length of the hinge.

9.02 Sliding bolts/Latches

These shall be of Stainless Steel or as specified and shall be capable of smooth sliding action. These shall be finished as specified. The size of latch shall be taken as the length of the bolt catch.

9.03 SS Lever Handles.

These shall be as described in the Bill of Quantities and finished as specified.

10.00 PRESERVATIVE TREATMENT

All wood work in contact with masonry shall be painted with approved asphalt or bitumen paint before placing. Care shall be taken to keep exposed faces clear from tar, etc. Tarfelt shall be used to isolate wood from masonry wherever practically possible. All concealed wood members in ceiling, partitions, cabinet work, etc., shall be treated fully and liberally with solignum before placing in position.

11.00 MODE OF MEASUREMENT

The method of measurement for various items in the tender shall be generally in accordance with the IS: 1200 subject to the following:

- All work shall be measured net as fixed. No extra measurement will be given for shape, joints, splayed, meeting stiles of doors and windows and shall be measured in unit of square metre. Door frames shall be in cubic metre, if measured separately.
- 2) Area over one face inclusive of exposed frame thickness (excluding width of cover mould) shall be measured in case of doors, windows and ventilators when frames are included in the item. Portions embedded in masonry or flooring shall not be measured.

12.0 PRE-LAMINATED PARTICLE BOARD (PLPB)

Particle Board is a panel product. It is manufactured by gluing particles of wood. Particles are flakes, shavings and splinters produced by cutting or breaking. Made from recycled agricultural fibre, it is coloured with non-toxic, water based dyes. The texture you see or feel comes from the fibre content, not found in other similar products. For the production of particle boards a well planned manufacturing process and quality inspection is needed.

Prelaminated melamine faced 3-layered particle board. The plain particle boards are made from plantation hardwood timber agro waste. The same are laminated with melamine impregnated high grammage imported paper on either side. Green lamiboard is an eco-friendly alternative to conventional timber, plywood and block board. Apart from IS: 12823 Grades II. It also conforms to internal standards.

Technical Specifications:

SL. No.	Properties	Unit	Specified Values as per IS:12823-1990	Conforms
1	Density	Kg/M ³	500 – 900	√
2	Moisture Content	%	>5,<15	√
3	Water Absorption a) 2 hrs. b) 24 hrs.	%	15 (Max.) 30 (Max.)	✓ ✓
4	Thickness swelling in two hours	%	8 (Max.)	√
5	Modulus of Rupture	N/mm ²	11 (Min.)	√
6	Tensile Strength perpendicular to surface	N/mm²	0.3 (min.)	√
7	Screw withdrawal strength			

SL. No.	Properties	Unit	Specified Values as per IS:12823-1990	Conforms
	a) Face b) Edge	N N	1250 (Min.) 750 (Min.)	√ √
8	Resistance to steam		Should pass test	√
9	Resistance to Cracking		Should pass test	✓
10	Resistance to cigarette burns		Should pass test	√
11	Resistance to stain		Should pass test	√
12	Abrasion resistance	Rev	450 (Min.)	√

13.00 Prelaminated Medium Density Fibre Board (MDFB)

MDF is a type of fiberboard made from wood or lignocelluloses material refined into fibres and reconstituted with a resin binder (glue) carrying elevated temperatures. MDF has a homogenous structure with uniform texture and properties throughout. It is easier to machine than natural wood and can be laminated and shaped very evenly and smoothly.

Pre laminated MDF Boards is melamine faced medium density fibre board having a dense, compact and homogenous construction. Imported base papers impregnated in Melamine Resin are laminated on either side of the medium density fibre board. The product conforms to IS: 14587-1998

Technical Specifications:

SL. No.	Properties	Unit	Specified Values as per IS:14587-1998	Conforms
1	Density	Kg/M ³	500 – 900	✓
2	Moisture Content	%	>5,<15	√
3	Water Absorption c) 2 hrs. d) 24 hrs.	%	9 (Max.) 18 (Max.)	✓ ✓

IITM PUNE

SL. No.	Properties	Unit	Specified Values as per IS:14587-1998	Conforms
4	Thickness swelling in two hours	%	7 (Max.)	√
5	Modulus of Rupture	N/mm ²	28 (Min.)	✓
6	Tensile Strength perpendicular to surface	N/mm ²	0.7 (min.)	√
7	Screw withdrawal strength			
	c) Face	N	1500 (Min.)	✓
	d) Edge	N	1250 (Min.)	✓
8	Resistance to steam		Should pass test	✓
9	Resistance to Cracking		Should pass test	√
10	Resistance to cigarette burns		Should pass test	√
11	Resistance to stain		Should pass test	√
12	Abrasion resistance	Rev	450 (Min.)	✓

PAINTING WORKS

1.00 SCOPE

This specification covers the general requirements for painting, white washing, etc. of both interior and exterior surfaces of masonry, concrete, plaster and all carpentry works, structural and miscellaneous steel works. This also includes furnishing of all materials, labour, scaffolding, tools and appliances etc.

2.00 GENERAL REQUIREMENTS

- 2.01 Before commencing painting, the Contractor shall obtain the approval of the Architect in writing regarding the scheduling of work to minimize damage, disfiguration or staining by other trades. He shall also undertake necessary precautions to prevent damage, disfiguration or staining of other trades or other installations.
- 2.02 Contractor shall protect not only his own work at all times but also all the adjacent work and materials by suitable covering, protection or other methods acceptable to the Architect during progress of painting. It is the responsibility of the contractor upon completion of painting work to remove all paint and varnish spots from floors, walls, glass panes and other surfaces and restore them to the original conditions. The work generally to be touched up shall be attended to after all other workmen have left. All accumulated material, rubbish etc. have to be cleared and the premises left in clean, orderly and acceptable conditions.
- 2.03 Contractor shall provide scaffolding wherever necessary erected on double supports tied together by horizontals, no ballies, bamboos or planks shall rest on or touch the surface which is being painted. Contractor is deemed to have considered the following while tendering and no extra claim on account of these will be entertained.
 - a) Supplying the paint and other materials required of approved colour and brand.
 - b) Preparing the surface to be painted
 - Providing and erecting scaffolding and removing the same after completion of the work.
 - d) Lifting of materials to any height and painting at all levels.
 - e) Application of paint as per the specification and to Manufacturer's instructions.
 - Curing, protecting the painted surface, adjacent work and thoroughly cleaning of the premises.
 - 2.04 The Contractor shall furnish all skilled and unskilled labour, plant, equipment, scaffolding, all materials etc. required for complete execution of the work in accordance with the drawings and as described herein and / or as directed by the Architect.

- 2.05 The Contractor shall strictly follow, at all stages of work, the stipulations contained in the Indian Standard Safety Code and the provisions of the Safety Rules as specified in the General Conditions of the Contract for ensuring safety of men and materials.
- 2.06 Any approval, instructions, permission, checking, review etc. whatsoever by the Architect shall not relieve the Contractor of his responsibility and obligation regarding adequacy, correctness, completeness, safety, strength, workmanship etc.

3.00 CODES AND STANDARDS

IS: 712

IS: 1477

- 3.01 All standards, specifications, acts, and codes of practice referred to herein shall be the latest editions including all applicable official amendments and revisions.
- 3.02 List of certain important Indian Standards, Acts and Codes applicable to this work is given below. However, the applicable standards and codes shall be as per but not limited to the list given below:

as per but not	limited	to the list given below:			
IS: 157	:	Chemical resistant paint.			
IS: 161	:	Oil resistant paint			
IS: 162	:	Readymixed paint, resisting, silicate type wood, colour as required	brushing for	l, use	fire on
IS: 348	:	French Polish			
IS: 423	:	Plastic wood for joiners filter			
IC · 427		Distampar dry colour as required			

IS: 423	:	Plastic wood for joiners filter					
IS: 427	:	Distemper, dry,	colour as r	equired			
IS: 428	:	Distemper,	oil	emulsion,	colour		

as required

IS:1200 : Method of measurement of

building and civil Engineering works.

Code of practice for painting of

ferrous metals and buildings.

IS: 2074: Ready mixed paint, air drying, red oxide – zinc chrome priming.

IS: 2922 : Specification for wooden tent

mallets

Building limes

IS: 2932 : Enamel, synthetic, exterior (a)

undercoating, (b) finishing

IS: 2933 : Enamel exterior (a) undercoating,

(b) Finishing

IS: 5410 : Cement paint

4.00 MATERIALS

4.01 General

Paint shall be ready mixed and of first quality of the approved brand and manufacturer. The paint shall generally conform to the chemical composition and other characteristics laid down in the relevant Indian standard specification. Mixing of paint by the Contractor at site will not be allowed. However, in the case of selection of special shades and colours (not available standard shades) the Contractor shall mix different shades of ready mixed paints as per Manufacturer's instructions and as directed by the Architect.

Materials shall be the highest grade products of well known approved manufacturers and shall be delivered to the site in original sealed containers, bearing brand name, manufacturer's name and colour shade, with labels intact and seals unbroken. All materials shall be subject to inspection and approval by the Architect. It is desired that materials of one manufacturer only shall be used as far as possible and paint of one shade be obtained from the same manufacturing batch. All paints shall be subjected to analysis from random samples taken at site from the painter's bucket, if so desired by the Architect.

All unspecified materials shall be of the highest quality available and shall conform to the latest IS standards. All such materials shall be made by reputable recognized manufacturers and shall be approved by the Architect.

Any materials found not conforming to the relevant specification shall have to be removed by the Contractor from the site at his own expenses.

All colours shall be as per the painting schedule and tinting and matching shall be done to the satisfaction of the Architect. In such cases, where samples are required, they shall be executed in advance with the specified materials for the approval of the Architect.

All primer coats shall be compatible to the material of the surface to be finished as well as to the finishing coats to be applied.

4.02 **Dry Distemper**

Dry distemper of required colour conforming to IS: 427 and of approved brand and manufacturer shall be used. The primer where used shall be cement primer or distemper primer. These shall be of same manufacturer as that of distemper.

4.03 Acrylic Emulsion Paint

Shall be water based acrylic copolymer emulsion with rutile titanium dioxide and other selected pigment and fungicide. It shall exhibit excellent adhesion to plaster and cement surface and shall resist deterioration by alkali salts. The paint film shall allow the moisture in wall to escape without pelling or blistering the paint. After it is dried, the paint should be able to withstand washing with mild soap and water without any deterioration in colour or without showing flaking, blistering or peeling.

4.04 **SOFT SHEEN ENAMEL PAINT**

Soft sheen enamel paint - Satin Finish to walls of approved colour over a coat of primer (cement Primer 34-200) including preparation of surface by thorough cleaning and free from grime, dust, grease, loose or flaking particles, hair cracks shall be filled, smoothen out the surface by using suitable emery paper of 320 grade followed by a coat of water based cement primer - (32-168) fully to give an even shade before painting.

5.00 **STORAGE**

The Contractor shall arrange for safe and proper storage of all materials and tools. Paints shall be kept covered at all times and mixing shall be done in suitable containers. All necessary precautions shall be taken by the Contractor to prevent fire.

6.00 PREPARATION OF SURFACE

6.01 Wood Work

Pretruding timber fibre shall be removed and all holes shall be filled with teakwood batten. the nail marks shall be covered with putty. The work shall then be sanded first with G/80 sand paper followed by G/120 or G/150 sand paper. Sanding should be taken up only when it can be followed immediately by painting.

6.02 Steel work

The surface shall be thoroughly cleaned sand prepared and / or rubbed with emery cloth if necessary to remove grease, mortar or any other foreign materials. In case of rusted surface, it shall be first cleaned with steel wire brushes till the corroded crust is removed. The cleaned surface shall be shiny and free from brush marks, patches, blisters and other irregularities. The surface thus finished shall be got approved before painting.

6.03 Before starting the work, the Contractor shall obtain the approval of the Architect regarding the soundness and readiness of the surface to be painted on.

7.00 APPLICATION

7.01 General

Before the commencement of the work the Contractor shall provide sample panels of painting at his own cost for the approval of the Architect to enable him to keep an accurate check on the materials supplied and final shade to be painted. It is however the express responsibility of the Contractor to provide any deviations and defects shall have to be rectified by the Contractor at his own cost.

The method of application shall be as recommended by the manufacturer. In case of selection of a special shade and colour (not available in standard shades) the Contractor shall prepare test panels in different shades of minimum size 1 metre square as instructed by the Architect and obtain his approval prior to applications of the finishing paints.

Proper tools and implements shall be used. Scaffolding if used shall be independent of the surface to be painted to avoid shade differences of the freshly repaired anchor holes. Painting shall be done by skilled labour in a workman like manner. All materials shall be evenly applied, so as to be free of sags, runs, crawls or other defects. All coats shall be of proper consistency. In case of application by brush, no brush marks shall be visible. The brushes shall be clean and in good condition before application of the paint.

All priming undercoats for painting shall be applied by brush only. Roller and spray equipment, etc., shall not be used.

The cleaned surface shall be dusted and a primer shall be applied.

One shop coat of red oxide or zinc chromate primer or as specified shall be given to all iron surfaces. Painting work on steel and iron surface shall conform to IS: 1477 (Part I and II).

All primer coats shall be compatible to the material of the surface to be finished as well as to the finishing coat to be applied.

No work shall be done under conditions that are unsuitable for the production of good results. No painting shall be done when plastering is in progress or is drying. Paint which seals the surfaces to moisture shall be applied only after the moisture on and below the surface has dried out.

All coats shall be thoroughly dry before being sand papered or before the succeeding coat is applied. Coats of painting as specified are intended to cover surfaces perfectly. In case the surface is not covered properly by applying the specified number of coats, further coats shall be applied by the Contractor when so directed by the Architect at no extra cost.

All primers and under coats shall be tinted to approximate the colour of the finishing coats. Finished coats shall be of exact colour and shade as

approved samples and all finish shall be uniform in colour and texture. All parts of mouldings and ornaments shall be left clean and true to finish.

Stopping and filling carpentry work should be done when the primer is just dry. For deep scratches, holes etc. stopping shall be done with putty of plastic wood (IS 423). Putty can be white lead with linseed oil base or synthetic metal putty.

For all minor scratches and rough surfaces, like flush door's faces filling made out of one part of white lead, two parts of whiting (powdered chalk) mixed and kneaded in double boiled linseed oil shall be evenly applied and rubbed down with G/220 or G/240 sand paper after allowing it to dry overnight.

Painting shall be done by skilled labourers in a workmanlike manner. All materials shall be evenly applied so as to be free from sags, runs, crawls, or other defects. All coats shall be of proper consistency and shall be well brushed out, so that no brush marks are visible, except varnish and enamels which shall be uniformly flowed on. The brushes shall be clean and in good condition before application of paint. No work shall be done under conditions that are unsuitable for production of good results.

The undercoating should be nearest to the specified colour of the finishing coat. Ready mixed synthetic enamel paint or fill paint may be used for the undercoat. The undercoat shall be uniform and free of all brush marks.

Undercoats should be completely dry before finishing coat is taken up. For synthetic enamels overnight and for oil paints, a whole day shall be left between undercoat and finishing coat. The undercoat shall then be rubbed with G/240 sand paper and dusted clean. The finishing coat of approved paint shall then be applied. If the surface is not satisfactory additional finish coats shall be applied at no extra cost. The paints shall be applied with bristle brushes and not horse hair ones all be stippled with a stippling brush.

. 7.02 Acrylic Emulsion Paint

Acrylic emulsion paint shall be brought in original containers and in sealed tins.

After allowing 24 hours for drying of primer coat specified approved quality paint shall be applied evenly and smoothly. If required filler putty coating may be given to give smooth finish. Each coat shall be allowed to dry out thoroughly and then lightly rubbed down with sand paper and cleaned of dust before the next coat is applied. Number of coats shall be as specified in the item and if however the finish of the surface is not uniform additional coats as required shall be applied to get good and uniform finish at no extra cost. After completion no hair marks from the brush or clogging of paint puddles in the corners of panel angles of mouldings shall be left on the work.

When the final coat is applied, if directed, the surface shall be rolled with a roller or if directed it shall be stipplied with a stippling brush.

Lime gauged cement plastered surfaces shall not be painted for at least one month after plastering. All sample patch shall be painted to check alkali reaction if so desired by the Architect. Painting shall be strictly as per manufacturer's specification.

8.00 PROTECTION

Contractor shall provide and use sufficient number of drop clothes, covers, tarpaulins and other screens to protect adjacent surfaces and shall remove all splatter and stains from such surfaces. The contractor shall also protect his own work.

Furniture and other movable objects, equipment, fittings and accessories shall be moved, protected and replaced upon completion of the painting work. All stationary items of equipment shall be well covered so that no paint can fall on them. Work finished by other agencies shall be well protected. All protection shall be as per instruction of the Architect.

9.00 **CLEANING UP**

The Contractor shall upon completion of painting etc. remove all marks and make good surfaces, where paint has spilled, splashed or splattered, including all equipment, fixtures, glass furniture, fittings, etc. to the satisfaction of the Architect.

10.00 ACCEPTANCE CRITERIA

- 10.01 All painted surfaces shall be uniform and pleasing the appearance.
- 10.02 The colour, texture etc. shall match exactly with approved samples.
- 10.03 All stains, splashes and splatters of paint shall be removed from surrounding surfaces.

11.00 MODE OF MEASUREMENT

Unless noted otherwise in the bills of quantities, the method of measurement for various items shall be generally in accordance with IS 1200.

TECHNICAL SPECIFICATIONS FOR FALSE CEILING

Properties	ACOUSTIC MINERAL FIBRE TILE GRID CEILING	ALUMINIUM COIL COATED TILE GRID CEILING	PLAIN GYPSUM BOARD CEILING
Thickness	16mm	0.5 mm	12.5mm
Noise Reduction Coefficient	0.55 or better	0.60 with 'Soundtex' backer 0.10 with no infill	0.1
Ceiling Attenuation Class	35	NA	35
Relative Humidity	99%(min.)	NA	60%
Light Reflectance	83% (min.)	95%	NA
Light Transmission	NA	NA	NA
Fire Rating	Class A	Class A	Class A
Weight	4.5 Kg/ sqm(min.)	1.44 kg/sqm (min.)	10.5 kg/sqm (approx.)
Method of production	Cast	NA	NA

- 1. The various works described in the Bills of Quantities and in the drawings shall be executed in strict accordance with the specifications and drawings to the entire satisfaction of the PMC / Architect and EMPLOYER. The quality of materials and workmanship shall be of high quality and shall conform to the relevant I.S. Specifications wherever applicable. The successful tenderers will be required to produce for approval samples of all materials and procurement shall be arranged only after specific approval. Samples of finished work shall also be shown for approval wherever directed and finished work shall conform strictly to the approved samples. The decision of the Architect in this matter will be final.
- 2. In certain cases, the material selection by the client has already taken place and the approved samples are available with the Project Manager on display. All tenderers are required to inspect the approved samples. While quoting, the tenderers shall ensure that if selected, they will supply materials exactly matching the approved sample and no deviation shall be accepted. If any supply is found to be deviant, the Project Manager/Architect reserves the right to reject such deviant materials and ask for full replacement at the total risk and cost of the bidder.

The successful tenderer is required to submit detailed method statement for each activity, with emphasis on QA / QC procedure. Once approved the method statement shall be followed strictly.

As previously stated the quality of material and workmanship shall be of the highest order. Any work falling below the standards are liable for rejection and the Project Manager/Architect will reserve the right either to ask the successful tenderer to replace the rejected works with approved quality or even get such works are done by agencies independently selected by Project Manager/Architect on their own and have the work carried out at the risk and cost of the successful bidder. The successful bidder shall ensure that sourcing the material is done from the best source that is well equipped, and in good control on maintaining the supplies, the quality and delivery of material to the required standard. Any compromise attempted by the successful bidder in such procurement or in any aspect of execution is likely to be rejected at any stage of execution of work. The Project Manager/Architect shall require mock-up of all finishing to be done for inspection and approval by the Client/Project Manager/Architect.

Work shall be executed incorporating the comments made during such inspection of mock-up without any extra cost and time factor. The successful bidder shall only engage the best quality labour force for executing work. Utmost importance shall be given to uniformity of colour, grains, patterns, maintaining of levels, lines, slopes, proper joints, pointing etc., and any deficiency will be rejected. While laying floor and wall finishes, the Contractor shall obtain prior approval from Project Manager/Architect by way of shop drawings on the exact location of joints, pattern, size of finishing materials, starting point of laying, co-coordinating the joint patterns with wall/floor service outlets for achieving uniformity etc., Any rework due to not meeting the above requirements including co-ordination with the respective contractor's responsible service wall/floor outlets will require to be modified at the risk and cost of the successful bidder.

The tenderers shall include in their rate any requirement likely due to variation in levels and alignments of base surface which filling up / chopping may be required and such cost shall be included in the tender. Wherever tieback/anchors/clamps etc are required for vertical cladding, quoted rates shall include providing such accessories made out of Stainless steel grade 304 of appropriate thickness and size including anchors into the base wall/surface by means of appropriate dia and length of anchors capable of sustaining the working loads and no extra is payable for such accessories.

All natural materials for finishes of walls and floors shall be carried out only after proper pre selection of materials to ensure uniformity of colour,patterns etc., Such pre selection shall be in the form of dry laying of final material on dry bed to enable rejection of unsuitable material and also reorganizing the materials to achieve the desired finishing by way of uniformity etc., Failure to ensure such uniformity is liable for rejection and relaying at the risk and cost of the successful bidder.

3. The tenderers shall ensure that the place of work is kept neat and tidy during the progress of work and also clean at the end of each day's work. The contractor shall also ensure that the site is cleared of all rubbish, and other unwanted materials and handed over in a neat and satisfactory conditions as may be directed by EMPLOYER.

4. The successful tenderer shall note that the work is to be executed in a building project engaging several other Contractors and Tradesmen. Hence proper coordination for executing the work so as not to affect or hold up or damage the works of other agencies shall rest with the successful Contractor out of this tender. The successful tenderer shall be required to plan and execute the work in a proper sequence as laid down by the Project Manager and failure on the part of successful tenderer to co-ordinate cannot absolve him of risks in case of delays attributable to him. The successful tenderer shall be required to take proper site measurements before fabrication and installation. The successful tenderer shall submit shop drawings / put up mock ups or carry out such other activities so as to ensure that the design intent as per the tender documents and as per approved samples are proved to be truly reflected in the work actually being executed. Any deviation from the approved samples / approved mock up or approved shop drawings are liable to be rejected and the rejected works shall be reinstated by the Contractor at his own cost and risk, to the full satisfaction of the Project Manager and the Architects.

During the course of execution, the Contractor shall be responsible for safeguarding his materials, tools & tackles, work in progress etc. Even after completing the work and until this is being taken over by the Project Manager / Clients, the responsibility for safe keeping the finished product shall be under the entire responsibility of the successful Contractor. For this purpose, any protection layer, enclosure, coverage or any other form of protection shall be the responsibility of the Contractor within the quoted rates.

In the course of executing the work, the Contractor shall take proper steps to protect the work of other agencies, particularly the works either adjoining the area of work or immediately below and above the area of work. Damages to other's works by way of carelessness on the part of the Contractor shall not be tolerated. The Project Manager is at liberty to take such suitable steps to reinstate the affected portion of other Contractor's works at the cost and risk of the Contractor found responsible for causing damage. The decision of the Project Manager / Architect shall be final and binding in all such cases. The successful tenderer shall exercise sufficient control over his workmen to ensure that no damage or pilferage occurs in respect of any part of the building / services within the compound of the EMPLOYER. The successful tenderer shall ensure high standards of safety, housekeeping, security, hygiene etc. Since the works will involve round the clock deployment of force, proper supervision by competent supervisors shall be organized not only to monitor the progress but also to monitor housekeeping, safety and security. The workmen shall not misuse any part of the building. Wash room facilities shall be used only at the designated place and any observed misuse will entail imposition of fines by the Architect / PMC, whose decision will be final and binding.

The Client is not in a position to make available any storage place within the campus. The successful Contractor shall be responsible for constructing his own storage space as may be required at his own cost for safe keeping the raw materials, tools & tackles etc.

5. The tenderers shall take maximum precaution in protecting persons, things and properties belonging to the **EMPLOYER**, Public and also their own during the progress of work. The tenderers will be solely responsible for any damage caused during the

progress of work and the successful tenderer shall indemnify **EMPLOYER** by suitable guarantee / insurance cover from any claims on any account due to damages caused during their work.

- Pre-measurements to be recorded for all the dismantling items before starting of work.
- 7. Site meetings will be held regularly once in a week, if necessary meeting will be held in between also. The contractor or their authorised representative would be present for the meeting to take instruction and carry out the same for execution.
- 8. The contractor should maintain measurement books in which he should record measurements of work done from time to time and checked by the PMC .There should be no corrections or over writing in the measurements.
- 9. A register should be maintained at the site which should contain the instructions issued at site by the PMC / Architect or Employer and the instructions are properly made and recorded.
- The Contractor on starting the work shall herewith furnish to the programme for carrying out the work stage by stage with in the stipulated time. A graph or chart on individual work shall be maintained showing the progress week by week. The Contractors shall submit to the PMC a weekly progress report stating the number of skilled and unskilled labourers employed on the works, working hours done, quantity of cement used, place, type and quantity of work done during the period.

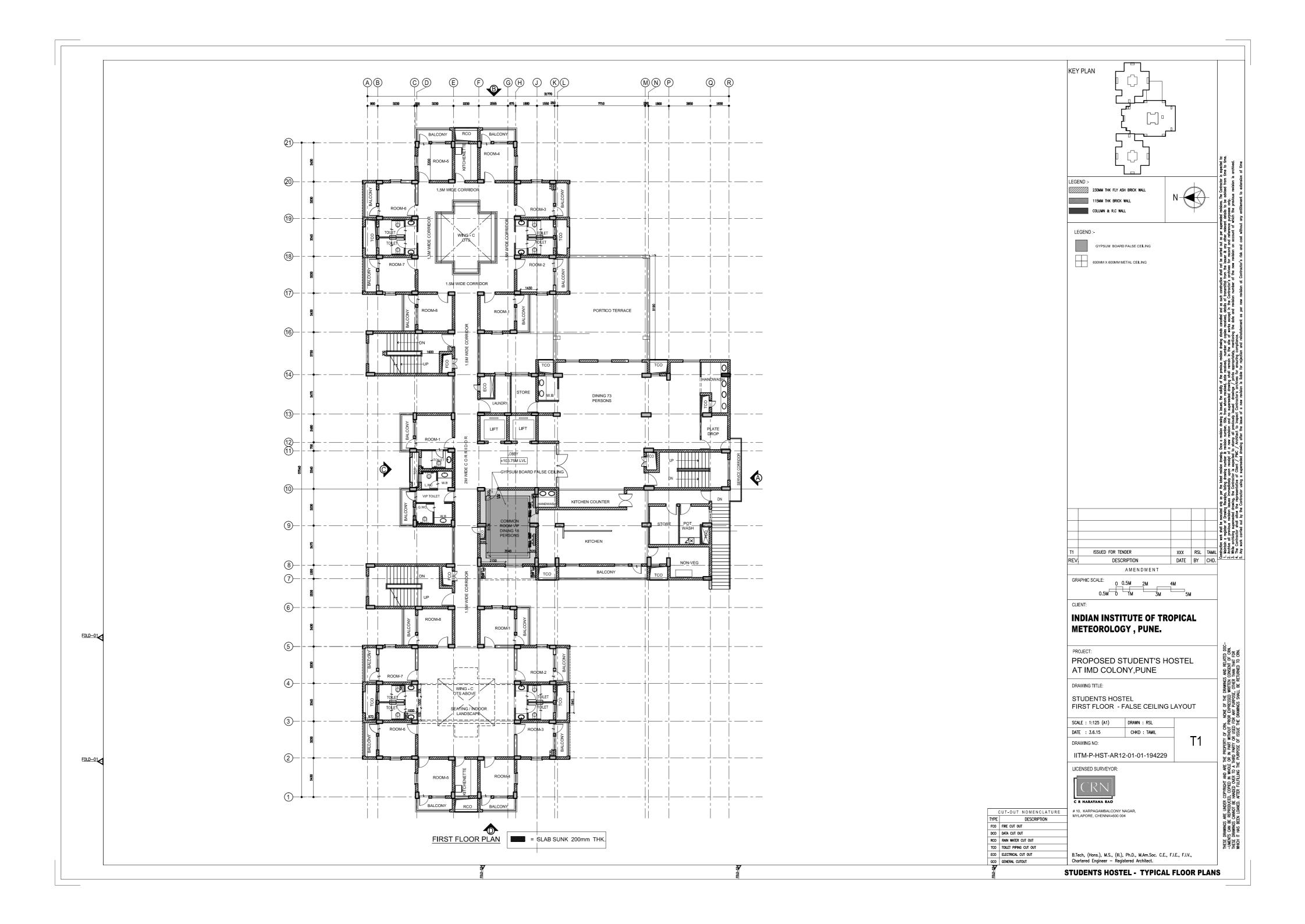
The supervision at site shall be carried out by **EMPLOYER**'s representative. The work progress to be reviewed in periodic site meetings at site to be decided by the **EMPLOYER** and the BAR chart and PERT chart shall be prepared by the contractor in consultation with the **EMPLOYER** and the **EMPLOYER** approval shall be obtained, for the same. After approval, the contractor shall faithfully adhere to the schedule and where deviations take place, the contractor shall take remedial action to compensate for the delays in completion of the project.

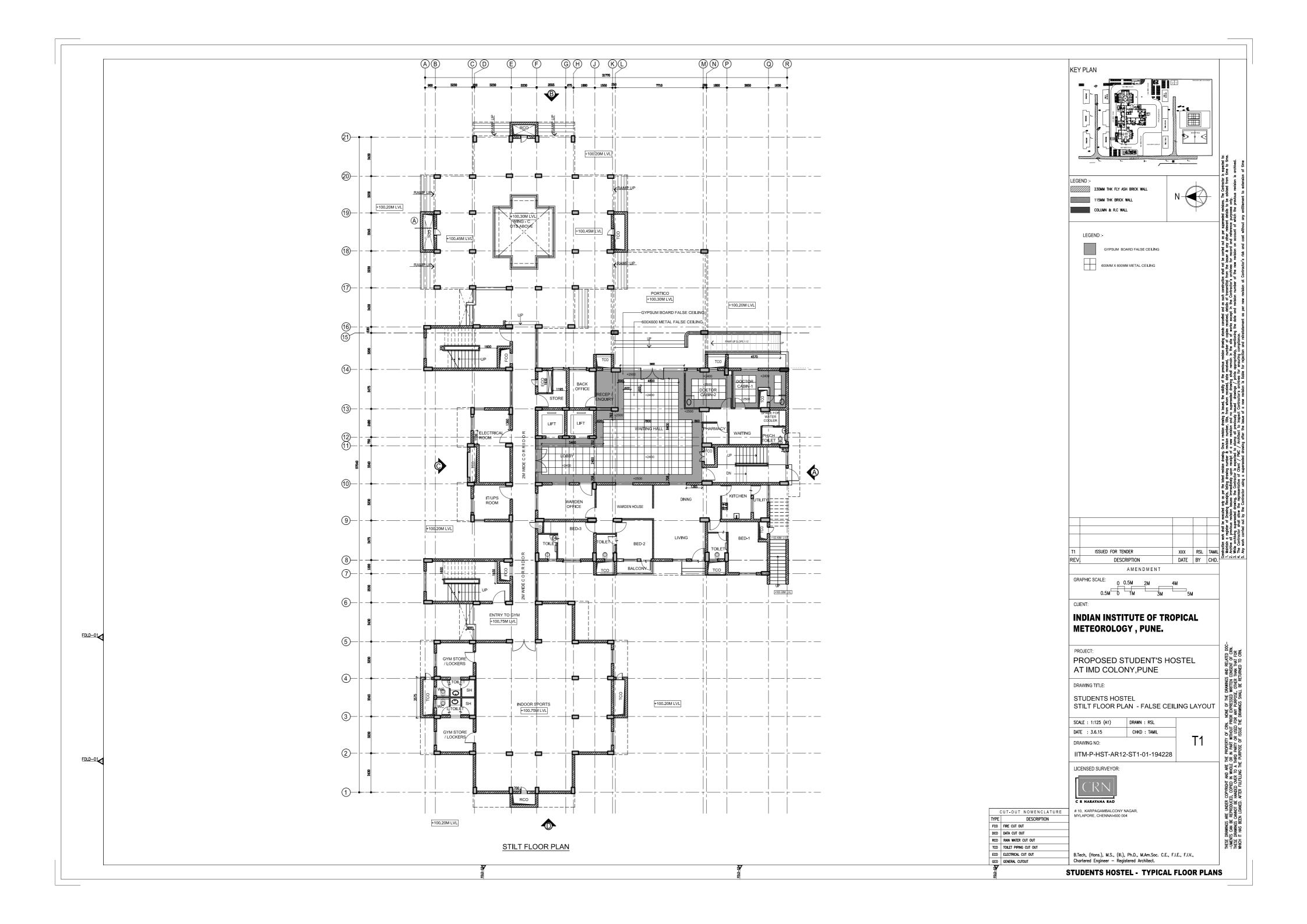
- a) The Contractor shall provide at his own cost for all necessary storage on the site in a specified area for all materials such as timber, cement, lime and other materials, which is likely to deteriorate by the action of sun, rain or other causes due to exposure, in such a manner that all such materials, tools, etc., shall be duly protected from damage by weather or any other cause. All such stores shall be cleared away and the ground left in good and proper order on completion of this contract unless otherwise expressly mentioned therein.
- b) The contractor shall provide at his own cost temporary works as per drawings/specifications approved by the. The contractors should obtain approval of local authorities. The Contractor shall be responsible for removal and disposal of the temporary works before handing over the completed works to the **EMPLOYER / PMC**

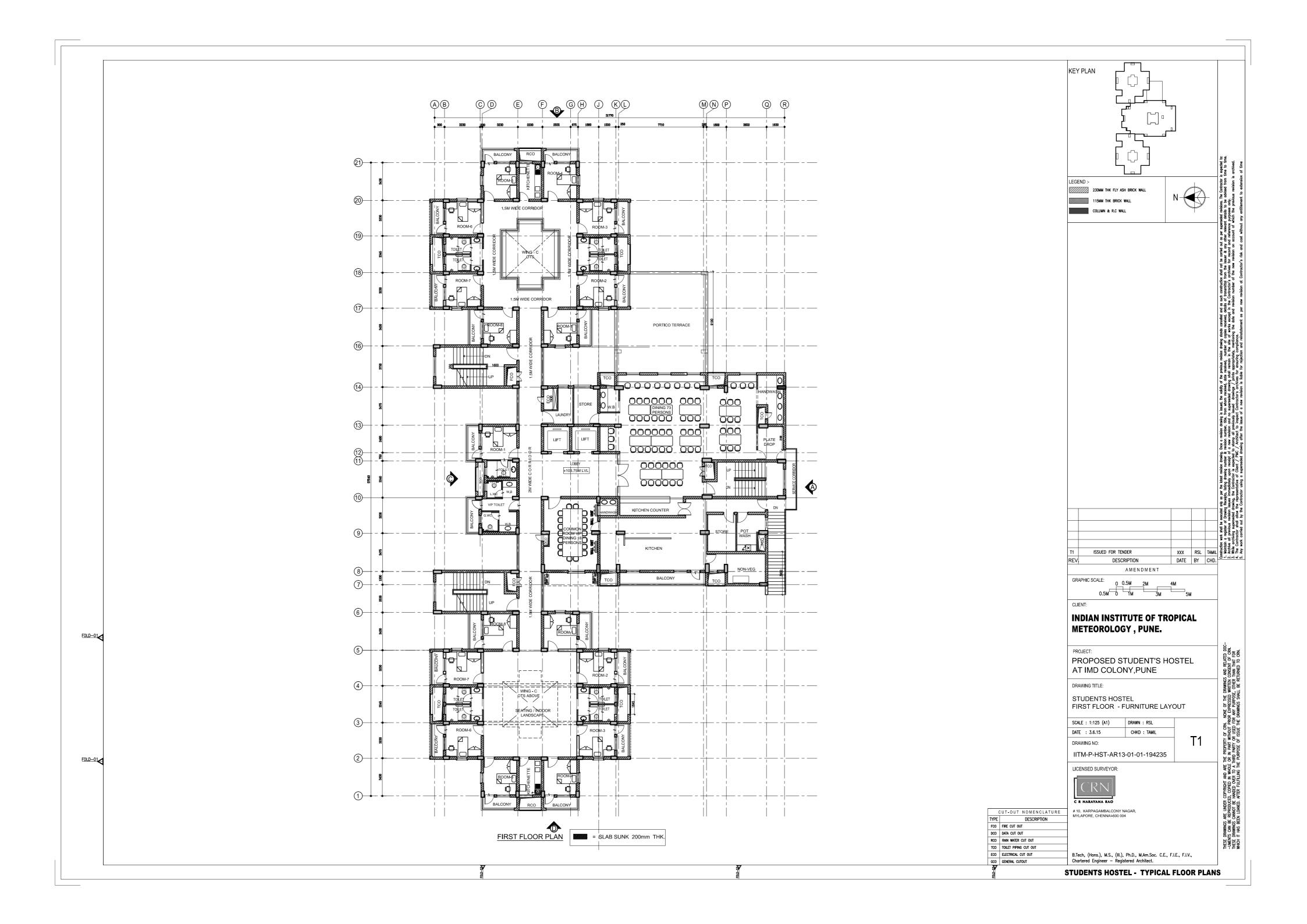
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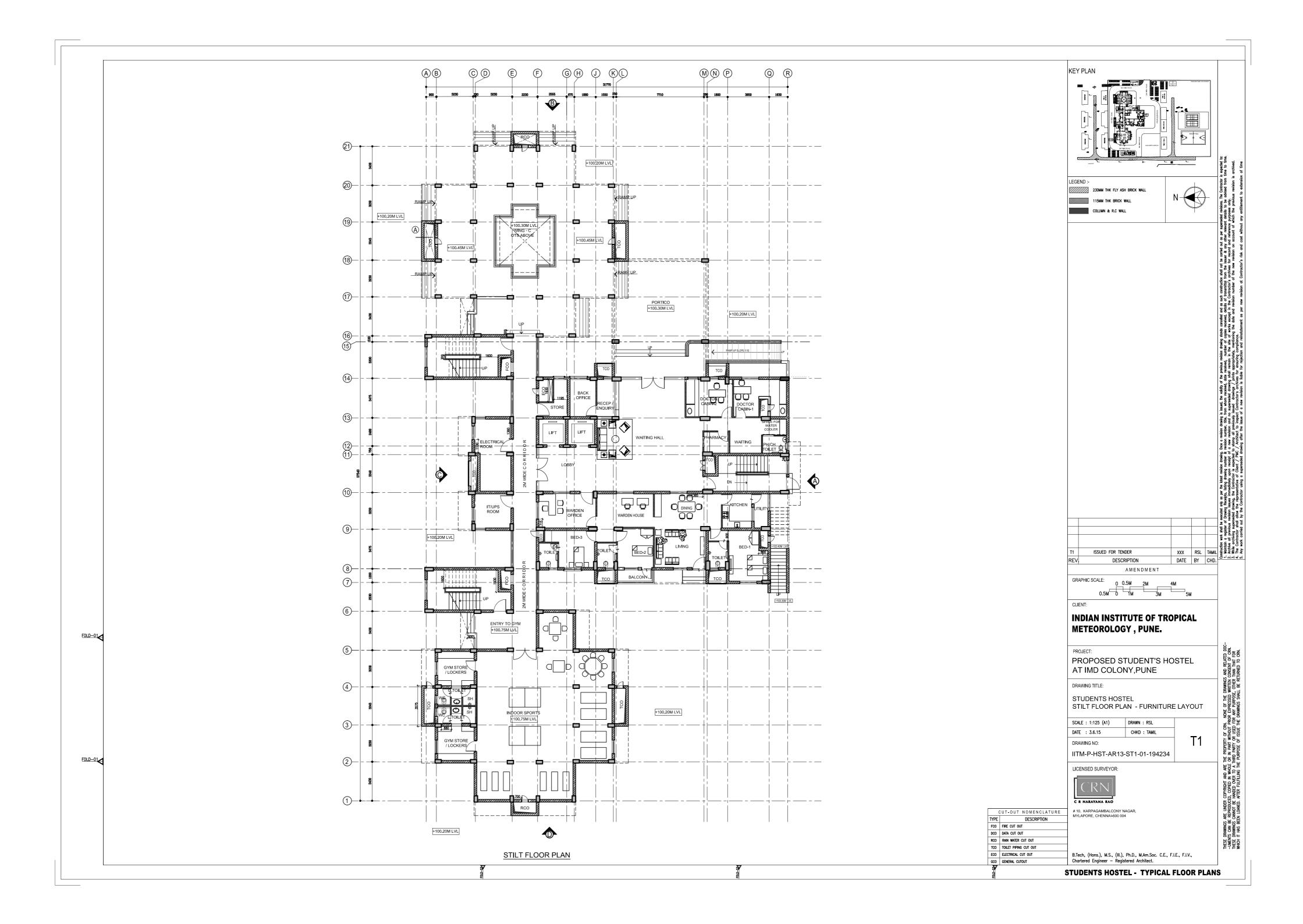
- c) All formalities including permission required to be obtained from competent authorities for making the provisions in (a) and (b) above would be done by the contractors at his own cost.
- d) The Contractor shall erect a display board on site at his cost in accordance with the drawings issued by the PMC for display of the names of the various agencies involved on the project including the EMPLOYER the Architect and PMC.
- e) Contractor should soon after the commencement of work makes prototype samples of items as require for the approval. EMPLOYER have the liberty to modify the design in such case the contractor should follow the approved samples very strictly as no extension in contract time will be granted by the EMPLOYER in respect of the modification of the design.
- 12. The Contractor shall engage an independent Housekeeping debris removal agency on a day-to-day basis. Hence Contractor would be responsible for cleaning up the debris and waste materials accrued from his work and dispose the accumulated debris on a daily basis. If the Contractor fails to comply with this requirement, the Employer will be at liberty to direct the cleaning agency to do the regular cleaning responsibility.
- 13. The Contractor shall strictly follow and comply with the guidelines (which are applicable to them) given in EMPLOYER during execution.
- 14. Quality of polish of the Granite shall be of the highest order. There shall be no warping of surfaces, and blemishes and undulations. All exposed edges of granite shall be fully polished. Rates for granite shall include edge grinding, edge nosing, bevelling, as instructed.
- 15. The successful tenderer shall be required to engage quality conscious site engineer for overseeing the entire procurement, planning, execution and finishing of the works. The responsibility for the first level of supervision shall rest on the successful tendered.

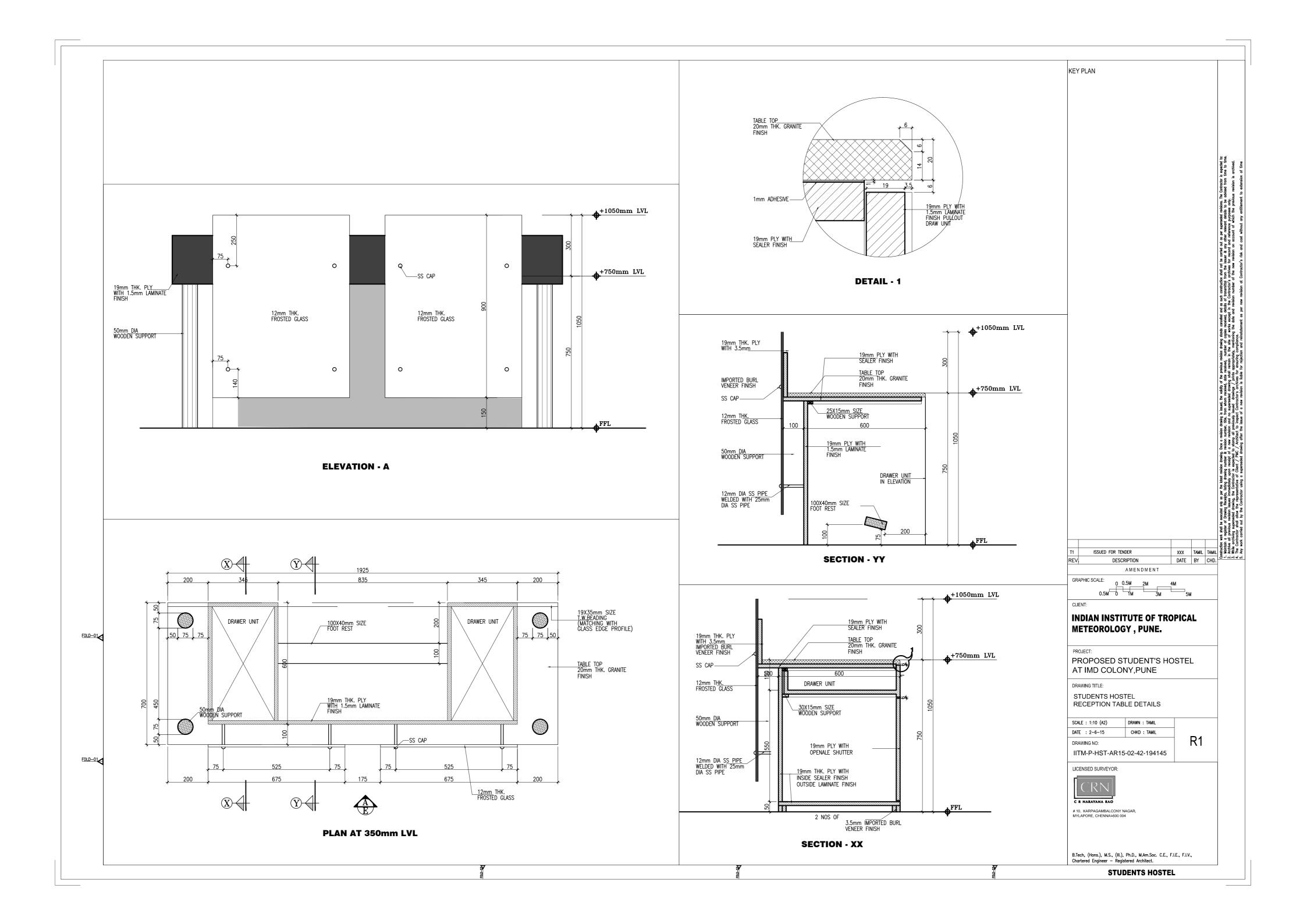
Reference Tender DRAWING of INTERIOR AND FURNISHING WORKS FOR STUDENT /TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN PUNE

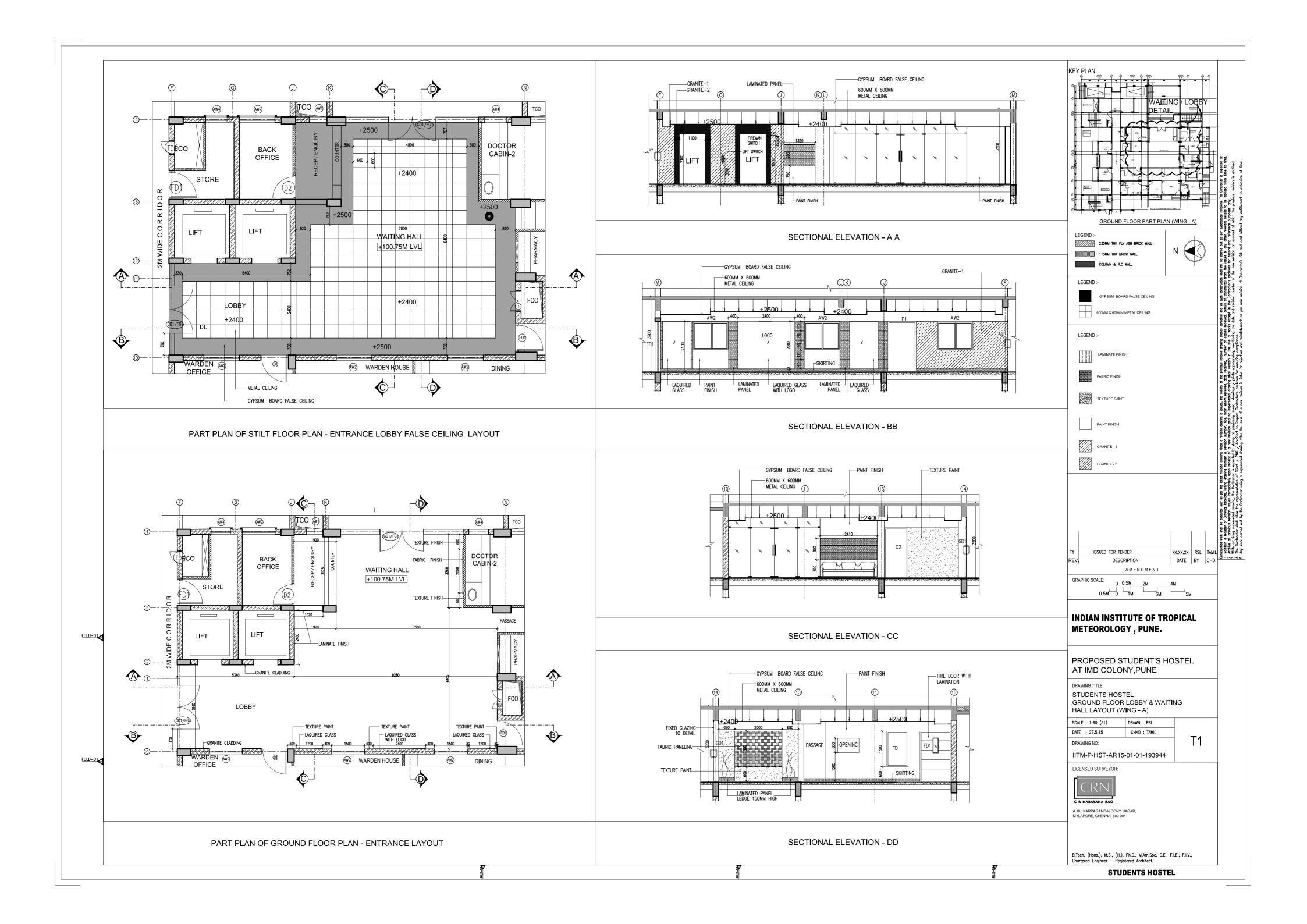


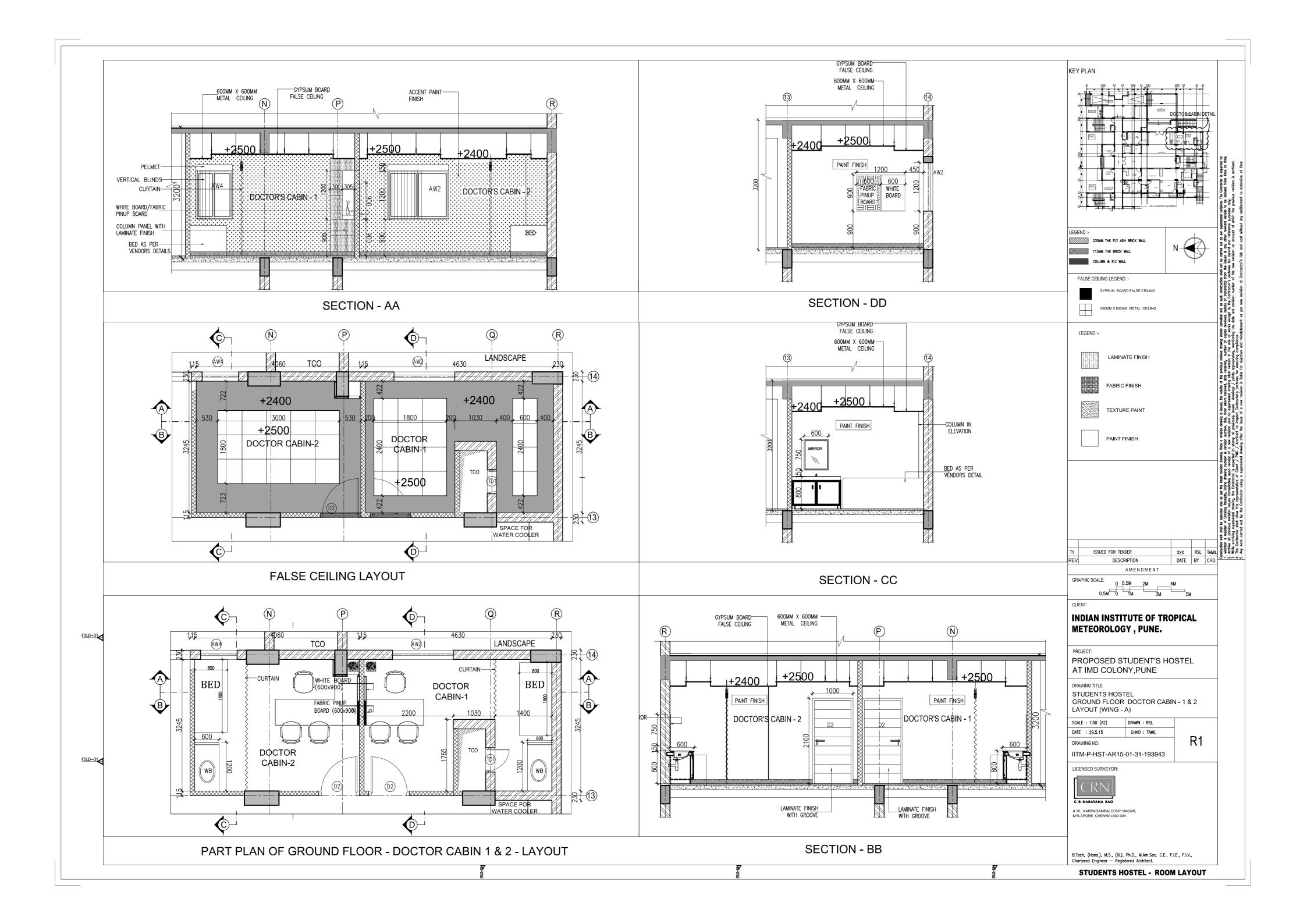


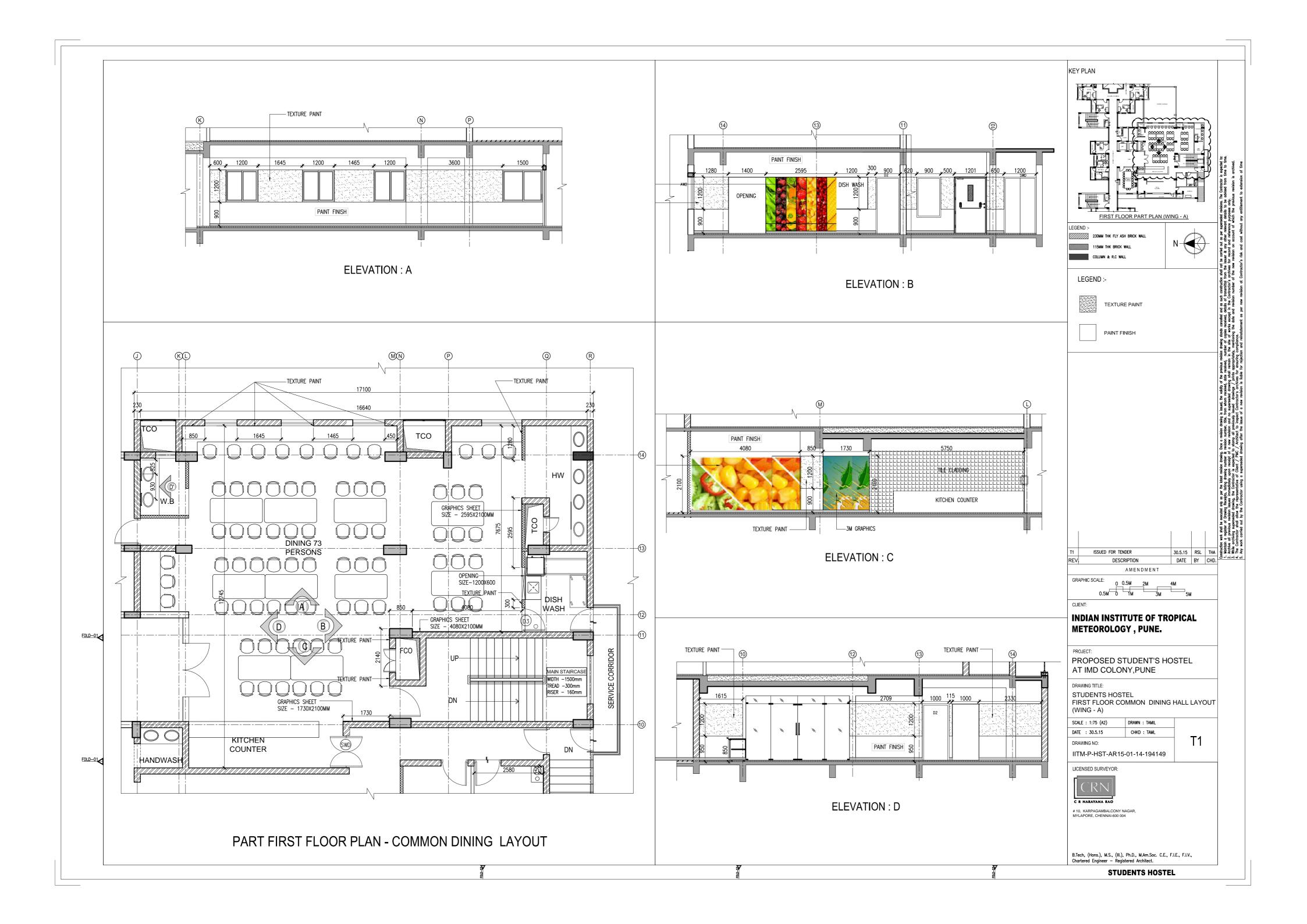


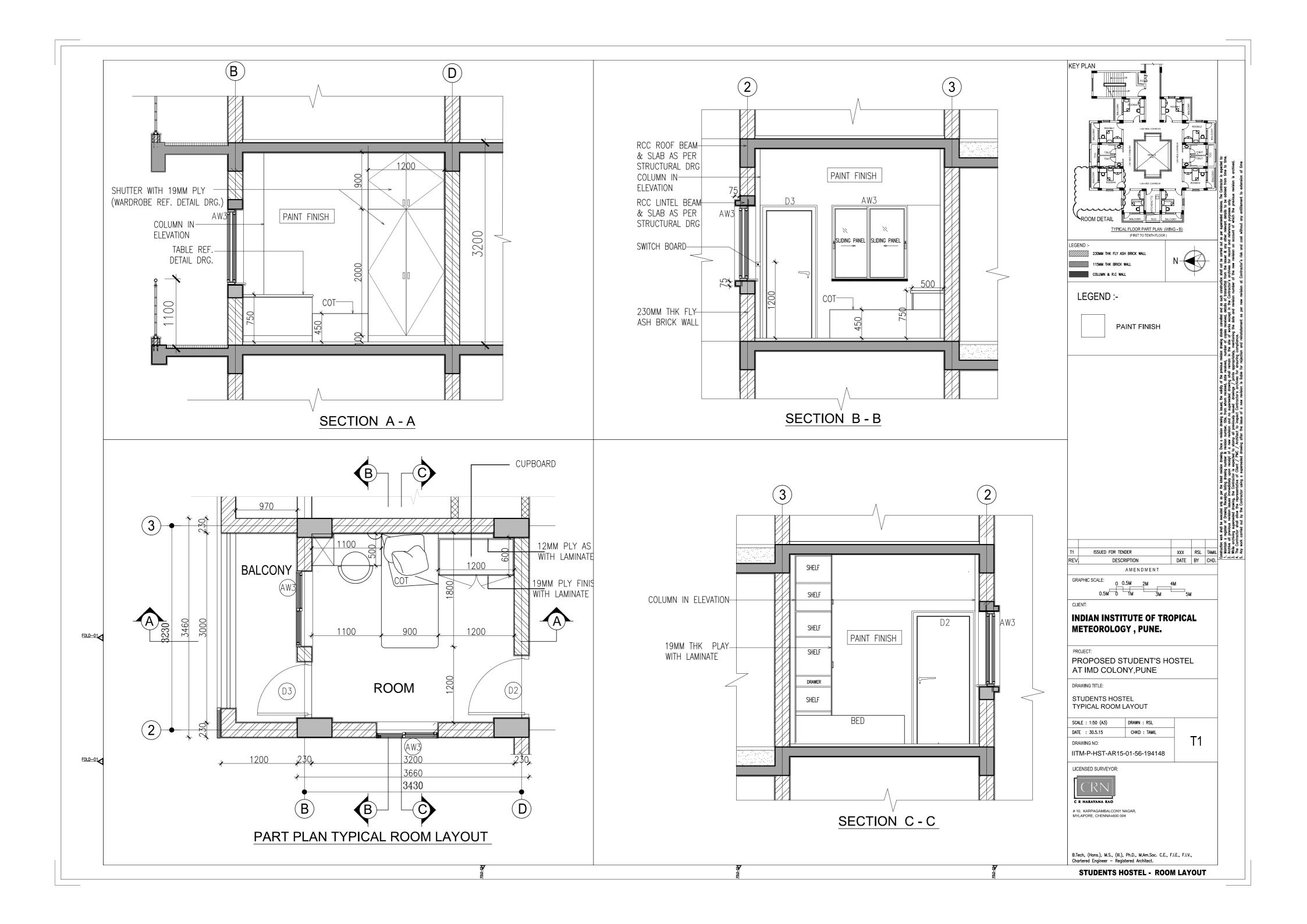


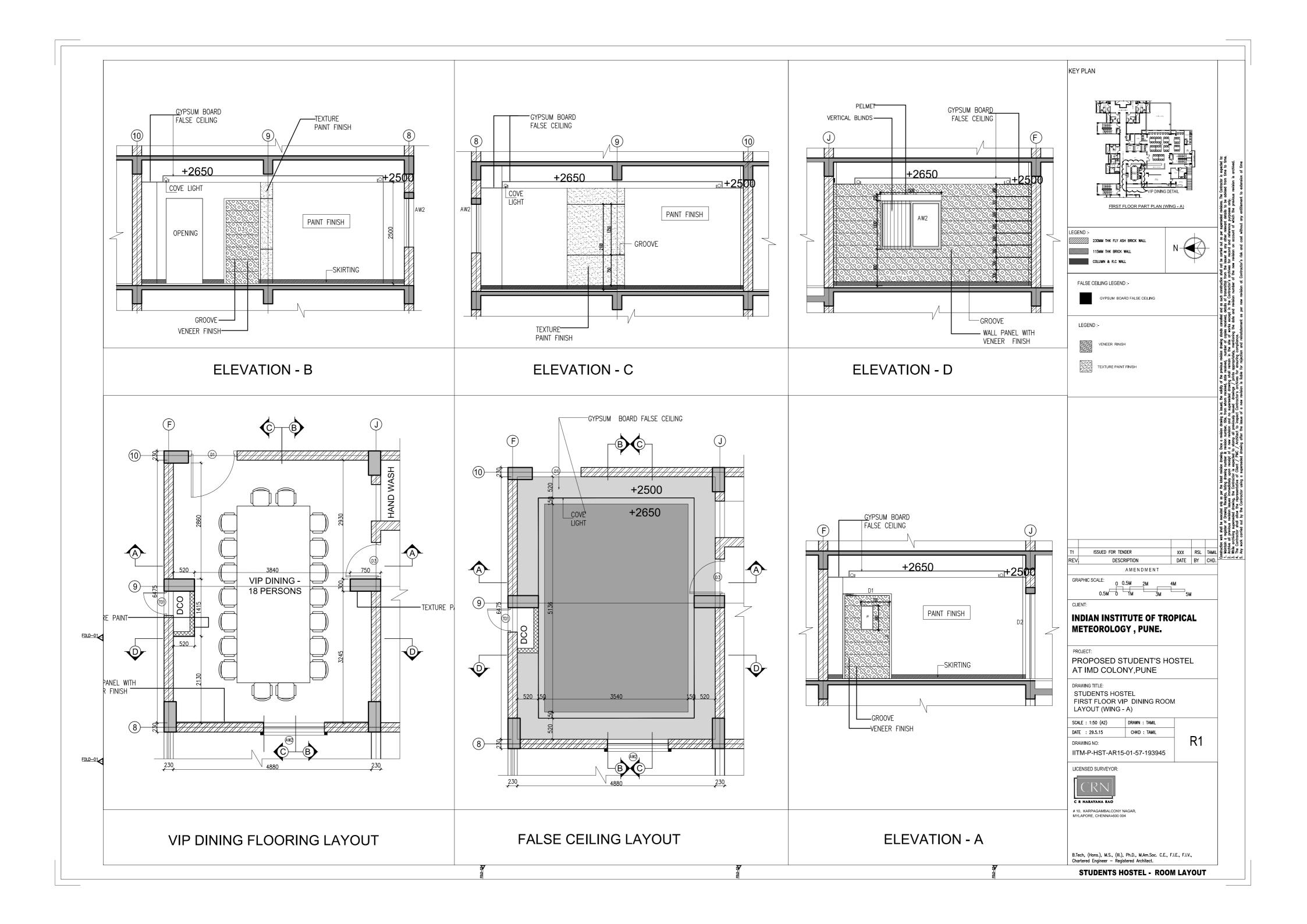


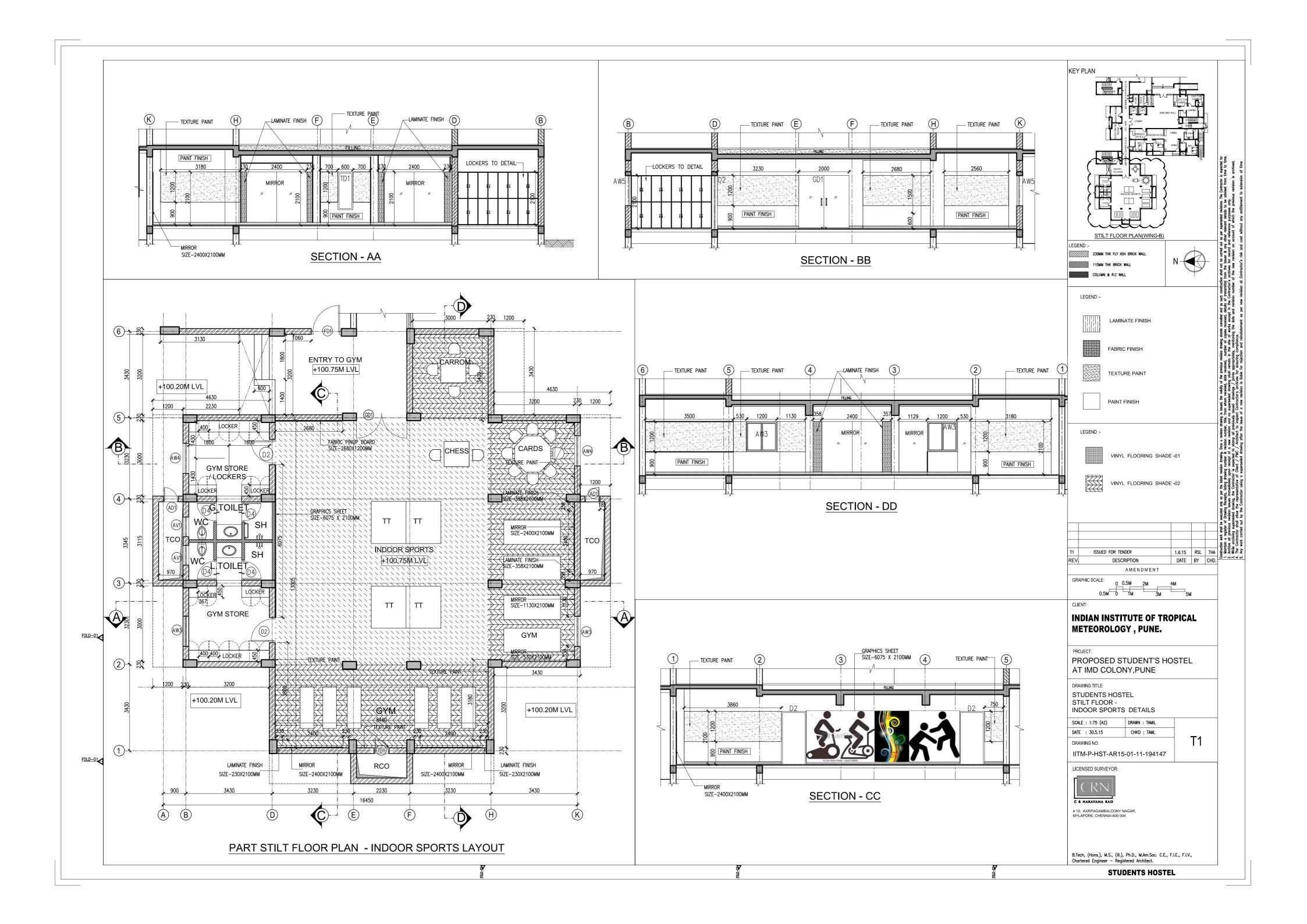


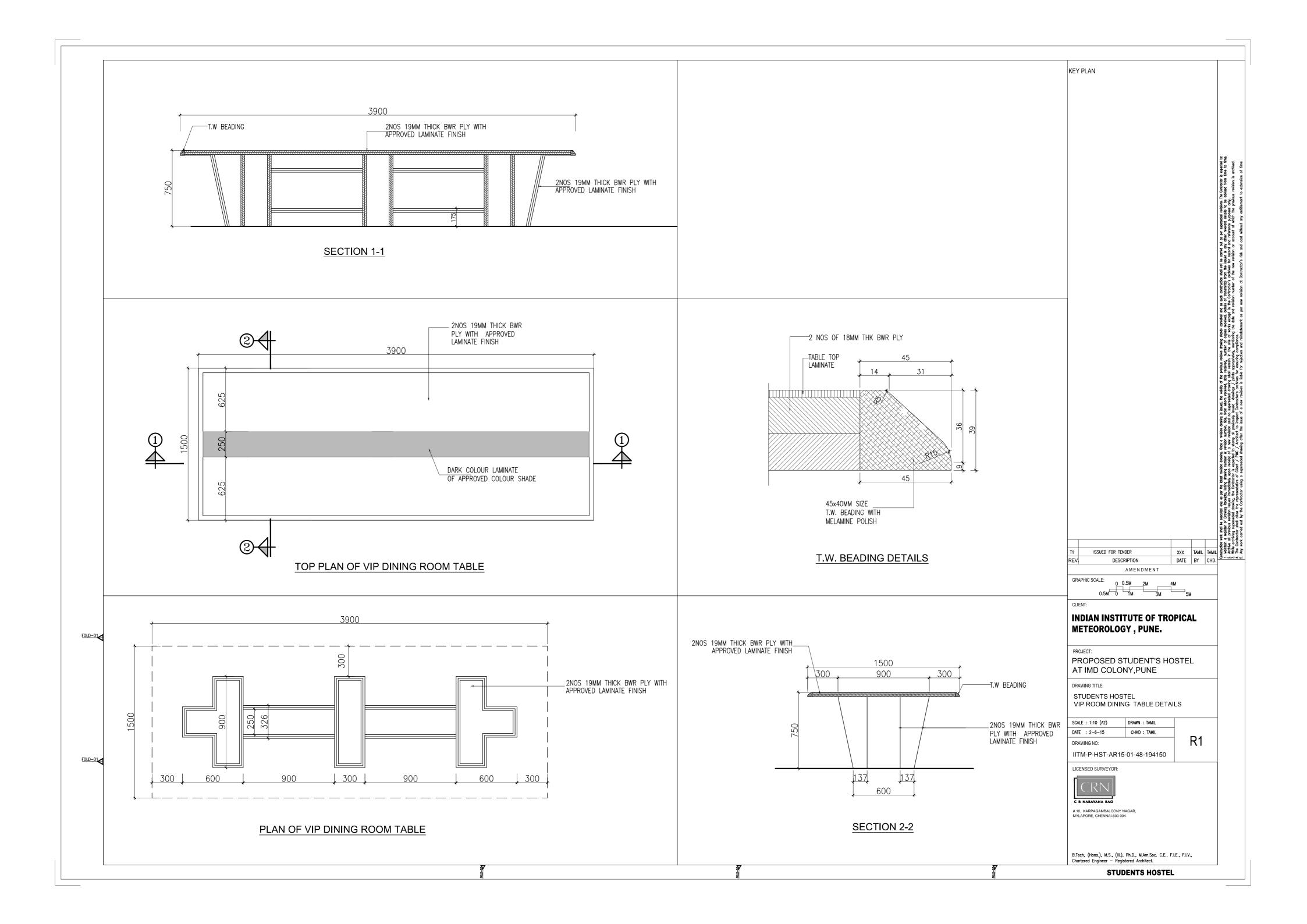












Reference Tender BoQ (with reference Images) of INTERIOR AND FURNISHING WORKS FOR STUDENT /TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN PUNE

		INDIAN	INSTIT	UTE OF TROPICA	L METEOROLO	OGY, IITM PUNE				
	INTERIOR AND FURNISHING WOR			•				LONY,PASHAN,	,PUNE	
	REFE	RENCE BI	LL OF Q	UANTITIES FOR		D FURNISHING V		1		
Item No.	Description	Qty	Unit	Basic Rate in Rs.	VAT %	Service Tax %	Rate (Basic +Taxes)	Amount in Rs.	Referen	ce Image
	Providing and fixing at all height false ceiling of 12.5mm thick tapered edge				VAI //	Service rax /6	+Taxes)		ı	ıı ıı
	gyproc gypsum board conforming to IS:2095 (BS 1230) including providing and									
	fixing of frame work made of special sections power pressed from GI sheet and									
	galvanized in accordance with zinc coating of grade 350 as per IS:277 and									
	consisting of angle cleat of size 25mm wide x 1.6mm thick with flanges of									
	22mm and 37mm at 1200mm centre to centre one flange fixed to the ceiling									
	with dash fastener 12.5mm dia x 40mm long with 6 mm dia bolts to the angle									
	hangers of 25 x 25 x 0.55 mm of required length, and other end of angle									
	hanger being fixed with nut and bolts to GI channels 45x15x0.9mmrunning at									
	the rate of 1200mm centre to centre to which ceiling section 0.5mm thick									
	bottom wedge of 80mm with tapered flanges of 26mm each having clips of									
	10.5mm at 450mm centre to centre shall be fixed in a direction perpendicular									
	to GI channel with connecting clips made out of 2.64mm dia x 230 mm long GI									
	wire at every junction including fixing the gypsum board with ceiling section									
	and perimeter channels 0.5mm thick 27mm high having flanges of 20 mm and									
	The perimeter of ceiling shall be fixed to wall / partition with the help of raw									
	plugs at 450 mm centre to centre with 25 mm long drive-all screws @ 230 mm									
	interval including jointing and fixing to a flush finish of tapered and square									
	edges of the gypsum board with recommended filler, paper tapes, finisher and									
	two coats acrylic emulsion paint over the two coats of primer suitable for									
	gypsum board as per manufacturers specification and also including the cost of									
	making openings for light fittings, grills, diffusers, cutouts made with frame of									
	perimeter channels suitably fixed all complete as per drawing and specification									
	and direction of the Employer / Architect. the surface shall be painted with 2									
	coats of plastic emulsion paint of approved make and shade over a coat of									
	primer suitable for gyp-board after E-Mix / Pop / Gypsum putty and all as per									
	manufacturer's specification etc complete and all as directed.									
		185.00	Sqm							
2	Providing & Fixing of Lay in Aluminium Perforated metal ceiling System									
	consisting of 600x600mm Lay in tiles of pre coated Aluminium in 0.7 mm									
	thickness in white colour with standard perforation of 2.5mm dia & open area									
	of 16% and Freudenberg Soundtex acoustical fleece glued to the back of the									
	tile to be laid on grid systems with 15mm wide T - section flanges colour white									
	having rotary stitching on the Main Runner, 1200 mm & 600 mm Cross Tees.									

2.1	The T Sections have a Galvanizing of 120 grams per M2 & passed through 500			1			
2.1	hrs of Salt test. The tiles should have Humidity Resistance (RH) of 100%, NRC						
	of 0.70, Fire performance A2-s1.d0 in module size of 600 x 600 mm, suitable						
	for Green Building application, with Recycled content of 50%. The Tile & Grid						
	system used together should carry a 15 year warantee.						
	INSTALLATION: To comprise main runner spaced at 1200mm centers securely						
	fixed to the structural suffix at 1200mm maximum centre & not more than						
	150mm from spliced joints. The First / Last suspension system at the end of						
	each main runner should not be greater than 600mm from the adjacent wall.						
	1200 mm long cross tees to be interlocked between main runners at 600mm						
	centre to form 600 x 600 mm module. Cut cross tees longer than 600mm						
	require independent support. Perimeter trim to be wall angles, secured to						
	walls at 450 mm maximum centers. The rate shall be inclusive of making						
	openings for light fittings, grills, diffusers, cutouts, wastage and necessary						
	hardware etc						
		60.00	Sqm				
3	Providing and fixing AMF Thermatex Antaris complete Mineral Fibre Ceiling						
	tile of approved make or equivalent suspension system to consist of 2mm or						
	3mm GI suspension rod/wire with adjustable Butterfly Clips of 4mm dia						
	securely affixed to structural ceiling using 10mm dia hook type anchor fastener						
	. Ceiling Suspnsion System to be fixed at interval (Main Runner) of 1200mm						
	spacings. Properietary supplied ceiling suspension system to consist of Main						
	Runners @ 1200mm and joined by C Channel @ 300mm to form overall grid						
	opening of 1200mm * 300mm centre to centre. Additional cross tees are to be						
	placed where appropriate for light fixtures, AC diffusers etc. exposed surfaces						
	chemically cleaned and capped prefinished in high-gloss polyster enamel with two coat system on cold rolled steel.						
	False ceiling will be measured only for the laid area, inclusive of all vertical						
	drops, edge moldings, facias, etc. Rate quoted to include all cut - outs required						
	for light fixtures, smoke detectors and other services cut - outs complete as						
3.1	directed by Engineer incharge						
	Product : AMF Thermatex Antaris Complete VT S 15 / Equivalent Ultima of						
	Armstrong						
	Tile Type: Lay-in ceiling type System C (Exposed Grid Ceiling).						
	Dimensions: 600 x 600 x 15 mm thick						
	Edge Detail : Bevelled Edge - VT S 15						
	Light Reflectance : upto 88%						
	Humidity Resistance : 95%						
	Colour : White Similar to RAL 9010						
	Surface Burning Characterstics: Class1, BS 476:Part 7:1987						
	Building Material Class A2-s1,d0 as per EN 13501-1						
	Thermal Conductivity : 0.052 - 0.057 W/mK						
	Sound Absorption : NRC = 0.70 as per ASTM C 423						
	Sound Attenuation : Dnfw = 31 dB as per EN 10848						
	Thickness/Weight : 3.6 Kg/m2	140.00	Sqm				
4	Providing & installing of Point elastic multipurpose PVC Sports flooring as per						
L	manufacture specification over finished flooring surface.			i	i		

4.1	The sports Flooring shall be stored, used and installed by authorized dealer /								
	authorized vendor in accordance with the manufacture guidelines using the								
	tools and accessories recommended & certificate for the same to be produced.								
	Cost to include covering the laid floor with necessary protection, cleaning for								
	any stains before handover. etc. complete as per the drawing and to complete								
	satisfaction of the Engineer. The adhesive used for laying the floor shall be as								
	per written recommendation made by the manufacturer & and the joints to be								
	welded using suitable welding rods and cost to include welding rods as								
	approved by the Architect / Engineer in charge	160.00	Sqm						
	5 mm thick Vinyl Sports floor (roll form of 2000mm width)								
	Sports floor covering to conform to the following standards:								
	Wear layer Thickness - 0.70 mm								
	Total Weight /sqmt 4.23 Kg/M2								
	Friction - 100%								
	Shock Absorption - 19% to -								
	Residual Indentation - approx. 0.16mm								
	Vertical deformation - 1mm								
	Vertical Ball Behaviour - above 98%			1		1			
	Dimensional Stability - <0.10%								
	Make : Tarkett/Armstrong or equivalent - Omnisports Training 5mm Vinyl								
	flooring								
5	Providing and fixing wall paneling as per drawing , in general it shall be made								
	of Aluminium extruded sections of size 50 x 25mm x 1.5mm thick in both								
	horizontal and vertical direction at 600 mm c/c spacing, frame shall be fixed at								
	required depth as per drawing. The framework shall be covered with single								
	layer of 8mm thick BWR plywood on one side up to 75mm above false ceiling.								
	The cost of necessary hardware's etc; as required for complete the works.								
	Actual laid surface area.(i.e) from FFL to bottom of false ceiling height will be								
	measured and paid. The rate shall be not inclusive of painting with primer								
	coat etc it shall be measures and paid seperately.	75.00	Sqm						
6	Providing and fixing of 8mm thick of approved make BWR plywood on the								
	partition /wall. The rate shall be inclusive necessary hardware, screw and								
	wastage etc. The rate shall be not inclusive of necessary painting with 2 coats		_						
	and with one coat of primer etc complete	20.00	Sqm						
7	Providing and fixing column paneling as per drawing, in general it shall be								
	made of aluminium extruded sections of size 50 x 25 x 1.5 mm thick in both								
	horizontal and vertical direction at 600mm c/c spacing. The framework shall be								
	covered with single layer of 8mm thick (Marine or approved equivalent) BWR plywood on one sides up to 75mm above false ceiling. The cost of necessary								
	hardware's etc as required for complete the works. Actual seen surface								
	area.(i.e) from FFL to bottom of false ceiling height will be measured and paid.								
		15.00	Sqm						
8	Providing and fixing of 1mm thick laminate of approved color and shade with								
	grooves and lines and in patterns on specified area as instructed by Architect /								
	Client and finishing for the item nos.5,6 & 7,above. The cost of necessary								
	hardware's, adhesives, wastages etc; as required for complete the works.								
	Actual laid area only will be measured and paid.	110.00	Sqm						
9	Providing and fixing of 8mm thick lacquered glass of approved colour and Saint								
	Gobain or equivalent make over the existing partition, paneling or wall /								
	Column surfaces. The rate shall be inclusive of necessary SS Stud, hardware	a= a-							
- 10	and wastage etc: complete	15.00	Sqm						
10	Providing and fixing of mirror in general 8mm thick mirror with butt joint of								
	approved make fixed on necessary backing frame of 12MM thick BWR ply. The								
	rate shall be inclusive of necessary hardware and wastage etc; complete.Make	35 00	Sqm						
	Modiguard/Saint gobain or equivalent	33.00	Jym	1	l	l	l		

	Providing and fixing soft board panel of specified sizes having 12 mm thick soft board covered with felt fabric of approved make and shade of premium quality and cost of fabric not less than Rs. 250/- Rm the board shall have beech wood beading, lipping all-round. The board shall be fixed on prepared surface with necessary hardware fittings etc. complete. All concealed wood works shall have sealer polish as directed. Rate quoted shall be for the complete finished work including all the materials and labour mentioned above.	15.00	Sqm				
12	Providing and applying texture finish of Asian/Dulux/Berger Make or equivalent for the internal wall surface, as per approved design and pattern and as per manufacture specification, over a base coat of thickness not less than 2 mm. The quoted rate shall inclusive of final finishing coat over 2 coats of acrylic emulsion paint. The rate shall also to inclusive of all the above and including wall putty, labour, tools & tackles at all heights and levels etc complete.	55.00	Sqm				
13	Wall Graphics Providing graphic wall paper fixing on wall / column / partition. providing and fixing of digitally reproduced 3M scotch print decorative graphics (with controltac & comply feature for direct, bubble-free application on walls) as per the theme selected by clients with UV protective matte over laminate. Customized imagery. MCS warranty of 5 yrs must be endorsed by 3M India limited. The rate shall be inclusive of material, hardware for fixing the graphics	32.00	Sqm				
14	Making and supplying of personal lockers with louvers panel from Godrej or approved equivalent make, in general it shall be made by CRCA steel with anticorrosive treatment and factory finished painting of approved color. The locker door shall have a ventilating louvers for air circulation and it shall be a standalone unit of as a multi unit. The rate shall be inclusive of lock, handle and stands etc. Size of the locker 350mm depth, 300mm width and height 1830mm with 4 nos of doors for each unit.(bagge rack at entrance) Make Godrej/merino/Wipro or equivalent	8.00	nos				
	Providing and fixing Reception table made to shape and pattern identical as per Architect Drawing. and to a height of two levels 1000 mm/ 750 mm, but in general it shall be made of 18mm thick BWR plywood as table top, sides, front and rear side with adequate supports as directed in both horizontal and vertical directions. Providing drawers unit with a pencil drawer, and storage with openable shutters and key board tray at the specified location. Refer drawing.						
15.1	Rate shall be inclusive of providing edge molding of approved shape, making cut open in the, as per drawing detail, storage shutter and drawer are made with 18mm thick BWR ply finished with 1.5mm thick laminate of approved colour and other recessed surfaces are finished with 1mm thick laminate. Rate shall include for necessary wastages, hardware's like sliding runners, auto closing hinges, locking facility with one master key for Two drawers and storage, Rate to include for providing teakwood lipping, teak wood foot rest duly finished with melamine polish etc. providing 6mm thick lacquered glass at front of the table with necessary SS stud etc. (Size 2000mm long and 600mm wide) including all factory finished etc.Refer drawing.	1.00	Each				

16	Supplying and installation of Dining table of size 4200mm x 1500mm x 800mm height along with top with 2 nos of 19 mm thick BWR ply with 3 mm venner of approved shade and colour as per drawing. The table frame shall be made with 75mmx75mm size square teakwood legs along with 8mm height plastic level adjuster and 38mmx75mm size teak wood support panels on all four sides. The table top shall be made with 38mm thick water proof ply wood and to be fixed on the table support panels using 50mmx50mmx1.5mm thick Matt finish SS supports. The ply wood surfaces shall be finished with 1mm thick approved make and shade veneer sheets at factory by hot pressing with burl veneer finish inlays in pattern as per the instructions of the Architect. The rate shall be inclusive of polishing the veneer surfaces and teak wood surfaces with water based PU polish upto the required level and inclusive of necessary hardwares, adhesives, wastages etc; as required for complete the works.	1.00	Each				
17	DINING CHAIR Providing and fixing of chairs from @ home (Hercules) -with the following specifications Frame work shall be with wood work of good quality seesham wood and finished with fabric of Linen and cotton mix.Makes-Godrej/Nilkamal/Wipro/Equivalent	20.00	Each				
18	STUDY TABLE Cabin Table of size: 1000L X 500D X 750HT Table top is Made of 25mm Pre laminated boards with 2mm PVC edge banding. Understructure: 18mm thick prelam particle board with PVC edge gable end and 18mm thick prelam 1 drawer + 1 Shutter with suitable handles and Locks are provided. Makes Godrej/Nilkamal/Wipro or Equivalent	227.00	Each				
19	STUDY CHAIR Providing and fixing of chairs from the approved manu facturer (WIPRO or equivalent) brand with the following specifications Wood mate of Wipro/Godrej/Nilkamal or equivalent	227.00	Each				
20	DOCTOR CHAIR and Warden chairs, Reception Providing and fixing of chairs from the approved manufacturer (WIPRO or equivalent) brand with the following specifications Click Medium back chair * Synchro Mechanism, * Two Way Adjustable Arms (Height & Width) * Nylon Base	4.00	Each				
20.1	visitor chairs in warden(3) and doctor(2+2) cabin ,pharmacy(1),back office(2) Providing and fixing of chairs from the approved manufacturer with the following specifications Chrome plated MS frame with thickness of 1 mm,Fabric upholstered chair with mesh back and foam cushioned seat,Vega Mesh Chair -Black Make Wipro/Nilkamal/Godrej or equivalent	10.00	Each			3	
21	Wardrobe Providing and fixing of wardrobes in student rooms the size shall be 900L x 500 D x 1900ht with mirror Made of 18mm thick Pre laminate particle board with PVC edge band of 2.0mm thickness. The shutter are provided with individual locks and recessed handles, with Provission of Hanging rod - one number . The colour shade will as per the approved shade by Engineer in charge / Architect. One locker drawer for the extent of wardrobe lock and key shall be provided . Makes	215.00	Each				

22	Wardrobe Providing and fixing of wardrobes in VIP rooms the size shall be 1200L x 500 D x 1900ht with mirror Made of 18mm thick Pre laminate particle board with PVC edge band of 2.0mm thickness. The shutter are provided with individual locks and recessed handles, with Provission of Hanging rod - one number . The colour shade will as per the approved shade by Engineer in charge / Architect. One locker lock and key and one drawer lock and key for the extent of ward robe lock and key shall be provided . Makes Godrej/Nilkamal/Wipro or Equivalent	12.00				17 11	
23	Providing & Fixing Patient Examination bed with three drawers an three cabinets,Full metal body frame work,back rest ajustable via gas spring,Legs fitted with PVC stump,5cm cushion top covered with rexine,Epoxy powder coated finish provided for better rust resistance and ease of cleaning,size-183L x50W x 82H cm. Make-Gayatri surgicals/Standard steel/Carevel medical	2.00	Each				
24	Providing & Fixing Consultation Table and warden table-Front part of table 1200x750mm and the side part shall be 1000x450mm.,Front part with metal understructure with wire manager ,premium finish prelam tops made of 18mm thick Pre laminate particle board with PVC edge band of 2.0mm thickness.and side table will have 3 side drawers with same front top specifications.profile of the table top shall be as per the attched image.Makes-Wipro/Godrej/Nilkamal or As per drawing/specifications given by Architect	3.00	Each				
25	providing and fixing of curtain made out of fabric of any colour and design as per the direction of Engineer -in charge with necessary accessories to fix the curtain etc Make Bombay dyeing/Mafatlat or equivalent	15.00	Sqm				
26	Providing and fixing side / center table as per selection from manufacturer's catalogue made out of stainless steel base frame with 12mm beveled edge toughened glass top of the following sizes: Make:-Wipro/Godrej/Nilkamal or						
26.1	1000x600mm	2.00	Each			T	
26.2	600x600 mm	14.00	Each				
27	Providing and fixing sofa selected from the manufacturer's catalogue, in general, the sofa shall be made out adequate size of teakwood frames in both horizontal and vertical directions and SS legs as required with necessary teak wood frames and supports to shape and profile. Rate to include to provide soft foam of required mm thick, fabric upholstery of approved make and design and ISI mark hard wares etc. complete as directed by engineer in charge						
27.1	Single seater (App. Size 810 x 865 x 875)	28.00	Each				
27.2	Three seater (App.Size.1790 x 865 x 875)	4.00	Each				
28	Providing and fixing ledge of 12mm thick BWR ply of thickness 50mm width on wall surface and finished with 1.00mm thick veneer or approved shade and colour.	10.00					

29	Supplying and installation of dining table of size 1200*800 mm with Base and frame as per the following specification 1) Frame: Base 37 SS foldable Size of frame shall be 600 W x 900D x 735 H Supporting frame to be made with SS pipe for foldable legs and dia pipe for cross brazing as required finished with mirror or brushed finish 16 gauge thick 2) Top shall Imade with all sides post formed engineered wood of density 750 kg/m3 membrane with melamine finish by architects (Grade of SS shall be 316) Tables to have a warranty for one year size 1200x800mm) Approved make shall be Zayaka rectangular top of Nil kamal or Resol from Monarch or equivalent	15.00	Each				
30	Supply of Student's dining chair from Backliner of steel case / very wire stack of Haworth/ posh or equvalent with the following specification • Powder coated/SS legs • Wire base/ mesh base • Polymer back and seat • Stackable	73.00					
31	Supplying and fixing of steel cot powder coated with mild steel tubular sections for single person 915x1905mm with coir mattresses 75"x36"x4" with 4"coir etc as per the manufaturer specification etc for student room. Make of bed Nilkamal/Godrej/furniture kraft or equivalent	215.00	Each				min
32	Supplying coir mattresses 75"x36"x4" with 4"coir etc as per the manufaturer specification etc for student room. Make -Nilkamal/Sleepwell/kurlon or equivalent	215.00	Each				
33	Supplying and fixing of steel cot powder coated with mild steel tubular sections/primary material engineered wood with MDFwith natural teak finish for queen size 60"x78" for VIP room. Make -Nilkamal/Godrej/furniture kraft or equvalent	12.00	Each			1	
34	Supplying mattresses 78"x60"x6" with 6"bonnel spring mattress etc as per the manufaturer specification etc for VIP room. Make - Nilkamal/Sleepwell/kurlon or equivalent	12.00					
35	Providing and fixing partition upto ceiling height consisting of G.I. frameand required board, including providing and fixing of frame work made ofspecial section power pressed/ roll form G.I. sheet with zinc coating of 120gms/sqm(both side inclusive), consisting of floor and ceiling channel 50mmwide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floorand ceiling at the spacing of 610 mm centre to centre with dash fastener of12.5 mm dia meter 50 mm length or suitable anchor fastener or metalscrews with nylon plugs and the studs 48 mm wide having one flange of 34mm and other flange 36 mm and 0.50 mm thick fixed vertically withinflanges of floor and ceiling channel and placed at a spacing of 610 mmcentre to centre by 6 mm dia bolts and nuts, including fixing of studs alongboth ends of partition fixed flush to wall with suitable anchor fastener ormetal screws with nylon plugs at spacing of 450 mm centre to centre, andfixing of boards to both side of frame work by 25 mm long dry wall screwson studs, floor and ceiling channels at the spacing of 300 mm centre tocentre. The boards are to be fixed						
35.1	to the frame under with injuste changed to avoid through cracke. M.S. fiving 75mm overall thickness partition with 12.5 mm thick double skin tapered edged plain Gypsum board conforming to IS: 2095; part I	80.00	sqm				
36	supplying and fixing of 3/4" dia 1 mm thick ,SS hollow tubes for the fixing of window curtains . The quoted rate shall inclusive of SS brackets on either side and one side with threaded clamp for the fixing and removal of rod to provide the curtain	700.00	Rm				

	Supplying and fixing of 3 mm thick veneer over the plysurface of approved color and shade with grooves and lines and in patterns on specified area as instructed by Architect / Client and finishing for the item nos.5,6 & 7,above. including the cost of necessary hardware's, adhesives,melamine polishing, wastages etc; as required for complete the works. Actual laid area only will be measured and paid.Make-Century/greenIm/merino or equivalent	60.00	sqm					
	Providing and fixing Access floor systems of Unitile® or approved equivalent make all as per following specifications confirming to PSA MOB - PF2 PS/SPU or NFPA 262 standards. In UPS / IT server	10.00	sqm					
	Supply & installation of Meeting Table for common MEETING room - Model Lexicon, size 2400x1200, 20 mm thick BWR PLY board with aluminum understructure. Flipper on table top for power / data. The wire Mgmt is thru Flipper to mount necessary Electrical and Data Sockets flexible wire hose below with cable tray ETS .All the exposed surface of the ply shall be lipped with 4 mm thick TW and finished melaamine polish, Top surface of the table shall finished with 1.00 mm thick laminate and bottom surface shall finished with melamine polish as per drawing	1.00	nos					
	Supply and installation of Personality - 60MM Dia Twin Wheel Nylon CastorsEach Castor has Load Bearing Capacity of 250KG ANSI/BISMA Standard125MM, Gaslift for height adjustment as per DIN Standard Class IV - Korean MakeHeight Adjustable Armrest made of ABS with Soft PU Pad on TopBackrest: Made of ABS with Mesh Fabric UpholsteryInbuilt Lumbar Support in BackrestSynchro Tilt Mechanism with 3MM Thickness Plate as per ANSI /BIFMASeat Ply 12MM Hot Compressed PlySeat PU Moulded cushion with 65 density (+ or - 2)Model - Pesonality mesh, Height adjustable arms, Upright locking, seat slide adjustment, adjustable lumber support, black base & hard castors Make-Steel case / Hayworth/Posh or equivalent	10.00	Nos				ST.	
41	Providing Single bedsheet cotton with pillow covers by bombay dyeing/Raymonds/Mafatlal or equivalent.Samples shall be submitted for approval by Client/Architect	430.00	Nos					
42	Providing double bedsheet cotton with pillow covers by bombay dyeing/Raymonds/Mafatlal or equivalent.Samples shall be submitted for approval from Client/Architect.	24.00	nos					
	Providing pillows with poly fibre 450gm fibre fill, odourless,washable,dryable,refluffable by recron/Nilkamal/kurl-on or equivalent	240.00	nos					
	Supply and installation of cotton curtains in all the rooms.Lined single layer of fabric hemmed at the bottom and sides and top with eyelet ring stud.Fabric from D-décor/Bombay dyeing/Swayam or equivalent.Samples shall be submitted for approval from Client/Architect.	1050.00	sqmt					
45	supply of Cotton fleece blankets single washable and dryable by sleepinns/mink/bombay dyeing or equivalent	215.00	nos					
46	supply of Cotton fleece blankets Double washable and dryable by sleepinns/mink/bombay.dveing.or.equivalent	12.00	nos			 		
	Cloth drying stands-Anodised aluminium tube with powder coat finidh,sturdy yet light,maximum load of 15 kgs,fold flat for easy storage.Makes-Pull n dry/Deneb/Cipla plast or equivalent	227.00	nos					
	Total Cost in Rs.							
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Tender No. CE/IITM/Project/Students Hostel/Interior/2015/09

Tender BoQ of INTERIOR AND FURNISHING WORKS FOR STUDENT /TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN PUNE

COMMERCIAL BID

VOLUME - II

	BILL OF QUANTITIES FO	OR INTERIO	OR AND	FURNISHING W	ORKS				
Item						TA	KES	Actual Rate	Total Amount in
No.	Description	Qty	Unit	Basic Rate in Rs.	VAT	%	Service Tax %	(Baisc + Taxes)	Rs.
1	Providing and fixing at all height false ceiling of 12.5mm thick tapered edge gyproc gypsum board conforming to IS:2095 (BS 1230) including providing and fixing of frame work made of special sections power pressed from GI sheet and galvanized in accordance with zinc coating of grade 350 as per IS:277 and consisting of angle cleat of size 25mm wide x 1.6mm thick with flanges of 22mm and 37mm at 1200mm centre to centre one flange fixed to the ceiling with dash fastener 12.5mm dia x 40mm long with 6 mm dia bolts to the angle hangers of 25 x 25 x 0.55 mm of required length, and other end of angle hanger being fixed with nut and bolts to GI channels 45x15x0.9mmrunning at the rate of 1200mm centre to centre to which ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26mm each having clips of 10.5mm at 450mm centre to centre shall be fixed in a direction perpendicular to GI channel with connecting clips made out of 2.64mm dia x 230 mm long GI wire at every junction including fixing the gypsum board with ceiling section and perimeter channels 0.5mm thick 27mm high having flanges of 20 mm and 30 mm long,								
2	The perimeter of ceiling shall be fixed to wall / partition with the help of raw plugs at 450 mm centre to centre with 25 mm long drive-all screws @ 230 mm interval including jointing and fixing to a flush finish of tapered and square edges of the gypsum board with recommended filler, paper tapes, finisher and two coats acrylic emulsion paint over the two coats of primer suitable for gypsum board as per manufacturers specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed all complete as per drawing and specification and direction of the Employer / Architect. the surface shall be painted with 2 coats of plastic emulsion paint of approved make and shade over a coat of primer suitable for gyp-board after E-Mix / Pop / Gypsum putty and all as per manufacturer's specification etc complete and all as directed. Providing & Fixing of Lay in Aluminium Perforated metal ceiling System consisting of 600x600mm Lay in tiles of pre coated Aluminium in 0.7 mm thickness in white colour with standard perforation of 2.5mm dia & open area of 16% and Freudenberg Soundtex acoustical fleece glued to the back of the tile to be laid on grid systems with 15mm wide T - section flanges colour white having rotary stitching on the Main Runner, 1200 mm & 600 mm Cross Tees.	185.00	Sqm						

INTERIOR AND FURNISHING WORKS FOR STUDENT /TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE

IA e	BILL OF QUANTITIES FO					TA	KES	A shoot Bata	Total Aurania !
Item No.	Description	Qty	Unit	Basic Rate in Rs.	VAT	%	Service Tax %	Actual Rate (Baisc + Taxes)	Total Amount in Rs.
3.1	The T Sections have a Galvanizing of 120 grams per M2 & passed through 500 hrs of Salt test. The tiles should have Humidity Resistance (RH) of 100%, NRC of 0.70, Fire performance A2-s1.d0 in module size of 600 x 600 mm, suitable for Green Building application, with Recycled content of 50%. The Tile & Grid system used together should carry a 15 year warantee. INSTALLATION: To comprise main runner spaced at 1200mm centers securely fixed to the structural suffix at 1200mm maximum centre & not more than 150mm from spliced joints. The First / Last suspension system at the end of each main runner should not be greater than 600mm from the adjacent wall. 1200 mm long cross tees to be interlocked between main runners at 600mm centre to form 600 x 600 mm module. Cut cross tees longer than 600mm require independent support. Perimeter trim to be wall angles, secured to walls at 450 mm maximum centers. The rate shall be inclusive of making openings for light fittings, grills, diffusers. cutouts. wastage and necessary hardware etc Providing and fixing AMF Thermatex Antaris complete Mineral Fibre Ceiling tile of approved make or equivalent suspension system to consist of 2mm or 3mm Gl suspension rod/wire with adjustable Butterfly Clips of 4mm dia securely affixed to structural ceiling using 10mm dia hook type anchor fastener. Ceiling Suspnsion System to be fixed at interval (Main Runner) of 1200mm spacings. Properietary supplied ceiling suspension system to consist of Main Runners @ 1200mm and joined by C Channel @ 300mm to form overall grid opening of 1200mm * 300mm centre to centre. Additional cross tees are to be placed where appropriate for light fixtures, AC diffusers etc. exposed surfaces chemically cleaned and capped prefinished in high-gloss polyster enamel with two coat system on cold rolled steel.	60.00	Sqm				76		
3.1	False ceiling will be measured only for the laid area, inclusive of all vertical drops, edge moldings, facias, etc. Rate quoted to include all cut - outs required for light fixtures, smoke detectors and other services cut - outs complete as directed by Engineer incharge.								
	Product : AMF Thermatex Antaris Complete VT S 15 / Equivalent Ultima of Armstrong								
	Tile Type: Lay-in ceiling type System C (Exposed Grid Ceiling).								
	Dimensions : 600 x 600 x 15 mm thick								
	Edge Detail : Bevelled Edge - VT S 15								
	Light Reflectance : upto 88%								
	Humidity Resistance : 95%								
	Colour : White Similar to RAL 9010								
	Surface Burning Characterstics: Class1, BS 476:Part 7:1987								
	Building Material Class A2-s1,d0 as per EN 13501-1								

	BILL OF QUANTITIES FO								
lke					••	TA	XES	Actual Data	Total American !::
Item No.	Description	Qty	Unit	Basic Rate in Rs.	VAT	%	Service Tax %	Actual Rate (Baisc + Taxes)	Total Amount in Rs.
	Thermal Conductivity: 0.052 - 0.057 W/mK								
	Sound Absorption: NRC = 0.70 as per ASTM C 423								
	Sound Attenuation : Dnfw = 31 dB as per EN 10848								
	Thickness/Weight: 3.6 Kg/m2	140.00	Sqm						
4	Providing & installing of Point elastic multipurpose PVC Sports flooring as per manufacture specification over finished flooring surface.								
4.1	The sports Flooring shall be stored, used and installed by authorized dealer / authorized vendor in accordance with the manufacture guidelines using the tools and accessories recommended & certificate for the same to be produced. Cost to include covering the laid floor with necessary protection, cleaning for any stains before handover. etc. complete as per the drawing and to complete satisfaction of the Engineer. The adhesive used for laying the floor shall be as per written recommendation made by the manufacturer & and the joints to be welded using suitable welding rods and cost to include welding rods as approved by the Architect / Engineer in charge		Sgm						
	5 mm thick Vinyl Sports floor (roll form of 2000mm width)	160.00	Sqiii						
	Sports floor covering to conform to the following standards:								
	Wear layer Thickness - 0.70 mm								
	Total Weight /sqmt 4.23 Kg/M2								
	Friction - 100%								
	Shock Absorption - 19% to -								
	Residual Indentation - approx. 0.16mm								
	Vertical deformation - 1mm								
	Vertical Ball Behaviour - above 98%								
	Dimensional Stability - <0.10%								
	Make: Tarkett/Armstrong or equivalent - Omnisports Training 5mm Vinyl								
	flooring								
5	Providing and fixing wall paneling as per drawing, in general it shall be made of Aluminium extruded sections of size 50 x 25mm x 1.5mm thick in both horizontal and vertical direction at 600 mm c/c spacing, frame shall be fixed at required depth as per drawing. The framework shall be covered with single layer of 8mm thick BWR plywood on one side up to 75mm above false ceiling. The cost of necessary hardware's etc; as required for complete the works. Actual laid surface area.(i.e) from FFL to bottom of false ceiling height will be measured and paid. The rate shall be not inclusive of painting with primer coat etc it shall be								
	measures and paid seperately.	75.00	Sqm						

	BILL OF QUANTITIES FO	OR INTERIO	OR AND	FURNISHING W	ORKS				
Item						TA	KES	Actual Rate	Total Amount in
No.	Description	Qty	Unit	Basic Rate in Rs.	VAT	%	Service Tax %	(Baisc + Taxes)	Rs.
6	Providing and fixing of 8mm thick of approved make BWR plywood on the partition /wall. The rate shall be inclusive necessary hardware, screw and wastage etc. The rate shall be not inclusive of necessary painting with 2 coats and with one coat of primer etc complete.		Sqm						
7	Providing and fixing column paneling as per drawing, in general it shall be made of aluminium extruded sections of size $50 \times 25 \times 1.5$ mm thick in both horizontal and vertical direction at 600 mm c/c spacing. The framework shall be covered with single layer of 8mm thick (Marine or approved equivalent) BWR plywood on one sides up to 75mm above false ceiling. The cost of necessary hardware's etc as required for complete the works. Actual seen surface area.(i.e) from FFL to bottom of false ceiling height will be measured and paid.		Sqm						
8	Providing and fixing of 1mm thick laminate of approved color and shade with grooves and lines and in patterns on specified area as instructed by Architect / Client and finishing for the item nos.5,6 & 7,above. The cost of necessary hardware's, adhesives, wastages etc; as required for complete the works. Actual laid area only will be measured and paid		Sqm						
9	Providing and fixing of 8mm thick lacquered glass of approved colour and Saint Gobain or equivalent make over the existing partition, paneling or wall / Column surfaces. The rate shall be inclusive of necessary SS Stud, hardware and wastage etc; complete.		Sqm						
10	Providing and fixing of mirror in general 8mm thick mirror with butt joint of approved make fixed on necessary backing frame of 12MM thick BWR ply. The rate shall be inclusive of necessary hardware and wastage etc; complete.Make Modiguard/Saint gobain or equivalent		Sqm						
11	Providing and fixing soft board panel of specified sizes having 12 mm thick soft board covered with felt fabric of approved make and shade of premium quality and cost of fabric not less than Rs. 250/- Rm the board shall have beech wood beading, lipping all-round. The board shall be fixed on prepared surface with necessary hardware fittings etc. complete. All concealed wood works shall have sealer polish as directed. Rate quoted shall be for the complete finished work including all the materials and labour mentioned above.		Sqm						

INTERIOR AND FURNISHING WORKS FOR STUDENT /TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY,PASHAN,PUNE

	BILL OF QUANTITIES FO	OR INTERIO	OR AND	FURNISHING W	ORKS				
Item						TA	KES	Actual Rate	Total Amount in
No.	Description	Qty	Unit	Basic Rate in Rs.	VAT	%	Service Tax %	(Baisc + Taxes)	Rs.
12	Providing and applying texture finish of Asian/Dulux/Berger Make or equivalent for the internal wall surface, as per approved design and pattern and as per manufacture specification, over a base coat of thickness not less than 2 mm. The quoted rate shall inclusive of final finishing coat over 2 coats of acrylic emulsion paint. The rate shall also to inclusive of all the above and including wall putty, labour, tools & tackles at all heights and levels etc complete.								
		55.00	Sqm						
13	Wall Graphics Providing graphic wall paper fixing on wall / column / partition. providing and fixing of digitally reproduced 3M scotch print decorative graphics (with controltac & comply feature for direct, bubble-free application on walls) as per the theme selected by clients with UV protective matte over laminate. Customized imagery. MCS warranty of 5 yrs must be endorsed by 3M India limited. The rate shall be inclusive of material, hardware for fixing the graphics and fixing charges etc.	32.00	Sgm						
14	Making and supplying of personal lockers with louvers panel from Godrej or approved equivalent make, in general it shall be made by CRCA steel with anti-		-						
	corrosive treatment and factory finished painting of approved color. The locker door shall have a ventilating louvers for air circulation and it shall be a standalone unit of as a multi unit. The rate shall be inclusive of lock, handle and stands etc. Size of the locker 350mm depth, 300mm width and height 1830mm with 4 nos of doors for each unit.(bagge rack at entrance) Make Godrej/merino/Wipro								
15	Providing and fixing Reception table made to shape and pattern identical as per	8.00	nos						
15	Architect Drawing. and to a height of two levels 1000 mm/ 750 mm, but in general it shall be made of 18mm thick BWR plywood as table top, sides, front and rear side with adequate supports as directed in both horizontal and vertical directions. Providing drawers unit with a pencil drawer, and storage with openable shutters and key board tray at the specified location. Refer drawing.								
15.1	Rate shall be inclusive of providing edge molding of approved shape, making cut open in the, as per drawing detail, storage shutter and drawer are made with 18mm thick BWR ply finished with 1.5mm thick laminate of approved colour and other recessed surfaces are finished with 1mm thick laminate. Rate shall include for necessary wastages, hardware's like sliding runners, auto closing hinges, locking facility with one master key for Two drawers and storage, Rate to include for providing teakwood lipping, teak wood foot rest duly finished with melamine polish etc. providing 6mm thick lacquered glass at front of the table with necessary SS stud etc. (Size 2000mm long and 600mm wide) including all factory								
	finished etc.Refer drawing.	1.00	Each						

INTERIOR AND FURNISHING WORKS FOR STUDENT /TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE

	BILL OF QUANTITIES FO	JK IIN I EKI	JK AND	FURINISHING W	UKKS	TA	KES		
Item No.	Description	Qty	Unit	Basic Rate in Rs.	VAT		Service Tax	Actual Rate (Baisc + Taxes)	Total Amount in Rs.
16	Supplying and installation of Dining table of size 4200mm x 1500mm x 800mm height along with top with 2 nos of 19 mm thick BWR ply with 3 mm venner of approved shade and colour as per drawing The table frame shall be made with 75mmx75mm size square teakwood legs along with 8mm height plastic level adjuster and 38mmx75mm size teak wood support panels on all four sides. The table top shall be made with 38mm thick water proof ply wood and to be fixed on the table support panels using 50mmx50mmx1.5mm thick Matt finish SS supports. The ply wood surfaces shall be finished with 1mm thick approved make and shade veneer sheets at factory by hot pressing with burl veneer finish inlays in pattern as per the instructions of the Architect. The rate shall be inclusive of polishing the veneer surfaces and teak wood surfaces with water based PU polish						96		
	upto the required level and inclusive of necessary hardwares, adhesives, wastages etc; as required for complete the works.	1.00	Each						
17	DINING CHAIR Providing and fixing of chairs from @ home (Hercules) -with the following specifications Frame work shall be with wood work of good quality seesham wood and finished with fabric of Linen and cotton mix.Makes-Godrej/Nilkamal/Wipro/Equivalent		Each						
18	STUDY TABLE Cabin Table of size: 1000L X 500D X 750HT Table top is Made of 25mm Pre laminated boards with 2mm PVC edge banding. Understructure: 18mm thick prelam particle board with PVC edge gable end and 18mm thick prelam 1 drawer + 1 Shutter with suitable handles and Locks are provided. Makes Godrej/Nilkamal/Wipro or Equivalent								
19	STUDY CHAIR Providing and fixing of chairs from the approved manu facturer (WIPRO or equivalent) brand with the following specifications Wood mate of Wipro/Godrej/Nilkamal or equivalent								
20	DOCTOR CHAIR and Warden chairs, Reception Providing and fixing of chairs from the approved manufacturer (WIPRO or equivalent) brand with the following specifications Click Medium back chair * Synchro Mechanism, * Two Way Adjustable Arms (Height & Width) * Nylon Base	4.00	Each						

INTERIOR AND FURNISHING WORKS FOR STUDENT /TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE

	BILL OF QUANTITIES FO	ZIX IIVI LIXIX	JK AND		Onno	TAX	KES	- Actual Rate (Baisc + Taxes)	Total Amount in Rs.
Item No.	Description	Qty	Unit	Basic Rate in Rs.	VAT	%	Service Tax %		
20.1	visitor chairs in warden(3) and doctor(2+2) cabin ,pharmacy(1),back office(2) Providing and fixing of chairs from the approved manufacturer with the following specifications Chrome plated MS frame with thickness of 1 mm,Fabric upholstered chair with mesh back and foam cushioned seat,Vega Mesh Chair -Black Make Wipro/Nilkamal/Godrej or equivalent	10.00	Each						
21	Wardrobe Providing and fixing of wardrobes in student rooms the size shall be 900L x 500 D x 1900ht with mirror Made of 18mm thick Pre laminate particle board with PVC edge band of 2.0mm thickness. The shutter are provided with individual locks and recessed handles, with Provission of Hanging rod - one number . The colour shade will as per the approved shade by Engineer in charge / Architect. One locker drawer for the extent of wardrobe lock and key shall be provided . Makes	215.00							
22	Wardrobe Providing and fixing of wardrobes in VIP rooms the size shall be 1200L x 500 D x 1900ht with mirror Made of 18mm thick Pre laminate particle board with PVC edge band of 2.0mm thickness. The shutter are provided with individual locks and recessed handles, with Provission of Hanging rod - one number . The colour shade will as per the approved shade by Engineer in charge / Architect. One locker lock and key and one drawer lock and key for the extent of ward robe lock and key shall be provided . Makes Godrej/Nilkamal/Wipro or Equivalent	12.00							
23	Providing & Fixing Patient Examination bed with three drawers an three cabinets, Full metal body frame work, back rest ajustable via gas spring, Legs fitted with PVC stump, 5cm cushion top covered with rexine, Epoxy powder coated finish provided for better rust resistance and ease of cleaning, size-183L x50W x 82H cm. Make-Gayatri surgicals/Standard steel/Carevel medical systems pvt. Itd or equivalent	2.00	Each						
24	Providing & Fixing Consultation Table and warden table-Front part of table 1200x750mm and the side part shall be 1000x450mm.,Front part with metal understructure with wire manager ,premium finish prelam tops made of 18mm thick Pre laminate particle board with PVC edge band of 2.0mm thickness.and side table will have 3 side drawers with same front top specifications.profile of the table top shall be as per the attched image.Makes-Wipro/Godrej/Nilkamal or As per drawing/specifications given by Architect	3.00	Each						

	BILL OF QUANTITIES FOR INTERIOR AND FURNISHING WORKS										
Item						TA	KES	Actual Rate	Total Amount in		
No.	Description	Qty	Unit	Basic Rate in Rs.	VAT	%	Service Tax %	(Baisc + Taxes)	Rs.		
25	providing and fixing of curtain made out of fabric of any colour and design as per the direction of Engineer -in charge with necessary accessories to fix the curtain etc Make Bombay dyeing/Mafatlat or equivalent		Sqm								
	Providing and fixing side / center table as per selection from manufacturer's catalogue made out of stainless steel base frame with 12mm beveled edge toughened glass top of the following sizes: Make:-Wipro/Godrej/Nilkamal or equivalent										
	1000x600mm	2.00	Each								
26.2	600x600 mm	14.00	Each								
27	Providing and fixing sofa selected from the manufacturer's catalogue, in general, the sofa shall be made out adequate size of teakwood frames in both horizontal and vertical directions and SS legs as required with necessary teak wood frames and supports to shape and profile. Rate to include to provide soft foam of required mm thick, fabric upholstery of approved make and design and ISI mark hard wares etc. complete as directed by engineer in charge Reed sofa from Nilkamal/Godrej/Wipro or equivalent										
27.1	Single seater (App. Size 810 x 865 x 875)	28.00	Each								
27.2	Three seater (App.Size.1790 x 865 x 875)	4.00	Each								
	Providing and fixing ledge of 12mm thick BWR ply of thickness 50mm width on wall surface and finished with 1.00mm thick veneer or approved shade and colour.	10.00	RM								
29	Supplying and installation of dining table of size 1200*800 mm with Base and frame as per the following specification 1) Frame: Base 37 SS foldable Size of frame shall be 600 W x 900D x 735 H Supporting frame to be made with SS pipe for foldable legs and dia pipe for cross brazing as required finished with mirror or brushed finish 16 gauge thick 2) Top shall Imade with all sides post formed engineered wood of density 750 kg /m3 membrane with melamine finish by architects (Grade of SS shall be 316) Tables to have a warranty for one year. size 1200x800mm) Approved make shall be Zayaka rectangular top of Nil kamal or Resol from Monarch or equivalent		Each								

INTERIOR AND FURNISHING WORKS FOR STUDENT /TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE

	BILL OF QUANTITIES FO	JK IIVI LKIC	JK AND	FORMISHING W	ORKS	TA	KES	Actual Rate (Baisc + Taxes)	Total Amount in Rs.
Item No.	Description	Qty	Unit	Basic Rate in Rs.	VAT	%	Service Tax %		
30	Supply of Student's dining chair from Backliner of steel case / very wire stack								
	of Haworth/ posh or equvalent with the following specification								
	♦ Powder coated/SS legs								
	♦ Wire base/ mesh base								
	♦ Polymer back and seat								
	♦ Stackable	73.00	Each						
31	Supplying and fixing of steel cot powder coated with mild steel tubular sections								
	for single person 915x1905mm with coir mattresses 75"x36"x4" with 4"coir etc as								
	per the manufaturer specification etc for student room. Make of bed	24= 00							
	Nilkamal/Godrei/furniture kraft or equivalent	215.00	Each						
32	Supplying coir mattresses 75"x36"x4" with 4"coir etc as per the manufaturer								
	specification etc for student room. Make -Nilkamal/Sleepwell/kurlon or								
	equivalent	215.00	Each						
33	Supplying and fixing of steel cot powder coated with mild steel tubular								
	sections/primary material engineered wood with MDFwith natural teak finish for								
	queen size 60"x78" for VIP room. Make -Nilkamal/Godrej/furniture kraft or								
	equvalent	12.00	Each						
34	Supplying mattresses 78"x60"x6" with 6"bonnel spring mattress etc as per the								
	manufaturer specification etc for VIP room. Make - Nilkamal/Sleepwell/kurlon								
	or equivalent	12.00	Each						

INTERIOR AND FURNISHING WORKS FOR STUDENT /TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE

	BILL OF QUANTITIES FOR INTERIOR AND FURNISHING WORKS										
Item	Berneldin.	04		Davis Data in Da		TAXES VAT % Servi		(Daisc + Taxes)	Total Amount in Rs.		
No.	Description	Qty	Unit	Basic Rate in Rs.	VAT	%	Service Tax %				
35	Providing and fixing partition upto ceiling height consisting of G.I. frameand						/0				
	required board, including providing and fixing of frame work made ofspecial										
	section power pressed/ roll form G.I. sheet with zinc coating of										
	120gms/sqm(both side inclusive), consisting of floor and ceiling channel										
	50mmwide having equal flanges of 32 mm and 0.50 mm thick, fixed to the										
	floorand ceiling at the spacing of 610 mm centre to centre with dash fastener										
	of12.5 mm dia meter 50 mm length or suitable anchor fastener or metalscrews										
	with nylon plugs and the studs 48 mm wide having one flange of 34mm and other										
	flange 36 mm and 0.50 mm thick fixed vertically withinflanges of floor and ceiling										
	channel and placed at a spacing of 610 mmcentre to centre by 6 mm dia bolts and										
	nuts, including fixing of studs alongboth ends of partition fixed flush to wall with										
	suitable anchor fastener ormetal screws with nylon plugs at spacing of 450 mm										
	centre to centre, andfixing of boards to both side of frame work by 25 mm long										
	dry wall screwson studs, floor and ceiling channels at the spacing of 300 mm										
	centre tocentre. The boards are to be fixed to the frame work with joints										
	staggeredto avoid through cracks, M.S. fixing channel of 99 mm width (0.9 mm										
	thickhaving two flanges of 9.5 mm each) to be provided at the horizontal joints of										
	two boards, fixed to the studs using metal to metal flat head screws, including										
	jointing and finishing to a flush finish with recommendedjointing										
	compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm),										
	jointfinisher and two coats of primer suitable for board as per										
	manufacture'sspecification and direction of engineer in charge all complete.										
35.1	75mm overall thickness partition with 12.5 mm thick double skin										
33.1	tapered edged plain Gypsum board conforming to IS: 2095: part I										
	tapered edged plain dypsum sourd comorning to 15. 2055. part i	80.00	sqm								
36	supplying and fixing of 3/4" dia 1 mm thick ,SS hollow tubes for the fixing of										
	window curtains . The quoted rate shall inclusive of SS brackets on either side										
	and one side with threaded clamp for the fixing and removal of rod to provide	700.00	Rm								
37	the curtain. Supplying and fixing of 3 mm thick veneer over the plysurface of approved color		IXIII								
]	and shade with grooves and lines and in patterns on specified area as instructed										
	by Architect / Client and finishing for the item nos.5,6 & 7,above. including the										
	cost of necessary hardware's, adhesives, melamine polishing, wastages etc; as										
	required for complete the works. Actual laid area only will be measured and										
	paid.Make-Century/greenlm/merino or equivalent	CO 00									
20	, , , , , , , , , , , , , , , , , , , ,	60.00	sqm								
38	Providing and fixing Access floor systems of Unitile® or approved equivalent make										
	all as per following specifications confirming to PSA MOB - PF2 PS/SPU or NFPA 262 standards. In UPS / IT server										
	202 Statitualus: III OPS / II Server	10.00	sqm								
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INTERIOR AND FURNISHING WORKS FOR STUDENT /TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY, PASHAN, PUNE

	BILL OF QUANTITIES FOR INTERIOR AND FURNISHING WORKS										
Item		_				VAT % Service Tax (Baisc + Taxe	Actual Rate	Total Amount in			
No.	Description	Qty	Unit	Basic Rate in Rs.	VAT	%	Service Tax %	(Baisc + Taxes)	Rs.		
39	Supply & installation of Meeting Table for common MEETING room - Model Lexicon, size 2400x1200, 20 mm thick BWR PLY board with aluminum understructure. Flipper on table top for power / data. The wire Mgmt is thru Flipper to mount necessary Electrical and Data Sockets flexible wire hose below with cable tray ETS .All the exposed surface of the ply shall be lipped with 4 mm thick TW and finished melaamine polish ,Top surface of the table shall finshed with 1.00 mm thick laminate and bottom surface shall finished with melamine	1.00	nos								
40	Supply and installation of Personality - 60MM Dia Twin Wheel Nylon CastorsEach Castor has Load Bearing Capacity of 250KG ANSI/BISMA Standard125MM, Gaslift for height adjustment as per DIN Standard Class IV - Korean MakeHeight Adjustable Armrest made of ABS with Soft PU Pad on TopBackrest: Made of ABS with Mesh Fabric UpholsteryInbuilt Lumbar Support in BackrestSynchro Tilt Mechanism with 3MM Thickness Plate as per ANSI /BIFMASeat Ply 12MM Hot Compressed PlySeat PU Moulded cushion with 65 density (+ or - 2)Model - Pesonality mesh, Height adjustable arms, Upright locking, seat slide adjustment, adjustable lumber support, black base & hard castors Make-Steel case / Hayworth/Posh or equivalent		Nos								
41	Providing Single bedsheet cotton with pillow covers by bombay dyeing/Raymonds/Mafatlal or equivalent.Samples shall be submitted for approval by Client/Architect.	430.00									
42	Providing double bedsheet cotton with pillow covers by bombay dyeing/Raymonds/Mafatlal or equivalent. Samples shall be submitted for approval from Client/Architect.	24.00	nos								
43	Providing pillows with poly fibre 450gm fibre fill, odourless, was hable, dryable, refluffable by recron/Nilkamal/kurl-on or equivalent	240.00	nos								
44	Supply and installation of cotton curtains in all the rooms.Lined single layer of fabric hemmed at the bottom and sides and top with eyelet ring stud.Fabric from D-décor/Bombay dyeing/Swayam or equivalent.Samples shall be submitted for approval from Client/Architect	1050.00	sqmt								
45	supply of Cotton fleece blankets single washable and dryable by sleepinns/mink/bombay dyeing or equivalent	215.00	nos								
46	supply of Cotton fleece blankets Double washable and dryable by sleepinns/mink/bombay dyeing or equivalent	12.00	nos								
47	Cloth drying stands-Anodised aluminium tube with powder coat finidh,sturdy yet light,maximum load of 15 kgs,fold flat for easy storage.Makes-Pull n dry/Deneb/Cipla plast or equivalent	227.00	nos								

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY, IITM PUNE										
	INTERIOR AND FURNISHING WORKS FOR STUDENT /TRAINEE HOSTEL BUILDING FOR IITM AND IMD AT IMD COLONY,PASHAN,PUNE										
	BILL OF QUANTITIES FOR INTERIOR AND FURNISHING WORKS										
Item	Description	Qty	Unit	Basic Rate in Rs.	TAX	KES	Actual Rate (Baisc + Taxes)	Total Amount in Rs.			
No.					VAT %	Service Tax					
						%	,				
	TOTAL COST in Rs.										