## ESTATE & WORKS INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

## No. E&W/IE/Tender/245

Dated: March 23,2021

#### **NOTICE INVITING TENDER (NIT)**

#### 1. General

#### Name of Work :

On behalf of BOG, IIT Roorkee invites open **Percentage Rate Tenders** in **Two Bid system** (1.Technical 2. financial) from contractors of appropriate class & category registered with CPWD, State PWD, MES, Railway having experience of working in Central/State Government, Public Sector undertaking/ Autonomous Organization of the Central/State Government and Working Contractors of IITR for the following works :

Name of the Work	Estimated Cost	Completion Period (Months)
Repair of Plaster of all heights of Departments &	5.00 Lacs	03 Months
Hostel in Zone F at IIT Roorkee		

## 2. Critical Data sheet :

Approximately Cost	Rs. 5.00 lacs.
Tender Type (Open / Limited / EOI / Auction /	Open
Single)	
Tender Category (Services/Goods/Works)	Works
Type/Form of Contract (Work/Supply/	Work Contract
Auction/Service/ Buy/ Empanelment/ Sell)	
Product Category (Civil Works/Electrical	Civil Works
Works / Fleet Management/ Computer	
Systems)	
Tender document publish date	23.03.2021 (18:00 Hrs)
Tender Document Available / Downloaded	From 23.03.2021 (18:00 Hrs) to 15.04.2021 on website
From Institute website	https://mm.iitr.ac.in/mmweb/ .
NIT Publish on	https://eprocure.gov.in/epublish/app
Start Date of Seeking Clarification	Nil
Last Date of Seeking Clarification	Nil
Pre Bid Meeting Date	Nil
Bid Submission Start Date	03.04.2021 (15:00 Hrs)
Bid Submission End Date	15.04.2021 (15:00 Hrs)
Date & time of opening of Tender (Technical	15.04.2021 (15:30 Hrs)
Bid)	
Date & Time of opening of Financial Bid	Will be informed later on after the evaluation of Technical Bids
	(Only to the bidders who will successfully qualify the Technical
	Evaluation)
Tender Fee	Tender fee of Rs.500.00 (Non-refundable), in the form of RTGS/NEFT
	transfer to IIT Roorkee Account No: 00000032685865515, Account
	Name – NON MHRD GOVERNMENT FUND IIT ROORKEE, State
	Bank of India, Branch, IIT Roorkee, IFSC Code: SBIN0001069, MICR
	Code:247002094 and copy of the receipt / Hard copy of demand draft in
	favour of Registrar, IIT Roorkee be enclosed with the technical bid. The
	downloaded tenders without tender fee shall not be acceptable and stand
	rejected
EMD	Bidder shall Submit a Bid Security Declaration as in Annexure - A
Performance Guarantee	3% of awarded value shall be submitted in the form of Bankers Cheque /
	DD / FDR / Bank Guarantee in the name of Institute Engineer, IIT
	Roorkee after issue of Letter of Acceptance (LOA).

Security Deposit (5%)	5% of awarded value shall be submitted in the form of Bankers Cheque / DD / FDR / Bank Guarantee in the name of Institute Engineer, IIT Roorkee after issue of Letter of Acceptance (LOA).
No. of Covers	02 (Cover-1 for Technical+ Cover-2 for Financial)
Bid Validity Days	90 days (from last date of opening of tender)
Address for submission of documents or other communication.	Institute Engineer, Estate & Works Department, James Thomson Building, IIT Roorkee, Roorkee-247667 (India), Tel. No. 01332- 285266/ 5275/ 5747 / 4955
Email Address	ie@iitr.ac.in/ nepalaad@iitr.ac.in /

#### 2. Eligibility Criteria for submission of bid documents:

- a. Intending bidder should not be a joint venture
  - b. Experience of having successfully completed similar work individually costing not less than as stated below during the last 7 years ending previous day of last date of submission of bids.
    - (i) Three similar works, each of value not less than 40% of the estimated cost,
    - OR (ii) Two similar works, each of value not less than 60% of the estimated cost,

OR

(iii) One similar works of value not less than 80% of the estimated cost,

Completion certificate issued by Competent Authority will only be considered. Competent Authority means officer of not below the Rank of Executive Engineer/ Equivalent would be acceptable.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to last date of receipt of applications for this tender. (Copy of work completion certificate to be uploaded as proof of eligibility criteria in Cover-1)

#### c. Similar works mean:-Construction/Maintenance/ Renovation of Buildings.

- 3. **Turnover:** The average financial annual turnover on construction works should be at least **50%** of estimated cost during the immediate last 3 consecutive Financial Year (2017-18, 2018-19, 2019-20) –balance sheet duly audited by Charted Accountant. (Scanned copy of Certificate from CA to be uploaded). The year in which no turnover is shown would also be considered for working out the average.
- 4. Institute reserves the right to cancel any or all tenders without assigning any reason.

Sd-Institute Engineer E&W, IIT Roorkee.

# PART-A

Name of Firms:-....

Address :-....

# ESTATE & WORKS INDIAN INSTITUTE OF TECHNOLOGY ROORKEE-247667 (U.K.)

No. E&W/IE/Tender/245

Dated: March 23 ,2021

# Name of Work: Repair of Plaster of all heights of Departments & Hostel in Zone F at IIT Roorkee.

## Last Date & Time For

1. Receipt of Tenders	:-	15.04.2021	: 3.00 PM
2. Opening of Bids	:-	15.04.2021	: 3.30 PM

## <u>Technical Bid Format</u> (A) <u>QUALIFYING INFORMATION</u>

Please furnish the following information along with documentary evidence possible only in this format (as eligibility criteria)

## The information to be filled by the Bidders in the following prescribed format required for purposes of Prequalification (copies duly signed and self attested being enclosed).

1.	Name	of Contractor/ Firm	:	
2.	(a)	Year for Establishment of Firm	:	
	(b)	Permanent Address	:	
	(c)	Mailing Address with Contact Numbers and E-mail Id	:	
3.	Princip	pal place of business	:	
4.		nent Account Number ( PAN) v enclosed )	:	
5.	GST F	Registration ( Copy enclosed )	:	
6.	Details	s of Earnest Money Deposit. (E.M.D)	:	
7.	Details of Tender fee ( Demand draft )		:	
8.	Details of the work completed as a Contractor in the last 7 years ending on the last day of the month previous to the one in which the tender are invited. Experience Certificate should be enclosed with Technical bid. Scope of work executed should be as follows:		:	
а.	(attested copies be enclosed )Experience of Construction/Maintenance/Renovation of Buildings etc.Bidder have executed projects mentioned in scope had value as below:		:	
b.	than tend ii. Two than tend iii. On	Or o similar works each of value not less 60% of the estimated cost put to the er. Or e similar works each of value not less 80% of the estimated cost put to the	:	

## 9. Details of work completed.

S.No.	Description of work	Date of	Date of	Address/	Value of work
		Start	Completion	Location/Name of	completed done
				the Client	

If required separate sheet may be enclosed.

10. Detail of Works in hand: (Copy enclosed).

S.No.	Description of work	Date of	Date of	Address/	Cost of	Cost of
		Start	Completion	Location/Name of	the	the work
				the Client	work	executed
					allotted	till date

If required separate sheet may be enclosed.

12. Any other information highlighting the qualifying criteria, competency, credential and capability in handling such works.

Signature of bidder with Seal

#### ESTATE & WORKS INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

#### No. E&W/IE/Tender/245

Dated: March 23,2021

#### **INSTRUCTIONS FOR BIDDING**

#### **TENDER FOR : Repair of Plaster of all heights of Departments & Hostel in Zone F at IIT Roorkee**

Sealed tenders are invited from well established, experienced and resourceful agencies for the above stated works. Please find enclosed herewith the formats of following:

- (A) Technical Bid Form
- (B) Financial Bid Form

It may be noted that tenders should be submitted in the above (enclosed) forms as two separate bids, i.e. (A) Technical Bid, and (B) Financial Bid. Both the bids should be sealed in separate envelops clearly inscribing the name of the work, (A) TECHNICAL BID (B) FINANCIAL BID.

The envelope should be addressed and submitted to the "Institute Engineer (E&W), Indian Institute of Technology Roorkee, Roorkee - 247 667 (U.K.)" so as to reach on due date & time mentioned in the Tender Notice. Tenders received after the due date shall not be considered, what so ever reasons will.

The tender documents can be seen and downloaded from our website <u>www.iitr.ac.in</u>. Tender will be downloaded from the website the requisite tender fee i.e. Rs. 500.00 in shape of demand draft in favour of Registrar, IIT Roorkee be enclosed with the technical bid. The downloaded tenders without tender fee shall not be acceptable and stand rejected.

Bidder shall submit a Bid Security Declaration as in Annexure- A

"Technical Bids" shall be opened at <u>15.04.2021</u> at 3:30 P.M. in the office of the Executive Engineer (Civil), E&W, in the presence of the representatives of the bidding agencies, who so ever want to be present. No separate communication will be made in this regard. The Institute will later evaluate the Technical Bids, to short-list the firms, which fulfill the eligibility criteria, on the basis of their "Technical Bid".

The bidders should be prepared to visit Roorkee for this purpose at short notice. Any additional information needed by the Institute to evaluate the professional capabilities of the bidding firm(s) shall have to be submitted by the concerned firm(s).

**The "Financial Bids" of only the short-listed firms will be opened subsequently after evaluation.** It may also be noted that the tender bids received after the stipulated date & time or found incomplete and the tender bids

It may also be noted that the tender bids received after the stipulated date & time or found incomplete and the tender bids containing false/incorrect information shall be summarily rejected. The Institute shall not entertain any communication in this regard, whatsoever.

Institute reserves the right to cancel any or all tenders without assigning any reason.

Institute Engineer Estate & Works, IIT Roorkee

## **SCHEDULE 'D'**

## Name of work: Repair of Plaster of all heights of Departments & Hostel in Zone F at IIT Roorkee

## **DECLARATION**

**1.** (A) I/We hereby declare that I/we (Name) have no other business relations with the Institute.

## 'Or'

(B) Have the following other association with the Institute.

2. (A) Have no relatives or connection by marriage on the staff of the Institute.

#### 'Or'

(B) Have the following relatives or connection by marriage on the staff of the Institute.

Name	Relationship	Designation	Office in which posted
(i)			
(ii)			
(iii)			
(iv)			
(v)			

Signature and full address of the contractor /contractors

Note: Stick out (a) or (b) of each of the above declaration which is not applicable.

## **UNDER TAKING**

## (ON A NON JUDICIAL STAMP PAPER OF Rs.100/-)

Name and Address of the firm/company/Agency/contractor .....

.....

Name of the tender.....

Due date: .....

Sir,

- 1. I/We hereby agree to abide by all terms and conditions laid down in tender document.
- 2. This is to certify that I/We before signing this bid have read and fully understood all the terms and conditions and instructions contained therein and undertake myself/ourselves abide by the said terms and conditions.
- 3. I/ my authorized representative shall remain available in and around Roorkee during the currency of Contract Bond to attend the emergency complaints/maintenance work on the call of Engineering Incharge.

I/we agree to the forfeit of the earnest money deposit by me in connection with this tender, if I fail to comply with any of the terms and conditions mentioned in the tender document.

(Signature of the Bidder) Name and Address of the Bidder. Telephone No.

# PART -B

# ESTATE & WORKS INDIAN INSTITUTE OF TECHNOLOGY ROORKEE-247667 (U.K.)

No. E&W/IE/Tender/245

Dated: March 23,2021

# **Financial Bid Form**

For

Name of Work: Repair of Plaster of all heights of Departments & Hostel in Zone F at IIT Roorkee.

## Name of work:- Repair of Plaster of all heights of Departments & Hostel in Zone F at IIT Roorkee

Name of the Contractor:		
Contract Bond No	_/I.E., E&W /2020-21	dated

I hereby tender for the execution for the Director/ B.O.G., IIT Roorkee for the work specified in the under written memorandum within the time specified in such memorandum at the rate specified in the attached Appendix "A" and in accordance in all respect with the specification ,designs drawings and instructions in written referred in rules. I therefore, and in clause 2 of the conditions of contract and with such materials as provided for in all other respects in accordance with such conditions as far as possible.

#### **MEMORANDUM**

Sl.No.	Item of work	Approx. Quantity	Tendered rate in In Fig. In words
7. Date of C	Completion	:	
6. Date of s	tart	:	
5. Performa	nce Guarantee	:	
4. Security	money	:	
	owed for the complete f written orders to co		<u>03 Months</u>
2. Tendered	Cost	:	Rs
1. General I	Descriptions of Worl	k :	As above

Bill of quantity as per Appendix "B"

If this tender is accepted I hereby agree to abide by and fulfill all the terms and conditions and provisions of the contract annexed. In case of default Earnest Money to be forfeited and pay to the Registrar, I.I.T. Roorkee or his nominee in office.

Bidder shall Submit a Bid Security Declaration as in Annexure- A

Place: Roorkee
Date :\_\_\_\_\_

Sign. & Address of the contractor.

## ESTATE & WORKS INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE

## TENDER NOTICE

1. Tenders are hereby invited on behalf of B.O.G., IIT Roorkee for the work "Repair of Plaster of all heights of Departments & Hostel in Zone F at IIT Roorkee".

Sealed tenders (Technical Bid and Financial Bid in two separate envelope clearly mentioning Technical Bid / financial Bid) will be received up to 3.00 P.M. on the day of <u>15.04.2021</u> by the Office of the Institute Engineer, Estate & Works, IIT Roorkee and Technical bids shall be opened in the Office of Executive Engineer (Civil) in the presence of bidder or their representative (who so ever want to be present) at 3.30 P.M. hrs. on the day of 15.04.2021.

- 2. The tenderers who desires to be present at the time of opening of the tenders will be permitted to be present.
- 3. The work must be completely finished in accordance with the contract documents within **06 months** Calendar months from the date of receipt of the order to commence work.
- Copies of drawings and other documents pertaining to the work (signed for the purpose of identification by the accepting authority or his accredited representative) will be available for inspection by the tenderer at the office of the Institute Engineer during normal working hours after 10:00 A.M. Tender form can be downloaded our website <u>www.iitr.ac.in</u>. Tender fee of Rs. 500.00 (Non refundable) with deposited in shape of Demand Draft of requisite fee in favour of Registrar, IIT Roorkee with the Technical Bid.
   Diddow shall uplead a Did Sequrity Declaration as in Amaginan.
- 5. Bidder shall upload a Bid Security Declaration as in Annexure- A
- 6. The rates shall be inclusive of GST and all other taxes of any nature. Tenderer should keep in to consideration all fluctuations in market rate and no claim shall be entertained due to any such variation prior to the acceptance of tender and or during currency of the contract.
- 7. (i) No tenderer shall be permitted to tender for work if any or his relative is posted in the service of the Institute in the Administrative Institute Supervision Staff.
  - (ii) Failure on the part of the tenderer to correctly or completely disclosed the names and designations as in sub. Clause (2) above would Tender the earnest money/ the contract, if entered into shall be rescind without any claim for compensation.

## (iii) EXPLANATION

- (a) The expression near relatives used in this clause means father mother, sister, brother, brother-in-law, son-in-law or mother-in-law, son-in-law, father's cousin or self, wife, son, daughter, father, mother, father-in-law or mother-in-law.
- (b) The expression tenderer or self used in this clause includes any partner or Director of the tendering firm of the company as the case may be.
- (iv) Tenderer shall submit with their tender certificates, copies of certificates of their past experience and of their having done work of their magnitude.
- (v) The tenderers are advised to inspect the site of the work and they will be deemed to have familiarized themselves with the scope of the work, local conditions, drawings, specifications conditions of contract etc., before submitting their tender.
- 8. The quantities given in the statement of bill of quantity are liable to vide variations and the contractor shall be bound to execute the changed quantities at his tendered rates without entitling him to any compensation whatsoever. However, in case of increase of quantities of work, suitable extension of time limit for completion of work may be granted.
- 9. Tender shall remain open for acceptance for a period of three months from the date of opening the tenders.
- 10. Canvassing in any form in connection with the tender is strictly prohibited and the tenders submitted by the tenderers who resort to canvassing are liable to be rejected.

- 11. Joint tenders shall not be considered unless parties tendering are registered firm or produce power of attorney from each other.
- 12. The rates shall be written in figures & words and shall be in English or in Hindi and should be free from errors and over writing. All cancellations and insertions shall be duly signed by the tenders. In case of discrepancy between the rates written in words and figures, the rates written in lower side shall be considered.
- 13. All rates shall be quoted on the blank form of the tender documents only. Tenders with rates quoted in pripata paper are liable to be rejected.
- 14. The notice invited tender shall form part of the contract when concluded.
- 15. (a) Not more than one tender for one and the same work would be submitted by one contractor or firm of contractors.
  - (b) In case of firm, tenders must be signed by each partner or member or the person holding the power of attorney on behalf of the firm. In the later case a copy of the power of attorney attested by a Gazetted Officer must accompany.
  - (c) Conditional or incomplete tenders are liable to be rejected.
- 16. Institute is reserved the rights to reject any or all tenders, accept part of any tender without assigning any reason Thereof. If a part of the work is allotted, the tenderer shall have to sign the contract bond for the part Work allotted him. If the tenderer refuses to accept part work so allotted his earnest money shall be forfeited unless it has been clearly specified in the tender that part work shall not be acceptable to him.
- 17. Unless the person whose tender is accepted sign contract and deposits the security specified in para '6' above within 7 days after he is required to do so, the earnest money deposited to him with that tender will be forfeited and acceptance of his tender withdrawn.
- 18. Written notice should be deemed to have been dully served is delivered in person to the contractor of his authorized agent or representative if sent by Registered Post to the last business addressed known to the Institute Engineer or his authorized representative.
- 19. On acceptance of the tender the name of the accredited representative of the contractor who would be responsible for taking instruction from the Chairman, Estate & Works and Engineer In-charge shall be communicated to the Office calling for tenders.
- 20. The tenderer will be asked to deposit security over the face value of agreements as given below at the time of entertaining in to the agreement in the shape of as mentioned in condition No.6 above:
  - a. In the case of works estimated to cost upto Rs. 1.00 lacs ,10% of the estimated cost.
  - b. In the case of works estimated to cost more than Rs. 1.00 lac and upto Rs. 2.00 lacs to 10% on the first 1.00 lac and 7.5% on the balance.
  - c. In the case of works estimated to cost more than Rs. 2.00 lacs to 10% on first Rs. 1.00 lac, 7.5% on the next Rs. 1.00 lac and 5% on the balance.
- 21. Stamp duty will be payable by the contractors as per rules.
  - **Note:** (a) The expression "Engineer In-charge" herein used mean Asstt. Executive Engineer or A.E.E. who shall supervise and be in-charge of the work.
    - (b) Taxes Notification by the Government from time to time would be applicable

Sd-

Institute Engineer Estate & Works, IIT Roorkee

## Annexure-A

## Performa for Earnest Money Deposit Declaration

(One the letter head of Bidder/Contractor)

Whereas, I/We \_\_\_\_\_\_(name of bidder/Contractor)
have submitted bids for
NIT No.\_\_\_\_\_\_
Name of the work: \_\_\_\_\_\_
I/We hereby submit following declaration in lieu of submitting Earnest Money Deposit.
(1) If after the opening of tender, I/We withdraw or modify my/our bud during the period of validity of tender

(including extended validity of tender ) specified in the tender documents,

Or

(2) If, after the award of work, I/We fail to sign the contract, or to submit performance guarantee before the deadline defined in the tender document.

I/We shall be suspended for one year and shall not be eligible to bid for IIT Roorkee tenders from date of issue of suspension order.

Signature of the contractor(s) With official seal

Date :\_\_\_\_\_

## GENERAL CONDITIONS OF CONTRACT(GCC)

## A: GENERAL

#### 1.0 Definitions :

1.1 In this contract, the following terms shall be interpreted as indicated:

- a. "The Contract" means the agreement entered into between the Owner and the Bidder, as recorded in the contract form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein.
- b. "The Contract Value" means the amount payable to the Bidder under the contract for the full and proper performance of its contractual obligations.
- c. "Contract Bond" means any information provided in the tender document and agreed to by the Bidder.
- d. "The Work" means all labour, materials, tools and plant, equipment including government taxes and transport that may be required in preparation of and for and in the full and entire execution and completion of "the Work".
- e. "Services" means services ancillary to the execution of the work such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Bidder covered under the contract.
- f. "GCC" mean the General Conditions of Contract contained in this section.
- g. "SCC" means the Special Conditions of Contract.
- h. "The Owner" means the Indian Institute of Technology Roorkee or its representative.
- i. "The Owner" means the Owner/Project Management Consultant appointed by the Owner for preparing all the drawings, details and specifications of items required for the execution of the work and supervise and monitor the execution at site along with checking and verifying Bidder's bill. The Bidder shall offer the Engineer or any representative of Owner every facility and assistance for examining the works and materials. The Engineer or any representative of the Owner shall have power to give notice to the Bidder or to his staff, of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the Owner. Such examinations shall not in any way exonerate the bidder from the obligations to remedy any defects which may be found to exist at any stage of the work or after the same is completed.
- j. "The Bidder" means the individual or the firm executing the work.
- k. "The Project Site" where applicable, means the place or places named in SCC.
- l. "Day" means calendar day.
- m. "Engineer-in-charge (EIC)" means Assistant Executive Engineer.

#### 2.0 Interpretation and Application

- 2.1 These general conditions shall apply to the extent that provisions in other parts of the contract do not supercede them.
- 2.2 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 Owner will provide instructions clarifying queries about the Conditions of Contract.
- 2.3 If sectional completion is specified in the Contract Bond, references in the Conditions of Contract to the Works, the Completion Date, and the Intended completion date are for the whole of the Works.

#### 3.0 Standards

3.1 The works executed by the Bidder should be carried out in most professional manner, both as regards material and otherwise, in every respect, in strict accordance with the Technical Specifications. All materials and workmanship shall so far as procurable be of the respective kinds described in the priced schedule of quantities and/ or specifications and in accordance with the Owner' instructions, and the Bidder shall upon the request of the Owner, furnish them with all invoices, accounts; receipts and other vouchers to prove that the material procured complies therewith. When no applicable standard is mentioned, the work shall be carried out as per the directions of the Owner. The Bidder shall at his own cost arrange for and/or carry out any test of materials which the Owner may require. In case of discrepancies in tender wording as regards the specifications of materials, workmanship etc., written instructions will supersede the tender wording unless otherwise mentioned.

- 3.2 The Owner in their absolute discretion from time to time shall issue further drawings and/ or written instructions, details, directions and explanations which are hereafter collectively referred to as "the Owner's instructions" in regard to: -
- a. The variation or modification of the design quality or quantity of works or the addition or omission or submission on any work.
- b. Any discrepancy in the drawings or between the schedule of quantities and / or drawings and /or specifications/ dimensions etc.
- c. The removal and / or re-execution of any works executed by the Bidder.
- d. The removal from the site of any materials brought thereon by the Bidder and the substitution of any other materials therefore / or rejection of the material brought on site.

#### 4.0 Use of Contract Documents and Information

- 4.1 The Bidder shall not, without the Owners' prior written consent, disclose the contract or any provision thereof, or any specifications, plan, drawing, pattern, sample or information furnished by or on behalf of the Owner in connection therewith, to any person other than a person employed by the Bidder in performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.
- 4.2 The Bidder shall not, without the Owner's prior written consent make use of any document or information enumerated in Para 4.1 except for the purposes of performing the contract.
- 4.3 All documents included but not limited to contract agreement shall remain the property of the Owner and shall be returned (in all copies) to the Owner on completion of the Bidder's performance under the contract, if so required by the Owner.
- **5.0 Owner's Decisions:** Except where otherwise specifically stated, the Owner will decide contractual matters between the Owner and the Bidder, in the role of representing the Owner.
- **6.0 Performance Guarantee:** The proceeds of the performance guarantee shall be payable to the Owner as compensation for any loss or dues resulting from the Bidder's failure to complete its obligations under the contract.

#### 7.0 Program and Reporting

- 7.1 The bidder shall furnish to the Indian Institute of Technology Roorkee a bar chart laying down weekly financial and physical targets to complete the project within stipulated time for approval within fifteen days from the date of receipt of notification of award. Weekly progress report shall be furnished to the owner showing the progress.
- 7.2 The bidder must submit every week the following information to the Owner in writing:
- i. Number of men employed, trade wise;
- ii. Progress achieved;
- iii. Expected dates for completion of work;
- iv. Any actual or potential delay in completion schedule.

#### 8.0 Assignment and Sub-contracting

- 8.1 The whole of the works included in the Contract shall be executed by the bidder and the bidder shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein without the written consent of the Owner.
- 8.2 No sub-contracting shall relieve the Bidder from the full and entire responsibility of the Contract or from the active superintendence of the work during their progress.

#### 9.0 Bidder to provide everything necessary for proper execution of work

9.1 The Bidder shall provide everything necessary for the proper execution of the works according to the intent and meaning of the drawings, priced schedule of quantities and specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from. If the Bidder finds any discrepancy therein he shall immediately and in writing refer the same to the Owner whose decision shall be final and

binding. Further, if any sample(s) of material(s), fittings, fixtures or finished item(s), to be used in the construction work, has/have been called for from the bidder, no work related to it/these shall be executed unless the same has/ have been approved by the Owner failing which no payment shall be made to the bidder on this account. Any sample, duly approved by the Owner shall become part of the supply to be used in "the works".

- 9.2 The Bidder shall arrange for water & power supply at site at his cost for the entire work. The water to be used for construction shall be free from excessive salts and minerals that are harmful to the construction work. Making arrangement of water good for construction either through external supply or through treatment at site shall be entirely the responsibility of the Bidder. The Bidder shall on demand of the Owner / PMC get any random water samples tested at the approved testing laboratories. No extra payment shall be made for arranging water good for construction under any circumstances. No excuse for / of Municipal water / electric supply shall be entertained. The bidder shall ensure provision of electricity by generator and water by tanker transport if necessary. No claim shall be entertained on this account. In case the same will be provided by the Owner at any stage, then water/electricity charges shall be deducted from the Bidders running bills as per actual metered consumption.
- 9.3 The Bidder shall supply fix and maintain at his cost, during the execution of any works, all the necessary power supply, water supply, centering, scaffolding, watching and lighting by night as well as by day, required not only for the proper execution but also for protection of the public and the safety of any adjacent roads, streets, pavements, walls houses, building and other erections, matters or things. The Bidder shall take down and remove any or all such centering, scaffolding, staging, planking, timbering, strutting, shoring pumping, fencing, hoarding, watching and lighting by night as well as by day, required not only for the proper execution but also for protection of the public and the safety of any adjacent roads, streets, pavements, walls houses, building and other erections matters or things. The bidder shall take down and remove any digacent roads, streets, pavements, walls houses, building and other erections matters or things. The bidder shall take down and remove any or all such centering, scaffolding, staging, planking, timbering, strutting, shoring etc. as occasion shall require or when ordered so to do so and shall fully reinstate and make good all matters and things disturbed during the execution of the works, to the satisfaction of the Owner.
- 9.4 Throughout the execution of the work, the Bidder or his representative duly authorized and fully responsible and technically conversant with the work under this agreement, acting on his behalf shall be available at the site for supervising the work. The Bidder shall make adequate arrangements for watchmen to guard the materials brought by them to the site and shall ensure the safety, breakage and any theft of materials fixed or unfixed by him. Any material, T & P brought to the site for bonafide use of the Project shall not be removed/ shifted from the site without the prior written permission of the Engineer/Owner.
- 9.5 The bidder has to provide at his cost leveling pipe, steel/ metallic tapes etc. required by the supervising staff of the Owner's/Owner' representative during execution of the work.
- 9.6 Whenever required by the Owner, the Bidder shall provide shop drawings / details before execution of work and get them approved by the Owner.
- 9.7 Wherever the specification of any item indicates the usage of approved equivalent of any material, the Bidder shall get the sample of the equivalent material approved from the Owner before execution. The approval of the equivalent material is entirely at the discretion of the Owner.
- **10.0 Infrastructure:** For storage of materials, bidder has to provide at his own cost sufficient fenced and covered appropriate area on site for storage of above materials with lock and key arrangement. For arranging meetings suitable sized table and chairs shall be provided by Bidder. Temporary space shall be provided to the Bidder for construction of stores for storage of materials /site office/ labour hutments for the project period.
- 11.0 Site Establishment: The bidder shall provide all stores, workmen and materials. All materials likely to deteriorate in the open shall be stored under suitable cover. The security of the bidder's equipment and materials is his own responsibility. The Owner accepts no liability for loss or damage to the bidder's plant tools or materials. The materials issued to the bidder by the Owner will remain under the custody of bidder as a trustee. However, title on the same will remain with the Owner. The bidder will be responsible for loss or damage to such materials and shall preserve them in good working conditions as required for the contract and good construction practices till such time that they are incorporated in the works and erected, aligned and fully installed in position and handed over to the Owner. In case the Owner feels that arrangements made by the bidder are not adequate he shall so advice the bidder and the bidder shall promptly take corrective action. In case the bidder fails to take corrective action, Owner shall take such corrective actions and recover the cost thereof from the bidder's bills. Accounts of such material on completion of work shall be rendered and surplus material returned to the Owner as per instructions of Owner. The bidder shall clear away periodically or as instructed by Owner any rubbish, scrap materials, etc. and dump the same in the authorized dump sites notified by local authority/area indicated by the Owner. All construction materials shall be neatly stacked in an orderly manner as directed by the Owner and care shall be taken to allow proper access to workmen and easy movement of men, vehicles, cranes and materials. The bidder shall maintain all the drawings carefully mounted on the board of appropriate size and well

protected from the ravages of weather, termites and other insects. The bidder shall not permit the entry to the site of any person not directly connected/concerned with the work without first having obtained the written permission of Owner. The bidder shall submit a list of plants, equipments, tools, tackles, etc. which he will use, to perform the work. These tools, etc. shall not be removed from the site till the completion of job. A gate pass must be obtained from the Indian Institute of Technology Roorkee, chief proctor office, in order to remove from site any plant equipment, tools and materials. All items such as instructions and other pertinent data regarding erection/commissioning and maintenance should be typed and classified for transmittal in a manner approved by the Owner. For all employees of Owner, the bidder shall conform for no misconduct from any of his workforce; failure of this will be sufficient cause for removal of such person from the site.

**12.0 Messing & Accommodation:** The bidder will make his own arrangements for messing and accommodation. No accommodation and messing shall be provided by the Owner.

#### 13.0 Procurement, Consumption and Storage of Materials

- 13.1 The bidder shall at his own expenses, provide all materials including cement & steel required for the works. Adequate stocks of all materials required for the work are to be maintained at site. No material (unless as provided elsewhere in this document) shall be supplied by the Owner.
- 13.2 All materials to be provided by the bidder shall be in conformity with the detailed specifications laid down in the contract and the bidder have to prove that the materials conform to the laid down specifications, if requested by the Indian Institute of Technology Roorkee.
- 13.3 All materials required for execution of work must be got approved by the site representative of the Owner before they are actually put to use. All facilities for prior inspection of materials and subsequent inspection of work by the Site Engineer must be made available.
- 13.4 The bidder shall, at his own expenses and without delay, supply to the Owner samples of materials proposed to be used in the work. The Owner shall within seven days of supply of samples, or within such further period as Owner may require and intimate the bidder in writing, whether samples are approved by Owner, or not. If samples are not approved, the bidder shall forthwith arrange to supply, for their approval, fresh samples complying with the specification laid down in the contract.
- 13.5 The Owner shall have full powers to require removal of any or all the materials brought to site by the bidder which are not in accordance with the contract specifications or do not conform in character or quality to the samples approved Owner. In case of default on the part of the bidder in removing rejected materials, the Owner shall be at liberty to have them removed by other means. The Owner shall have full powers to direct other proper materials to be substituted for rejected materials and in the event of the bidder refusing to comply. Owner may cause the same to be supplied by other means. All risks and costs which may attend upon such removal and/or substitution shall be borne by the bidder.
- 13.6 Bidder shall be responsible for procurement of all materials/equipments etc. No delay due to non-availability of any material equipment will be entertained by Owner.

#### 14.0 Method of storing the materials

- 14.1 The bidder shall at his own cost, provide for all necessary storage on the site in specified areas for all materials such as steel, cement and such other materials which are likely to deteriorate by the action of sun, wind, rain, dampness or other natural causes due to exposure in the compounds or in stores in such a manner that all materials, tool etc. shall be duly protected from damage by weather or any other cause.
- 14.2 Materials required for the works, by the bidder be stored by the bidder only at places approved by the Owner. Storage and safe custody of materials shall be the responsibility of the bidder. All the materials including bidder's Tools & Plants brought by the bidder to the site shall become and remain the property of the Owner and shall not be removed off the site without prior written approval of the Owner/Owner. But whenever the works are finally completed and advances, if any, in respect of such materials are fully recovered, the bidder shall at own expenses forthwith remove from the site all surplus materials supplied by him and upon such removal, the same shall revert in and become the property of the bidder.
- **15.0** Shuttering and Scaffolding Materials: It shall be desirable to have adequate amount of shuttering and scaffolding materials to complete the work speedily and Owner decision so as to the quantum of these desirable/ resources of the site shall be final and binding.
- **16.0 Completion of Work:** Before finally leaving site, all the Bidders stores, plant, tools and rubbish shall be removed and the site left clean and tidy. The space allocated by Owner shall be vacated and handed over to the Owner.

#### 17.0 Water and Electricity for Construction work : Water & Electricity as per relevant section's mentioned above

#### 18.0 Employment of Labour

- 18.1 The bidder shall comply with the requirement of statutory provisions and shall be solely responsible for fulfillment of all legal obligations under Contract Labour (R&A) Act, Inter State Migrant Workmen (Registration of Employment and condition of Service Act, Payment of Wages Act., Minimum Wages Act, Workmen's Compensation Act, Factories Act, Employee's Provident Fund & Miscellaneous Provisions Act, Payment of Bonus Act, Payment of Gratuity Act, Industrial Disputes Act and all other Industrial/Labour enactments and Rules made there under as applicable from time to time. In case Owner incurs any liability towards payment of any dues, compensation, cost of any other liability of any kind whatsoever, due to non-fulfillment of statutory provisions under any industrial/labour laws by the bidder, the same shall be made good by the bidder and Owner shall have full right to recover and claim the same against the bidder from his outstanding bills or otherwise. No Labour to stay at site.
- 18.2 The bidder will be expected to employ on the work only his regular skilled employees with experience of this particular work. The permission of the Owner must be obtained before tradesman are recruited locally for the work. This rule does not apply to unskilled labour. No female labour shall be employed in dark hours/ i.e. hours prohibited under the applicable law. No person below the age of eighteen years shall be employed at any point of time. The bidder shall pay, to each person, the wages as per minimum Wages Act of the State Government.
- 18.3 All traveling expenses including provision of all necessary transport to and from site, lodging allowances and other payments to the bidder's employees are his own responsibility. The hours of work on the site shall be decided by the Owner and bidder shall adhere to the same. All bidders employees shall wear safety helmet and such identifications marks as may be provided by bidder on work site and duly approved by Owner. All notices displayed on the site and any instructions issued by the Owner shall be strictly adhered to by the Bidder's and/or his sub-bidders employees. The bidder shall be required to maintain employment records as covered in relevant Acts and produce documentary evidence to the effect that he has discharged his obligations under the Employees Provident Fund Act 1952, and ESI Act, 1948 Group Insurance and other Acts for the workmen working at site.
- 18.4 The bidder shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Dean Infrastructure/Executive Engineer may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The bidder shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.
- **19.0 Working and Safety Regulations:** The bidder shall observe all statutory safety and legal requirements regulations issued by Central and State Governments applicable to the work as well as any local regulations applicable to the site issued by the Owner or any other authority.
- **20.0** Particular attention is drawn to the following: In case of accident, the Owner shall be informed in writing forthwith and First-Aid, Hospitalization shall be provided by the Bidder. The bidder shall strictly follow regulations laid down by Govt. and State authorities in this regard and all cases are to be defended by the bidder. The Owner shall not refund any insurance claims. Bidder shall fence his plant, platforms, excavations etc. Compliance with all electricity regulations. Compliance with statutory requirements for inspection and test of all lifting appliances and auxiliary lifting gear. Staircase, doors or gangways shall not be obstructed in any way that will interfere with means of access of escape. Where it is necessary to provide and/or store petroleum products or petroleum mixtures and explosive, the bidder shall be responsible for carrying out such provision and/or storage in accordance with the rules and regulation laid down in Petroleum Act 1934. Explosive Act 1948 and Petroleum and Carbide of Calcium Manual Published by the Chief Inspector of Explosive of India. All such storage shall have prior approvals of the Owner. In case any approval or clearance from Chief Inspector of Explosive or any statutory authorities is required, the bidder shall be responsible for obtaining the same.

The bidder shall have his own Fire Fighting Extinguishers and Equipment. The bidder shall be responsible for the provision of all safety notices safety equipments including the safety gadgets for his workmen required by both the relevant legislation and such as the Owner may deem necessary. While working at heights, safety belts and safety helmets shall necessarily be used.

- **21.0** Owner's and Bidder's Risks: The Owner carries the risks, which this Contract states are The Owner risks, and the Bidder carries the risk, which this Contract states are The Bidder's risks.
  - 21.1 Owner's Risks: The Owner is responsible for the accepted risks which are :

- a. In so far as they directly affect the execution of the Works. These include war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection of military or usurped power, civil war, riot commotion or disorder (unless restricted to the Bidder'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 Bidder's design.
- 21.2 Bidder's Risks: All risks of loss 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 accepted risks of the owner.
- 21.3 The Bidder shall be responsible for all injury to persons, animals or things, and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of himself or of any sub-bidder or of any of his or sub-bidder's employees whether such injury or damage arises from carelessness accident or any other causes whatsoever in any way connected with the carrying out to the Contract. This clause shall be held to include interalia any damage to buildings, whether immediately adjacent or otherwise and any damage to roads, footpaths, or ways as well as all damage caused to the buildings and the work forming the subject to this Contract by frost, rain or other inclemency of the weather. The Bidder shall indemnify the Owner and hold him harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of Government or otherwise and also in respect of an award of compensation or damages consequent upon such claim. The bidder shall make good all damages of every sort mentioned in the Clause, as to deliver up the whole of the Contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

#### 22.0 Insurance

- 22.1 The Bidder shall provide, in the joint names of the Owner and the Bidder, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Contracted Data for the following events which are due to the Bidder's risks and shall be covered under respective policies as under :
  - a. Workmen Compensation Policy;
  - b. Bidder's All Risk Policy;
  - c. Third Party Insurance.
- 22.2 Policies and certificates for insurance shall be delivered by the Bidder to the Owner for the approval before the Date of Start of work i.e. dates of execution of the contract. 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.
- 22.3 If the Bidder does not provide any of the policies and certificates required, the Owner may affect the insurance which the Bidder should have provided and recover the premiums the Owner has paid from payments otherwise due to the Bidder or if no payment is due, the payment of the premiums shall be a debt due.
- 22.4 Alterations to the terms of the insurance shall not be made without the approval of the Owner.
- 22.5 Both parties shall comply with the conditions in the insurance policy.
- **23.0 Setting out Works:** The bidder shall set out the works and responsible for the true and perfect setting out of the same and for the correctness of the positions, levels, dimensions and alignment of all parts thereof, if at any time any error shall appear during the progress of any part of works the bidder shall at his own expenses rectify such error, if called upon to the satisfaction of the Owner.
- 24.0 Bidder to remove all offensive matter, non-suitable material etc immediately.
  - 24.1 All debris, excavated soil, filth or other matter or an offensive nature taken out of any trench, sewer, drain cesspool or other place shall not be deposited on the surface but shall be at once carted away by the bidder out of the premises/ site under intimation to concerned authorities.
  - 24.2 Any material brought on site if found unsuitable shall be removed from site at once by the Bidder under intimation to the concerned authorities.

#### 25.0 Inspections by Owner

25.1 The representative of the Owner at all times have free access to the works and /or to the workshops, factories or other places where materials are being prepared or constructed for the Contract and also to any place where materials are lying or from which they are being obtained. No person except the representatives of Public authorities shall be allowed on the work at

any time without the written permission of the Owner. If any work is to be done at a place other than the site of the works, the Bidder shall obtain written permission of the Owner for doing so.

- 25.2 The Owner and their representatives shall have the right to test and/ or inspect the works to confirm their conformity to the contract, at all times, whenever in progress either on the site on the Bidder's premises wherever situated or any firm or company where work in connection with this contract may be in hand. All records, registers or documents relating to the works including materials used on works shall be kept open to the inspection of the Owner or his Authorized representative when so called for in writing.
- 25.3 The Bidder shall get the quality of work done inspected for material and workmanship at different stages of execution as per instructions given by the Owner or their representative time to time. Any item of work done which is found not conforming to the Contract shall be rejected by the Owner. The decision of the Owner in such cases shall be final.
- 25.4 The inspections and tests may be conducted on the premises of the Bidder or at the Project site. When carried out on the premises of the Bidder or its sub-Bidder(s), all reasonable facilities and assistance including access to drawings and production data shall be furnished to the inspectors at no charge to the Owner.
- 25.5 Should any inspected items of work fail to conform to the specifications, the Owner shall communicate them and the Bidder shall either replace them or make all alterations necessary to meet specification requirements free of cost to the Owner.
- 25.6 The Bidder shall permit the Owner/Architect to inspect the Bidder's accounts and records relating to the performance of the Bidder and to have them audited by auditors appointed by the Owner, if so required.

#### 26.0 Covering Up/Uncovering of Works

- 26.1 No part of the works shall be covered up without the approval of Owner and the Bidder shall afford full opportunity for examination and inspection by the Owner. The bidder shall give due notice to the EIC about the work to be covered up for its measurements and examination. The EIC shall within a reasonable time attend for the purpose of examining such work, unless the EIC specifically advises the Bidder in writing of his unwillingness not to attend for such examination in which case the Bidder may proceed further with the Contract work.
- 26.2 Should the Owner consider it necessary in order to satisfy himself as to the quality of the work, the Bidder shall at any time during the continuance of the contract pull down or cut into any part of the work and make such opening into and to such an extent through the same, as the Engineer may direct and the Bidder shall make good the whole to the satisfaction of the Engineer, should the work prove to be faulty or in any respect not in accordance with the terms of the contract documents, the Engineer shall be at liberty to order such further removal as he may consider necessary and the whole of the expenses incurred shall be borne by the bidder. If however, the work proves to be sound and in accordance with the contract document, the actual expenses incurred in such examination will be borne by the Owner.
- 26.3 Rates charged by the Bidder for works performed under the contract shall not vary from the rates quoted by the Bidder in its bid, with the exception of any price adjustments authorized in SCC or in the Owner's request for bid validity extension, as the case may be.
- 26.4 If requested by the Owner, the Bidder shall provide the Owner with a detailed cost breakdown of any rate in the Schedule of Quantities.
- 26.5 The Owner may at any time / stage of execution demand for the Analysis of Rates for any item / items of work which in their opinion is / are abnormally high / low rates or required for the Analysis of Rates of other Publish / extra item / items. The Bidder is bound to present the same and if the Bidder is unable to present a justified Analysis of Rates for any item / items, the rate / rates for such item may be adjusted accordingly and the decision of the Owner in such cases shall be final.

#### 27.0 Change in the order/ Extra items of work

- 27.1 The Owner may at any time, by written order given to the Bidder, make alterations in, omissions from, additions to, or substitutions for, in drawings, designs or specifications or quantities of the items of work
- 27.2 Owner reserves to itself the right of omission of any item of work from the awarded, Publish at any time / stage during the execution of work and award the same to another agency / bidder.
- 27.3 The Owner may at any time, by written order given to the Bidder, increase the scope of work or include any new item of work. The Bidder shall be bound to carry out such works, the rates for which shall be arrived at on the basis of the CPWD Schedule of Rates or if the Schedule is silent by standard methods of rate analysis as derived by the Owner/Architect.

#### 28.0 Payment

- 28.1 The method and conditions of payment to be made to the Bidder under the contract shall be specified in SCC.
- 28.2 Payment shall be made promptly by the Owner after certification of the bill by the Owner.

28.3 All intermediate running payments to the bidder shall be regarded as payments by way of advance against the final payment and shall not preclude the requiring of bad, unsound and imperfect or unskillful work to be removed, taken away and reconstructed or re-erected.

#### 29.0 Variations and Provisional Cost (If applicable):

- 29.1 Where work cannot be measured and valued properly, the Bidder shall be allowed day work rates on the prices prevailing when such work is carried out (unless otherwise provided in the contract): a. At the rates if any inserted by the Bidder in the priced Schedule of Quantities or b. If no such rates have been inserted then at the rates prevailing in the market for material and labour and at the control rates for the controlled materials including in all cases the rate for delivery of the material at the work.
- 29.2 Provided that in any case voucher specifying the time daily spent upon the work (and if required by the Owner the workman's names) and the materials used shall be delivered for verification to the Owner, or his authorised representative not later than the end of the week following that in which the work has been executed. Effect shall be given to the measurement and valuation of variations in interim Certificates and by adjustment of the total Contract Value.

#### 30.0 Claims for Extra or for Deductions

- 30.1 The Owner shall not be responsible for the payment of any claim for extra work not included in the contract nor the Bidder shall be entitled to claim any addition to the contract sum in respect of any changes or alterations in the materials used unless the same shall have been ordered or sanctioned, as the case may be, in writing by the Owner.
- 30.2 The Bidder has to submit a monthly return by 10th of the ensuing month for any extra work which in his opinion is not covered by the contract agreement through the Owner's/ Owner's representatives and obtain a receipt from the authorized signatory of the Owner. Failing this, he shall have no right to any such claim, whatsoever may be the circumstances, later on.
- 30.3 In the event of any dispute arising either as to validity of the claim or as to the account to be paid or allowed in respect thereof, the decision of the Owner shall be final and binding on the bidder. In the meantime, the Bidder may either proceed with the work in question or suspend the same as may be determined by the Owner.
- 30.4 All extra works (those permitted by Owner) of every description shall be executed by bidder on site of work in pursuance of any of the provision of the contract, shall be measured up, and shall be paid according to actual quantities ascertained by such measurements and the prices as finalized by the Owner based on the priced schedule of quantities so that such priced schedule of quantities shall include all such operations and accessories as appear in the said schedule of prices or specification to be or shall in the opinion of the Owner the contingencies upon the works mentioned in such schedule of prices or required to make such works perfect and fit for use.
- 30.5 Provided also that if any work shall be ordered by the Owner and executed by the Bidder for the payment of which no provision in the opinion of the Owner have been made in the priced schedule of quantities or the specifications, the Owner shall fix and determine such prices for the same based on the prices appearing in the priced schedule of quantities, such allowance being made as may seem to the Owner sufficient for any difference in the character of conditions of the work. However, rates for extra items shall be fixed on the basis of actual rate analysis.
- 30.6 If, it shall appear that the work has been executed with unsound, imperfect or unskilled workmanship, or with material of any imperfect or any inferior quantity or otherwise not in accordance with the contract documents the Bidder shall at his own cost rectify, reform, remove, or reconstruct the same, wither in the whole or in part, as may be directed by the EIC, whether or not the value of any such work or materials shall have been included in any payment made to the Bidder.
- 30.7 The Bidder shall remove all malba etc., wash and clean the floors and hand over the site quite clean on the completion of the work.

#### **31.0** Delay in the Bidder's performance

- 31.1 Execution of the work and performance of the services shall be done by the Bidder in accordance with the time schedule specified by the Owner in the Notice inviting tender.
- 31.2 If, at any time during performance of the contract, the Bidder should encounter conditions impending timely execution of the works and performance of services, the Bidder shall promptly notify the Owner in writing of the fact of the delay, it's likely duration and its cause(s). As soon as possible, after receipt of the Bidder's notice, the Owner shall evaluate the situation and may, entirely at its discretion, extend the Bidder's time for performance with or without liquidated damages.
- **32.0 Liquidated Damages**: If the Bidder fails to execute any or all of the works or to perform the services within the period(s) specified in the contract, the Owner shall deduct from the contract value, as liquidated damages, a sum specified in the SCC for

each week or part thereof delay until actual completion or performance, up to a maximum deduction of the percentage specified in SCC. Once the maximum is reached, the Owner may consider termination of the contract.

#### **33.0** Termination by Default

- 33.1 The Owner may without prejudice to any other right or remedy, by written notice (of fifteen days) of default sent to the Bidder, terminate the contract in whole or part: a) if the Bidder fails to complete any or all of the works within the period(s) specified in the NIT or any amendment thereof, or within any extension thereof granted by the Owner, or b) if the Bidder fails to perform any other obligation(s) under the contract,
- 33.2 In the event, the Owner terminates the contract in whole or in part, the Owner may procure, upon such terms and in such manner as it deems appropriate, works or services similar to those unexecuted and the Bidder shall be liable to the Owner for any excess costs for such similar work or services. However, the Bidder shall continue the performance of the contract to the extent not terminated.

#### 34.0 Force Majeure

- 34.1 The Bidder shall not be liable for forfeiture of its Security Deposit, liquidated damages or termination by default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.
- 34.2 For purposes of this clause, "Force Majeure" means an unforeseeable event beyond the control of the Bidder and is not because of the Bidder's fault or negligence. Such events may include acts of the Owner either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics.
- 34.3 If a Force Majeure situation arises, the Bidder shall promptly notify the Owner in writing of such conditions and the cause thereof. Unless otherwise directed by the Owner in writing, the Bidder shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- **35.0 Termination for Insolvency:** The Owner may at any time terminate the contract by giving written notice to the Bidder, if the Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Bidder, provided such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Owner.
- **36.0 Termination for Convenience:** The Owner, by written 30 days prior notice sent to the Bidder may terminate the contract, in whole or in part, at any time for its convenience. The notice shall specify that the termination is for Owner's convenience, the extent to which performance of the Bidder under the contract is terminated, and the date upon which such termination becomes effective. The items of work that are complete and ready within (1) month after the Bidder's receipt of notice of termination shall be accepted by the Owner at the contract terms and values. For the remaining works, the Owner may elect;
  - a) to have any portion completed at the contract terms and value and/or
  - b)to cancel the remainder and pay to the Bidder an amount, finalized by the Owner, for partially completed works and for materials and parts previously procured by the Bidder.

#### **37.0 Resolution of Disputes**

- 37.1 The Owner and the Bidder shall make every effort to resolve amicably by direct informal negotiations any disagreement or dispute arising between them under or in connection with the contract. If, after thirty (30) days from the commencement of such informal negotiations, the Owner and the Bidder have been unable to resolve amicably a contract dispute, either party may require that the dispute be referred for resolutions to the formal mechanisms specified in the SCC. These mechanisms may include but are not limited to, Arbitration in accordance with rules of Arbitration Act and award made in pursuance thereof shall be binding on both the parties.
- 37.2 All disputes should be under the Jurisdiction of civil court Roorkee.
- **38.0** Governing language: The contract shall be written in Hindi or English language. All correspondence and other documents pertaining to the contract that are exchanged by the parties shall be written in the same language.
- **39.0 Governing law:** The contract shall be governed by the laws of The Union of India for the time being in force. All disputes are subject to jurisdiction of courts at Roorkee or Honourable High Court Uttrakhand at Nainital.
- **40.0** Notices: Any notice given by one party to the other pursuant to this contract shall be sent to other party in writing or by cable, telex, or facsimile and confirmed in writing to the other party's address specified in SCC. A notice shall be effective on the date on when it is delivered, or on the notice's effective date, whichever is later.
- **41.0 Discoveries:** Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Owner. The Bidder is to notify the Owner of such discoveries and carry out the Owner' instructions for dealing with them.
- **42.0** Dismissals of workmen: The bidder on request from the Owner, immediately dismiss from the works any person employed by him who may be found in the opinion of the client to be unsuitable or incompetent or who has shown misconduct.

**43.0 Working Hours:** Normal working hours shall be from 08:45 a.m. to 05:30 p.m. No construction work of important structural nature shall be carried out on Sundays, Holidays and during nights. However, permission to work beyond normal working hours can be granted by the Owner in exceptional circumstances to achieve the target schedule of completion.

# **B. TIME CONTROL**

#### 44.0 Program

- 44.1 Within the time stated in the Contract Bond the Bidder shall submit to the Owner for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the works, along with weekly cash flow forecast. 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.
- 44.2 The Bidder shall submit to the Owner, for approval, an updated Program at intervals no longer than the period as stated in the clause no. 7.1. If the Bidder does not submit an updated Program within this period, the Owner may withhold the amount stated in the Contract Bond 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.
- 44.3 The Owner's/Owner's approval of the Program shall not alter the Bidder's obligations. The Bidder may revise the Program and submit it to the Owner again at any time. A revised Program is to show the effect of Variations at any stage of work, Owner award any item/part of item of work to bidder's workman/ external agency, if in their opinion, the progress of work is suffering because of that. The work done will be added to the Bidder's bill and the amount paid for the job will be deducted from the Bidder's account.

#### 45.0 Delay and Extension of time

If in the opinion of the Owner the work be delayed

- a) by force majeure or
- b) by reason of any exceptionally inclement weather or
- c) by reason of proceedings taken or threatened by or disputes with adjoining or neighboring owners or public authorities or
- d) by delays of other bidder or Tradesmen engaged by the Owner or the Owner and the works not referred to in the Schedule of Quantities and/or specification or
- e) by reasons of Owner's instruction or
- f) by reason of civil commotion, local combination of workmen or strike or lockout affecting any of the building trades or
- g) in consequence of the bidder not having received in due time necessary instructions from the Owner for which he shall have specially applied in writing or
- h) from other cause which the Owner may certify as beyond the control of the bidder or
- i) by reason of nonpayment of interim certificate at specified time, the Owner shall grant for approval by the Owner a fair and reasonable extension of time for completion of the Contract. In case of strike or lockout the bidder shall as soon as may be given written notice thereof to the Owner, but the bidder shall nevertheless constantly use his endeavors to prevent delay and shall do all that may reasonably be required to the satisfaction of Owner to proceed with the work.

## **C. QUALITY CONTROL**

**46.0 Identifying Defects:** The Owner shall check the Bidder's work and notify the Bidder of any Defects that are found. Such checking shall not affect the Bidder's responsibilities. The Owner may instruct the Bidder to search for a Defect and to uncover and test any work that the Owner considers may have a Defect.

#### **47.0** Correction of Defects

- 47.1 The Owner shall give notice to the Bidder of any Defects before the end of Defects Liability Period, which begins at Completion and is defined in the Contract Bond. The Defects Liability period shall be extended for as long as Defects remain to be corrected.
- 47.2 Every time notice of Defect is given, the Bidder shall correct the notified Defect within the length of time specified by the Owner' notice.

**48.0** Uncorrected Defects: If the Bidder has not corrected a Defect within the time specified in the Owner' notice, the Owner will assess the cost of having the Defect corrected, and the Bidder will pay this amount.

# **D. COST CONTROL**

#### 49.0 Schedule of Quantities

- 49.1 The Schedule of Quantities shall contain items for the construction work, installation, testing, and commissioning work to be done by the Bidder.
- 49.2 The Schedule of Quantities is used to calculate the Contract Price. The Bidder is paid for the quantity of the work done at the rate in the priced Schedule of Quantities for each item.
- **50.0 Variations:** All variations in the program pursuant to clause no. 7.0 of GCC shall be included in the updated program produced by the Bidder.

#### 51.0 Payments for Variations

- 51.1 The Bidder shall provide the Owner with a quotation (with breakdown of unit rates) for carrying out the Variation when requested to do so by the Owner. The Owner shall assess and finalise the quotation, which shall be given within seven days of the request or within any longer period stated by the Owner and before the Variation is ordered.
- 51.2 If the Bidder's quotation is unreasonable, the Owner may order the Variation and make a change to the Contract Price which shall be based on Owner' own forecast of the effects of the Variation on the Bidder's costs.
- 51.3 If the Owner 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 shall be treated as a Variation.
- 51.4 The Bidder shall not be entitled to additional payment for costs, which could have been avoided by giving early warning.

## **<u>E: FINISHING THE CONTRACT</u>**

- **52.0** Completion Certificate: The Bidder shall request the Owner to issue a Certificate of Completion of the Works will do so upon deciding that the Work is completed.
- **53.0 Taking Over:** The Owner shall take over the Site and the Works within Ten days of the Owner issuing a certificate of Completion. Before handing over the site, the bidder must obtain a site clearance certificate from the Owner.
- **54.0 Final Account:** The Bidder shall supply to the Owner a detailed account of the total amount that the Bidder considers payable under the Contract before the end of the Defects Liability Period. The owner shall issue a Defect Liability Certificate and certify any final payment that is due to the Bidder after receiving the Bidder's account if it is correct and complete. If it is not, the Owner shall issue schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Owner shall decide on the amount payable to the Bidder and issue a payment certificate after receiving the Bidder's revised account.

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## SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract are supplementary, to the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the General Conditions of Contract is indicated in parentheses.

#### 1. Definition (GCC clause 1.0)

- a) Owner means : IIT Roorkee.
- b) Site means the project site situated in IIT Roorkee Main Campus, Saharanpur Campus and Greater Noida Extension Centre (GNEC).

#### 2. Security Deposit :

- (i) Total Security Deposit The (Earnest Money Deposit) EMD of the successful Bidder shall form a part of the Total Security Deposit and to be deposited as per critical data sheet.
- (ii) Release of Security Deposit: Security Deposit will be refunded by the Owner after completion of Defect Liability Period i.e.
   6 months from date of virtual completion.
- 3. Performance Security Within Ten days (10) after the Bidder's receipt of Notification of Award, the Bidder shall furnish Performance Security to the Owner for an amount of 5% of the accepted bid Value in the form of Cash or Bank Guarantee from Nationalised/Scheduled Bank to the Owner. The Performance security shall be refunded/returned to the bidder on completion of work and recording of the completion certificate.

## 4. Payment against Running Bills:

The Bidder shall be paid for the work done against running bills to be raised not more than monthly. The Final bill will be certified within 60 days from the date of submission. The following payment will be recovered from the bills: Statutory deductions like income Tax, Cess under Building and Other Construction Workers Welfare Cess Act, 1996 etc. as applicable. Any other recovery if becomes due.

Payment shall not be released against 1st R/A bill until submission of following documents by bidder to the Owner:

- a) GST Invoice with revenue stamp.
- b) EPF & ESI deposit proof (if applicable)
- c) Insurance Bidder's All Risk (CAR) Policy, Workmen compensation policy and Third Party Liability Insurance (if applicable)

#### 4.1.1 Basis of Payment in RA bills

Payment in RA bills shall be based on quantity of work executed at site (as per the item of work) & verified by Owner as per the item rate in work orders. Owner is authorized to allow part rate/reduced rate for any item of work.

#### 4.1.2 Disallowance of payment

If payment has been made in RA bill for any item of work but later on some defect is noticed, Owner/Architect is authorized to disallow the payment in the subsequent bills till rectification of the work.

#### 4.2 Final bill

The final bill complete in all respect shall be submitted by the bidder within 60 days from the date of completion of work. The total quantity may vary as per actual work execution/site requirement/and user suggested changes during execution. The bill should be accompanied with the following documents.

- a) Job completion certificate.
- b) Site clearance certificate.
- c) Indemnity certificate towards labour payment and all statutory payments.
- d) Certificate of test on materials etc. (if applicable.)
- e) Certificate of measurement sheets.
- f) Original quality control record, measurement records and any other joint site records maintain at site (if applicable). No claim shall be entertained after receipt of final bill.
- g) Warranty certificate.

Settlement of final bill shall be made subject to deduction of all dues payable by bidder, settlement of all disputes and furnishing of all required documents/clarifications and grant of extension of time, if any, by Owner's competent authority.

#### 5. Liquidated Damages

0.5% per week of balance / unattended work subject to a maximum of 5% (Five percent) of the Contract value from the stipulated date of completion.

#### 6. Resolution of Disputes

In case the parties don't agree to the advice of owner, then the Director, IIT Roorkee shall appoint a sole arbitrator within 30 days of receipt of request forthwith. The arbitration shall be governed by Arbitration and Reconciliation Act 1956.

#### 7. Notices

For the purpose of all notices, the following shall be the address of the Owner and the Bidder. Owner: Dean Infrastructure.

Dean Infrastructure, Estate & Works, Indian Institute of Technology Roorkee

Bidder:

(To be filled in at the time of Signing of the Contract)

#### 8. Resolution of Disputes & Arbitration

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, terminations, completion or abandonment thereof shall be dealt with as mentioned hereinafter.

If the bidder considers any work demanded of him to be outside the requirements of the contract or disputes any drawings, record or decision given in writing in connection with or arising out of the contract or carrying out of the work, he shall promptly within 15 days request the Owner in writing for written instruction or decision.

If the Bidder is dissatisfied with this decision, the Bidder shall within a period of 30 days from receipt of the decision, give written notice to the IIT Roorkee for appointment of Arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the Arbitrator.

Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by The Director, IIT Roorkee. If reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. It is a terms of this contract that the party invoking arbitrator. It is also a list of disputes with amounts claimed in respect of each dispute along with the notice for appointment of arbitrator. It is also a term of this contract that no person other than a person appointed by such IIT Roorkee as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

It is also a term of this contract that if the contactor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 30 days of receiving the intimation from the Owner that the final bill is ready for payment, the claim of the bidder shall be deemed to have been waived and absolutely barred and IIT Roorkee shall be discharged and released of all liabilities under the contract in respect of these claims. The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause.

#### 9. Protection of environment

- 8.1 The Bidder shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.
- 8.2 During continuance of the contract, the Bidder and his sub-bidders shall at all times abide by all existing enactment on environmental protection and rules made there under, regulations, notifications and bye-law of the State or Central Government, or local authorities and any other law, by-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.
- 8.3 Salient features of some of the major laws that are applicable are given below:

The Water (Prevention and Control of Pollution) Act, 1974 This provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. 'Pollution' means such contamination of water or alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.

The Air (Prevention and Control of Pollution) Act, 1981, This provides for prevention, control and abatement of air pollution, 'Air Pollution' means the presence in the atmosphere of any air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

The Environment (Prevention and Control of Pollution) Act, 1986 This provides for the protection and improvement of environment and for matters connected to herewith, and the prevention of hazards to human beings. Other living creatures, plants and property, 'Environment' includes water, air and land and the interrelationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property.

The Public Liability Insurance Act 1991. This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.

#### 10. Specification to be followed for execution for execution of works are:

**For Civil Works:** CPWD Specifications 2018 Vol. 1 and Vol. 2 with up to date correction slips. (Hereinafter called CPWD specifications also) and Specification mentioned in this Published document for each projects.

Sd-Institute Engineer, E&W, IIT Roorkee

## **SCHEDULE 'D'**

1. Name of work : Repair of Plaster of all heights of Departments & Hostel in Zone F at IIT Roorkee

## **DECLARATION**

**1.** (A) I/We hereby declare that I/we (Name) \_\_\_\_\_\_\_\_\_ have no other business relations with the Institute.

## 'Or'

(B) Have the following other association with the Institute.

2. (A) Have no relatives or connection by marriage on the staff of the Institute.

## 'Or'

(B) Have the following relatives or connection by marriage on the staff of the Institute.

Name	Relationship	Designation	Office in which posted
(i)			
(ii)			
(iii)			
(iv)			
(v)			

Signature and full address of the contractor /contractors

Note: Stick out (a) or (b) of each of the above declaration which is not applicable.

## ESTATE AND WORKS INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE BILL OF QUANTITIES

## Name of Work:- Repair of Plaster of all heights of Departments & Hostels at Zone F of IIT Roorkee.

Si No.         DESCRIPTION OF ITEM         UNIT         QTY         FIG. (RS.)         AMOUNT(RS)           Dimmiting of bjatter or skitting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres: and under, including tutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per directions of Engineer-in-         615         39         23985.00           2         Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. metres and under, including disposal of rubbish to the dumping ground, all complete as per directions of Engineer-in-         615         39         23985.00           3         Is mm cement plaster on the rough side of single or half brick wall of mix :         615         307.90         1539.50           3         15 mm cement plaster on the rough side of single or half brick wall of mix :         5         307.90         1539.50           4         124 (Leement: 4 fine sand)         50M         740         266.85         197469.00           4         124 (Leement: 4 fine sand)         50M         740         266.85         197469.00           7         Fine file south strated.         50M         740         266.85         197469.00           8         Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming t					RATE IN	
plaster including disposal of rubbish to the dumping ground within 50 metressqm6153923985.001Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per directions of Engineer-in- 26153923985.002Charge.580417.8242324.00315 mm cement plaster on the rough side of single or half brick wall of mix :5307.901539.50Note : Rates for external plastic are for height upto 10m from ground level in less otherwise stated. 12 mm cement plaster of mix :5QM740266.85197469.00412 mm cement plaster of mix :5QM740266.85197469.007Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to 15: 13592 Type A, including jointing with seal ring conforming to 15: 13592 Type A, including jointing with seal ring conforming to 15: 13592 Type A, including jointing with seal ring conforming to 15: 13592 Type A, including point phicks of class designation 7.5 in superstructure above plinth level up to floorMTR30201.106033.006V level.5QM4932.103728.406Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finishe with a floating coat of neat cement, including cement slury, but excluding the cost of nosing of steps etc. complete.SQM4498.351993.408Renewing glass panes, ontin	SI No.		UNIT	QTY	FIG. (RS.)	AMOUNT(RS)
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of class designation 7.5 in superstructure above plinth level up to floor V level.Image: class designation 7.5 in superstructure above plinth level up to floor V level.Cement mortar 1:4 (1 cement :4 coarse sandSQM4932.103728.40Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.Image: common slurry3728.4040 mm thick with 20 mm nominal size stone aggregateSQM4498.351993.408Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:Image: common slurryImage: common slurryImage: common slurry9Float glass panes of nominal thickness 4 mm (weight not less than 12.5kg/sqm)sqm3890.502671.509Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leadsCUM65138.859025.25		110 mm diameter	MTR	25	305.05	7626.25
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stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.Image: Complete content of the cost of nosing of steps etc. complete.40 mm thick with 20 mm nominal size stone aggregateSQM4498.351993.40Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:Image: Complete content of the cost of nominal thickness 4 mm (weight not less than 10kg/sqm)Image: Complete content of the cost of nominal thickness 5 mm (weight not less than 12.5kg/sqm)Image: Complete content of the cost of nominal thickness 5 mm (weight not less than 12.5kg/sqm)Image: Complete content of the cost of nominal thickness 5 mm (weight not less than 12.5kg/sqm)Image: Complete content of the cost of nominal thickness 5 mm (weight not less than 12.5kg/sqm)Image: Complete content of the cost of the cost of the cost of the cost of nominal thickness 5 mm (weight not less than 12.5kg/sqm)Image: Complete content of the cost of the		Cement mortar 1:4 (1 cement :4 coarse sand	SQM	4	932.10	3728.40
8Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:1Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)sqm3890.502671.50Float glass panes of nominal thickness 5 mm (weight not less than 12.5kg/sqm)sqm31184.853554.55Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leadsCUM65138.859025.25	7	stone aggregate) finished with a floating coat of neat cement, including				
Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)sqm3890.502671.50Float glass panes of nominal thickness 5 mm (weight not less than 12.5kg/sqm)sqm31184.853554.55Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.CUM65138.859025.25	8	Renewing glass panes, with putty and nails wherever necessary including racking	SQM	4	498.35	1993.40
not less than 12.5kg/sqm)sqm31184.853554.55Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.Sqm31184.853554.559Including all lifts involved.CUM65138.859025.25			sqm	3	890.50	2671.50
or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leadsImage: Comparison of the second			sqm	3	1184.85	3554.55
	0	or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads	CLIM	65	120.05	0025.25
	9		CUM	50		

## SCHEDULE 'C'

# LIST OF APPROVED MAKES/AGENCY OF MATERIALS

The following guidelines are to be noted with regard to use of materials in the work.

- 1. The CONTRACTOR shall be required to use material of the make given in the list of approved make or specifically mentioned in the Bill of Quantitys . EMPLOYER is free to demand the CONTRACTOR to use any particular make from the approved list of items.
- 2. However in case of non availability of any item as per the list of approved make CONTRACTOR shall use alternative item of ISI make with prior written permission from the ENGINEER-IN-CHARGE.
- 3. Wherever, material bearing Standard Mark (ISI) are used in the work, the Contractor should furnish necessary documents and proof of payments made for the procurement of materials bearing Standard Mark (ISI).
- 4. In case it is established that Standard material (bearing ISI mark) as well as the materials indicated in the list (as mentioned in the above para) are not available in the market, then approved equivalent materials may be used in the work subject to approval from the Engineer-in-charge.
- 5. For materials bearing "Standard Mark (ISI)" ordinarily no testing is to be done. However, in case of doubt or with a view to check the quality of materials, ENGINEER-in-charge may send samples for random testing.
- 6. For use of materials other than materials bearing "Standard Mark (ISI)" Mandatory tests shall be conducted at the frequency specified in the contract. In case frequency of testing is not stipulated in the contract then standard specification (CPWD, ISI etc.) may be considered for frequency at which materials are to be tested.
- 7. Before bulk purchase of quantities of materials, it is the responsibility of the Contractor to get the samples of materials approved from Engineer-in-charge and ENGINEER-in-charge
- 1. All the materials shall be tested for quality as per the relevant site by the contractor at his own cost. Details of tests shall be provided in the agreement.
- 2. The consumption of cement shall be calculated as per CPWD/DSR norms.
- 3. Brick bats will be supplied from Central Store @ Rs.500.00/ M<sup>3</sup> as per consumption if available in the Central Store.
- 4. In case of Non availability of prescribed board as stated above approval of equivalent good brand can be considered for approval by Institute but only under unavoidable circumstances.

9	List of Approved Makes of Civil & Sanitary Materials				
C NI-	Materials	Manufacturer/ Make			
5.No. 1	(i) Ordinary Portland Cement/ Portland	Lafarge, Ultratech, ACC, Ambuja cement, J.K.			
	Pozzolana Cement/ Portland Slag Cement.	Cement, Jaypee Cement (conforming to relevant I.S. Codes with latest amendments			
	(ii) White Cement	Birla White, J.K. White, Lafarge			
2	Reinforcement Steel	SAIL, TATA Tiscon Steel, RINL Vizag TMT, JSW- Neosteel, JSPL- Jindal Panther, Electrosteel V- XEGA, Kamdhenu, Galwalia Ispat-Indostar (conforming to relevant I.S. Codes with latest amendments conforming to relevant IS Codes with latest amendments)			
3	Water Proofing Compound	FOSROC, CICO, BASF, SIKA, Pidilite (Dr. Fixit), ARDEX ENDURA, MC-Bauchemie, STP			
4	Crystalline water proofing compound	FOSROC, CICO, BASF, Xypex, Monoroof, ARDEX ENDURA			
5	Grouts/ Tile Adhesives	Latecrete, BASF, Ferrous Crete, ARDEX ENDURA, Weber (Saint Gobain), Pidilite, Thermoshield			
6	Structural Steel	SAIL, TATA Steel, Rashtriya Ispat Nigam (RINL), JSW Steel Itd., JSPL, Galwalia Ispat (GIUPL) (conforming to relevant I.S. Codes with latest amendments conforming to relevant IS Codes with latest amendments)			
7	Polycarbonate Sheet	GE Plastic, Danpalon, Bayer, Macrolux			
8	Profile steel sheet (Precoated)	Ezydeck of TATA, Lloyd Superdeck, JSW, JSPL			
9	Particle Board	Kitply, Action TESA, Greenlam, Merino			
10	Laminated Particle Board/ Laminates	Kitply, Action TESA, Greenlam, Centuryply, Merino			
11	Flush Door Shutters/ Block board	Kitply industries (Swastik), Centuryply, Durian, Greenply, Archid			
12	Fire Rated Doors	I clean, Shakti Hormann, Navair			
13	False Ceiling system	Armstrong, Hunter Douglas, USG Boral, Saint Gobain, Aerolite, Gypsum India, Anutone, Grid Square			
14	Plywood/ Veneer	Greenply, Centuryply, duro, Kitply			
15	Melamine Polish	Asian Paints- Melamine Gold, Wudfin of Pidilite, Timertone of ICI Dulux, Berger			
16	Floor Spring & Door Closure	Godrej, Dorma, Dorset, Kich, Hafele			
17	(a) Aluminium Section	Hindalco, Jindal, Indalco			
	(b) Anodised Aluminium Hardware (Heavy Duty)	Kilong, Alualpha, Classic, Ebco			
18	Clear/ Float/ Frosted/ Refractive/ Coated Glass	Saint Gobain, Modiguard, Asahi (AIS), Pilkington			
19	Stainless Steel Railing, Accessories etc.	Dorma, Kich, GEZE, Hettich			
20	Stainless Steel Door & window fittings	Dorma, Kich, Dorset, Godrej, Hettich			
21	Silicon based water repellant/ Weather sealant	G.E. Plastics, Dow Corning, Wacker, BASF,			

Pidilite (Dr.Fixit/Roff)

Perma, Tuffseal

FOSROC, Pidilite (Dr. Fixit/Roff), Sika, BASF,

Poly-Sulphide Seal

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	23	Mosaic tiles/ Chequered Tiles/ Tactiles	Ultra Tiles, NITCO, Hyper (Mayur), Pavcon Duracrete, Eurocon, Unistone
	24	Ceramic Tiles	Kajaria, NITCO, Orient, Somany, Rak Ceramics
	25	Vitrified Tiles (Anti-skid/ Matt/ Glazed)	Kajaria, NITCO, Orient, Somany, Johnson, Ra Ceramics
100	26	Dash/ Anchoring Fasteners	HILTI, Fischer, Bosch, Wurth
	27	Cement Based Wall Putty	Birla wall care, JK White, Berger, Asian Paints
E la manda de la	28	Oil Bound Washable Distemper/ Dry Distemper	Asian Paints (Profesional Acrylic Distemper) Nerolac (Beauty Acrylic Distemper), Berge (Bison Acrylic Distemper), ICI Dulux (Maxilite)
	29	1 <sup>st</sup> Quality Acrylic Distemper (washable/ Ready mix/ Low VOC)	Asian Paints (Tractor Aqua Lock Paint), Berge (Commando or equivalent paints of Nerolac o ICI Dulux)
	30	Acrylic Emulsion Paints	Asian Paints (Professional Premium Interio Emulsion Paint), Nerolac (Beauty Gold), Berge (Rangoli Total Care), ICI Dulux (Super Cover)
	31	Plastic Emulsion Paints	Asian Paints (Apcolite Heavy Duty Premiun Emulsion Paint), Nerolac (Impression), Berge (Easy clean)
	32	Premium Acrylic Emulsion Paints (Interior)	Asian Paints (Royale Luxury Emulsion), Nerola (Impression), Berger (Silk) ICI Dulux (Velve touch)
	33	Textured Exterior Paint	Asian Paints, Nerolac, Berger Paints, Nerola Paints, Luxture
	34	Acrylic smooth exterior paint	Asian Paints (Apex/Professional Premiun Exterior Emulsion), Nerolac (XL), Berge (Weather coat) ICI Dulux (Weather Shield)
	35	Premium Acrylic smooth exterior paints with Silicon additives	Asian Paints (Apex Ultima), Nerolac (XL Total) Brger (Weather coat all guard), ICI Dulu (Weather Shield max)
,	36	Synthetic Enamel paint	Asian Paints (Apcolite Premium gloss enamel) Nerolac (Synthetic Hi-gloss), Berger (Luxol Hi gloss), ICI Dulux (Gloss Synthetic enamel)
	37	Cement Primer	Nerolac, Berger (BP White Primer-WT), Asian (Decoprime- WT), ICI Dulux
	38	Steel Primer (Red-Oxide Zinc Chromate Primer)	Asian Paints, Nerolac, Berger, ICI Dulux
	39	Wood Primer	Asian Paints (Wood Primer- White/ Pink Berger, ICI Dulux, Nerolac
	40	Epoxy Paint	Asian Paints, Nerolac, Berger, ICI Dulux, Pidilite Tuffcoat, Dubond

	41	Fire Paint	Asian Paints, Akzo Nobel coatings India Ltd. PROMAT, Jotun
-	42	G.I./ M.S. Pipe	TATA, Jindal (Hisar), Jindal (Ghaziabad), Prakash
			Surya, Swastik, Zenith
	43	G.I. Fittings	Unik, AVR, Zoloto, TATA, Zenith
	44	HDPE Pipe	Reliance, ORIPLAST, Supreme, Vectus
	45	D.I. Pipes	Electrosteel, Jindal, TATA Ductura, Kapilangle
			Kesoram
	46	D.I. Fittings	Electrosteel, Jindal, TATA Ductura, Kapilangle Kesoram
	47	UPVC/SWR Pipe and Fittings	Astral, Supreme, Ashirwad, Finolex, Vectus Prince
	48	Centrifulgally Cast (spum) Iron Pipes & Fittings.	NECO, Kapilansh, Electrosteel, SKF, HEPCO
	49	C.I. Manhole covers, frames & G.I. gratings	NECO, RAJ Iron Foundry Agra, BIC, SKF Kapilansh, HEPCO
	50	SFRC Manhole covers & gratings	KK, Jain, Pragati
	51	C.P. Brass Fittings	Jaquar, Grohe, Roca, Hindware, Parryware
	52	Stainless steel pipes & fittings	TATA, Jindal, Viega, Hindware
	53	Sanitary ware, Fittings & accessories	Kohler, Roca, Hindware, Parryware, Jaquar
	54	Mirror Glass	Atul, Modi Guard, Golden Fish
	55	CPVC Pipe & Fitting	Astral, Supreme, Ashirwad
	56	Stainless Steel Sink	Neelkanth, Nirali, Hindware, Jayna, Franke
	57	RCC Pipes (NP-2)	Lakshmi, Sood & Sood, Jain & Co., Diwan Spun Pipe, ACS, Kisan Industries, Sai Concrete
F	58	UPVC Doors & Windows (Profile makers & their authorized Fabricators only)	
-	59		Wintech
-	60	Extruded polystyrene Insulation Board Heat Resistant Tiles	Dow Corning, Supreme, Texas, Analco
-	61		Swastik, Thermatek, Rocotile
	01	Gypsum Plaster	Ferrous Crete, Gyproc- Saint Gobain, Ultratech
	62	Floor Hardner	Ironite, Ferrok, Hardonate
	63	Modular Expansion Joint	Herculus, Sanfield India Ltd., Vexcolt
	64	Glass Wool	Dow Corning, U.P. Twiga, Isover
	65	UPVC door and window hardwares	Rotto, Dorset, Kinglong
	66	AAC Blocks	Ultratech, Instablock, Biltech, JK Smartblox, Shree Cement Ltd., Aerocon, Siporex, Ecolite
	67	AAC Block Adhesive	Ultratech, ARDEX ENDURA, Ferrous Crete
	68	Locks in cabinets and furniture	Hettich, Blum, Hafele, Godrej, Dorset, Dorma, Kich
	69	EPDM Gasket	As approved by EIC
	70	Water proofing Cement Paint	Snowcem (Super Snowcem), Acrocem, Birla Cem
	71	Aluminium Composite Panel (ACP)	Alpolic, Aluco Bond, Reyno Bond, Euro Bond, Alstrong
	72	Anti-termite chemical & wood preservatives	Thiodon, De-NOCIL, Bayer, Vam organic, NOCIL, Hindustan Insecticides, Roffe
	73	POP (Plaster of Paris)	JK Lakshmi, Shriram Nirman, Sakarni

Note: Deviation in the approved make(s) may be obtained with due approval of the competent authority with due justification.