



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

**TENDER FOR
APPOINTMENT OF CONTRACTOR
FOR CONSTRUCTION OF INSTITUTIONAL BUILDING
AT
SITAPURA, PLOT NOS. IPS-1,11,12 & 13 AT INDUSTRIAL AREA,
SITAPURA PH-III, JAIPUR, RAJASTHAN**

**BOOK- I
TECHNICAL BID**

ARCHITECT/CONSULTANTS : **PROMOD JAIN & ASSOCIATES,
C-6, MOTI MARG, BAPU NAGAR,
JAIPUR – 302015.**

CLIENT : **SECRETARY,
THE INSTITUTE OF COST ACCOUNTANTS OF INDIA.,
CMA BHAWAN,12, SUDDER STREET,
KOLKATA – 700 016**

PROJECT INFORMATION

Project : Construction of Institutional Building at Plot Nos. IPS-1,11,12 & 13 At Industrial Area, Lithographs-III, Jaipur, Rajasthan

Employer : The Institute of Cost Accountants of India.

Head Office : CMA Bhawan, 12 Sudder Street,
Kolkata – 700 016

Extent of Site : As per the Site Plan attached with the Tender

Location of Site : Sitapura, Plot Nos. IPS-1,11,12 & 13 At Industrial Area, Lithographs-III, Jaipur, Rajasthan

Existing Conditions : (To be verified by the Contractor)

Terrain : (As per site)

Nature of Soil : (As per existing site conditions)



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

CONTENTS

SECTION	DESCRIPTION	PAGE NO
I	INVITATION TO BID	1-4
II	INSTRUCTIONS TO TENDERERS	5-19
III	GENERAL CONDITIONS OF CONTRACT	20-67
IV	SPECIAL CONDITIONS OF CONTRACT	68-82
V	TENDER FORM & APPENDIX TO TENDER FORM	83-90
VI	EVALUATION FORMATS	91-97
VII	FORM OF AGREEMENT	98-106
VIII	ACCEPTABLE FORMS OF BANK GUARANTEES	107-116
IX	TECHNICAL SPECIFICATIONS	116
X	LIST OF APPROVED MAKES	116-124
XI	LIST OF TENDER DRAWINGS & SKETCHES	125 & 192-213
XII	FINANCIAL BID & BOQ	126-191



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SECTION - I INVITATION TO BID

SECTION I - INVITATION TO BID

Tender Ref. no. **ICMAI/Civil/Inst.bldg- Jaipur COE/2024 – 25**

Date: **25.06.2024**

The Institute of Cost Accountants of India. (ICMAI) invites sealed unconditional tenders in two bid system (Technical Bid and Price Bid in two separate covers) from experienced and reputed Contractor in respect of proposed, Construction of Institutional Building at Plot Nos. IPS-1,11,12 & 13 At Industrial Area, Sitapura, Ph-III, Jaipur, Rajasthan. The duly filled in bids shall be received at the Headquarters, the Institute of Cost Accountants of India., CMA Bhawan, 12, Sudder Street, Kolkata – 700 016.

A complete set of Tender Documents may be downloaded from ICMAI's web site www.icmai.in. The Bidders downloading the Tender Document from website shall have to enclose non-refundable **Demand Draft for Rs 2000/- plus GST @18% in favour of** "The Institute of Cost Accountants of India." payable at Kolkata, towards the cost of Tender Document along with tender, failing which, the tender shall be summarily rejected.

S.No.	Name of work	Proposed Built- up Area of Construction (in sq. ft.)		Earnest Money Deposit (In Rs.)	Time of Completion inclusive of rainy periods and holidays (months)
1.	Construction of Institutional Building at Plot Nos. IPS-1, 11, 12 & 13 At Industrial Area, Sitapura Ph-III, Jaipur, Rajasthan	i) Basement	14,365.00	12.00 Lakhs	24 MONTHS From the date of handing over the site
		ii) Ground Floor	12,213.00		
		iii) First Floor	2,690.00		
		iv) Mumty Room at Terrace	499.00		
		Total	29,767.00		

Note –

- EMD to be submitted along with the Technical bid in the form of DD in favour of "**The Institute of Cost Accountants of India.**", payable at Kolkata
- Bid Security to be obtained from all the bidders except the bidders, registered with Micro and Small Enterprises (MSEs) and start up entities (Company/Firm). The contractor shall submit the Udyog Adhar Certificate and the undertaking and certificate issued by the DPIIT for Start-up businesses.
- The EMD of unsuccessful bidders shall be refunded to them without any interest after the decision of awarding the work to the L-1 bidder is taken.
- Those who are having registered with **MSME are exempted from EMD**. Copy of valid MSME certificate for the relevant work should be enclosed with the Technical bid of the tender.
- The successful MSME bidder need to deposit the EMD amount of Rs. 12,00,000/- (Rupees twelve lakhs only) along with Performance Security within two weeks' time from the receipt of the work order from the Institute.
- EMD to be deposited in the form of demand draft payable at New Delhi in the Name of "THE INSTITUTE OF COST ACCOUNTANTS OF INDIA." drawn on any scheduled bank. No interest shall be paid on the EMD.
- The said Earnest money of the contractor to whom the work is awarded shall be held by The Institute up to the defect liability period of 12 months after the completion of work and to the rest, it shall be returned within thirty days of opening of Price Bid.

The Bidder shall quote subject to fulfilling the eligibility criteria and other norms laid down /prescribed in this tender documents.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

RELEVANT INFORMATION AT A GLANCE

A.	Name of work:	Construction of Institutional Building at Plot Nos. IPS-1,11,12 & 13 at Industrial Area, Sitapura, Ph-III, Jaipur, Rajasthan
B.	Estimated Cost	Rs. 550.00 Lakhs plus GST as applicable at the material time.
C.	Cost of Tender Documents:	Non-refundable Rs. 2000/- plus GST @ 18% in the form of Demand Draft favoring “The Institute of Cost Accountants of India.” payable at Kolkata, to be enclosed with “Technical Bid”. Please note, Tender without Tender cost to be submitted with Technical bid will be rejected.
D.	Availability of Blank Tender document:	Blank tender document may be downloaded from the Institute website www.icmai.in on or before 15 th July 2024 up to 16:00 hrs from www.icmai.in under sub-head “Tender”.
E.	Pre-Bid Meeting will be held on:	08.07.2024 at 16:00 Hrs at Headquarters, The Institute of Cost accountants of India., CMA Bhawan, 12, Sudder Street, Kolkata – 700 016.
F.	Last Date & time of receipt of tender:	Tenderers may have sent the bids at the address given above either by registered post/speed post /or may dropped in the designated tender Box so as to reach on or before 15th July 2024 up to 16:00 Hrs
G.	Place of submission of tender:	Headquarters, The Institute of Cost accountants of India., CMA Bhawan, 12, Sudder Street, Kolkata – 700 016. West Bengal.
H.	Date, time and place of opening of Envelope No.1 Technical Bid:	The Technical bids shall be opened on (will be notified in due course) at 16:00 Hrs or on any other date & time as per the discretion of ICMAI even if bidders are not present. In the event, the specified date of bid opening is declared as or happens to be a holiday for ICMAI, the bid shall be opened on the next working day at the specified time at Headquarters, The Institute of Cost accountants of India., CMA Bhawan, 12, Sudder Street, Kolkata – 700 016. West Bengal.
I.	Date of opening of Financial bid:	After evaluating the technical bids as per ICMAI’s Parameters, the financial bids of successful bidders shall be opened on same day or on any other date at the discretion of ICMAI as notified even if bidders are not present. In the event, the specified date of bid opening is declared as or happens to be a holiday for ICMAI, the bid shall be opened on the next working day at the specified time and location.
K.	Bid validity period:	The offer of the Contractor shall remain valid for a period of minimum 180 days from the date of opening of tender and thereafter until it is withdrawn by the Contractor. The Bid security accompanying the bid shall be valid for 30 days beyond the bid validity period.
L.	Performance Security Deposit:	5% of the accepted tender project value to be deposited before starting of the work in the form of DD or Bank Guarantee.
M.	Retention Money:	Ten Percent (10 %) of Contract Value, to be deducted @ 10% from each RA bill towards Retention Money. Alternately, Contractor can submit Bank Guarantee for equivalent amount before payment of RA bill. (50% of same shall be released along with Final Bill and balance 50% after completion of Defect Liability Period. No interest will be paid on this amount.

Note: -

ICMAI at its sole discretion and without assigning any reason thereof reserves the right to accept and/or reject any or all bids. Further, ICMAI does not bind itself to accept the lowest bid and also reserves the right to award the entire work or part thereof to any one or more Bidders at its sole discretion without assigning any reason thereof.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SECTION – II

INSTRUCTIONS TO TENDERERS

SECTION - II: INSTRUCTIONS TO TENDERERS TABLE OF CONTENTS

Clause No.	Description	Page No.
1.	General Instructions	6-9
2.	Eligibility Criteria	9-11
3.	Earnest Money	11-12
4.	Tendering Procedure	12-16
P	4.1 Issue of Tender Form	
	4.2 Pre- Bid Meeting	
	4.3 Manner of Submission of Tender and its Accompaniments	
	4.3.1 Envelope No.1 (Technical Bid)	
	4.3.2 Envelope No.2 (Price Bid)	
	4.3.3 Submission of Tenders	
	4.4 Opening of Tenders	
	4.4.1 Envelope No.1 (Technical Bid)	
	4.4.2 Envelope No.2 (Price Bid)	
5.	Performance Security Deposit	16
6.	Retention Money	16
7.	Evaluation Criteria	16-18
8.	Check List to be submitted by Tenderer Along with Their Bid	19



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SECTION - II: GENERAL INSTRUCTIONS TO TENDERERS

1. GENERAL INSTRUCTIONS

- 1.1 The Invitation to Bid shall form part of the Contract.
- 1.2 The Tenderers shall check the number of pages of all the documents and if they find anything missing or unclear, they must notify ICMAI at once for clarification. No liability for errors in the tender resulting from failure to check the documents will be accepted. If any clarification, addition, alteration or amendments to the drawings or specification be necessary during the tender period, then it will be a part of the contract in the form of an addendum. Such addendum must be clarified by the CONTRACTOR and those addendums will be a part of the tender document. The Tenderer has to incorporate the entire addendum as and where applicable and the tender not incorporated with the addendum is liable to be rejected.
- 1.3 The Tenderers must understand that the quantities marked in bill of quantities for respective items are not the final / actual quantities to be executed. These are only estimated quantities. These quantities are liable to alteration, omission, deletion or addition at the discretion of the Architect/Consultant/ ICMAI without affecting the terms of the contract. Nothing extra will be paid on this account.
- 1.4 **Before tendering, in the pre-bid meeting, the Tenderer shall satisfy himself fully regarding the nature of the work and get required clarifications from the ICMAI. No plea with respect to want of information or clarification on any particular point shall be entertained after the tender has been received.**
- 1.5 Each page of the tender document is required to be duly signed, stamped and dated by the Tenderer's authorized representative.
 - (i) If the tender has to be submitted by a partnership firm it should be signed by all the partners or by the partner who has the necessary authority on behalf of the firm to enter into the contract and the tender document shall be submitted along with such power of attorney.
 - (ii) If the tender has to be signed on behalf of company incorporated under Companies Act, 1956 it shall be signed by the Managing Director or one of the Directors duly authorized in this behalf, by resolution of Board of Directors of the Company. A copy of the Memorandum and Articles of Association of the company besides the Board resolution should also be submitted along with the tender.
- 1.6 The signature and the address of the authorized person signing the tender document must be attested by one witness. The witness must be a person of status and propriety. His name, occupation, Mobile number and address should be stated clearly below his signature.
- 1.7 Along with the submission of tender, the Tenderer shall indicate the name(s) of the authorized representative who would be responsible and authorized to discuss, negotiate and provide clarification and receive instruction from the Architect/Consultant/ ICMAI during and the post tender stage.
- 1.8 All parts of Tender documents including drawings, formats, addendums etc., should be submitted duly signed and stamped.
- 1.9 The Tenderer shall fill in the rates and amount both in figures as well as in words. The amount for each item should be worked out and totalled.
 - (i) The rates, amounts and all other entries in the Tender documents shall be written by hand in black/blue ink only.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- (ii) All corrections should be attested by the Tenderer with his dated initials as many times as the corrections occur.
- (iii) Any tender with unattested overwriting or corrections is liable to be rejected.
- (iv) Arithmetical errors in filling the rate and amount will be incorporated as follows:
 - a. While filling the rates, the rate in words will supersede the numerical rate.
 - b. Totalling of amount will be corrected clearly on the basis of arithmetical rules.
 - c. In case of error in totalling, rate given in words will prevail and tender value will be corrected accordingly.

1.10 Tenderer should not make any alteration in the Tender document including Instructions to Tenderers, the Conditions of Contract, the Drawings, Specifications and Quantities. If at any stage, it is found that alterations (s) are made, the tender shall be liable to be rejected and EMD shall be forfeited.

1.12 Request for Information

No oral request will be entertained; however, information will be given on written requests over following:

- (i) Ambiguity / Clarification in conditions, specifications, drawings, Bill of Quantities, site etc.
- (ii) Regarding items of works which are included in the tender and / or regarding items of works which Tenderer considers shall be included to complete the work in all respect.

1.13 Within Ten days of issue of Letter of Intent/ Work Order by the ICMAI, the Tenderer shall sign the necessary agreement.

1.14 The date of start of work shall be assumed as Seven (7) days after the date of issue of Letter of Intent/ Work Order, or handing over of the site, whichever is later. Within this period the CONTRACTOR must handover, a Non Judicial Stamp Paper of minimum value of Rs. 100/- to execute the agreement, to the representative of the ICMAI.

1.15 The CONTRACTOR is bound by the rates; he quotes for the various items irrespective of quantities mentioned in the tender. No revision in rates will be allowed due to variation, alteration, omissions, modifications of the quantities put to tender.

1.16 If the contractor fails to quote rate for any particular item in the tender, the rate for that particular item will be treated as zero and contractor shall be liable to execute that item at zero rate, for a quantity limited up to the quantity given in the tender.

1.17 If the contractor quotes different rates for same item at different places, then lowest rate will be considered for all the purposes.

1.18 The quoted rates shall be for all heights, lifts, leads and depth except where otherwise specified in the item of work. Quoted rates shall include all materials & provision of all scaffolding, hoists, tools and tackles and other plants, shuttering profiles and all other equipment/materials required for proper execution of the work.

1.19 The rates quoted by the Tenderer shall cover the cost of all loading, transporting to site, unloading, sorting under covers as required, assembling or joining the several parts together as necessary and incorporating



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

or fixing materials in the work including all preparatory work or whatsoever description as may be required and of closing, preparing, loading, returning empty cases of containers to the place of issue.

- 1.20 The Rates shall be inclusive of all taxes, service tax, octroi, toll, sales tax, professional tax, works contract tax, labour cess, labour insurance, royalties, (Except GST) or any other new taxes or levies etc. and shall be payable by the CONTRACTOR. GST will be paid extra as per applicable rates at the material time. The ICMAI will not entertain any claim whatsoever in this respect.
- 1.21 No Labour hutments will be allowed at site.
- 1.22 The Tenderer shall inspect the site to acquaint himself with the nature of work, local conditions, facilities of transport conditions, effective labour and materials, access and storage for materials and removal of rubbish etc. The Tenderer shall provide in the tender for the cost of carriage freight and other charges and also for any special difficulties for proper execution of work, before quoting his rates.
- 1.23 The validity of the Tender shall be for a period of **One Hundred Eighty (180) days** from the date of opening of tenders.
- 1.24 The successful Tenderer shall submit a detailed Completion Schedule / Program in the form of Microsoft Project chart identifying the important milestones/ activities involved and working out the resource planning/scheduling for main items, within Ten days of issue of Letter of Intent/ Work Order, which with modifications if any, by the ICMAI, shall form part of the agreement and shall be adhered to for final and satisfactory completion of entire work within the agreed time frame.
- 1.25 The CONTRACTOR shall follow the detailed program for all the items of the work and such program will be part of the contract and shall be binding on the CONTRACTOR. The program may be modified by the ICMAI, in consultation with the CONTRACTOR, but subject to the time limits specified in the tender.
- 1.26 Any /part of the works shall not be sub-let to a third party without the prior written approval of the ICMAI/ Architect/Consultant/ PMC. These works will be restricted to specific items like Waterproofing, Anti-termite treatment etc. as mutually decided between the ICMAI/ Architect/Consultant and the Contractor.
- 1.27 As soon as the work is awarded, the CONTRACTOR shall submit a list of subcontractors and details of their work profile for specialist works such as Anti- Termite Works, Water proofing works, Stone Flooring works, painting works, POP works, Wood works, plumbing works, Metal works etc. to whom works are proposed to be sublet along with their letter of consent for the approval of the ICMAI. Only Employer approved agencies will be permitted to undertake the work.
- 1.28 The Tenderer, if firm or company, shall in its forwarding letter mention the names of all the partners of the firm or the Directors of the company (as the case may be) and the name of the partner/Director who holds the power of attorney authorizing him to conduct transaction on behalf of the firm or company.
- 1.29 In the event of tender opening day happens to be a holiday then the bids shall be opened on next working day at the same time and venue.
- 1.30 No interest shall be payable on Security Deposits or on any delayed payments, at any stage.
- 1.31 The cost/expenses incurred in preparing & submission of this Tender shall be exclusively borne by the Tenderers only.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- 1.32 The Tenderers are advised to note that this is a “Prestigious Project” of the ICMAI and has to be executed in accordance with the details given in the Tender Documents.
- 1.33 The details, information, drawings, specification of material etc. being provided with the tender documents are the absolute and exclusive property of the ICMAI. The Tenderers are not authorized or permitted to copy or otherwise reproduce the document in any way or convey to any third party, any information contained in the tender documents or drawings. The Tenderer has to maintain strict confidentiality.
- 1.34 The Tenderer is required to keep all the information/ details /drawings /material specification highly confidential and has to maintain secrecy.
- 1.35 No material shall be provided by ICMAI and all the items in BOQs are inclusive of Providing and fixing/ laying/installation etc. even if it is not specified so in any description.
- 1.36 Tenderers are requested to fill in rate and amount by hand both in figures as well as in words and submit hard copies of BOQs.
- 1.37 Architect/Consultant/ICMAI has right to inspect or take assessment report which would be binding to the tenderer. This assessment is necessary for qualifying for the technical bid.
- 1.38 Architect/Consultant/ICMAI may inspect the sites if necessary.
- 1.39 The assessment made by ICMAI cannot be challenged by the bidding parties/disqualified bidders in any form including any court or forum.

2. ELIGIBILITY CRITERIA:

This invitation to response unconditionally is open to such qualified and reputed Contractor which are registered and have their Registered Office in Jaipur along with the General Eligibility criteria, the Contractors must satisfy the following conditions: -

Experience of having successfully completed works during the last 5 years ending 31st March 2024:

- i) The Tenderer shall have executed one similar work having construction area of at least equal to proposed construction area in Sq. Ft, or Two Similar works having construction area of at least 80% to proposed construction area in Sq. Ft OR Three Similar works having construction area of at least 60% to proposed construction area in Sq. Ft, completed during last 05 years, 05 years reckoned as on 31.03.2024. The Area mentioned above shall be built-up area and” Similar Work” shall mean construction of Multi-storeyed Buildings (minimum ground floor plus 2 storied) such as Residential Buildings, Institutional Buildings, Commercial Buildings/ Office complex and IT Buildings/ IT parks for which construction has been completed.
- ii) The Tenderer shall have at least completed one work of similar nature costing not less than the amount equal to 25 % of the estimated area put to tender with any Central Government Department/State Government Department/Central Autonomous Body/ Central Public Sector undertaking/State Public Sector undertaking/ Govt. Bank/ Govt. Insurance Company/ Govt. Educational Institution/ Govt. College/ Govt. University/any Semi-Govt. Authority.
- iii) Turnover Criteria: Average annual financial turnover per year on construction works should not be less than as per below criteria of the Project, during the immediate last 5 consecutive financial years or in any one of



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

the last three years (applicable for composite works inclusive of CIVIL, Electrical, Plumbing, Sanitary, HVAC, Lift works etc.):

S. No.	Proposed Built up area (in Sq.Ft.)	Turnover (Minimum) Rs. in Crores
A	B	C
(i)	Up to 29,767.00	5.00

Note: The Proposed Built up area (in column B) pertains to the Built up area of proposed Building for which Tender is floated.

- iv) Profit/loss: The Tenderer should not have incurred any loss for more than two years during the immediate last three consecutive financial years. The Audited balance sheets for last three years is to be provided.
- v) Solvency Certificate: Solvency certificate from Bankers/Auditor for an amount which is more than or equal to 40% of the estimated cost of the work.
- vi) The Bidder/Tenderer should have adequate Office Infrastructure in **Jaipur**.
- vii) Joint ventures shall not be allowed to participate in the bidding process.
- viii) The bidding capacity of the CONTRACTOR should be more than or equal to the estimated cost of the work put to tender. The bidding capacity shall be worked out by the following formula:

Where,

$$\text{Bidding Capacity} = [A \times N \times 2] - B$$

A = Maximum value of construction works executed in any one year during the last five years taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of work for which bids has been invited.

B = Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited.

- ix) In addition to the above, the following information/documents should also be submitted along with the bid by the Tenderers for evaluation/determination of their eligibility:
 1. Copy of Income Tax Returns for three previous years in original or certified true copies,
 2. Copy of Permanent Account Number (PAN) for income tax purpose.
 3. Copy of TDS certificate issued by the clients to substantiate the claim for the value of works executed in the private sector.
 4. The Bidder/Tenderer should preferably be registered with, MES/CPWD/any other Central/State government agency, if any. Accordingly, Certificate as a registered Contractor with the, MES/CPWD/any other central/state government agency, if any.
 5. Documentary evidence of having independent PF Code number from Regional Provident Fund Commissioner.
 6. GST Registration certificate.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

7. ESI Registration
 8. Proof of compliance of other statutory requirements
 9. Certificate of incorporation of the firm (Company Act/ Partnership etc.)
 10. Power of attorney in favour of partner submitting the tender, in case of partnership firm
 11. Copy of audited Balance Sheets along with Profit and Loss Accounts duly certified by the Chartered Accountant for the last three Financial Years ending up to March 2023.
 12. Resolution of Board of Directors of the Company, signed by MD/ Director/ Key Managerial Person/ Officer of the company).
 13. The contractor to submit address, phone no. and name of contact person of the qualifying works fulfilling the above. It would also include coloured photographs of the above works.
 14. Any other relevant document(s), if any.
- x) Even though the Tenderer meets the specified criteria, he may be disqualified if he has:
- a. Made untrue or false declaration in the forms, statements and attachments submitted in proof of their qualification and / or
 - b. Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, poor workmanship or financial failure, and a number of litigations or Arbitrations by or against him, etc.
 - c. If the Tenderer is overbooked beyond his capacity to execute the work as per required schedules.

3. EARNEST MONEY DEPOSIT (EMD):

- a. Earnest money deposit shall be submitted along with the tender of Rs. 12.00 Lakh (Rupees Twelve Lakh Only) in the form of DD in favour of “The Institute of Cost Accountants of India.” payable at Kolkata, to be included in Envelope no. 1 (Technical Bid) only. EMD can also be submitted in the form of Bank Guarantee drawn on any nationalized bank. No FDR is permitted.
- b. EMD is required to be submitted by all bidders except those who are registered with MSME. Any bid not accompanied by an Earnest Money Deposit (Bid Security) except the tenders submitted by the MSME registered vendors shall be rejected by ICMAI as non –responsive. MSME registered vendor should submit valid MSME registration certificate along with the Technical Bid for consideration.
- c. The amount of earnest money will be refunded to the unsuccessful tenderers without any interest within 30 days from the date of award of work to the successful tenderer. In case of the successful Tenderer, EMD shall be converted into Security Deposit or the same may be refunded after furnishing the Performance Security Deposit in the form of Irrevocable Bank Guarantee issued by a Nationalized/ Scheduled Commercial Bank in favour of “The Institute of Cost Accountants of India.”. If successful Tenderer does not pay the Performance Security Deposit in the prescribed time limit and does not execute the Agreement, his earnest money deposit will be forfeited by ICMAI.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- d. No interest would be paid by ICMAI on Earnest Money Deposit/ Performance Security Deposit. The EMD may be forfeited if the Tenderer withdraws/revokes/modifies his bid during the period of bid validity. EMD may be forfeited in the following conditions also: -

The EMD may be forfeited if:

- (i) The tenderer unilaterally modifies its application price any time after submission of Bid and after being declared as successful bidder.
- (ii) The tenderer withdraws its/ his offer during the tender validity period or non- acceptance of Letter of Intent/ work order by the successful Bidder.
- (iii) The tenderer fails to furnish performance guarantee/ performance security/ security deposit within 10 days from the issuance of award of the work/ Letter of Intent/ Work Order.
- (iv) The Successful bidder refuses/fail to commence the work within the stipulated time.
- (v) The successful bidder refuses/ fails to execute the Agreement or furnish the Performance Security/ Guarantee.
- (vi) The Bidder founds to be indulged in Canvassing, Fraud, Corruption, Misrepresentation, Mal Practices etc. in any form in connection with the tender.
- (vii) The Bidder founds to be suppressing the information or furnishing wrong or incomplete information.
- (ix) bidder fails to keep all the information/ details /drawings /material specification confidential and fails to maintain secrecy.
- (xi) the successful bidder fails to honour or refuses to comply with or modifies any or all terms and conditions of the RFP/ tender.
- (xi) The successful bidder fails to handover the Insurance Policy in original to ICMAI within 10 days from the date of Letter of Intent/ Work Order.
- (xii) If the successful bidder places any additional condition or request to change any of the terms and conditions of the Tender document subsequent to declaration of L-1 bidder at the time of accepting Letter of Intent/Work order or thereafter at any stage.

4. TENDERING PROCEDURE: -

4.1. ISSUE OF TENDER FORMS:

The Blank tender forms can be downloaded from the Institute's web site www.icmai.in under subhead "Tender"

4.2 PRE-BID MEETING:

1. Tenderers or their representatives are advised to attend pre bid meeting on 08.07.2024 at 16.00 Hrs at (meeting link will be hosted on our website)

The purpose of the meeting is to clarify any issues and to answer questions on any matter that may be raised at this stage. The Tenderers are requested to submit questions/queries in writing or through email to reach ICMAI not later than 15th July 2024 up to 4.00 PM. Email Id for this communication is, infrastructure.hod@icmai.in



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

2. The link of the online pre bid meeting will be hosted on our website.

3. The reply to the queries/ questions of Tenderers will be given by ICMAI during pre-bid meeting and will be compiled and hosted on the website after pre-bid meeting. This clarification referred to as addendum/ corrigendum shall form part of the tender documents which will also be common and applicable to all Tenderers.
4. The tender submitted by Tenderer shall be based on the addendum/corrigendum (if any) by the ICMAI and this tender shall be un-conditional. Conditional Tenders will be summarily rejected.

4.3 MANNER OF SUBMISSION OF TENDER AND ITS ATTACHMENTS:

1. Tenderer shall submit the tender and documents in two sealed envelopes as below, which will be acceptable through registered post/ speed post/ courier/ or may be dropped in a designated Tender Box provided in the premises of the Headquarters, the Institute of Cost Accountants of India., CMA Bhawan, 12 Sudder Street, Kolkata – 700 016.
2. The Tenderer shall sign and put seal of his firm on each page on 'Technical Bid' and 'Price Bid' while submitting the bids.

4.3.1 ENVELOPE NO.1 (TECHNICAL BID):

The first envelope clearly marked as 'Envelope No -1 (Technical Bid)' shall contain the following documents duly indexed with page numbers:

1. Earnest Money Deposit (Bid security)
2. Tender fee, if the tender is downloaded from the website
3. Certificate of incorporation of the Company/firm (Company Act/ Partnership etc.)
4. Registration certificate of GST.
5. PF Registration Certificate from Regional PF Commissioner
6. Registration certificate of ESI
7. PAN Card
8. Registration certificate of WCT
9. Registration certificate of Service Tax
10. Certificate as a registered Contractor with the MES/CPWD/any other central/state government agency, if any.
11. Resolution of Board of Directors of the Company, if bid is signed by MD/ Director/ Key Managerial Person/ Officer of the company).
12. Power of attorney as applicable
13. Form A - Financial Information with supporting document
14. Form B - Form of Bankers Certificate from a Scheduled Bank.
15. Form C - Details of all similar works completed during the last five years in same name and style. Certificate of completion of works from clients to be attached.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

16. Form D - Project under execution in the same name and style. Copy of work orders to be attached.
17. Form E - Performance Report of work referred to in Forms C and D
18. Form F - Structure & Organization
19. Form G - Details of Technical & Administrative Personnel to be employed for the work.
20. Form H - Details of construction plant and equipment likely to be used in carrying out the work
21. Form I - Details of Statement of Arbitration & Disputes
22. Income tax return for the last three years.
23. Tender Form along with Appendix duly signed and sealed, on the letter head of Tenderer.
24. Original bidding document including drawings, corrigendum/ addendum and all other documents duly signed & sealed.
25. The contractor to submit address, phone no. and name of contact person of the qualifying works fulfilling the above. It would also include coloured photographs of the above works.

4.3.2 ENVELOPE NO.2 (PRICE BID):

The second envelope clearly marked as 'Envelope no. 2 (Price Bid)' shall include the following;

- a) Grand Summary (both in words and figures)
- b) Summary with item rates (both in words and figures)

The Tenderer should quote his most competitive item rates and Grand Summary (in words and figures) in attached Bill of Quantities in the tender document. He should not quote this offer anywhere directly or indirectly in Envelope No. 1 (Technical Bid). The Tenderer shall quote for the work as per details given in the main tender and also based on the addendum or corrigendum. This tender shall be unconditional.

4.3.3 SUBMISSION OF TENDERS:

1. The sealed Envelope No .1 (Technical Bid) and Envelope No. 2 (Price Bid) should be sealed by the Bidder in separate covers duly superscribed and shall be again put together in one common cover and sealed. This sealed cover shall be marked on left hand top corner as **“Construction of ICAI BHAWAN, at Sitapura, Jaipur”**.
2. The full name and address of the Tenderer/ name of the authorized person delivering the sealed cover containing the tender shall be written on the bottom left hand corner. The sealed envelopes marked as above, shall be enclosed in another cover properly addressed and shall be sent by Registered Post Acknowledgement Due/ Speed Post or by Courier or by hand delivery. The date and time of receipt of envelope containing tender shall strictly apply in all cases. The Tenderers should ensure that their tender is received by ICAI, before the expiry of last date and time.

No delays on account of any cause will be entertained for the late receipt of tender. Tenders received later than the specified deadline for submission of the bids as prescribed in relevant clauses shall be returned to the Tenderer unopened. The bids shall not be accepted through Fax or Email.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

4.4 OPENING OF TENDERS:

Issue of tender document will not automatically mean that the Tenderers are considered qualified. The tender committee shall evaluate the qualifying requirements of each Tenderer as per Invitation to Bid. Bids not meeting the qualified requirement shall be treated as non-responsive and no document would be returned to the concerned Tenderer. On the date specified in the tender notice, following procedure will be adopted for opening of the tender.

4.4.1 ENVELOPE NO.1 (TECHNICAL BID):

- 1. First of all, Envelope No. 1 i.e. Technical Bid will be opened in the presence of Tenderer/its representative who like to attend at the time and venue of opening to verify its contents as per tender requirements. If the documents contained in this envelope do not meet the requirements of the ICAI, a note will be recorded accordingly by the tender opening authority and the said Tenderer's Envelope No. 2 (Price Bid) will not be considered for further action.**
- 2. The date of opening of Envelope No.2 (Price Bid) shall be decided and communicated well in advance to all the Tenderers whose credentials meet qualifying requirement as per Invitation to Bid and are acceptable to ICAI.**

4.4.2 ENVELOPE NO. 2 (PRICE BID):

1. Price bids of only those Tenderers, whose technical capability is found acceptable /satisfactory and suitable for this work based on the details submitted in Envelope No. 1, will be opened.
2. To assist in the examination, evaluation and comparison of bids, ICAI may ask the Tenderers individually for clarifications on their bids including break down of unit rates. The request for the clarification and response shall be in writing or by fax or by email, but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by ICAI during evaluation of bids.
3. The bids determined to be substantially responsive will be checked by ICAI for any arithmetic errors in computation. Errors will be corrected as follows:
 - i) Where there is discrepancy between the unit rates and amounts in figures and in words, the rate and amount in words shall prevail and;
 - ii) Where there is discrepancy between the unit rate and total amount derived from multiplication of the unit rate and the quantity, the unit rate as quoted shall govern.
4. The successful Tenderer will be required to produce to the satisfaction of the specified concerned authority, a valid and concurrent license issued in his favour under provision of the Contract Labour (Regulation and Abolition) Act, 1970 and the Contract Labour (Regulation and Abolition) Central Rules 1971, before starting the work. On failure to do so, the acceptance of the tender is liable to be withdrawn and forfeiture of earnest money.
5. The Tenderer whose tender is accepted will have to give an undertaking to the effect that he/they will pay the labours engaged on the work, the wages as per Minimum Wages Act, 1948 and any latest modification thereof, applied to the zone in which the work lies and act accordingly.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

6. The Contractor shall comply with the provision of the payment of Wages Act, 1936, Minimum Wages Act 1948, Employers Liability Act 1938, Employees' Compensation Act, 1923, the Contract Labour (Regulation and Abolition) Act, 1970, and any latest modification thereof or any other applicable law relating thereto, and rules made thereunder from time to time.
7. The successful Tenderer will have to sign the Agreement on Rs.100 Non- judicial stamp paper within 10 days of such communication from ICMAI. The Tenderer will have to sign the original copy of tender papers and the drawings according to which the work is to be carried out. The Contractor shall also have to give a declaration to the effect that he has fully studied the plans, specifications, local conditions and availability of labour and materials and that he has quoted his rates with the consideration to all these factors and that he will not make any subsequent claims on these accounts.

5. PERFORMANCE SECURITY DEPOSIT

1. Within 10 days of the receipt of the communication of the award of the contract from ICMAI, the successful Tenderer shall have to furnish Performance Security Deposit (5 % of the contract amount, to be submitted before signing agreement) in favour of "The Institute of Cost Accountants of India", payable at Kolkata in the form of a bank guarantee issued by a nationalized/scheduled bank strictly in the format provided by ICMAI, and complete the Contract documents, failing to do so, his earnest money will be forfeited. The bank guarantee shall be valid for the entire period of the contract including defect liability period (i.e. 12 months) plus ninety days. The validity of the bank guarantee should be suitably extended by the Contractor in the event of extension of time of the contract.
2. All compensations or other sums payable by the Contractor under the terms of this Contract or any other Contract or any account may be deducted from his Performance Security Deposit, Retention Money or from any sums which may be due to him or may become due to him by ICMAI on any account and in the event of the security being reduced by reason of any such above noted deductions, the Contractor shall within 10 days of receipt of notice of demand from the Architect/Consultant/ICMAI make good the deficit.
3. No interest shall be paid on the Security Deposit.
4. The compensation for any loss resulting from the contractor's failure to complete his obligation under this contract shall be payable to ICMAI out of Security Deposit.
5. This Performance Security Deposit shall be refunded after the completion of defect liability period of 12 months prescribed for this Contract in accordance with the provisions in the Contract.
6. Running Account bills will be paid after verification by the Architect/Consultant, in 30 (Thirty days) days from the date of submission of bill, if found in order.

6. RETENTION MONEY:

Ten percent (10 %) of Contract Value will be deducted from each RA bill towards Retention Money. Alternately, Contractor can submit Bank Guarantee for equivalent amount before payment of RA bill. (50% of same shall be released along with Final Bill and balance 50% after completion of Defect Liability Period. No interest will be paid on this amount.

7. EVALUATION CRITERIA:

The Tender Documents submitted by the Tenderers will be evaluated in the following manner:



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

The initial criteria prescribed in clause 2 will first be scrutinized and the Tenderer’s eligibility for the work to be determined. The Tenderers qualifying the initial criteria will be further evaluated for following criteria by scoring method on the basis of details furnished by them.

a) Financial strength (Form ‘A’ & ‘B’)	Maximum 20 marks
b) Experience in similar nature of work during last five years (Form ‘C’)	Maximum 20 marks
c) Performance Report of works (Form ‘D’) – Time overrun	Maximum 20 marks
d) Performance on works (Form ‘E’) – Quality	Maximum 15 marks
e) Personnel and Establishment (Form “F” &” G”)	Maximum 10 marks
f) Plant & Equipment (Form “H”)	Maximum 15 marks
Total	100 marks

To be eligible for short listing, the Tenderer must secure at least fifty percent marks in each and seventy percent marks in aggregate.

CRITERIA FOR EVALUATION OF THE PERFORMANCE OF CONTRACTORS

Attributes		Evaluation
(a)	Financial strength (i) Average annual turnover (ii) Solvency Certificate	(i) 60% marks for minimum eligibility criteria (ii) 100% marks for twice the minimum eligibility criteria or more. In between (i) & (ii) – on pro-rata basis
(b)	Experience in similar Class of works	(i) 60% marks for minimum eligibility criteria (ii) 100% marks for twice the minimum eligibility criteria or more. In between (i) & (ii) – on pro-rata basis

Performance on works (time over run) (20 marks)		Score				Maximum
Parameter	Calculation For points	1.00	2.00	3.00	>3.50	
(i) Without levy of compensation		20	15	10	10	2
(ii) With levy of compensation		20	5	0	-5	
(iii) Levy of compensation not decided		20	10	0	0	

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

TOR = AT/ST, where AT = Actual Time; ST = Stipulated Time.

Note: Marks for value in between the stages indicated above is to be determined by straight line variation basis.

(d)	Performance of works(Quality)	(15marks)
	(i) Very Good	15
	(ii) Good	10
	(iii) Fair	5
	(iv) Poor	0
(e)	Personnel and Establishment	(Max. 10 marks)
	(i) Graduate Engineer	3 marks for each
	(ii) Diploma holder Engineer	2 marks for each up to Max. 4 marks
	(iii) Supervisory/Foreman	1 mark for each up to Max. 3 marks
(f)	Plant & Equipment	(Max. 15 marks)
	(i) Hopper Mixer	1
	(ii) Truck/Tippers/Transit mixer	1
	(iii) Steel shuttering	2
	(iv) Building Hoist	1
	(v) Excavator	1
	(vi) Concrete Batching Plant	2
	(vii) Tandom Roller	1
	(viii) Vibration Compactor	1
	(ix) Water pumps	1
	(x) Weigh Batching m/c	2
	(xi) DG Set	1
	(xii) Diesel Vibrators	1

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

8. CHECK LIST TO BE SUBMITTED BY TENDERER ALONG WITH THEIR BID

Sr. No.	Item	Submitted	
		Yes	No
01	Earnest Money Deposit submitted (Bid security)		
02	Tender fee submitted ,if the tender is downloaded from the website		
03	Certificate of incorporation of the firm (Company Act/Partnership etc.)		
04	Registration certificate of GST		
05	PF Registration Certificate		
06	Registration certificate of ESI		
07	PAN Card		
08	Profit & Loss statement, Balance sheet for last three financial years including audit report.		
09	Income tax returns for the last three years		
10	Power of attorney as applicable		
11	Resolution of Board of Directors of the Company, if bid is signed by MD/ Director/ Key Managerial Person/ Officer of the company).		
12	Certificate of completion of works from clients for works completed in same name and style.		
13	Copy of work order for work in hand, in same name and style.		
14	Tender Form along with Appendix duly signed and sealed, on the letter head of tenderer.		
15	Solvency certificate for current year		
16	Certificate as a registered Contractor with the MES/CPWD/any other central/state government agency, if any.		
17	Original bidding document including drawings and all other documents duly signed& sealed		
18	Evaluation Formats 'A' to 'I' duly filled, signed and sealed.		

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

**SECTION - III
GENERAL CONDITIONS OF CONTRACT****SECTION III - GENERAL CONDITIONS OF CONTRACT TABLE OF CONTENTS**

Clause No.	Description	Page No.
1.	INTERPRETATIONS	24-25
1.1	Law Governing the Contract	26
1.2	Scope of Contract work	26
1.3	Discrepancies and Adjustment of Errors	26-27
1.4	Letter of Intent/ Work Order	27
1.5	Date of Commencement and Completion	27
1.6	MS Project Schedule for Execution of Work	27
1.7	Mobilization Advance	27-28
1.8	Performance Security	28
1.9	Additional Performance Security	28
1.10	Apportionment and Sub-Letting	28-29
1.11	Specialized Works	29
1.12	Emergency Work	29-30
1.13	Mandatory Requirement	30-31
1.14	Admission to Site	31-32
1.15	Temporary Workshops/Stores/Site Office etc.	32
1.16	Nuisance	32
1.17	Working Hours	32
1.18	Labour	32-33
1.19	Right of Inspection	33
1.20	Materials to be arranged by the Contractor	33
1.21	Testing Materials	34
1.22	Rejection of Materials	34
1.23	Care and Custody	34
1.24	Surplus Materials	34
1.25	Extra House of Working	34

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Clause No.	Description	Page No.
1.26	Contractors all Risk Insurance Cover	35
1.27	Giving of Notices and Payment of Fees	35
1.28	Fossils	35-36
1.29	Patent Rights and Royalties	36
1.30	Plant Equipment and Transport	36
1.31	Electricity and Water Supply	36
1.32	Contactoꝝ's Supervision	36
1.33	Dismissal of Contractors Employees	36-37
1.34	Setting Out of Works	37
1.35	Approval by Stages	37
1.36	Covering of Work	38
1.37	Architect/Consultant's Instructions	38
1.38	Variations	38
1.39	Rates for Altered/ Substituted/ Additional Works	38
1.40	Defective Work	39
1.41	Order Under The Contract	39
1.42	Measurements	39
1.43	Delay and Extension	40
1.44	Certificate of Completion	40
1.45	As Built Drawings	40
1.46	Defects Liability Period	40-41
1.47	Liquidated Damages	41
1.48	Escalation	41
1.49	Secured Advance	41
1.50	Retention Money	42
1.51	Running Account Payments	42
1.52	Final Bill	42

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Clause No.	Description	Page No.
1.53	Recovery from Contractor	43
1.54	Determination	43-44
1.55	Foreclosing Of Work	44
1.56	Settlement of Dispute	44-45
1.57	Arbitration	45
1.58	Works contract Tax/Sales Tax	45
1.59	Site Order Book	45
1.60	Action Where No Specifications Are Specified	45
1.61	Permission For Blasting	46
1.62	Relics, Objects Of Antiquity, Treasures, Etc.	46
1.63	Requirement of Minimum Technical Staff to be Deployed	46
2	LOGISTIC PLAN FOR HEALTH	
2.1	Labour and Employment Laws	46-48
2.2	Health and Sanitary Arrangements for Workers Employed by the Contractor	48
2.3	First Aid	48-49
2.4	Drinking Water	49
2.5	Washing and Bathing Place	49
2.6	Latrines and Urinals	49-50
2.7	Disposal of Excreta	50
2.8	Provision of Shelter	50
2.9	Crèches	50
2.10	Solid Waste Disposal	50
		50-52

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Clause No.	Description	Page No.
3	SAFETY PROCEDURES	52-53
3.1	Site Safety Policy	
	I. Safety Plan:	53
	II. Responsibility	54
	III. Accident / Incident Reports	54
	IV. Public Relation	55
4	SITE SAFETY MANUAL	
4.1	General Safety Practices	55-56
4.2	Personal Protective Equipment	56-57
4.3	Ladders	57
4.4	Scaffolding	57-58
4.5	Machinery and Vehicles	58
4.6	Material Handling of Overhead Operating Equipment	59
4.7	Excavation and Shoring	59-60
4.8	Electrical	60-61
4.9	Hand Tools	61-62
4.10	Welding And Burning	62
4.11	Work In confined Spaces	63
4.12	Work Permit System	63
4.13	Environmental Considerations	63-64
4.14	Training	64
4.15	Defects after Completion and Performance Guarantee	64
5	ACCIDENT REPORT	65-66
6	INCIDENT REPORT	67



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

1. INTERPRETATIONS

In construing these conditions and Interpretations, Specifications, Schedule of Quantities and Contract Agreement, the following words shall have the meanings herein assigned to them except where the subject or context otherwise requires:

a)	EMPLOYER	Shall mean “The Institute of Cost Accountants of India., Kolkata” and shall include their representative/s assignees or successor/s.
b)	TENDERER/ BIDDER	Tenderer shall be the firm/ company/ individual who submit the bid against the Invitation to Bid.
c)	Contractor	Means the individual or firm or Company, under taking the works and shall include legal representatives of such individual or firm or company, or the successors of such individual or firm or company and the permitted assignor of such individual or firm or Company.
d)	SUB-CONTRACTOR	Sub-contractor shall mean the person/ firm/ company named by the contractor whom a part of contract has been sub-let with the consent of employer/ Architect/Consultant/consultant and shall include his heirs/ successors/ legal representatives/ assignees.
e)	SITE	Shall mean the site of the contract works including any building and erections thereon and any other land (inclusive) as aforesaid allotted by the EMPLOYER for the Contractor’s use.
f)	PROJECT MANAGEMENT CONSULTANT (PMC)/ ENGINEER IN CHARGE	Shall mean ARCHITECT/CONSULTANT/Consultant /Officials of the EMPLOYER or his representative.
g)	THIS CONTRACT	Shall mean the tender, its acceptance, the Articles of Agreement, the Appendix, the Schedule of Quantities, Specifications, addendum, corrigendum and the drawings pertaining to the work.
h)	NOTICE IN WRITING	Notice in Writing or written notice shall mean a notice in writing, typed or printed (unless delivered personally or otherwise proved to have been received) by registered post to the last known private or business address or registered office of the addressee and shall be deemed to have been received in the ordinary course of post.
i)	CONTRACT PRICE/ RATE	Contract price/ rate shall mean the prices/rates of the accepted bid.
j)	ACT OF INSOLVENCY	Shall mean any Act of insolvency as defined by the Presidency Towns Insolvency Act or any applicable Act.

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

k)	ARCHITECT/CONSULTANTS	PROMOD JAIN & ASSOCIATES, C-6, MOTI MARG, BAPU NAGAR, JAIPUR – 302015.
l)	STRUCTURAL CONSULTANTS	S.G. STUCTURES, A-36,1ST FLOOR, SUNDER SINGH BANDARI NAGAR, SWEJ FARM, NEW SANGANER ROAD, JAIPUR-302019.
m)	Indian standard (IS)	Shall mean Indian Standard as issued by the Indian Standard Institution. Wherever reference is made to “IS” it shall mean the relevant “IS” code on the subject with latest edition as amended till date of submission of tender.
n)	PROPERTY, EMPLOYER OWNERSHIP & POSSESSION”	The assets being created under this contract as stipulated in the schedule will be the ‘Property’ belonging to the EMPLOYER. The ownership of the site and property will vest with the EMPLOYER throughout the performance of this contract from the beginning up to its completion or determination or termination or cancellation and beyond.
o)	MONTH	Month shall mean from the beginning of the given date of a calendar month to the end of the preceding date of the next calendar month.
p)	WEEK	Week shall mean seven consecutive days including holidays in between.
q)	AWARD	Award shall mean the written acceptance of the bid by the Employer
r)	DAY	Day means a day of twenty-four hours from midnight to midnight irrespective of no. of hours worked in that day.
s)	WORKING DAY	Working Day means any day other than that prescribed by the Negotiable Instruments Act as being a holiday and consists of the number of hours for labour as commonly recognized by good EMPLOYER in the trade and in the district where the work is carried out.
t)	CONSTRUTION PLANT	Constructional Plant shall mean all appliances or things of whatsoever nature required in or about the execution and maintenance of the Works but does not include the materials or other things required /intended to form or forming part of the Works.
u)	PERFORMANCE SECURITY	Performance Security shall mean the amount pledged with the ICAI/ Employer while signing the agreement for faithful and satisfactory performance of the contract.
v)	WORK OR WORKS	Work or Works mean the works by virtue of the contract contracted to be executed, whether temporary or permanent, and whether original, altered, substituted or additional.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

1.1 LAWS GOVERNING THE CONTRACT: -

1. This contract shall be governed by the Indian Laws for the time being in force. The contract is confidential and must be strictly confined to the purposes of the contract. The original and duplicate copies of the contract shall be signed by the EMPLOYER and the Contractor or their accredited representative. The original shall be kept in the safe custody of the EMPLOYER and the duplicate copy shall be handed over to the Contractor. One certified true copy of the Contract shall remain in the custody of the Architect/Consultant.
2. The Contractor, on signing of the contract, shall be furnished a copy thereof by the ICMAI, free of cost, with one certified true copy of the Contract and two copies of all drawings issued during the progress of the work. Any further copies of such drawings required by the CONTRACTOR shall be paid for by him. The CONTRACTOR shall keep one certified copy of the contract and all drawings on the work site and the EMPLOYER/Architect/Consultant or his representative shall at all reasonable time have access to the same.

1.2 SCOPE OF WORK: -

1. The CONTRACTOR shall carry out and complete the said work in every respect in accordance with this contract as per CPWD Specifications / applicable IS codes and with the directions and to the satisfaction of the ICMAI and Architect/Consultant.
2. The contract shall include all labour, materials, tools plant equipment and transport which may be required for, the full and entire execution and completion of the works and shall unless otherwise stated, include wastage and materials, carriage and cartage, carrying of empties, hoisting, setting, fitting and fixing in position, testing and commissioning of aforesaid work in accordance with good Engineering practice and recognized principles.
3. The CONTRACTOR shall provide everything necessary for the proper execution of the works according to the intent and meaning of the specifications and drawings 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 and if the Contractor finds any discrepancy in the specifications and drawings or between the drawings, he shall immediately and in writing refer the same to the Architect/Consultant and EMPLOYER who shall decide which is to be followed, subject to provisions in the contract.
4. The CONTRACTOR shall be deemed to have satisfied himself as to the nature of the site, local facilities of access and all matters affecting the entire execution and completion of the works. No extra charges consequent on misunderstanding or otherwise will be allowed.

1.3 DISCREPANCIES AND ADJUSTMENT OF ERRORS: -

1. The several documents forming the contract are to be taken as mutually explanatory of one another. In case of discrepancy ICMAI shall be sole deciding authority with regard to intention and interpretation of the document and his decision in this respect shall be final and binding.
2. Any error in description, quantity or rate in Bill of Quantities or any omission there from shall not vitiate the contract or release the CONTRACTOR from the execution of the whole or any part of the works comprised therein according to the drawings and specifications or from any of his obligations under the contract. Any error in quantity rate or amount in Bill of Quantity shall be adjusted in accordance with the following rules: -



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- (i) In the event of a discrepancy between description in words and figures quoted by a Tenderer the description in words shall prevail.
- (ii) In the event of an error occurring in the amount column of Bill of Quantity as a result of wrong extension of unit rate and quantity, the unit rate quoted by Tenderers shall be regarded as firm and the extension shall be amended on the basis of the rate.
- (iii) All errors in totalling in the amount column and in carrying forward totals shall be corrected.
- (iv) All rates shall be quoted on the tender form provided in the Bill of Quantities. In case CONTRACTOR misses to quote rate for any item, the rate for that particular item shall be treated as 'Zero' and CONTRACTOR would be bound to execute that item without any payment limited to quantity mentioned in the BOQ at the time of tendering.

1.4 LETTER OF INTENT/ WORK ORDER: -

The Letter of Intent/ Work Order will be issued by the ICMAI to the successful TENDERER. Handing over of site and Date of Commencement of the work shall be **Seven** days from the date of issue of this letter.

1.5 DATE OF COMMENCEMENT AND COMPLETION: -

The Contractor shall be allowed admittance to the site on 'Date of Commencement' which will be **Seven** days from the issue of Letter of Intent/ Work Order by ICMAI and shall thereupon begin the works and shall regularly proceed so as to complete the same on or before the 'Date of Completion' subject, nevertheless, to the provision for extension of time contained hereinafter. Date of Completion is the date or dates for completion of the whole or any part of the works set out in or ascertained in accordance with the individual work order or the tender documents or any subsequent amendment thereto as provided in the conditions.

1.6 MS PROJECT SCHEDULE FOR EXECUTION OF WORK

1. Contractor shall submit within one week of the acceptance of the tender a MS Project Chart to ICMAI along with a weekly work schedule, which shall indicate the planning for the execution of the entire work under the contract within the stipulated time given for completion. This shall be scrutinized by the ICMAI. The mutually agreed M S Project schedule shall be binding on the CONTRACTOR for progress of the work for by the due date.
2. The Contractor shall during the entire tenure of site work, provide accurate fortnightly reviews of M S Project chart work targets & completed works for discussions with the ICMAI.
3. The Contractor shall maintain a register of daily deployment of labour, mason etc. on various activities and get it signed from Engineer-in-Charge on daily basis and shall produce before the ICMAI as and when asked for.

1.7 MOBILISATION ADVANCE

- a) ICMAI, if requested for, will make an advance loan to the Contractor for the costs of mobilization in respect of the works in a lump sum amount equivalent to 10% of the Contract price. The Payment of the mobilization advance loan will be due under separate certification by the Employer/PMC/ Architect/Consultant after:
 - i) Execution of the Agreement by the parties thereto,
 - ii) Provision by the Contractor of the Performance Security



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- iii) Provision by the Contractor of a bank guarantee equivalent to 110% of advance amount, valid till the Completion Period of contract, issued by a Nationalized Indian Bank. The acceptable form of Bank guarantee shall be strictly as per format given in the tender document. The bank guarantee shall remain effective until the advance loan has been completely repaid by the Contractor out of current earnings under the Contract and certified accordingly by the PMC/ Architect/Consultant.
- b) Unless otherwise agreed, the advance loan shall be repaid with proportionate percentage deductions from the interim payments certified by the PMC/ Architect/Consultant under the Contract. Recovery shall be made for the mobilization advance paid starting from the first interim R/A Bill @ 20% of the gross value of work done for the contract, until such time as the loan has been fully repaid.

1.8 PERFORMANCE SECURITY

Within 10 days of the Letter of Intent/ Work Order, the successful Tenderer shall furnish a Performance Security for an amount of 5 % (five percent) of the Contract Value (to be submitted before signing agreement) in favour of “The Institute of Cost accountants of India.”, payable at Kolkata in the form of Bank Guarantee, the validity of which will be up to Defect Liability Period plus 90 Days. Failure of the successful Tenderer to comply with this requirement shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security. The Security Deposit should be suitably extended in the event of extension of time of the contract.

In the event of increase in the contract cost, in actual execution, proportionate additional performance security shall be provided by the contractor or recovered from the subsequent payment due to the contractor. The validity of bank guarantee shall be suitably extended in the event of extension of time of the contract.

In case the Contractor fails to submit the Security Deposit and/ or Bank Guarantee of the requisite amount within the stipulated period or extended period, the Letter of Intent or Work Order will stand withdrawn automatically and EMD of the contractor shall be forfeited.

1.9 ADDITIONAL PERFORMANCE SECURITY:

If the bid of the successful Tenderer is having ALR (Abnormally Low Rates i.e. the rates less than 60% of estimated rates) for prices of individual items or total bid price offered in relation to the ICMAI’s item rates estimate or total price estimate of the real cost of the work to be performed under the Contract, the amount of the performance security deposit should be increased at the expense of the successful Tenderer to a level sufficient to protect the ICMAI against financial loss in the event of subsequent performance of the successful Tenderer under the Contract. This additional security provided separately shall be termed as Additional Performance Security and shall be released on completion of all ALR (Abnormally Low Rates) items against which the additional performance security is obtained. The value of the Additional Performance Security shall be worked out on the basis of differential rates.

i.e. Additional Performance Security Amount = Quantity X (60% of estimated rate -ALR rate).

1.10 FORFEITURE OF BANK GUARANTEE, RETENTION MONEY & SECURITY DEPOSIT

The Security Deposit, Bank Guarantee and Retention Money shall be liable to be forfeited by the Institute at its discretion in the event the Contractor is deemed to be in default or the event of any breach of contract on the part of the Contractor or if the Contractor fails to perform or observe any of the conditions of the contract.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

In addition to other provisions and conditions mentioned herein, Security Deposit/Bank Guarantee/ Retention Money, shall liable to be forfeited in following conditions also:

- a. the Bidder/ Contractor modifies its application price any time after being declared as successful bidder
- b. the successful bidder/ Contractor withdraws its/ his offer during the period of Agreement.
- c. the successful bidder/ Contractor refuses/ fails to execute the Work awarded to him/it.
- d. the successful bidder/ Contractor fails to perform the work to the satisfaction of the ICMAI.
- e. the Bidder/ Contractor founds to be indulged in Canvassing in any form in connection with RFP/ tender.
- b) the Bidder/ Contractor founds to be suppressing the information or furnishing wrong information or making mis-statements.
- c) the successful bidder/ Contractor fails to honour or refuses to comply with or modifies any or all terms and conditions of the Tender and/ or Agreement at any stage including after declaring L-1 Bidder.
- d) Contractor fails to make good the deficit of Security Deposit within 10 days of the notice of demand.
- e) Contractor fails to pay the Liquidated damages within stipulated time as provided in the Agreement.
- f) Successful Bidder/ Contractor fails to keep all the information/ details /drawings /material specification confidential and fails to maintain secrecy.
- g) The successful Bidder/ Contractor, in violation of the provisions of the Tender and ensuing Agreement and/ or without prior written consent of the Client/ Owner, sub- let the Contract.
- h) The successful bidder/ Contractor fails to handover the Insurance Policy including renewed Insurance Policy in original.
- i) Unless extended by the ICMAI in writing, on failure to complete the works, work order and items of work within individual dates for completion and clear the site on or before the date of completion.

1.10 APPORTIONMENT AND SUB-LETTING: -

The whole of the works included in the contract shall be executed by the main CONTRACTOR and as per **LIST OF SPECIALISED AGENCIES**. They shall not directly or indirectly transfer, assign or further sublet the contract or any part thereof or interest therein without the written consent of the ICMAI. But no such undertaking shall relieve the CONTRACTOR from the full and entire responsibility of the CONTRACTOR or from active superintendence of the works during their progress.

1.11 SPECIALIZED WORKS: -

Specialized works are works for which there are specialized agencies available in the market to execute them. These works should be got executed through such agencies only to ensure a proper quality of work. In the case of some specialized jobs by specialized firms being executed in the project, a Guarantee Bond is required to be executed, viz. water proofing works and anti- termite treatment.

1.12 EMERGENCY WORK: -

Emergency works means, any urgent measures which, in the opinion of the ICMAI, become necessary during the progress of the works to obviate any risk of accident or failure or which become necessary for security, or rectification to essential services during the defects liability period. If any Emergency works become necessary



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

and the CONTRACTOR is unable or unwilling at once to carry them out, the Architect/Consultant shall advise and assist the ICMAI in getting these works carried out by any other agency at the Risk and cost of Contractor. All expenses incurred on these works shall be recoverable from the CONTRACTOR, and if necessary be set off against any sum payable to him under this contract

If the EMPLOYER feels that the sub-contractors appointed by the CONTRACTOR is not competent enough to carry out the work of that package awarded to him, the ICMAI reserves the right to entrust that particular work to another CONTRACTOR selected by the ICMAI. However, the new subcontractor will work under the supervision of the main CONTRACTOR only.

The payments for the work done by the sub-contractor selected by the ICMAI will be made directly to the sub-contractor by the ICMAI

1.13 MANDATORY REQUIREMENT: -

1. The CONTRACTOR shall conform to the provisions of Acts of the Legislature relating to the works, and to the regulations and bye-laws of any authority, and of any water, lighting and other companies and/or authorities with whose system the structure is proposed to be connected and shall, before making any variation from the drawings or specifications that may be necessitated by so conforming, give to the Architect/Consultant and ICMAI written notice, specifying the variation proposed to be made and the reason for making it, and apply for instructions thereon. In case the CONTRACTOR does not, within 2 weeks, receive such instructions, he shall proceed with the work in question, and any variations so necessitated shall be dealt with under clause 1.39.
2. The CONTRACTOR shall indemnify the ICMAI or any agent, servant or employee of the ICMAI against any action, claim or proceeding relating to the infringement of any copy or design rights or any alleged patent or design rights and shall defend all actions arising from such claims and pay any royalties, license fees, damages, cost of all and every sort of other charges which may be payable in respect of any articles or material or part thereof legally incurred in respect thereof and included in the contract. In the event of any claim being made or action being brought against the ICMAI or any agent, servant or employee of the ICMAI in respect of any such matters aforesaid, the CONTRACTOR shall be immediately notified thereof.
3. The CONTRACTOR shall indemnify the ICMAI against all claims which may be made upon the ICMAI under the Workmen's Compensation Act or any other statutory provisions applicable to the work.
4. The CONTRACTOR shall also be responsible for all bodily injury to persons, animals, or things which may arise from the operation or neglect of himself or of any nominated subcontractor's employees whether such injury or damage arises from carelessness, accident or any other cause whatsoever in any way connected with carrying out of this contract. The CONTRACTOR shall indemnify the ICMAI and save him harmless in respect of all and any expense arising from and such injury or damage to persons, animals or things as aforesaid and also in respect of any claims made in respect of injury or damage under any Acts of Government or otherwise and also in respect of any Award of Compensation or damage consequent upon such claims.
5. The CONTRACTOR shall be responsible for all structural and other damage to any property which may arise from the operation or neglect of himself or of any subcontractor's employees or arising out of neglect, carelessness, defect or any other cause whatsoever in any way connected with the carrying out of this contract. This clause shall be deemed to include interalia, any damage to buildings, whatever immediately



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

adjacent or otherwise, and any damage to roads, streets, footpaths, bridges or ways as well as all damage caused to the building and works forming the subject of this contract by inclemency of weather. The CONTRACTOR shall indemnify the ICMAI against all claims which may be made against the ICMAI by any member of the public or other third party in respect of anything which may arise in respect of the works or in consequence of and in respect of any cost, charge/expense arising out of any claim or proceedings and also in respect of any Award of compensation or damage arising there from and shall reinstate all damage or every sort mentioned in this clause so as to make good or otherwise satisfy all claims arising from damage to the property of third parties.

6. The ICMAI with the advice of the Architect/Consultant shall be at liberty and is empowered to deduct the amount of any damage, compensation, costs, charges and expenses arising or accruing from or in respect of any such above said claims for damages from any sum or sums due or become due to the CONTRACTOR, for which the ICMAI shall be the sole deciding authority.
7. The CONTRACTOR shall be responsible for safety of all workmen and necessary statutory requirements related to ESI, workmen's compensation etc. should be met. The proof of (Insurance Policy) should be handed over to the ICMAI.

1.14 ADMISSION TO SITE:

1. The EMPLOYER & the Architect/Consultant and their representatives shall at all reasonable times have free access to the works and/or the workshop, factories, or other places where materials are lying or from which they are being obtained and the CONTRACTOR shall give all necessary facilities to the EMPLOYER/Architect/Consultant and/or his representative for inspection and examination and test of the materials and workmanship. No person unless authorized by the EMPLOYER/Architect/Consultant except the representative of Public Authorities shall be allowed on the works at any time.
2. The officials of the ICMAI connected with the contract shall have the right of entry to the site at all times.
3. The portion of the site to be occupied by the CONTRACTOR, erection of temporary workshop, stores, site office etc. will be clearly defined and or marked on the site plan, and the CONTRACTOR will on no account be allowed to extend his operations beyond these areas. No labour hutments to be provided on site and the Contractor to make own arrangements for the same elsewhere.
4. The CONTRACTOR shall provide if necessary, or if required on the site all facilities for temporary access thereto and shall alter, adopt and maintain the same as required from time to time and shall take up and clear away as and when no longer required and make all good.
5. The ICMAI reserves the right to use the premises or any portion of the site for execution of any work not included in this contract which he may desire to have carried out by other persons, and the CONTRACTOR shall allow all reasonable facilities for the execution of such work but shall not be required to provide any plant, material or labour for the execution of such work except by special arrangement with the ICMAI. Such work shall be carried out in such manner as not to impede the progress of the works included in the contract and the CONTRACTOR shall not be responsible for any damage or delay which may happen to or be occasioned by such work.
6. The ICMAI reserves the right of taking over any portion of the site, which may be required and the Contractor shall at his own expense clear such portion forthwith.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

7. Site is handed over to CONTRACTOR only for execution of work, not for any other job and the possession of CONTRACTOR is terminated at the completion of work or in case of foreclosure.

1.15 TEMPORARY WORKSHOPS/STORES/SITE OFFICE ETC.: -

1. The CONTRACTOR shall during the progress of the works, provide, erect and maintain at his own expense temporary workshops and stores as required for proper and efficient execution of the works.
2. On completion of works and if necessary, on completion of the defects liability period as decided by the ICMAI, the whole of such temporary buildings/structures shall be cleared away and the site reinstated and left clean to the entire satisfaction of the EMPLOYER at the Contractor's expense.
3. Additionally, the ICMAI may at his discretion permit the CONTRACTOR to locate his workshop and stores, in such buildings as may be available at site for that purpose at a rate to be mutually decided upon by the ICMAI and the Contractor, and in the event of the Contractor occupying such accommodation, the CONTRACTOR undertake to maintain such premises at his own expense in a clean and sanitary condition and to deliver the same on the completion of the works or on the termination of the contract, or in the event of the said building being required by the ICMAI within 7 days of an order to that effect, handover the same in a clean state complete in every respect.

1.16 NUISANCE: -

The CONTRACTOR will not at any time do, cause or permit any nuisance on the site or do anything which shall cause unnecessary disturbance or inconvenience to the ICMAI, tenants or occupiers of other properties near the site and to the public generally. The CONTRACTOR is completely responsible to ensure the safety and convenience of all concerned and at his own cost.

1.17 WORKING HOURS: -

The CONTRACTOR shall work normally only on and during the hours of working day. In case any work over and above normal working hours is required, the CONTRACTOR shall obtain prior written permission from ICMAI /Architect/Consultant. Safety for workmen, proper lighting arrangement, housekeeping and safety to client material will be Contractor's responsibility. The ICMAI shall incur no liability in respect of any excess cost arising therefrom.

1.18 LABOUR:-

1. The CONTRACTOR shall employ labour in sufficient number to maintain the required rate of progress and of such quality to ensure workmanship of the degree required by the specifications and to the satisfaction of the ICMAI.
2. The CONTRACTOR shall remain liable for the payment and shall pay or cause to be paid all wages or other moneys to his workers or employees and for those employed by his subcontractors (engaged directly or indirectly from time to time on or in connection with the said work under the relevant Acts or enactments relating thereto and the Rules framed there under as if the labour had been directly employed.
3. In respect of all labour directly or indirectly employed on the works for the performance on the Contractor's part, the CONTRACTOR shall comply with or cause to be complied with the current labour regulations in regard to all matters provided therein and with all other labour laws as applicable.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

4. The regulations aforesaid shall be deemed to be a part of this contract and any breach thereof deemed to be a breach of this contract.
5. The CONTRACTOR shall take all actions and deposit fees as may be necessary under the Contract Labour (Regulation & Abolition) Act, 1970 and current labour regulations including the actions and depositing of money on behalf of ICMAI, if required. The CONTRACTOR shall at all times keep the ICMAI indemnified against any actions for breach of the said Act and regulations.
6. The CONTRACTOR shall, during the progress of the works, comply at his own expense with all the current rules and provisions for the protection of health and sanitary arrangements and safety provisions for workers employed and shall at his own expenses provide for all facilities in connection therewith.
7. Contractors shall deposit all provident funds, ESI etc. to the respective authorities and produce the receipt of the same to ICMAI regularly, failing which ICMAI will deposit the same himself and the same shall be adjusted in RA bills or Retention Money.

1.19 RIGHT OF INSPECTION: -

The ICMAI, the Architect/Consultant and other consultants including their representatives concerned with the contract shall be entitled, at any time, to inspect and examine any materials intended to be used in or on the works, either on the site or at the Factory or workshop or other place where such materials are assembled, fabricated or manufactured or at any place(s) where these are lying or from which these are being obtained and the CONTRACTOR shall give such facilities as may be required for such inspection and examination, at Contractor's cost .

1.20 MATERIALS TO BE ARRANGED BY THE CONTRACTOR: -

1. The CONTRACTOR shall at his own cost and expense provide all materials required for the works.
2. All materials to be provided by the CONTRACTOR shall be brand new conforming to latest IS Codes and ISI marked wherever applicable and all materials and workmanship shall be as far as procurable of the respective kinds described in the specifications drawings and/or schedule of quantity/ies and in accordance with the Architect/Consultant's and/or ICMAI's instructions and the CONTRACTOR shall, upon the request of the Architect/Consultant or ICMAI, furnish him with all invoices, accounts receipt and other vouchers to prove that the materials comply therewith.
3. The CONTRACTOR shall, at his own cost and expense supply to the ICMAI through the Architect/Consultant samples of materials proposed to be used in the works. The samples must be produced at least four weeks before they are to be incorporated in works. The ICMAI shall within seven days of supply of samples or within such further period as he may require, inform the CONTRACTOR whether samples are approved by him or not. If samples are not approved, the CONTRACTOR shall forthwith arrange to supply the ICMAI for his approval fresh samples through the Architect/Consultant complying with the specification laid down in the contract.
4. No materials shall be brought by the CONTRACTOR to site unless samples are approved.
5. Cement Store as per standard design finalized and approved by Consultant/ Engineer in Charge to be made at site by Contractor at his own cost.



1.21 TESTING MATERIALS: -

The EMPLOYER or Architect/Consultant shall be entitled to have tests carried out as specified in IS codes for any materials supplied by the CONTRACTOR (other than those for which satisfactory proof has been furnished) at the cost of CONTRACTOR and the CONTRACTOR shall provide at his expense all facilities which the ICMAI or Architect/Consultant may require for the purpose. The cost of materials consumed as well as cost of testing from approved laboratory shall be borne by the CONTRACTOR.

1.22 REJECTION OF MATERIALS: -

The Architect/Consultant/ICMAI shall have full powers to reject/removal of any or all the materials brought to site by the Contractor which are not brand new and in accordance with the contract specifications or does not conform in character or quality to sample approved by the ICMAI. In case of default on the part of the CONTRACTOR in removing rejected materials, the Architect/Consultant and or EMPLOYER ICMAI shall be at liberty to have them removed by other means at the Contractor's expense and risk. The Architect/Consultant with prior approval of ICMAI shall have full powers to permit or to approve other materials to be substituted for rejected materials.

1.23 CARE AND CUSTODY: -

1. Materials required for the works, whether brought by the CONTRACTOR or supplied by the ICMAI shall be stored by the Contractor only at places approved by the ICMAI, storage and safe custody of materials shall be at the risk and the responsibility of the CONTRACTOR. The CONTRACTOR shall be liable for any loss or damage to such materials due to the neglect, theft or fire and shall make the loss good at his cost and expense.
2. Where in any running bill the, CONTRACTOR has claimed payment and the Architect/Consultant has included the value of any unfixed materials intended for incorporation in works, then these materials shall become the property of the ICMAI and they shall not be removed except for use upon the works, without the written authority of the ICMAI.

1.24 SURPLUS MATERIALS: -

Whenever the works are finally completed and advance if any in respect of any such materials is fully recovered, the CONTRACTOR shall at his own expense forthwith remove from the site all surplus materials arranged by him after obtaining prior clearance in writing from the ICMAI.

1.25 EXTRA HOURS OF WORKING: -

If for any reason, the Contractor has to work on any section or complete work on holidays or after the normal working hour, the Contractor shall seek the consent of the Employer/Architect/Consultant/Consultant to do so after making the adequate provision for safety requirements and any additional lighting required. The Contractor shall bear such extra hours working payment for his workmen and supervisory staff including the provision for any additional plant, facilities and the like arising out of extra hour working.

In case the Contractor carries out construction in the night hours (beyond 20.00 hrs.) or listed holidays & week offs, then CONTRACTOR shall arrange for to and fro travelling and food for his workers and other staff, safety and security for Project site staff deployed for supervision at his own cost.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

1.26 CONTRACTOR'S ALL RISK INSURANCE COVER: -

Notwithstanding anything contrary in this document, the CONTRACTOR shall arrange Contractor's All Risk cover insurance in line with the following:

Value: The entire contract value (including the Contract Price plus 10% of the Contract for the period of completion of the Works which includes till the works are handed over to the ICMAI to cover the damages due to Civil commotion, riots, war, earth quake, terrorist attack and other disturbances.

All Plants and machinery owned by the Contractor for the project to be also covered.

Damage insurance against loss or damage by fire or any other disaster to the works during construction until its completion.

The CONTRACTOR has to take insurance policy to cover all risks including the above. The risks covered in the Contractor's policy include but not limited to Workmen Compensation, Third Party Insurance, Labour and Materials at site etc.

Beneficiary: The CONTRACTOR (for the insurance policy taken by him)

Period: The period covered under insurance shall be completion period including extended time plus 12 months of Defects Liability Period.

Third party liability: The insurance shall cover all third party Liability

Employees cover: The insurance shall cover all risks to the employees of CONTRACTOR. The original policy shall be handed over to ICMAI within 10 days from the date of Letter of Intent/Work Order.

Failing of above, ICMAI will arrange such insurance policy and recover the proportionate premium amount from the first RA bill.

1.27 GIVING OF NOTICES AND PAYMENT OF FEES: -

1. The Contractor shall give all notices and pay all fees required to be given or paid under any Statute, Ordinance, or Law, or any regulation, or bye-law of any local or other duly constituted authority in relation to the execution of the Works and by the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works.
2. The Contractor shall conform in all respects with the provisions of any such Statute, Ordinance or Law as aforesaid and the regulations or bye- laws of any local or other duly constituted authority which may be applicable to the Works and with such rules and regulations of public bodies and companies as aforesaid and shall keep the ICMAI indemnified against all penalties and liability of every kind for breach of any such Statute, Ordinance or Law, regulation or bye- law.
3. The ICMAI will repay or allow to the Contractor all such sums as the Engineer in Charge shall certify to have been properly payable and paid by the Contractor in respect of such fees.

1.28 FOSSILS: -

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the site of the Works shall be deemed to be the absolute property of the ICMAI. The Contractor shall take precautions to prevent his workmen or any other persons from removing or



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

damaging any such article or thing and shall immediately upon discovery thereof and, before removal, acquaint the Engineer-in-charge of such discovery and carry out the Engineer's orders as to the disposal of the same.

1.29 PATENT RIGHTS AND ROYALTIES: -

The Contractor shall save harmless and indemnify the EMPLOYER/ICMAI from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Constructional Plant, machine work, or material and for in connection with the Works or any of them and from and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Except where otherwise specified, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works or any of them.

1.30 PLANT EQUIPMENT AND TRANSPORT: -

All tools, plant and equipment brought to the site shall not be removed off the site without the prior written approval of the EMPLOYER/ICMAI. But whenever the works are finally completed or the contract is terminated the CONTRACTOR shall forthwith remove from the site all tools, plants and equipment after clearance in writing from and the ICMAI.

1.31 ELECTRICITY AND WATER SUPPLY: -

1. The ICMAI does not warrant electricity and water connections. Temporary water and electricity connections should be arranged by the Contractor at his own cost and shall be responsible for all connections, pumps, pipes, storage capacity, cabling, wiring, conduiting and all other works necessary to distribute and use services from distribution points as much as required for his work.
2. The Contractor shall also make arrangement for alternative standby services at his own cost in the form of generators of adequate capacity (Day & Night) so that there is no delay in progress of works as per construction schedule submitted by him and approved by PMC.
3. If ICMAI is able to arrange for electricity supply from Authorities, then the same facility will be extended to the CONTRACTOR at one point. Cost of cabling, security deposit, meter, monthly payments of electricity bills etc. will be on Contractor's account. Unit consumed as per installed meter will be levied at prevailing electricity charges. In case of meter getting faulty, 1.0 % of RA bill will be levied toward electricity charges.
4. The available bore well in the premises (If any) can be used by CONTRACTOR for drawing water. Water charges will be deducted @ 0.5 % of RA bills.

1.32 CONTRACTOR'S SUPERVISION: -

1. The CONTRACTOR shall give all necessary personal superintendence during the execution of the works, and as long thereafter as the Architect/Consultant and ICMAI may consider necessary until the expiration of the Defect Liability Period.
2. Where the CONTRACTOR is not a qualified engineer or even if he is so qualified, he cannot, in the opinion of the Architect/Consultant and ICMAI give his full personal attention to the works, he shall, at his own expense employ any experienced engineering graduate as his accredited agent to supervise the works and to receive instruction from the Architect/Consultant and ICMAI. The employment of engineer as aforesaid shall be to the approval of the Architect/Consultant and ICMAI who may verify his qualification and



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

experience by referring original degree which shall be made available by the CONTRACTOR or the individual employed or proposed to be employed.

3. If the CONTRACTOR fails to appoint a suitable engineer on being required to do so, the Architect/Consultant or the ICMAI shall have full powers to suspend the execution of works until such date a suitable engineer is appointed and the CONTRACTOR shall be held responsible for the delay so caused to the works, if the CONTRACTOR fails to employ the qualified engineer, the ICMAI shall have the discretion to appoint such engineer and payment made to such engineer shall be recoverable from the CONTRACTOR.
4. Orders/Instructions given to the CONTRACTOR or his agent who will be nominated by the CONTRACTOR before commencement of work shall be considered to have the same force as, if they had been given to the CONTRACTOR himself.
5. The CONTRACTOR or his agent shall be in attendance at the site during all working hours and shall superintend the execution of the works with such additional assistance in each trade as the ICMAI may consider necessary.
6. The CONTRACTOR or his accredited agent shall attend, when required and without making any charge for doing so, either at works site or at the office of the Architect/Consultant or ICMAI to receive instructions from the Architect/Consultant or ICMAI.

1.33 DISMISSAL OF CONTRACTORS EMPLOYEES: -

ICMAI shall have full power and without giving any reason to direct the CONTRACTOR to immediately cease to employ in connection with this contract any agent, servant or employee whose continued employment in his opinion is undesirable. The CONTRACTOR shall not be allowed any compensation on this account.

1.34 SETTING OUT OF WORKS: -

1. The Architect/Consultant/Consultant shall supply dimensioned drawings, levels and other information necessary to enable the CONTRACTOR to set out the works.
2. The CONTRACTOR shall set out the works and shall provide and fix all setting out apparatus required and solely be responsible for the true and perfect setting out the same and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. The CONTRACTOR shall take in writing the approval of the Engineer-in- Charge for setting out and levels before starting the work. However, the CONTRACTOR will be responsible for correctness of setting out of works.

1.35 APPROVAL BY STAGES: -

All work embracing more than one process shall be subject to examination and approval at each stage thereof as stipulated by the Architect/Consultant in consultation of ICMAI and the CONTRACTOR shall give reasonable notice in writing to the Architect/Consultant when each stage is ready. In default of such notice received, the Architect/Consultant shall be entitled to appraise the quality and extents thereof and in the event of any dispute the decision of the ICMAI thereon shall be final and binding. Record of such approval will be maintained at Site.

1.36 COVERING OF WORK: -



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

The CONTRACTOR shall give reasonable notice in writing to the Architect/Consultant whenever any work is to be permanently covered or concealed, whether by earth or other means and in default of so doing, shall, if it is required by the Architect/Consultant, uncover such work at his own expense and make it good at his own cost.

1.37 ARCHITECT/CONSULTANT'S INSTRUCTIONS: -

The CONTRACTOR shall carry out and complete the said work in every respect in accordance with the contract conditions and with the directions of and to the satisfaction of the Architect/Consultant and ICMAI. The Architect/Consultant may from time to time issue further detailed drawings and or written detailed directions/instructions and explanations within the meaning of contract agreement in regard to:

- i. The variation or modification of the design, quality or quantity of works or the addition or omission or substitution of any work, with the prior approval of the ICMAI.
- ii. The removal and/or re-execution of any works executed by the Contractor.
- iii. The opening up for inspection of handy work covered up.
- iv. The amending and making good of any defects.

1.38 VARIATIONS: -

No alteration, omission or variation shall vitiate this contract. In case the Architect/Consultant or ICMAI thinks proper, at any time during the progress of the works, to make any alterations in or omission from the works or any alteration in the kind or quality of the materials to be issued therein, the Architect/Consultant, with approval of ICMAI, shall give notice thereof in writing well in advance under his hand to the CONTRACTOR and the CONTRACTOR shall carry out such alteration, addition or omissions as the case may require, in accordance with such notice. The value of such extra alteration, addition or omissions shall in all cases be determined by the ICMAI in accordance with the provisions of Clause 1.39 hereof and the same shall be added to or deducted from the Contract amount.

1.39 RATES FOR ALTERED/ SUBSTITUTED/ ADDITIONAL WORKS: -

1. If the rates for altered, substituted or additional work are not specifically provided in the Contract, then such rates will be derived from the rates for a similar class of work as specified in the Contract.
2. If the rates of altered, substituted or additional work cannot be determined in the manner specified above, then the rates of such items of work shall be computed based on the Analysis of Rates as provided in CPWD, Analysis of Rates (latest edition). Water & Electricity charges even if provided in the analysis will not be allowed since same are deemed to be included in the 15% (Fifteen Percent) to be added towards establishment, overheads, water and electricity, POL charges, contingency and CONTRACTOR profit, tool and tackles etc.
3. If the rates for the altered, substituted or additional work cannot be determined in the manner specified in above Clauses, then the rates for the same shall be decided by the EMPLOYER on recommendations of Architect/Consultant on pro-rata basis or the actual cost to the CONTRACTOR at site including labour (for which CONTRACTOR shall produce sufficient proof) plus 15% towards establishment, overheads, water and electricity, POL charges, contingency and CONTRACTOR profit, tool and tackles etc. cover profits & overheads of CONTRACTOR.

1.40 DEFECTIVE WORK: -



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

1. The Architect/Consultant or ICMAI shall, during the progress of the works, have power to order in writing from time to time the removal and proper re-execution of any work executed with materials or workmanship not in accordance with the drawings and specifications or instructions, and CONTRACTOR shall forthwith carry out such order at his own cost. In case of defaults on the part of the CONTRACTOR to carry out such order, the ICMAI shall have the power to employ other persons to carry out the same and all expense consequent thereon or incidental thereto as certified by the Architect/Consultant shall be borne by the Contractor or may be deducted by the ICMAI from any money due or that may become due to the CONTRACTOR against this contract or any other contract with the ICMAI.
2. The CONTRACTOR is responsible and shall ensure that there are no leakages or seepage in roofs, ceilings, walls, or floors or in the water supply, electrical or sewage system. Contractor shall do the complete stage of work to the satisfaction of Architect/Consultant and ICMAI.
3. Engineer-in-Charge has full authority, discretion to reduce /part the rates of various items, if the executed item is not up to the satisfaction or yet to be completed. No objection from CONTRACTOR shall be entertained on this ground.

1.41 ORDERS UNDER THE CONTRACT: -

All directions, notices etc. to be given under the contract shall be in writing, type script or printed and if sent by registered post/E-Mail to the last known place of abode or business of the CONTRACTOR shall be deemed to have been served on date when in the ordinary course of post, it would have been delivered to him.

If the CONTRACTOR after receipt of written notice from the ICMAI requiring compliance, fails to comply within fifteen days with such further drawings and or Architect/Consultant instructions, the ICMAI may employ and pay other persons to execute any such work whatsoever that may be necessary to give effect thereto, and all costs incurred in connection therewith shall be recoverable from the CONTRACTOR by the ICMAI on certification of the Architect/Consultant as a debt or may be deducted by him from any money due to/become due to the CONTRACTOR. The measurements shall be taken jointly by the Engineer – In – Charge or any person or persons duly authorized by him and the Contractor's representatives, immediately on completion of the item or work.

1.42 MEASUREMENTS: -

1. The CONTRACTOR shall measure the work done and enter into the measurement book, sign and submit to the PMC for verification and certification.
2. Mode of measurement for Civil Works will be as per IS 1200.
3. If any alterations or additions (other than those authorized) have been covered up by the Contractor without his having given notice of his intention to do so, the Architect/Consultant shall be entitled to appraise the value thereof and in the event of any dispute the decision of the ICMAI thereon shall be final and binding.
4. The measurement and valuation in respect of the contract shall be completed within one months of the completion of the contract works.

1.43 DELAY AND EXTENSION: -



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

If the work is delayed beyond the stipulated time for reasons given below, then the Contractor shall immediately give a written notice thereof to the ICMAI, but the CONTRACTOR shall nevertheless consistently use his endeavours to prevent delay and shall do all that may be reasonable or required to the satisfaction of the ICMAI to proceed with the work. The ICMAI based on the recommendations of Architect/Consultant, shall grant fair and reasonable extension of time for the completion of works in the following cases.:

1. By force majeure; as desired hereunder: -

The CONTRACTOR shall not be held in default in performance of his obligations if such performance is prevented or delayed due to any unforeseen causes beyond his control such as Act of God, action of Govt. in its sovereign capacity and its statutory bodies, Civil commotion, flood, earthquake or any other natural calamities which cannot be foreseen.

However, it shall be incumbent on the CONTRACTOR to inform the ICMAI/Architect/Consultant regarding conditions of force majeure in writing with documentary proof within 15 days of commencement and completion of Force majeure circumstances.

2. By the works or delays of other Contractor's or tradesmen engaged by the ICMAI.

3. In consequence of the CONTRACTOR not having received in due time necessary instruction/clearance from the Architect/Consultant for which he shall have specifically applied in writing, fifteen days before its actual requirement. No claim whatsoever for any extra compensation in respect of or arising out of extension of time as specified above shall be payable by the ICMAI.

1.44 CERTIFICATE OF COMPLETION: -

1. Immediately after completion of the whole work which has been mentioned in the contract, the CONTRACTOR shall give notice thereof to the Architect/Consultant with a copy to the ICMAI. The work shall be completed to the entire satisfaction of the Architect/Consultant and the ICMAI. If satisfied the Architect/Consultant shall issue the certificate of completion.
2. The works shall not be considered as completed unless the Architect/Consultant has certified in writing that they have been accepted by the ICMAI. The defects liability period as mentioned in Clause 1.46 shall commence from the date certified by the Architect/Consultant as date of completion.

1.45 AS BUILT DRAWINGS: -

The CONTRACTOR shall submit 2 sets of as Built Drawings (Hard Copies) along with Soft Copies (PEN Drives) for all trades of work to the ENGINEER-IN-CHARGE for his approval along with the Final Bill.

1.46 DEFECTS LIABILITY PERIOD: -

- 1a Defects Liability Period shall be **twelve (12) calendar months** after actual completion of the works as certified under clause 1.44. Any defects in material or workmanship observed in the entire work during execution or work or within Defects Liability Period, shall be notified in writing by the Architect/Consultant or ICMAI to the Contractor and shall be rectified by him at his own cost within time as specified by Architect/Consultant/ICMAI.
- 1b To facilitate prompt attention to the defects, the CONTRACTOR shall employ a team of tradesmen like Masons, Plasterers, Carpenters, Plumbers, Fitters and Labours covering all trades along with necessary materials and spares. A supervisor will also be available along with the maintenance team to take



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

instructions from Architect/Consultant/ICMAI. The maintenance team will be available throughout the defects liability period. The composition of the tradesmen will vary according to the nature of recurring defects noticed in the buildings. In case of default, the Architect/Consultant/ICMAI may employ any other person to rectify or make good such defects. All expense consequent thereon or incidental thereto shall be borne by the Contractor and shall be recoverable from him by the EMPLOYER and shall be deducted from RA bills or Retention Money or Performance Guarantee/ Retention Money.

2. Should any defective works have been done or material supplied by any sub-CONTRACTOR employed, the CONTRACTOR shall be liable to make good in the same manner as if such work or material has been done or supplied by the CONTRACTOR. The CONTRACTOR shall remain liable under the provisions of this clause notwithstanding the signing by the Architect/Consultant of any certificate or passing any account.
3. The Architect/Consultant shall also certify at the end of the Defects Liability Period regarding the state of rectification of defects pointed out during defect liability period.

1.47 LIQUIDATED DAMAGES: -

If the CONTRACTOR fails to complete the works by the due date or within extended time, the Contractor shall be liable to pay Liquidated Damages to the ICMAI at the rate of 0.5 % of the contract value for every week of delay subject to a maximum of 10% of the contract value. In addition to Liquidated Damages, in case the delay is beyond 20 weeks, it shall render the Retention Money to be forfeited and in addition a penalty of Rs. 10 Lacs (Rupees Ten Lacs Only) will be payable by the CONTRACTOR and the Contract will come to end and the ICMAI shall be at liberty to withdraw the work and get it executed from any other agency at Contractor's risk and cost and the site shall be vacated by Contractor immediately.

1.48 ESCALATION: -

The contract amount shall remain firm and shall not be subject to any escalation whatsoever under any circumstance.

1.49 SECURED ADVANCE: -

The CONTRACTOR, on signing an indenture in the form to be specified by the Engineer-in- Charge, shall be entitled to be paid during the progress of the execution of the work up to 65% of the material cost against submission of invoice in original or 65% of item rate, whichever is less, for materials such as cement, steel, bricks, tiles, stone etc. which are non-perishable, non- fragile and non-combustible and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and/ or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. Such advances shall be deducted completely in the next RA bill. Material advance can be claimed only in the following R.A. Bill and no separate bill shall be raised.

Materials against which advance is paid shall not be removed from site. Undertaking should be given by CONTRACTOR to ICMAI, stating that materials remains in safe custody of CONTRACTOR, is safeguarded against losses due to the CONTRACTOR postponing the execution of the work or due to shortage or misuse of the materials, or any unstated reason.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

1.50 RETENTION MONEY

Ten per cent (10%) of the Contract value will be deducted towards Retention Money. It will be deducted from every RA bill @ 10% of the gross bill amount. Alternately Contractor can submit a Bank Guarantee for equivalent amount, before payment of 1st RA bill. 50% of the Retention Money shall be released along with final bill and balance 50% shall be released after completion of 'Defect Liability Period'. No interest shall be payable by ICMAI on this amount

1.51 RUNNING ACCOUNT PAYMENTS: -

- a) The Contractor shall submit bills for the work done as per provision given in Section –V –Appendix form of tender, Point no. 16.
- b) Any certificate relating to work done or materials delivered may be modified or corrected by any subsequent certificates or by the final certificate and no certificate of the ICMAI supporting any payment shall on itself be conclusive evidence that any work or materials to which it relates are in accordance with the contract.
- c) The running account payments shall be cleared by the ICMAI within 21 working days from the date of the receipt of Contractor's bill, if found in order.
- d) All payments to the CONTRACTOR shall be subject to deduction of Income tax at Source as per section 194(c) of Income Tax Act and other deductions as per contract.
- e) All interim payments shall be treated as advance payments. On completion of the entire work, the Contractor shall submit his final bill.

1.52 FINAL BILL: -

1. The final bill shall be submitted by the Contractor in duplicate within one month of issue of virtual completion certificate. The Architect/Consultant will certify the bill so submitted in next 30 days. Payment of those items of the final bill in respect of which there is no dispute shall be made in next 30 days of receipt of duly certified bill from the Architect/Consultant.
2. It shall be accompanied by all abstracts, vouchers etc. supporting it and shall be prepared in the manner prescribed by the ICMAI.
3. No charges shall be allowed to the CONTRACTOR on account of the preparation of the final bill.
4. No further claims shall be made by the CONTRACTOR after submission of a final bill, and other claims if at all, shall be deemed to have been waived and extinguished with his free consent.
5. The Engineer-in-charge shall check and forward the final bill along with all the measurement books in original to the Architect/Consultant and with Architect/Consultant's signature, it will be sent to the ICMAI.
6. The CONTRACTOR shall be entitled to be paid the full measurement value of work less the value of payment made on account and any charges properly preferred under the conditions of contract, for stores supplied by the ICMAI subject to the certification of the final bill by the Architect/Consultant.
7. After the payment of the amount of the final bill, the CONTRACTOR may, if he so desires, reconsider his position in respect of the disputed portion of the final bill and take step for settlement and if he fails to do so within 30 days, his disputed claim shall be deemed to have been waived and abandoned by the CONTRACTOR.
8. All payments due under this contract shall be made by means of a crossed cheque 'A/C payee' /RTGS.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

1.53 RECOVERY FROM CONTRACTOR: -

1. Whenever any claim for payment of a sum of money arises(s) out under this contract against the CONTRACTOR the CONTRACTOR shall on demand make the payment of the same or agree for effecting adjustment from any amounts due to him by the ICMAI. If , however, he refuses or neglects to make the payments on demand or does not agree for effecting adjustment from any amount due to him, the ICMAI shall be entitled to withhold an amount not exceeding the amount of claim(s), from any sum then due or which at any time thereafter may become due to the CONTRACTOR under this or any other contract with the ICMAI or from the Contractor's Retention Money and retain the same by way of lien till such time, payment is made by the CONTRACTOR or till the claim(s) is/are settled or adjusted.
2. It is an agreed condition of this contract that the sum of money(s) withheld or retained as and by way of lien under this condition by the ICMAI, will be kept, withheld or retained as such by the ICMAI, till the claims arising out of or under/this contract is settled or adjusted and that the CONTRACTOR will have no claim for interest or damages whatsoever on any account in respect of such sum so withheld.

1.54 DETERMINATION: -

1. The ICMAI may without prejudice to any other right or remedy cancel the contract in part or whole in any of the following cases:

If Contractor:

- (i) Being an individual, or if a firm, any partner thereof at any time be adjudged insolvent or having received orders for administration of his estate made against him or takes any proceedings for liquidation or composition under any Insolvency Act for the time being in force or makes any conveyance or assignment of his effects or composition or arrangement for the benefits of his creditor or purport so to do or if any application be made under Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be granted by him for and behalf of his creditors or.
- (ii) Being a company passes a resolution or the court makes an order for the liquidation of its affairs or a receiver or manager on behalf of the debenture holders be appointed or circumstances arises which entitle the court or debenture holders to appoint a receiver or Manager, or.
- (iii) Assigns, transfers or subjects or attempts to assigns transfer or sublet any portion of the works without the prior written approval of the ICMAI or.
- (iv) Makes defaults in commencing the work within a reasonable time from the date of the handing over of the site and continue in that state after reasonable notice from the Architect/Consultant and or ICMAI.
- (v) In the opinion of the ICMAI/Architect/Consultant at any time whether before or after the date or extended date for completion makes defaults in proceeding with the works with due diligence and continues in that state after reasonable notice from the Architect/Consultant and or ICMAI or delays the project.
- (vi) Fails to comply with any of the terms and conditions of the contract after reasonable notice in writing with directions properly issued there under.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- (vii) Fails to complete the works, work order and items of work within individual dates for completion and clear the site on or before the date of completion.
2. Whenever the ICMAI exercises his authority to cancel the contract under any Clause, he may complete the works by any means at the Contractor's risk and expense provided always that in event of cost of completion after alternative arrangements have been finalized by the ICMAI to get the works completed or estimated cost of completion (as certified by the Architect/Consultant) and approved by the ICMAI being less than the contract cost, the advantage shall accrue to the ICMAI. If the cost of completion after the alternative arrangements have been finalized by the ICMAI to get the work completed or estimated cost of completion (as certified by the Architect/Consultant) and approved by the ICMAI exceeds the money due to the CONTRACTOR under this contract, the CONTRACTOR shall either pay the excess amount assessed by the Architect/Consultant or the same shall be recovered from the CONTRACTOR by adjustments from outstanding or by other means.
 3. The ICMAI shall also be at liberty to use the materials and other stores on site as he thinks proper in completing the work and the CONTRACTOR will be allowed the necessary credit. The amount of credit to be allowed in completing the work shall be assessed by the Architect/Consultant and approved by the ICMAI and the amount so assessed shall be final and binding on the CONTRACTOR.
 4. In case the ICMAI completes or decides to complete the works under the provisions of this contract, the cost of such completion to be taken into account in determining the excess cost to be charged to the CONTRACTOR under this condition shall be the cost or estimated cost (as certified by the Architect/Consultant) of materials purchased or required to be purchased and or the labour provided or required to be provided by the ICMAI , as also the cost of the Contractor's materials used with addition of 25% (twenty Five percent) to cover superintendence and establishment charges.

1.55 FORECLOSING OF WORK: -

1. If at any time after the acceptance of the tender, the ICMAI, for any reason whatsoever, does not require the whole or any part of the works to be carried out, the ICMAI shall give notice in writing of the fact to the CONTRACTOR, who shall have no claim to any payment of compensation or otherwise, whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the foreclosing of whole or part of the works.
2. He shall be paid at contract rates for the full amount of the executed works including such additional work e.g. clearing of site etc. as may be rendered necessary by the said foreclosing, he shall be allowed a reasonable payment (as decided by the EMPLOYER) for any expenses sustained on account of labour and materials collected but which could not be utilized on the works.

1.56 SETTLEMENT OF DISPUTES:

If the Contractor considers any work demanded of him to be outside the requirements of the Contract, or considers any drawings, record or ruling of the Engineer-in-charge on any matter in connection with or arising out of the Contract or the carrying out of the work to be unacceptable, he shall promptly ask the Engineer-in-charge in writing, for written instructions of decision. There upon the Engineer-in-charge shall give his written instructions or decision within a period of thirty days of such request.

Upon the receipt of the written instructions or decisions, the Contractor shall promptly proceed without delay to comply with such instructions or decisions.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

If the Engineer-in-charge fails to give his instructions or decisions in writing within a period of thirty days after being requested, or if the Contractor is dissatisfied with the instructions and decisions, he shall appeal to the ICMAI, who shall afford an opportunity to the Contractor to be heard and to offer an evidence in support of his appeal. The ICMAI shall give a decision within a period of thirty days after the Contractor has given the said evidence in support of his appeal.

If the Contractor is dissatisfied with this decision, the Contractor within a period of thirty days from the receipt of the decision shall indicate his intention to refer the dispute to Arbitration, failing which the said decision shall be final and conclusive.

1.57 ARBITRATION: -

That in the event of any question, dispute or differences arising out or in connection with any of the terms and conditions of the Agreement, in the first instance, the parties hereto shall try to resolve the same by mutual consultation, failing which the same shall be referred to the sole arbitrator to be appointed mutually by the parties. The Arbitration and Conciliation Act, 1996 and any statutory modification or re-enactment thereof, shall apply to these arbitration proceedings. Arbitration proceedings shall be held at Jaipur and the language of the arbitration proceeding shall be English. The arbitral award shall be final and binding upon both the parties. All Arbitral Awards shall be in writing and shall state the reasons therefor.

1.58 WORKS CONTRACT TAX (SALES TAX): -

1. The CONTRACTOR will necessarily and properly keep all the records, documents and paid vouchers etc. for the purpose of tax assessment by concerned authority. Any claims for refund, if applicable shall be filed by the CONTRACTOR directly with the Sales tax authority.
2. Accordingly, the CONTRACTOR is deemed to have accounted for the element of sales tax on all the quoted amounts under this contract.

1.59 SITE ORDER BOOK: -

1. A site order book shall be kept at PMC's office at site of work. As far as possible, all orders/ regarding the work shall be entered in this book. All entries shall be signed by PMC, his authorized sub-ordinates who are in-charge of work or his representatives. In important cases, PMC will countersign the entries which have been made.
2. The site order book shall not be removed from the work site except with written permission of PMC. The contractor or his representative shall be bound to take note of all instructions and directions meant for the contractor as entered in the site order book.

1.60 ACTION WHERE NO SPECIFICATIONS ARE SPECIFIED: -

The contractor shall execute all the work as per BOQ, drawings and specifications. In case of any class of work for which there is no such specification, such work shall be carried out in accordance with standard CPWD Specifications or Bureau of Indian Standards (BIS). In case there is no such specification in BIS, the work shall be carried out as per manufacturer's specification or standard engineering practices at the discretion of PMC/Engineer-in-charge.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

1.61 PERMISSION FOR BLASTING: -

Under normal circumstances, blasting will not be permitted for excavations. If necessary, it will be allowed only after taking permission from the concerned local Govt. Authorities/bodies. The responsibility of taking permission including remittance of fees will be with the contractor.

1.62 RELICS, OBJECTS OF ANTIQUITY, TREASURES, ETC.: -

All gold, silver, oil minerals archaeological and other findings of importance, all precious stones, coins, treasures, relics, antiquities and other similar things which may be found in or upon the site shall be the property of ICMAI and Contractor shall duly preserve the same to the satisfaction of EMPLOYER and from time to time deliver the same to such person or persons as EMPLOYER may authorize or appoint to receive the same.

1.63 REQUIREMENT OF MINIMUM TECHNICAL STAFF TO BE DEPLOYED: -

Project	Contract Period	Qualification	Number	Min Experience	Remarks
Construction of Institutional Building	—	i) Project Manager - BE (Civil)	1	10	Principal Technical Representative
		ii) Graduate Engineer - BE (Civil) & BE (Electrical)	1 each	7	
		iii) Diploma Engineer - (Civil)/ Electrical	1 each	5	
		iv) Supervisor - Civil/ MEP		10	

In case of non-compliance, rate of recovery will be done at following rates: -

S. No.	Qualification	Rate of recovery
(i)	Project Manager with Degree	Rs.30,000/-p.m.
(ii)	Graduate Engineer/ Diploma Engineer	Rs.20,000/-p.m.
(iii)	Supervisor	Rs.15,000/-p.m.

2 LOGISTICS PLAN FOR HEALTH

2.1 LABOUR AND EMPLOYMENT LAWS

1. No labour below the age of eighteen (18) years shall be employed on the Project.
2. The Contractor shall not pay the labourers engaged by it on the Project less than what is provided for under the applicable laws. Whether for time or piece work, based on the applicable rates of wages as fixed under law at the time. The Contractor shall ensure that the provisions of the Minimum Wages Act, 1948 and the Provident Fund Act, 1952, as amended from time to time, are fully complied with. The Contractor shall maintain the necessary registers and records for payment of wages, overtime, Provident Fund etc, made to its workmen / Regional Provident Fund Commissioner as required by the Conciliation Officer (Central) Ministry of Labour, Government of India., Provident Fund Department or



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- such authorized person appointed by the Central and/or State Government. The Contractor shall ensure that this is complied by him including any labour CONTRACTOR employed by him.
3. The Contractor, at his own expense, shall comply with all the current applicable labour laws and keep the ICMAI indemnified thereof.
 4. The Contractor shall pay equal wages to both men and women in accordance with the applicable Labour Laws.
 5. The Contractor is covered under the Contractor Labour (Regulation and Abolition) Act, 1970, it shall obtain a license from the licensing authority (i.e. Office of the Labour Commissioner) by payment of the necessary prescribed fee and deposit. Such fee and deposits shall be borne by the Contractors and included in their Tender.
 6. The Contractor shall employ labour in sufficient numbers, either directly or through Sub- Contractors, to maintain the required rate of progress and of quality to ensure workmanship to the degree specified in the Contract documents and to the satisfaction of the PMC.
 7. The Contractor shall furnish to the PMC the labour returns of the number and description, by trades, of the people employed on the Project every Saturday. This shall be for the preceding week.
 8. The Contractor shall submit in the last working day of each month to the Engineer – In charge an Accident Status Report. This shall show the accidents that occurred during that time period; the circumstances under which they occurred; and the extent of damage caused by them.
 9. The Contractor shall submit on the last working day of each month to the PMC a Maternity Benefits Statement. This shall identify the number of female workers who have been allowed Maternity Benefit as provided under the Maternity Benefit Act 1961, or the Rules made there under, and the amounts paid to them.
 10. The Contractor shall comply with all the provisions of the following statutory Acts or any modifications thereto and the rules made there under from time to time.
 - The Factories Act, 1948
 - The Payment of Wages Act, 1936
 - The Minimum Wages Act ,1948
 - The Employers' Liability Act, 1938
 - The Apprentices Act, 1961
 - The Workmen's Compensation Act, 1923
 - The Industrial Disputes Act, 1947
 - The Maternity Benefits Act, 1961
 - The Contract Labour (Regulation and Abolition) Act, 1970
 - The Employment of Children Act, 1933
 - The Provident Funds and Miscellaneous Provisions Act, 1952
 - The Employee's Pension Scheme, 1995



11. Should a report be made by an Inspecting Officer, as defined in the Contract Labour (Regulation and Abolition) Act 1970, the Employer shall have the right to deduct from any money due to the Contractor any sum required, or estimated to be required, for making good the loss(es) suffered by a worker or workers by the reason of non- fulfilment of the Conditions of the Contract relating to the benefits of workers, non- payment of wages or of deduction made from their wages which are not justified by the terms of the Contract or non-observance.
12. The Contractor shall indemnify the ICMAI against any payments to be made under and for the observance of the provisions of the aforesaid Acts.
 - (i) In the event of the Contractor committing a default or breach of any of the provisions of the aforementioned Acts, as amended from time to time, of furnishing any information or submitting or filling in any Form/Register/Slip under the provision of these Acts which is materially incorrect, then on the report of the Inspecting officers, the Contractor shall, without prejudice to any other liability, **pay to the ICMAI a sum of the amount demanded by the concerned Statutory authority/department for the aforesaid fault/non-compliance of any status.** This shall be applied to each incident for every default, breach or furnishing of, submitting, making and/or filling- immaterially incorrect statements, the exact amount shall be fixed by the Architect/Consultant.
 - (ii) In the event of the Contractor's default continuing in this respect, the Liquidated Damages may be increased to Rs 100.00 per day for each day that default occurs up to a maximum of one percent (1%) of the Contract Amount.
 - (iii) The ICMAI shall deduct such amounts from the RA bill or the Retention Money of the Contractor and credit the same to the Welfare Fund constituted under these Acts. The decision of the Employer in this respect shall be final and binding.

2.2 HEALTH AND SANITARY ARRANGEMENT FOR WORKERS EMPLOYED BY THE CONTRACTOR

1. These rules shall apply to all the building and construction contracts.
2. In respect of all labour directly or indirectly employed on the Project for the execution of the works which is for the performance of the Contractor's part of this contract, the Contractor shall comply with, or cause to be complied with, all the rules and regulations of the local sanitary and other Authorities or as required by the ICMAI from time to time for the provision of the adequate Health and Sanitary arrangements for all workers.
3. The Contractor shall provide off site, if required, its own separate labour camp complete with all amenities such as electricity, water and other health and sanitary arrangements. The Contractor shall also provide all the necessary surface transportation to the project site and back to the labour camp for all their labour personnel accommodated in the labour camp.

2.3 FIRST AID

The Contractor shall provide and maintain at the Project site, in an easily accessible place, first aid supplies including an adequate supply of sterilized dressings etc. These supplies shall be kept in good order and a member of the Contractor's staff trained to carry out this shall be nominated to be in charge of the same and shall be readily available during working hours.



The Contractor shall maintain on site at all times a car, if required, shall be available to take any injured person or persons to the nearest hospital.

2.4 DRINKING WATER

The Contractor shall provide and maintain at one central location, easily accessible to labour, a sufficient supply of safe drinking water. The water supply storage container shall be no closer than 20 meters from any latrine, drain or other source of pollutions. Where water is obtained from an existing well, which is within the proximity of latrines, drains or other sources of pollutions, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be closed securely and be provided with a trap door that shall be dust proof and seal the opening. A reliable pump shall be fitted to each covered well. The trap door shall be kept locked and shall be opened only for cleaning and inspection, which shall be done at least once a calendar month.

2.5 WASHING AND BATHING PLACE

The Contractor shall provide adequate washing and bathing places separately for men and women. Such places shall be maintained in a clear and dry state.

2.6 LATRINES AND URINAL

- (i) The Contractor shall provide on the Project site, within accessible location, latrines and urinals.
- (ii) The calculation of the number of units which shall be provided, separately for men and women, is based on the following criteria:

No of seats

- a. Where the number of persons 2
Does not exceed 50
- b. Where the number of persons 3
Exceeds 50, but does not exceed 100
- c. Extra for every additional 100 persons 3

- (iii) If women are employed on the Project site, separate latrines, screened from those provided for men, shall be provided. They shall be clearly marked “For Women Only” in local language. A poster/symbol showing the figure of women shall be exhibited at the entrance of the latrines. These shall be an adequate water supply close to the latrines.
- (iv) The latrines and urinals for men shall be separate and screened from the women’s. They shall be clearly marked “For Men Only” in local language. A poster/symbol showing the figure of a man shall be exhibited at the entrance of the latrines. These shall be an adequate water supply close to the latrines.
- (v) The latrines shall be:
 - a. If water borne sewage system is available, be water-flushed latrines.
 - Or
 - b. With septic Tank



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- (vi) The latrine structure shall be constructed of masonry or some suitable heat resistant non- absorbent material. It shall be cement plastered inside and outside at least once a calendar year. The latrine shall have thatched roofs.

2.7 DISPOSAL OF EXCRETA

The Contractor shall make arrangements for proper disposal of excreta by incineration by means of a suitable incinerator approved by the Municipal Medical Office of Health in whose jurisdiction the project site is located.

2.8 PROVISION OF SHELTER

At the project site, the Contractor shall provide, free of cost, two suitable sheds for meals, one each for men and women, to be used by the labour force. The sheds shall be roofed with thatch, as a minimum, and flooring will be provided. The sheds shall be kept clean.

2.9 CRECHES

1. The Contractor shall provide, where there are women workers employed, two huts for the use of children under the age of 6 years, who belong to these women.
2. One hut shall be used for the infant's games and where they can play. The other hut shall be used as bedroom.

The huts shall not be constructed to a lower level of construction than:

- (i) Thatched roof
 - (ii) Mud floor and dwarf walls
 - (iii) Planks spread over the mud floor and covered with matting.
3. The huts shall be provided with suitable and sufficient openings for light and ventilation.
 4. The place shall be kept neat and clean
 5. The use of the hut shall be restricted to the infants, their mothers and their attendants.
 6. Where the number of women workers is more than 25 and less than 50, the Contractor shall provide at least one Dai to look after the children of women workers.
 7. The size of the crèches may vary with the number of women workers.
 8. The crèche or crèches shall be properly maintained and necessary equipment, including toys, shall be provided.

2.10 SOLID WATER DISPOSAL

The Ministry of Environment and Forests hereby accords environmental clearance as per the Provision of Environmental Impact Assessment Notification, 1994 and the subsequent amendment Subject to strict compliance of the terms and conditions mentioned below.



Part A – SPECIFIC CONDITIONS

A. Construction Phase: -

All required sanitary and hygienic measures should be taken before starting construction activities and to be maintained throughout the construction phase.

1. During the construction phase average water requirement of about 185 cubic meters per day would be met from tankers. Water usage during construction should be optimized to avoid any wastage.
2. The Workers employed during the construction phase will be provided adequate drinking water and sanitary facilities. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
3. All the topsoil excavated during construction activities should be stored for use in horticulture/ Landscape development within the project site.
4. Disposal of muck including excavated material during construction phase should not create any adverse effects on the neighbouring communities and disposed of taking the necessary precautions for general safety and health aspects.
5. Use of diesel generator sets during construction phase should be enclosed type and should confirm to Environment (Protection) Rules prescribed for air and noise emission standards.
6. Vehicles hired for bringing construction material at site should be in good condition and should confirm to applicable air and noise emission standards and should be operated only during non-peak hours.
7. Ambient noise levels should confirm to residential standards both during day and night. incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase.
8. Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
9. Regular supervision of the above and other measures should be in place all through the construction phase so as to avoid disturbance to the surroundings.
10. Energy efficient construction materials shall be used to achieve the desired thermal comfort.

B. Operation phase: -

1. Water harvesting system and energy conservation measures like installation of solar panels for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.
2. The project proponent shall obtain necessary permissions from the Municipal Corporation/Water board before drawing the water from the sources for the purpose of the proposed construction activity.
3. Noise barriers shall be provided at appropriate locations so as to ensure that the noise levels do not exceed the prescribed standards.
4. The solid waste generated should be properly collected, segregated before disposal to the City municipal facility.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

5. Any hazardous waste should be disposed of as per applicable Rules and norms with necessary approvals of the concerned authorities.
6. Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.
7. Provision for rain water harvesting has been made in the proposal. Rain water harvesting system should be operational for recharging of aquifer before project commissioning. The project should regularly monitor ground water levels and deterioration of ground water.
8. Care shall be taken to ensure energy conservation during the construction period as well as in the design and layout of buildings. Project Authorities will submit a detailed plan for conservation of energy and use of technologies for improved energy efficiency.

PART B – GENERAL CONDITIONS

1. Provision should be made for the supply of kerosene or cooking gas / pressure cooker to the labourers during construction phase.
2. All the labourers to be engaged for construction works should be screened for health and adequately treated before the issue of work permits.
3. Financial provision should be made by the project proponent in the total budget of the project for implementation of the suggested safeguard measures.
4. The Ministry / ICMAI reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the environment clearance under the provisions of the environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner.

3. SAFETY PROCEDURES

INTRODUCTION

Safe methods of working shall be a main consideration in all operations. Contractors shall provide PMC with details of their methods of work, highlighting the safety aspects. It is the

responsibility of all persons employed on this project to act responsibly to prevent accidents to themselves and to others. Notwithstanding the provisions contained herein the Contractor is not exempted from the enforcement of any Act or Rule.

1. Each Contractor is responsible for the safety of his work by:

- (i) Providing safe plant, equipment and working conditions.
- (ii) Ensuring the establishment of safe working procedures.
- (iii) Providing suitable protective equipment and clothing e.g. gloves, ear muffs and goggles.
- (iv) Providing adequate job training.
- (v) Providing fire extinguishers and first aid box.
- (vi) Reporting all accidents and dangerous occurrences, with copies to Employer
- (vii) Ensuring that hazardous materials, if necessary on site, will be stored and used in a safe manner.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

2. It is the duty of all persons employed on site:

- (i) To report defects in any plant or equipment to his supervisor and to cease using that equipment if it is in a dangerous condition.
- (ii) To comply with all safety procedures necessary at his place of work as defined by legislation.
- (iii) To wear the personal protective equipment required for his own safety.
- (iv) To co-operate with management in creating and maintaining a high standard of safety, health and welfare.
- (v) To familiarize themselves and comply with the agreed methods and systems for working.
- (vi) To assist management by taking all possible steps to avoid accidents.

3. Persons responsible for safety:

It remains the responsibility of each Contractor to name his Site Manager, who will be responsible for the safety of his works, and also his company safety officer along with his contact details.

3.1 SITE SAFETY POLICY

This section covers safety objectives. Detailed procedures are given in the **Site Safety Manual**.

I. Safety Plan:

The Safety Plan is to be prepared by the Site Safety Officer and is to cover all of the following:

Damage Avoidance	Planning and co-coordinating all work to avoid bodily injury, property damage and loss of productive time
Detection & Correction	Establishing and maintaining a system for prompt detection and correction of unsafe practices and conditions.
Protective Equipment	Assuring the availability and use of personal protective equipment.
Inspection & Maintenance	Establishing and maintaining an effective and comprehensive inspection and maintenance system and record.
Training	Establishing and supporting an educational and job skill training designed to ensure a safe working environment.
Investigations	Investigating accidents to determine cause and take the necessary corrective action.
Control / Protection	Providing visitor control and hazard protection.
Site Security	Providing project site security.
Material Storage	Controlling the placement of materials received consistent with the traffic control pattern established.
Fire Protection	Providing fire protection in co-ordination with local authorities. The Contractor shall provide and maintain adequate fire protection in the form of barrels of water with buckets tanks, fire extinguishers, or other effective means of extinguishing fire, ready for instant use. The Contractor shall follow the instructions and specifications of the concerned local authorities.
Compliance to Regulations	Ensuring compliance with the laws, ordinances, rules and regulations issued or promulgated by state, local and governmental agencies.

II. Responsibilities:



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Site Safety Officer/Manager

Responsible for:

the health and safety of all Site personnel. Implementing Site Safety Policy and Procedures.

Responsibilities include: Preparing the Site Safety Plan.

Obtaining a Safety plan from all Trade Contractors describing hazards particular to that trade.

Ensuring that daily job site safety inspections are conducted and then forwarding a written report to PMC.

Developing a fire evacuation plan.

Safety Supervisor

Before commencement of work, the CONTRACTOR shall appoint a Safety Supervisor and to submit a detailed site safety plan for hazards particular to that trade.

Responsibilities include:

Providing and enforcing the use of personnel protective equipment and ensuring attendance of all employees at the regular “Tool Box”

Taking immediate action to correct unsafe practices or conditions.

Ensuring adequate first aid supplies are available and that there are personnel on site qualified to administer first aid.

Ensuring that Safety Rules and Emergency Telephone numbers are posted in a prominent place.

Ensuring all accidents are reported in a timely manner.

III Accident / Incident Reports:

Timely reporting

Any injury or injury resulting in fatality shall be reported immediately to the PMC who, in turn shall notify the same to the Employer.

Injuries

Any accident involving injury is reported to PMC using the form shown in attachment.

Timely reporting

Each incident on site shall be reported as soon as possible, but of incidents no later than 24 hours after the incident. The form shown in attachment is to be used.

Note:

An incident can include lost property, damaged property, injury, fire, crime etc.

The logs are maintained and updated as needed by the PMC using the format shown in attachment.

IV. Public Relations:



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Reporting

All inquiries regarding any incident or accident received by the Contractor shall be reported immediately to the PMC or his Representative for appropriate action. The same shall be informed to the EMPLOYER immediately.

Site personnel shall not discuss accidents/incidents with the media.

4. SITE SAFETY MANUAL

INTRODUCTION

This manual has been divided into well-defined sections; these sections provide supporting information to the checklist.

Tool Box Meetings

These meetings shall be held at the project start up time and shall continue on a regular basis; in addition, if an accident has occurred on site, a meeting should be held once the cause has been established.

A specific topic should be covered at these meetings. Each section in this manual would form a suitable topic. The contractor shall maintain the record of the meetings.

4.1 GENERAL SAFETY PRACTICES: -

1. Foremen and supervisors shall insist on employees observing and obeying every rule, regulation and order as necessary for the safe conduct of work.
2. Every workman shall know how to do his job/perform his duties safely. Never take chances or use unsafe methods, tools or equipment. If you do not know how to do the job safely, ask your supervisor.
3. Take interest in your co-workers. Explain or show them the safe methods of doing the work and caution them about dangerous or unsafe acts.
4. Anyone known to be under the influence of any intoxicating substance shall not be allowed on the job. Drugs, pills, tranquilizers etc are not to be taken on the job unless written permission is obtained from a doctor.
5. No one shall knowingly be permitted or required to work while his ability or alertness is so impaired by fatigue, illness or other causes that might, unnecessarily, expose him or others to injury.
6. Fighting, quarrelling, being abusive etc. are forbidden on the job.
7. Firearms and ammunition are not to be brought to the job site at any time.
8. Never throw material or equipment of scaffolding. Someone may be walking or working below.
9. "Tool Box" safety meetings shall be conducted by foremen on a regular basis. All workers on site shall be instructed on accident prevention.
10. No one shall operate equipment or use tools which have been tagged "DO NOT OPERATE" or "OUT OF ORDER" until required repairs have been made and said tag has been removed by an authorized person.
11. Notify the Safety Officer regarding use and storage of chemicals.
12. Adequate precaution shall be taken by the Contractor to ensure no materials shall be so stacked or placed, so as to cause danger or inconvenience to any person or the Public. The Contractor shall provide all necessary fencing and lights to protect public from accidents and shall be bound to bear expenses of



defence of every suit, action, other proceedings of law that may be brought by any person for injury sustained owing to neglect of the above precautions to pay any damages and costs which may be awarded in any such suit action or proceedings to any such person.

4.2 PERSONAL PROTECTIVE EQUIPMENT: -

Whenever there is a possibility of exposure to hazardous material or operations, personal protective equipment or devices shall be worn or used. These include (but are not limited to) hard hats, safety shoes, safety glasses and goggles, gloves, protective suits, hoods, respiratory equipment and proper hearing protection.

The Contractors at all levels will be held responsible for ensuring that workers wear proper protective equipment.

1. Hard Hats:

All personnel working in areas where there is a possible danger of head injury from impact, or from falling objects, shall be protected by protective helmets. This will be interpreted as all areas within the site boundary except inside permanent or temporary structures not under construction. Helmets shall conform to the specifications contained in the National Standards

Employees of Contractors who are represented on the construction site, who apply for entry to the project and are not in possession of an approved hard hat, will be asked to remain at the security gate until arrangements can be made by their supervisor / foremen to obtain an approved hard hat.

2. Eye Protection:

Eye protective gear shall be used while doing work that may cause possible injury to eyes from flying particles, grinding, splashes, welding or cutting operations.

3. Safety Shoes:

All workers must use safety shoes

4. Clothing:

To be suitable for the type of work in which they are engaged.

5. Hearing protection:

Hearing protection equipment shall be used by all the workers while operating pneumatic equipment.

6. Respirators:

Whenever and wherever necessary to protect from dust, gases, hazardous chemical and vapours.

7. Safety belts:

Safety belts shall be used while working from high places.

8. Protective gloves:

To be worn as work activity may require.

9. Housekeeping:



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- (i) Place debris, rubbish and waste in proper containers.
- (ii) Place and store material and equipment in designated storage areas.
- (iii) Working areas, passageways, stairs and exits shall be kept free from all debris, equipment, tools and other sharp objects.
- (iv) Avoid spilling liquids. Wipe off spills immediately.
- (v) Use safety cans to store flammable liquids.
- (vi) Sharps objects protruding from timber from panels etc. are to be pulled or bent over.
- (vii) Debris and combustible scarp shall be disposed of on a regular basis and not allowed to accumulate.

4.3 LADDERS:

1. Select the right ladders for the job. Do not use a too long or too short ladder. Do not splice two ladders together. Do not use lightweight or household ladders in a heavy construction job. Do not use metal ladders near electrical circuits, fixtures or power lines.
2. Check the condition of ladder for cracked or split rails; for missing or broken steps, cleats, rungs, treads or U-shapes; for sharp edges or splinters.
3. If any of the above conditions exist, withdraw the ladder from use and fix it at once if possible if it cannot be fixed, destroy it. Every ladder should have identification tags, records of maintenance and inspection must be maintained.
4. Use ladder safely. Place it with care; do not lean it against a movable object. Make sure it is not placed on a loose object or uneven footing. Do not place it too close to a wall. The horizontal distance from wall to the foot of the ladder should never be less than 1.4 times the length and it should extend at least 36 inches above the upper horizontal edge. Tie ladder with rope or wire. If wire is used, be careful to protect users from injury.
5. Only one person at a time shall be permitted on a ladder.
6. Always face the ladder and grasp the side rails or rungs with both hands when ascending and descending.
7. Do not carry tools or material when going up or down ladders. Use a bucket or canvas bag on a rope to haul or lower then.
8. Be sure the soles of your shoes are free from dirt oil and mud before using ladder.
9. Never work above the second rung from the top of the ladder.
10. Stepladders should not be over 10feet long. Do not use a stepladder as a straight ladder.

4.4 SCAFFOLDING:

1. Scaffold should be tubular and designed for the loads it will carry. Bamboo shall not be used as scaffold. Inspect the scaffold before use.
2. Scaffold planks must be tested, carefully erected and made secure to prevent slipping by using cleats or tying.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

3. Scaffold to be braced/tied to the permanent structure at suitable intervals to prevent overturning.
4. All scaffolds shall have handrails and toe boards (minimum 4 inches' height).
5. There is no such thing as a temporary scaffold.
6. Ladders should be attached for ascent and descent on scaffolds.
7. Any defects, loose knots or cracks in a scaffold plank will make that plank useless.
8. Guard rails shall be 50mm by 100mm or the equivalent, approximately 1050mm high, with a mid-rail. Supports shall be at intervals not to exceed 2400mm.
9. Any scaffold, including accessories such as braces, brackets, trusses, screw legs, ladders etc. weakened from any cause shall be immediately repaired or replaced.

4.5 MACHINERY AND VEHICLES:

1. Equipment shall be safely built, economical and long- life operational.
2. Only experienced and authorized persons shall operate power equipment. Before being allowed to operate a particular piece of equipment, the employee/workman must prove by actual demonstration to the supervisor that he understands the operation.
3. Operators shall make careful inspection of their equipment at the start of each shift, before operating, and required repairs shall be made to the equipment.
4. Cleaning, oiling, fuelling or repairing should not to be done on equipment while it is in operation.
5. The operator can take standard industry hand signals from only one designated person.
6. Cranes or other equipment shall not lift loads in excess of the manufacture's maximum load limit displayed on the equipment. Lifting equipment must be tested by a competent authority and records of the same should be maintained.
7. Electrical installations must confirm to IE (Indian Electricity Rules) and BIS (Bureau of Indian Standards).
8. Do not operate equipment within 300 mm of high voltage lines. For lines over 50000 volts, increase operating clearance 1mm for each additional 1000 volts.
9. Where it is difficult for the operator to see overhead high voltage lines or obstacles, a person shall be designated to observe and give him warning required to maintain safe clearance.
10. Do not work under vehicles supported by jacks or chain hoists without protective blocking that will prevent injury if jacks or hoists should fail.
11. Examine excavation before backfilling to ensure that no one is in the pit.
12. Before operating excavating equipment near tops of cuts, banks and cliffs, be sure no one is below.
13. Tractors, bulldozers and carryalls should be operated with care where there is possibility of overturning on dangerous area, such as edges of deep fills, cut banks and steep slopes.
14. No passengers are allowed to ride on or in equipment that does not have a designated seat for each rider.
15. Vehicular and pedestrian path and parking spaces should be clear of overhead operating equipment.



4.6 MATERIAL HANDLING OF OVERHEAD OPERATING EQUIPMENT:

1. Maximum load carrying capacity of cranes, blocks or chains must be displayed along with the last date tested and the next due date for testing.
2. Do not overload cranes, ropes, blocks or chains. If any such equipment has been damaged or is found to be defective, inform your supervisor.
3. No one shall ride loads, concrete buckets or hooks.
4. Use a guide of “tag line” on loads.
5. Stand clear of taut cables or hoists
6. Keep hands and fingers away from blocks, sheaves or winches.
7. Do not stand under overhead loads.
8. Stack materials neatly and safely as per established guidelines.
9. Keep all material 5500 mm away from sprinkler heads.
10. All material handling equipment must be periodically checked by a competent authority and maintained properly. Records of the same must also be maintained.

4.7 EXCAVATION AND SHORING:

1. All trenches or excavation 1.5 meters or more in depth shall be effectively guarded against the hazard of moving ground by sloping sides to the angle of the material encountered or by the installation of a shoring system.
2. When sides are sloped, it shall be no steeper than $\frac{3}{4}$ horizontal to 1 vertical. Slopes must be made less steep if material encountered is not stable.
 - (i) Trenches less than 1500mm deep shall also be guarded
 - (ii) When a shoring system is used, it shall conform to the approved design and the requirements of the appropriate local agencies.
 - (iii) Beware of disturbed ground. Ground that has been filled or disturbed will require additional sheeting and bracing, as well as hard compact ground if there is filled ground nearby. (A trench wall that is near another recently filled trench, for example, is unstable even though it appears to be compact material).
 - (iv) Take special precautions where moisture is present. Provide extra sheeting where there is water or seepage. Keep excavation dry at all times and avoid any accumulation of water, day or night, until work is done.
 - (v) Install upper trench jacks or supports first. When trench jacks are used to hold up rights in place against trench walls, the top jack shall be installed before anyone enters the trench to place the lower jack. Shoring does not serve its purpose if men expose themselves to hazards while installing it. Installation work should be done from outside of the trench or by working progressively from top to the bottom of the trench with men always in an area which has already been shored.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- (vi) Adequate shields or cages shall be used when needed for safety installation of shoring.

Prior to starting any excavation work, the foreman shall make a thorough survey of the conditions on the Site to determine, so far practical, the predictable hazards to employees and the kind and extent of safeguards necessary to accomplish the work in a safe manner. Hazards shall be documented together with action required.

- (vii) Special attention shall be given to locating and protecting underground utilities and to the precautions that must be taken to protect employees from the hazards of working near such utilities.

- (viii) No part any shoring system of any excavation shall be removed until proper steps have been taken to avoid hazards to men from moving ground.

- (ix) All excavated areas must be properly barricaded to prevent people from falling into the pits.

- (x) Proper access for workers must be proved to and from excavation pits.

- (xi) Work permits where required must be issued to authorized persons undertaking any excavation.

- (xii) Flagmen shall be required at all locations on a construction site where barricades and warning signs cannot control moving traffic. They shall be placed so as to give adequate warning, approximately 100 feet ahead of impact point. They shall be provided with red flags and hand signs or red lights.

- (a) A warning sign shall be posted ahead of flagmen reading “Flagmen Ahead”.

- (b) The flagmen shall be provided with a red or orange warning garment for flagging. At night, reflective garment shall be used.

- (c) Flagmen shall be instructed in the proper fundamentals of flagging moving traffic before they perform this work.

- (xiii) DESIGN OF DEWATERING SYSTEM

- (a) If the Contractor wishes to appoint some properly qualified dewatering subcontractor, then his name, qualifications, record of previous jobs of similar nature personnel to be employed on the work, and other pertinent information shall be submitted to the Development Manager for approval.

- (b) Prior to commencement of installation of the dewatering system, Contractor shall submit to the Development Manager for his technical approval, complete final plans, details and description of the dewatering system.

- (c) Approval of the de-watering system by the Consultant shall in no way relieve the Contractor from his responsibility of satisfying the entire de-watering requirements as specified herein.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

4.8 ELECTRICAL:

1. Whenever possible, an electrical line should be de-energized before work is done on or near it, no matter how low the voltage. Only qualified persons should do such work. Use proper lockout tagging procedures.
2. Persons doing electrical work or working near energized circuits should wear the appropriate safety equipment.
3. All electrical equipment must be properly earthed.
4. Do not overload circuits. Do not use any extension cables that may be damaged.
5. Do not leave electrical cables where vehicles will run over them. If electrical cables must cross a roadway, use protective cross over devices
6. Only approved plugs and receptacles shall be used on all jobs.
7. All electrical work shall be according to local, state or National Electrical Codes.
8. Only licensed electricians are allowed to carry out electrical work.
9. Rubber gloves and rubber shoes/ boots of correct voltage grade shall be used.
10. Temporary supply shall be trapped from a source panel which is properly fabricated, permanently fixed and effectively earthed.
11. Live line testers and test lamp shall not be used. Usage conditions of a multi-meter with long probes are to be followed. Test lamps can be used temporarily if fitted with protective guard.
12. Makeshift connections are prohibited; **Earth Leakage Circuit Breaker (ELCB)** to be used for Portable Electrical Equipment.
13. ELCB's should be checked regularly and records maintained and Work permit system must be used wherever required.

4.9 HAND TOOLS:

1. Do not use defective tools.
2. Keep faces of hammers in good condition to avoid flying nails, bruising fingers and chipping the hammer head.
3. Hold cold chisels in such a way that the knuckles will be protected if the hammer misses the head.
4. Do not use pipe wrenches as a substitute for other wrenches.
5. Wrenches should not be altered by the addition of handle extensions.
6. Files shall be equipped with handles.
7. Do not use a screwdriver as a chisel.
8. Keep handsaws and other tools sharp and in good condition.
9. Do not lift or lower portable electrical tools by their power cords. Use a rope.
10. Guards on power hand tools must be kept in proper operating condition at all times.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

11. Keep electrical cables out of water, oil or chemical.
12. Only qualified persons shall be permitted to use power activated tools. Check the other side of walls, floors, ceiling, etc. before using.
13. Do not use aluminium handled full floats or aluminium ladders where there is a possibility they may come in contact with power lines.
14. Do not use electrical tools while standing in water.
15. All electric hand tools shall be double insulated.
16. Wire cutting tools and knives shall be provided with safe handles.

4.10 WELDING AND BURNING:

1. Only experienced persons are allowed to do any electrical or acetylene welding or burning.
2. Do not weld or burn in hazardous area without written instructions.
3. Do not burn or weld where hot sparks, hot metal or severed sections could fall on cylinders, hoses, machinery, legs or feet or on flammable materials or where they could strike personnel working below.
4. Do not weld or burn barrels, enclosed tanks of other containers without making sure that nothing flammable has been stored in them or until such tanks have been made safe by filling with water or carbon dioxide under the supervision of a foreman.
5. Never strike an arc on cylinders.
6. Never use matches to light torches. Use a spark lighter or stationary pilot flame.
7. Make sure there is plenty of fresh air when welding is closed or confined places and never use oxygen for ventilation.
8. Do not overload welding cable operating with poor connection. Turn off cylinders and machinery when not in use and roll up cable and hoses.
9. Wear proper head (hard hat), eye and face protection when welding, and protect others from arc burns by using a shield, if possible, or by warning them to wear adequate protection. Welders must see that those working with them have proper head and eye protection.
10. Always refer to acetylene as “acetylene” not “gas”. Refer to oxygen “oxygen” not “air”.
11. Use the cylinder for its intended purposes and nothing else.
12. When cylinders are empty, turn off; remove the gauges; put the protective cap on and mark them “MT or “Empty”.
13. Always transport, store and use acetylene cylinders in a vertical position to avoid loss of acetone.
14. Protective caps shall be in place while transporting, moving and storing cylinders.
15. When cylinders are being hoisted, they shall be secured in a cradle.
16. In keeping “empties” and “full’s” separate, use a chain across the storage racks and always tie the bottles.
17. Full cylinders of acetylene and oxygen should be stored at least 20feet apart under a shelter and not exposed to sunlight.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

18. Welding sets shall be properly earthed through an insulated conduit to the nearest earth.

19. Work permits system must be used for welding operators.

4.11 WORK IN CONFINED SPACES:

When work is done in the interiors of storm drains, sewers, vaults, utility Pipelines, manholes and any other structure which might permit the Accumulation of dangerous vapours or gases, the followings precautions shall be taken:

1. Workmen/Employees shall be instructed regarding any potential hazards.
2. Tests for the presence of dangerous and combustible gases and adequate levels of oxygen content shall be made prior to entering a confined work area and at frequent intervals ensure safety of the workman while he is in such structure. A record of such tests will be maintained at the job site.
3. Sources of ignition, including smoking, will not be allowed until proper tests have been made to ensure safety.
4. When air is not suitable for breathing, approved respiratory equipment will be used. A safety line shall be attached to employee/workman and standby employee/workman shall be within call and sight ready to give assistance in case of emergency.
5. No work shall be done in the presence of explosive gases or air unsuitable for breathing.
6. Internal combustion engine-driven equipment shall not be operated inside buildings or confined spaces unless adequate steps have been taken to ensure protection from dangerous concentrations of gases or fumes. Some of the precautions that may provide adequate control are as follows:
 - a) Pumping exhaust gases to outside atmosphere.
 - b) Ventilation which dilutes and removes gases.
 - c) Use of catalytic exhaust scrubbers.

4.12 WORK PERMIT SYSTEM:

1. Work permit system must be used for the following
 - (i) Electrical work
 - (ii) Working at Heights
 - (iii) Excavation & Demolition
 - (iv) Welding or hot work
 - (v) Working in confined spaces
 - (vi) Any other hazardous operation.

4.13 ENVIROMENTAL CONSIDERATION

The Contractor shall be concerned with the impact of his work upon the Environment. This applies to the effect upon the residential community, adjacent industrial facilities and upon the area outside the site boundary. Areas of concern will include but are not limited to:

1. Use of clean fuels to minimize air polluting emissions.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

2. Control of other air pollutants.
3. Recovery and recycling of usable materials.
4. Control of vehicle noise
5. Control of noise from power facilities.
6. Limitation of vibrations.
7. Preservation of archaeological features.

4.14 TRAINING:

Adequate training must be provided to all supervisors; workers; CONTRACTORS etc. on the safe systems of work.

4.15 DEFECTS AFTER COMPLETION AND PERFORMANCE GUARANTEE:

Any defect, shrinkage, settlement, unsound construction or other faults which may appear either in the work executed or in materials used within the “Defects Liability Period” stated in herein arising in the opinion of the Architect/Consultant from materials or workmanship not in accordance with the Contract shall upon the directions in writing of the Architect/Consultant, and within such reasonable time as shall be specified therein, be amended and made good by the Contractor, at his cost unless, the Architect/Consultant in consultation with the ICMAI shall decide that he ought to be paid for such amending and making good and in case of default, the ICMAI may employ and pay another agency to amend and make good such defects, shrinkage, settlements or other faults and all damages, loss and expenses consequent thereon or incidental thereto shall be made good and borne by the Contractor and such damage, loss and expenses shall be made good recoverable from him by the ICMAI or may be deducted by the ICMAI upon the Architect/Consultant’s certificate in writing from the amount retained with the ICMAI or any money due or that may become due to the Contractor, deduct from such money a sum, to be determined by the Architect/Consultant, equivalent to the cost of amending such works, and in the event the said amount retained and/or the other sums payable to the Contractor being insufficient, recover the balance from the Contractor.

The Contractor shall be held responsible for the safety of the building for a period of ten years counted from the expiry of the Defects Liability Period, provided herein, and shall be wholly and exclusively liable for any latent or patent defect or deficiency manifesting itself in the building during such period of ten years and affecting or likely to affect the safety of the building. An undertaking/performance guarantee to this effect on non-judicial stamp paper of appropriate value (draft of which is attached hereto) shall be given by the Contractor.



ACCIDENT REPORT

Contract details:

Log No..... Date of accident.....Time.....Weather:.....

Project.....

Contractor:.....

Contractor's Personnel or Equipment

Name of injured employee/workman: Age

Sex Occupation:

Nature of injury: First Aid () Hospital () Fatality ()

Type of equipment.....

Extent of damage:.....

Other persons or property

Name of injured Party: Age

Sex

Address:.....

Nature of injury: First Aid () Hospital () Fatality ()

Type of property EMPLOYER

Address:

Nature & Extent of damage:

Details of Accident:

Description:.....

.....

Primary Cause.....



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Additional Information

whether lack of safety equipment/ breach of safety rules is the cause of accident:.....

If so, explain:

What corrective action has been taken by the CONTRACTOR:

..... Reported by:

Name..... Position.....

SignatureDate



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

INCIDENT REPORT

Contract details:

Log No Date of incident Time

Project

Contractor: Address Phone

Lost Property/ Damaged Property/ Fire/ Visitor / Suspected Crime or Offence/ Any other unusual occurrence or condition

Contractor’s Employee /workman/ Public: Property involved :

Brief description of incident :

Police Contacted : yes/no Date/Time:

Witness: Name

Address

Phone

Reported by: Name Position

SignatureDate



SECTION IV

SPECIAL CONDITIONS OF CONTRACT

SECTION IV - SPECIAL CONDITIONS OF CONTRACT TABLE OF CONTENTS

Clause no	Description	Page No.
1.	General	69-76
2.	Electricity and Water for Construction	76
3.	Sewage	76
4.	Taxes and Insurance	76
5.	Secured Advance	76-77
6.	Site Facilities	77
7.	Access to Site and Environment	77
8.	Construction Program	77
9.	Rates	77
10.	Security	77
11.	Cement Concrete and Steel Testing	77
12.	Cement and Steel Supply	78
13.	Compliance to Government Regulations and Bye-Laws	78-79
14.	Materials if supplied by ICMAI	79
15.	Safety Norms	79

ADDITIONAL CONDITIONS

1.	Inspection and Testing	80
2.	Shop Drawings	80
3.	Accessibility	81-82
4.	Completion Certificate	82
5.	Balancing, Testing and Commissioning	82
6.	Completion Drawings	82
7.	Operating Instruction & Maintenance Manual	82
8.	Onsite Training	82



SECTION IV - SPECIAL CONDITIONS OF CONTRACT

1. GENERAL

1. These Special Conditions of Contract shall be read in conjunction with the General Conditions of Contract and other parts/sections of the Tender Documents. In case any provisions in these Special Conditions (given herein below) are at variance with the General Conditions and/or other sections of the Tender Documents, the Special Conditions shall be deemed to take precedence there over.
2. In General Conditions and other parts of the Tender/Contract Documents, if it is stated that the Engineer-in-Charge will issue Approvals, Orders, Certificates for Payments, Completion Certificates, Drawings, Designs, Decisions and Instructions etc. this shall mean that the Engineer-in-Charge shall first obtain the same in writing from ICMAI/Architect/Consultants before issuing it to the Contractor.
3. The Contractor shall carry out and complete the said work in every respect in accordance with this Contract and with the directions of and to the satisfaction of the ICMAI Architect/Consultant. The Architect/Consultant may in his absolute discretion and from time to time, issue further drawings and/or written instructions, details, directions and explanations which are hereinafter collectively referred to as 'Architect/Consultant's Instructions' in regard to:
 - (i) The variations or modifications of the designs, quality or quantity of works or the addition or omission of works or the addition or omission of substitution of any work.
 - (ii) Any discrepancy in the drawings or between the Bill of Quantities and/or drawings and/or specifications.
 - (iii) The removal and/or re-execution or any works executed by the Contractor.
 - (iv) The removal from the site of any material brought thereon by the Contractor and the substitution of any other material therefor.
 - (v) The dismissal from the works of any person employed there upon.
 - (vi) The opening up of any covered works for inspection.
 - (vii) The amending and making good of any defects regarding removal of improper works and materials etc.

The Contractor shall forthwith comply and fully execute any work comprised in such Architect/Consultant's Instruction provided always that verbal instructions, directions and explanations given to the Contractor or his representative upon the works by the Architect/Consultant shall, if involving a variation be confirmed in writing by the Contractor within 7 days to the Architect/Consultant, else such shall be deemed to be the Architect/Consultant's Instructions within the scope of the Contract.

4. The CONTRACTOR should inspect and examine the site and its surrounding thoroughly and should acquaint himself about the nature of ground, sub-soil conditions, topography of site, existing structure(s), availability of water, food stuff, labour and other facilities, before tendering for this work. No claims shall be entertained for his failure in this matter. If any approach road or any culvert is required at site from the main road or existing approach is to be improved and maintained for cartage of his material etc., the same shall be provided, improved and maintained at his own cost by CONTRACTOR.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

5. A standard benchmark with reference to which the whole work is to be carried out shall be constructed by the CONTRACTOR. The level shown on the outline drawings are with reference to standard benchmark. The CONTRACTOR shall establish reference benchmark at suitable spots. The construction and maintenance of the bench marks shall be the responsibility of the CONTRACTOR. No payments shall be made for this work. The CONTRACTOR shall set out all the works and shall be responsible, for the true and perfect setting out/layout, position, levels, dimensions etc. as shown in Drawings. Any error or mistake ever noticed during the progress of work, shall be rectified by CONTRACTOR at his own cost.
6. Suitable areas at site as proposed by the CONTRACTOR and approved by the ARCHITECT/CONSULTANT/CONSULTANT will be given for site-offices, stores, stockyards and labour camps. All necessary temporary roads, culverts, structures, guards, fencing and enclosures etc. shall be erected and maintained by the CONTRACTOR at his own cost. The Dewatering of all accumulated water in all locations on work site from whatever source of cause until the virtual completion of the entire work shall be done at CONTRACTOR'S own cost. The CONTRACTOR shall clear the site of works as per the instructions of the ARCHITECT/CONSULTANT. The site shall be delivered in a clean and neat condition within a period of one week after Virtual Completion. In case of failure to comply with this requirement by the CONTRACTOR the ICMAI may at the advice of the ARCHITECT/CONSULTANT have the sites cleared by another CONTRACTOR and deduct the cost of carrying out the work from sums due to the CONTRACTOR.
7. The Contractor shall provide and maintain at the site throughout the period of works the following at his own cost and without extra charge, the cost being held to be included in the contract rates: -
 - (i) All labour, materials, plant, equipment and temporary works required to complete and maintain the works to the satisfaction of the ARCHITECT/CONSULTANT/ICMAI.
 - (ii) Lighting for night work and also whenever and wherever required by the ENGINEER IN- CHARGE
 - (iii) Temporary fences, guard lights and protective work necessary for protection of workmen, supervisors, Engineers or any other persons permitted to have access to the site.
 - (iv) All equipment, instruments and labour required by the ENGINEER-IN-CHARGE for measurement of the works.
 - (v) A waterproof and air-conditioned, lockable, office-accommodation for ICMAI/ARCHITECT/CONSULTANTS consisting of two (2) rooms each of approx. 15 sq. meters. These offices shall be provided with all sanitary, water supply and electrical services and shall be kept in clean and tidy conditions. Necessary display boards, office furniture, almirahs and telephone facilities will be provided therein, all at CONTRACTOR'S cost.
 - (vi) The separate site offices shall be provided for CONTRACTOR'S own staff along with other storage structures/stockyards etc. to keep his own and ICMAI'S supplied materials, Tools, Plants and Equipment, FAX MACHINE etc. The necessary safety, security, water and protection against rain, sun, and theft etc. is to be provided for all site offices/structures etc.
 - (vii) A temporary enclosure (whenever and wherever required) along the periphery of the site by erecting ply board panels or C.G.I. sheets or M.S. sheets (Minimum height 2.5 meters fixed on wooden posts / M.S. Angle posts etc. with suitable entry gates etc. shall be erected by the Contractor after obtaining permission for the same.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- (viii) The Display Boards for the Project shall be supplied and erected as per given sizes, specifications and descriptions and at specified locations, as approved by ICMAI/ARCHITECT/CONSULTANT.
- (ix) A field Laboratory will be established in a room of suitable size equipped with the following, with adequate labour and materials required for carrying out tests therein:
 - (a) Set of standard sieves for testing grading of sand and a 75-micron sieve for testing silt content.
 - (b) Sieves with openings respectively of 5mm, 10mm, and 20mm for testing grading of aggregates.
 - (c) Balance of capacity 10 Kg reading to 5 gm, with weights. (d). Primus stove and pans for drying of sand and aggregates. (e). Glass measuring flasks of 1/2 and 1-liter capacity
 - (f) Flask for determining moisture content of sand.
 - (g) Slump cone for slump test.
 - (h) Minimum 24 steel moulds for 150 x 150 mm test cubes. It may be necessary to provide more steel cube moulds depending upon concreting programme.
 - (i) Work benches, shelves, desks, sinks and any other furniture and lighting as required by the ENGINEER-IN-CHARGE/ARCHITECT/CONSULTANT.
 - (j) Cube testing machine.
 - (k). Any other equipment not specifically mentioned above which can reasonably be held necessary for the completion of the contract works to the satisfaction of the ENGINEER-IN-CHARGE/ARCHITECT/CONSULTANT.

NOTE:

The requisite tests shall be conducted in field Laboratory as per C.P.W.D. Specifications and other related I.S. Codes. All such tests shall be conducted in presence of the ENGINEER-IN-CHARGE and the proper Test Records shall be maintained by CONTRACTOR with the attestations by the ENGINEER-IN-CHARGE. The CONTRACTOR shall bear all expenses for installing, running and maintenance of this Field Laboratory.

8. INFORMATION TO BE SUPPLIED BY THE CONTRACTOR AT THE COMMENCEMENT OF THE CONSTRUCTION

The Contractor shall submit the following information within 10 days of the date of issue of Letter of Intent/ Work Order of works:

- (i) Operational method of the site, i.e. holidays, working hours
- (ii) Temporary layout plan
- (iii) Overall schedule of the Construction
- (iv) Sub CONTRACTORS list
- (v) Security and management of the site
- (vi) Submittal schedule of the Construction drawings/shop drawings
- (vii) Time schedule of the necessary applications to the Authorities
- (viii) Time schedule of the major inspection
- (ix) Time schedule of the submittal of samples



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

9. INFORMATION TO BE SUPPLIED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD

A senior representative of the CONTRACTOR shall attend weekly meetings at the site and in addition, meetings as arranged by the ARCHITECT/CONSULTANT/ICMAI to discuss the progress of work and sort out problems if any and ensure that the work is completed in the stipulated time. The CONTRACTOR shall submit to the Engineer-in-Charge, every fortnightly:

- (i) Detailed industrial statistics regarding the labour employed by him daily.
 - (ii) A list of technically qualified persons employed by him for the execution of the work.
 - (iii) The total quantity and quality of materials used for the works and supplied to site.
 - (iv) A fortnightly progress report along with requisite photographs.
 - (v) Weather report including temperature and humidity.
 - (vi) Special incident at site.
 - (vii) Whether the work is progressing according to schedule, or not. If not, what are the problems and the remedial measures to be taken to regain schedule.
 - (viii) Inspection record and Schedule
 - (ix) Record of the approvals by ICMAI/ARCHITECT/CONSULTANT
 - (x) Record of the discussions by ICMAI/ARCHITECT/CONSULTANT
 - (xi) Fortnightly Construction Schedule
 - (xii) Monthly Construction Schedule
 - (xiii) Installation method of the materials, construction, erection of equipment etc.
10. i) The CONTRACTOR shall plan, engage, deploy his men, materials and machineries in such a way that suits best in the interest of the progress of the works and no claims on account of idle labour, manpower and machinery shall be entertained at any stage for reasons whatsoever it may be.
- (ii) The CONTRACTOR shall comply with all Safety Rules, Labour Rules, Workmen's Compensation Act, Minimum Wages Act, Building Bye-Laws, Rules and Regulations of Local Authorities or State Government as applicable to the works. The CONTRACTOR shall bear all the Sales Tax, Royalty, Octroi, labour cess and other Taxes, charges etc., as applicable for such works.
- (iii) The CONTRACTOR shall take all precautions to avoid all accidents by providing and exhibiting necessary Caution Boards day and night, speed limit boards, Red Flags, Red Lights and by providing barriers etc. He shall be responsible for any/all damages and accidents caused due to negligence on his part or his workers/subcontractors/Agencies working at site and to the ICMAI'S of the adjoining areas and to traffic etc., during the execution of work.
- (iv) During working at site, some restrictions may be imposed by ENGINEER-IN- CHARGE/SECURITY STAFF of ICMAI or local authorities regarding safety and security etc. on the working and/or movement of labour, materials etc. The CONTRACTOR shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on this account. No materials, machinery etc., whether belonging to ICMAI or CONTRACTOR, shall be allowed to go out of the site premises without the written authority/gate pass to be issued by EMPLOYER/ENGINEER-IN-CHARGE.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- (v) CONTRACTOR'S attention is invited to the fact that during the currency of this contract, works on other services which are outside the scope of the work of this contract, may be entrusted for execution to other Agencies. The Contractor shall permit full access and afford all co-operation and facilities for such other agencies or departmental workmen, if any, engaged by ICMAI; to carry out their part of works in the site premises. Any damage done to the existing structures during the execution of works shall be made good by the CONTRACTOR at his own cost and the rectification/ re instalment /making good etc., shall conform to the standard of materials originally used on the work and shall match with existing work in all respects to the entire satisfaction of the ARCHITETS/ENGINEER-IN- CHARGE.
- (vi) However, facilities such as power and water will be provided by the main contractor to other contractors on payment basis, based on sub-meter readings. Sub-Meters to be installed by other contractors at their own cost. Client shall deduct overall consumption charges for both water and electricity from the main contractor only.
- (vii) The CONTRACTOR shall secure CONTRACTOR'S ALL RISK POLICY for the full contract value, Third Party Insurance and other Insurance policies as mentioned elsewhere, to cover any loss or damage to any person within the site premises and to works of other persons caused either by his own men, or his subcontractors or persons/machinery T & P deployed by him directly/indirectly. The CONTRACTOR shall keep in force all such policies at his own cost up to the expiry of the Defect Liability Period.
- (viii) All materials to be used in the work shall be as per Specifications applicable and shall be got approved from ICMAI/ARCHITECT/CONSULTANTS/CONSULTANTS before incorporating /procuring them at site. Unsound materials work shall be removed or dismantled at his own cost and replaced free of cost. All test of materials/water etc. shall be done at CONTRACTOR'S cost in approved laboratories, to be indicated by ICMAI/ARCHITECT/CONSULTANTS/CONSULTANTS.
- (ix) The CONTRACTOR shall bear all incidental charges for cartage to site, local carriages within the site, storage and safety custody or all materials. Suitable godowns shall be erected, at places to be indicated by ENGINEER-IN-CHARGE at site for the proper storage of all materials, for their safety against damages. Cement shall be stored in a water proof separate godown with brick paved floorings provided with a single lockable door. The cement shall be received/ issued into/from the godown with the knowledge of ICMAI/ ENGINEER-IN-CHARGE and a proper record for its daily receipt/issues shall be maintained.
- (x) All materials which are stored on site such as bricks, metals, sand etc., shall be stacked in such a manner as to facilitate rapid and easy checking of quantities of such materials. The safety and security of all materials brought to the site shall be the sole responsibility of the CONTRACTOR. The material against which an advance has been paid by the ICMAI, shall be carefully stored and protected at site by the CONTRACTOR. No material shall be removed from the site without the written permission of the ICMAI and all materials brought to site shall be used in the contract work only.
- (xi) The CONTRACTOR shall pay all charges in connection with the provision of services to the offices and stores. The CONTRACTOR shall provide and maintain at his own cost and expense adequate



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

sanitary arrangements for the use of workmen and others in accordance with the rules and regulations of all relevant authorities at the location chosen by the ARCHITECT/CONSULTANT.

11. (i) No compensation shall be payable to the CONTRACTOR for any damage caused by rains, lightning, wind, storm, floods, tornado, earthquake or other natural calamity during the execution of work. He shall make good all such damages at his own cost; and no claim on this account will be entertained.
- (ii) The CONTRACTOR shall remain fully responsible for safety, soundness of workmanship and water tightness of the works wherever water proofing treatment are done and shall execute a Guarantee Bond on Rs.100/- Stamp paper for any leakage/ seepage/ failure of water proofing systems for period of 10 years (Minimum).
- (iii) The CONTRACTOR shall obtain the virtual completion certificate from the ICMAI/ARCHITECT/CONSULTANTS/CONSULTANTS as soon as the works are completed as per contract and to the entire satisfaction of the ICMAI. The 12 months defects liability period and release of Security Deposit instalments shall be reckoned from the date of virtual completion.
- (iv) No interest shall be payable on account of delay in payments of bills, release of Earnest Money deposits and/or release of Security Deposits. No interest shall accrue on Earnest Money Deposit / Security Deposits.

12. Samples

- (i) The Contractor shall submit the samples for approval. The CONTRACTOR shall submit one (1) piece of each item to the Architect/Consultant. Each piece shall be clearly and properly labelled, the approved samples shall be maintained & preserved till completion of project.
- (ii) All such samples shall be truly representative, and shall be sufficiently large to properly and accurately show the quality, texture, colour and/or other pertinent characteristics of the finished work or installation(s). In all cases, the finished work shall exactly match the sample in each and every respect.

13. Coordination of Work:

- (i) The CONTRACTOR shall consult all appropriate Drawings and Specifications in order to carry out all aspects and phases of the installation (s) without interference to other portions of the work, and shall verify all dimensions, details, locations, etc. with the Drawings and/or Specifications of all other Divisions where appropriate.
- (ii) Minor changes in the routing of piping conduit and/or in the location of equipment to avoid conflict with other Divisions may be required without additional cost to the ICMAI. If such changes do not constitute a modification in the intent of the system or installation(s), conflicts of this nature shall be resolved in the field. In all cases, however, interpretation of what constitutes a modification in the intent of the system or installation(s) shall be made by the ARCHITECT/CONSULTANT.
- (iii) Major alternations, deletions, additions and/or questions of intent shall be referred in advance, and in writing, to the ARCHITECT/CONSULTANT for a decision.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

14. Cutting and Repairing Openings:

- (i) The CONTRACTOR shall cooperate with work to be done under other sections and Divisions by providing full information in advance as to openings required in walls, slabs and footings for all piping, duct, conduit and equipment, including information on the proper positioning of sleeves.
- (ii) Any drilling or cutting required to carry out work under this contract shall be the responsibility of the CONTRACTOR, and the cost thereof shall be borne by him.
- (iii) For any holes in concrete, the CONTRACTOR shall provide, accurate position and install sleeves in the form(s) before the pouring of the concrete. The CONTRACTOR shall pay any additional costs that may be required for cutting any holes as a result of the incorrect positioning of sleeves. All holes through existing concrete shall be core drilled or saw cut. The CONTRACTOR shall seek and obtain the prior written approval of the ARCHITECT/CONSULTANT before drilling or cutting any holes in existing concrete.
- (iv) It shall be the responsibility of the CONTRACTOR to ascertain that all chases and openings are properly located.

15. Cleaning and Protection:

- (i) The CONTRACTOR shall keep the work clean and free of waste. All materials delivered to the job site shall be promptly stored in an approved area to minimize congestion or interference with other trades or with the orderly progress of the work.
- (ii) Debris of any kinds shall be removed from the exterior and interior of all equipment, piping, conduit, junction boxes, ductwork, accessories and appurtenances upon completion of the work, and prior to the operation of any system and/or final inspection or and testing.
- (iii) The CONTRACTOR shall provide for the safety and good condition of any and all equipment and/or materials until final acceptance by the ARCHITECT/CONSULTANT.
- (iv) The CONTRACTOR shall protect all materials and equipment from damage, provide adequate and proper storage facilities during the progress of the work, and take special care to provide proper protection for bearings, open connections, etc.

16. Shop Drawings

The Contractor shall prepare detailed shop drawings and obtain necessary approval from Engineer- in-Charge, before execution of items of work such as Aluminium Works, Stainless Steel Works etc.

17. As Built Drawings

The CONTRACTOR shall submit 2 sets of as Built Drawings and the floppies for all trades of work to the ENGINEER-IN-CHARGE for his approval along with the Final Bill.

18. Permissions and Licenses

The CONTRACTOR shall be responsible for obtaining all due sanctions and the completion certificate of the building from the statutory authorities before or within one month of the virtual completion of the building. He will be provided all requisite assistance by the ICMAI and Architect/Consultant, but will be reimbursed only for legal & valid receipts produced against above sanctions. The ICMAI will entertain no claims without official receipts.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

19. Secrecy

- (i) The details, information, drawings, specification of material etc. being provided therein are the absolute and exclusive property of the ICMAI.
- (ii) The Contractor is required to keep all the information / details / drawings / materials specifications confidential and to maintain secrecy.
- (iii) No information relating to the works shall be copied or otherwise reproduced in any way or conveyed to any third party except as may be essential for proper execution of the works or with the prior written consent of Architect/Consultant.
- (iv) All contract documents and any other further information deemed relevant by the Architect/Consultant together with all copies of the same made by Contractor, his subcontractors and suppliers, other concerned with the Works and authorized third parties shall be returned by Contractor to the ICMAI upon completion, termination or abandonment of the Contract.
- (v) Neither the Contractor nor his subcontractors, suppliers or any third party shall display any signboards or other form of advertisement at or near the site, until and unless approved by ICMAI / Architect/Consultant.
- (vi) Neither the Contractor nor his Sub-CONTRACTORS, suppliers or any third party shall use or permit to be used any details of the works in any form of publicity or advertisement in any part of the world.
- (vii) Photographic equipment shall not be taken on or near the site and the taking of photographs at or near the site is strictly forbidden until and unless permitted by ICMAI/ Architect/Consultants in the interest of the project.

The Contractor shall incorporate into any Sub-contract or Supply Agreements in connection with the works a clause imposing upon the Sub-CONTRACTOR or supplier the same obligations as are imposed upon the Contractor by this clause.

2. ELECTRICITY AND WATER FOR CONSTRUCTION

The Contractor shall arrange temporary water and electricity connections at his own cost.

3. SEWAGE

Temporary sewage connection to the staff toilet and labour quarter is required to be provided by contractor by installing adequate capacity septic tank.

4. TAXES, DUTIES AND INSURANCE

The Tenderer shall include all Government taxes, duties, cess, charges such as VAT/WCT, Sales tax, Service Tax, Labour cess, GST etc. in the bid price. All expenses towards insurance costs to be included in the bid price.

5. SECURED ADVANCE

The CONTRACTOR, on signing an indenture in the form to be specified by the Engineer-in- Charge, shall be entitled to be paid during the progress of the execution of the work up to 65 %of the material cost against (submission of invoice) or 65% of item rate, whichever is less, for materials such as cement, steel, bricks, tiles, stone etc which are non-perishable, non-fragile and non- combustible and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and/ or protected



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

against damage by weather or other causes but which have not at the time of advance been incorporated in the works. Such advances shall be deducted completely in the next RA bill. Material advance can be claimed only in the following R.A. Bill and no separate bill shall be raised.

Materials against which advance is paid shall not be removed from site. Undertaking should be given by CONTRACTOR to Employer, stating that materials remains in safe custody of CONTRACTOR, is safeguarded against losses due to the CONTRACTOR postponing the execution of the work or due to shortage or misuse of the materials, or any unstated reason.

6. SITE FACILITIES

The Contractor shall make arrangements for his site office cement godown (300 sqft.) and project engineer's office (200 sq.ft.) with tables, chairs, lockable cupboards, drinking water, display board etc.

7. ACCESS TO SITE AND ENVIRONMENT

The Contractor shall acquaint himself with the proposed site of work, conditions at worksite, its sub- soil strata, underground water table and its approach roads to the site of work, plot boundaries and other site environment before filling quotations. For carriage of materials to the work site preparation of new approach road or repair to existing is required, it would be done by the contractor at his own cost for which nothing extra shall be payable.

8. CONSTRUCTION PROGRAMME

The Contractor shall submit detailed construction program within first week of allotment of work showing bar chart, progress of work, financial flow, decision required and the no of skilled unskilled labours to be provided.

9. RATES

Rates quoted in the BOQ shall be inclusive of all taxes, leads, lifts, handling costs, transportation, local or outstation, wastage etc.

In case any activity, though specifically not covered in description of Bill of Quantities, but is required to complete the work as per scope of work, scope of supply, specifications, standards, drawings, General Conditions of contract, special conditions of contract or any other part of tender documents, the quoted rates shall be deemed to be inclusive of cost incurred for all such activities.

10. SECURITY

The Contractor shall make this own security arrangement for protection of construction material and equipment.

11. CEMENT CONCRETE AND STEEL TESTING

For the purpose of assuring desired concrete strength, the mix design of the sand, metal and cement to be obtained from the approved laboratory, well in advance before first concreting is done. Contractor shall make the mixing boxes as per mix design weigh batchers and for every slab concrete, the sample concrete cubes shall be taken and tested in the laboratory. No additional payment will be made for this. The Contractor shall be responsible for achieving minimum desired concrete strength.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

12. CEMENT AND STEEL SUPPLY

Cement and structural steel as well as M.S. and tor steel/TMT bars required for the construction shall be procured by the Contractor and the respective item rate should include all the factors involved.

Grey ordinary Portland cement 53 grade confirming to IS12269 – 1987 and 43 grade confirming to IS8112-1989, reinforcement steel Fe 500 conforming to IS 1786 and structural steel confirming IS 2062 shall be procured by the Contractor and stored at the site of work as certified by consultant during the work in progress.

Cement shall be stored in separate godown with pucca floor, waterproof wall and roof. The cement bags shall be stacked horizontally, continuous in each tier. These stacks shall be in rows of 12 bags high with clear minimum space of 600mm around. The capacity of the godown shall be equal to 20% of the theoretical consumption for the whole work. Contractor must carry out the required tests of cement and steel brought to site including chemical analysis and submit the test results to consultants for scrutiny and approval before using it in works. The rejected material shall be removed immediately from the site by the Contractor. Contractor should make his own arrangement to unload, transport to his godown and stack as also the testing, at his cost and ensure safe custody of materials procured by him. It would be mandatory on the contractor to submit the test certificate of lots of cement and steel procured from the manufacturer.

Care should be taken in use of cement. Consumption of cement will be assessed on constants standard/ attached along with the tender and derived constants (for items not in the schedule). Upper limit of cement wastage shall be 2% of the theoretical consumption and the Contractor shall have to submit cement consumption. Contractor shall maintain the cement consumption register and shall be daily signed by Project Engineer and the Contractor. Reconciliation of cement shall be done by same consideration. If there is less consumption of cement as compared to theoretical consumption, then the difference shall be recovered at the rate of 200% of prevailing market rate from the contractor. All concrete i.e. M20 and above grade shall be weigh batch mixing. The mix should be a design mix which Contractor shall furnish immediately after commencement of the work to employer.

Measurement for steel will be recorded as per actual work done at site adopting the standard weights in kgs/rmt as per the relevant IS code. No rolling margins will be allowed for additional payment. Rate shall include wastage. Bar bending schedule shall be submitted to Project Engineer before tying of the reinforcement.

Care should be taken to cut the steel and use it judiciously to avoid wastages in the form of small cut lengths the balance steel left over at site shall be Contractors property and the Contractor should remove the same after the completion of the work with due permissions of the owner. However, Contractors can take away the wastages i.e. pieces less than one meter lengths in order to keep the site clean with prior consent of the owner. Foundation bolts in concrete / masonry shall be of Mild Steel Round bars confirming to Fe250.

13. COMPLIANCE TO GOVERNMENT REGULATIONS AND BUILDING BYE LAWS

13.1 The work shall be carried out in the manner complying in all respects with requirements of relevant Bye-laws of the local body under the jurisdiction of which the work is to be executed or as directed by Project Engineer ICMAI and nothing extra shall be payable on this account.

13.2 The work of water supply, internal sanitary installations and drainage work etc. shall be carried out as per local Municipal Corporation or such local body bye-laws and the contractor shall produce necessary completion certifications, wherever required, from such authorities after completion of work.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- 13.3 Water tanks, taps, pipes, fittings and accessories shall conform to bye-laws and specifications of the Municipal body/Corporation. The contractor should engage licensed plumbers for the work and get the materials (fixtures and fittings) tested by the Municipal- Authorities, wherever required, at his own cost and nothing extra shall be payable.
- 13.4 The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rules and regulations and pay all fees and charges which may be liable.
- 13.5 The contractor shall give due notices to Municipal, Police and / or other authorities that may be required under the law /rules under force in the area and obtain all requisite licenses for temporary obstructions/enclosures and pay all charges which may be liveable on account of his execution of work under the agreement. Nothing extra shall be payable on this account.
- 13.6 The contractor shall comply with bye laws of Fire Fighting Department, wherever required, & obtain a certificate of completion from them. No extra claim shall be admissible on this account.

14. MATERIAL SUPPLIED BY ICMAI

No material will be supplied/issued by the ICMAI. The contractor will have to arrange all the materials required for the work including all costs such as transportation, Loading- Unloading, levy, taxes etc.

15. SAFETY NORMS

Safety norm to be follow up all work at all height including safety nets, safety shoes, safety belts etc. without any extra cost to the client.



ADDITIONAL CONDITIONS

1. INSPECTION AND TESTING

The ICMAI shall carry out inspection and testing at manufacturer's works for items such as water treatment plant, electrical panels & pumps covered under this contract. No equipment shall be delivered without prior written confirmation from PMC. In case factory inspection is carried out then all travelling and lodging expenses shall be borne by ICMAI for maximum two persons. All expenses related to testing shall be to Contractor account. Tests on site for completed works shall demonstrate the following, among other things.

That the equipment installed complies with specification in all respects.

That all items operate efficiently and quietly to meet the specified requirements.

That all electrical circuits are correctly protected and that protective devices are properly coordinated.

The contractor shall provide all necessary instruments and labour required for testing, shall make adequate records of test procedures and readings, shall repeat any tests requested by the PMC and shall provide test certificate signed by a properly authorized person. Such test shall be conducted on all materials and equipment and tests on completed work as called for by the PMC at contractor's expenses unless otherwise called for.

If it is proved that the installation or part thereof is not satisfactorily carried out, then the contractor shall be liable for the rectification and retesting of the same as called for by the PMC whose decision as to what constitutes a satisfactory test shall be final.

The above general requirements as to testing shall be read in conjunction with any particular requirements specified elsewhere.

2. SHOP DRAWINGS

All the shop drawings shall be prepared on computer through AutoCAD System based on Architectural/ Constructional Drawings, site measurements and Interior Designer's Drawings. Within four weeks of the award of the contract, contractor shall furnish, for the approval of the Architect/Consultant/Consultant, two sets of detailed shop drawings of all equipment and materials including layouts for Plant room, Pump room, Typical toilets drawings showing exact location of supports, flanges, bends, tee connections, reducers, detailed piping drawings showing exact location and type of supports, valves, fittings etc.; external insulation details for pipe insulation etc.; electrical panels inside/outside views, power and control wiring schematics, cable trays, supports and terminations. These shop drawings shall contain all information required to complete the Project as per specifications and as required by the Architect/Consultant / Consultant / ICMAI's site representative. These Drawings shall contain details of construction, size, arrangement, operating clearances, performance characteristics and capacity of all items of equipment, also the details of all related items of work by other contractors. Each shop drawing shall contain tabulation of all measurable items of equipment/materials/works and progressive cumulative totals from other related drawings to arrive at a variation-in- quantity statement at the completion of all shop drawings. Minimum 5 sets of drawings shall be submitted after final approval along with CD.

Shop drawings shall be submitted for approval four weeks in advance of planned delivery and installation of any material to allow Architect/Consultant/Consultant ample time for scrutiny. No claims for extension of time shall be entertained because of any delay in the work due to his failure to produce shop drawings at the right time, in accordance with the approved programme.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Manufacturers drawings, catalogues, pamphlets and other documents submitted for approval shall be in four sets. Each item in each set shall be properly labelled, indicating the specific services for which material or equipment is to be used, giving reference to the governing section and clause number and clearly identifying in ink the items and the operating characteristics. Data of general nature shall not be accepted.

Samples of all materials like valves, pipes, insulation, control wires etc. shall be submitted to the ICMAI's site representative prior to procurement. These samples shall be submitted in two sets for approval and retention by ICMAI's site representative and shall be kept in their site office for reference and verification till the completion of the Project. Wherever directed a mock up or sample installation shall be carried out for approval before proceeding for further installation.

Approval of shop drawings shall not be considered as a guarantee of measurements or of building dimensions. Where drawings are approved, said approval does not mean that the drawings supersede the contract requirements, nor does it in any way relieve the contractor from any responsibility or requirement to furnish material and perform work as required by the contract.

Where the contractor proposes to use an item of equipment, other than that specified or detailed on the drawings, which requires any redesign of the structure, partitions, foundation, piping, wiring or any other part of the mechanical, electrical or Architectural/Constructional layouts; all such re-design, and all new drawings and detailing required therefor, shall be prepared by the contractor at his own expense and got approved by the Architect/Consultant/Consultant/ ICMAI's site representative. Any delay on such account shall be at the cost and consequence of the Contractor.

Contractor shall prepare coordinated services shop drawings based on the drawings prepared by Electrical Contractors to ensure adequate clearances are available for installation of services for each trade.

Where the work of the contractor has to be installed in close proximity to, or will interfere with work of other trades, he shall assist in working out space conditions to make a satisfactory adjustment. If so directed by the ICMAI's site representative, the contractor shall prepare composite working drawings and sections at a suitable scale, not less than 1:50, clearly showing how his work is to be installed in relation to the work of other trades. If the Contractor installs his work before coordinating with other trades that may cause any interference with work of other trades, he shall make all the necessary changes without any extra cost to the ICMAI.

Within two weeks of approval of all the relevant shop drawings, the contractor shall submit four copies of a comprehensive variation in quantity statement, and itemized price list of recommended (by manufacturers) imported and local spare parts and tools, covering all equipment and materials in this contract. The PMC shall make recommendation to ICMAI for acceptance of anticipated variation in contract amounts and also advise ICMAI to initiate action for procurement of spare parts and tools at the completion of project.

3. ACCESSIBILITY

The Contractor shall verify the sufficiency of the size of the shaft openings, clearances in cavity walls and suspended ceilings for proper installation of his piping and other ancillaries. His failure to communicate insufficiency of any of the above shall constitute his acceptance of sufficiency of the same. The Contractor shall locate all equipment which must be serviced, operated or maintained in fully accessible positions. The exact location and size of all access panels, required for each concealed, valve or other devices requiring attendance, shall be finalized and communicated in sufficient time, to be provided in the normal course of work, failing



which the Contractor shall make all the necessary repairs and changes at his own expense. Access panel shall be standardized for each piece of equipment / device /accessory and shall be clearly nomenclature / marked.

4. COMPLETION OF INSTALLATION

On completion of the installation, a certificate shall be furnished by the contractor, counter signed by the licensed supervisor, under whose direct supervision the installation was carried out. This certificate shall be in the prescribed form as required by the local authority.

The contractor shall be responsible for getting the entire electrical installation duly approved by the local authorities concerned, and shall bear expenses if any, in connection with the same.

5. BALANCING AND TESTING

Balancing of all water systems and all tests as called for shall be carried out by the contractor through a specialist group, in accordance with the Specifications and ASPE / ASHRAE Guide lines and Standards. The installation tests shall be carried out in the presence of the representatives of the Architect/Consultant/Consultant and ICMAI's site representative and the defects if any shall be removed.

6. COMPLETION DRAWINGS

Contractor shall periodically submit completion drawings as and when work in all respects is completed in a particular area. These drawings shall be submitted in the form of two sets (Hard Copies) and soft copies (in Auto CAD & PDF Form) in Pen Drives each containing complete set of drawings on approved scale indicating the work as - installed. These drawings shall clearly indicate complete plant room layouts, piping layouts, location of wiring and sequencing of automatic controls, location of all concealed piping, valves, controls, wiring and other services. Each portfolio shall also contain consolidated control diagrams and technical literature on all controls. The contractor shall keep f one set of these consolidated control diagrams in glass frame, in the plant room.

7. OPERATING INSTRUCTION& MAINTENANCE MANUAL

Upon completion and commissioning of WORK, the contractor shall submit a draft copy of comprehensive operating instructions, maintenance schedule and log sheets for all systems and equipment included in this contract. This shall be supplementary to manufacturers' operating and maintenance manuals. Upon approval of the draft, the contractor shall submit four (4) complete bound sets of typewritten operating instructions and maintenance manuals; one each for retention by Consultant and ICMAI's site representative and two for ICMAI'S Operating Personnel. These manuals shall also include basis of design, detailed technical data for each piece of equipment as installed, spare parts manual and recommended spares for 4 yearsperiod of maintenance of each equipment. Preventive Maintenance Schedule for each equipment / panel shall be submitted along with Operation and Maintenance manual.

8. ON SITE TRAINING

Upon completion of all work and all tests, the Contractor shall furnish necessary operators, labour and helpers for operating the entire installation for a period of fifteen (15) working days of ten (10) hours each, to enable the ICMAI'S staff to get acquainted with the operation of the system. During this period, the contractor shall train the ICMAI'S personnel in the operation, adjustment and maintenance of all equipment installed.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SECTION - V: TENDER FORM & APPENDIX TO TENDER FORM

Clause No	Description	Page No.
1.	Tender Form & Appendix to Tender Form	84
2.	Pre-Qualification of Contractors / Vendors / Agencies	85-87
3.	Appendix to the Form of Tender	88-90



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SECTION V

TENDER FORM & APPENDIX TO TENDER FORM TABLE OF CONTENTS

TENDER FORM

To
The Convener,
Tender Committee,
The Institute of Cost Accountants of India.,
CMA Bhawan, 12, Sudder Street,
Kolkata – 700 016

Dear Sir,

I/We do hereby tender for the execution of the work specified in the underwritten memorandum within the time specified at the rates therein and in accordance with & in all respects as per the specifications, drawings, designs and instructions supplied by you, which I/We have read very carefully.

MEMORANDUM:

Construction of Institutional Building at Plot Nos. IPS-1,11,12 & 13 At Industrial Area, Lithographs-III, Jaipur, Rajasthan

I/We hereby distinctly and expressly declare and acknowledge before the submission of my/our tender, I/We have carefully followed the instructions and read the specifications and read the schedule of quantities, examined the drawings and clearly understood all the conditions of tender. I/We have also seen the location where the said work is to be done and made such investigations of the work required to enable me/us to complete the work successfully.

Should this tender be accepted in whole or in part, I/We hereby agree to abide by and fulfil all the terms and conditions annexed hereto.

I/We also agree to furnish the required deposits in the form and shape as stipulated in tender documents.

I/We agree to keep the offer open for 180 days from the date of opening of tender.

I/We accept that you are not bound to accept the lowest tender or bound to assign any reason for rejecting my/our tender.

Please find attached herewith Demand Draft No. _____ dated _____ drawn on _____ (Bank) for Rs. ___/- against the Earnest Money Deposit.

Please also find attached my / our income tax. Sales tax, service tax clearance certificates, last audited balance sheet, company profile deed and solvency certificate including work contract registration as requested.

We understand and accept the Payment Terms as stipulated in the General / Special Conditions of tender documents.

Yours faithfully,

Name of the Partner /Officer of company
Signature of Partner / Officer of company
Seal of company & date

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

PRE-QUALIFICATION OF CONTRACTORS / VENDORS / AGENCIES
APPLICATION FORM**(Please strike-off which is not applicable)****Documents, which are to be enclosed with the application should be demarcated as Annexures A, B, C etc. as mentioned below with Flag.**

S. No.	Particulars	To be filled by the Applicant
1	Name of the applicant	
2	Postal Address of the Office (Mandatory)	
	E-mail Id: (Mandatory)	
	Contact telephone/ Mobile No. (Mandatory)	
3	Year of establishment (Documentary evidence Mandatory) . Certificate of Incorporation / Memorandum of Association for the proof of establishment (Annexure - "A")	
4	i) Constitution of the firm. (Annexure - "B") (Documents evidence Mandatory)	Sole proprietorship/Partnership/ Private Ltd./Ltd. Co/ Any other (Please specify)
	ii) Name of proprietor / Partners. /Directors. of the organization/firm. (Annexure - "C") (Documentary evidence Mandatory)	
	iii) Name/s of authorized signatory	
	iii) Mode of Authorization. (Annexure - "D") (Documentary evidence Mandatory) .	Resolution/Partnership Deed /Registered Power of Attorney/Proprietor/ any other (Please specify)
	iv) Details of registration-whether partnership firm, company, etc. Name of registering authority, date and registration number (Note: Partnership firms not registered with the appropriate authority need not apply) (Documentary evidence Mandatory) . (Annexure - "E")	
5	Whether registered with Govt. /Semi Govt. /Institutes / CPWD/Municipal Authorities or any other Public Organization and if so, in which class and since when. Enclose certified copies of document as evidence. (Annexure - "F") i. Name of organization	YES/NO

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

S. No.	Particulars	To be filled by the Applicant
	Category Registration No.& Date I. Name of organization ii. Category iii. Registration No.& Date	
6	No. of years. of experience in the field and details of work in any other field	
7	Yearly turnover of the organization during last 3years. (Year wise) (Annexure – “G”)	FY - 2020-21 FY- 2021-22 FY- 2022-23 Average:
8	Bank’s Details (Annexure – “H”) a) Full Postal Address of the branch b) Account No c) IFSC Code No	
9	Bank’s Solvency Certificate/Limit (Please enclose latest Solvency certificate from the Banker not prior to September 2023) (Mandatory) (Annexure – “I”)	
10	Whether registered with `GST, if yes, GST No. (GST registration should have with Delhi NCR State) (Mandatory) (Annexure - “J”)	
11	Whether an assessed of Income Tax. If so, mention PAN No along with copy of Pan card. (Annexure – “K”)	
12	Furnish audited balance sheet and profit& Loss A/c (Audited) for the last 3 years. Whether last 3 years IT returns filed (Pl. enclose certified copies of the IT return of the year: -2020-21; 2021-22; 2022-23 (Annexure – “L”)	
13	Detailed description and value of works done during the last 5 years. as per Annexure II	
14	Names & addresses of the persons/organizations who will certify about the quality as well as performance of your organization	
15	Details of technical staff as per Annexure III . Does the applicant have sufficient workforce, plant & machinery, equipment	

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

S. No.	Particulars	To be filled by the Applicant
	etc. (provide details in Annexure-III)	
16	Whether any Civil Suit/litigation arisen in contracts executed during the last 7 years. If yes, please furnish the name of the project, employer, nature of work, contract value, work order and brief details of litigation. Give name of the Court, place, status of pending litigation	
17	Information relating to whether any litigation is pending before any Arbitrator for adjudication of any litigation or else any litigation was disposed of during the last five years by an arbitrator. If so, the details of such litigation are required to be submitted.	
18	Services setup, Registration and Licenses required. (Mandatory) Please enclose documentary evidence. (Annexure – “M”)	Having full- fledged service setup at New Delhi/NCR. Must have valid licenses for related trades, PAN, GST Registration etc. with respective registering authorities. In addition, the vendors should possess PF Registration and ESIC Registration.
19	Mandatory registration from Govt. authorities ESIC No: EPF No:	

NOTE:

1. All the above documents to be submitted in hardcopy duly signed by the Authorized signatory, under seal of the company/ firm.
2. Photographs of the completed works pasted in A-4 size paper & Photocopies of all self-attested documentary evidences to be enclosed.

Name and Signature of the Contractor with seal



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

APPENDIX TO THE FORM OF TENDER

SI No.	Clause No.	Brief Description of Clause
1.	Name of Work	Construction of Institutional Building at Plot Nos. IPS-1,11,12 & 13 At Industrial Area, Lithographs-III, Jaipur, Rajasthan
2.	Cost of Tender Document	Rs.2000/- + (18% GST)(Non-refundable)
3.	Earnest Money Deposit	In the form of DD/ Pay Order/ Bank Guarantee for an Amount of Rs. _____ /-
4.	Validity of the BID	180 days
5.	Commencement of work	Within 7 days from the date of Letter of Intent/ Work Order or handing over of site, whichever is later.
6.	Time of Completion inclusive of holidays & rainy period.	24 Months
7.	Signing of Contract Agreement	Within 7 days of issue of Letter of Intent/ Work Order
8.	Performance Security Deposit	5 % of the contract amount (to be submitted before signing agreement) in the form of DD/ Bank Guarantee in favour of “The Institute of Cost Accountants of India.”, payable at Kolkata. The validity of which will be up to Defect Liability Period plus 90 Days.
9.	Release of Performance Security	Full performance security (5%) shall be refunded after completion of Defect Liability Period Plus ninety days
10.	Additional Performance Security against low quoted items	Additional Performance Security Amount will be as given in the Tender Documents. This will be released as per provision in the Tender Documents.
11.	Mobilization Advance	10% of the Contract price against submission of BG equivalent to 110% of advance amount, valid till the Completion Period of contract period. It shall be recovered from 1st RA bill onwards @ 12.50 % .
12.	Retention Money	10 % of Contract Value to be deducted from each RA bill. Alternately, Contractor can submit BG for equivalent amount before payment of 1st RA bill. BG will be valid till completion of contract period plus 90 days.
13.	Release of Retention Money	50% of same shall be released along with Final Bill and balance 50% after completion of Defect Liability Period
14.	Insurance	Contractor’s All Risk Insurance Policy to inter alia cover the following: Contract Price plus 10% for the period of completion of the works + defect liability period. Civil commotion, riots, war, earth quake, terrorist attack and other



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SI No.	Clause No.	Brief Description of Clause
		disturbances. All Plant and machinery owned by the Contractor for the project. Damage insurance against loss or damage by fire or any other disaster to the works during construction until its completion. Workmen Compensation Policy to be taken by contractor. Third Party Insurance Policy Any other insurance policy not referred above but mandatory to indemnify ICMAI against all types of losses.
15.	Secured Advance on Non-perishable Material	65 % of the material cost (against submission of invoice) or 65% of item rate, whichever is less.
16.	Running Account Bills	Max. one bill per month will be entertained. No bill value should be less than Rs. 50.00 lacs.
17.	Payment of Running Account Bills	Within 30 (Thirty) days from the date of submission of bill, if found in order. All bills along with measurements to be checked by PMC/ Architect/Consultant. However, if the ICMAI feels, they may get it cross- checked.
18.	Final Bill	Contractor to submit the final bill within 30 days of issue of virtual completion certificate. PMC / Architect/Consultant to certify in next 30 days. EMPLOYER to release payment in next 30 days.
19.	Taxes and Duties	All Government taxes and duties such as Sales tax, Service Tax, Labour cess etc. to be included in the bid price except GST. GST will be paid extra as applicable at the material time.
20.	Freight, Insurance, Packing, Forwarding, Loading & Unloading	To be included in the bid price.
21.	Quantity Variation	The Quantity mentioned in BOQ can vary up to any extent on either side. Any item can be deleted. Nothing extra shall be paid on this account in the rate quoted.
22.	Escalation	No Escalation shall be payable during the contract period, whatsoever may be the reason.
23.	Electricity & Water	Electricity, drinking water and water for construction to be arranged by CONTRACTOR at his own cost.
24.	Period of Maintenance/ Defect Liability Period	12 (twelve) Months from date of issue of completion certificate by Architect/Consultant/ PMC.
25.	Liquidation Damages	0.5 % of Contract Value per week of delay, subject to a maximum of 10 % of Contract Value.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

If the rates for altered, substituted or additional work are not specifically provided in the tender, then such rates will be derived from the rates for a similar class of work as specified in the tender.

If the rates of altered, substituted or additional work cannot be determined in the manner specified above, then the rates of such items of work shall be computed based on the Analysis of Rates as provided in Local PWD or CPWD, Analysis of Rates (latest edition). Water & Electricity charges even if provided in the analysis will not be allowed since same are deemed to be included in the 15% (Fifteen Percent) to be added towards establishment, overheads, water and electricity, POL charges, contingency and CONTRACTOR profit, tool and tackles etc.

If the rates for the altered, substituted or additional work cannot be determined in the manner specified above, then the rates for the same shall be decided based on actual cost to the CONTRACTOR at site including labour (for which CONTRACTOR shall produce sufficient proof) plus 15% to towards establishment, overheads, water and electricity, POL charges, contingency and Contractor’s profit, tool and tackles etc. cover profits & overheads of CONTRACTOR.

(Signature of the Authorized person) Designation:

Date: Name of the firm:

(Official Seal)

Address:



SECTION – VI

EVALUATION FORMATS

SECTION - VI: EVALUATION FORMATS TABLE OF CONTENTS

Clause No	Description	Page No.
1. Form A	Financial Information with supporting document	91
2. Form B	Form of Bankers Certificate from a Scheduled Bank.	92
3. Form C	Details of all works of similar Class completed during the last five years ending last day of the month.	92
4. Form D	Project under execution or awarded	93
5. Form E	Performance Report of work referred to in Forms C and D	93
6. Form F	Structure & Organization	94
7. Form G	Details of Technical & Administrative Personnel to be Employed for the work.	95
8. Form H	Details of construction plant and equipment likely to be used in carrying out the work.	95-97
9. Form I	Details of Statement of Arbitration & Disputes	97

SECTION VI - EVALUATION FORMATS

FORM 'A'

FINANCIAL INFORMATION

- I. Financial Analysis - Details to be furnished duly supported by figures in balance sheet/ profit & loss account for the last three years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

Year	Profit/ Loss	Turnover	Remarks
2020-2021			
2021-2022			
2022-2023			

- II. Financial arrangements for carrying out the proposed work:

Signature of Chartered Accountant with Seal

Signature of Tenderer(s).



FORM “B”

SOLVENCY CERTIFICATE

FORM OF BANKERS’ CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s./Shri..... having marginally noted address customer of our Bank are/is respectable and can be treated as good for any engagement up to a limit of Rs..... (Rupees.....)

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature) For the Bank

NOTE:

- (1) Bankers certificates should be on letter head of the Bank, sealed in cover addressed to tendering authority.
- (2) In case of partnership firm, certificate should include names of all partners as recorded with the bank.

FORM ‘C’

**DETAILS OF ALL WORKS OF SIMILAR CLASS COMPLETED DURING THE LAST FIVE YEARS
 ENDING LAST DAY OF THE MONTH**

S. No	Name of work/project and location	Owner or sponsoring organization	Cost of work in crores of rupees	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Litigation/ arbitration cases pending/ in progress with details*	Name and address/ telephone number of officer to whom reference maybe made	Remarks
1	2	3	4	5	6	7	8	9	10

*Indicate gross amount claimed and amount awarded by the Arbitrator.

Signature of Bidder(s)

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

FORM 'D'**PROJECTS UNDER EXECUTION OR AWARDED**

S.No.	Name of work/project and location	Owner or sponsoring organization	Cost of work in crores of rupees	Date of commencement as per contract	Stipulated date of completion	Up to date percentage progress of work	Slow Progress if any and reasons thereof	Name and address/ telephone number of officer to whom reference may be made	Remarks
1	2	3	4	5	6	7	8	9	10

Certified that the above list of works is complete and no work has been left out and that the information given is correct to my knowledge and belief.

Signature of Bidder(s)

FORM 'E'**PERFORMANCE REPORT OF WORKS REFERRED TO IN FORMS "Cr' & "0"**

1. Nama of work/project & location
2. Agreement no.
3. Estimated cost
4. Tendered cost
5. Date of start
6. Date of completion
 - (i) Stipulated date of completion
 - (i) Actual date of completion
7. Amount of compensation levied for delayed completion, any
8. Amount of reduced rate items, H any
9. Performance Report
 - (1) Quality of work
 - (2) Financial soundness
 - (3) Technical Proficiency
 - (4) Resourcefulness
 - (5) General Behaviour

Very Good/Good/Fair/Poor Very Good/Good/Fair/Poor Very Good/Good/Fair/Poor Very Good/Good/Fair/Poor Very Good/Good/Fair/Poor

Dated:

Not Below the Rank of Executive Engineer or Equivalent

FORM "F"



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

STRUCTURE & ORGANISATION

1. Name & address of the bidder
2. Telephone no.; Mobile No.; Fax no.; email address
3. Legal status of the bidder (attach copies of original document defining the legal status)
 - (a) An Individual
 - (b) A proprietary firm
 - (c) A firm in partnership
 - (d) A limited company or Corporation

4. Particulars of registration with various Government Bodies (attach attested photocopy)

Organization	Place of registration	Registration No.
--------------	-----------------------	------------------

- 1.
- 2.
- 3.

5. Names and titles of Directors & Officers with designation to be concerned with this work.
6. Designation of individuals authorized to act for the organization
7. Was the bidder ever required to suspend construction for a period of more than 5 months continuously after he commenced the construction? If so, give the name of the project and reasons of suspension of work.
8. Has the bidder, or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment.
9. Has the bidder, or any constitutional partner in case of partnership firm, ever been debarred/black listed for tendering in any organization at *any* time? If so, give details
10. Has the bidder, or any constituent partner in case of partnership firm, ever been convicted by the court of law? If so, give details.
11. In which field of Civil Engineering construction the bidder has specialization and interest?
12. Any other information considered necessary but not included above.

Signature of Bidder(s)

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

FORM 'G'**DETAILS OF TECHNICAL & ADMINISTRATIVE PERSONNEL TO BE EMPLOYED FOR THE WORK**

S.No.	Designation	Total number	Number available for this work	Name	Qualifications	Professional experience and details of work carried out	How these would be involved in this work	Remarks
1	2	3	4	5	6	7	8	9

Signature of Bidder(s)

FORM 'H'**DETAILS OF CONSTRUCTION PLANT AND EQUIPMENT LIKELY****TO BE USED IN CARRYING OUT THE WORK**

S.No.	Name of equipment	Nos.	Capacity or type	Age	Condition	Ownership status			Current location	Remarks
						Presently owned	Leased	To be purchased		
1	2	3	4	5	6	7	8	9	10	11
Earth moving equipment										
1.	Excavators (various sizes) Equipment for hoisting & lifting									
1.	Tower									
2.	Builder 's hoist									
	Equipment for concrete work									
1.	Concrete batching plant									
2.	Concrete pump									
3.	Concrete transit mixer									
4.	Concrete mixer (diesel)									
5.	Concrete mixer (electrical)									
6.	Needle vibrator (electrical)									
7.	Needle vibrator (petrol)									
8.	Table vibrator (elect. / petrol)									



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

S.No.	Name of equipment	Nos.	Capacity or type	Age	Condition	Ownership status			Current location	Remarks
						Presently owned	Leased	To be purchased		
1	2	3	4	5	6	7	8	9	10	11
Equipment for building work										
	1. Block making machine									
	2. Bar bending machine									
	3. Bar cutting machine									
	4. Wood thickness planer									
	5. Drilling machine									
	6. Circular saw machine									
	7. Welding generators									
	8. Welding transformer									
	9. Cube testing machines									
	10. M.S. Pipes									
	11. Steel shuttering									
	12. Steel scaffolding									
	13. Grinding/polishing machines									
Equipment for road work										
	1. Road rollers									
	2. Bitumen paver									
	3. Hot mix plant									
	4. Spreaders									
	5. Earth rammers									
	6. Vibratory road rollers									
Equipment for transportation										
	1. Tippers									
	2. Trucks									
Pneumatic equipment										
	1. Air compressor (diesel)									
De-watering equipment										
	1. Pump (diesel)									
	2. Pump (electric)									

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

S.No.	Name of equipment	Nos.	Capacity or type	Age	Condition	Ownership status			Current location	Remarks
						Presently owned	Leased	To be purchased		
1	2	3	4	5	6	7	8	9	10	11
Power equipment 1. Diesel generators (Any other plant equipment)										

Signature of Bidder(s)

FORM "I"**Statement of Arbitration and Disputes**

S. No.	Name of work/project and location	Name and address/telephone number of officer to whom reference may be made	Name of client	Cost of work in crores	Nature of dispute	Award of Arbitration	Remarks

Signature of Tenderer(s)



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SECTION - VII

FORM OF AGREEMENT

This Agreement is made on this the ____--____ day of _____ 2023-_____ at _____ Jaipur, Rajasthan _____

BETWEEN

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA., having its Head Office at ‘CMA Bhawan’, 12, Sudder Street, Kolkata – 700 016, represented by its authorized officer Shri, _____ (HEREINAFTER referred to as ‘ICMAI’) which expression shall, wherever the context so admits, mean and include its successors in office, assignees, representatives, administrator etc. of the ONE PART;

AND

_____, represented by its authorized signatory _____, (HEREINAFTER referred to as “THE CONTRACTOR”) which expression shall, wherever the context so admits, mean and include its partners, successors, representatives, assignees, executors, administrators etc. of the OTHER PART.

WHEREAS

- A. The ICMAI is desirous that Structural, Civil & other finishing works, Plumbing Electrical and HVAC Works in respect of the **construction of Institutional Building at Plot Nos. IPS-1,11,12 & 13 At Industrial Area, Sitapura Ph-III, Jaipur, Rajasthan.** (hereinafter referred to as ‘Contract Work’) should be executed as mentioned, enumerated or referred to in the tender including Press Notice Inviting Tender, General Conditions of the Contract, Special Conditions of the contract, Specifications, Drawings, Plans, Time Schedule of completion of jobs, Schedule of Quantities and Rates, Agreed Variations, other documents and has called for Tender as per the Tender Document No. Dated
- B. The Contractor has inspected the site and surroundings of the work specified in the tender documents and has satisfied himself by careful examination before submitting his tender as to the nature of the surface, strata, soil, sub-soil and grounds, the form and nature of the site and local conditions, the quantities, nature and magnitude of the work, the availability of labour and materials necessary for the execution of work, the means of access to site, the supply of power and water thereto and the accommodation he may require and has made local and independent enquiries and obtained complete information as to the matters and things referred to or implied in the tender documents or having any connection therewith, and has considered the nature and extent of all the probable and possible situations, delays, hindrances or interferences to or with the execution and completion of the work to be carried out under the contract, and has examined and considered all other matters, conditions and things and probable and possible contingencies, and generally all matters incidental thereto and ancillary thereof affecting the execution and completion of the contract work and which might have influenced him in making his tender and has offered to execute the contract work.
- C. The tender documents including the ICMAI’s Press Notice Inviting Tender, Instruction to bidder, General conditions of contract, Special Conditions of Contract, Schedule of Quantities and Rates, General obligations, Specifications, Drawings, Plan, Time Schedule for completion of work, Letter of Acceptance of Tender, Letter of Intent and any Statement of Agreed Variations and all or any appendices, copies of which hereto annexed along



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

with such amendments as may be confirmed or instructions as may be issued from time to time by the ICMAI shall form part of the contract though separately set out and are included in the expression 'Contract' wherever herein used.

D. The tender documents shall be taken as complementary and mutually explanatory of one another, but in the case of ambiguities and discrepancies shall take precedence in the order set out below:

1. This Form of Agreement
2. The Letter of Intent/ Work Order
3. The said bid and Appendix
4. The Bill of Quantities
5. The Technical Specifications
6. The Tender Drawings
7. Special Conditions of Contract
8. General Conditions of Contract
9. Form of Bank Guarantees

AND WHEREAS:

The ICMAI accepted the tender of the Contractor for executing the contract work(s), conveyed vide letter no, dated, at the rate(s) stated in the Schedule of quantities for the work and accepted by the ICMAI (hereinafter referred to as the 'Schedule of Rates') upon the terms and subject to the conditions of the contract.

NOW, THEREFORE, THIS AGREEMENT WITNESSTH AND IT IS HEREBY AGREED BY AND BETWEEN BOTH THE PARTIES AND DECLARED AS FOLLOWS:

1. That in consideration of the payment of Rs./- (Rupees _____ only), hereinafter referred to as the 'Contract Price', to be made by the ICMAI to the Contractor for the work to be executed by him, the Contractor hereby covenants with the ICMAI that the Contractor shall and will duly provide, execute and complete and remedy any defects therein and shall do and perform all other acts and things in conformity in all respects with the provisions of the Contract or described therein or which are to be implied therefrom or shall be reasonably necessary for the completion of the said works and at the said times and in the manner and subject to the terms and conditions or stipulations mentioned in the contract.
2. That the contract work shall be completed within 12 months from the date of handing over the site to the Contractor or from the 10th day of the receipt by the Contractor, the work order issued, whichever is later, according to the rate of progress indicated in the programme chart enclosed to the work order, or within such period specifically agreed to by the ICMAI's Architect/Consultant in writing towards extension of time in consultation with the ICMAI.
3. That the Contractor has furnished performance Bank Guarantee No. _____ dated for Rs./- (an amount equal to 5 % of the contract value), issued by (bank) with validity tillin favour of Secretary, ICMAI, payable at Delhi, for due performance of his obligation under this contract.

That the Contractor has further agreed that towards Retention Money, an amount equal to 10% of the running bill will be deducted from each progressive bill. It is further agreed between the parties that 50% of same shall



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

be released along with Final Bill and balance 50% after completion of Defect Liability Period plus 90 days. No interest will be paid on retention money.

The Performance Security Deposit will be released upon expiry of Defect Liability Period of 12 months which will be counted from the date of virtual completion of work or two months from the date of latest rectification of work, whichever is later.

4. That in consideration of the due provisions, execution and completion of the contract work, the ICMAI does hereby agree with the Contractor that the ICMAI will pay to Contractor the respective amounts for the work actually done by him and approved by the ICMAI at the Scheduled Rates under provision of the contract, such payment to be made at such time in such manner as prescribed for in the contract.
5. That it is specifically and distinctly understood and agreed between the ICMAI and the Contractor that the Contractor shall have no right, title or interest in the site made available by the ICMAI for execution of the works or in the building, structures or works executed on the said site by the contractor or in the goods, articles, materials, etc. brought on the said site (unless the same specifically belongs to the Contractor) and the Contractor shall not have or deemed to have any lien whatsoever or charge for unpaid bills and shall not be entitled to assume or retain possession or control of the site or structures and the ICMAI shall have an absolute and unfettered right to take full possession of site and to remove the Contractor, their servants, agents and materials belonging to the Contractor and lying on the site.
6. That it is further specifically and distinctly understood and agreed between the ICMAI and the Contractor that in any event, the ICMAI shall owe no responsibility or liability of any kind towards any person or persons engaged by the Contractor for carrying the contract work(s) and the Contractor alone shall be responsible and liable to any such person or persons so engaged.
7. REPRESENTATIONS AND WARRANTIES

The Contractor represents and warrants to ICMAI that:

- (a) It is duly organized and validly existing under the laws of India., and has full power and authority to execute and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;
- (b) It has taken all necessary corporate and other actions under laws applicable to its business to authorize the execution and delivery of this work contemplated in this Agreement and to validly exercise its rights and perform its obligations under this Agreement
- (c) It has the financial standing and capacity to execute the Project in accordance with the terms of this Agreement;
- (d) In providing the Services, it shall not cause any disruption to ICMAI's normal operations (e). This Agreement has been duly executed by it and constitutes a legal, valid and binding obligation, enforceable against it in accordance with the terms hereof.
- (f) The information furnished in the tender/ Agreement documents and as updated is true in all aspects and nothing is suppressed or misrepresented.
- (g) The execution, delivery and performance of this Agreement shall not conflict with, result in the breach of, constitute a default by any of the terms of its Memorandum and Articles of Association or any Applicable



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected;

- (h) There are no material actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it at law or in equity before any court or before any other judicial, quasi-judicial or other authority, the outcome of which may result in the breach of this Tender or ensuing Agreement or which individually or in the aggregate may result in any material impairment of its ability to perform any of its material obligations under this Tender or ensuing Agreement;
- (i) It has no knowledge of any violation or default with respect to any order, writ, injunction or decree of any court or any legally binding order of any Government Instrumentality which may result in any Adverse Effect on its ability to perform its obligations under this Tender or ensuing Agreement and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its obligations under this Agreement;
- (j) It has complied with Applicable Laws and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have an Adverse Effect on its ability to perform its obligations under this Agreement;
- (k) It and its personnel, have the necessary experience, skill, knowledge and competence to perform the Contract;
- (l) No representation or warranty by it contained herein or in any other document furnished by it to ICMAI or its Employee or its nominated agencies in relation to the Required Consents contains or shall contain any untrue or misleading statement of material fact or omits or shall omit to state a material fact necessary to make such representation or warranty not misleading
- (m) No sums, in cash or kind, have been paid or shall be paid, by it or on its behalf, to any person associated with ICMAI in any manner whatsoever by way of fees, commission or otherwise for entering into this Agreement or for influencing or attempting to influence ICMAI in connection therewith.

8. SECURITY DEPOSIT, BANK GUARANTEE AND RETENTION MONEY

The Security Deposit, Bank Guarantee and Retention Money shall be liable to be forfeited by the Institute at its discretion in the event the Contractor is deemed to be in default or in the event of breach of any covenant or terms and conditions of the contract on the part of the Contractor. In addition to other provisions and conditions mentioned herein, and in the Tender document, Security Deposit, Guarantee and Retention Money, shall liable to be forfeited in the following conditions also:

- a) the Contractor modifies or changes the rates of contract unilaterally during the Contract Period
- b) the Contractor withdraws its/ his offer during the period of Agreement.
- c) the Contractor refuses/ fails to execute the Work awarded to him/ it.
- d) the Contractor fails to perform the work to the satisfaction of the ICMAI.
- e) the Contractor is found to be indulged in Canvassing in any form or indulge in fraud or corruption/ corrupt practices in any form in connection with tender. the Contractor is found to be suppressing the information or furnishing wrong information or indulging in misrepresentation or mis- statements.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- f) the Contractor fails to honour or refuses to comply with or modifies any or all terms and conditions of the Tender and/ or Agreement at any stage including after declaration of L-1 Bidder.
- g) Contractor fails to make good the deficit of Security Deposit within 10 days of the notice of demand.
- h) Contractor fails to pay the Liquidated damages and/ or Penalty within stipulated time as provided herein.
- i) Contractor fails to submit Additional Performance Security.
- j) Contractor fails to keep all the information/ details /drawings /material specification confidential and fails to maintain secrecy.
- k) The successful Bidder/ Contractor, in violation of the provisions of the Tender and ensuing Agreement and/ or without prior written consent of the Client/ Owner, sub-contracts the work awarded to him.
- l) The Contractor fails to handover the Insurance Policy including renewed Insurance Policy in original
- m) Unless extended by the ICMAI in writing, on failure to complete the works, work order and items of work within individual dates for completion and clear the site on or before the date of completion

9. ADDITIONAL PERFORMANCE SECURITY DEPOSIT:

Since the Contractor has, in its bid dated, quoted ALR (Abnormally Low Rates i.e. the rates less than 60% of estimated rates) for prices of undermentioned individual items and/or total bid price offered in relation to the ICMAI's item rates estimate or total price estimate of the real cost of the work to be performed under the Contract, the Contractor has furnished Additional Performance Security Deposit of Rs. which is calculated at per the given formula.

i.e. Additional Performance Security Amount = Quantity X (60% of estimated rate -ALR rate).

10. RESERVATION CLAUSE:

That the ICMAI reserves the right to add or omit any item(s) of the contract work, exercise control on quality of work, check of measurement, payment certificates, variation(s) arising in view of change of scope of work and approval of extra substituted items. The decision of the ICMAI shall be final and binding in regard thereto and the Contractor shall not be entitled to claim any compensation other than the admissible rates provide for in the contract or otherwise mutually agreed upon for such additions, alternations, modifications, variation omissions etc.

11. ASSIGNMENT:

The contractor shall not without the prior written consent of the ICMAI assign the contract works or any part thereof. PROVIDED ALWAYS that any consent given by the ICMAI for assigning contract works or any part thereof will not absolve the Contractor from the full and entire responsibility of its obligations under this contract and/or instructions issued by the ICMAI.

12. LIABILITY UNDER EMPLOYEES STATE INSURANCE ACT, 1948 AND EMPLOYEES PROVIDENTFUND AND ISCELLANEOUS PROVISIONS ACT, 1952 AND GRATUITY/PENSION OR ANYOTHERLABOUR LAWS:

Whenever the ICMAI is required to pay contributions in respect of the workmen or employees engaged or employed by or through the Contractor, his Sub-contractor or permitted assigns, under the Employees State Insurance Act, 1948 and P.F. Act, 1952 or the Rules and Regulations, made thereunder either as the principal employer or otherwise, the ICMAI shall be entitled to recover from the Contractor such amounts from dues



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

payable or becomes payable to the Contractor. The Contractor will discharge its responsibilities under the Employees State Insurance Act, 1948, PF Act, 1952 as an immediate employer in respect of employees engaged or employed by the Contractor or by the Sub-contractor for the execution of work or for any reason whatsoever. The Contractor shall submit to the owner at periodic intervals the evidence for discharge of statutory contribution under ESI Act and PF Act and other statutory liabilities for which the Contractor or Sub-contractor is liable. The Contractor acknowledges the right of the ICMAI to recover the amount of the contribution paid by the latter in the first instance in respect of the employees employed by or through the Contractor or by his Sub-contractor or permitted assignees as well as the employee's contribution, if any, either by the deduction from any amount payable to him by the owner under any contract or as a debt payable by the Contractor to the owner.

13. OTHER STATUTORY OBLIGATIONS:

In the event the ICMAI is called upon to make any payment to meet any statutory obligation concerning the contract works, such amount shall be recovered from the Contractor and without prejudice to any other mode of recovery, the ICMAI may deduct the same from any amount payable to the contractor by the ICMAI under any contract. The Contractor shall submit written confirmation together with evidence to the ICMAI at periodical intervals to the effects that all statutory obligations have been duly complied with and the liabilities having arisen thereunder have been duly discharged as required.

14. STATUTORY REQUIREMENTS:

The Contractor shall conform to the provisions of Acts of Parliament or State Legislatures and to by-laws, rules, orders or notifications of the Government, Municipal or Local Authority for the time being in force affecting the works undertaken by it and will give all necessary notices to and obtain requisite sanction and permits of and from the Municipal and any other authority in respect of the said works, the materials to be used therein and generally will comply with building and other regulations of such authorities.

The Contractor undertakes to ensure due and complete compliance with all laws, regulations, rules, etc. whether of the Central Government or the State Government or of any other competent authority applicable to the workmen employed or whose services are otherwise availed of by the Contractor whether in connection with the construction work at the site or otherwise.

The ICMAI shall have the right to inspect the records maintained by the Contractor concerning such workmen from time to time and the Contractor shall whenever require by the ICMAI produce such records as the ICMAI may call upon the Contractor to produce for the ICMAI's inspection in order to ascertain whether or not the requirements of all such laws, regulations, rules, etc. have been complied with by the Contractor.

In the event of any contravention of such laws, regulations, rules, etc. coming to light whether as a result of such inspection or otherwise to effect such compliance within such time as the ICMAI may prescribe in that behalf and in the event of the Contractor failing to effect such compliance within the time prescribed by the owner then the ICMAI shall without prejudice to his rights be entitled to withhold from the amount payable to the Contractor any amount payable to the workmen under any such laws, regulations and rules to make payment thereof to the workmen. The ICMAI shall also have in that event the right to terminate the contract with immediate effect and to exercise powers reserved to the ICMAI under the contract as a result of termination.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

15. INDEMNITY:

That the Contractor shall keep the ICMAI indemnified against all actions, suits and proceedings and all and any costs, charges, expenses, loss or damage incurred, suffered, caused to/sustained by the ICMAI by reason of any default or breach or lapse or negligence or non- observance or non- performance or any non- payment by/on behalf of the Contractor.

16. LIQUIDATED DAMAGES:

If the CONTRACTOR fails to complete the works by the due date or within extended time, the Contractor shall be liable to pay Liquidated Damages to the ICMAI at the rate of 0.5 % of the contract value for every week of delay subject to a maximum of 10% of the contract value.

In addition to Liquidated Damages, in case the delay is beyond 4 months, it shall render the Retention Money to be forfeited and in addition a penalty of Rs. 10 Lacs (Rupees Ten Lacs Only) will be payable by the CONTRACTOR and the Contract will come to end and the EMPLOYER shall be at liberty to withdraw the work and get it executed from any other agency at Contractor's risk and cost and the site shall be vacated by Contractor immediately.

17. TERM & TERMINATION:

TERM:

This Agreement shall be co-terminus with the completion of the Project to be handed over to ICMAI to its complete satisfaction.

TERMINATION:

The ICMAI may, without prejudice to any other right or remedy, terminate the contract forthwith in part or whole in any of the following cases:

If Contractor:

- (i) Being an individual, or if a firm, any partner thereof at any time be adjudged insolvent or having received orders for administration of his estate made against him or takes any proceedings for liquidation or composition under any Insolvency Bank Crafty Code, 2016 for the time being in force or makes any conveyance or assignment of his effects or composition or arrangement for the benefits of his creditor or purport so to do or if any application be made under Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be granted by him for and behalf of his creditors; or
- (ii) Being a company passes a resolution or the court makes an order for the liquidation of its affairs or a receiver or manager on behalf of the debenture holders is appointed or circumstances arises which entitle the court or debenture holders to appoint a receiver or Manager; or
- (iii) Assigns, transfers or subjects or attempts to assigns transfer or sublet any portion of the works without the prior written approval of the ICMAI; or
- (iv) fails to commence the work within a reasonable time or within such extended time as may be permitted by ICMAI at its discretion from the date of the handing over of the site and continue in that state after reasonable notice from the Architect/Consultant and or ICMAI.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- (v) In the opinion of the ICMAI/Architect/Consultant at any time whether before or after the date or extended date for completion makes defaults in proceeding with the works with due diligence and continues in that state after reasonable notice from the Architect/Consultant and or ICMAI or delays the project.
- (vi) Fails to comply with any of the terms and conditions of the contract after reasonable notice in writing with directions properly issued there under.
- (vii) Fails to complete the works, work order and items of work within individual dates for completion and clear the site on or before the date of completion.

18. FORCE MAJEURE

Time shall be the essence of the contract in this regard subject however to 'Force Majeure'.

For purpose of this clause, 'Force Majeure' means an event beyond the control of the contractor and not involving the contractor's fault or negligence and not foreseeable. Such events may include, but are not restricted to major changes in the present building rules, act of God, earthquakes, tempest and flood.

If a Force Majeure situation arises, the Contractor shall promptly notify the ICMAI in writing of such conditions and the cause thereof. Unless otherwise directed by the ICMAI in writing, the Contractor shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. In case a Force Majeure conditions exists for a period more than 15 days, ICMAI may terminate the Contract.

19. WAIVER:

Any term or condition of this Contract may be waived at any time by the party that is entitled to the benefit under this agreement. Such waiver must be in writing and must be executed by an authorized officer of such party. The waiver by either Party of performance of any term or condition or breach of any provision on one occasion shall not be taken or held to be a waiver thereof on any subsequent occasion or as nullifying the effectiveness of such provision. However, any delay or failure on the part of ICMAI in exercising its rights under this Agreement shall not be considered as a waiver of such right, remedy or provision available under the same.

20. AMENDMENT:

This Contract shall not be modified, altered, amended and/or varied except as may be mutually agreed to by the Parties herein by way of an instrument in writing signed by both the Parties hereto.

21. SEVEREABILITY:

In case any provision of this Contract be rendered illegal or unenforceable, in whole or in part, by the laws, regulations or public policy of any jurisdiction in India., including without limitation by a requirement, directive or guidance of the appropriate authority, such provision shall to that extent be deemed not to form part of this Contract but the validity or enforceability of any other provision of this Contract shall not be affected.

22. FALL BACK ARRANGEMENTS:

In case of breach of terms of the Agreement committed by the Contractor, the ICMAI may terminate the contract by giving 30 days' notice and may inter alia further award contract to any other Contractor at the risk and cost of the defaulting Contractor. In such case, any higher price is to be paid by ICMAI to the newly appointed Contractor, the same shall be recoverable from the defaulting Contractor from the payments due



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

and payable to the defaulting Contractor and/ or by invoking the Bank Guarantee, forfeiting the Retention Money and Security Deposit.

23. NOTICES:

All notices and other communications required or permitted to be given under this Contract shall be in writing and shall be delivered or sent by personal delivery, electronic mail, facsimile transmission or registered or certified mail (return receipt requested) postage prepaid to the relevant Party addressed as herein below or as may from time to time be notified in writing by such Party to the other no less than 15 days’ in advance. The notices and communications sent in such manner shall, unless the contrary is proven, be deemed to have been duly received on the date of personal delivery, two business days following delivery upon confirmation of transmission by the sender’s facsimile machine or electronic mail device or ten business days following mailing by registered or certified mail (return receipt requested postage prepaid).

For ICMAI:

For Contractor:

24. ARBITRATION:

That in the event of any question, dispute or differences arising out of or in connection with any of the terms and conditions of the Agreement, in the first instance, the parties hereto shall try to resolve the same by mutual consultation, failing which the same shall be referred to the sole arbitrator to be appointed mutually by the parties. The Arbitration and Conciliation Act, 1996 and any statutory modification or re-enactment thereof, shall apply to these arbitration proceedings. Arbitration proceedings shall be held at Jaipur and the language of the arbitration proceeding shall be English. The arbitral award shall be final and binding upon both the parties. All Arbitral Awards shall be in writing and shall state the reasons therefor.

25. JURISDICTION

Subject to the arbitration agreement contained herein, any dispute between the parties arising out of this Agreement shall be subject to the jurisdiction of the Courts at Jaipur only.

IN WITNESS WHEREOF THE PARTIES HERETO HAVE HERE-INTO SET THEIR RESPECTIVE HANDS AND SEALS ON THE DAY AND THE YEAR FIRST ABOVE WRITTEN.

Signed and delivered for and on behalf of ICMAI

Signature:

Name:

Designation:

Mobile No:

Signed and delivered for and on behalf of the

Contractor

Signature:

Name:

Designation:

Mobile No:

IN PRESENCE OF TWO WITNESSES

1. SIGNATURE:

2. SIGNATURE:

NAME:

DESIGNATION:

ADDRESS:

MOBILE NO:

NAME:

DESIGNATION:

ADDRESS:

MOBILE NO:



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SECTION - VIII

FORM OF BANK GUARANTEES

SECTION - VIII: FORM OF BANK GUARANTEES TABLE OF CONTENTS

APPENDIX FORM	PAGE NO.
APPENDIX – 1 Bank Guarantee for Earnest Money Deposit	108-109
APPENDIX - 2 Bank Guarantee for Mobilization Advance	110-111
APPENDIX – 3 Bank Guarantee for Performance Guarantee	112-113
APPENDIX - 4 Proforma of Undertaking/Performance Guarantee for any latent or patent defect	114-115



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

APPENDIX - I

BANK GUARANTEE IN LIEU OF EARNEST MONEY DEPOSIT

To

Bank Guarantee no.....

The Secretary

Institute of Cost Accountants of India.

CMA Bhawan, 12, Sudder Street,

Kolkata – 700 016

In consideration of The Institute of Cost Accountants of India., a statutory body having its Head Office at CMA Bhawan, 12 Sudder Street, Kolkata – 700 016 (hereinafter referred to as “ICMAI/Employer” which expression shall, wherever the context so admits, mean and include its successors and assignees), having issued bid documents for **construction of Institutional Building at Plot Nos. IPS-1,11,12 & 13 At Industrial Area, Lithographs-III, Jaipur, Rajasthan**” for The, tohaving their registered office at(hereinafter called the Bidder) and under the terms and conditions of the said bid documents, the Bidder is required and has undertaken to furnish a Bank Guarantee of Rs./- (Rupeesonly) as Earnest Money Deposit as contained in the said tender document, we , having our registered office at_and branch office at_____ (hereinafter called “the Bank”) hereby unconditionally and irrevocably undertake to pay to the Employer immediately upon receipt of the first written demand such amount or amounts as may be demanded by the Employer from us under this Guarantee not exceeding a sum of Rs. ---- (Rupees only) in aggregate without demur or reference to the Bidder and agree that the Employer’s demand shall be conclusive, final and binding on the Bank under all circumstances.

We hereby affirm that we are the Guarantor and responsible to you on behalf of the Bidder up to an aggregate sum of Rs. -----/- (Rupees -----only) such sum or sums being payable in Indian currency and we undertake to pay on your first written demand and without demur or reference to the bidder and / or condition, and sum or sums within the aggregate limit of Rs. /- (Rupees only).

We agree that no change or addition to or modification of the terms of the tender or of the works to be performed thereunder or of any of the documents which may be made between you and the bidder shall in any way release the Bank from any liability under this Guarantee, and we hereby waive notice of any such change, addition or modification.

We further agree that the ICMAI shall have the right to invoke a claim up to the last date of the validity of this Bank Guarantee and that the ICMAI shall remain the sole judge of the validity and amount of the claim and the Bank agrees not to contest any claim.

We further agree that any change in the Bidder’s constitution or their liquidation or dissolution shall not discharge the Bank’s liability under this Guarantee.

We further agree that the right of the ICMAI to make a claim shall not be vitiated by any dispute raised or pending with any Statutory Authority, arbitrator, court, tribunal or any other body or person.

It is agreed that the ICMAI’s claim shall remain valid even if the employer has not issued a prior notice or has not proceeded against a Contractor before making such claim.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

This Guarantee is confirmed and irrevocable and shall remain valid up to and including and shall remain valid up to such extended period which may be mutually agreed to.

Unless a demand or claim under this Guarantee is made on the Bank in writing on or before the Bank shall be discharged from all liability under this Guarantee.

For and on behalf of the Bank

Dated.....day of 2023



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

APPENDIX - II

Bank Guarantee no.....

To
The Secretary
Institute of Cost Accountants of India.
CMA Bhawan, 12, Sudder Street,
Kolkata – 700 016

Dear Sir,

1. In consideration of the of The Institute of Cost Accountants of India., a statutory body having its Head Office at ‘CMA Bhawan, 12 Sudder Street, Kolkata – 700 016 (hereinafter called ICMAI/OWNER/Employer’ which expression shall include its successors and assigns) having agreed under the terms and conditions of Contract No.....dated.....(hereinafter referred to as the said Contract) made between ICMAI and.....hereinafter called the Contractor) which expression shall include its successors and assigns to make at the request of the Contractor a lump sum advance of Rs.....for utilizing it only for the purposes of the said Contract on his furnishing a guarantee acceptable to ICMAI.
2. We, the... ..Bank (hereinafter referred to as ‘the said Bank) registered under the Banking Companies Regulation Act, 1949 and having our registered office at.....do hereby guarantee the recovery of the said advance and interest thereon as provided according to the terms and conditions of the said Contract. If the Contractor fails to utilize the said advance for the purposes of the said Contract and/or the said advance together with interest thereon as aforesaid is not fully recovered by ICMAI, we..... Bank hereby unconditionally and irrevocably undertake to pay the ICMAI on demand and without demur or protest to the extent of the said sum of Rs.....any claim made by ICMAI on us against non- utilization / mis-utilization of the said advance and/or by reason of ICMAI not being able to recover in full the sum of Rs... .. as aforesaid.
3. We.....Bank further agree that ICMAI shall be the sole judge of and as to whether the said Contractor has utilized or not utilized the said advance or any part thereof for the purposes of the said Contract and/or as to whether the advance or any part thereof with interest has been recovered or not and the finding of the ICMAI in this regard shall be conclusive, final and binding on us.
4. We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and till the said advance has been fully recovered and its claims satisfied or discharged and till ICMAI certifies that the said advance with interest has been fully recovered from the Contractor.
5. ICMAI shall have the fullest liberty without affecting in any way the liability to the said Bank under this guarantee or indemnity from time to time to vary any of the terms and conditions of the said Contract, or the advance or to extend time of performance by the said Contractor or to postpone for any time and from time to time any powers exercisable by it against the said Contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said Contract or securities available to ICMAI and the said Bank shall not be released from its liability under these presents by any exercise by ICMAI of the liberty with reference to the matters aforesaid or by reason of time being given to the said Contractor or any other forbearance, act or omission on the part of the ICMAI or any indulgence by ICMAI to the said Contractor or of



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of so releasing the said Bank from its such liability.

6. The obligations of the Bank in terms hereof shall not be anyway affected or suspended by reasons of any dispute or disputes having been raised by the Contractor (whether or not pending before any arbitrator, Tribunal or court) or any denial of liability by the Contractor.
7. The amount stated in any notice of demand addressed by ICMAI to Bank or to the Contractor, shall be conclusive evidence of the amount so liable to be paid to ICMAI by the Bank.
8. This guarantee/undertaking shall be in addition to any other guarantee or security whatsoever that ICMAI may now or any time may have in relation to the Contractor’s obligations or liabilities under and/or in connection with the said Contract, and ICMAI shall have full authority to take recourse to or enforce this security in preference to any other guarantee or security which ICMAI may have or obtain and there shall be no forbearance on the part of ICMAI in enforcing or requiring enforcement of any other security and shall not have the effect of releasing the Bank from its full liability hereunder.
9. We, the said Bank further undertake that we shall pay forthwith the amount stated in the notice of demand without demur and protest notwithstanding any dispute/difference pending between the parties before the arbitrator Tribunal or Court and/or dispute is being referred to arbitrator.
10. We, the said Bank undertake not to revoke this Guarantee during its currency except with the consent of ICMAI in writing and agree that any change in the Constitution of the said Contractor or the said Bank shall not discharge our liability hereunder.
11. This guarantee/undertaking shall be a continuing guarantee/undertaking and shall remain valid and irrevocable for all claims of ICMAI and liabilities of the Contractor arising up to and until midnight of.....

For and on behalf of the Bank

Dated.....day of 2023_____



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

APPENDIX – III

BANK GUARANTEE FOR PERFORMANCE

[Clause 1.8 of the GCC]

Bank Guarantee no.....

To

The Secretary

Institute of Cost Accountants of India.

CMA Bhawan, 12, Sudder Street,

Kolkata – 700 016

In consideration of the Institute of Cost Accountants of India., a statutory body established under the Cost Accountants Act, 1949, having its Head Office at CMA Bhawan, 12 Sudder Street, Kolkata – 700 016 (hereinafter referred to as “ICMAI”) having agreed, under the terms and conditions of clause of General Conditions of Contract (GCC) of Tender Ref. dated, and Agreement dated made between M/s____, a____ having its registered office at _____(hereinafter referred to as “the Contractor”) and the ICMAI in connection with the work **construction of Institutional Building at Plot Nos. IPS-1, 11, 12 & 13 At Industrial Area, Lithographs-III, Jaipur, Rajasthan” for the**, to accept irrevocable Bank Guarantee for Rs./- (Rupees only) from a Nationalized Bank as Security Deposit to be furnished by the Contractor for due performance of the terms and conditions contained in the said Tender, Agreement, webank and having head office at (hereinafter referred to as “the Bank”) on the request of the contractor do hereby covenant and agree with the ICMAI as follows:-

1. We, the Bank do hereby guarantee and undertake to pay the ICMAI, on demand without proof and condition any or all monies payable by the contractor to the extent of Rs._____-/- (Rupees only) at any time up to..... (date) without demur, reservations, contest, recourse or protest and or without any reference to the contractor, in case the contractor fails to perform the said agreement as aforesaid. Any such demand made by the ICMAI on the Bank shall be conclusive and binding notwithstanding any difference or dispute between the ICMAI and the contractor pending before any Court, Tribunal, Arbitrator or any other authority
2. Notwithstanding anything contained herein, ICMAI’s decision in regard to the effect whether the contractor has made any such default and amount to which the ICMAI is entitled on account of such default will be conclusive, final and binding on us and we undertake not to question ICMAI’s decision and not ask to establish ICMAI’s claim under this guarantee and we shall pay the demanded amount without any objection.
3. We undertake to pay to the ICMAI any money so demanded not withstanding any dispute or disputes raised by the Contractor in such or any proceeding pending before any court or Tribunal relating thereto and our liability under this present being absolute and unequivocal. The payment so made by us under this guarantee shall be a valid discharge of our liability for payment thereunder.
4. The Bank also agrees that the ICMAI at its option shall be entitled to enforce this guarantee against the Bank as principal debtor without proceeding against the contractor and notwithstanding any security or other guarantee that ICMAI may have in relation to contractor’s liabilities.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

- 5. We further agree that the ICMAI shall have full liberty without our consent and without affecting in any manner our obligations herein under to vary any of the terms and condition of the said Agreement or to extend time of performance by the said contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the ICMAI against the said Contractor and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor or for any forbearance, or any indulgence of the said Contractor or by any other act or matter or thing whatsoever which under the law relating to sureties would, but for these provisions have effect of so relieving us.
- 6. The guarantee shall not be discharged due to the change in the constitution of the Bank or the Contractor.
- 7. We the Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the ICMAI in writing unless discharged by the ICMAI.
- 8. This guarantee shall hold and remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the ICMAI under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged. Unless a demand or claim under this guarantee is made on us in writing on or before we shall be discharged from all liability under this guarantee thereafter.

Date the day of2023_ For and on behalf of the
Bank

Signature

Date

.....

Name

.....

Designation



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

APPENDIX – IV

Proforma of Undertaking/Performance Guarantee for any latent or patent defect or deficiency manifesting itself in the building for a period of ten years counted from the expiry of the defect liability period to be given on Rs. 100/- Non-Judicial Stamp Paper

To
The Secretary
Institute of Cost Accountants of India.
CMA Bhawan, 12, Sudder Street,
Kolkata – 700 016

Sir,
Sub: Civil Works executed by M/s _____ for the proposed construction of Institutional Building at Plot Nos. IPS-1,11,12 & 13 At Industrial Area, Lithographs-III, Jaipur, Rajasthan”

Ref: TENDER No. ___ dated _

Pursuant to acceptance of the bid of M/S(hereinafter referred to as “Contractor”), communicated vide letter of acceptance no. dated by ICMAI (hereinafter referred to as “Employer”), an agreement dated _____ executed between the Contractor and ICMAI for carrying out the Construction/civil Works for ICMAI’s proposed building on..... (hereinafter referred to as ‘Building’).

We, the Contractor, hereby guarantee that the civil works as regards construction, structure etc. of the said building is sound and free from any latent or patent defect or deficiency and the said building shall remain free from any defect, shrinkage, unsound construction or other faults and shall also remain completely termite-proof/water and leak- proof throughout its normal life. If, by any chance, it is noticed that any defect, shrinkage, settlement, unsound construction or other faults has occurred or any latent or patent defect (s) or deficiency is manifesting in the structure of the building, we, the Contractor, pursuant to Clause of General Conditions of Contract (GCC) of the said Tender -“**Defects after Completion & Performance Guarantee**”, hereby unequivocally accept that we shall be wholly and exclusively liable for any latent or patent defect (s) or deficiency as regards any shrinkage, unsound construction or other faults such as termite, seepage, water leakage etc. occurring or manifesting in itself either in the work executed or in materials used thereby affecting or likely to affect the safety of the said building for a period of **TEN (10) YEARS** from the date of the expiry of the defect liability period and will rectify such defect(s) at our own cost.

The question whether the work is defective as aforesaid shall be decided by M/s._____, (hereinafter referred to as “Consultant”) and the decision of the Consultant shall be final, conclusive and binding on us.

In case any defect(s) is noticed in the said building during the **TEN (10) YEARS** of guarantee period as stated above and we are unable/decline or neglect to remedy the said defect (s) within **ONE (1) MONTH** or such extended period as may be decided by the Consultant, the employer shall be at liberty to get the defect(s) rectified through any other competent contractor and recover (including) interest @ 12% from us all cost/expenses forgetting the defect (s) rectified.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

All disputes arising out of or in any way connected with Undertaking/Performance Guarantee herein mentioned be decided to have arisen in and only the courts in shall have jurisdiction to determine the same.

Shri ___ has been duly authorized by M/s _____ vide Board Resolution

No. dated to sign this Undertaking/Guarantee.

All parts of this guarantee have been read and fully understood by us.

IN WITNESS WHEREOF the Undertaking/Guarantee is signed by _ and countersigned by M/s _____, who has executed the civil work of the said building, in token of their consent.

SIGNATURE

COUNTERSIGNATURE WITNESS:

NAME:

NOTE: Stamp Paper to be signed by a person having Power of Attorney to sign such Guarantee on behalf of the Contractor.

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

**SECTION - IX TECHNICAL SPECIFICATIONS
REFER BOOK - II****SECTION -X****LIST OF APPROVED MAKES****SECTION - X: LIST OF APPROVED MAKES TABLE OF CONTENTS**

Sl. No	Description	Page No.
1.	CIVIL & FINISHING WORKS	125-130
2.	PLUMBING & FIRE FIGHTING WORKS	131-138
3.	ELECTRICAL WORKS	139-144

SECTION - X: LIST OF APPROVED MAKES**LIST OF APPROVED MAKES FOR CIVIL & FINISHING WORKS**

S. No.	Details of Materials / Equipment	Manufacturer's Name
A.	CONCRETE	
1.	Concrete Admixtures	Fosroc / Sika
2.	Cementitious non shrink	Fosroc / Sika
3.	Grey Cement (OPC) Grade43/53	Ambuja/ ACC/ JK/ MP Birla
4.	Integral Water Proofing Compound	Fosroc/Sika /Dr.Fixit
5.	Reinforcement Steel	TATA /SAIL
6.	Structural Steel/ hollow tube section	TATA /SAIL
7.	Anti-Termite Treatment Buildings	Dusban/ TC /Chlorpyr-ifostc/Dhanvka
8.	Anchor fasteners	Hilti Fischer/ Anchor-man
9.	SBR Latex	Fosroc/BASF/Rauf
B.	DOORS & WINDOWS	
1.	Fire door	Navair/Adhunik/Balco
2.	Aluminium Sections	Jindal/ Hindalco
3.	Glass	Saint Gobain/ Modi float
4.	Glass wool	Up Twiga/Lloyd
5.	Ply & Boards/ Flush door shutters / Block boards	Greenply /Kitply /Century
6.	Pressed Steel Door / Windows Frames & Shutters	Perfect Agew/Anand Windows (New Delhi)
7.	Hardware (Door Fittings or Door Lock)	Door set /Dorma/ Ozone
8.	Adhesives	Araldite /Fevicol/SH
9.	EPDM Gasket	Dow /Corning
10.	Veneers 3/4"	Euro /Greenply /Anchor
11.	Laminates 1mm and 1.5 mm	Greenlam /Century /Kitply

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

S. No.	Details of Materials / Equipment	Manufacturer's Name
12.	ACP Panels	Alucobond/Alstrong
13.	Door Lock	Dorset Godrej Ozone
14.	Hydraulic Door Closer	Dorset/Everite/ Ozone
15.	Floor Spring	Dorma/EveriteGeze
16.	Patch Fittings	Ozone Enox/Zaha
17.	Glass door Handles	KichDunex/Dorma
18.	Mortice	Godrej/Dunex/Kich
19.	Handles	Dorma/Dorest/Ozone
20.	Pre-laminated Particle board	Green ply /Century ply /Archid ply
C.	FINISHING	
1.	Cement Paint	Super Snowcem/Nitcocem/ Asian
2.	PAINTS - Plastic Emulsion / Acrylic Emulsion / Synthetic Enamel OBD / Luster	Asian Paints Berger
3.	External Paint	Asian Apex Ultima/ICI /Dulex weather-shield/ Max Berger Weather- coat long life
4.	Epoxy Paint	Asian /Berger /MRF
6.	PU Paint	BASF /Berger /Asian
7.	Thermo Plastic Paint	Shalimar/ Asian/ BASF
8.	Primer / PUTTY	Birla /JK/ ICI
9.	Wood preservative	Wood guard Termiseal/MRF
10.	Fire retardant paint	BASF/ Noble/Firetard
11.	False Ceiling (Calcium Silicate Board)	Ramco/ India. Gypsum/ Saint Govin
12.	Board Partition (Calcium Silicate Board)	Ramco/ India. Gypsum /Saint Govin
1.3	Silicon Sealant	Dow Corning /Wacker/ GE
14.	Poly-sulphide Sealant	Fosroc/Dr.Fixit/Choksey Chemicals
15.	Gypsum Plaster	St. Govin/ Birla/Dudhi
16	Gypsum Board	India. Gypsum/ Boral
17.	SS Pipes	Magnum /Dorma/Jindal
D.	FLOORING	
1.	Ceramic / Vitrified Tile	H & R /Johnson /Kajaria/Somani
2.	PVC Vinyl Flooring	Armstrong /RMG /Bhor
3.	Paper Block	GICO/Tulsi
4.	White Cement	Birla White /JK White
E.	ROOFING	
1.	Galvalume Pre-coated	TATA BLUE SCOPE/ Multi Colour Interarch
2.	GI Fittings	R' Brand/Unik



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

S. No.	Details of Materials / Equipment	Manufacturer's Name
3.	GI Pipes	Tata /Surya /Jindal
4.	Polycarbonate Sheet	LEXAN/ Lloyd /GE
F.	ROAD	
1.	Bitumen Impregnated Board	Shalitek/Seleflex/ Pre-moulded filler board /Jolly Board

**LIST OF APPROVED MAKES FOR EQUIPMENT & MATERIALS
 PLUMBING AND FIREFIGHTING SYSTEM**

S.No.	Details of Materials / Equipment	Manufacturer's Name
A.	PLUMBING SYSTEM	
1.	a. Vitreous China Sanitary Ware	Kohler/Duravit/Roca
	b. WC Connectors	Multikwik (UK) /Prince /Supreme
	c. Concealed Cistern	Viega/Gebrit/Commander
2.	Seat Cover (Heavy Duty)	Commander
3.	Stainless Steel Sink	Jayna/Neelkanth/ Kingston/Nirali
4.	Auto Urinal Flush System (Battery operated) UTEC System Euronics	AOS /Auto Robo Flushing System/Toshi
5.	Hand Drier Utec World Dryer Corporation Kopal	Euronics
6.	CP Brass Fittings	Jaquar/Ess-Ess/ Gem /Aquaplus
7.	WC Connectors Supreme	Prince
8.	Floor Drain Fixture, Rain Water Outlets & Channel Neer	ACO /Gratings /GMGR
9.	Shower Channel/ PP – car parking channel	ACO/Viega
10.	C.P. Grating for Floor Trap	GMGR /Chilly
11.	Cast Iron Pipes & Fittings Manhole covers and frames	
	a. As per IS:3989 (Pipes & Fittings)	NECO
	b. As per IS:1729 (Manhole covers and frames)	NECO/ Raj Iron Foundry Agra
	c. As per IS:1536 (CI Class LA Pipes)	Electro Steel Calcutta IISCO /Kesoram Calcutta NECO/ NECO
	d. D.I. Manhole Covers & Frames	Kartar valves & fittings NECO
	e. CILA fittings	Kartar valves & fittings NECO
	f. Suspended Manhole and Gully Trap	Kartar valves & fittings, NECO Patel Pattern
12.	Drip Seal	Vinod Cement Co. Chandigarh (PJS-43)
13.	GI / M.S Pipes (IS : 1239 and IS : 3589)	Jindal /Tata Steel
14.	GI pipes fittings	Unik/Zoloto M
15.	GI pipe sealent	Henkel / LOCTITE 55
16.	Pipe clamp & supports	Chilly /Euroclamp
17.	UPVC Pipe	Finolex/Prince /Supreme
18.	CPVC pipes	Ajay /Ashirwad/Astral
19.	RCC Pipe	K KPranali, /Local & Approved

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

S.No.	Details of Materials / Equipment	Manufacturer's Name
20.	Stoneware Pipes, Gully Traps	Perfect Potteries of JABALPUR /Rajura/ Local & Approved
21.	GM / Forged Brass Valves	Danfoss/Jayhiwa/Zoloto
22.	Sluice Valves	India.n Valve Company /Kirloskar
23.	Butterfly Valve	Audco/Danfoss/Jayhiwa
24.	Check Valve – WaferType Check Valve – Dual Plate	Advance /Danfoss/Kirloskar/Advance
25.	Pressure Reducing Valve	Honeywell RB /Zoloto
26.	Solenoid Valve	Avcon/Danfoss
27.	Air Release Valve	Arco OR Zoloto
28.	Ball Float Valve	Esseti/HBD /Zoloto
29.	Y Strainer	Emerald/Zoloto
30.	Hydropneumatic System Grundfos ITT Industries Willo – Mather & Platt	DP – Holland
31.	Storm Water Drainage Sump Pumps (Submersible)	DP – Holland Grundfos ITT Willo – Mather & Platt
32.	Sewage Handling Pumps	DP – Holland Grundfos ITT Willo – Mather & Platt
33.	Transfer Pumps Grundfos	DP – Holland ITT Willo - Mather & Platt
34.	Mechanical Seal Sealol	Burgmann
35.	Couplings	Lovejoy
36.	Anti Vibration Mounting & Flexible Connections	Dunlop FlexionicsKanwal Industrial Corporation
37.	Pressure Gauge	Emerald /Fiebig/H Guru
38.	Water Meter (Mechanical Type)	Actaris/ Capstan Kaycee /Kranti
39.	Electronic Flow Meter	Krohne (Forbes Marshall)/Rockwin
40.	Level Controller & Indicator (Water)	Auto Pump Cirrus Engineering TechnikaTechtrol
41.	Paints	Asian Paints Berger ICI Shalimar Paints
42.	MH / Water Tank Plastic Steps	KGM Patel Pranali Industries
43.	Insulation for Hot Water Pipes	Aflex/Armacell - ArmaflexEurobatex – Union Foam K-Flex ST Thermaflex
44.	Three Way Motorized Valve	Danfoss/ Honeywell /Johnson /Control Siemens
45.	Welding Rods	ADOR Cosmos Esab
46.	Fastner	Fisher/ Hilti
47.	Fire Sealant	Birla /3 M /Hilti /Promat
48.	Water Treatment Plant	Enhanced Wapp Systems /Ion Exchange/Thermax Apex Eco Tech
49.	Ultra Violet Water Purifier (WTP / STP)	Alfa UV - Mumbai Eureka Forbes Pentair
50.	Dosing Pumps	Grundfos/LMI Pulsar/Feeder /Toschon

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

S.No.	Details of Materials / Equipment	Manufacturer's Name
51.	Ductile Iron Pipes	Electrosteel /Kesoram
52.	HDPE Pipes	Jain Irrigation /Oriplast/Reliance/Duraline
53.	SS Exp. Joints	Kanwal Industrial Corporation /Dunlop/Resistoflex
B.	FIRE FIGHTING SYSTEM	
1.	Fire / Sprinkler Main Pump / Jockey	Grundfos/ITT (A-C Pumps) Kirloskar/Wilo - Mather & Platt
2.	Diesel Engine	Cummins /Greaves/ KOEL
3.	Motor	ABB/ Bharat Bijlee/Kirloskar/Siemens
4.	G.I. / M.S. Pipes (IS : 1239 / IS : 3589)	Jindal/Tata Steel
5.	Standard M.S. Fittings	Seamless Fittings
6.	DI / CI / Forged Steel Fittings	Jainsons Industries VS
7.	C.I. (Class L.A.) Pipes	Electro Steel Calcutta/IISCO/Kesoram Calcutta/NECO
8.	MH Cover & Frame	Kartar Pipe and fittings/ NECO /Raj Iron/ Foundry Agra
9.	Paints	Asian Paints /Berger/ ICI /Shalimar Paints
10.	Double / Single Headed Landing Valve	New Age Safeguard Minimax Ever/safe
11.	Fire Hose	CRC Ever/safe Jayashree/ New Age/ Safeguard
12.	First Aid Hose Reel (LPCB Approved)	Eversafe/New Age /Safeguard /Minimax
13.	Gun Metal Branch Pipe	New Age /Safeguard/ Eversafe/ Minimax
14.	Fireman Axe	New Age/ Safeguard/ Eversafe/ Minimax
15.	Installation Control Valve	HD Tyco Viking
16.	Sprinkler Heads	Victaulic /Tyco Viking/Newage
17.	Fire Extinguishers	Alert - Tyco Eversafe Minimax Safeguard
18.	Water Flow Switch	Honeywell System /Sensor Spray Safe
19.	Pipe Protection Wrapping	IWL - PypkoteRustech - Coatek
20.	Pipe clamp & supports	Chilly /Euroclamp
21.	GM / Forged Brass Valves	Danfoss J/ayhiwa/Zoloto
22.	Sluice Valves	Indian Valve Company/Kirloskar
23.	Butterfly Valve	Audco/Danfoss/Jayhiwa
24.	Check Valve – Wafer Type Check Valve – Dual Plate	Advance /Danfoss/Kirloskar/ Advance
25.	Pressure Reducing Valve (Listed)	Tyco
26.	Air Release Valve	Arco OR Zoloto
27.	Ball Float Valve	Esseti/HBD /Zoloto
28.	Y Strainer	Emerald /Zoloto
29.	Mechanical Seal	Burgmann /Sealol
30.	Couplings	Lovejoy
31.	Anti-Vibration Mounting & Flexible Connections	Dunlop/Flexionics/Kanwal Industrial Corporation /Resistoflex
32.	Pressure Gauge	Emerald Fiebig/H Guru



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

S.No.	Details of Materials / Equipment	Manufacturer's Name
33.	Level Controller & Indicator (Water)	Auto Pump Cirrus Engineering TechnikaTechtrol
34.	Paints	Asian Paints /Berger/ ICI /Shalimar Paints
35.	Welding Rods	ADOR Cosmos/ Esab
36.	Fastener	Fisher /Hilti
37.	Fire Sealant	Birla/ 3 M/ Hilti /Promat
38.	Grooved Couplings	Victaulic/ Viking/ Shurjoint
39.	Flexible Drops	Easy Flex/ Newage/ Dungaflex
40.	Internal & External Fire Hose Cabinet	Eversafe/ New Age/ Safeguard/ Minimax
41.	Fire Brigade Inlet Connection	Eversafe/New Age/ Safeguard/ Minimax
42.	Fire Brigade Draw Out Connection	Eversafe/ New Age /Safeguard /Minimax
43.	Fire Buckets	Minimax /New Age/ Safeguard/Minimax

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

LIST OF APPROVED MAKES FOR ELECTRICAL EQUIPMENT & MATERIALS

S. No.	Details of Materials / Equipment	Manufacturer's Name
A.	HIGH VOLTAGE EQUIPMENT (33 KV)	
1.	Oil Filled type Transformer with OLTC	Areva Voltamp Crompton Greaves Ltd. ABB
2.	HT panel	ABB Siemens Areva
3.	Protection Relays	
	a. Numeric Type	Areva ABB Siemens L & T Easun Reyrolle
	b. Electromagnetic Type	Areva Easun Reyrolle
4.	Potential Transformer	Automatic Electric ABB Pragati Gilbert & Maxwell Precise
5.	Current Transformer (Cast Resin Epoxy Coated)	Automatic Electric ABB Pragati Gilbert & Maxwell Precise
6.	Static Power Meter & Logger	Conzerv (Schneider-Electric) (Trivector Meters) Ducatti Larsen & Toubro
7.	Electronic Digital Meter (A/V/PF/HZ/KWH) with LED Display.	Conzerv (Schneider-Electric) Ducatti
8.	HRC Fuse and Fuse Fitting	Siemens GE Power Control
9.	HT Jointing Kit	Raychem Birla-3M M-Seal Frontec
10.	HT Termination Kit	Raychem Birla-3M M-Seal
11.	HT XLPE Cable	Cable corporation of India Universal RPG Cables
12.	Rubber Mats	Jyoti Maruti
13.	Fire Extinguisher	Alert Tyco Minimax Safeguard
B.	MEDIUM VOLTAGE EQUIPMENT	
1.	Power Distribution Panels and Motor control centre	Adlec System Pvt. Ltd. Advance Panels & Switchgear (P) Ltd Tricolite Industries System Power & Control Ambit Switchgear
2.	Sandwiched Construction Bus ducts	Control & Switchgear GE Power Control Godrej (Henikwon) Intraco Megaduct (Marketed by Larsen & Toubro) Schneider Electric
3.	Final Distribution Board	Siemens Schneider Electric (MG) ABB GE Power Controls Hager (L&T) Legrand
4.	Air Circuit Breaker (3/4 Pole)	Siemens (3 WL) Schneider Electric (Master Pact NW) L&T (U Power) ABB (E-Max) GE Power Controls (M-Pro)

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

S. No.	Details of Materials / Equipment	Manufacturer's Name
5.	Moulded Case Circuit Breaker (MCCB)	Siemens (3VL) Schneider Electric (Compact NSX) L&T (d-sine) ABB (T – Max) GE Power Controls (Record Plus)
6.	Motor Protection Circuit Breaker (MPCB)	Siemens Schneider Electric Hager (Marketed by Larsen & Toubro) ABB GE Power Control
7.	Miniature Circuit Breakers (MCB)	Siemens Schneider Electric (MG) ABB GE Power Controls Hager (L&T) Legrand
8.	Residual Current Circuit Breaker (RCCB)	Siemens Schneider Electric (MG) ABB GE Power Controls Hager (L&T) Legrand
9.	Power/Aux. Contactor	Siemens ABB GE Power Control Schneider Electric
10.	Change Over Switch	C & S H H Elcon HPL – Socomec Larsen & Toubro
11.	Control Transformer/Potential Transformers	Automatic Electric Gilbert & Maxwell Matrix Pragati Precise
12.	Current Transformer (Epoxy Cast Resin)	Automatic Electric Gilbert & Maxwell Matrix Pragati Precise
13.	Protection Relay	
	a. Numeric Type	Siemens ABB Areva Larsen & Toubro
	b. Electromagnetic Type	ABB Areva
14.	Indicating Lamps LED type and Push Button	Larsen & Toubro (ESBEE) Schneider Electric Siemens Teknik Vaishno Electricals GE Power Controls
15.	Overload relays with built in Single Phase preventer	ABB GE Power Controls Larsen & Toubro Schneider Electric Siemens
16.	Electronic Digital Meters (A/V/PF/Hz/KW/KWH) with LED Display	ABB L&T Automatic Electric Conzerv (Schneider Electric) Secure Trinity
17.	Static Power Meter & Logger (SPML) With RS 485 port	Conzerv (Schneider Electric) Larsen & Toubro
18.	Power Capacitor (MPP) with detune filter	ABB Ducati GE Power Controls Matrix Meher (Larsen & Toubro) Siemens (Epcos)
19.	Automatic Power Factor Correction Relay (Numeric Type)	Areva BELUK (Germany) Conzerv Ducati Siemens
20.	PVC insulated XLPE aluminium/copper conductor armoured MV Cables upto 1100 V grade	Finolex Skytone Universal KEI Polycab Ekta Cables
21.	LT Jointing Kit / Termination	Raychem REPL Safe Kit

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

S. No.	Details of Materials / Equipment	Manufacturer's Name
22.	Cable Glands Double Compression with earthing links	Baliga Lighting Comet Cosmos
23.	Bimettalic Cable Lug	Comet Cosmos Dowell's (Biller India) Hax Brass (Copper Alloy India)
24.	PVC insulated copper conductor stranded flexible wires (FRLS) -	Finolex Ekta Cables Polycab L & T R R Kabel Skytone
25.	Mettalic / GI Conduit (ISI approved) AKG BEC NIC	
26.	PVC Conduit & Accessories (ISI approved)	AKG BEC D Plast Duraline Polypack Precision
27.	Switch & Socket	ABB – Lumina/ Classic Clipsal (H2000 Series) Crabtree M K India (Wraparound) Legrand (Mosaic) Northwest
28.	Industrial Socket	
	a. Splash Proof	Clipsal Gewiss MDS Legrand Neptune Balls RR-PCE Schneider Electric
	b. Metal Clad	BCH Legrand
29.	Ceiling Fan	Anchor Crompton Greaves Havells Orient Usha
30.	Lighting Fxiture	Philips Wipro
	a. Fluorescent	Bajaj Electricals Ltd. GE Havells Sylvania (Linolite, Concord, Luminance)
	b. Incandescent / Halogen / PL / Metal (Halide)	Philips Wipro Keslec Artlite GE Havells Sylvania(Linolite, Concord, Luminance) C&S

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

**SECTION - XI
LIST OF TENDER DRAWINGS & SKETCH**

S.No.	Description	Drawing No.
LIST OF DRAWINGS FOR THE PROPOSED CONSTRUCTION OF BUILDING OF THE INSTITUTE OF COST ACCOUNTANTS OF INDIA. AT SITAPURA, PLOT NOS. IPS-1, 11, 12 & 13 AT INDUSTRIAL AREA, SITAPURA PH-III, JAIPUR, RAJASTHAN		
ARCHITECTURAL DRAWINGS		
1	Site Plan	ICMAI / JPR./AR/ 01 / 01
2	Ground Floor Plan	ICMAI / JPR./AR/ 02 / 02
3	Basement Floor Plan	ICMAI / JPR./AR/ 03 / 03
4	First Floor Plan	ICMAI / JPR./AR/ 04 / 04
5	Sections	ICMAI / JPR./AR/ 05 / 05
6	Sections	ICMAI / JPR./AR/ 06 / 06
7	Elevations	ICMAI / JPR./AR/ 07 / 07
8	Elevations	ICMAI / JPR./AR/ 08/ 08
9	Flush Door Details	ICMAI / JPR./AR/ 09/ 09
10	Glass Door Details	ICMAI / JPR./AR/ 10/10
11	Windows and Glazing Detail	ICMAI / JPR./AR/ 11/11
PLUMBING DRAWINGS		
1	Toilet Plumbing Detail	ICMAI / JPR./ SN / 01 / 12
2	External Drainage Detail	ICMAI / JPR./ SN / 02 / 13
ELECTRICAL DRAWING		
1	Ground Floor Electrical layout	ICMAI / JPR./ EL / 01 / 14
2	First Floor Electrical layout	ICMAI / JPR./ EL / 02 / 15
3	Basement Floor Electrical layout	ICMAI / JPR./ EL / 03 / 16
STRUCTURAL DRAWINGS		
1	Ground Floor Roof Layout	ICMAI / JPR./ ST / 01 / 17
2	Ground Floor Roof beam layout	ICMAI / JPR./ ST / 02 / 18
3	Basement Floor Roof Layout	ICMAI / JPR./ ST / 03 / 19
4	Basement Floor Roof beam layout	ICMAI / JPR./ ST / 04 / 20
5	First Floor Roof Layout	ICMAI / JPR./ ST / 05 / 21
6	First Floor Roof beam layout	ICMAI / JPR./ ST / 06 / 22



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SECTION – XII

FINANCIAL BID

CONSTRUCTION OF INSTITUTIONAL BUILDING AT SITAPURA, PLOT NOS. IPS-1, 11, 12 & 13 AT INDUSTRIAL AREA, SITAPURA PH-III, JAIPUR, RAJASTHAN

To,
The Convener
Tender Committee,
The Institute of Cost Accountants of India.,
CMA Bhawan, 12, Sudder Street, Kolkata -700016.

Dear Sir/Madam,

I/We, the undersigned, am /are willing to complete the assigned work in full and in accordance with the drawings/specification/scope of work/assessment of work after site visit and to the Institute's entire satisfaction for the sum stated below [Figures in the table below should capture the figures of total amount column of the BOQ. The work shall be as per specifications of CPWD, Delhi schedule of Rates, 2021/2023 as per relevant DSR number stated herein.

CIVIL WORKS , PLUMBING, SANITARY, FIRE FIGHTING AND ELECTRICAL WORKS	
BILL OF QUANTITIES	
S. No.	General Notes
1	Rates mentioned in BOQ shall be inclusive of all taxes as of date including GST, Labour CESS etc. or any other tax as applicable in Jabalpur/MP.
2	Rates quoted in this BOQ shall be applicable to any height & any location even if not specified in any item, including steel (H frame, Ledger system etc.) scaffolding, curing, cleaning and rectification.
3	Details/ functions/ activities mentioned in preambles in each section are included in quoted rates and nothing extra shall be paid for it.
4	Watching and lighting arrangements, wherever necessary, whether ordered by the Employer/ Architects or otherwise is included in items.
5	This bill of quantities is to be read in conjunction with the drawings, specifications, terms & conditions etc.
6	The quantities given are approximate and can vary up to any extent. The contractor will not be entitled to claim any extra on account of this quantity variation. Billing will be on actual measurement as executed and approved.
7	Contractor has quoted the rates after visiting the site and after considering all local factors.
8	Rates are inclusive of Carting away debris / Cleaning / Security / statutory approval for disposal of debris etc.
9	Rates are quoted for finished items, wastage factor is on contractor part and measurement will be for finished item only.
10	The rates shall remain firm till the completion of the work and the contractor shall not be entitled to claim any escalation on any account till the completion of the project, in any respect.
11	Where ever applicable all the material samples should be got approved from engineer in charge for its quality, makes, colour, pattern etc. before start of work /mass procurement of material.
12	Manufacturer test certificates/testing from lab and test results will be provided along with the sample for

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

CIVIL WORKS , PLUMBING, SANITARY, FIRE FIGHTING AND ELECTRICAL WORKS	
BILL OF QUANTITIES	
S. No.	General Notes
	all the materials procured at site. Testing will be got done by the contractor at his own cost.
13	Excavation beyond given depth will be made up by the contractor with PCC 1:4:8 at his own cost and nothing extra will be paid on this account.
14	Curing, slurry, scaffolding, etc. wherever applicable are included in item.
15	All concreting to be done as per Mix Design (to be got done by contractor at his own cost) and got approved by him by EIC/ Architect beforehand.
16	For all concrete, Brick, stone, flooring and other works except plastering, sand used shall be coarse sand and for plastering, it would be 50% coarse + 50% fine, unless specified otherwise.
17	All surfaces to be plastered/tiled, hacking of surface after stripping of shuttering is included in items.
18	All cement related works shall be cured for 7 days or more as applicable as per specifications. The rate shall be also inclusive with Hassian cloth and any other form of curing as directed.
19	Protection of all kinds of floorings with POP and polythene sheet etc. is included in item rate and nothing extra shall be paid for this. The rate is also inclusive of removing and cleaning the same after completion of work.
20	Holes or pockets in the Brick work for Rain water pipes and other pipes shall be kept or the pipes shall be provided at the time of raising the masonry. These holes or Zarries should be made good after fixing of pipes and nothing extra shall be paid for the same.
21	Chiseling of brickwork, if required shall be done to flush the floor skirting with the wall. Nothing extra shall be paid on this account.
22	Grooves with cement finish up to 12 mm X 6 mm shall be formed in plaster at the junction of slab and beam and slab & brick work without any extra charge. Similar grooves shall be made in plaster at the junction of masonry and wood or steel door or steel window frames or at bottom of beams or chajja, slab projections as drip moulds without extra charge.
23	Septic tanks, Soak pits, Underground sumps, cable trenches of various sizes, chambers having sizes other than specified in BOQ will be measured under relevant items of work.
24	For landscaping work the cost of supply and replacement of good earth, organic manure is included in item rate.
25	Water and electricity for all the work including landscaping work shall be arranged by the contractor at his own cost.
26	Bailing out, pumping out, continuous dewatering or otherwise removing all water which may accumulate in the working areas from any or all causes whatsoever.
	Preambles for Different Works.
(A)	Site Development & Earth Works
i	Excavation either straight, inclined or curved in trenches, footings etc., including marking out, cutting and dressing sides and bottom to true dimensions and depositing excavated stuff beyond three metres clear of the edge of trench or mass excavations for basements or anywhere within the site as directed.
ii	Removal and disposal of all shrubs, roots, vegetation and trees up to 300mm girth from alignment of the buildings including loading, Transporting, unloading to approved municipal Dumping Ground or as approved by Engineer In charge beyond 50m initial lead, for all leads including all lifts involved.
iii	Continuous Dewatering - Work for excavation shall include bailing, continuous dewatering or pumping out water which may accumulate in the excavation during the progress of work either from subsoil, seepage,



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

CIVIL WORKS , PLUMBING, SANITARY, FIRE FIGHTING AND ELECTRICAL WORKS	
BILL OF QUANTITIES	
S. No.	General Notes
	springs, flooding, rain or any other cause and diverting surface flow if any by bunds or other means, pumping out water shall be done in such approved manner as to preclude the possibility of any damage to the foundation trenches, concrete, or masonry or any adjacent structure. The excavation shall be kept free from water: - i. When Concreting / reinforcement work / waterproofing work are in progress. ii. Till the client / Architect consider that Concrete/ Mortar is sufficiently set.
iv	All labour and material required for fencing and protection against risk of accident to open excavation etc. with necessary shoring, planking and strutting and for providing gangways with hand rails across open trenches etc., where necessary during the progress of the work.
v	Battering, benching, forming steps in the sides of foundations, and mass excavations where required and removal of slips and falls.
(B)	Plain/Reinforcement Cement Concrete Works
i	Making all drips, grooves, moulds, curved surfaces and chamfered edges etc., in concrete and /or plaster work as directed.
ii	Forming all expansion and/ or construction joints in RCC as directed.
iii	PVC or Concrete cover blocks shall be used for the reinforcement, will be as per IS standards and specifications, the cost of which is deemed to be included in the item rates of reinforcement.
iv	Installing a calibrated cube testing machine at site, getting it calibrated every 3 month and submitting test report to Architects.
v	Preparing test cubes, testing them at site and /or getting tested in an approved laboratory and any fees, costs etc. relating to them to borne by the contractor.
vi	Working up or hacking of concrete surface for providing keys for further concrete work including applying thick cement slurry or mortar as directed.
vii	Hoisting to all lifts, carrying to all leads, consolidating by rodding, vibrating, tamping, and curing. Shuttering to be made water tight with ply wood lined timber or by any other means.
viii	Design Mix for all concretes will be done by contractor from approved lab or consultant. The same should be approved from project in charge prior to start of concreting at site.
ix	Use of shuttering oil and cement slurry over shuttering before commencing bar binding and concreting respectively.
x	Providing dowel bars wherever necessary (cost of bars to be paid as reinforcement).
xi	Forming cutouts, openings, and concreting of same at a later stage as required.
xii	Maintaining of POUR CARDS showing approval of Employer/Engineer in charge/Architect cum PMC to concrete various components of R.C.C frame.
xiii	Admixtures in recommended proportions. (As per IS: 9103) to accelerate, retard setting of concrete improve workability without impairing strength and durability as per direction of Employer/ Architect.
xiv	Providing camber in the shuttering.
(C)	Aluminium Works.
i	Contractor to submit the anodizing/ powder coating , EPDM/ Neoprene gaskets test reports / certificates
ii	Samples to be got approved before fabricating / fixing
iii	All exposed framing shall be free from scratches and other serious blemishes
iv	All aluminium sections/ profiles shall be protected by using masking tapes, which shall be removed as and

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

CIVIL WORKS , PLUMBING, SANITARY, FIRE FIGHTING AND ELECTRICAL WORKS	
BILL OF QUANTITIES	
S. No.	General Notes
	when required during installation
v	All screws bolts, nuts and washers to be used be only stainless steel of approved manufacturer
vi	The glass shall be free from flaws, specks or bubbles and shall have square corners and straight line
vii	The completed installation shall be free from vibration, wind whistles and noise due to thermal, structural movement and wind pressure
(D)	Masonry Work
i	Work in English bond or any other bond or design as directed by the Architects
ii	Work in square, round and rectangular pillars, flower troughs, under floor drains, making curved and tapered surfaces steps etc.
iii	Forming openings, chases, grooves etc.
iv	Embedding conduits, boxes, other fixture of any descriptions, hold fasts of doors, windows, glazing etc., no deduction shall be made for cavities so formed.
v	Making all drip courses, projected courses of any description, offsets, setbacks, corbels, architraves or any other feature of any description.
vi	Raking out joints, for plastering or pointing or finishing joints flush as directed.
vii	Bonding with R.C.C. work.
viii	Holes or pockets in the Brick work for Rain water pipes and other pipes shall be kept or the pipes shall be provided at the time of raising the masonry. These holes or Zarries should be made good after fixing of pipes and nothing extra shall be paid for the same.
ix	Work in narrow widths, small quantities etc.
x	Over lapping reinforcement and embedding reinforcement in adjoining walls in case of half brick masonry walls.
xi	Supplying moulds, taking briquettes, getting tested and any fees, costs etc., relating to the same.
xii	Providing 25mmx 300mm GI strips of 20 gauge for anchoring masonry with RCC columns/structural members.
xiii	Bricks to be tested for efflorescence, compressive strength and any other mandatory tests in the laboratory.
xiv	No holes for scaffolding will be permitted into the brickwork .
xv	Quoted Rates are for all heights, all depths, all levels, including basement to roof (mumty) & all leads and lifts, including curved , circular or any shape
(E)	Wall Finish
i	Making all drip courses, projected courses of any description, offsets, setbacks, corbels, architraves or any other feature of any description. Included in
ii	Raking out joints in brickwork, for plastering or pointing flush as directed.
iii	Cleaning of Brickwork for efflorescence, chemical washing will be done as directed, free of cost.
iv	Base preparation, cracks, undulation or any other filling required with pop or putty are included in item.
v	All the painting work to be carried out as per IS standards & will be done with brushes only unless stated otherwise.
vi	Scaffolding for work will be arranged by the contractor (only steel scaffolding is allowed)
(F)	Wood Work
i	All the wood used should be well seasoned & free for knots, warping, twisting etc., any substandard

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

CIVIL WORKS , PLUMBING, SANITARY, FIRE FIGHTING AND ELECTRICAL WORKS	
BILL OF QUANTITIES	
S. No.	General Notes
	material will be replaced free of cost.
ii	Ant-termite treatment and protective paint is included in the rates.
iii	All the flush doors will be of water proof, termite proof quality
iv	All the fitting and fixtures will be of approved brand and quality
v	Providing and fixing door frames with Fasteners or hold fast as approved are included in the rates
vi	Contractor to submit the anodizing/ powder coating , EPDM/ Neoprene gaskets test reports / certificates
(G)	Steel Works
i	Samples to be got approved before fabricating / fixing
ii	All exposed framing shall be free from scratches and other serious blemishes
iii	All aluminium sections/ profiles shall be protected by using masking tapes, which shall be removed as and when required during installation
iv	All screws bolts, nuts and washers to be used be only stainless steel of approved manufacturer
v	The glass shall be free from flaws, specks or bubbles and shall have square corners and straight line
vi	The completed installation shall be free from vibration, wind whistles and noise due to thermal, structural movement and wind pressure
(H)	Terrace Roof Slab Water Proofing
i	Cleaning of surface and applying cement slurry @ 4.4 kg/sqm. mixed with acrylic based water @1:1:1 (1 cement : 1 compound : 1 water) proofing compound.
ii	Cement mortar 1:3 mixed (1 cement: 3 coarse sand) mixed with acrylic based water proofing compound@ 0.2 kg per 50kg bag of cement , or as per manufacturer specification
iii	Brick bats with 15 mm to 20 mm joints, grouted and jointed with cement mortar 1:3 (1 cement: 3 mixed) with acrylic based water proofing compound.@ 0.2 kg per 50kg bag of cement , or as per manufacturer specification
iv	Racking out of brick bat joints up to depth of 20mm
v	Cement mortar plaster 1:4 (1 cement: 4 coarse sand) mixed with non-shrinkage, water proofing compound @ 0.2 kg/ bag of cement finish neat ,complete with grooves pattern 300x300 or as specified
vi	Treatment for vertical walls up to 300 mm height, gola / watta, junctions of pipe , sleeves, drain etc is part of item.
(I)	Floor Finish Work
i	Line and level to be checked and confirm prior to start of work
ii	All the samples for stones, marbles, tiles etc. shall be got approved prior to start of work and procurement of material in bulk quantity
iii	Makes, quality, color, shade of the materials to be used in the work, be got approved prior to start of work.
iv	All the flooring ceramic tiles are anti-skid , until specified otherwise.
v	Clearing and curing of area for work to be done one day in advance. Cleaning of flooring or cladding will be done at site on the same day of work
vi	All the joints will be neatly finished, with matching color pigment mixed with white cement even if not specified in the item
vii	Protection of all kinds of floorings with POP and polythene sheet etc. is included in item rate and nothing extra shall be paid for this.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

CIVIL WORKS , PLUMBING, SANITARY, FIRE FIGHTING AND ELECTRICAL WORKS	
BILL OF QUANTITIES	
S. No.	General Notes
viii	Chase cutting for flush skirting is included in rates
ix	Finishing and plaster repairing after fixing skirting is included in rates
x	Cleaning of POP and polyethylene sheet at the time of handing over, washing floor with Mild Acid solution if required.
xi	Repairing of all damages shall be made good/ replaced before handing over.
xii	Tolerance in thickness of granite / marble will be +/- will be 1mm



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

CHAPTER XII

FINANCIAL BID

INSTITUTE OF COST ACCOUNTANTS OF INDIA
Plot no. IPs-1,11,12&13 at Industrial Area, Sitapura, Jaipur

Summary Sheet

S.No.	Item of Work	Page Reference	Amount (Rs.)
1	Civil Work	144	
2	Firefighting Work	152	
3	Internal Electrical & Networking	166	
4	Sanitary & Plumbing work	169	
5	Water Supply Installation work	170	
6	Drainage / Disposal work	174	
7	Tube well & Rain Water Harvesting	176	
8	External Electrical works	191	
	Sub-total		
Add	GST@18%		
	Grand total		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

BILL OF QUANTITIES

CIVIL WORK

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
1	EARTH WORKS				
01.10	Earth work in surface excavation not exceeding 30cm. in depth but exceeding 1.5 meter in width as well as 10 Sqm on plan including disposal of excavated earth up to 50 Mtr. and lift up to 1.5 Mtr. disposed soil to be levelled and neatly dressed : All kinds of soil	2,950.00	Sqm		
01.20	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth. 1.5m in width as well as 10 sqm. on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed : All kinds of soil	3,330.00	Cum		
01.30	Earth work in excavation by mechanical means (Hydraulic Excavator)/ manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift up to 1.5 m, including taking out the excavated soil and depositing and refilling of jhiri with watering & ramming and disposal of surplus excavated soil as directed with in a lead of 50 meter. All kinds of soils	1,090.00	Cum		
01.40	Filling available excavated earth (excluding rock) in trenches, plinth side of foundation etc. in layers not exceeding 20 cm. in depth, consolidating each deposited layer by ramming and watering including lead up to 50 meter and with all lift.	730.00	Cum		
01.50	Anti-termite treatment of floor using Imidacloprid 30.5% EC non repellent, odorless, low dose, environmentally safe termiticide with rapid action non corrosive stain free, by drilling 12mm dia.meter holes 300mm apart injecting the emulsion as per specification and plugging with cement mortar 1:2 (1 cement : 2 coarse sand) in the whole floor area DPE 12mm dia.termitube system with required number of junction boxes are to be installed. The termitube will run all along the perimeter wall both inside and outside. In the	1,340.00	sqm		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
	middle area the termitube to be installed at an interval of 1.00 Mtr. or less both ways as required with sufficient number of junction boxes to pump the emulsion. After successful testing of termitube, pesticide emulsion of imidacloprid 30.5% EC mixed with water in the ration of 1:474 will be pumped by a motorized spray pump from the junction box in specified manner. The plinth area of the area treated will be measured for payment.				
	Total Amount of Earth Work				
2	CEMENT CONCRETE (CAST-IN-SITU):				
2.10	Providing and laying in position cement concrete including curing, compaction etc. complete in specified grade excluding the cost of centering and shuttering - All work up to plinth level.				
2.20	M10grade Nominal Mix 1: 3: 6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	450.00	Cum		
2.30	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size).	130.00	Cum		
	DAMP- PROOF COURSE AND PRECASTCOPING				
2.40	Centering & shuttering with plywood or steel sheets including strutting, propping bracing both ways with steel props and removal of formwork for up to floor five level for :				
	Walls (any thickness) including attached pilasters, buttresses plinth and string course.	-	Sqm		
	Total Amount of Cement Concreting (Cast-in Situ)				
3	REINFORCED CONCRETE WORK				
3.10	Providing and laying in position specified grade of cement concrete for all RCC structural elements up to plinth level including curing, compaction, finishing with rendering in cement sand mortar 1:3 (1 cement: 3 coarse sand) and making good the joints and cost of plasticizers (if required) excluding the cost of centering, shuttering and reinforcement. M20 grade Nominal Mix / Design Mix	490.00	Cum		
3.20	Providing and laying in position specified grade of cement concrete for RCC structural elements up to floor five level including curing, compaction, finishing with rendering in cement sand mortar 1:3 (1 cement: 3 coarse sand) and making good the joints and cost of plasticizers (if required) excluding the cost of centering,	390.00	Cum		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
	shuttering and reinforcement for Walls (any thickness) including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. M20 grade Nominal Mix / Design Mix				
3.30	Providing and laying in position specified grade of cement concrete for RCC structural elements up to floor five level including curing, compaction, finishing with rendering in cement sand mortar 1:3 (1 cement: 3 coarse sand) and making good the joints and cost of plasticizers(if required) excluding the cost of centering, shuttering and reinforcement for Beams, suspended floors, roofs, girders having slopes up to 15°, landings, balconies, shelves, chajjas, lintels, bands, plain windows sills, staircases and spiral staircases etc. M20 grade Nominal Mix / Design Mix	660.00	Cum		
3.40	Add extra for providing richer mixes respectively at all floor levels				
	Providing M-25 grade concrete by using cement as per codal provision instead of M-20 grade design mix.	1,530.00	Cum		
	FORM WORK				
3.50	Centering and Shuttering with plywood or steel sheets including strutting, propping bracing both ways and removal of formwork for foundation , footings, strap beam, raft , bases of columns etc.	440.00	Sqm		
3.60	Centering & shuttering with plywood or steel sheets including strutting, propping bracing both ways with steel props and removal of formwork for up to floor five level for :				
	Walls (any thickness) including attached pilasters, buttresses plinth and string course.	1,720.00	Sqm		
3.70	Suspended floors, roofs, landings, staircases, balconies, girders, cantilevers, bands, coping bed plates, anchor blocks, sills, chhajjas, lintel, beam, plinth beam etc.	3,530.00	Sqm		
3.80	Columns, pillars, posts and struts etc.	1,200.00	Sqm		
3.90	Add extra for shuttering in circular work (in respective centering and shuttering items)	100.00	Sqm		
3.91	Add extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan are is to be measured)	2,380.00	Sqm		
	STEEL REINFORCEMENT:				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
3.92	Providing and fabricating reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding (including cost of binding wire) all complete up to floor five level. (‘Original producers’ who manufacture billet directly from iron ores and roll the billets to produce steel conforming to IS:1786)				
	Thermo-mechanically Treated bars (Conforming of relevant IS code)	-	Kg		
	Total Amount of Concreting Work				
4	BRICK WORK				
	BRICK MASONRY				
4.10	Brick work with F.P.S. bricks of class designation 75 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
	Cement mortar 1 : 6 (1 cement : 6 coarse sand)	410.00	Cum		
4.20	Add extra for Square or Rectangular Pillars in Superstructure brick work up to five story.				
4.21	Up to 45 cm length and all sides are free	-	Cum		
4.22	Upto 45 cm length and two corners are free	10.00	Cum		
4.23	Up to 90 cm length and all sides are free	10.00	Cum		
4.30	Half brick masonry in Superstructure , above plinth level up to floor V level using bricks of designation 75				
	Cement mortar 1 : 4 (1 cement : 4 coarse sand)	90.00	Sqm		
4.31	Add extra providing and placing in position 2 Nos. ,6mm Ø M.S. bar at every third course of half brick masonry .	90.00	Sqm		
	Total Amount of Brick Works				
5	STONE MASONRY				
5.10	Random Rubble stone masonry for with hard stone in foundation and plinth in Cement Sand mortar above 30 CM thick wall in:				
	Cement Mortar 1:6 (1-Cement : 6-Sand).	-	Cum.		
6	MARBLE, GRANITE AND TILE WORKS				
6.10	Providing and fixing Granite stone slab mirror polished and machine edge cut in walls, pillars, steps, Shelves, Sills Counters, Floors etc. laid on 12mm (Av.) thick base				

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
	of cement mortar 1:3 (1 cement : 3 coarse sand) jointing with white cement mortar 1:2 (1white cement : 2 marble dust) with pigment to match the shade of the marble slab including grinding, rubbing and polishing complete.				
	Good quality South Black				
	Above 3601 Cm ² Slabs	850.00	Sqm.		
6.20	Extra for providing edge moulding to 15-18mm thick marble/ Granite/Kota stone counters, Vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.				
	Granite/Kota Stone Work				
6.21	Full Edge moulding	200.00	Mtr.		
6.22	Half Edge moulding	40.00	Mtr.		
6.30	Providing and fixing 1st quality standard white, grey, ivory, fume red brown, light green, light blue and other light shades glazed tiles confirming to IS : 13753 & IS :15622 of size 300mm x 600mm in walls, floors, steps, pillars etc. laid on a bed of neat cement slurry finished with flush pointing in the white cement mixed with pigment to match the shade of the tile complete (excluding the cost of cement plaster on walls and pillar).	320.00	Sqm.		
6.31	Providing and fixing 1st quality MAT finished ceramic tile size 300x300mm confirming to IS : 13755 and IS : 15622 colour such as white, grey, ivory, fume red brown, light green, light blue and other light shades in floors, steps, pillars etc. laid on a bed of neat cement slurry finished with flush pointing in the white cement mixed with pigment to match the shade of the tile complete (including the cost of cement mortar bed 1:4).	50.00	Sqm.		
6.40	Providing and fixing 1st quality standard white, grey, ivory, fume red brown, light green, light blue and other light shades ceramic glazed vitrified tiles with water absorption less than or equal to 0.08% confirming to IS:13753 & IS : 15622 on walls, pillars etc. laid on a bed of neat cement slurry finished with flush pointing in the white cement mixed with pigment to match the shade of the tile complete (excluding the cost of cement plaster on walls and pillar).				
	Size 600mm x 1200mm	280.00	Sqm		
	Total Amount of Marble, Granite and Tile Works				
7	WOOD WORK				

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
7.10	Providing and fixing external grade board solid core single leaf flush door shutters ISI 2202-67 marked using Phenol formal de-Hyde resin in glue both sides with approved steel fittings complete as per annexure 'A' :				
	35 mm thick .				
	Decorative teak veneer both side	80.00	Sqm		
7.20	Extra for providing external lipping with 2nd class teak wood battens 6 mm minimum depth on all edges of shutters (over all area of door shutter to be measured) Over item no. 8.13.	80.00	Sqm		
	Extra for providing other type of fittings as mention in annexure A (as approved by EI) :				
	Brass fittings	30.00	Each		
	Total Amount of Wood Works				
8	STEEL & FENCING WORKS				
8.10	Providing and fixing pressed steel door frames confirming to IS 4351 manufactured from commercial mild steel sheet of 1.25 mm thickness including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tail to each jamb including steel butt hinges 2.5mm thick with mortar guards, lock strike-plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface including filling with CC 1:2:4(M15 grade) complete as directed by Engineer-in-charge :				
8.11	Profile C	90.00	Rmt		
8.12	Profile E	80.00	Rmt		
8.20	Providing and fixing steel gate, grating , and grills made of angles, tees, square bars, flats,or black pipe with holdfast and fittings complete as per design and drawing including cutting welding and fabrication with priming coat of red oxide	-	Kg.		
8.30	Extra if square, rectangular hollow tubelar sections are used or grill made by flats only	-	Kg.		
	Total Amount of Steel & Fencing Works				
9	ROOFING				
9.10	FALSE CEILING				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
9.11	Providing and fixing calcium silicate board false ceiling at all heights including providing and fixing of frame work made of special sections power pressed from M.S. sheet and galvanized in accordance with zinc coating of grade 350 as per IS : 277 and consisting of angle cleats of size 25mm wide x 1.6mm thick with flanges of 22mm and 37mm at 1200mm centre to centre one flange fixed to the ceiling with dash fastener 12.5mm dia.x40mm long with 6mm dia. bolts to the angle hangers of 25x25x0.55mm of required length, and other end of angle hanger being fixed with nut and bolts to G.I. channels 45x15x0.9mm running at the rate of 1200mm centre to centre to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26mm each having clips of 10.5mm at 450mm centre to centre shall be fixed in a direction perpendicular to G.I. channel with connecting clips made out of 2.64mm dia.x230mm long G.I. wire at every junction including fixing the calcium silicate board with ceiling section and perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450mm centre to centre with 25mm long drive-all screws @ 230mm interval including jointing and fixing to a flush finish of tapered and square edges of the board with recommended filler, jointing tapes, finisher and two coats of primer suitable for board as per manufactures specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed all complete as per drawing and specification and direction of the Engineer in Charge but excluding the cost of painting of thickness of calcium silicate board as below:-				
	8 mm thick	10.00	Sqm		
9.20	Providing and fixing 15 mm thick densified tegular edged ecofriendly light weight calcium silicate false ceiling tiles of approved texture as per direction of Engineer-in-charge of size 595 X 595 mm in true horizontal level suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanizing @120 grams per sqm) consisting of main 'T' runner suitably spaced at joints to get required length and size of 24X38mm made from 0.33 mm thick (minimum) sheet, 1200mm centre to centre, and cross 'T' of size 24X32mm made out of 0.33mm (Minimum) sheet, 1200mm long spaced between main 'T' at 600mm centre to centre to form a grid of 1200X600mm and secondary cross 'T' of length 600mm and size 24X32mm made out of 0.33 mm thick				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
	(Minimum) sheet to be interlocked at middle of the 1200X600mm panel to form grid of size 600X600mm resting...				
9.30	...on periphery walls/partitions on a perimeter wall angle pre-coated steel of size (24X24X3000mm made of 0.40mm thick (minimum) sheet with the help of rawl plugs at 450mm centre to centre with 25mm long dry wall screws @ 230mm interval and laying 15mm thick densified edged calcium silicate ceiling tiles of approved texture in the grid including cutting /making opening for services like diffusers, grills, light fitting, fixtures, smoke detectors etc., wherever required, Main 'T' runners to be suspended from ceiling using 50 mm long M 6 dash fasteners, 6mm G.I. fully threaded rods with galvanized steel L cleat level adjusters of size 80x25x2mm, spaced at 1200mm centre to centre long main 'T' bottom exposed with 24mm of all T-sections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawing and as directed by engineer-in-charge. Note: - Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/opening (cut outs) having area less than 0.30 Sqm. The calcium silicate ceiling tiles shall have NRC. Value 0.50 (Minimum), light reflection> 85% non-combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity <= 0.043 w/m0KC.	680.00	Sqm		
	Total Amount of Finishing Works				
10	FLOORING WORKS				
	CEMENT CONCRETE FLOORING				
10.10	Cement 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, making of lines or groove etc. complete but excluding the cost of nosing of steps etc. complete.				
	40mm thick with 20mm thick nominal size aggregate.	520.00	Sqm		
10.20	Filling of sunk portion of roof with earthen pots of required height including filling voids with 1:3:6 light concrete, using brick bats complete levelling and dressing the surface by 50mm thick cement concrete 1:2:4 as per specification.	-	Sqm		
10.30	Providing and laying M30 grade controlled cement concrete pavements including mixing and vibrations concrete with necessary needle vibrators and surface	180.00	Cum		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
	with screed board vibrating complete in all respect with 20/25 mm stone aggregate (crusher broken) including anti-skid textured finish to required camber/ super elevation and grade including curing etc. as per specification with cement concrete M-30 grade including cost of Steel frame work for sides of C.C. pavement consisting of M. S. channels flats and angles with required steel pegs (some of them may left embedded in concrete/ including providing frame work)				
	Extra for vacuum processed concrete including cost of equipment labour etc.	1,150.00	Sqm..		
10.40	Cutting of construction joint/ longitudinal joint 4 to 6 mm. wide using mechanical concrete cutter including cost of diamond bit cutting wheel and filling of bitumen sealing compound in groove including cost of sealing compound.				
	50 mm depth	890.00	P Mtr.		
	Total Amount of Flooring Works				
11	FINISHING WORKS				
11.10	CEMENT PLASTER				
11.11	Plaster on new surface on walls in cement sand mortar 1:4 including racking of joints etc. complete fine finish :				
	20mm thick .	2,660.00	Sqm		
11.12	Plaster on new surface on walls in cement sand mortar 1:6 including racking of joint etc. complete fine finish :				
	12mm thick.	6,800.00	Sqm		
11.13	6 mm thick cement plaster to ceiling of mix 1:3 (1cement : 3-fine sand)	4,150.00	Sqm		
11.14	Making grooves as per design in plaster 10mm to 20mm wide.	1,620.00	Sqm		
11.15	Providing and applying white cement based putty over plastered surface to prepare the surface even and smooth complete				
	New Plastered Surface (three or more coats)	2,100.00	Sqm		
11.16	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete	10,950.00	Sqm		
11.17	Providing & Laying POP moulding & beading in ceiling including nailing & scaffolding etc. complete of size :				
	25mm x 12mm	1,630.00	Sqm		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
11.18	Providing & Laying POP Cornice of required design & pattern in ceiling including nailing & scaffolding etc. complete with fine finishing of size:				
	75mm x 75mm	1,690.00	Sqm		
11.19	INTERIOR FINISHING				
	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade including all scaffolding:				
	Two or more coats on new work including preparation of base with primer, putty, lippy etc. complete in all respect.	10,950.00	Sqm		
11.20	EXTERIOR FINISHING				
	Painting exterior surface of Wall with 100% acrylic exterior paint of approved brand and manufacture to give an even shade with two or more coats including preparation of base with sand papering, primer, putty, etc complete in all respect including scaffolding and safety provision				
	New Work	2,660.00	Sqm		
11.21	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
	Two or more coats on new work	30.00	Sqm		
	Total Amount of Finishing Works				
12	WATER PROOFING AND EXPANSION JOINT TREATMENT				
12.10	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of : Ist course of applying cement slurry @ 4.4 Kg/sum mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. IInd course of 20mm cement plaster 1:3 (1 cement: 3 coarse sand) mixed with water. proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.. IIIrd course of applying blown or residual bitumen applied hot at 1.7 Kg per sqm. of area. IVth course of 400 micron thick PVC sheet .(Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.)	160.00	Sqm		
12.20	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water	1,470.00	Sqm		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
	proofing cement compound consisting of applying : after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. laying second layer of Fiber glass cloth when the first layer is still green . Overlaps of joints of fiber cloth should not be less than 10 cm . Third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken up to 30cm on parapet wall and tucked into groove in parapet all around fourth and final layer of brick tiling 'with cement mortar or any other approved protective coarse. (which will be paid for separately) For the purpose of measurement the entire treated surface will be measured				
	Total Amount of Water Proofing and Expansion Joint Treatment				
13	ALUMINIUM & P.V.C. WORK				
13.10	Providing and fixing Structural glazing work with toughened glass of 6mm thick and reflective colour as approved in dark shade like Blue/Dark Blue etc. with frame work of curtain section 65x60mm (Weight 1.64 kg/m min.) made of aluminum with chrome plating. Internal frame work will also be of curtain section 65x60mm of chrome plated aluminum section with 20x20mm aluminum tube section and structural spacer made of rubber. The aluminum frame work size as per instruction of Engineer-in-charge and including openable panels with all necessary sections and fitting. The work includes silicon structural adhesive for complete gripping of glass with framing members and silicon weather seal sealant to prevent moisture/water through joints. Glass will be fixed in plumb and with uniform spacing of 10-12mm wide duly filled with silicon weather seal sealant. The work includes all labour, scaffolding , structural aluminum work, toughened glasses, silicon weather seal sealant, silicon structural adhesive structural spacer, all accessories like handles, peg stays, M-15 grade cement concrete for fixing holdfast .(Face area of glass shall be measured)	100.00	Sqm		
13.20	Providing and fixing of UPVC Sliding windows : Frame Made from the Extruded uPVC Window Profile Section of size 106w x 50h mm having outer wall thickness of	40.00	Sqm		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
	2.5mm (+/- 0.2mm) and 3 box multi-chamber construction, laminated (colour) finish, duly reinforced with 1.2 mm thick GI section. Frame shall have three track configuration, two for sliding of window shutter and one for mosquito mesh shutter. Vertical member of frame which bears the sliding shutter load shall have aluminum rail/track for smooth sliding of shutter rollers. All the four corners shall be mitered cut & thermal welded so as to form window frame. Frame shall be milled with drain and air equalizer hole in order to be water tight and for drainage of accumulated water, if any, to outer side. Shutter : The shutter of sliding window shall be made of 39w x 69h mm Extruded 3 box multi- chamber uPVC Window Profile Section of laminated (colour) having outer wall thickness of 2.5mm (+/- 0.2mm) provided with reinforcement of 1.5mm thick GI section duly mitered cut & thermal welded at all corners and fitted with uPVC glazing bead of size 22 x 20 mm with inner and outer co-extruded EPDM/TPE-E weather seal gaskets along with 6mm thick ISI make plain float glass. Mesh shutter shall be made of 39w x 69h mm Extruded 3 box multi-chamber UPVC Window profile section of laminated (colour) having outer wall thickness of 2.5mm (+/- 0.2mm) provided with reinforcement of 1.5 mm thick GI section duly mitered cut & thermal welded at all corners and fitted with nylon/polymer mesh and rollers/pulley.				
13.30	Providing and fixing stainless steel railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).				
	Grade 304	750.00	Kg.		
	Total Amount of Aluminum& P.V.C.Work				
14	ADDITIONAL MISCELLANEOUS ITEMS				
14.10	Providing and Fixing Chicken wire mesh at the joint of masonry members/ R.C.C. Members with Nails complete in all respect.	330.00	Sqm		

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount
	Total Amount of Additional Miscellaneous Items				
	Total Amount (Sl. No. 1 to 14)				

Fire Fighting Work

Sl. No.	Description	Unit	Rate	Qty	Amount
1	Supplying, Installation, Testing & Commissioning of Electrical Driven firefighting duty Terrace pump as per TAC and IS 12469-1988., Factory assembled in Pump make OEM suitable for automatic operation and consisting of following details given as A, B, C, D, E, F, G and H.				
	(A) Horizontal End suction Centrifugal Back pull type pump complete for delivery of below mentioned discharge and Head				
	(B) Material of construction : Pump Casing - Cast Iron, Impellor - Bronze, Shaft - SS 410, Packing - Mechanical Seal				
	(C) Squirrel cage induction motor (IE-3 Class) suitable for 3 phase, 415 V, 50 HZ, Ac supply , Class - F Insulation, Synchronous speed not Exceeding 3000 RPM, T.E.F.C confirming to IP:55 , of required HP suitable for the above pump ,along with flexible (Love Joy type) coupling , coupling guard complete in all respect .				
	(D) Common bed plate fabricated from mild steel channel for installation of pump and Motor including anti vibration pads.				
	(E) The Hydrostatic tests (2 times of design operating head or 1.5 times the shut off head whichever is higher) and performance tests (to determine developed head, Pump BHP and efficiency v/s Flow) of pumps along with trip test shall be carried out at manufacturer's works in Virtual / Physical presence of Department's representatives.				
	(F) Physical & Chemical Test reports of i) Pump casing (ii) Impeller (iii) Shaft (iv) Shaft sleeve and Dynamic Balance certificate is to be submitted by OEM				
	(G) Suitable size Reinforced cement concrete (M-30) foundation with foundation bolt, Nosing Angle of size 40mm x40mm x5 mm (Cost of RCC Foundation				

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Rate	Qty	Amount
	to be paid Extra)				
	(H) Weather proof hood fabricated from 5mm thick UV stabilized FRP sheet supported by 50 mm x 50 mm x 5 mm Angle Iron frame above pump set to protect it from weather All as per approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	900 LPM with 35 mtr head	Each		1.00	
1.10	SITC of pressure switches of pressure range 3 to 15 Bar for Main, Jockey, Terrace pump and Diesel pumps, Etc. as Required (Control Cable from Pressure switch to Panel to be Paid Extra). All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each		1.00	
1.20	Providing and fixing 20/25 mm dia. (PN - 1.6, Type-S1, Flanged, ISI marked) air release valve confirming to IS - 14845: 2000 with Double Flange isolating valve (pressure rating PN 1.6) complete with 1 no. Matching Flanges (Minimum 10 mm thick), nuts, bolts, washers, gaskets etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each		1.00	
1.30	SITC of UL listed and FM Approved Polyethylene vane type water flow switch with actuation & delay mechanism for sensitivity in the range of 4 to 10 GPM and suitable for installation in following sizes of Sprinkler pipe for a Static pressure rating up to 250 PSI including making connections, making hole in pipe for inserting the vane etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
1.31	80 mm Dia..	Each		3.00	
1.32	100 mm Dia..	Each		1.00	
1.32	150 mm Dia..	Each		1.00	
1.40	SITC of suitable Pressure release valve of 50 mm dia., of CI body, with pressure setting range 7-15 kg/sq.cm, on discharge header / Air Vessel, complete in all respect etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each		1.00	

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Rate	Qty	Amount
1.50	Providing & fixing pressure transducer in M.S. Pipe line (pressure range 0 to 10 kg/cm ²) suitable for 12 volts/24-volt DC. Including connection etc. as required. (Control Cable from Pressure Transducer to Panel to be Paid Extra). All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each		3.00	
1.60	SITC of UL listed / FM Approved Brass Test and drain valve assembly for sprinkler system comprising of 3-position (off, test and Drain) ball valves with drain orifice having K-factor 5.6 and maximum working pressure 300 PSI and Inbuilt sight glass etc. as required of following size. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	25 mm Dia..	Each		3.00	
1.70	Providing, Fixing, Jointing, Testing & Commissioning of Heavy duty MS 'C' class (Heavy) pipes conforming to IS 3589 / 1239 Part-I for hydrant and sprinkler applications including cutting, screwing, welding etc. & forged steel fittings like elbows, tees, tapers, reducer, gaskets etc. fixing the pipe on the wall/ceiling with suitable clamps, hanger and nuts bolts including cutting hole and chase in brick or RCC walls/ slab and making good the same. complete with painting of one coats of Red Oxide and two or more coats of synthetic enamel paint of required shade complete as required. (Pipe to be tested @ 10Kgf/Sq.cm for 2 Hrs.). All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
1.71	25 mm dia.	Mtr.		80.00	
1.72	32 mm dia.	Mtr.		60.00	
1.73	40 mm dia.	Mtr.		55.00	
1.74	50 mm dia.	Mtr.		60.00	
1.75	65 mm dia.	Mtr.		50.00	
1.76	80 mm dia.	Mtr.		30.00	
1.77	100 mm dia.	Mtr.		10.00	
1.80	Providing, Fixing, Jointing, Testing & Commissioning of Heavy duty MS 'C' class (Heavy) pipe conforming to IS 3589 / 1239 part-I for hydrant and sprinkler				

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Rate	Qty	Amount
	applications in Existing trench with cement concrete block as supports including cutting, welding etc.& forged steel fittings like elbows, tees, tapers, reducer with cleaning, wrapping and coating of the pipe with 4 mm thick tar based polymeric corrosion protection tape including applying uniform coat of cold pipekot primer as per IS; 10221 for protection against corrosion complete in all respect. (Pipe to be tested @ 10Kgf/Sq.cm for 2 Hrs. & Excavation of Trench and refilling of trench to be paid extra). All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
1.81	80 mm dia.	Mtr.		10.00	
1.82	100 mm dia.	Mtr.		70.00	
1.90	Supplying and fixing cylindrical air vessel of continuous welded construction for pump room made of 450 mm dia. fabricated out of 10 mm thick dished ends and 8 mm thick MS sheet, 2000 mm in height with flanged connection, Provision for 25 mm dia. drain valve, air release valve, safety valve pressure gauge as required accessories and painting with two coats of Red Oxide and two coat of post office red enamel paint including The tank shall be installed on suitable vertical legs. The legs shall be provided with M.S. Angle of size 75 mm x 75 mm x 5 mm at the bottom. The legs shall be grouted in cement concrete foundation. as required. (Air Release valve, Drain valve, PRV, Pressure Gauge shall be Paid Extra). All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each		3.00	
1.91	Supplying and fixing cylindrical air vessel of continuous welded construction fixed at riser top made of 250 mm dia., fabricated out of 8 mm thick MS sheet, 1200 mm in height with flanged connection, Provision for 25 mm dia. drain valve, air release valve, safety valve pressure gauge as required accessories and painting with two coats of Red Oxide and two coat of post office red enamel paint including The tank shall be installed on suitable vertical legs. The legs shall be provided with M.S. Angle of size 75 mm x 75 mm x 5 mm at the bottom. The legs shall be grouted in cement concrete foundation. as required. (Air Release valve, Drain valve, PRV, Pressure Gauge shall be Paid Extra). All as per pre-approved by Engineer in charge. For	Each		3.00	



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Rate	Qty	Amount
	additional technical parameters of products/ work, refer Annexure “A” attached with this BSR.				
1.92	Supplying and Fixing of PN 16 Flanged Y strainer fabricated out of cast iron body, SS 304 strainer with perforated screen with 3 mm. dia. holes in existing MS / GI pipe complete with 2 no. Matching Flanges (Minimum 16 mm thick), nuts, bolts, washers, gaskets etc. as required of following sizes. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure “A” attached with this BSR.				
	100 mm dia.	Each		3.00	
1.93	Supplying and Fixing of PN 16 Flanged sluice valve with non-rising spindle, bronze /gun metal seat confirming to IS:14846 complete with 2 no. Matching Flanges (Minimum 16 mm thick), nuts, bolts, washers, gaskets, etc. as required of following sizes. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure “A” attached with this BSR.				
	100 mm dia.	Each		5.00	
1.94	Supplying and Fixing of PN 1.6 Butterfly Valve (Wafer Type) with S.G Iron Disc and confirming to IS:13095 complete with 2 no. Matching Flanges (Minimum 16 mm thick), nuts, bolts, washers, gaskets, etc. as required of following sizes. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure “A” attached with this BSR.				
	100 mm dia.	Each		7.00	
1.95	Supplying and Fixing of PN 16 Brass/GM Ball valves with screwed end, SS Ball including Teflon tape etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure “A” attached with this BSR.				
	25 mm dia..	Each		6.00	
1.96	Supplying and fixing of SS 304 Single / Double headed oblique pattern hydrant landing valve (internal/external) with 75 / 100 mm dia. flanged inlet & 63 mm dia. instantaneous type female outlet coupling with cast iron wheel complete with ABS cap and chain and all accessories as per IS:5290-93 (Type-A) including matching flange (14 mm thick), nuts, bolts, washers, gaskets, etc. as required. All as				

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Rate	Qty	Amount
	per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	Single Headed with 75 mm Dia. Flanged Inlet	Each		4.00	
1.97	Supplying & fixing SS-304 Short Branch Pipe conforming to IS: 903:93 fitted with 20mm (nominal internal diameter) bore nozzle, for projecting water in form of solid jet. The Branch shall have 63mm Male Instantaneous Inlet, suitable for use with 63 mm size Firefighting hoses. H.P. tested to 21 kgf/cm ² for 2.5 minutes. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each		4.00	
1.98	Supplying and fixing first -Aid Fire hose reel Drum wall mounted swinging type with MS construction powder painted in post office Red, conforming to IS 884-1985 with up to date amendments, complete with the following as required. (A) Thermoplastic / Rubber Hose (B) 20 mm dia. UL, FM Bronze / SS nozzle with 5mm orifice (C) Drum and brackets for fixing the equipment on wall. (D) Connections from riser with 20/25 mm dia. Brass/GM gate valves with screwed end and conforming to IS:778 Class-1 through Forged Steel Screwed Union & M.S. pipe. Etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	With 30 m x 20 mm High Pressure Braided Rubber Hose as per IS:5132 - 1969 and Bursting pressure 42 Kg/sq.cm	Each		4.00	
1.99	Supplying and fixing Inlet Breeching Connection of CI body with Gun Metal male instantaneous inlet couplings with Inbuilt NRV, Drainage Connection with 50 mm Brass gate valve complete with PVC blank cap and chain as required for 150mm dia. Outlet with 1 no. Matching Flange (Minimum 16 mm thick), nuts, bolts, washers, gaskets, etc. as required of following Ways. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	2 Way	Each		1.00	
2.0	Providing and fixing of 100 mm Dia. Flanged Gun	Each		1.00	

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Rate	Qty	Amount
	Metal Fire Brigade Suction hose coupling (draw out connection) for female coupling as per IS:902-1974 complete with Matching Flange (Minimum 14 mm thick), nuts, bolts, washers, gaskets, etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
2.10	Supplying and fixing of 750 mm x 600 mm x 250 mm Outdoor Application Fire Hose Cabinet made of 1.6 mm thick MS sheet Duly powder coated in red color externally and white internally with 6 mm thick glazed doors with Expanded Metal 2 mm thick Jali including necessary locking arrangement suitable to accommodate 2 Nos 15 Mtr. Long RRL Hose and 1 No. branch pipe on Existing Wall / Angle Iron Frame as required. (Cost of MS structure for mounting Frame is to be Paid Extra) All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each		1.00	
2.12	Supplying and fixing of 1000 mm x 600 mm x 500 mm Outdoor Application Fire Hose Cabinet made of 1.6 mm thick MS sheet Duly powder coated in red color externally and white internally with 6 mm thick glazed doors with Expanded Metal 2 mm thick Jali including necessary locking arrangement suitable to accommodate External hydrant with butterfly valve, 2 Nos 15 Mtr. Long RRL Hose and 1 No. branch pipe on Existing Wall / Angle Iron Frame as required. (Cost of MS structure for mounting Frame is to be Paid Extra). All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each		3.00	
2.13	Providing and Fixing of 15 mm dia. Bronze quartzoid bulb type sprinkler heads with Maximum working pressure 11.6 Kg / Sq.cm and suitable for 68-degree centigrade rating standard response (UL Listed) chrome plated complete in all respect of the following type. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
2.131	Pendant/ Upright type	Each		154.00	
2.132	Sidewall Sprinklers (ordinary)	Each		5.00	
2.133	Extended Throw Sidewall type .	Each		5.00	



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Rate	Qty	Amount
2.14	Supply & Fixing of Fire Man's Axe with carbon steel head & rubber mouldehandle usable up to 20 KV and confirming to IS :926 with length approx. 0.4 M & weight 3.0 Kg. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each		4.00	
2.15	Providing & fixing sprinkler flexible pipe (UL Listed) of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm NPT female thread with reducer, nipple, 2 side brackets, center bracket, stock bar of following sizes complete as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	1500 mm Long	Each		70.00	
	Total Cost				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

INTERNAL ELECTRICAL & NETWORKING

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
1	Electrical Wiring in PVC Conduit				
1.10	Wiring of light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper conductor 1.1 kV grade and 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper earth conductor 1.1 kV grade (IS:694) in recessed ISI marked MMS (IS:9537 P - III) virgin material PVC conduit & it's ISI marked (IS:3419-1988) accessories, round tiles, 1.2 mm thick Hot Dipped Galvanized Modular Box with earth terminal, 10A Modular switch, Modular face plate with grid plate, 3 pin ceiling rose / Holder /3 way connector, screws, making connections, testing etc. as required. For specification of copper Conductor, Phenolic Laminated sheet's & Electrical/ Wiring accessories refer Chapter E - 04, E - 05 & E - 07 For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
1.11	Short point (up to 3 mtr.)	Per Point	45.00		
1.12	Medium point (up to 6 mtr.)	Per Point	75.00		
1.13	Long point (up to 10 mtr.)	Per Point	135.00		
1.20	Wiring of twin control light point with 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper conductor 1.1 kV grade and 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper earth conductor 1.1 kV grade (IS:694) in recessed ISI marked MMS (IS:9537 P - III) PVC conduit & it's ISI marked (IS:3419-1988) accessories, round tiles, 2 Nos Hot Dipped Galvanized M.S Modular box of 1.2 mm thick with earth terminal,2 Nos10 A two way Modular switch, 3 pin ceiling rose / holder / 3 way connector ,Modular face plate with grid plate, screws, making connections, testing				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
	etc. as required. For specification of copper Conductor, Phenolic Laminated sheet's & Electrical/ Wiring accessories refer Chapter E - 04, E - 05 & E - 07 For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
	Long point (up to 10 mtr.)	Per Point	10.00		
1.21	Wiring of 3/5 pin 6 amp. Light plug point with 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper conductor 1.1 kV grade and 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper earth conductor 1.1 kV grade (IS:694) in recessed ISI marked MMS (IS:9537 P - III) PVC conduit & it's ISI marked (IS:3419-1988) accessories, Hot Dipped Galvanized Modular box of 1.2 mm thick with earth terminal, 10 A modular switch, 3/5 pin 6 A modular socket, Modular face plate with grid plate, screws, making connections, testing etc. as required. For specification of copper Conductor, Phenolic Laminated sheet's & Electrical/ Wiring accessories refer Chapter E - 04, E - 05 & E - 07 For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
1.211	On board	Per Point	25.00		
1.212	Short point (up to 3 mtr.)	Per Point	10.00		
1.213	Medium point (up to 6 mtr.)	Per Point	20.00		
1.214	Long point (up to 10 mtr.)	Per Point	20.00		
	Total Amount of Electrical Wiring in PVC Conduit				
1.30	Drawing of Wires and Sub - mains				
1.31	Supplying and drawing FR PVC insulated & unsheathed flexible copper conductor as per PWD specification for electrical Works with ISI marked (IS:694) and as per IS 8130: 2013 of 1.1 kV grade. Wire should be made from 99.90 % purity copper, class 5 stranding in acc. to IS:8130/IEC 60228 for lower watt loss, oxygen free for less chances of oxidization, insulation PVC type A/C/D, flame retardant as per IS 10810-53, better amperage rating as per IS:3961 part 5, in existing surface or recessed PVC/ MS conduit/casing capping				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
	making connections with Copper Lugs of suitable size, Ferrules, testing etc. as required. OEM Must have its own in house NABL lab setup for all testing facilities for wires. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
1.311	2 x 2.5 sq. mm. + 1x1.5sqmm	Rmt	505.00		
1.312	2 x 4.0 sq. mm. + 1 x 2.5 sq. mm.	Rmt	720.00		
1.313	2 x 6.0 sq. mm. + 1 x 2.5 sq. mm.	Rmt	180.00		
1.314	4 x 10.0 sq.mm	Rmt	180.00		
1.315	4 x 16.0 sq.mm	Rmt	180.00		
1.40	Supplying and drawing coaxial cable 75-ohm impedance with foam PE insulated solid bare copper inner conductor, and 1st outer conductor of bonded alum. tape and second outer conductor of alum. alloy braid in existing surface or recessed conduit/casing capping including making connections as required. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
	RG - 6	Rmt	180.00		
1.41	Supplying and drawing PE Insulated & PVC Sheathed un-armored telephone cable with 0.5 mm dia. Solid Annealed electrolytic grade bare Copper Conductor as per IS: 8130/84 &confirming to TEC specification GR / WIR/06-03 March 2002 in existing surface or recessed conduit/casing capping. including ferruling on each pair for Identification etc. as required. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
1.411	2 pair	Rmt	180.00		
1.412	4 pair	Rmt	180.00		
	Total Amount of Drawing of Wires and Sub-mains				
1.50	G.I. /M. S./ Wooden Boxes ,Laminates & Dismantling				
1.51	P & F 1.2mm thick M.S. Recessed fan box, hexagonal/ round of size 130 mm dia. depth 75mm, 12 mm dia. rod fan hook with 100	Each	15.00		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
	mm length extended on each side. All as per pre-approved by Engineer in charge. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
	Total Amount of G.I. /M. S./ Wooden Boxes ,Laminates & Dismantling				
1.60	Distribution Board & IT's Accessories				
1.61	Providing & Fixing of 240/415 V AC MCB with positive isolation of 10 kA breaking capacity (B/ C/D tripping characteristic as per type of load and site requirement) 4 KV impulse withstand voltage, ISI marked IS 8828(1996) / conforming to IEC 60898-1 2002, IEC 60947-2, low watt losses, trip free mechanism , energy limiting of class 3 as per IEC, minimum phase termination capacity of 35sq.mm. , conductor line load reversibility , IP 20 contact protection and fitted in existing distribution board/sheets, minimum electrical operation 20,000 up to 20 A rating and 10,000 up to 63 A, 5000 for 80 A & above rating including making connections, testing etc. as required. OEM shall have submitted NABL / CPRI / ERDA accredited lab type test reports & All as per pre-approved by Engineer in charge. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
1.62	Single pole MCB (With B/C curve tripping Characteristics)				
	6 A to 32 A rating	Each	90.00		
1.63	Double pole MCB(With B/C curve tripping Characteristics)				
	6 A to 32 A rating	Each	10.00		
1.64	Triple pole MCB (With B/C curve trippingCharacteristics)				
1.641	6 A to 32 A rating	Each	5.00		
1.642	40 A rating	Each	5.00		
1.643	50/63 A rating	Each	5.00		
1.70	Four pole MCB (With B/C curve tripping Characteristics)				
1.71	50/63 A rating	Each	5.00		

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
1.72	80 A rating	Each	5.00		
1.80	Providing & Fixing of Recessed/surface mounting heavy duty horizontal type Double Door (Metal / Glazed) Distribution board with Metal end box made out from Galvanized steel / CRCA sheet not less than 1.2 mm thick conforming to IS-8623-1 & 3 / IEC 61439- 1 & 3, powder painted complete with reversible door (for double door DB only)100 amp. insulated copper bus bar/shorting link, copper neutral link, copper earth link, color coded interconnecting wire set of suitable rating and din bar, masking sheet, making internal DB terminations with copper lugs, Ferrules, detachable gland plate, including making connections, testing etc. as required. OEM shall have submitted NABL / CPRI / ERDA accredited lab type test reports & All as per pre-approved by Engineer in charge. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
1.90	Metal door (single phase) IK-09 and IP-43 with Metal end box				
1.91	12 Way (12+2)	Each	5.00		
1.92	16 Way (16+2)	Each	5.00		
2.0	Metal door (Three phase) IK-09 and IP-43 with Metal end box				
2.01	6 Way	Each	5.00		
2.02	8 Way	Each	5.00		
2.10	Metal door (Three phase) Per phase isolation,Vertical IK-09 and IP-43 with Metal end box				
2.11	8Way(Incomer 8,Sub Incomer2+2+2)	Each	5.00		
	Total Amount of Distribution Board & IT's Accessories				
2.20	Electrical Accessories				
2.21	Providing & Fixing of modular type switch/ bell push duly ISI marked (IS :3854) with CM/L no. printed and made out of unbreakable and fire retardant virgin UV Stabilized Polycarbonate with brass terminals and captive screws & silver alloy contact tip with IP-20 rating, minimum width of switch				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
	toggle (PUSHPART) should not less than 20mm, including all as per pre-approved by Engineer in charge, making connections, testing etc. as required. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
2.211	10 A one way switch	Each	325.00		
2.212	10 A two way switch	Each	10.00		
2.30	Providing & Fixing of modular type lockable feature socket duly made out of unbreakable and fire retardant virgin poly carbonate with brass terminals and captive screws & silver alloy contact tip with IP-20 rating, including all as per pre-approved by Engineer in charge, making connections, testing etc. as required. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
2.31	6 A 3/5 pin shuttered socket	Each	75.00		
2.32	6/16 A shuttered socket	Each	90.00		
2.33	13 A flat pin international socket	Each	15.00		
2.34	25 Amp. 2 Module Socket	Each	25.00		
2.40	Providing & Fixing of modular type 120 W Step Fan regulator duly ISI marked (IS 11037:1984) with CM/L no. printed made out of unbreakable and fire retardant virgin poly carbonate with brass terminals and captive screws & silver alloy contact tip with IP-20 rating, including all as per pre-approved by Engineer in charge, making connections, testing etc. as required. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
2.41	5 step fan regulator 2 Module 360 degree rotating	Each	20.00		
2.50	Providing & Fixing of following modular accessories as per PWD specification for electrical Works, made out of unbreakable and fire retardant virgin poly carbonate with brass terminals and captive screws & silver alloy contact tip with IP-20 rating, including all as per pre-approved by Engineer in charge, making connections, testing etc. as required. For additional technical parameters of product / work refer Annexure 'A'				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
	attached with this BSR				
2.51	RJ-11 telephone jack Double line	Each	20.00		
2.52	RJ-45, Cat 6 computer jack with shutter	Each	20.00		
2.53	T.V. coaxial socket	Each	20.00		
2.54	Blanking plate	Each	40.00		
2.60	Providing & Fixing of following size mounting grid plates with cover plates made from fire retardant UV established high performance engineering plastic suitable for all universal metal boxes for front installation & removal direct fit type complete in all respect. All as per pre-approved by Engineer in charge. For additional technical parameters of products/work , refer Annexure “A” attached with this BSR .				
2.61	1/2 Module	Each	40.00		
2.62	3 Module	Each	40.00		
2.63	4 Module	Each	40.00		
2.64	6 Module	Each	40.00		
2.65	8 Module	Each	40.00		
2.66	10 Module	Each	40.00		
2.67	12 Module	Each	40.00		
2.68	16/18 Module	Each	40.00		
	Total Amount of Electrical Accessories				
2.70	Air Circuit Breakers & MCCB				
2.71	SITC of 3 /4 pole current limiting Moulded case circuit breaker (MCCB) made of flame retardant& heat resistant material having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings , conforming to IS/IEC 60947 P - 2 :2003 with front face and centralized adjustable, trip free mechanism, true contact position indicator, line load interchangeability, designed for both horizontal & vertical mounting without any adverse effect on electrical performance, suitable for operation up to 55 degree and without de-rating up to 40 degree, pollution degree 3, having positive isolation capability, push (test) to trip, trip time less than 10 ms under s/c condition, Breaking capacity Ics =				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
	100% Icu. U imp =8 KV, rated insulation voltage 690 V. provision for UVR, shunt trip, earth fault trip, door interlock, pad lock & rotary handle, including making connections etc. as required.OEM shall have submitted NABL / CPRI / ERDA accredited lab type test certificate before execution All as per pre-approved by Engineer in charge. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
	3 pole MCCB With Thermal Magnetic release				
2.711	125 Amp , 25 kA, adjustable O/L & adjustable S/C setting,	Each	90.00		
	Total Amount of Air Circuit Breakers & MCCB				
2.80	LT Cables				
2.81	Providing & Laying P.V.C. / XLPE insulated & P.V.C. sheathed ArmoredAluminum cable confirming to IS:1554 P-I / IS :7098 P - I of 1.1 KV with H4- Grade electrolytic aluminum conductor confirming to IS 8130 of purity >99.6 %, round / flat strip armoring of cables, Inner / outer sheath confirming to IS:5831 in existing RCC / Hume / Stoneware / PVC pipe/ open duct/cable trench / Cable tray (with cable tie) including testing etc. as required of following size. OEM must have its own in house NABL accredited Laboratory for testing procedure as per IS:10810.For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
2.811	25.0 Sq. mm				
2.812	3.5 core	Rmt	200.00		
2.82	Providing & Laying P.V.C. / XLPE insulated & P.V.C. sheathed ArmoredAluminum cable confirming to IS:1554 P-I / IS :7098 P - I of 1.1 KV with H4- Grade electrolytic aluminum conductor confirming to IS 8130 of purity >99.6 %, round / flat strip armoring of cables, Inner / outer sheath confirming to IS:5831 in existing RCC / Hume / Stoneware / PVC pipe/ open duct/cable trench / Cable tray (with cable tie) including testing etc. as				

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
	required of following size. OEM must have its own in house NABL accredited Laboratory for testing procedure as per IS:10810.For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
	50.0 Sq. mm				
2.821	3.5 core	Rmt	100.00		
2.90	Providing & Laying P.V.C. / XLPE insulated & P.V.C. sheathed Armored Aluminum cable confirming to IS:1554 P-I / IS :7098 P - I of 1.1 KV with H4- Grade electrolytic aluminum conductor confirming to IS 8130 of purity >99.6 %, round / flat strip armoring of cables, Inner / outer sheath confirming to IS:5831 in existing RCC / Hume / Stoneware / PVC pipe/ open duct/cable trench / Cable tray (with cable tie) including testing etc. as required of following size. OEM must have its own in house NABL accredited Laboratory for testing procedure as per IS:10810.For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
	120.0 Sq. mm				
2.91	3.5 core	Rmt	50.00		
	Total Amount of LT Cables				
3.0	LT Cable Termination & Accessories				
3.10	Supply, Fabricating & installing following sizes of perforated Hot dipped Galvanized iron cable tray (Galvanized thickness not less than 50 microns) with perforation not more than 17.5% in convenient section including horizontal and vertical bends, reducers tees, cross members and other accessories as required and duly suspended from the ceiling with GI suspenders including GI bolts &nuts, fasteners, supports etc. as required.All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
3.11	150mm x 50mm x 1.6mm	Rmt	90.00		
3.12	225mm x 50mm x 1.6mm	Rmt	90.00		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
3.13	300mm x 50mm x 1.6mm	Rmt	90.00		
	Total Amount of LT Cable Termination & Accessories				
4.0	Fans				
4.10	Supply & Fixing of phenolic laminated board of 6.4 mm thick for fresh air fan/exhaust fan up to size of 300 mm on existing window frame including cost of board, cutting of hole, Nut bolts etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/work , refer Annexure “A” attached with this BSR .	Sqm	5.00		
4.20	Providing & Fixing of 1200 mm sweep BLDC technology power saving ceiling fan which can withstand on voltage fluctuations from 140 volts to 240 volts, power factor not less than 0.9, service value (CMM/W) minimum 6.85, air delivery minimum 220 CMM, speed minimum 330 RPM (tolerance as per IS:374 2019) THD less than 10% and complete with down rod of 15 mm dia. ERW (Electrical resistance welded) of 1.6mm nominal thick medium duty steel pipe up to 80 cm , cotter pin with 3 x 1.5 sq.mm PVC insulated flexible copper conductor making connection testing etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/work , refer Annexure “A” attached with this BSR .				
4.21	Without Remote	Each	20.00		
4.30	Providing & Fixing of BLDC Technology ventilating fans, single phase with PVC impeller, ABS body, Double Ball bearing, automatic back lower shutter including making connection, testing etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure “A” attached with this BSR .				
4.31	<u>250 mm sweep with Min. Air delivery 1150 CMH, 1300 RPM</u>	Each	15.00		
4.40	Providing & Fixing of Heavy duty capacitor start, copper wound Double ball bearing 900/1400 RPM single phase Exhaust fan				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
	conforming to IS:2312 ISI marked in existing opening including making connections testing etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
4.41	300 mm sweep(900/1400 RPM)	Each	15.00		
	Total Amount of Fans				
4.50	Indoor Lighting				
4.51	Providing & Fixing of energy efficient direct fit (Retrofit) Polycarbonate/ Glass housing SMD Mid Power LED tube rod (with integral driver & aluminum. heat sink), on existing fixture. system lumen efficacy ≥ 100 lm/Watt output, internal surge protection of 2.5 KV, THD < 20%, p.f. ≥ 0.95 , CRI > 80, life time of minimum 35000 Burning Hours with, 70% of initial Lumen maintained till life ends, CCT 3000°K / 4000°K / 5700°K / 6000°K/6500°K (As per ANSI Bin), maximum power consumption should not more than the specified rating and Fixture shall be of BIS standard and trade mark certificate (T.C.). Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing. OEM must have its own in house NABL lab setup for all testing facilities for LED fixtures. (LM79 & LM80) certificate / Report from OEM shall be submitted. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
4.511	600mm , Min. Lumens output 1800 lm LED Tube rod with Polycarbonate Housing	Each	5.00		
4.512	1200mm , Min. Lumens output 2000 lm LED Tube rod with Polycarbonate Housing	Each	90.00		
4.52	Providing & Fixing of IP-20 LED Recessed / Surface Mounted, Round / Square SMD Mid Power LED Downlight with power coated die-cast aluminum housing with UV Stabilized non yellowish Diffuser with BIS compliance 2.5 KV surge protected Isolated driver, with Short & Open circuit protection, having efficiency > 85%. System Lumen efficacy of ≥ 110 lm / watt, THD < 10 %, Pf. ≥ 0.95 , CRI > 80,				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
	life time of minimum 50000 Burning Hours with, 70% of initial Lumen maintained till life ends, CCT 3000°K / 4000°K/ 5700°K /6000°K/6500°K (As per ANSI Bin), maximum power consumption should not more than the specified rating and Fixture shall be of BIS standard and trade mark certificate (T.C.). Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing.				
	OEM must have its own in house NABL lab setup for all testing facilities for LED fixtures. (LM79 & LM80) certificate / Report from OEM shall be submitted. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure “A” attached with this BSR .				
	Recessed Mounting				
4.521	Minimum lumen output 650 lm	Each	35.00		
4.522	Minimum lumen output 1300 lm	Each	25.00		
4.523	Minimum lumen output 1600 lm	Each	50.00		
4.524	Minimum lumen output 1950 lm	Each	5.00		
4.60	Providing & Fixing of IP20, 1100-1200 mm x 50-60 mm x 70-85 mm size Suspended Mounting Mid power SMD type LED linear Light fixture made from Extruded Aluminum housing, PMMI diffuser for uniform light distribution. High efficiency with 4 KV internal/external surge protection BIS certified isolated driver having efficiency > 85%, with Short & Open circuit protection (Integral with light fixture). System lumen efficacy of ≥ 100 lm/Watt, THD< 10 %, p.f.≥0.95, CRI>80, life time of minimum 50000 Burning Hours with, 70% of initial Lumen maintained till life ends, CCT 3000°K / 4000°K / 5700°K /6000°K/6500°K (As per ANSI Bin), maximum power consumption should not more than the specified rating and Fixture shall be of BIS standard and trade mark certificate (T.C.). Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing.				
	OEM must have its own in house NABL lab setup for all testing facilities for LED fixtures. (LM79 & LM80) certificate / Report from				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
	OEM shall be submitted. All as per pre-approved by Engineer in charge. For additional technical parameters of products/work , refer Annexure “A” attached with this BSR .				
4.61	Minimum lumen output 3000 lm	Each	20.00		
4.70	Providing & Fixing of IP 20 box made out from 1.2mm thick CRCA sheet steel with depth of minimum 30 mm and finished with powder coating and suitable for mounting LED tube including side covers, holders, internal wiring to illuminate the single sided connection LED tube. (Without tube). All as per pre-approved by Engineer in charge. For additional technical parameters of products/work , refer Annexure “A” attached with this BSR .				
4.71	Suitable for 4’ LED Tube shape fixture for single rod	Each	90.00		
	Total Amount of Indoor Lighting				
5.00	Local Area Networking				
5.10	Supply, Installation, & Testing of 19” 1U Rack Mounted/ surface mounted aluminum/ CRCA 1.2mm powder coated, Single mode glass Fiber Optic Cable Patch panel/LIU loaded with flangeless/screwable duplex adapters for ST/E-2000/SC/LC/MT-RJ/PC type, It should have easy removable Top plate with push buttons, there should be a splice tray installed in the Patch panel/LIU which can handle the fiber cores, splice tray should be PC+ABS material, it should include accessories like mounting hardware, gormetts, heat shrink tubes/sleeves, screws, nuts to install the panel for rack/wall mount applications as per requirement complete in all respect. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure “A” attached with this BSR.				
6.11	24 Ports	Each	5.00		
6.20	Supply & Installation of IP-20 & IK-08 , UL Listed Communication enclosure (Rack) made from powder coated (60 to 80 Micron) CRCA sheet, Vertical Mounting Rail 1.6 MM with ‘U’Marking, front sturdy sheet steel				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SL. NO.	Description of Work	Unit	Quantity	Rate	Amount
	frame folded from one piece and welded with 5mm toughened glass door, with All round protective channel on the door aperture, lock integrated on front door, top and bottom cover with cable entry provision with gland plates, integrated side walls, Set of 75 mm height 4 castors, 2 of which have brakes, Accessories like: 5 Nos of 19” 1U Horizontal Cable manager, 2 Nos of vertical cable managers, 1 no. Keyboard Tray, 4 Nos of 90 cfm 230V AC Fan with 1 mts. long cable, mounting hardware , 2 No of 19” 1U, mountable socket strips with 6 nos. of 5A universal sockets with 2 mts. long power chord for supplying power to switches, fans etc. along with earth continuity kit, indicator, moulded power supply cable complete in all respect. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure “A” attached with this BSR.				
6.21	42 U Rack with Width 800 mm & Depth 1000 mm with 3 no. Heavy Duty Sliding Drawer	Each	5.00		
6.30	Supply, Installation, Testing and Commissioning of Unmanaged Switch Plug-and-play - easy setup with no configuration or no software needed, following Port fast Ethernet - 8 port 10/100 MBPS auto-negotiation RJ45 ports, IEEE 802.3x flow control, supports auto-MDI/MDIX, eliminating the need for crossover cables including making connection etc. as required complete in all respect. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure “A” attached with this BSR.				
6.31	8 Port	Each	5.00		
6.32	24 Port	Each	5.00		
	Total Amount of Local Area Networking				
	TOTAL AMOUNT				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

SANITARY AND PLUMBING WORK

Sl. No.	Description of Work	Unit	Quantity	Rate	Amount
	SANITARY INSTALLATION WORK				
NOTE:	All items which are manufactured ISI marked, shall only be used. this condition shall be always incorporated in special condition of contract.				
1	P & F White Vitreous China <i>Double Symphonic European</i> W.C. (I.S:2556Mark) with mounted W.V.C. flushing cistern of (IS: 2556 Mark) of 10 litre capacity complete with all necessary internal fittings including cutting and making good the wall and floor.	Each	10.00		
2	P & F 1st quality WVC Urinal (IS:2556 mark) with 25mm dia. G.I. waste pipe, dome waste couplings, concealed iron brackets or screws etc. complete.				
2.10	Flat Back (large) or half stall size 610x400x80mm.	Each	10.00		
3	P & F W.V.C. <i>Urinal Partition Plate</i> of approved standard make of size 630x315mm including making good the wall.	Each	9.00		
4	P & F C.P. brass <i>Urinal Spreader</i> for stall urinal of approved make.	Each	10.00		
5	P & F C.P. brass <i>Doom Waste Coupling</i> 40 mm dia.	Each	10.00		
6	P & F WVC Wash basin (1st quality IS:2556 Mark) of approved make with C.I. brackets duly painted 1 No. 15 mm C.P. Pillar cock (IS:8934 Mark) & 32 mm C.P. brass waste coupling of approved make, P.V.C Waste pipe with PVC nut 32 mm complete including cutting & making good the wall :				
6.10	Size 630 mm x 500 mm dia. for counter top	Each	11.00		
7	1.0 mm thick stainless steel AISI -304 & IS 13983-1994 kitchen sink of approved make as per Engineer-in-charge with large waste coupling.				
	Overall size <u>Bowl size</u>				
	(inches) (inches)				
7.10	45 x 20 x 8 20x16x8 (with drain board)	Each	1.00		
8	P & F Bottle Trap of approved make :				
8.10	C.P Brass 40 mm	Each	11.00		
9	P& F waste Coupling with fittings of approved quality /make:				
9.10	C.P Brass 40 mm dia.	Each	11.00		
10	P & F <i>Bevelled edge Mirror/mirror with teak wood lipping around</i> of special glass of approved make as				

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Unit	Quantity	Rate	Amount
	per direction of Engineer-in-charge complete with 6mm thick commercial ply base fixed to wooden screws & washers.				
10.10	Other sizes	Sqm.	19.80		
11	P & F <i>Towel Rail or Ring</i> of approved quality/make:				
11.10	C.P. brass towel rail with brackets 450 x 20mm.	Each	11.00		
12	C.P. Brass Towel Ring revolving type	Each	11.00		
13	P & F Grating of approved quality/make:				
13.10	(-do-) Square 150 x 150 x 8mm. (Anti Cockroach)	Each	50.00		
14	P & F <i>Liquid Soap Container</i> with brackets complete of approved make:				
14.10	C.P. brass	Each	11.00		
15	P & F <i>Toilet Paper Holder</i> with rod of approved quality/make:				
15.10	C.P. brass heavy & Superior quality.	Each	10.00		
16	P & F Shower arm 15mm dia. of approved quality/make.				
16.10	C.P.brass heavy & superior quality 150mm Projection.	Each	3.00		
17	(-do-) size 370mm.(-do-)	Each	3.00		
18	P & F Bath Shower of approved quality/make.				
18.10	C.P. brass of Heavy & superior quality, revolving with adjustable key 150mm.	Each	3.00		
19	P & F Extension Pipe for bib cocks of approved quality/make.				
19.10	C.P. brass of Heavy & Superior quality 50x15mm	Each	41.00		
20	P & F C.P. Health Faucet with 1Mtr. Long Tube & Hook of approved make and heavy as per direction of Engineer-in-Charge	Each	10.00		
21	P & F C.P. brass Urinal Spreader for Large Urinal of heavy duty of approved make as per direction of Engineer-in-Charge	Each	10.00		
22	Providing & Fixing premium quality WVC Urinal with PVC waste pipe, dome couplings, concealed iron brackets or screws etc. complete.				
22.10	Flat Back (large) or half stall size 590x375x390 mm.	Each	10.00		
23	Providing & Fixing premium quality W.V.C. Urinal Partition plate of size 630x315 mm	Each	10.00		
24	P&F Looking Mirror 5mm thick of approved make	Sqm	11.00		

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Unit	Quantity	Rate	Amount
	with ornamental frame size 50x12 with 6mm Ply Board on Back Side Complete as per approved sample				
25	Providing & Fixing chair for wall hung W.C.	Each	10.00		
26	Providing & Fixing premium quality waste coupling 32mm half thread as per approved by Engineer in Charge.	Each	11.00		
27	Providing & Fixing Premium quality Bottle trap internal portion 32mm, size 250mm long wall connection pipe & wall flange as per approved by Engineer in Charge.	Each	11.00		
	Total Amount of Sanitary Installation Work				

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Unit	Quantity	Rate	Amount
	WATER SUPPLY INSTALLATION				
1	P & F Bib Cock (IS : 8931 Mark), Superior quality of approved make:				
1.10	C.P. Brass bib cock,15mm nominal bore.	Each	10.00		
2	(-do-) Long body, 15mm nominal bore weight not less than 690 gm	Each	1.00		
3	P & F Sink Cocks of superior quality & approved made :				
3.10	C.P. Sink cock swinging spout 15mm.	Each	1.00		
4	P & F Inlet Connection (Angle Valves) Superior quality, of approved make, for Wash basin, Geyser etc.				
4.10	C.P. Inlet connection 15mm.Brass (IS : 8931 marked)	Each	20.00		
5	P & F Mixing Range (15mm)				
5.10	C.P. One hole/close hole basin mixer with casted spout.	Each	11.00		
6	C.P. sink mixer with swinging spout J-pipe.	Each	1.00		
7	C.P. wall mixer telephonic type crutch & telephonic shower.	Each	3.00		
8	P & F Diverters of superior quality and approved make:				
8.10	C.P. brass Tip-tone diverter bath spout with mixing valve.	Each	3.00		
9	P & F PVC Storage Tank ISI Marked (IS: 12701) indicating the BIS license No), of approved make with cover, 25mm dia. 1M long G.I. over-flow pipe & 25 Cm. long wash out pipe with plug & socket, including making connection etc., complete of approved design:				
9.10	2000 (-do-)	Each	2.00		
9.20	5000(-do-)	Each	2.00		
10	Hoisting Charges for each floor :				
10.10	For items 2.26.5 to 2.26.8	Each	4.00		
	Total Amount of Water Supply Installation				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Unit	Quantity	Rate	Amount
	DRAINAGE / DISPOSAL WORK				
	<u>RIGID PVC PIPE</u>				
1	P&F rigid <i>PVC Pipe</i> (IS:4985 mark) class II/ (4 Kg./Cm ² .) approved quality /make including joining the pipe with solvent cement rubber ring and lubricant.				
1.10	110 mm dia..	Mtr	50.00		
1.20	160 mm dia..	Mtr	50.00		
2	Providing & Laying C.C. 1:3:6 (Stone Aggregate 20mm nominal size) all around PVC Pipe including 7.5 cm thick bed concrete [Width & Height = Dia. of Pipe in CM+15CM] excluding cost of Pipe & Excavation of trenches etc.				
2.10	PVC pipe 110 mm dia..	Mtr.	50.00		
2.20	PVC pipe 160 mm dia..	Mtr.	100.00		
3	P&F rigid <i>PVC pipe fittings</i> (IS: 4985 mark) of approved quality /make including joining the pipe with solvent cement rubber ring and lubricant:				
3.10	110mm dia.	Each	??		
3.20	160 mm dia.	Each	??		
4	Plain Tee		??		
4.10	110mm dia.	Each	??		
4.20	160 mm dia.	Each	??		
5	Bend 87 .5		??		
5.10	160 mm dia.	Each	??		
6	P- Trap		??		
6.10	110mm dia.	Each	??		
7	Gully trap				
7.10	110mm dia..	Each	9.00		
8	Construction of <i>manhole</i> in all type of soil inner size 90 X 60 Cm. 300 mm thick masonry in CM 1:6, 10 Cm. thick cement concrete 1:5:10 in foundation, 20 mm thick inside plaster in CM 1:6, finished with floating neat cement, 50mm thick M-15 grade C.C. flooring, making channels, 80mm thick stone slab covering with 40mm thick M-15 grade C.C. flooring,				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Unit	Quantity	Rate	Amount
	Cement cover with frame of 450mm dia., earthwork etc. complete as per design including disposal of surplus earth within 50 mtr. lead.				
8.10	Depth up to 0.5 M	Each	7.00		
8.20	Add extra over item 3.19.1 for every additional 0.10m depth above 0.5 m depth.	Each	7.00		
9	Construction of Man hole, in all types of soil, inner size 1.5 x 1.2 M, with 450mm thick masonry in CM 1:6, 10 Cm. thick cement concrete 1:5:10 in foundation, 20mm thick inside plaster in CM 1:6, finished with floating neat cement, 50 mm thick M-15 grade C.C. flooring making channels, 80 mm thick stone slab covering with 40 mm thick M-15 grade C.C. flooring, Ferro Cement cover with frame of 450mm dia., earthwork etc. complete including disposal of surplus earth within 50 mtr. lead as per design :				
9.10	Depth up to 1.5 M	Each	3.00		
10	Construction of <i>chamber</i> in all type of soil with 300 mm thick masonry in CM 1:6 m,10 cm thick C.C. 1:5:10 in foundation, 20mm thick insider plaster in Cm 1:6, finished with floating neat cement, 50mm thick M-15 grade C.C. flooring , earthwork etc. complete as per design including disposal of surplus earth within a lead of 50 mtr.				
10.10	Inside size 300 X 300 mm depth up to 0.5 M Cement cover with frame.	Each	9.00		
10.20	-do- size 450 x 450mm depth up to 0.5 M Cement cover with frame	Each	9.00		
10.30	-do- size 600 x 450mm depth up to 0.5 M Cement cover with frame.	Each	7.00		
11	Supplying and fixing C.I. Cover with frame, C.I. gratings for chambers & man holes.	Kg.	1,365.00		
12	Construction of Cement Concrete Chamber 125mm dia.				
12.10	C.P. Brass grating	Each	50.00		
13	UPVC SOIL WASTE & RAIN WATER (SWR) PIPES				
13.10	Providing and Fixing Un-plasticized Poly Vinyl Chloride (UPVC) SWR Pipes Type B for scabland waste discharge system (IS:13592 : 1992 Marked) of approved quality /make				
13.11	75 mm dia.	Mtr.	232.00		

**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Unit	Quantity	Rate	Amount
13.12	110 mm dia.	Mtr.	159.00		
13.20	Providing and Fixing Un-plasticized Poly Vinyl Chloride (UPVC) SWR Pipes fittings type B for scabland waste discharge system (IS:13592 : 1992 Marked) of approved quality /make				
	Coupler				
13.21	75mm dia.	Each	33.00		
13.22	110mm dia.	Each	23.00		
13.30	Bend 87.5 Dg.				
13.31	75mm dia.	Each	31.00		
13.32	110mm dia.	Each	23.00		
13.40	Bend 45 Dg.				
13.41	75mm dia.	Each	6.00		
13.42	110mm dia.	Each	6.00		
13.50	Door Bend 87.5 Dg.				
13.51	75mm dia.	Each	6.00		
13.52	110mm dia.	Each	6.00		
13.60	Single 'Y'				
13.61	75mm dia.	Each	6.00		
13.62	110mm dia.	Each	10.00		
13.70	Single 'Y' with Door				
13.71	75mm dia.	Each	-		
13.72	110mm dia.	Each	5.00		
13.80	Pipe Clip				
13.81	75mm dia.	Each	10.00		
13.82	110mm dia.	Each	35.00		
13.90	Single Tee				
13.91	75mm dia.	Each	30.00		
13.92	110mm dia.	Each	23.00		
14.00	Single Tee with Door				
14.10	75mm dia.	Each	10.00		
14.20	110mm dia.	Each	10.00		
15.00	Nahani Trap with Jali 4"				
15.10	110mm dia.	Each	38.00		
16.00	Vent Cowl				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Unit	Quantity	Rate	Amount
16.10	75 mm	Each	3.00		
17.00	Vent Cowl				
17.10	110mm dia.	Each	9.00		
	Total Amount of Drainage / Disposal Work				

4.00	TUBE WELL				
4.3	Construction of <i>tube-well</i> from ground levels and upto 100 Meter depth and above to accommodate housing and assembly pipe of following sizes in all types of alluvium strata by percussion/ rotary drilling method and with gravel as per IS:4097-1967 and packing as per IS:2800 (Part I -& II) 1979 as amended up to date (the work includes the cost of gravel & its primary packing and packing during development, lowering of housing & strainer assembly pipes, with supply and wrapping of coir-rope, wherever necessary, for arresting fine sand particles. The work will not include cost of housing pipe and strainer pipe assembly and development work, but work would be completed after obtaining sand free water).				
4.3.2	200mm –do-.	Rmt	150.00		
4.4	Development of tube well as per IS specification using suitable compressor to give sand free water for required yield of the gravel packed tube well.	Hr.	10.00		
	Supply of <i>ERW M.S. black casing pipe</i> ISI marked (IS:4270/1992) of grade Fe410 of following sizes at site of work.				
4.41	200 mm Nominal bore of pipe	Mtr.	80.00		
4.42	Supply of <i>strainer pipes</i> made of ERW M.S. black pipe ISI mark of following sizes at the site of work including required size of slotting as per IS:8110-1985.				
4.421	200mm-do-.	Mtr.	10.00		
4.43	S & F <i>tube well</i> cover of M.S.sheet (6mm thick) with nuts and bolts complete for casing size:				
4.431	200mm dia.	Each	1.00		
4.44	S & F M.S. <i>clamp</i> , set of 50 x6mm flat iron with nuts and bolts etc. for holding the riser pipe assembly of submersible pump set.	Each	1.00		
4.45	Installation of submersible motor pump set in Tube-well/open well complete (labour charges only)	Each	1.00		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Unit	Quantity	Rate	Amount
	including transportation of tripod, chain pulley block & any other material required for lowering purpose.				
4.5	Supplying and installation of <i>submersible pumping motor pump sets</i> I.S.I. Marked (IS: 8034-1989) of approved make like K.S.B., KIRLOSKAR, Calama etc. or equivalent, making connection suitable for T.W./D.C.B./Open well. The job includes screwing and welding of flanges on G.I. riser pipes, installation of complete fitting and accessories, with riser pipes, jointing of electrical cables and other connections making switch board electrical connections, all labour for testing of submersible pump set and supply of water to water mains, complete in all respect (Refer Electrical BSR)				
	For item of earthing refer to Electrical BSR .				
	For item of submersible cable refer to Electrical BSR.				
	for Item of panel board refer to Electrical BSR				
	Providing & lowering of G.I. Pipes, flange pipe including rubber washer and nuts of 8 mm dia. complete in all respect I.S.1239 Marked.				
4.51	B Class 50 mm dia..	Rmt	130.00		
5.00	<u>RAIN WATER HARVESTING</u>				
5.10	Construction of tubewell up to 100m depth and above to accommodate housing and assembly pipe in all types of alluvium strata by rotary drilling method with “code of practice for construction and testing of tubewells (IS:2800 (Part-II): 1991 and IS:2800 (Part-II) :1979 both amended up to date) with supply of bail plug if necessary. The work will not include cost of housing pipe and strainer pipe assembly cost, gravel and development work. Work would be deemed completed only after obtaining sound free water during pumping.				
5.11	150 mm nominal bore	Rm	100.00		
5.20	Construction of Recharge Shaft in filter pit including Earth work Excavation , lifting excavated earth with all lift and 50 m lead and centring& shuttering even ever required.				
5.21	Diameter 900 mm	Rm	1.00		
5.30	Supply & fixing Pre-cast RCC Rings at the mouth of recharge shaft of M20 mix with 40 mm thickness				
5.31	Diameter 900 mm	Rm	10.00		
5.40	Supply & lowering air line of 25mm dia. G.I. pipe ‘B’	Rm	50.00		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description of Work	Unit	Quantity	Rate	Amount
	class having perforation 3 to 5mm size all arrow of G.I. pipe in Zig-Zag fashion & making air vent at top including the cost of Tee-Nipples, Elbow, Socket etc.				
5.50	Supply and lowering vent air pipe 63mm dia. rigid PVC pipe (IS 4985) mark class II (4kg per cm ²) with required all necessary fittings including perforation of 3 to 5 mm size all around the pipe at a distance of 180 to 220mm in zig zag fashion and making air vent at top complete as per direction of Engineer in charge.	Rm	30.00		
5.60	Supply & lying River-gravels of following sizes in recharge shaft, filter pit after screening & washing from kachha shift without deduction of voids				
5.61	Size 9 to 12 mm	Cum	5.00		
5.62	Size 3 to 5 mm	Cum	2.00		
5.70	Supply & laying of clean, clear sharp river sand of size 1 to 2mm coarse, without deduction of voids.	Cum	2.00		
	Total Amount of Tube Well				
	Total Amount				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

External Electrical Work

Sl. No.	Description	Unit	Qty	Rate	Amount
	Supply installation testing & Commissioning of Copper wound distribution Transformer of following rating and % Impedance, 11/0.433KV Delta-Star Connected, Vector Group Dyn 11, ONAN Cooled losses as per IS 1180 part I 2014 (Fourth Revision) Level-1, with boltless core design including standard accessories like conservator with prismatic oil level gauge , silica gel breather, Bucholz relay, pressed steel radiator fins, Radiator Valve(above 800 KVA) Suitable size HT cable box, LT cable box with Busbar connection for outgoing cables, Off -LTC (+/- 2.5%, +/- 5% to - 7.5%), temperature rise of 40 degree C in oil / 45 degree C in winding , drain valve, Air release device, Dial type Oil & Winding Temperature gauge with alarm & trip contacts, first filling of transformer oil as per IS :335-1953 , Epoxy primer and PU based paint as Top coat, Unidirectional rollers for rating up to 800 KVA & bi- directional above 800 KVA rollers with locking arrangement etc. as required. The Transformer shall be subjected to routine factory tests (as per IS:2026 and IS:1180) including Temperature rise test in OEM’s own lab shall be witnessed by Department Engineer Physically.				
	Transformer shall be tested from CTL of discom before charging of transformer & complete installation must be certified from Electrical Inspectorate office as per Indian Electricity rule, (CTL testing charges and Electrical Inspection charges shall be reimbursed by the department to the contractor) Following tests shall be carried out on each transformer at site by OEM engineer in presence of department authorized representative: - a) Ratio test on each tapping. b) Resistance of windings at principal and all tapings. c) Insulation resistance of the winding between HV to earth / HV to LV / LV to earth. d) Vector group test. e) Magnetic Balance test. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	500 KVA with % Impedance 4.5	Each	1		
	SITC of Indoor Type Floor mounted metal clad 11 KV, 630 Amps 3 phase, 50 Hz Vacuum Circuit Breaker (VCB) Panel Fabricated in VCB Manufacturer's own Factory as per IEC 62271-1,100,200 Standard made from Powder painted pre-fabricated, CRCA sheet steel /High quality Aluminium-Zinc (Aluzinc) coated sheet steel. Fabrication shall be done through CNC turret press and CNC bending machine having a rupturing capacity of 500 MVA, 26.3 KA breaking capacity for 3 sec, Internal arc type tested for 26.3KA for 1 sec with AFLR classification totally enclosed with Aluminium bus bar of 630 Amps for each phase, flush front, Horizontal isolation, Horizontal draw out type with Electrical and Mechanical interlock and automatic safety shutter gear including padlocking arrangement, isolation plugs, assembly of 3 vacuum interrupters (VCB manufacturer's own make) , with each pole individually encapsulated by epoxy insulations to make it dust proof and self - aligning finger type isolating contacts, truck having integral racking with necessary interlocks (for insertion and removing of VCB), manual and automatic motor charged independent closing/ tripping spring , trip free operating mechanism with closing and tripping push buttons and mechanical breaker. interconnected with HT sleeve bus bar of 630 Amps, Basic Insulation level (BIL) : 28KV (RMS) / 75KV (Peak) and Altitude less than 1000 meters, including all protection, indication, Operation, monitoring and control and accessories etc. as required. . Factory Tests of VCB panel as per OEM's QAP in its own Manufacturing facility shall be witnessed by department Engineer virtually / Physically. (Cost of RCC Foundation / Steel Structure to be paid Extra) All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR .				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	<p>Incoming Cum Outgoing Panel comprising of Side cable box & Transformer Auxiliary protection and comprising of following.</p> <ul style="list-style-type: none"> – VCB 630 Amps. VI of VCB should be sealed for 30000 operations. VCB operation mechanism should be of M2 duty for minimum 10000 mechanical operations. – Closing & tripping coil of VCB should be of continuous rating to achieve minimal failure. – Resin Cast type CT having Ratio : 400-200A/ 1-1 A, Core1: 5P20, 5 VA; Core 2: 0.5, 5 VA (However CT Ratio shall be decided as per load requirement) – VT Ratio: 11KV/1.732/110V/1.732/110V/1.732, -Core 1: 0.5, 20VA should be floor mounted and to be connected from the back side of the panel. – Numerical relay (should be VCB manufacturer's own make) having protections of 50, 51, 50N, 51N, TCS. The relay shall have programmable 4 digital Input, programmable 6 Digital Output and programmable 4 nos. LED at HMI. – Ammeter with Selector switch and Volt meter with Selector switch – Multifunction Meter of Acc Class 0.5, having facility to monitor KW, KVA, KVAR, PF, KWH, KVARH, KVAH, AV etc. – Trip circuit supervision relay (feature of numerical relay) – LR, TNC switch, indication lamp - CB ON/OFF, spring charge, Auto trip, TCS healthy etc., Space heaters – Power Pack (230V AC- 110V DC) and 8/12 window Annunciator. 	Each	1		
	SITC of battery bank of min 150 AH capacity comprising SMF/VRLA batteries, FCBC (Float cum boost charger) suitable for 415V +/-10%, 50 Hz, 1-ϕ / 3 -ϕ Input & 24/ 48 /110 V DC Output Natural Cooled, free standing in Sheet Steel enclosure, SCR controlled , regulation +/-1% , Efficiency > 75% on FLAC/ DC Instruments, Selector Switch ,Built in DC Distribution Board (6 No MCB), indication , control as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each			
	SITC of HT metering cubical panel as approved By DISCOMs fabricated out of 18 SWG CRCA sheet steel in two compartment & MS angle of size 60mmX 6mm having provision for Following: (i)Provision for fixing Trivector/ Import - Export Meter (To be supplied by DISCOMs) (ii)Provision for fixing of combined CT PT Set with Copper strip for Connection (To be supplied by DISCOMs), (iii)Test terminal Block, (iv) 6mm thick Bakelite sheet on all sides, (V) 3/6 corex 1.5 / 2.5 Sq.mm copper cable for interconnections, etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each	1		
	SITC of Radiator Cooled and Turbo charged Silent DG Set (As per latest CPCB emission norms) having specifications as per A, B, C, D, E, F,G,H & I				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	A) 1500 RPM Diesel Engine conforming to BS:649/5514 of suitable BHP (up to 82.5 KVA 6 cylinder or Below required, 125 KVA & Above ratings 6 cylinder or above required) capable of taking 10% over loading for one hour after 12 hours of continuous operation., Dry exhaust manifold with Hospital grade silencer and catalytic convertor (isolated from main DG chamber), up to 3 M exhaust piping (with LRB insulation & Alum. cladding) as required .				
	B) AC Brush less SPDP Alternator conform to BS 5000 (part 99) or IS/IEC 60034-1. Alternator shall be self-regulated with standard Alternator Protection(Over voltage , over speed & under voltage, under speed warning & shutdown).Engine & Alternator mounted on a common base Frame & coupled through a flexible coupling or close coupled				
	C) CPCB / ARAI approved Standard canopy with Weatherproof, powder coated Acoustic enclosure for DG set for sound attenuation fabricated from 1.6 mm CRCA sheet steel (structure) with sidewall fabricated from 1.6 mm CRCA sheet & filled with glass wool (96Kg/m3) / Foam. as per IS8183 the doors of 28/40/50/85mm thick as per rating and fabricated from 1.6mm CRCA sheet packed with acoustic material, all doors/opening are sealed with neoprene /EPDN gaskets. The DG Set has Inbuilt / External in fuel tank to run 6 to 8 Hrs as per OEM standard, with protection and tripping of DG set against temperature of more than 50 degree centigrade.				
	D) Electronic / Mechanical governor, Manual & electric Start ,Batteries with battery charger, Engine instruments panel, AVM pads All controls for operation of DG set are from outside the enclosure with DG control panel having Microprocessor based Genet monitoring like Running Hour, RPM, Low Lube Oil tripping & control system, Panel mounted MCCB/ACB of suitable rating, Ammeter, Voltmeter, PF meter, frequency meter, KWH meter, digital fuel display meter, Ind. lamps etc. mounted inside enclosure , visible and accessible from outside. The enclosure should be suitable for following capacity DG sets and alternator. Noise level shall be less than 75 dB at a distance of 1 Mtrs. duly certified by authorised agency etc. complete in all respect of following capacity :				
	E) (i) Acoustic glass wool wall thickness should not be less than 40mm and not less than 20mm PU foam up to rating 100 KVA. (ii). Acoustic glass wool wall thickness should not be less than 65mm and not less than 50mm PU foam up to rating 250 KVA. (iii)Acoustic glass wool wall thickness should not be less than 100mm for rating above 250 KVA.				
	F) First filling of the fuel tank shall be done by contractor and the prevailing fuel cost at that time shall be reimbursed to the contractor by department.				
	G) Servicing Contract of DG Set from OEM's Authorised Service Dealer as per OEM guidelines during the DLP period shall be done by contractor including all consumables, actual charges shall be reimbursed to the contractor by End User Department.				
	H) Manufacturer / OEM must have its authorized service dealer in Rajasthan. Which can provide service within 6 Hours of complaint registration.				
	I) DG set will be offered for Inspection and Testing at Manufacturer's Works in presence of Departmental Engineers. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	400 KVA at 0.8 pf 415V 50Hz 3-Ø	Set	1		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	Providing, Fixing, Jointing, Testing & Commissioning of Medium duty MS B class pipes conforming to IS 3589 / 1239 part-I for DG Exhaust applications (beyond 1.5 Mtr. length) including cutting, welding etc. & fittings like elbows, flanges, tapers, reducer, gaskets etc. fixing the pipe on the wall/ceiling with suitable clamps, hanger and nuts bolts. including the cost of thermal insulation with 50 mm thick layers of LRB rock wool as per IS: 8183-1993 (64 kg/m3 density) & 26 SWG aluminium sheet claddings etc complete as required complete in all respect. (Cost of Steel Structure for Exhaust pipe will be paid Extra). All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	125 mm dia.	Mtr.	25		
	Supply & fabrication steel structure with MS channel / angle / joist / ISMB / sheet etc. including welding, riveting, cutting, nut & bolt, one coat of primer & two coat of enamel paint etc. as required complete in all respect. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR.	Kg	200		
	Gravelling of Transformer / RMU Yard with 100 mm Height Gravels of Size 20 to 25 mm including levelling, Dressing etc. as Required.	Sqm	10		
	SITC of PLC Based Auto main failure (AMF) Panel fabricated from CRCA sheet steel 2 mm. Thick , Powder coated finish , Engine Start & Stop commands, control Relays , Ammeter & Voltmeter with selector switches, Control & 2 nos. 4 pole Power Contactors with 2 no. of required size 4 pole MCCB, Timers, Electronic Hooter ,Visual & Alarm indication for faults, UPS, operator interface panel complete in all respect suitable for following capacity DG sets: Appropriate Test Certificate/ report of product/accessories from OEM/Panel Manufacturer shall be submitted. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
	500 KVA	Set	1		
	Providing & Laying XLPE insulated three core Armoured Aluminium cable for working voltage 11 K.V.(E) confirming IS :7098 P - 2 with H4- Grade electrolytic aluminium conductor confirming to IS: 8130 class-2 of purity >99.6 % , Insulation Screening: Extruded Semiconducting Compound followed by helically wrapped Copper Tape, round / flat strip armoring of cables , Inner / outer sheath PVC type ST-2 confirming to IS:5831 in existing RCC / Hume / Stoneware / PVC pipe/ open duct/cable trench / Cable tray including testing etc. as required of following size. OEM must have its own in house NABL accredited Laboratory for testing procedure as per IS:10810 All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR.				
	3 core 185.0 Sq.mm	Mtr	150		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	Providing & making heat shrinkable type indoor/outdoor/straight through terminations/ joint kit suitable for 11 KV / 33 KV (Earthed) cable with required components, preparation of cable ends. Type test report should be as per IS13573:2011 which covered all sequence for table 2 for termination kit and table 3 for straight through joint inclusive thermal & dynamic short circuit test, humidity test, soil fog test. Cross linking shall be done outside factory with E- beam/ peroxide technology. Extrusion process shall be in house OEM within same vicinity. including testing etc. as required of following sizes. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR.				
	11 KV End Termination Kit Indoor type				
	3 core 120/150/185 Sq.mm	Each	2		
	11 KV End Termination Kit Outdoor type				
	3 core 120/150/185 Sq.mm	Each	2		
	SITC of IP-42 and general construction confirming to IS:8623 : 1993, wall/ free standing floor mounted dust and vermin proof compartmentalised cubical panel as specifications and Other parameters required as per point (a) ,(b), (c),(d), (e), (f), (g), (h) as below:-				
	(a) Thickness of CRCA sheet shall be 2.0 mm, cable alley compartments having concealed hinged type doors with key type lock with / without detachable extension type structure. Removable 3 mm. thick sheet steel gland plates with appropriate size of knockouts for cables shall be provided				
	(b) complete panel shall undergo a process of degreasing, Water rinsing, Activation, derusting, pickling in acid bath, phosphatising & shall be subjected to nine tank process and then Powder coated with approved shade of minimum 70 microns on both side of panel. The panel having PE foam/ Neoprene rubber gasket of not less than 3mm thickness ,required hardware , concealed hinged door with key type locking arrangement for equipment/switchgear earthed with 2.5 sq.mm braided copper wire.				
	(c) Interconnection between bus bar and switchgears /cable shall be rigidly supported and made out by flexible copper wires (up to 63 amp) and by solid bus bar (>63 amp). control wiring will be carried out with 1.5 Sq.mm, Earth wire with 2.5 Sq.mm and CT with 2.5 sq.mm flexible copper wire only. All joints / interconnections of copper bus bar shall be dully tinned. Clearance between main bus bar and risers' / metal parts shall be at least 10 mm additional to width of bus bar Bus bar is insulated by Heat Shrinkable sleeves. Earth and Neutral bus bar shall be half of the size of phase bus bar. (Cost of Bus bar / Flexible wire for Interconnection between Main bus bar and Switchgear is to be Paid Extra)				
	(d) Wiring between components within switchgear and Incoming / outgoing cable shall be done through the terminal block only. Direct connection shall not be permitted. Each terminal block shall be one piece moulded, barrier type, 650-volt grade, complete with washers, heads, studs with two nuts and identification strips and shall have adequate continuous current rating. For tap-offs, adjacent terminals with shorting strips shall be used. 10% Spare terminal blocks shall be provided. Wire identification on marking strip shall correspond to the designation of the wiring diagrams. All wire terminals on the equipment shall also be marked with designation corresponding to those of the wiring diagram.				
	(e) All wiring shall be enclosed in plastic channels and neatly bunched and closed in metering chamber, Wiring between terminals of various devices shall be 'point to point' (no wire splitting or tee connections) with wires neatly trucked along the back of the panels, adequately supported to prevent sagging.				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	(f) Floor mounted panel shall be mounted on Base frame of ISMC channel size 100 x 50 x 5 mm (to be paid Extra)				
	(g) Tests: The insulation resistance (with 1000 V Megger) and High voltage Power frequency test (by applying a voltage of 2.5KV for one minute) shall be measured between phases, between phase and neutral and between phase and earth. both before and after high voltage power frequency test. The insulation resistance shall not be less than three mega ohms. CT Secondary current injection test shall also be carried out.				
	(h) only outer surface area on all sides shall be measured & panel to be fabricated only from CPRI approved fabricator only (CPRI Test certificates to be submitted) All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR.	Sq. Mtr	150		
	Providing & Fixing of IS: 13875 & IEC :61326 confirming LED Digital type (up to 500) V range Volt meter / Direct- Ammeter / CT over ratted ammeter/ Frequency meter / KWH meter / Multi-Function Meter / Power analyser of class 1 accuracy as per IS: 1248 of size 96mm x 96 mm including making connection by PVC insulated copper conductor with PVC sleeves / channel etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR.				
	Three phase Ammeter with Inbuilt Selector Switch	Each	6		
	Three phase Voltmeter with Inbuilt Selector Switch	Each	6		
	Three phase KWH Meter Dual Source	Each	2		
	Three phase AMP + HZ + PF + KW + KVA + KVAR + KVARH+KWH+DUAL ENERGY+ ENERGY+THD-I, THD-V & RUN HRS	Each	2		
	Providing & Fixing of BIS approved Current Transformer as per PWD specification for electrical Works ,ISI marked as per IS 2705-1992/ conforming to IEC 60044-1, with secondary terminal of CT shall be brought out suitable to a terminal block which shall be easier accessible for testing and terminal connection , with all necessary support in existing panel including connection etc. as required Current transformer Ring Type Tape Wound/Resin Cast Wound as per IS 16227 with, Accuracy Cl, CT ratio and burden as specified. ISF<=5, Cu cross section of secondary wire 1.5sqmm (minimum), including all necessary support in existing panel including connection etc. as required. All as per pre-approved by Engineer in charge. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
	C T Class 1, Ratio 400/5 to 1200/5, Burden 15 VA	Each	6		
	Providing & Fixing of 110/220 V, uni-body LED Indicating lamp IEC 60947 with integral circuit, IP 65 above panel & IP 20 terminal block, Approx. body dia for panel not less than 20 mm, length min. 50mm, front LED cover dia min. 29 mm, contact material phosphor bronze for Led, PCB contacts shall be of brass (tin plated), impulse dielectric tested for 2.5 KV, rated insulation resistance shall be 100 M ohm at 500VDC including connection etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR .				
	Red/yellow/Green colour	Each	18		
	Blue / white Colour	Each	18		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	Providing & Fixing of Electrical insulating rubber mats as per PWD specification for electrical Works, ISI marked confirming to IS: 15652 / 2006 with one side anti-skid aberration marks and pasting the mat with synthetic rubber adhesive as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
	11 KV, Class B 2.5 mm thick with proof voltage 22 KV AC (rms) and Break Down Voltage 45 KV AC (rms)	SQ.Mtr.	10		
	Providing & Fixing of self-healing IP20 MPP type shunt capacitor (banks) conforming to IS:13340-41 / IEC :831-1&2 OR IEC: 60831-1& 2 in existing panel or parallel with load terminals, the capacitor shall be fitted with discharge resistors, pressure sensitive disconnecter (PSD) and shall have dissipation factor less than 0.0025 at 50 Hz, Operating loss less than 0.30 Watt per KVAR. Min over current capacity 1.8 times rated current & peak inrush current min. 300 times of rated current, life expectancy greater than 100000hrs (temp class - 25 D) in 440 V/480 V Capacitor and for 525 V should life expectancy minimum 1,65,000 hrs (temp class - 25 D) including making connections, testing etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR.				
	Heavy duty Three phase 440 V, 50 Hz cylindrical type capacitor (Bank)	KVAR	180		
	Providing & Fixing of 3-Phase 415/440 V, 7 % / 14 % Detuned Reactors conforming to IEC 61558-2-20 & IEC 60076-6 Aluminium wound for harmonics filter with 180% to 200 % Linearity, H - Class Insulation (180-degree C), high temp. Disconnection above 155 deg C., ambient temperature: +60 deg C. with thermal cut off switch in existing panel with following Capacitor ratings. including making connections, testing etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR.				
	7 % (189 Hz) Aluminium wound Reactors				
	For 1 to 5 KVAR capacitor		2		
	10 KVAR		2		
	25 KVAR		2		
	50 KVAR		2		
	Providing & Fixing of IP54 microprocessor based 3 CT's for all 3 phase sensing compensation power factor correction relay Size 139mm x 139 mm, Operating Voltage 415/440 V , IEC / EN 61000-6-(2&4) having 3 CT sensing, sensitivity up to 50 mili amp secondary current , self-analysing auto c/k setting according to targeted power factor setting, the relay shall have digit display unit for display of real power factor, targeted power factor, lag/lead capacitor switching status, alarm output for under current, over current, insufficient compensation, communication interface with RS 485, indication of switching on units, auto/manual status, and shall have over load protection, no volt release , having multi parameter like KW, KVA, KVAR, RMS Value, step switching time 2 sec to 1800 sec. Lead & Lag parameters, metering facility and 3 no. Class- 0.5 Cast Resin CT (refer CT specs in this chapter)for sensing the relay including making connection with 1.5 Sq.mm copper wire etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR.				
	12 to 14 stage	Each	1		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	Providing & Fixing of AC operated heavy duty 230 /440 Volt power contactor as per PWD specification for electrical Works, ISI marked IS/IEC 60947-4-1: 2000 having provision of mechanical interlocking, auxiliary contacts, Din rail mounting type including making connections, testing etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	3 pole Power contactors with following AC 3 Rating				
	Up to 12 Amp	Each	2		
	13 to 25 Amp	Each	2		
	80 Amp	Each	2		
	185 Amp	Each			
	Providing & Fixing of 440 Volt 3 pole capacitor (AC 6 B) duty contactor with 3 no. early make and post break auxiliary contacts in series with quick discharge damping resistors/ reactors to limit the inrush current as per PWD specification for electrical Works, IS/IEC 60947-4-1: 2000, insulation voltage 1000V, impulse withstand voltage 8 KV, Din rail mounting type including making connections, testing etc. as required. suitable for following capacity capacitor bank. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
	up to 6 KVAR	Each	2		
	10 KVAR	Each	2		
	25.0 KVAR	Each	2		
	50.0 KVAR	Each	2		
	P & F of Automatic Transfer Switch (ATS) conforming to IEC60947-6-1, Utilization category AC-33B in Existing panel for automatic on load transfer between two source power supply of 415V through Solenoid/Motorised mechanism and integrated with three positions realize fast transfer within 100 ms. ATS shall have three positions (S1-OFF-S2) , Manual / Auto Override feature, The two sources can be isolated in the off position with a padlock. capability to expand with RS 485 communication module, which can ensure real-time transmission of communication data. ATS shall have automatic generator start & stop control function; Auxiliary contacts to indicate mechanical positions. Minimum Electrical operations 6000, of following Current ratings, including making connections etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR.				
	800 Amps	Each	2		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	SITC of Draw out type 3/4 pole door interlock Air Circuit Breaker (ACB) as conforming to IS/IEC 60947 P - 2 :2003 in existing LT panel suitable for LT installation 440 V, 50 Hz and having adjustable over load short-circuit, Instantaneous , earth fault (LSIG) with separate LED indication for each type of fault shall confirm to EMI/ EMC test , LCD/LED display, last 10 trip history, provision of ZSI, Communication, Power metering module, Thermal memory , trip free mechanism , suitable for ambient 50 degree and utilization category B. In built electrical & mechanical anti pumping feature, 100% rated neutral. ACB shall have separate indication for service, test, isolation & maintenance position, Breaking capacity Icu = Ics = Icw (1 sec) , U imp - 12 KV, break time not more than 25 ms. Provision for electrical & mechanical interlock between ACBs, Min. electrical operation 10000 upto 2000 A rating and 5,000 for 2500 A to 4000 A. including making connections, testing etc. as required. OEM shall have submitted NABL / CPRI / ERDA accredited lab type test certificate before execution. All as per pre-approved by Engineer in charge. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR.				
	Microprocessor based release Draw out type (Motorised charging type) 4 Pole				
	630/800 A Rating ,50 kA	Each	2		
	SITC of 3 /4 pole current limiting Moulded case circuit breaker (MCCB) made of flame retardant & heat resistant material having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings , conforming to IS/IEC 60947 P -2 :2003 with front face and centralised adjustable, trip free mechanism, true contact position indicator, line load interchangeability, designed for both horizontal & vertical mounting without any adverse effect on electrical performance, suitable for operation up to 55 degree and without derating up to 40 degree, pollution degree 3, having positive isolation capability, push (test) to trip, trip time less than 10 ms under s/c condition, Breaking capacity Ics = 100% Icu . U imp =8 KV, rated insulation voltage 690 V . provision for UVR, shunt trip, earth fault trip, door interlock, pad lock & rotary handle, including making connections etc. as required. OEM shall have submitted NABL / CPRI / ERDA accredited lab type test certificate before execution All as per pre-approved by Engineer in charge. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR.				
	3 pole MCCB With Thermal Magnetic release				
	up to 100 Amp , 10 kA, fixed O/L & fixed S/C setting	Each	6		
	up to 100 Amp , 25 kA, adjustable O/L & adjustable S/C setting,	Each	2		
	125 Amp , 25 kA, adjustable O/L & adjustable S/C setting,	Each	1		
	4 pole MCCB With Thermal Magnetic release				
	up to 100 Amp , 10 kA, fixed O/L & fixed S/C setting	Each	34		
	up to 100 Amp , 25 kA, adjustable O/L & adjustable S/C setting,	Each	1		
	200 Amp , 25 kA, adjustable O/L & adjustable S/C setting,	Each	2		
	250 Amp , 25 kA, adjustable O/L & adjustable S/C setting,	Each	2		
	400 Amp , 35 kA, adjustable O/L & adjustable S/C setting,	Each	2		
	630 Amp , 50 kA, adjustable O/L & adjustable S/C setting,	Each			



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	Providing & Laying P.V.C. / XLPE insulated & P.V.C. sheathed Armoured Aluminium cable confirming to IS:1554 P-I / IS :7098 P - I of 1.1 KV with H4-Grade electrolytic aluminium conductor confirming to IS 8130 of purity >99.6 %, round / flat strip armouring of cables, Inner / outer sheath confirming to IS:5831 in existing RCC / Hume / Stoneware / PVC pipe/ open duct/cable trench / Cable tray (with cable tie) including testing etc. as required of following size. OEM must have its own in house NABL accredited Laboratory for testing procedure as per IS:10810.For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
	4.0 Sq. mm				
	4 core	Mtr	130		
	6.0 Sq. mm				
	2 core	Mtr	300		
	4 core	Mtr	90		
	10.0 Sq. mm				
	4 core	Mtr	250		
	16.0 Sq. mm				
	4 core	Mtr	120		
	25.0 Sq. mm				
	3.5 core	Mtr	40		
	35.0 Sq. mm				
	3.5 core	Mtr	80		
	50.0 Sq. mm				
	3.5 core	Mtr	50		
	70.0 Sq. mm				
	3.5 core	Mtr	60		
	95.0 Sq. mm				
	3.5 core	Mtr	40		
	120.0 Sq. mm				
	3.5 core	Mtr	20		
	150.0 Sq. mm				
	3.5 core	Mtr	20		
	185.0 Sq. mm				
	3.5 core	Mtr	150		
	240.0 Sq. mm				
	3.5 core	Mtr			
	300.0 Sq. mm				
	3.5 core	Mtr	180		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	Supplying and making one end termination with Nickel plated heavy duty brass single compression gland (as per IS 12943-1990) SIBG type consisting of Check Nut, Gland Body, Metal Washer (3 Nos.), Outer Seal Rubber Ring, Compression Nut, heavy duty aluminium lugs (as per IS 8309 -1993) duly crimped with crimping tool, PVC tape as per IS 8337-1976 of following size of PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100-volt grade as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
	4 x 4.0 sq.mm	Set	16		
	2 x 6.0 sq.mm	Set	20		
	4 x 10.0 sq.mm	Set	10		
	4 x 16.0 sq.mm	Set	8		
	3.5 x 25.0 sq.mm	Set	4		
	3.5 x 35.0 sq.mm	Set	4		
	3.5 x 50.0 sq.mm	Set	4		
	3.5 x 70.0 sq.mm	Set	2		
	3.5 x 95.0 sq.mm	Set	2		
	3.5 x 120.0 sq.mm	Set	4		
	3.5 x 150.0 sq.mm	Set	6		
	3.5 x 185.0 sq.mm	Set	6		
	3.5 x 240.0 sq.mm	Set	8		
	3.5 x 300.0 sq.mm	Set	8		
	Supply, Fabricating & installing following sizes of perforated Hot dipped Galvanized iron cable tray (Galvanized thickness not less than 50 microns) with perforation not more than 17.5% in convenient section including horizontal and vertical bends, reducers tees, cross members and other accessories as required and duly suspended from the ceiling with GI suspenders including GI bolts & nuts, fasteners, supports etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
	100mm x 50mm x 1.6mm	Mtr	60		
	150mm x 50mm x 1.6mm	Mtr	200		
	225mm x 50mm x 1.6mm	Mtr	40		
	300mm x 50mm x 1.6mm	Mtr	30		
	450mm x 50mm x 2.0mm	Mtr	30		
	600mm x 50mm x 2.0mm	Mtr	40		
	Supply and fixing following size of Hot dipped Galvanized (275 GSM) floor raceways / Under floor trunking with/ without partition, including common cover, joint sleeve, cross over junction Box etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
	150 mm x 38 mm x 2.0 mm with 2 Compartment	Mtr	100		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	Supply and fixing following Hot Dipped Galvanized (275 GSM) accessories for floor raceways / Under floor trunking etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR.				
	Access Outlet 200 mm x 200 mm x 40-75 mm with Galvanized Lid	Mtr	6		
	Pipe Earthing as per IS:3043- 1987 with 3.0 Mtr. Long, 40 mm dia. 'B' class G.I. Pipe IS: 1239 (Part-1) 2004, Equivalent to BS : 1387 with perforated holes of 12 mm dia ,including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and Heavy duty weather proof poly-propylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm, Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. and embodying the pipe complete with alternate layers salt and coke/ charcoal, testing of earth resistance for value of 5 ohms or less as required & must record by engineer in charge during site visit and ensure to enter in measurement book. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Set	40		
	Plate Earthing as per IS:3043 with Hot dipped G.I. Earth plate of size 600mm x 600mm x 6.0mm by embodying 3 to 4 mtr. below the ground level with 20 mm dia. G.I. 'B' class watering Pipe ,including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and Heavy duty weather proof poly-propylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm, Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. and embodying the pipe complete with alternate layers salt and coke/ charcoal, testing of earth resistance for value of 5 ohms or less as required & must record by engineer in charge during site visit and ensure to enter in measurement book. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Set	16		
	Supply & Laying following size earth strip in horizontal or vertical run in surface by means of Earth strip DMC Insulator including riveting/ soldering/ welding, Jointing shall be done by overlapping and with 2 set of Brass (for Cu strip) / GI (for GI Strip) nut bolt & spring washer spaced at 50cm making connection etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	25mm x 3mm copper strip	Mtr.	100		
	50mm x 6mm copper strip	Mtr.	200		
	25mm x 3mm G.I. (Hot Dipped) Strip	Mtr.	250		
	25mm x 6mm G.I. (Hot Dipped) Strip	Mtr.	80		
	50mm x 6mm G.I. (Hot Dipped) Strip	Mtr.	80		
	Supply & Laying following size earth wire in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection with GI/Cu purity >95% thimble etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	8 SWG tinned copper Wire	Mtr.	300		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	SITC of UL 10th edition / EN54 / VDS certified Automatic Floating Sensitivity type Analog addressable Multi criteria (two optical/Smoke sensor to reduce false alarm) detector with mounting base & LED etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each	40		
	SITC of UL 10th edition / EN54 / VDS certified Rate of Rise Heat Detectors (Thermal Detectors): GRADE-I Analogue Addressable Type Heat Detectors with solid state design with sensing element combination of fixed type and rate of rise of temperature mounting base & LED etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each	4		
	SITC of UL 10th edition / EN54 / VDS certified Analogue Addressable type Multi criteria (Heat & smoke) Beam detector along with interface module having a coverage area with a distance of min. 10 m and max. 100 m, operating temperature range: -20 C to +55 C, Response sensitivity of 40%, shall UL/EN54 certification including transmitter and receiver unit with mounting base & LED etc. including the cost of all accessories, mounting arrangement Etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Set	6		
	SITC of UL 10th edition / EN54 / VDS certified Addressable Manual Call point (MCP) with LED / FIRE Indication Etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each	6		
	SITC of UL 10th edition / EN54 / VDS certified Addressable sounder with strobe light, Loop Powered / Direct powered from FACP with sound level 90 dB and programmable from the panel etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each	20		
	SITC of Response Indicator for indicating the activation of the Remotely located Detector for Addressable Type Detectors Etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each	10		



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

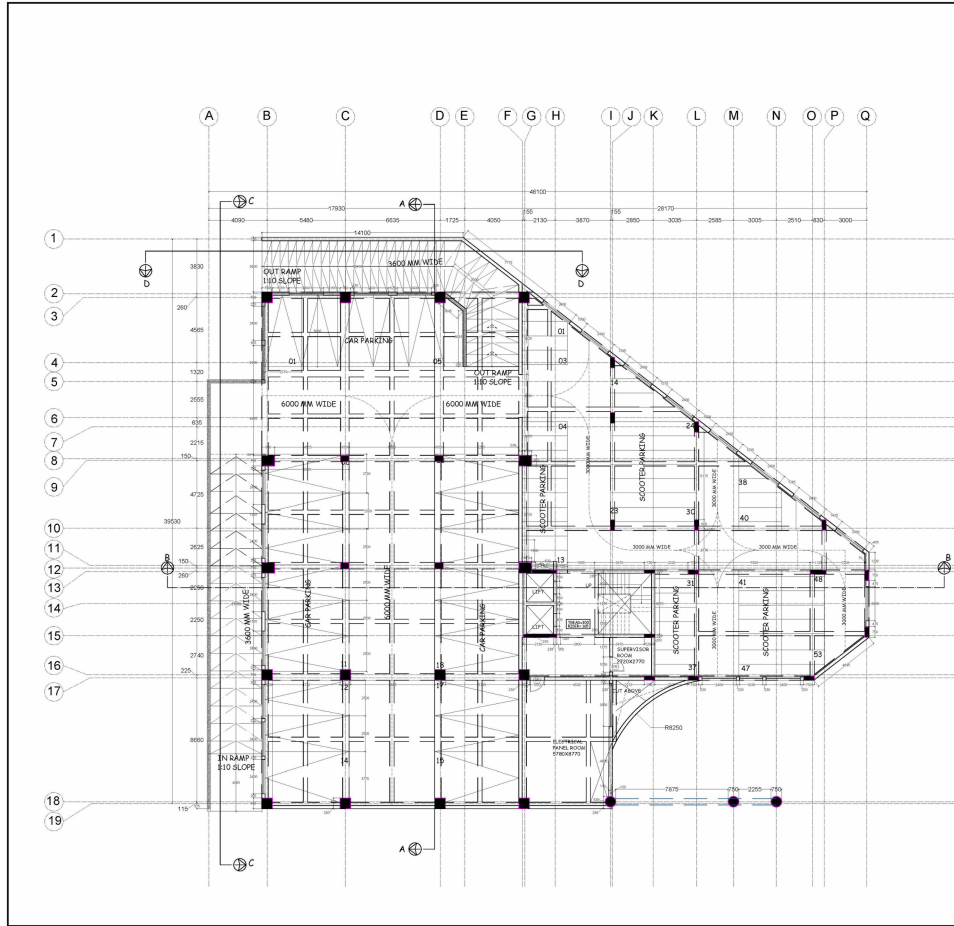
Sl. No.	Description	Unit	Qty	Rate	Amount
	SITC of UL 10th edition / EN54 / VDS certified Microprocessor based intelligent, Analogue addressable, modular, expandable networkable loop Fire Alarm Control Panel with each loop capacity of min 125 detectors per loop with total of 125 detectors & devices with Loop length up to 1 KM as per NFPA 72 approval. The Panel shall be able to give pin point location of addressable units via the address code for each unit. The Panel shall also be able to automatically switch off all control switches when-ever any Alarm is triggered. . The panel shall have 230 + 5 % volts power supply, Automatic battery charger 24V, sealed lead acid maintenance free batteries sufficient for 24 hours normal working and then be capable of operating the system for 30 minutes during emergency condtion. Loop interface cards, communication module, LCD/LED unit to indicate Fire / Fault Signal of individual unit, inbuilt networking port (both RS485&Ethernet), Serial port for printer, two supervisory inputs, two position key switch and USB port for programming. Including the cost of all accessories Etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	1 - Loop Panel	Each	1		
	SITC of UL 10th edition / EN54 / VDS certified 6 ZONE Digital Voice Command Center with FACP, it shall contain all equipment required for all audio control, signalling and supervisory functions. This shall include speaker zone indication and control, digital voice units, microphone etc. The Digital Voice Command Center shall have digital voice call station suitable for 6 zone, digital voice controller & router suitable for 6 zone, 4 nos 240 watt & 1no 480-watt amplifier & digital amplifier capable for 1440-watt load etc. Including the cost of all accessories Etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Each	3		
	Supplying and drawing Fire Resistant flexible / stranded bare copper conductor, PVC / XLPE insulated, overall aluminium mylar tape shielded ATC drain wire and outer PVC sheathed industrial Instrumentation (shielded)cables voltage grade 300/500 V as per BS /EN 50288-7 in existing surface or recessed PVC/ MS conduit/casing capping / Cable tray / Open Duct making connections, testing etc. as required. OEM Must have its own in house NABL lab setup for all testing facilities for cables. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	2 x 1.5 Sq.mm Armoured With Outer Sheath in Red Color	Mtr	2000		
	Supply & Fixing of CO2 type Fire Extinguisher conforming to IS: 15683:2018, charged with CO2 gas (purity 99.7% conforming to IS 15222), Powder coated Internal & External Surface Manganese steel ISI marked as per IS 7285-cylinder body, Wheel type Forged brass release valve ISI Marked as per IS 3224 with Inbuilt safety release device ((Fusible plug and Rupture Disc Type), 1.0 Mtr. Metal wire braided hose having minimum bursting pressure of 140 Kg/cm ² , Horn with metallic thread connection, QR code for Product Traceability, including Fixing on wall with suitable Anchor Fasteners as required of following capacity. Test Certificates of all the Parameters along with Hydro test & Burst test (For Cylinder Body) Certificate from OEM / External NABL Accredited Lab is to be submitted. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

Sl. No.	Description	Unit	Qty	Rate	Amount
	Capacity 3.0 Kg.	Each	6		
	Capacity 4.5 Kg.	Each	6		
	Supply & Fixing of Dry Powder Agent (as per IS 4308:2019), ABC type Fire Extinguisher (Stored Pressure type) conforming to IS:15683:2018 , Powder coated Internal & External Surface Deep drawn cylinder body of Mild Steel CR2 grade conforming to IS: 513, Squeeze grip Forged brass release valve with Inbuilt safety release device, Diaphragm Type, 0 to 28 bar range pressure gauge, 450 mm long EPDM discharge tube, QR code for Product Traceability including Fixing on wall with suitable Anchor Fasteners as required of following capacity. Test Certificates of all the Parameters along with Hydro test & Burst test (For Cylinder Body) Certificate from OEM / External NABL Accredited Lab is to be submitted. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
	2 kg	Each	4		
	4 kg	Each	6		
	6 kg	Each	6		
	Supplying and Fixing of Galvanized Mild Steel fire bucket Confirming to IS: 2546: 1974 with one coat of primer and two coat of enamel paint of approved shade on Angle Iron (50 x 50 x 5 mm) Stand of Size 800 x 1240 x 400 mm with MS 22 SWG Galvanized Canopy, 4 Hooks for Buckets including associated civil works etc. as required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.	Set	2		
	Providing and fixing signages as per required content printed on photo luminescent U1000 aluminium sheet of 1.0 mm (+-10%) containing Lumigen II as base chemical, covered under UV stabilized coating with suitable colour combination (Glow in dark) with high intensity properties for indoor surface glow visibility not less than 6 hrs. in total darkness and of appropriate size including fixing on wall, door, ceiling etc. with proper clamps, hangers, cleats, anchor fasteners etc. complete in all respects required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	Single sided signage board	Sq. Inch	1000		
	Providing and fixing of Aluminium housing body self-contained Rechargeable LED Emergency Light with required content and Size Approx. 300 mm x 180 mm, confirming to IS:9583 :1981with Ni-Mh / Ni - Cd Battery, 3 Hrs Back Up, Constant Current Charger, Input Voltage 230 V, 50 Hz including fixing on wall, door, ceiling etc. with proper clamps, hangers, cleats, anchor fasteners etc. complete in all respects required. All as per pre-approved by Engineer in charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR.				
	Single sided signage	Each	2		
	Double sided signage	Each	1		
	Total Cost				



ICMAI, JAIPUR CENTRE

S.No.	Door Width	Sill Ht.	Lintel Ht.	
01	GD-1	8250	00	3750
02	GD-2	5920	00	3750
03	GD-3	2700	00	3750

S.No.	Door Width	Sill Ht.	Lintel Ht.	
01	D-1	1500	00	2400
02	D-2	2400	00	2400
03	D-3	900	00	2100
04	D-4	800	00	2100
05	D-5	1000	00	2100
06	D-6	1050	00	2400

S.No.	Window Width	Sill Ht.	Lintel Ht.	
01	W-1	4000	150	3750
02	W-2	2100	1050	3150
03	W-3	975	1050	3150
04	W-4	900	1500	3150
05	W-5	2100	150	3750
06	W-6	2100	1050	3750
07	W-7	4000	1650	3750
08	V-1	2400	2250	2475
09	V-2	2400	1780	2475



BASEMENT FLOOR PLAN

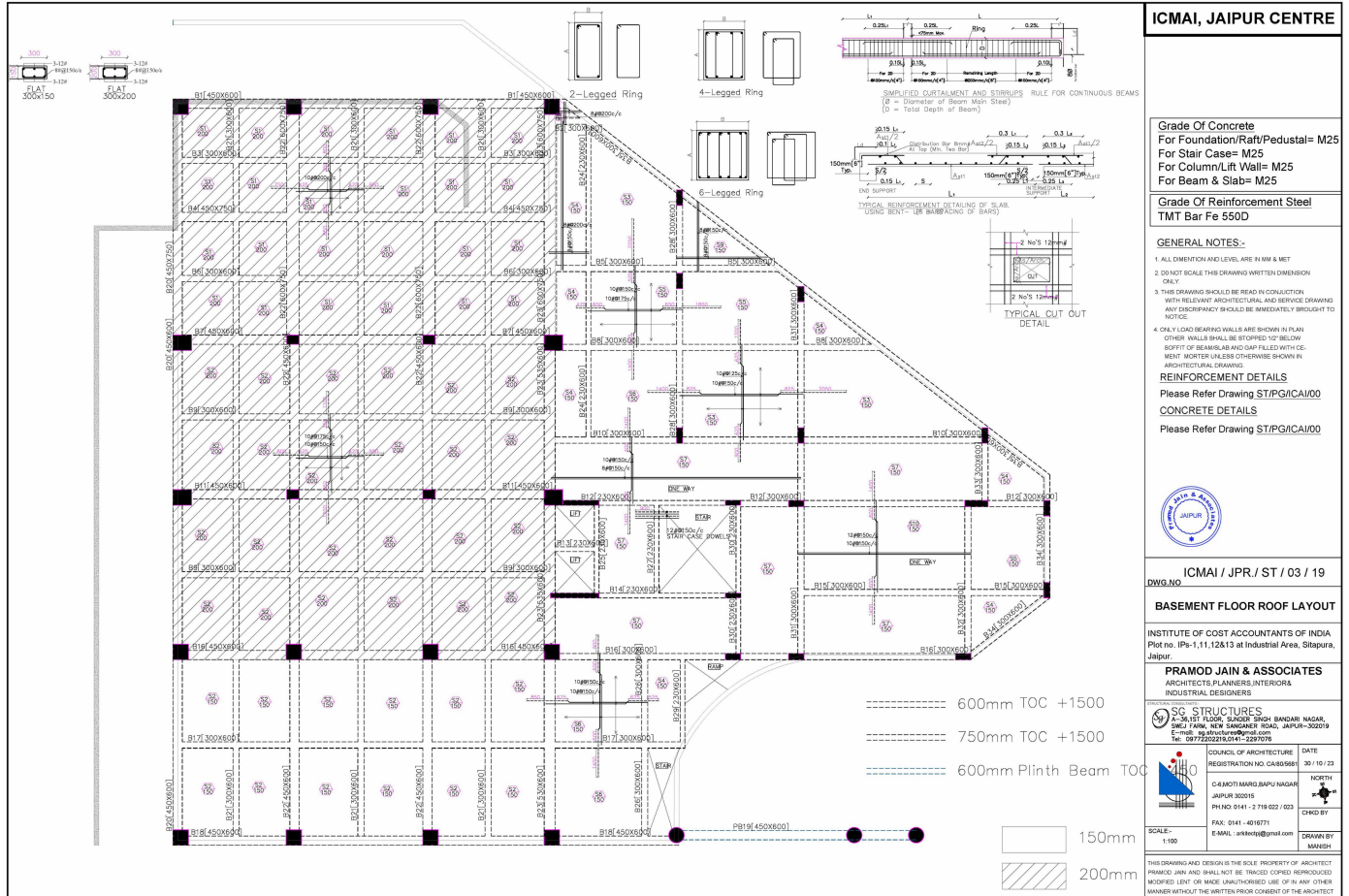
DWG. NO
ICMAI / JPR / AR / 03 / 03

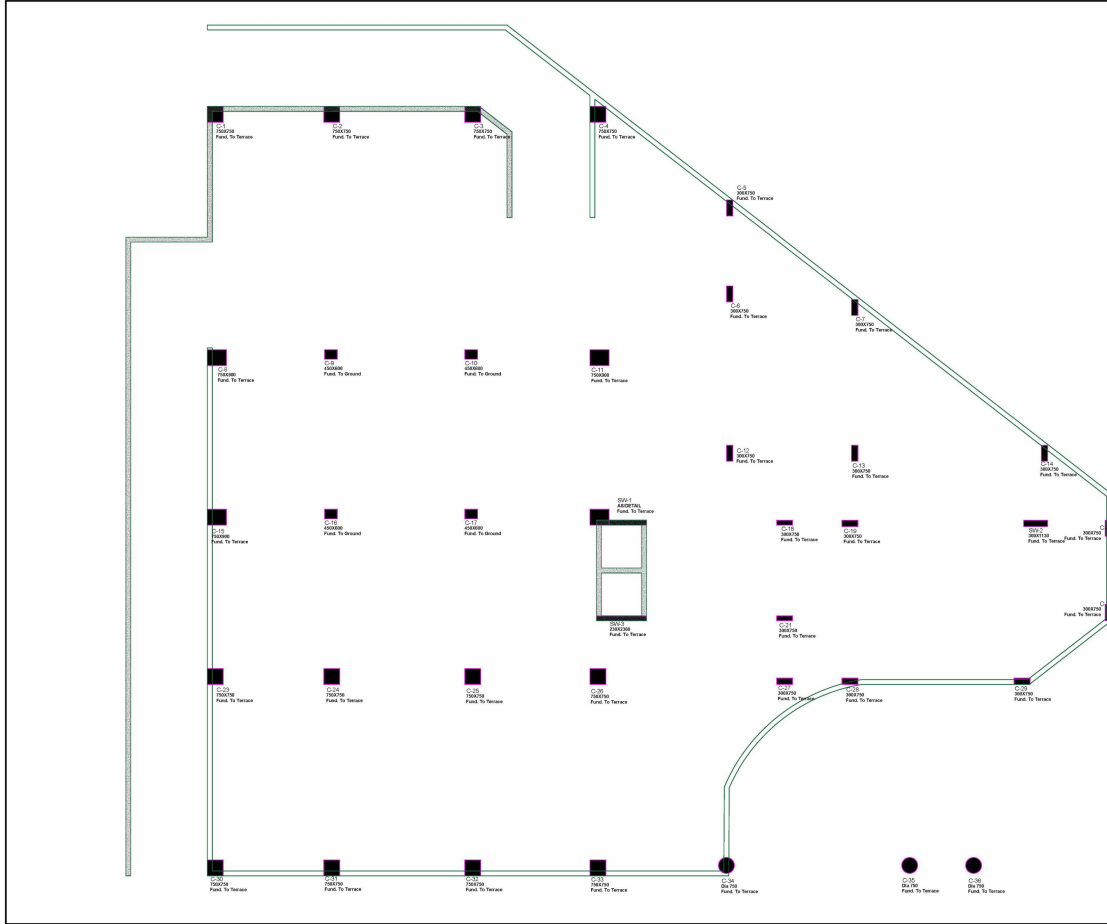
INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot No. IP-1, 11, 12 & 13 at Industrial Area, Sitapura, Jaipur.

PRAMOD JAIN & ASSOCIATES
 ARCHITECTS PLANNERS INTERIORS
 INDUSTRIAL DESIGNERS

	COUNCIL OF ARCHITECTURE REGISTRATION NO. CA/06/06	DATE 30 / 10 / 23
	C-6/20TH MARG SAPU NAGAR JAIPUR 302015 PH NO: 0141 - 2719 022 / 023 FAX: 0141 - 4918771 E-MAIL: prmodjain@gmail.com	NORTH C/PD BY MANISH

SCALE: 1:100
 DRAWN BY: MANISH
 THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT, OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT





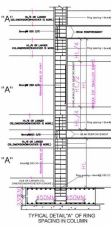
ICMAI, JAIPUR CENTRE	
Grade Of Concrete For Foundation/Raft/Pedestal= M25 For Stair Case= M25 For Column/Lift Wall= M25 For Beam & Slab= M25	
Grade Of Reinforcement Steel TMT Bar Fe 550D	
GENERAL NOTES:- 1. ALL DIMENSION AND LEVEL ARE IN MM & MET 2. DO NOT SCALE THIS DRAWING WRITTEN DIMENSION ONLY 3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND SERVICE DRAWING ANY DISCREPANCY SHOULD BE IMMEDIATELY BROUGHT TO NOTICE 4. ONLY LOAD BEARING WALLS ARE SHOWN IN PLAN SOFFIT OF BEAMS/SLAB AND GAP FILLED WITH CEEMENT MORTAR UNLESS OTHERWISE SHOWN IN ARCHITECTURAL DRAWING	
REINFORCEMENT DETAILS Please Refer Drawing ST/PG/ICA/00	
CONCRETE DETAILS Please Refer Drawing ST/PG/ICA/00	
COLUMN LAYOUT	
DWG.NO ICMAI / JPR./AR/ 01 / 01	
INSTITUTE OF COST ACCOUNTANTS OF INDIA Plot no. IP-1,11,12&13 at Industrial Area, Sitapura, JAIPUR	
PRAMOD JAIN & ASSOCIATES ARCHITECTS PLANNERS INTERIORS INDUSTRIAL DESIGNERS	
COUNCIL OF ARCHITECTURE REGISTRATION NO. CA/20/968 DATE 30/10/23 NORTH C-63071 MARG SAPU NAGAR JAIPUR-302015 PH NO. 0141 - 2719-022 / 023 FAX: 0141 - 4918771 E-MAIL : srgnrcps@gmail.com DRAWN BY MANISH	
SCALE: 1:100 THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT, OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT	



COLUMN	C-1/C-4/C-23/C-26/C-30/C-33	C-2/C-3/C-31/C-32	C-5/C-7/C-14	C-8/C-11/C-15	C-9/C-10/C-16/C-17	C-6	C-12/C-13/C-18/C-19	C-20/C-22	C-21/C-27/C-28
Foundation To Ground Floor		As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"
Ground Floor To 1st Floor		As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"
1st Floor To 2nd Floor		As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"
2nd Floor To Terrace		As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"	As Per Detail "A"

COLUMN	C-29	C-24/C-25	C-34/C-35	C-36
Foundation To Ground Floor		As Per Detail "A"	As Per Detail "A"	As Per Detail "A"
Ground Floor To 1st Floor		As Per Detail "A"	As Per Detail "A"	As Per Detail "A"
1st Floor To 2nd Floor		As Per Detail "A"	As Per Detail "A"	As Per Detail "A"
2nd Floor To Terrace		As Per Detail "A"	As Per Detail "A"	As Per Detail "A"

WALL	SW-1	SW-2	SW-3
Foundation To Ground Floor			
Ground Floor To 1st Floor			
1st Floor To 2nd Floor			
2nd Floor To Terrace			



ICMAI, JAIPUR CENTRE

Grade Of Concrete
 For Foundation/Raft/Pedestal= M25
 For Stair Case= M25
 For Column/Lift Wall= M25
 For Beam & Slab= M25

Grade Of Reinforcement Steel
 TMT Bar Fe 550D

- GENERAL NOTES:-**
1. ALL DIMENSION AND LEVEL ARE IN MM & MET ONLY.
 2. DO NOT SCALE THIS DRAWING WRITTEN DIMENSION ONLY.
 3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND SERVICE DRAWING ANY DISCREPANCY SHOULD BE IMMEDIATELY BROUGHT TO NOTICE.
 4. ONLY LIND BEARING WALLS ARE SHOWN IN PLAN OTHER WALLS SHALL BE STOPPED 10' BELOW SOFFIT OF BEAMS/SLAB AND GAP FILLED WITH CEMENT MORTAR/PLASTER OTHERWISE SHOWN IN ARCHITECTURAL DRAWING.

REINFORCEMENT DETAILS
 Please Refer Drawing ST/PG/ICA/00
CONCRETE DETAILS
 Please Refer Drawing ST/PG/ICA/00



COLUMN SCHEDULE DETAIL

DWG NO: ICMAI / JPR./AR/ 01 / 01

INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot no. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur.

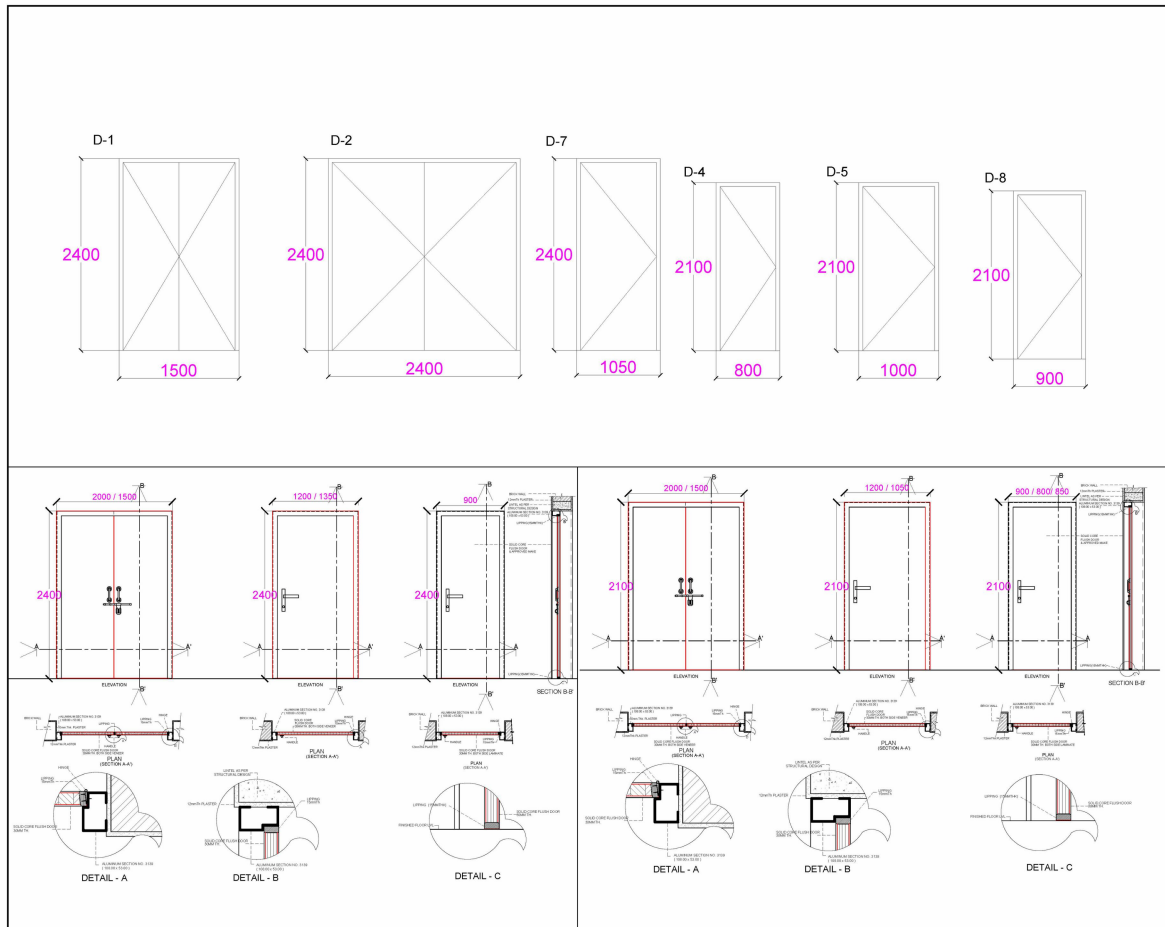
PRAMOD JAIN & ASSOCIATES
 ARCHITECTS, PLANNERS, INTERIORS
 INDUSTRIAL DESIGNERS

SG STRUCTURES
 F-34 1ST FLOOR, SANGAR SIKH SANDHU NAGAR
 SANGAR FARM, NEW SANGAR ROAD, JAIPUR-302019
 E-MAIL: sgstructures@gmail.com
 Tel: 0977202219, 0141-2297076

COUNCIL OF ARCHITECTURE REGISTRATION NO. CA/20/96	DATE 30/10/23
C-63071 MANGU SAPU NAGAR JAIPUR-302015 PH NO: 0141-2719-022 / 023	NORTH
FAX: 0141-4916771 E-MAIL: srhknops@gmail.com	CHFD BY MANISH

SCALE: 1:100

THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT



ICMAI, JAIPUR CENTRE

S.no	Door Width	Sill M.	Lintel M.	
01	GD-1	8250	00	3750
02	GD-2	5520	00	3750
03	GD-3	2700	00	3750

S.no	Door Width	Sill M.	Lintel M.	
01	D-1	1500	00	2400
02	D-2	2400	00	2400
03	D-3	900	00	2100
04	D-4	800	00	2100
05	D-5	1000	00	2100
06	D-6	1050	00	2400

S.no	Window Width	Sill M.	Lintel M.	
01	W-1	4000	150	3750
02	W-2	2100	1050	3150
03	W-3	975	1050	3150
04	W-4	900	1500	3150
05	W-5	2100	150	3750
06	W-6	2100	1050	3750
07	W-7	4000	1650	3750
08	V-1	2400	2250	2475
09	V-2	2400	1780	2475



FLUSH DOOR DETAILS

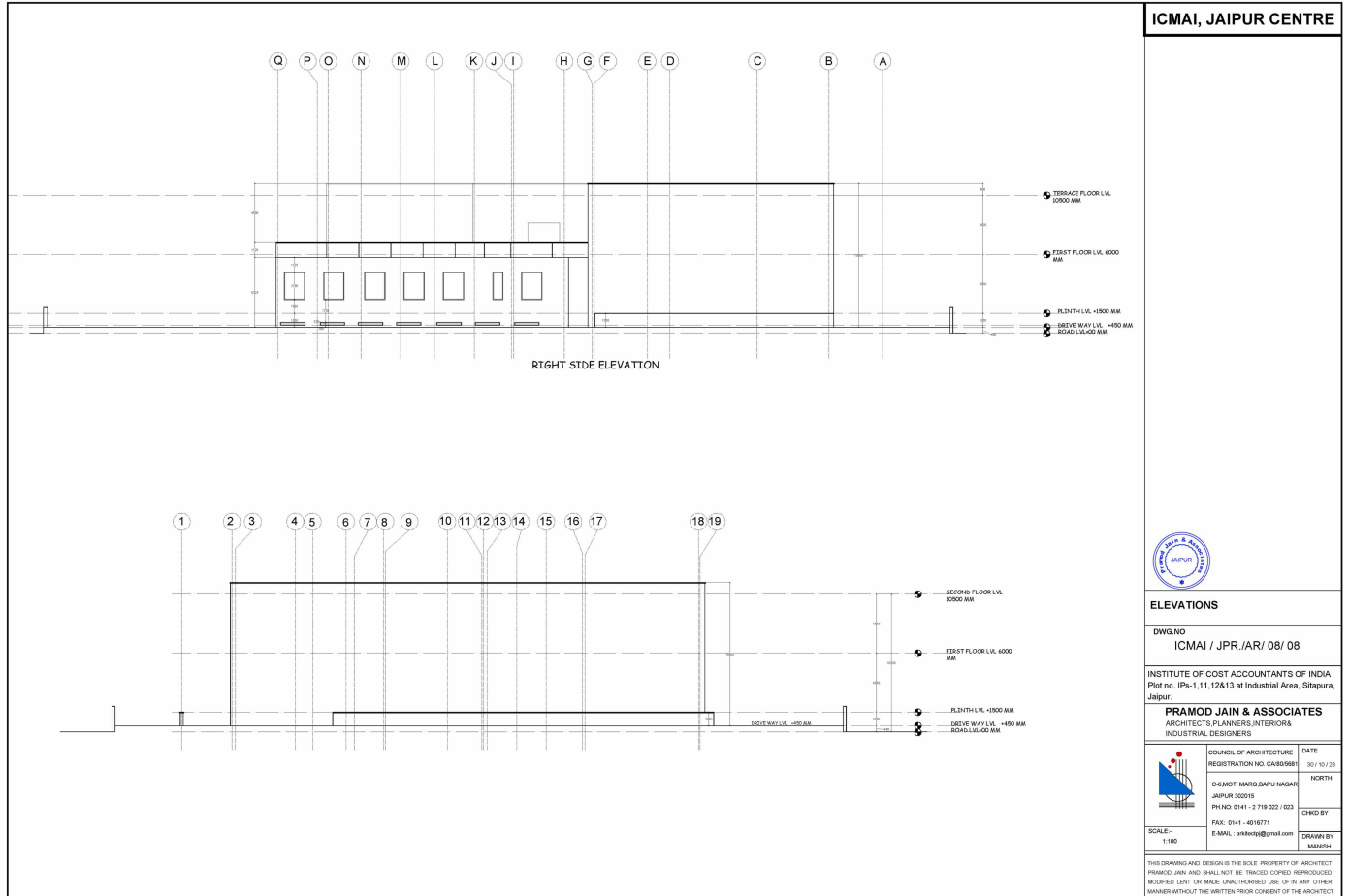
DWG.NO
ICMAI / JPR/AR/ 09/ 09

INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot No. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur.


PRAMOD JAIN & ASSOCIATES
 ARCHITECTS, PLANNERS, INTERIORS,
 INDUSTRIAL DESIGNERS

	COUNCIL OF ARCHITECTURE	DATE
	REGISTRATION NO. CA/09/06	30 / 10 / 23
	C-63/071 MARG SAPU NAGAR	NORTH
	JAIPUR-302015	PH NO: 0141 - 2719-022 / 023
SCALE: 1:100	FAX: 0141 - 4918771	DRAWN BY
	E-MAIL: prmodjain@gmail.com	MANISH

THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT



ICMAI, JAIPUR CENTRE



ELEVATIONS

DWG. NO
ICMAI / JPR./AR/ 08/ 08

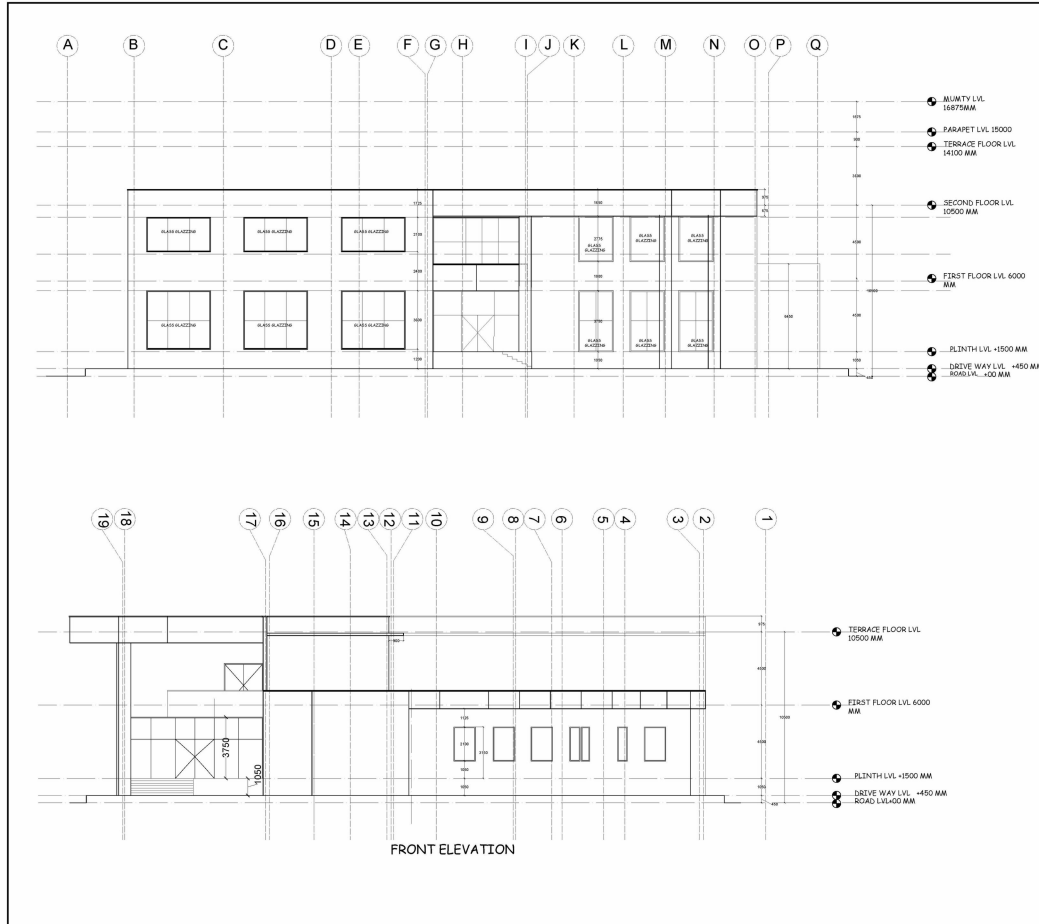
INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot No. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur.

PRAMOD JAIN & ASSOCIATES
 ARCHITECTS, PLANNERS, INTERIORS
 INDUSTRIAL DESIGNERS

COUNCIL OF ARCHITECTURE	DATE
REGISTRATION NO. CA/02/06	31/10/23
C-6/20TH MARG SAPU NAGAR	NORTH
JAIPUR 302015	
PH. NO. 0141 - 2719 022 / 023	CR'D BY
FAX: 0141 - 4918771	
E-MAIL: prmodjain@gmail.com	DRAWN BY
	MANISH

SCALE: 1:100

THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT



ICMAI, JAIPUR CENTRE



ELEVATIONS

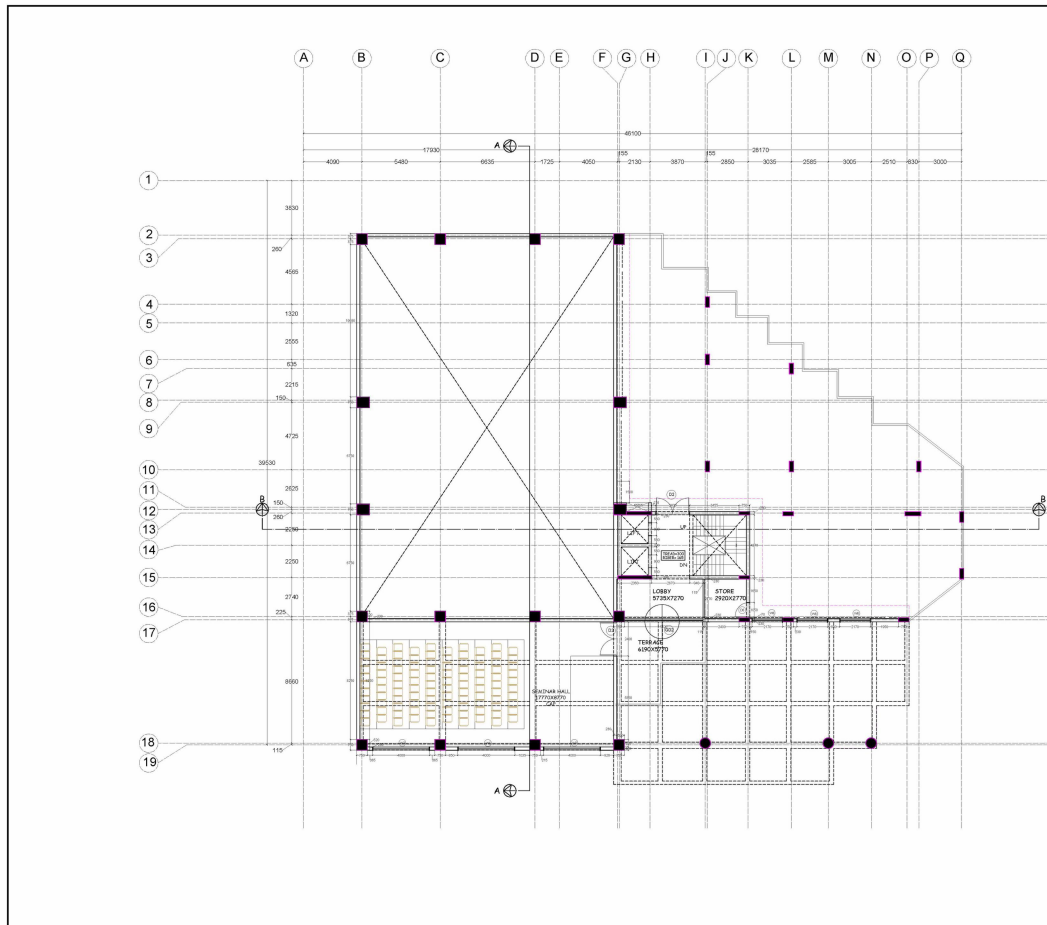
DWG.NO
ICMAI / JPR./AR/ 07 / 07

INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot No. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur.

PRAMOD JAIN & ASSOCIATES
 ARCHITECTS, PLANNERS, INTERIORS
 INDUSTRIAL DESIGNERS

COUNCIL OF ARCHITECTURE	DATE
REGISTRATION NO. CA/0296	30 / 10 / 23
C-6/2071 MARG SAPU NAGAR	NORTH
JAIPUR-302015	
PH NO: 0141 - 2719-022 / 023	CHD BY
FAX: 0141 - 4918771	
E-MAIL: prjain@prjai.com	DRAWN BY
	MANISH

SCALE: 1:100
 THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT



ICMAI, JAIPUR CENTRE

S.No.	Door Width	Sill Ht.	Lintel Ht.	
01	GD-1	5250	00	3750
02	GD-2	5020	00	3750
03	GD-3	2700	00	3750

S.No.	Door Width	Sill Ht.	Lintel Ht.	
01	D-1	1500	00	2400
02	D-2	2400	00	2400
03	D-3	900	00	2100
04	D-4	800	00	2100
05	D-5	1000	00	2100
06	D-6	1050	00	2400

S.No.	Window Width	Sill Ht.	Lintel Ht.	
01	W-1	4000	150	3750
02	W-2	2100	1050	3150
03	W-3	975	1050	3150
04	W-4	900	1500	3150
05	W-5	2100	150	3750
06	W-6	2100	1050	3750
07	W-7	4000	1650	3750
08	V-1	2400	2250	2475
09	V-2	2400	1780	2475



FIRST FLOOR PLAN

DWG.NO

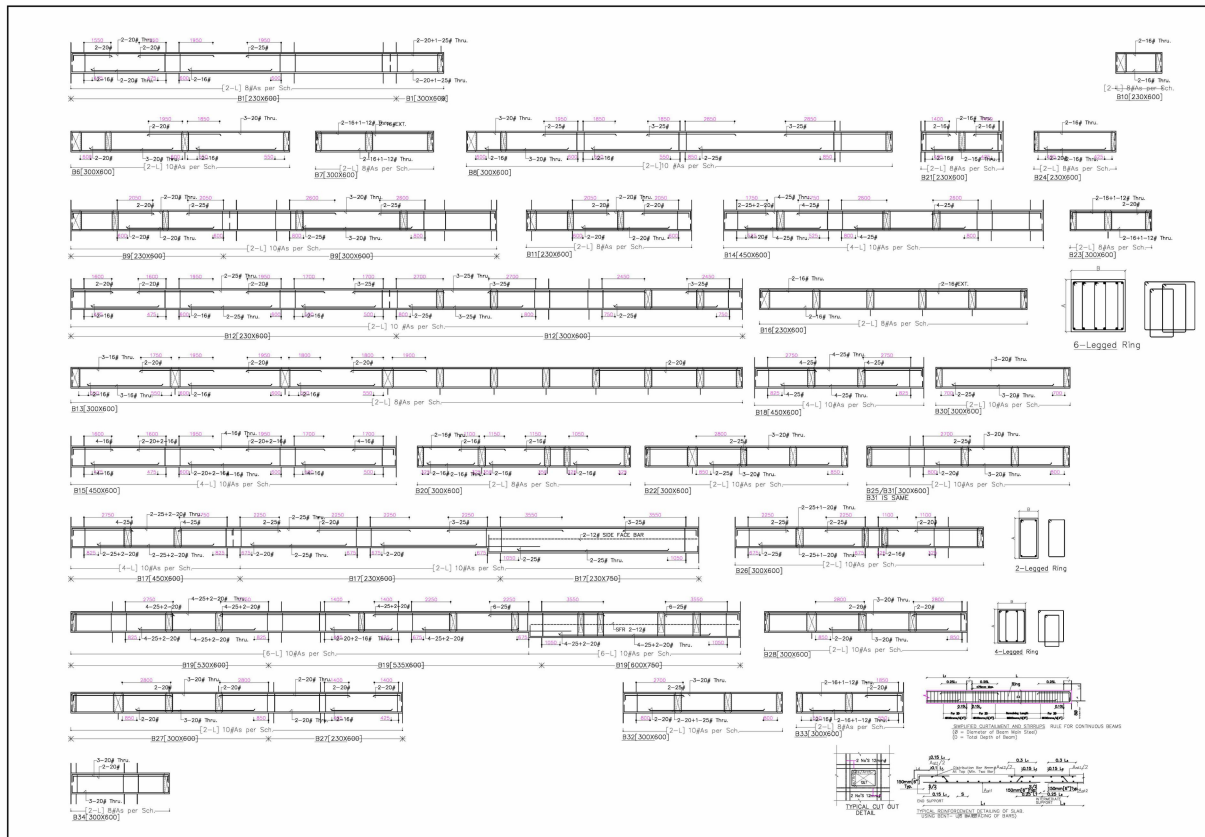
ICMAI / JPR./AR/ 04 / 04

INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot no. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur.

PRAMOD JAIN & ASSOCIATES
 ARCHITECTS, PLANNERS, INTERIORS
 INDUSTRIAL DESIGNERS

	COUNCIL OF ARCHITECTURE	DATE
	REGISTRATION NO. CA/02/96	30/10/23
	NORTH	
	C-6/20TH MARG SAPU NAGAR JAIPUR-302015 PH NO: 0141 - 2719-022 / 023	C/PD BY DRAWN BY MANISH
SCALE: 1:100	FAX: 0141 - 4918771 E-MAIL: prmodjain@gmail.com	

THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT, OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT



ICMAI, JAIPUR CENTRE

Grade Of Concrete
 For Foundation/Pile/Pedestal= M25
 For Stair Case= M25
 For Column/Lift Wall= M25
 For Beam & Slab= M25

Grade Of Reinforcement Steel
 TMT Bar Fe 550D

GENERAL NOTES:

- ALL DIMENSIONS AND LEVELS ARE IN M & MET
- DO NOT SCALE THIS DRAWING WITHOUT PERMISSION ONLY
- NO CHANGING SHOULD BE MADE IN CONSTRUCTION WITH RELEVANT ARCHITECTURAL AND SERVICE DRAWING AND GEOMETRIC PROFILES BEING EXACTLY BROUGHT TO LIGHT
- ONLY FOUNDATION WALLS ARE SHOWN IN PLAN OTHER WALLS SHALL BE STOPPED 10' BELOW. SCOFF OF BEAM/SLAB AND GAP FILLER REINFORCEMENT NOTED UNLESS OTHERWISE SHOWN IN ARCHITECTURAL DRAWING.

REINFORCEMENT DETAILS
 Please Refer Drawing ST/PG/CA/100

CONCRETE DETAILS
 Please Refer Drawing ST/PG/CA/100

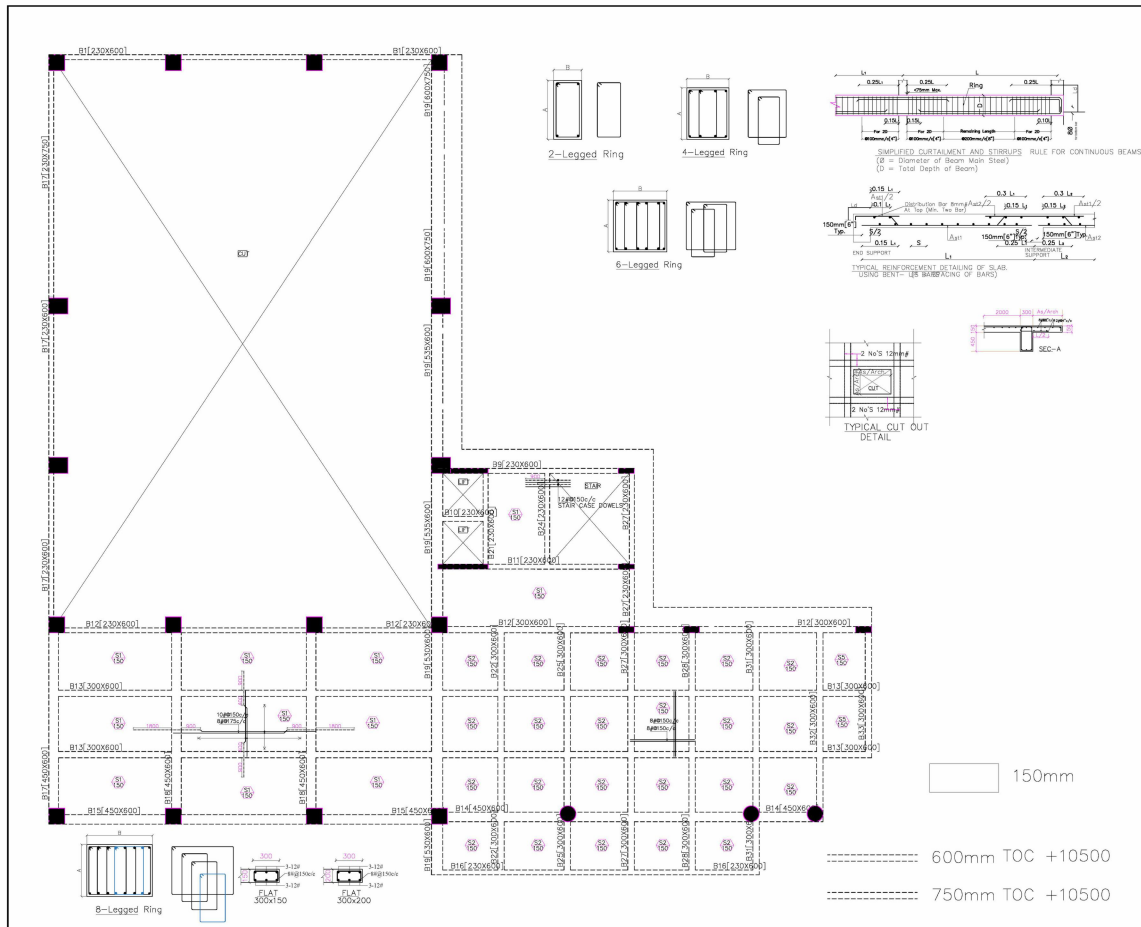
ICMAI / JPR / ST / 06 / 22
 DWG. NO.

FIRST FLOOR ROOF BEAM DETAIL

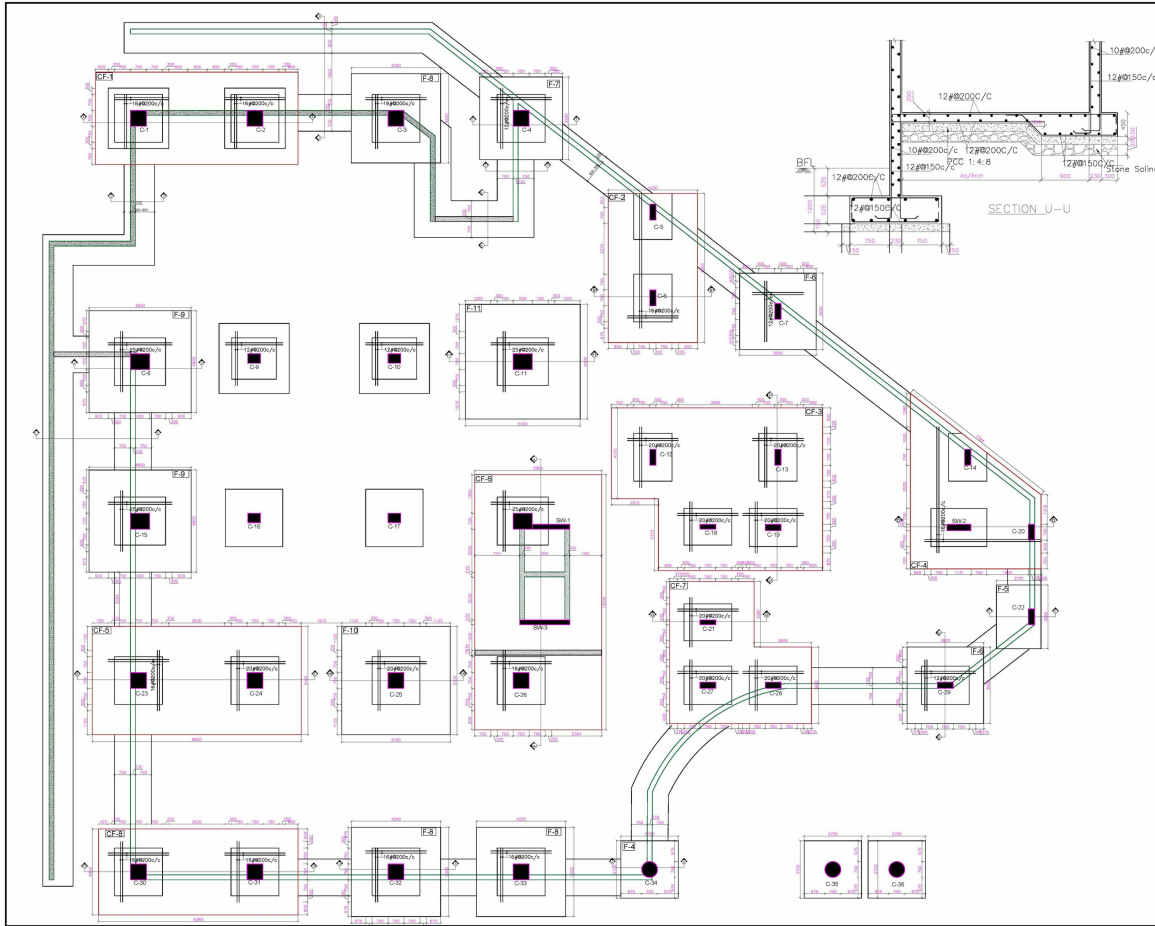
INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot no. IPS-1,11,12,13 at Industrial Area, Sitapura, Jaipur.

PRAMOJ JAIN & ASSOCIATES
 ARCHITECTS, PLANNERS, INTERIORS,
 INDUSTRIAL DESIGNERS

SG STRUCTURES
 P-25, P-26, P-27, P-28, P-29, P-30, P-31, P-32, P-33, P-34, P-35, P-36, P-37, P-38, P-39, P-40, P-41, P-42, P-43, P-44, P-45, P-46, P-47, P-48, P-49, P-50, P-51, P-52, P-53, P-54, P-55, P-56, P-57, P-58, P-59, P-60, P-61, P-62, P-63, P-64, P-65, P-66, P-67, P-68, P-69, P-70, P-71, P-72, P-73, P-74, P-75, P-76, P-77, P-78, P-79, P-80, P-81, P-82, P-83, P-84, P-85, P-86, P-87, P-88, P-89, P-90, P-91, P-92, P-93, P-94, P-95, P-96, P-97, P-98, P-99, P-100, P-101, P-102, P-103, P-104, P-105, P-106, P-107, P-108, P-109, P-110, P-111, P-112, P-113, P-114, P-115, P-116, P-117, P-118, P-119, P-120, P-121, P-122, P-123, P-124, P-125, P-126, P-127, P-128, P-129, P-130, P-131, P-132, P-133, P-134, P-135, P-136, P-137, P-138, P-139, P-140, P-141, P-142, P-143, P-144, P-145, P-146, P-147, P-148, P-149, P-150, P-151, P-152, P-153, P-154, P-155, P-156, P-157, P-158, P-159, P-160, P-161, P-162, P-163, P-164, P-165, P-166, P-167, P-168, P-169, P-170, P-171, P-172, P-173, P-174, P-175, P-176, P-177, P-178, P-179, P-180, P-181, P-182, P-183, P-184, P-185, P-186, P-187, P-188, P-189, P-190, P-191, P-192, P-193, P-194, P-195, P-196, P-197, P-198, P-199, P-200, P-201, P-202, P-203, P-204, P-205, P-206, P-207, P-208, P-209, P-210, P-211, P-212, P-213, P-214, P-215, P-216, P-217, P-218, P-219, P-220, P-221, P-222, P-223, P-224, P-225, P-226, P-227, P-228, P-229, P-230, P-231, P-232, P-233, P-234, P-235, P-236, P-237, P-238, P-239, P-240, P-241, P-242, P-243, P-244, P-245, P-246, P-247, P-248, P-249, P-250, P-251, P-252, P-253, P-254, P-255, P-256, P-257, P-258, P-259, P-260, P-261, P-262, P-263, P-264, P-265, P-266, P-267, P-268, P-269, P-270, P-271, P-272, P-273, P-274, P-275, P-276, P-277, P-278, P-279, P-280, P-281, P-282, P-283, P-284, P-285, P-286, P-287, P-288, P-289, P-290, P-291, P-292, P-293, P-294, P-295, P-296, P-297, P-298, P-299, P-300, P-301, P-302, P-303, P-304, P-305, P-306, P-307, P-308, P-309, P-310, P-311, P-312, P-313, P-314, P-315, P-316, P-317, P-318, P-319, P-320, P-321, P-322, P-323, P-324, P-325, P-326, P-327, P-328, P-329, P-330, P-331, P-332, P-333, P-334, P-335, P-336, P-337, P-338, P-339, P-340, P-341, P-342, P-343, P-344, P-345, P-346, P-347, P-348, P-349, P-350, P-351, P-352, P-353, P-354, P-355, P-356, P-357, P-358, P-359, P-360, P-361, P-362, P-363, P-364, P-365, P-366, P-367, P-368, P-369, P-370, P-371, P-372, P-373, P-374, P-375, P-376, P-377, P-378, P-379, P-380, P-381, P-382, P-383, P-384, P-385, P-386, P-387, P-388, P-389, P-390, P-391, P-392, P-393, P-394, P-395, P-396, P-397, P-398, P-399, P-400, P-401, P-402, P-403, P-404, P-405, P-406, P-407, P-408, P-409, P-410, P-411, P-412, P-413, P-414, P-415, P-416, P-417, P-418, P-419, P-420, P-421, P-422, P-423, P-424, P-425, P-426, P-427, P-428, P-429, P-430, P-431, P-432, P-433, P-434, P-435, P-436, P-437, P-438, P-439, P-440, P-441, P-442, P-443, P-444, P-445, P-446, P-447, P-448, P-449, P-450, P-451, P-452, P-453, P-454, P-455, P-456, P-457, P-458, P-459, P-460, P-461, P-462, P-463, P-464, P-465, P-466, P-467, P-468, P-469, P-470, P-471, P-472, P-473, P-474, P-475, P-476, P-477, P-478, P-479, P-480, P-481, P-482, P-483, P-484, P-485, P-486, P-487, P-488, P-489, P-490, P-491, P-492, P-493, P-494, P-495, P-496, P-497, P-498, P-499, P-500, P-501, P-502, P-503, P-504, P-505, P-506, P-507, P-508, P-509, P-510, P-511, P-512, P-513, P-514, P-515, P-516, P-517, P-518, P-519, P-520, P-521, P-522, P-523, P-524, P-525, P-526, P-527, P-528, P-529, P-530, P-531, P-532, P-533, P-534, P-535, P-536, P-537, P-538, P-539, P-540, P-541, P-542, P-543, P-544, P-545, P-546, P-547, P-548, P-549, P-550, P-551, P-552, P-553, P-554, P-555, P-556, P-557, P-558, P-559, P-560, P-561, P-562, P-563, P-564, P-565, P-566, P-567, P-568, P-569, P-570, P-571, P-572, P-573, P-574, P-575, P-576, P-577, P-578, P-579, P-580, P-581, P-582, P-583, P-584, P-585, P-586, P-587, P-588, P-589, P-590, P-591, P-592, P-593, P-594, P-595, P-596, P-597, P-598, P-599, P-600, P-601, P-602, P-603, P-604, P-605, P-606, P-607, P-608, P-609, P-610, P-611, P-612, P-613, P-614, P-615, P-616, P-617, P-618, P-619, P-620, P-621, P-622, P-623, P-624, P-625, P-626, P-627, P-628, P-629, P-630, P-631, P-632, P-633, P-634, P-635, P-636, P-637, P-638, P-639, P-640, P-641, P-642, P-643, P-644, P-645, P-646, P-647, P-648, P-649, P-650, P-651, P-652, P-653, P-654, P-655, P-656, P-657, P-658, P-659, P-660, P-661, P-662, P-663, P-664, P-665, P-666, P-667, P-668, P-669, P-670, P-671, P-672, P-673, P-674, P-675, P-676, P-677, P-678, P-679, P-680, P-681, P-682, P-683, P-684, P-685, P-686, P-687, P-688, P-689, P-690, P-691, P-692, P-693, P-694, P-695, P-696, P-697, P-698, P-699, P-700, P-701, P-702, P-703, P-704, P-705, P-706, P-707, P-708, P-709, P-710, P-711, P-712, P-713, P-714, P-715, P-716, P-717, P-718, P-719, P-720, P-721, P-722, P-723, P-724, P-725, P-726, P-727, P-728, P-729, P-730, P-731, P-732, P-733, P-734, P-735, P-736, P-737, P-738, P-739, P-740, P-741, P-742, P-743, P-744, P-745, P-746, P-747, P-748, P-749, P-750, P-751, P-752, P-753, P-754, P-755, P-756, P-757, P-758, P-759, P-760, P-761, P-762, P-763, P-764, P-765, P-766, P-767, P-768, P-769, P-770, P-771, P-772, P-773, P-774, P-775, P-776, P-777, P-778, P-779, P-780, P-781, P-782, P-783, P-784, P-785, P-786, P-787, P-788, P-789, P-790, P-791, P-792, P-793, P-794, P-795, P-796, P-797, P-798, P-799, P-800, P-801, P-802, P-803, P-804, P-805, P-806, P-807, P-808, P-809, P-810, P-811, P-812, P-813, P-814, P-815, P-816, P-817, P-818, P-819, P-820, P-821, P-822, P-823, P-824, P-825, P-826, P-827, P-828, P-829, P-830, P-831, P-832, P-833, P-834, P-835, P-836, P-837, P-838, P-839, P-840, P-841, P-842, P-843, P-844, P-845, P-846, P-847, P-848, P-849, P-850, P-851, P-852, P-853, P-854, P-855, P-856, P-857, P-858, P-859, P-860, P-861, P-862, P-863, P-864, P-865, P-866, P-867, P-868, P-869, P-870, P-871, P-872, P-873, P-874, P-875, P-876, P-877, P-878, P-879, P-880, P-881, P-882, P-883, P-884, P-885, P-886, P-887, P-888, P-889, P-890, P-891, P-892, P-893, P-894, P-895, P-896, P-897, P-898, P-899, P-900, P-901, P-902, P-903, P-904, P-905, P-906, P-907, P-908, P-909, P-910, P-911, P-912, P-913, P-914, P-915, P-916, P-917, P-918, P-919, P-920, P-921, P-922, P-923, P-924, P-925, P-926, P-927, P-928, P-929, P-930, P-931, P-932, P-933, P-934, P-935, P-936, P-937, P-938, P-939, P-940, P-941, P-942, P-943, P-944, P-945, P-946, P-947, P-948, P-949, P-950, P-951, P-952, P-953, P-954, P-955, P-956, P-957, P-958, P-959, P-960, P-961, P-962, P-963, P-964, P-965, P-966, P-967, P-968, P-969, P-970, P-971, P-972, P-973, P-974, P-975, P-976, P-977, P-978, P-979, P-980, P-981, P-982, P-983, P-984, P-985, P-986, P-987, P-988, P-989, P-990, P-991, P-992, P-993, P-994, P-995, P-996, P-997, P-998, P-999, P-1000.



ICMAI, JAIPUR CENTRE
Grade Of Concrete For Foundation/Raft/Pedestal= M25 For Stair Case= M25 For Column/Lift Wall= M25 For Beam & Slab= M25
Grade Of Reinforcement Steel TMT Bar Fe 550D
GENERAL NOTES:- 1. ALL DIMENSION AND LEVEL ARE IN MM & MET 2. DO NOT SCALE THIS DRAWING WRITTEN DIMENSION ONLY 3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND SERVICE DRAWING ANY DISCREPANCY SHOULD BE IMMEDIATELY BROUGHT TO NOTICE 4. ONLY END BEARING WALLS ARE SHOWN IN PLAN OTHER WALLS SHALL BE STOPPED 1/2 BELOW SOFFIT OF BEAMS/SLAB AND GAP FILLED WITH CE MENT MORTAR/BLUES OTHERWISE SHOWN IN ARCHITECTURAL DRAWING
REINFORCEMENT DETAILS Please Refer Drawing ST/PG/ICAI/00
CONCRETE DETAILS Please Refer Drawing ST/PG/ICAI/00
ICMAI / JPR / ST / 05 / 21
DWG NO
1ST FLOOR ROOF LAYOUT
INSTITUTE OF COST ACCOUNTANTS OF INDIA Plot no. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur
PRAMOD JAIN & ASSOCIATES ARCHITECTS PLANNERS INTERIORS INDUSTRIAL DESIGNERS
 SG STRUCTURES 31-31ST FLOOR, SANGAR SIKH SANDAR NAGAR, SHEF FARM, NEW SANGAR ROAD, JAIPUR-302019 E-MAIL: sikhraj@sgjpr.com Tel: 097720219,0141-2297076
 COUNCIL OF ARCHITECTURE REGISTRATION NO. CA/05/06 DATE: 30/10/23 C-6/071 MARG SAPU NAGAR JAIPUR-302015 PH NO: 0141-2719-021 / 023 FAX: 0141-4918771 E-MAIL: sikhraj@sgjpr.com SCALE: 1:100
 NORTH C/RD BT DRAWN BY MANISH
THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT



ICMAI, JAIPUR CENTRE

Grade Of Concrete
 For Foundation/Raft/Pedestal= M25
 For Stair Case= M25
 For Column/Lift Wall= M25
 For Beam & Slab= M25

Grade Of Reinforcement Steel
 TMT Bar Fe 550D

GENERAL NOTES:-

1. ALL DIMENSION AND LEVEL ARE IN MM & MET
2. DO NOT SCALE THIS DRAWING WRITTEN DIMENSION ONLY
3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND SERVICE DRAWING ANY DISCREPANCY SHOULD BE IMMEDIATELY BROUGHT TO NOTICE
4. ONLY LONG BEARING WALLS ARE SHOWN IN PLAN SOFFIT OF BEAMS/SLAB AND GAP FILLED WITH CEMENT MORTAR/FILLERS OTHERWISE SHOWN IN ARCHITECTURAL DRAWING

REINFORCEMENT DETAILS
 Please Refer Drawing ST/PG/ICAI/00

CONCRETE DETAILS
 Please Refer Drawing ST/PG/ICAI/00

FOUNDATION LAYOUT

DWG NO: ICMAI / JPR./AR/ 01 / 01

INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot no. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur

PRAMOD JAIN & ASSOCIATES
 ARCHITECTS, PLANNERS, INTERIORS
 INDUSTRIAL DESIGNERS

SG STRUCTURES
 F-34 1ST FLOOR, SANDHU BANGAR NAGAR,
 SHEJ FARM, NEW SANGANER ROAD, JAIPUR-302019
 E-MAIL: ssg@sgstructures.com
 Tel: 0977202219, 0141-2297076

COUNCIL OF ARCHITECTURE	DATE
REGISTRATION NO. CA/02/96	30/10/23
C-63071 MARG SAPU NAGAR	NORTH
JAIPUR-302019	
PH NO: 0141-2719-022 / 023	CHFD BT
FAX: 0141-4918771	
E-MAIL: ssk@sgjpr.com	DRAWN BY
	MANISH

SCALE: 1:100

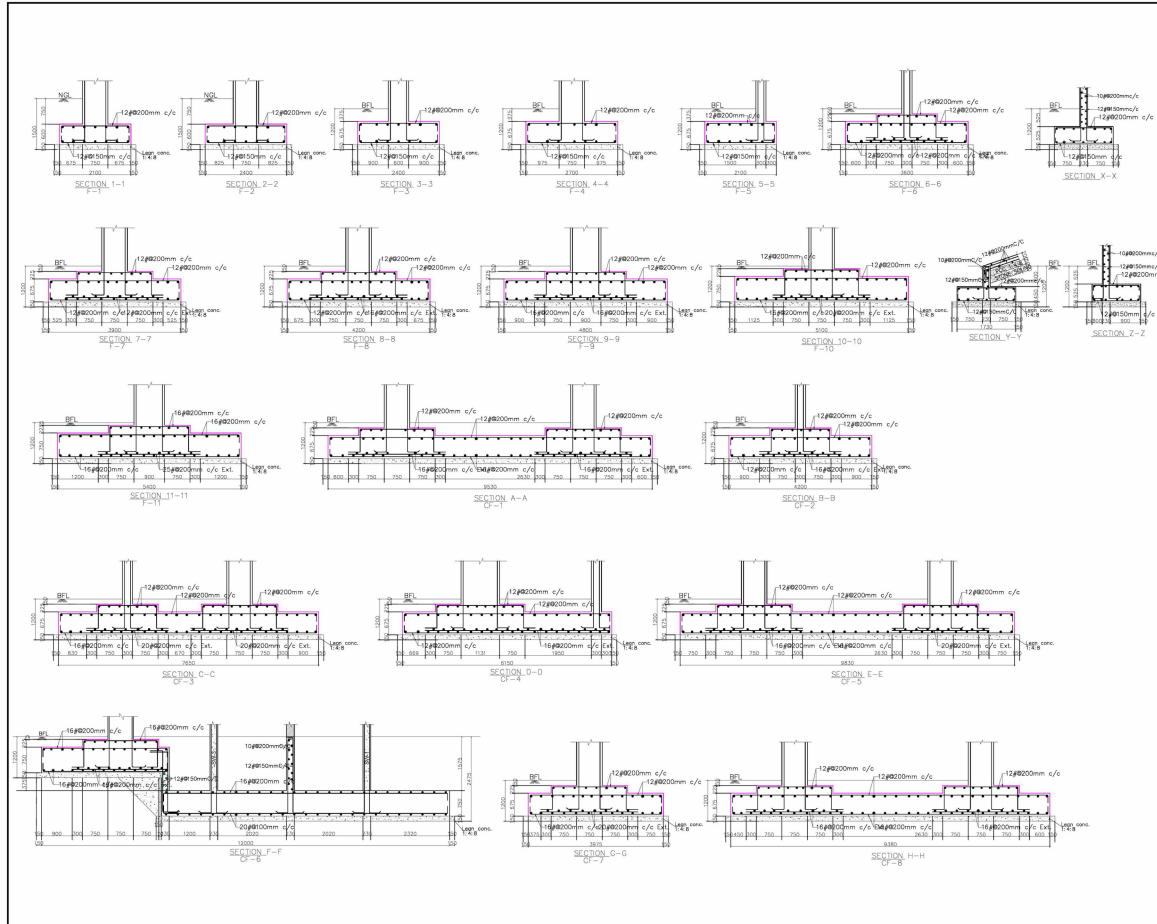
THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT, OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.

CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.



ICMAI, JAIPUR CENTRE

Grade Of Concrete
 For Foundation/Raft/Pedestal= M25
 For Stair Case= M25
 For Column/Lift Wall= M25
 For Beam & Slab= M25

Grade Of Reinforcement Steel
 TMT Bar Fe 550D

- GENERAL NOTES:-**
1. ALL DIMENSION AND LEVEL ARE IN MM & MET
 2. DO NOT SCALE THIS DRAWING WRITTEN DIMENSION ONLY
 3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND SERVICE DRAWING ANY DISCREPANCY SHOULD BE IMMEDIATELY BROUGHT TO NOTICE
 4. ONLY L-LOAD BEARING WALLS ARE SHOWN IN PLAN OTHER WALLS SHALL BE STOPPED 10' BELOW SOFFIT OF BEAMS/SLAB AND GAP FILLED WITH CEMENT MORTAR/FAIRFACED OTHERWISE SHOWN IN ARCHITECTURAL DRAWING

REINFORCEMENT DETAILS
 Please Refer Drawing ST/PG/ICAI/00

CONCRETE DETAILS
 Please Refer Drawing ST/PG/ICAI/00



FOUNDATION SECTION DETAIL

DWG NO: ICMAI / JPR./AR/ 01 / 01

INSTITUTE OF COST ACCOUNTANTS OF INDIA
Plot no. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur

PRAMOD JAIN & ASSOCIATES
ARCHITECTS PLANNERS INTERIORS
INDUSTRIAL DESIGNERS

SG STRUCTURES
P-38 1ST FLOOR, SANDIP SIKH SANDAR NAGAR,
SHEJ FARM, NEW SANGANER ROAD, JAIPUR-302019
E-MAIL: sgs@sgsindia.com
Tel: 0977202019,0141-2297076

	DATE	30/10/23
	DRWN BY	MANISH
SCALE:	1:100	

THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT, OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.

ICMAI, JAIPUR CENTRE

Grade Of Concrete
For Foundation/Raft/Pedestal= M25
For Slab Case= M25
For Column/Lift Wall= M25
For Beam & Slab= M25

Grade Of Reinforcement Steel
TMT Bar Fe 550D

GENERAL NOTES:-

1. ALL DIMENSION AND LEVEL ARE IN MM & MET ONLY.
2. DO NOT SCALE THIS DRAWING WRITTEN DIMENSION ONLY.
3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND SERVICE DRAWING ANY DISCREPANCY SHOULD BE IMMEDIATELY BROUGHT TO NOTICE.
4. ONLY LIFT BEARING WALLS ARE SHOWN IN PLAN OTHER WALLS SHALL BE STOPPED 10' BELOW SOFFIT OF BEAMS/SLAB AND GAP FILLED WITH CEMENT MORTAR/FILLERS OTHERWISE SHOWN IN ARCHITECTURAL DRAWING.

REINFORCEMENT DETAILS

Please Refer Drawing ST/PG/ICA/100
CONCRETE DETAILS
 Please Refer Drawing ST/PG/ICA/100



GENERAL SHEET

DWG NO: **ICMAI / JPR./AR/ 01 / 01**

INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot no. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur

PRAMOD JAIN & ASSOCIATES
 ARCHITECTS PLANNERS INTERIORS
 INDUSTRIAL DESIGNERS

SG STRUCTURES
 P-34 ST. PLOD. SANGAR SIKH SANDHU NAGAR
 SHEET FARM, NEW SANGAR ROAD, JAIPUR-302019
 E-mail: sgs@sgstructures.com
 Tel: 0977202219,0141-2297078

COUNCIL OF ARCHITECTURE
 REGISTRATION NO. CANS/9362 DATE: 30/10/23
 C-64071 MARG SAPU NAGAR
 JAIPUR-302015
 PH NO: 0141 - 2719 021 / 023
 C/PWD BT

SCALE: 1:100
 E MAIL: s@kings@jpr.com
 DRAWN BY: MANISH

THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT, OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT

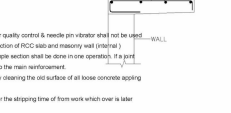
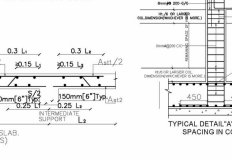
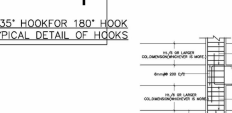
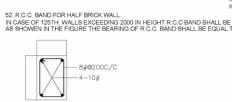
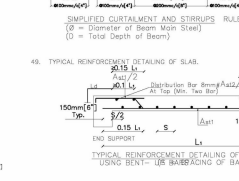
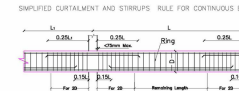
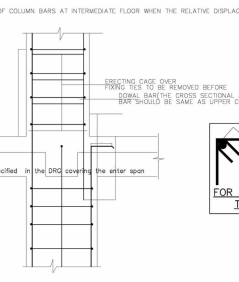
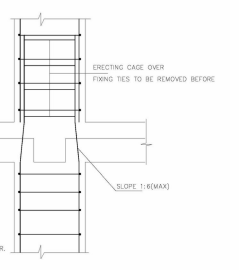
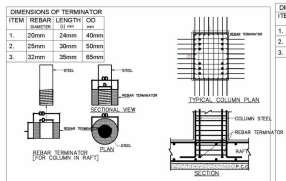
GENERAL NOTES

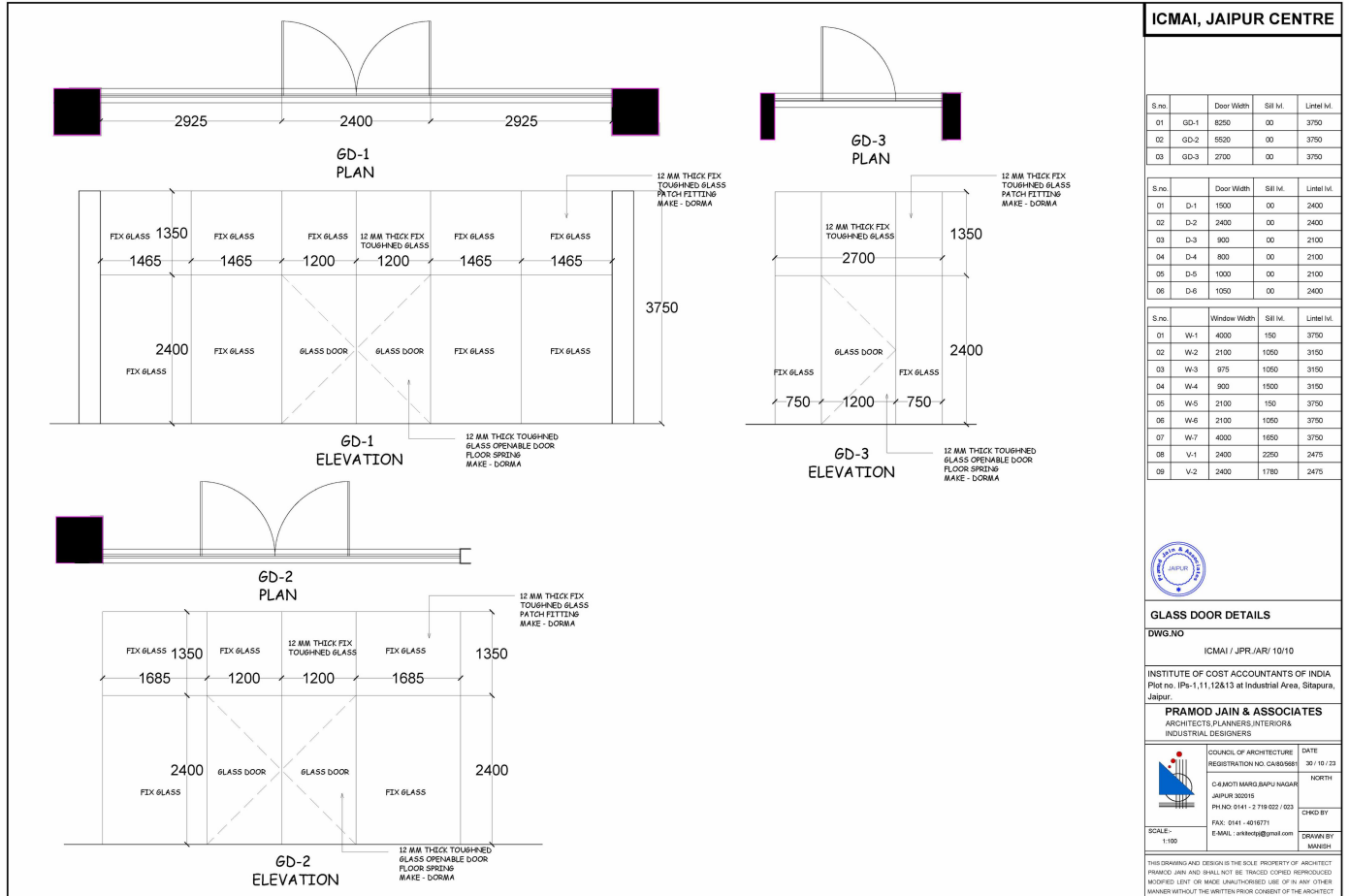
1. Contractor to check and verify all dimensions.
2. All dimensions are given. Refer millimeter unless other was specified.
3. Foundation concrete shall be below ground level.
4. Foundation concrete shall be cast in one lift.
5. An accurate down up shall be made in conjunction with relevant structural drawings any discrepancy between them observed shall be brought to the notice of the architect before the start of the work.
6. Any variation between the details given in the structural and topographical details shown in structural drawing shall be followed.
7. All reinforcement to be used shall be as per IS: 1786-2008.
8. The SBC has been taken as 2500 kg/cm² at a depth of 4.2 Meter Below Natural Ground level.
9. All reinforcement shall be provided in accordance with the following table.
10. If an alternative in RCC as per specification to the thickness of reinforcement other than specified or shown in (RCC) shall always be provided over foundation of RCC masonry structure.
11. Unless other was mentioned in the drawing reinforcement shall be provided as per typical RCC of stairs and changes.
12. Slabs shall be cast in one lift and back track wall shall be provided continuously at one level of 1.4 above F.F. level at 110 mm and 110 mm.
13. Water used for mixing and curing of concrete work shall conform to quality criteria specified in IS-456-2000.
14. All structural concrete shall be cast in one lift for all structural members design mix concrete conforming to IS-456-2000.
15. Formwork for concrete shall be rigid and shall be of approved material and shall be true to the shape and dimensions of the structural members and water tight. Formwork shall be designed for all imposed loads (dead, live, construction, wind, vibration, impact, fluid pressure).
16. Formwork shall be supported on closely spaced stiff props adequately braced in plan and firmly placed on sub-soil ground (not to be settled under load).
17. Aggregate to be used in structural concrete shall be crushed broken stone or coarse aggregate, well graded sand coarse dust or fine aggregate (specification for grading and other quality criteria are specified in IS-383).
18. Strength in concrete shall be tested at 7 days and 28 days respectively.
19. All joints shall be made over 2" x 1" RCC. 1.5" x 1" wide where directly bearing on fully completed concrete.
20. All joints shall be made over 2" x 1" RCC. 1.5" x 1" wide where directly bearing on fully completed concrete.
21. Make sure the reinforcement is provided in the slab where it is not provided, make sure that wall over deep well foundation.
22. The maining details of any structural RCC shall be as per approved drawings or as per engineering practice, must follow and read a copy of IS-456-2000 with regard to concrete.
23. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
24. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
25. Cast cover for all reinforcement shall be as under:-

ITEM	REBAR LENGTH	OD
1.	20mm	40mm
2.	25mm	50mm
3.	32mm	70mm

REINFORCEMENT DETAILING

26. All reinforcement shall be terminated with straight length of 1.0 m unless other was specified.
27. The horizontal distance between two parallel main reinforcement bars shall not be less than 1.0 m or 5 mm more than nominal size of coarse aggregate, whichever ever is more. Spacing of top bars measured above pedestal cap. Shall exceed 300 mm.
28. The vertical spacing of reinforcement bars shall be as per IS-456-2000.
29. The maining details of any structural RCC shall be as per approved drawings or as per engineering practice, must follow and read a copy of IS-456-2000 with regard to concrete.
30. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
31. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
32. Cast cover for all reinforcement shall be as under:-
33. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
34. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
35. Cast cover for all reinforcement shall be as under:-
36. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
37. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
38. Cast cover for all reinforcement shall be as under:-
39. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
40. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
41. Cast cover for all reinforcement shall be as under:-
42. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
43. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
44. Cast cover for all reinforcement shall be as under:-
45. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
46. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
47. Cast cover for all reinforcement shall be as under:-
48. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
49. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
50. Cast cover for all reinforcement shall be as under:-
51. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
52. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
53. Cast cover for all reinforcement shall be as under:-
54. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
55. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
56. Cast cover for all reinforcement shall be as under:-
57. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
58. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
59. Cast cover for all reinforcement shall be as under:-
60. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
61. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
62. Cast cover for all reinforcement shall be as under:-
63. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
64. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
65. Cast cover for all reinforcement shall be as under:-
66. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
67. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
68. Cast cover for all reinforcement shall be as under:-
69. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
70. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
71. Cast cover for all reinforcement shall be as under:-
72. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
73. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
74. Cast cover for all reinforcement shall be as under:-
75. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
76. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
77. Cast cover for all reinforcement shall be as under:-
78. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
79. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
80. Cast cover for all reinforcement shall be as under:-
81. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
82. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
83. Cast cover for all reinforcement shall be as under:-
84. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
85. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
86. Cast cover for all reinforcement shall be as under:-
87. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
88. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
89. Cast cover for all reinforcement shall be as under:-
90. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
91. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
92. Cast cover for all reinforcement shall be as under:-
93. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
94. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
95. Cast cover for all reinforcement shall be as under:-
96. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
97. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.
98. Cast cover for all reinforcement shall be as under:-
99. In beams, wherever reinforcement bars are provided in two or more layers, space bars of 250 @ 40 shall be provided between the reinforcement bars.
100. Wherever beams below foundation shall over 6" offset on all sides. Whenever the gap between footing is less than 6" the reinforcement shall be tied with iron corners.





ICMAI, JAIPUR CENTRE

S.no.	Door Width	Sill H.	Lintel H.	
01	GD-1	8250	00	3750
02	GD-2	5520	00	3750
03	GD-3	2700	00	3750

S.no.	Door Width	Sill H.	Lintel H.	
01	D-1	1500	00	2400
02	D-2	2400	00	2400
03	D-3	900	00	2100
04	D-4	800	00	2100
05	D-5	1000	00	2100
06	D-6	1050	00	2400

S.no.	Window Width	Sill H.	Lintel H.	
01	W-1	4000	150	3750
02	W-2	2100	1050	3150
03	W-3	975	1050	3150
04	W-4	900	1500	3150
05	W-5	2100	150	3750
06	W-6	2100	1050	3750
07	W-7	4000	1050	3750
08	V-1	2400	2250	2475
09	V-2	2400	1780	2475



GLASS DOOR DETAILS

DWG NO: ICMAI / JPR / JAR / 10/10

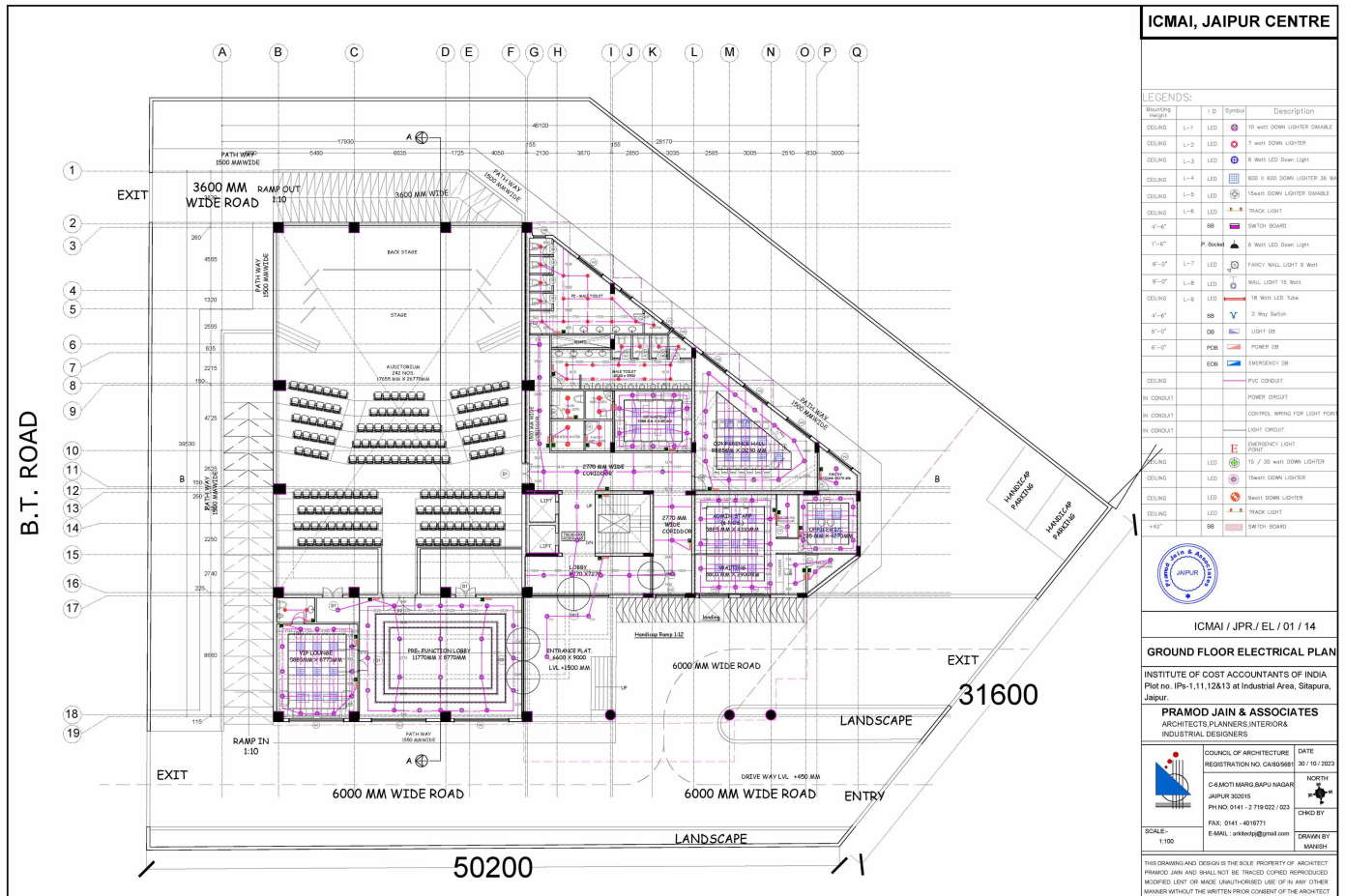
INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot No. IPB-1, 11, 12 & 13 at Industrial Area, Sitapura, Jaipur.

PRAMOD JAIN & ASSOCIATES
 ARCHITECTS, PLANNERS, INTERIORS
 INDUSTRIAL DESIGNERS

COUNCIL OF ARCHITECTURE	DATE
REGISTRATION NO. CA/2626	30 / 10 / 23
C-63071 MARG SAPU NAGAR	NORTH
JAIPUR 302015	
PH NO: 0141 - 2719 022 / 023	CRWD BY
FAX: 0141 - 4918771	
E-MAIL: prmodjain@gmail.com	DRAWN BY
	MANISH

SCALE: 1:100

THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT



ICMAI, JAIPUR CENTRE

LEGENDS:

NOTATION	I.D.	Symbol	Description
CEILING	L-1	LED	10 watt DOWN LIGHTER DIMABLE
CEILING	L-2	LED	7 watt DOWN LIGHTER
CEILING	L-3	LED	6 Watt LED DOWN LIGHT
CEILING	L-4	LED	600 X 600 DOWN LIGHTER 36 WATT
CEILING	L-5	LED	15WATT DOWN LIGHTER DIMABLE
CEILING	L-6	LED	TRACK LIGHT
6" x 6"	SB	SWITCH BOARD	
1" x 4"	P. BOARD	6 Watt LED Down Light	
9" x 9"	L-7	LED	FANCY WALL LIGHT 9 Watt
9" x 9"	L-8	LED	WALL LIGHT 15 Watt
CEILING	L-9	LED	16 Watt LED Tube
6" x 6"	SB	2 Way Switch	
6" x 6"	DB	LIGHT DB	
6" x 6"	POB	POWER DB	
6" x 6"	EDB	EMERGENCY DB	
CEILING		PVC CONDUIT	
IN CONDUIT		POWER CIRCUIT	
IN CONDUIT		CONTROL WIRING FOR LIGHT POINT	
IN CONDUIT		LIGHT CIRCUIT	
		EMERGENCY LIGHT POINT	
CEILING	LED	15 / 30 watt DOWN LIGHTER	
CEILING	LED	15WATT DOWN LIGHTER	
CEILING	LED	8WATT DOWN LIGHTER	
CEILING	LED	TRACK LIGHT	
6" x 6"	SB	SWITCH BOARD	

ICMAI / JPR / EL / 01 / 14

GROUND FLOOR ELECTRICAL PLAN

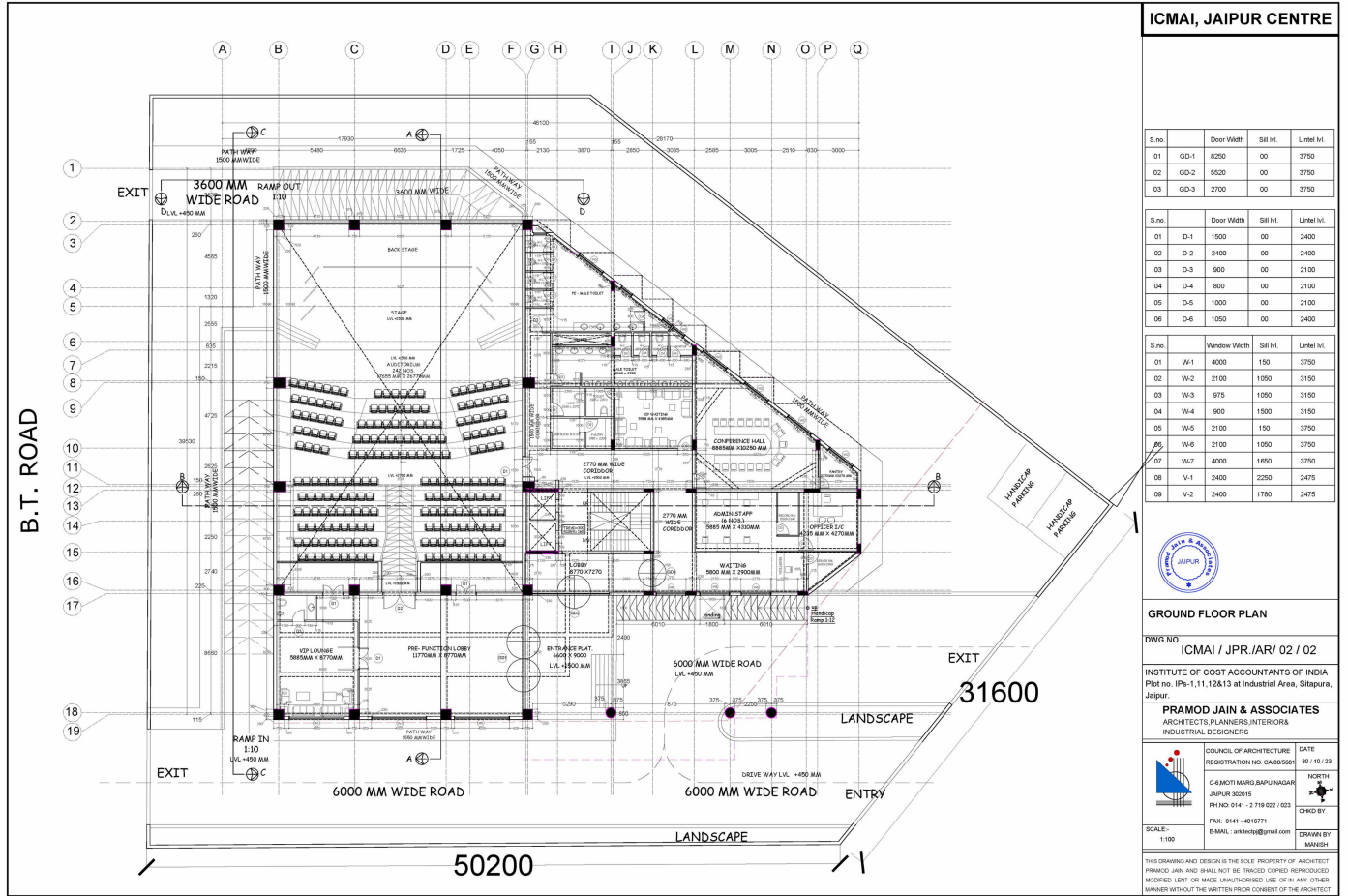
INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot No. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur.

PRAMOD JAIN & ASSOCIATES
 ARCHITECTS, PLANNERS, INTERIORS
 INDUSTRIAL DESIGNERS

COUNCIL OF ARCHITECTURE DATE: 30/10/2023
 REGISTRATION NO. CA/2019/36
 NORTH
 CAJAYOTI MANGU SAPU NAGAR
 JAIPUR-302015
 PH: 0141-2719-022 / 023
 CRWD BY
 FAX: 0141-4918771
 E-MAIL: srinivaspj@gmail.com
 DRAWN BY
 MANISH

SCALE: 1:100

THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT, OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT



ICAI, JAIPUR CENTRE			
S.No.	Door Width	Sill Ht.	Lintel Ht.
01	GD-1	5250	00
02	GD-2	5020	00
03	GD-3	2700	00
S.No.	Door Width	Sill Ht.	Lintel Ht.
01	D-1	1500	00
02	D-2	2400	00
03	D-3	900	00
04	D-4	800	00
05	D-5	1000	00
06	D-6	1050	00
S.No.	Window Width	Sill Ht.	Lintel Ht.
01	W-1	4000	150
02	W-2	2100	1050
03	W-3	975	1050
04	W-4	900	1500
05	W-5	2100	150
06	W-6	2100	1050
07	W-7	4000	1650
08	V-1	2400	2250
09	V-2	2400	1780

GROUND FLOOR PLAN

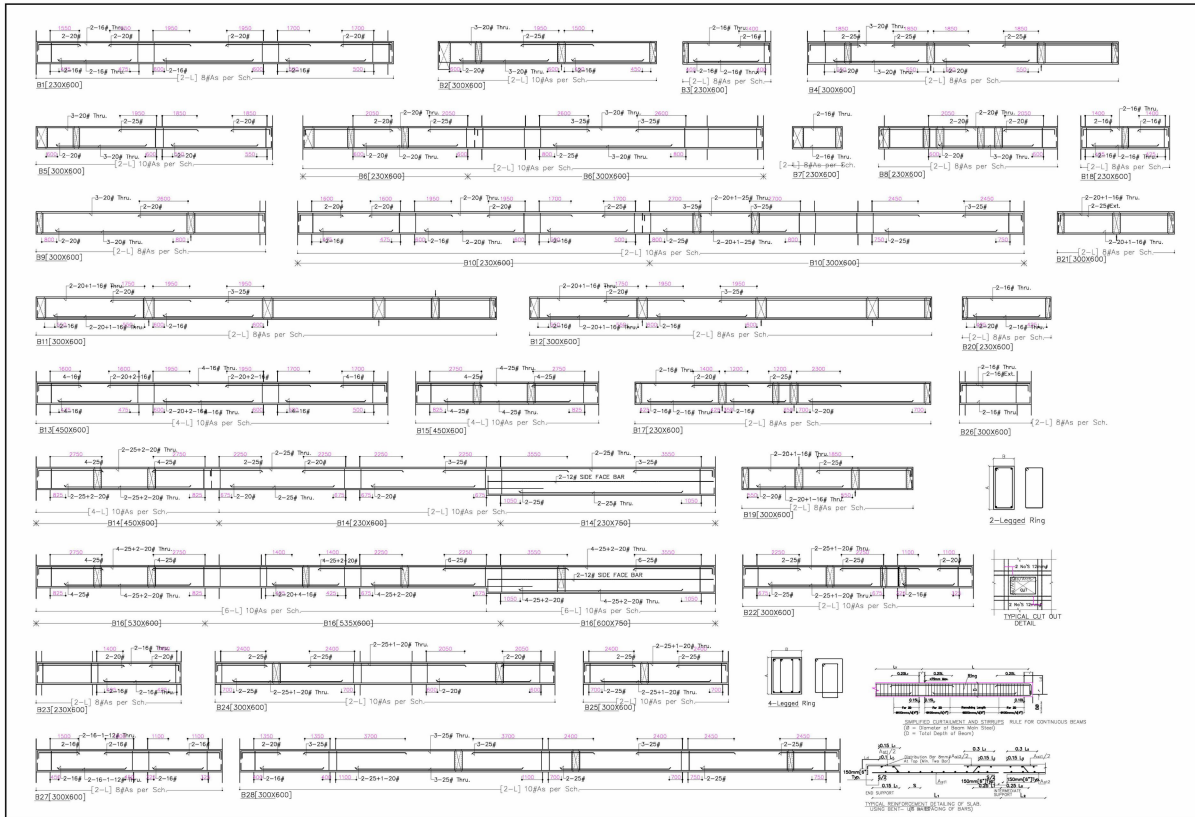
DWG. NO: ICAI / JPR. / AR / 02 / 02

INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot No. IP-1,11,12&13 at Institutional Area, Sitapura, Jaipur.

PRAMOD JAIN & ASSOCIATES
 ARCHITECTS PLANNERS INTERIORS
 INDUSTRIAL DESIGNERS

	COUNCIL OF ARCHITECTURE	DATE
	REGISTRATION NO. CA/02/96	30/10/23
	NORTH	
	CA/02/10/2015	
	PH. NO. 0141 - 2719 022 / 023	CR'D BY
	FAX: 0141 - 4918771	
	E-MAIL: pjain@pja.com	DRAWN BY
		MANISH

THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT, OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT



ICMAI, JAIPUR CENTRE

Grade Of Concrete
 For Foundation/Raft/Pedestal= M25
 For Slab= M25
 For Column/Lift Wall= M25
 For Beam & Slab= M25

Grade Of Reinforcement Steel
 TMT Bar Fe 550D

GENERAL NOTES:

1. ALL DIMENSIONS AND LEVELS ARE IN MM & MET
2. DONOT SCALE THE DRAWING WRITTEN DIMENSION ONLY
3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND SERVICE DRAWING ANY DISCREPANCY SHOULD BE IMMEDIATELY BROUGHT TO NOTICE
4. ONLY LOAD BEARING WALLS ARE SHOWN IN PLAN OTHER WALLS SHALL BE STOPPED UP BELOW TOP OF BEAM/SLAB AND SHALL FOLLOW THE CURVE OF BEAM/SLAB UNLESS OTHERWISE SHOWN IN ARCHITECTURAL DRAWING.

REINFORCEMENT DETAILS
 Please Refer Drawing ST/PGICA/00

CONCRETE DETAILS
 Please Refer Drawing ST/PGICA/00

ICMAI / JPR / ST / 02 / 18
 DWG.NO

GROUND FLOOR ROOF BEAM DETAIL

INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot No. 11, 12 & 13 at Industrial Area, Jaipur,
 Jaipur.

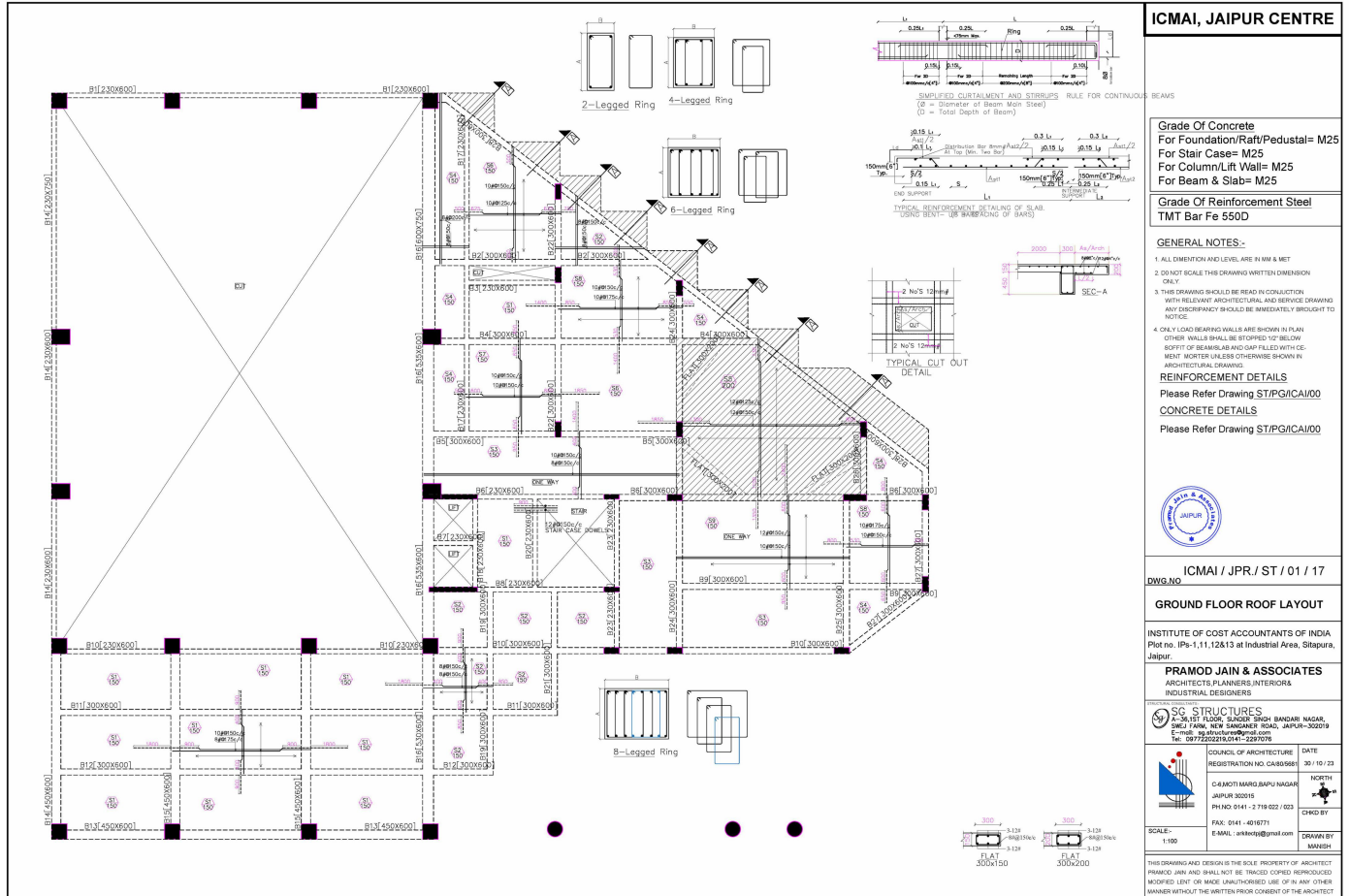
PRAMOD JAIN & ASSOCIATES
 ARCHITECTS PLANNERS INTERIORS
 INDUSTRIAL DESIGNERS

SG STRUCTURES
 2-16, 2-18, 2-25, 4-25, 6-16, 8-16, 10-16, 12-16, 14-16, 16-16, 18-16, 20-16, 22-16, 24-16, 26-16, 28-16, 30-16, 32-16, 34-16, 36-16, 38-16, 40-16, 42-16, 44-16, 46-16, 48-16, 50-16, 52-16, 54-16, 56-16, 58-16, 60-16, 62-16, 64-16, 66-16, 68-16, 70-16, 72-16, 74-16, 76-16, 78-16, 80-16, 82-16, 84-16, 86-16, 88-16, 90-16, 92-16, 94-16, 96-16, 98-16, 100-16

DATE: 30/10/23
 NORTH
 DRAWN BY: MANISH
 CHECKED BY: MANISH

SCALE: 1:100

THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE REPRODUCED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT



ICMAI, JAIPUR CENTRE

Grade Of Concrete
 For Foundation/Raft/Pedestal= M25
 For Stair Case= M25
 For Column/Lift Wall= M25
 For Beam & Slab= M25

Grade Of Reinforcement Steel
 TMT Bar Fe 550D

GENERAL NOTES:-

1. ALL DIMENSION AND LEVEL ARE IN MM & MET
2. DO NOT SCALE THIS DRAWING WRITTEN DIMENSION ONLY
3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND SERVICE DRAWING ANY DISCREPANCY SHOULD BE IMMEDIATELY BROUGHT TO NOTICE
4. ONLY END BEARING WALLS ARE SHOWN IN PLAN OTHER WALLS SHALL BE STOPPED 10' BELOW SOFFIT OF BEAMS/SLAB AND GAP FILLED WITH CEMENT MORTAR/FAIRFACER OTHERWISE SHOWN IN ARCHITECTURAL DRAWING

REINFORCEMENT DETAILS
 Please Refer Drawing ST/PG/ICAI/00

CONCRETE DETAILS
 Please Refer Drawing ST/PG/ICAI/00

ICMAI / JPR / ST / 01 / 17

DWS NO

GROUND FLOOR ROOF LAYOUT

INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot no. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur

PRAMOD JAIN & ASSOCIATES
 ARCHITECTS, PLANNERS, INTERIORS,
 INDUSTRIAL DESIGNERS

SG STRUCTURES
 2nd FLOOR, SANDIP SIKHAR SANGHAR NAGAR,
 SHEEL FARM, NEW SANGANER ROAD, JAIPUR-302019
 E-MAIL: sgstructures@gmail.com
 Tel: 0977202219, 0141-2297076

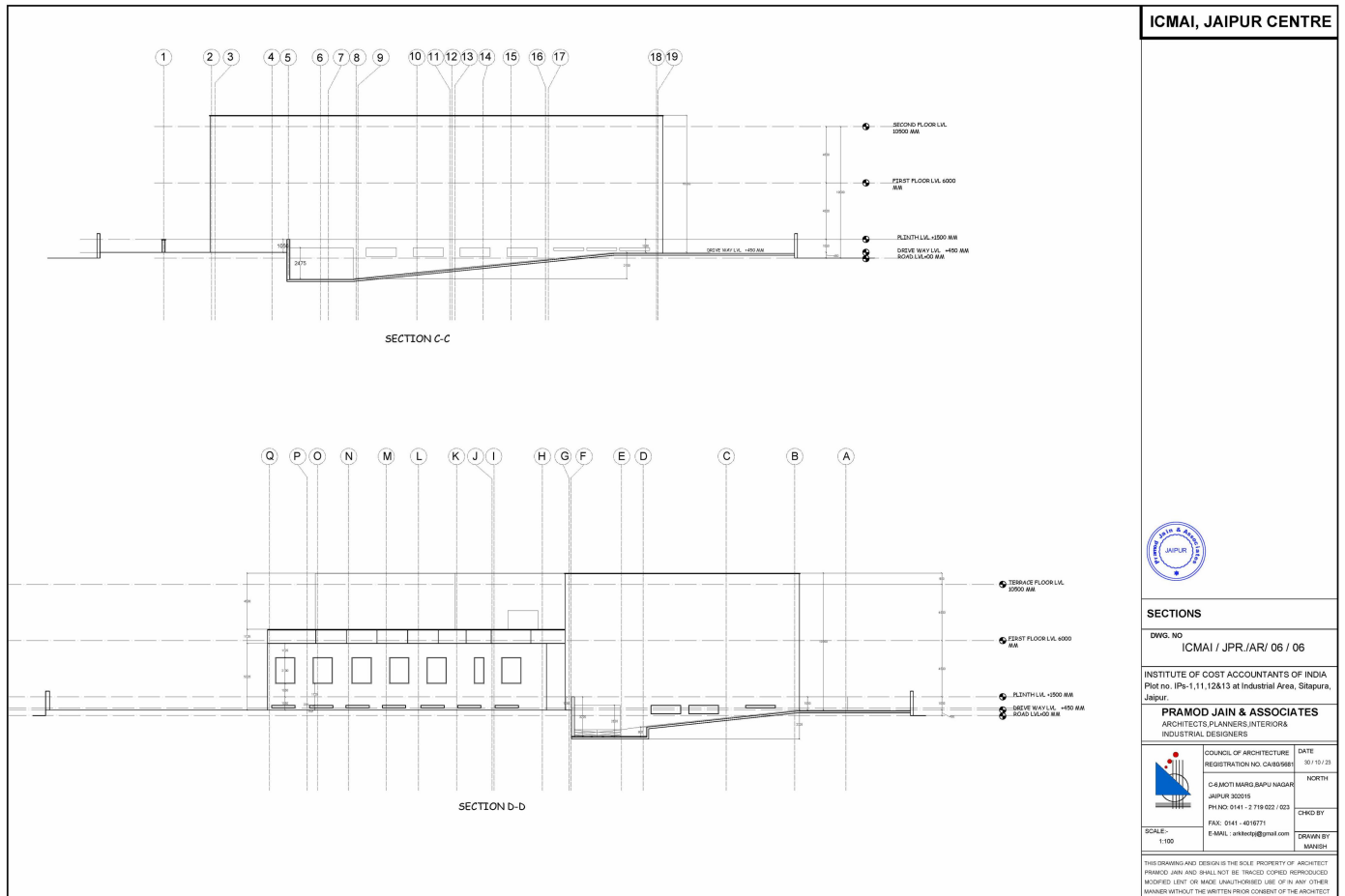
COUNCIL OF ARCHITECTURE REGISTRATION NO. CA/2056	DATE 30/10/23
C-63071 MARG SANGHAR NAGAR JAIPUR-302019	NORTH
PH NO: 0141-2219-022 / 023	CPWD BT
FAX: 0141-4918771	DRAWN BY MANISH
E-MAIL: srinivas@jprnl.com	


SCALE: 1:100

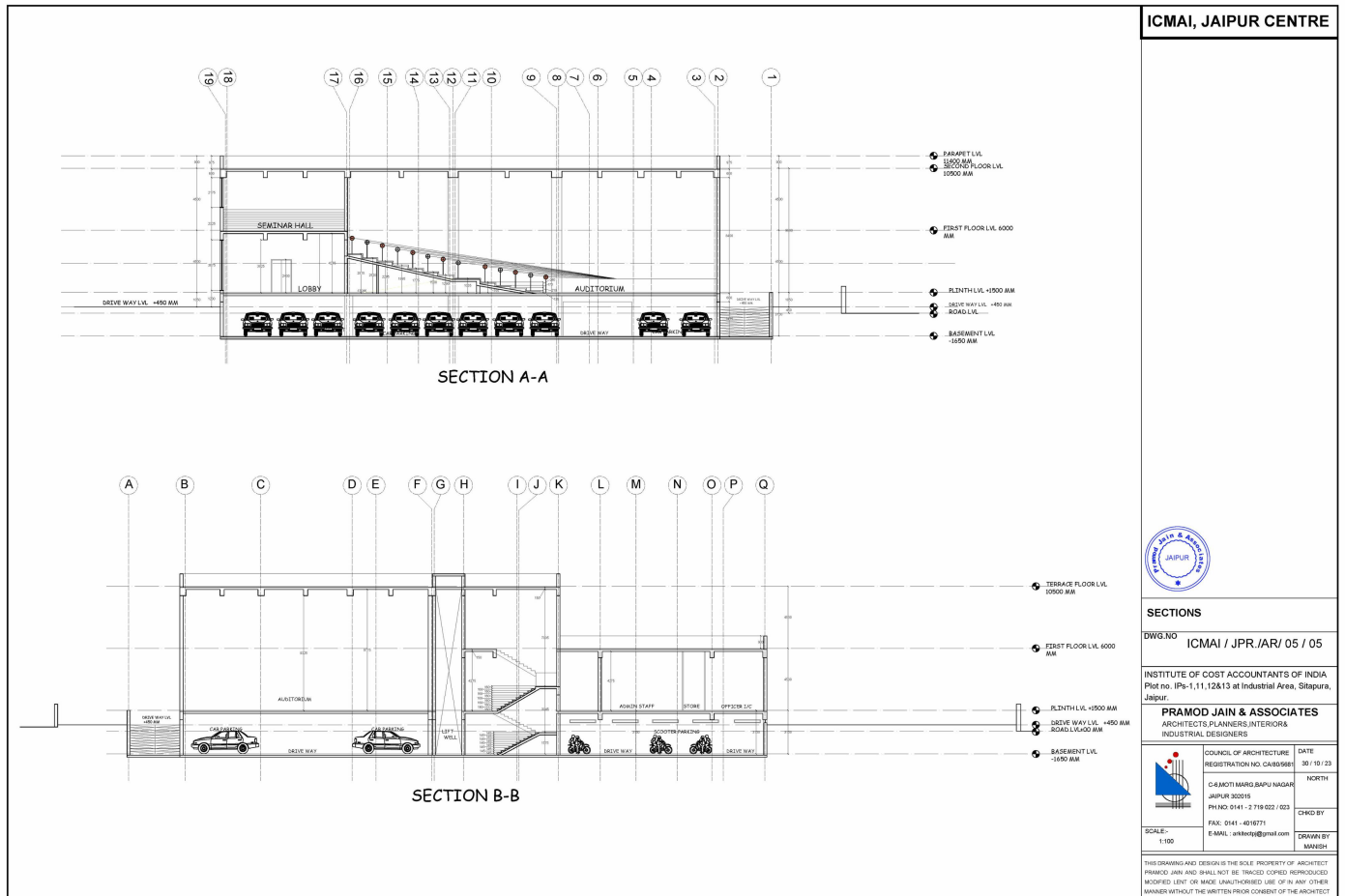
THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT

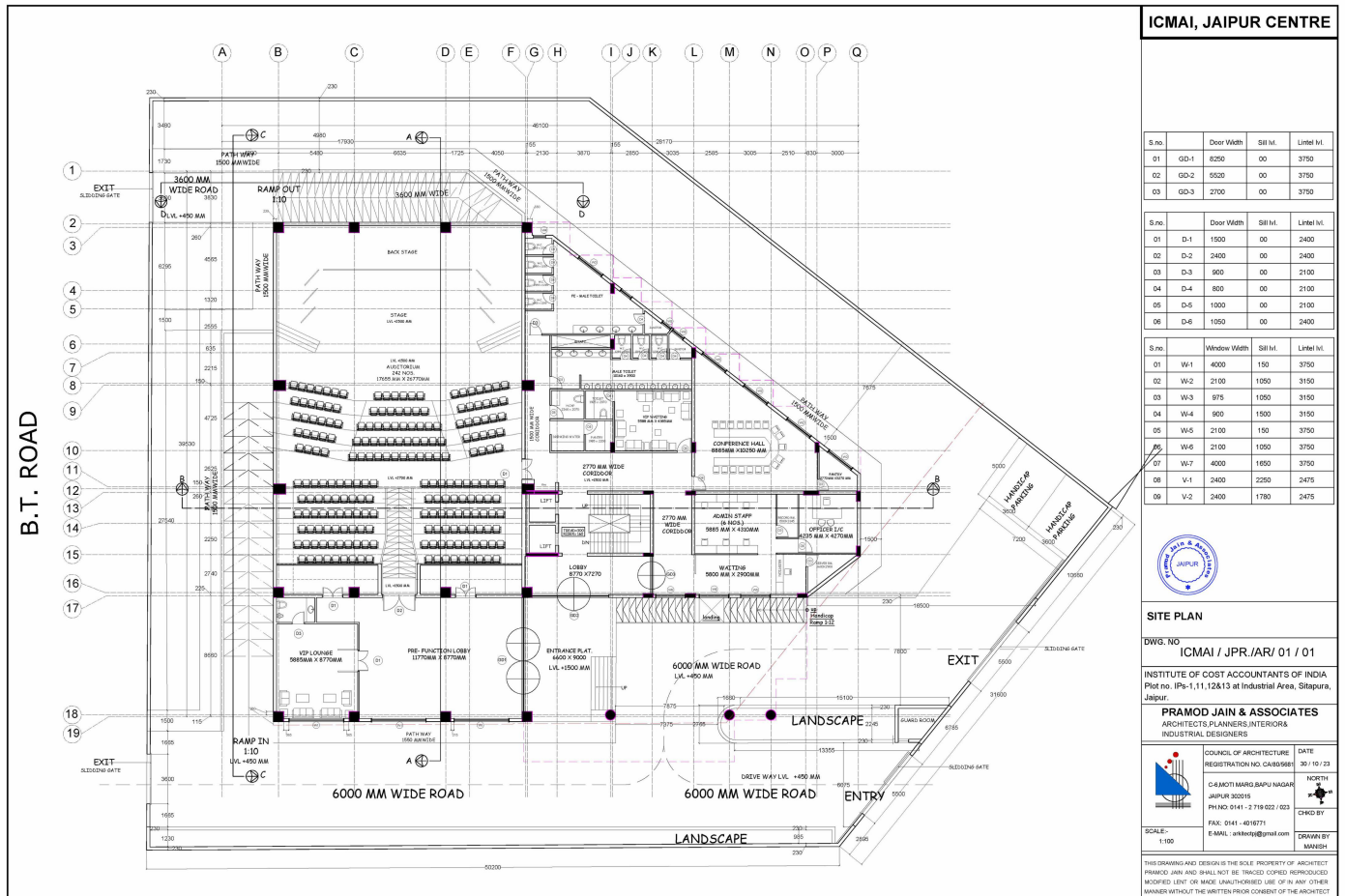


THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
 CMA BHAWAN, Headquarters, 12, Sudder Street, Kolkata – 700 016.
 CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi Office – 1100 03.



ICMAI, JAIPUR CENTRE	
	
SECTIONS	
DWG. NO ICMAI / JPR./AR/ 06 / 06	
INSTITUTE OF COST ACCOUNTANTS OF INDIA Plot No. IP-1,11,12&13 at Industrial Area, Sitapura, Jaipur.	
PRAMOD JAIN & ASSOCIATES ARCHITECTS, PLANNERS, INTERIORS INDUSTRIAL DESIGNERS	
COUNCIL OF ARCHITECTURE REGISTRATION NO. CAAR/06/06	DATE 30/10/23
C-6/20TH MARG SAPU NAGAR JAIPUR 302015 PH NO: 0141 - 2719 022 / 023	NORTH CWD BY MANISH
FAX: 0141 - 4918771 E-MAIL: pramodjain@gmail.com	DRAWN BY MANISH
SCALE: 1:100	THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT





ICMAI, JAIPUR CENTRE

S.No.	Door Width	Sill Ht.	Lintel Ht.	
01	GD-1	5250	00	3750
02	GD-2	5020	00	3750
03	GD-3	2700	00	3750

S.No.	Door Width	Sill Ht.	Lintel Ht.	
01	D-1	1500	00	2400
02	D-2	2400	00	2400
03	D-3	900	00	2100
04	D-4	800	00	2100
05	D-5	1000	00	2100
06	D-6	1050	00	2400

S.No.	Window Width	Sill Ht.	Lintel Ht.	
01	W-1	4000	150	3750
02	W-2	2100	1050	3150
03	W-3	975	1050	3150
04	W-4	900	1500	3150
05	W-5	2100	150	3750
06	W-6	2100	1050	3750
07	W-7	4000	1650	3750
08	V-1	2400	2250	2475
09	V-2	2400	1780	2475



SITE PLAN

DWG. NO: **ICMAI / JPR./AR/ 01 / 01**

INSTITUTE OF COST ACCOUNTANTS OF INDIA
 Plot No. IPB-1,11,12&13 at Institutional Area, Sitapura, Jaipur.

PRAMOD JAIN & ASSOCIATES
 ARCHITECTS PLANNERS INTERIORS
 INDUSTRIAL DESIGNERS

	COUNCIL OF ARCHITECTURE	DATE
	REGISTRATION NO. CA/0296	30 / 10 / 23
	NORTH	
	CHD BY	
	SCALE: 1:100	
	FAX: 0141-4918771	
	E-MAIL: pramodjain@gmail.com	
	DRAWN BY: MANISH	

THIS DRAWING AND DESIGN IS THE SOLE PROPERTY OF ARCHITECT PRAMOD JAIN AND SHALL NOT BE TRACED, COPIED, REPRODUCED, MODIFIED, LENT, OR MADE UNAUTHORISED USE OF IN ANY OTHER MANNER WITHOUT THE WRITTEN PRIOR CONSENT OF THE ARCHITECT

