

Tender Ref. No. KVG/PMD/01/2023-24/Contractor

Dated. 05.12.2023

**SUBJECT: PROPOSED RENOVATION WORKS OF KARNATAKA VIKAS
GRAMEENA BANK AT FIRST FLOOR HEAD OFFICE BUILDING DHARWAD.**

**TENDER FOR CIVIL, INTERIOR FURNISHING, ELECTRICAL,
NETWORKING AND AIRCONDITIONING WORKS**

PART-1

PREQUALIFICATION CUM TECHNICAL BID

Date of issue of Tender : 05.12.2023 During office hours.
Last date for submission of tender : 26.12.2023 up to 2.00 pm.
Opening of Bid : 26.12.2023 at 04.00 pm.
Pre bid Meeting : 12.12.2023 at 3.30 pm.

<u>Owner:</u> CHIEF MANAGER, Premises Maintenance Division, Head Office, Karnataka Vikas Grameena Bank Belguam Road DHARWAD	<u>Consultant:</u> M/s Kulkarni Associates, No. 203, Suryaprema Bldg., Above Canara Bank, Raghuvanahalli, Kanakpura Road, Bangalore 560062 Ph. No. 9448374916/ 6362396112 E-Mail: kulkarni.associates@yahoo.com
--	---

(Signature of the Contractor with Seal)

- 1 -

KARNATAKA VIKAS GRAMEENA BANK HEAD OFFICE DHARWAD

NIT FOR PROPOSED RENOVATION WORKS OF KVG BANK AT FIRST FLOOR HEAD OFFICE BUILDING DHARWAD

Karnataka Vikas Grameena Bank invites Tenders in two-bid system i.e. Technical Bid and Commercial/Price Bid from eligible established contractors having **registered Branch office in State of Karnataka** for carrying out proposed Refurnishing works at **First Floor of KVG Bank Head Office Dharwad**. The estimated cost of work is **Rs.175.00 Lakhs + GST** and the Completion period is **3 months**. Tender forms (prequalification bid & Price Bid) can be collected against payment of **Rs.3000/- (non-refundable)** by way of Demand Draft/ pay order drawn from Nationalized Bank only in favour of “Karnataka Vikas Grameena Bank” payable at Dharwad during working hours from **05.12.2023 to 26.12.2023 upto 2 p.m.** The tenders are also available on Bank’s website www.kvgbank.com & Government portal www.eprocure.gov.in. Tenderer downloading documents from website, must submit Demand Draft/ pay order for document cost (**Rs.3000/-**) while submitting the tender in a separate envelope super scribing “**tender cost**” else tender will not be considered for opening. The last date of submission of tender is **26.12.2023 upto 2.00 p.m.** Applicants registered as **MSME / NSIC / Udyog Aadhar/SSI Scheme** are exempted from depositing cost of BID document / EMD provided they attach self-attested copy of the relevant certificate. **The Bank reserves the right to reject any or all applications without assigning any reasons whatsoever. Please refer banks website and Govt. portal regarding any corrigendum for the subject tender till finalization.**

CHIEF MANAGER,
Premises Maintenance Division, Head Office,
Karnataka Vikas Grameena Bank Belguam Road DHARWAD

INDEX

Sr. No.	Contents	Page No.
1.	NOTICE FOR INVITING TENDER	5
2.	INTEGRITY PACT (IP)	8
3.	BIO-DATA OF CONTRACTING AGENCY	14
4.	PURCHASE PREFERENCE	24
5.	INSTRUCTIONS WITH REGARD TO SUBMISSION OF TENDERS	28
6.	TENDER FORM	31
7.	SUPPLEMENTARY CONDITIONS	33
8.	INDEMNITY BOND	34
9.	PERFORMANCE BANK GUARANTEE	35
10.	ARTICLES OF AGREEMENT	37
11.	GENERAL INSTRUCTIONS TO CONTRACTORS AND SPECIAL CONDITIONS	50
12.	THE CONDITIONS HEREIN BEFORE REFERRED TO	55
13.	APPENDIX HEREIN BEFORE REFERRED TO	79
14.	SAFETY CODE	80
15.	ADDITIONAL CONDITIONS	83
16.	PROFORMA OF APPLICATION FOR EXTENSION OF THE PERIOD	87
17.	DETAILED TECHNICAL SPECIFICATIONS	89
18.	LIST OF INDIAN STANDARDS	132
19.	LIST OF APPROVED MAKES/BRANDS	135
20.	DRAWINGS	
21.	COMMERCIAL / PRICE BID	

DISCLAIMER

The information is provided to prospective tenderer having Registered Branch Office in State of Karnataka, who intend to participate in bidding process for Interior furnishing, Civil, Electrical, Networking and Air conditioning works of proposed Refurnishing works at Renovation of First Floor @ KVG Bank Head office Building at Dharwad, for Karnataka Vikas Grameena Bank for which this tender has been issued, as per the terms and conditions set out in this tender and any other terms and conditions related to such information.

This tender is neither an agreement nor an offer and the purpose of this Tender/ Request for Proposal (RFP) is to provide the Bidder(s) with information to assist the formulation of their proposals. The RFP does not claim to contain all the information each Bidder may require. While Bank has taken due care in the preparation of the information contained herein, it does not claim that the information is exhaustive. Respondents to this tender are required to make their own inquiries/analysis and should check the accuracy, reliability and completeness of the information in this RFP and where necessary obtain independent advices/clarifications. They should not rely solely on the information contained in the blank tender documents / forms. Bank may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP. The Bank is not responsible if no due diligence is performed by the Respondents.

The Bank, its employees and advisors make no representation or warranty and shall have no liability to any person, including any applicant or Bidder under any law, statute, rule or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expenses which may arise from or be incurred or suffered on account of anything contained in this tender or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the tender and any assessment, assumption, statement or information contained therein or deemed to form part of this tender or arising in any way for participation in this Bid stage.

Karnataka Vikas Grameena Bank reserves the right to alter, amend, update or supplement the information reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline bids without assigning any reason thereof.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery, fees, expenses associated with any demonstrations or presentations which may be required by Bank or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and Bank shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding process.

NOTICE FOR INVITING TENDER

To

Dear Sir,

SUBJECT: PROPOSED RENOVATION WORKS OF KVG BANK AT FIRST FLOOR HEAD OFFICE BUILDING DHARWAD.

- 1) Sealed, Item Rate, tenders are invited in the prescribed format from contractors having registered Branch office in State of Karnataka for execution of Internal furnishing, Civil, Electrical and Networking works for the **PROPOSED RENOVATION WORKS OF KVG BANK AT FIRST FLOOR HEAD OFFICE BUILDING DHARWAD** as per following details:

Estimated Cost of the Work	: Rs.175.00 lacs + GST.
Earnest Money Deposit	: Rs.3,50,000.00/- by way of Demand Draft/ pay order drawn From Nationalized Bank only in favor of Karnataka Vikas Grameena Bank payable at Dharwad.
Period of Completion	: 3 months
Validity of Tender	: 90 day
Date of Issue of Tender	: 05.12.2023 During office hours
Pre-bid Meeting with Contractor	: <u>3.30 p.m. on 12.12.2023</u>
Last date of submission of Tender	: Up to 2.00 p.m. on 26.12.2023
Date & Time of opening the Technical bid.	: 04.00 p.m. on 26.12.2023

The tender document can be obtained from the office of the Client: **Karnataka Vikas Grameena Bank Belguam Road Dharwad**, on payment of Rs.3000/- (non-refundable) by way of Demand Draft/ pay order drawn from Nationalized Bank only in favour of “Karnataka Vikas Grameena Bank” payable at Dharwad and should be submitted in original, duly stamped, and sealed in the same office.

- 2) The Item Rates under the contract include for full, final & entire completion of all works in all respects described in the tender document forming part of the contract. Contractor must quote Item Rates on estimated cost. Tenders will be opened in the presence of contracting agencies or their authorized representatives.
- 3) The tenders shall be submitted in two envelopes. The envelope No.1 shall be marked as Technical Bid and shall contain Technical Bid of the tender, EMD in the form of Demand Draft/ Pay Order drawn from Nationalized Bank, Prequalification application and any other matter. **The envelope No. 2 shall be marked as Price Bid.**

(Signature of the Contractor with Seal)

All the above 2 envelopes to be put in 3rd envelope super scribing the subject tender before submitting.

- 4) **Envelope No.1.** Will be opened on the due date of opening. **Envelope No. 2** of the contractors will be opened at later date (to be intimated subsequently) and of those whose prequalification application meets with eligibility criteria of the advertisement and the requirement of Tender fees, EMD and the terms/ conditions submitted, acceptance of technical bid, etc.
- 5) Tenders are to be submitted in one sealed Envelope Cover Enclosing Therein the Envelope No.1 and Envelope No.2 Duly Super scribed **“Tender for Renovation of First Floor at KVG Bank Head office Building at Dharwad”**.

The tenderer must use only the tender forms issued for the purpose to fill in the rates. Intimation of tender quoted by letter, telegram/ telex will not be acceptable. The tender must be dropped in a tender box kept at **Chief Manager, Premises Maintenance Division, Head Office, Karnataka Vikas Grameena Bank Belgaum Road Dharwad.**

- 6) **Delivery of the tender through courier/ post shall be avoided and any disputes arising thereof shall not be entertained.**
- 7) Tenderers are advised not to make any alteration/modification in the tender documents, Item of work or in any respect whatsoever. Violation of this requirement will make the Tender liable for rejection.
- 8) In case of postal delivery, the tenderer has to ensure that tender is reached before the due date and time and dropped in the tender box. The Bank will not be responsible for damage in the transit and delay of receipt of tender, if any or sent by a special messenger. **Tender received late shall be rejected.**
- 9) Every page of the tender documents should be signed by the person or persons submitting the tender in token of his/their having acquainted himself/themselves with the General and Special Conditions of Contract, Specifications etc. as laid down. Any tender with any of the documents not so signed will be subjected to rejection.
- 10) No consideration will be given to a tender received after the time stipulated above and no extension will be allowed for submission of the tender.
- 11) The Karnataka Vikas Grameena Bank shall not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever.
- 12) This notice inviting tenders, the conditions of tender and the duly completed form of tender etc. will form part of the Agreement to be executed by the successful tenderer with the Bank.
- 13) Tender submitted without EMD from Nationalized Bank will be treated as incomplete and the same will be rejected outrightly. The EMD shall be strictly in the form of Pay Order / Demand Draft. No Cheques will be accepted on account of EMD. Tenders submitted with the cheque as EMD will be treated as incomplete and will be rejected.
- 14) No tender will be received after the expiry of the time notified for receiving tenders under any circumstances whatsoever.
- 15) The tender rate against each item of work/ price indicated in the schedule of quantities and rates/ prices should be indicated both in words and figures. In case of any discrepancy, the

rates indicated in words would prevail.

- 16) Every tender shall be accompanied by earnest money of **Rs.3,50,000.00 (Rupees Three lakhs Fifty thousand only)** by way of Demand Draft/ Pay Order drawn from Nationalized Bank only favoring KARNATAKA VIKAS GRAMEENA BANK, payable at Dharwad. Tender submitted without earnest money shall be summarily rejected. Applicants registered as MSME/ NSIC / Udyog Aadhar/ SSI Scheme are exempted from depositing cost of BID document/ EMD provided they attach self-attested copy of the relevant certificate.
- 17) The successful bidder will have to submit performance security deposit for a sum of 5% of the value of the accepted tender in the form of an Account Payee DD or Performance Bank Guarantee from a commercial bank in an acceptable form safeguarding the interest of the bank in all respect. The Earnest Money shall be returned to successful bidder on submission of performance Bank Guarantee or retained in the case the successful tenderer desires to do so, as part of the performance security deposit for due fulfillment of the Contract. No interest shall be paid on this deposit.
- 18) Failure to enter into the Contract agreement within the stipulated time of 10 days from the date of acceptance of work order or withdrawal from bidding during bid validity period shall entail the forfeiture of the Earnest money Deposit.
- 19) The Earnest money of unsuccessful tenderer will be released after issue of work order, without any interest.
- 20) Security money deposit of the successful contractor who fails to carry out the job after issue of work order by the bank shall be forfeited.
- 21) All tenders in which any of the prescribed conditions are not fulfilled or incomplete in any respect are liable to be rejected.
- 22) This tender notice shall form part of the contract documents.
- 23) Notwithstanding the above condition, bank shall have the right to reject any bid without assigning any reason thereof.

CHIEF MANAGER

INTEGRITY PACT (IP):

Vendors/bidders/sellers, only those who commit themselves to Integrity Pact (IP) with the Bank, would be considered competent to participate in the bidding process. In other words, entering into this pact would be the preliminary qualification. Bids not accompanied with signed IP by the bidders shall be summarily rejected.

IP shall cover all phases of contract i.e. from the stage of Notice Inviting Tenders (NIT)/ Request for Proposals (RFP) till the conclusion of the contract i.e. final payment or the duration of warrantee/guarantee. Format of IP is attached in Annexure "A" or strict compliance.

It may kindly be noted that all clarification/query/status with respect to tender may be forwarded to the following officer and not to IEMs except query related to Integrity Pact:

CHIEF MANAGER,
Premises Maintenance Division, Head Office,
Karnataka Vikas Grameena Bank Belguam Road Dharwad
Ph.No.:9480699595
E-mail: pmd@kvgbank.com

Chief Manager

Annexure-A

(To be submitted by bidder on plane Rs.200/- bond paper with witnesses)

Integrity Pact

Tender Ref. No. KVG/PMD/01/2023-24/Contractor

Dt. 05.12.2023

1. Whereas Karnataka Vikas Grameena Bank having its registered office at KVG Bank Head Office , Belguam Road Dharwad Planning and Development Division, represented by Chief Manager hereinafter referred to as the Buyer and the first party, proposes to procure (Name or category of the Equipment, services, etc.), hereinafter referred to as Stores and / or Services.

And

M/s....., represented by..... , Chief Executive Officer (which term, unless expressly indicated by the contract, shall be deemed to include its successors and its assignee), hereinafter referred to as the Bidder/ Seller and the second party, is willing to offer/ has offered the Stores and / or Services.

2. Whereas the Bidder / Seller is a private company/public company /partnership/ registered export agency, constituted in accordance with the relevant law in the matter and the Buyer is a Public Sector Undertaking and registered under Companies Act 1956. Buyer and Bidder/Seller shall hereinafter be individually referred to as “Party” or collectively as the “parties”, as the context may require.

3. Preamble

Buyer has called for tenders under laid down organizational procedures intending to enter into contract/s for supply / purchase / etc. of.....and the Bidder / Seller is one amongst several bidders/Proprietary Vendor/Customer Nominated Source/Licenser who has indicated a desire to bid/supply in such tendering process. Both parties acknowledge the importance of maintaining the highest standards of integrity, transparency and fairness in the tendering process.

In order to achieve these goals, the Buyer will appoint Independent External Monitor(s) (IEM) in consultation with Central Vigilance Commission, who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

4. Commitments of the Buyer.

- 4.1 The Buyer commits itself to take all measures necessary to prevent corruption and fraudulent practices and to observe the following principles:-

- i) The bank commit to ensuring the fair, transparent and competitive tendering process.
- ii) The Bank undertakes to treat all bidders, sellers equally. The Buyer will in particular, before and during the tender process, provide to all Bidder(s) / Seller(s) the same information and will not provide to any Bidder(s)/ Seller(s) confidential / additional information through which the Bidder(s) / Seller(s) could obtain an advantage in relation to the process or the contract execution.
- iii) The Buyer will exclude from the process all known prejudiced persons.

- 4.2 If the Buyer obtains information on the conduct of any of its employees which is a criminal offence under the Indian legislation Prevention of Corruption Act 1988 as amended from time

to time or if there be a substantive suspicion in this regard, the Buyer will inform to its Chief Vigilance Officer and in addition can initiate disciplinary action.

5. Commitments of the Bidder(s) / Seller(s).

5.1 The Bidder(s)/ Seller(s) commit himself to take necessary measures to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution. The bidder commits to submit a tender based on accurate and complete information.

- i) The Bidder(s)/ Seller(s) will not, directly or through any other persons or firm, offer promise or give to any of the Buyer's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he / she is not legally entitled to, in order to obtain in exchange any advantage during the tendering or qualification process or during the execution of the contract.
- ii) The Bidder(s)/ Seller(s) will not enter with other Bidders / Sellers into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- iii) The Bidder(s)/ Seller(s) will not commit any offence under the Indian legislation, Prevention of Corruption Act 1988 as amended from time to time. Further, the Bidder(s)/ Seller(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Buyer as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

5.2 The Bidder(s)/Seller(s) shall ensure compliance of the provisions of this Integrity Pact by its sub-supplier(s)/ sub-contractor(s), if any. Further, the Bidder/Seller shall be held responsible for any violation/breach of the provisions by its sub-supplier(s)/sub-contractor(s).

5.3 The Bidder(s)/ Seller(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences

5.4 The bidder not to engage in any corrupt, fraudulent, collusive or coercive practices.

5.5 Agents / Agency Commission:

The Seller/Bidder confirms and declares to the buyer that the Seller/Bidder is the original manufacturer or authorized distributor / stockist of original manufacturer or Govt. Sponsored / Designated Export Agencies (applicable in case of countries where domestic laws do not permit direct export by OEMS) of the stores and / or Services referred to in this tender/ offer / contract / Purchase order and has not engaged any individual or firm, whether Indian or Foreign whatsoever, to intercede, facilitate or in any way to recommend to Buyer or any of its functionaries, whether officially or unofficially, to the award of the tender / contract / purchase order to the Seller/Bidder; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Seller/Bidder agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in anyway incorrect or if at a later stage it is discovered by the Buyer that the Seller/Bidder has engaged any such individual / firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract / purchase order, the Seller/Bidder will be liable to refund that amount to the Buyer. The Seller will also be debarred from participating in any RFQ / Tender for new projects / program with Buyer for a minimum period of five years. The Buyer will also have a right to consider cancellation of the

Contract / Purchase order either wholly or in part, without any entitlement or compensation to the Seller/Bidder who shall in such event be liable to refund agents / agency commission payments to the buyer made by the Seller/Bidder along with interest at the rate of 2% per annum above LIBOR (London Inter Bank Offer Rate) (for foreign vendors) and Base Rate of SBI (State Bank of India) plus 2% (for Indian vendors). The Buyer will also have the right to recover any such amount from any contracts / Purchase order concluded earlier or later with Buyer.

6. Previous Transgression

- 6.1 The Bidder / Seller declares that no previous transgressions have occurred in the last three years from the date of signing of this Integrity Pact with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify Bidder's/ Sellers' exclusion from the tender process.
- 6.2 If the Bidder / Seller makes incorrect statement on this subject, Bidder / Seller can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason without any liability whatsoever on the Buyer.

7. Company Code of Conduct

Bidders / Sellers are also advised to have a company code of conduct (clearly rejecting the use of bribes and other unethical behavior) and a compliance program for the implementation of the code of conduct throughout the company.

8. Sanctions for Violation

- 8.1 If the Bidder(s)/ Seller(s), before award or during execution has committed a transgression through a violation of Clause 5, above or in any other form such as to put his reliability or credibility in question, the Buyer is entitled to disqualify the Bidder(s)/ Seller(s) from the tender process or take action as per the procedure mentioned herein below:
- i) To disqualify the Bidder / Seller with the tender process and exclusion from future contracts.
 - ii) To debar the Bidder / Seller from entering into any bid from Buyer for a period of two years.
 - iii) To immediately cancel the contract, if already signed / awarded without any liability on the Buyer to compensate the Bidder / Seller for damages, if any. Subject to Clause 5, any lawful payment due to the Bidder/Seller for supplies effected till date of termination would be made in normal course.
 - iv) To encash EMD / Advance Bank Guarantees/ Performance Bonds/ Warranty Bonds, etc. which may have been furnished by the Bidder / Seller to the extent of the undelivered Stores and / or Services.
- 8.2 If the Buyer obtains knowledge of conduct of a Bidder/ Seller or of an employee or a representative or an associate of a Bidder / Seller which constitutes corruption, or if the Buyer has substantive suspicion in this regard, the Buyer will inform to its Chief Vigilance Officer.

9. Compensation for Damages

- 9.1 If the Buyer has disqualified the Bidder(s) / Seller(s) from the tender process prior to the award according to Clause 8, the Buyer is entitled to demand and recover the damages equivalent to Earnest Money Deposit in case of open tendering.
- 9.2 If the Buyer has terminated the contract according to Clause 8, or if the Buyer is entitled to terminate the contract according to Clause 8, the Buyer shall be entitled to encash the advance bank guarantee and performance bond/ warranty bond, if furnished by the Bidder / Seller, in order to recover the payments, already made by the Buyer for undelivered Stores and / or Services.

10. Price Fall Clause

The Bidder undertakes that it has not supplied/ is not supplying same or similar product/systems or subsystems at a price lower than that offered in the present Bid in respect of any other Ministry/Department of the Government of India or PSU or Coal India Ltd and its subsidiaries during the currency of the contract and if it is found at any stage that same or similar product/ Systems or Subsystems was supplied by the Bidder to any other Ministry / Department of the Government of India or a PSU or any Public Sector Bank at a lower price during the currency of the contract, then that very price will be applicable to the present case and the difference in the cost would be refunded by the Bidder to the Buyer, if the contract has already been concluded.”

11. Independent External Monitor(s)

- 11.1 The Buyer has appointed Independent External Monitors for this Integrity Pact in consultation with the Central Vigilance Commission (Names and Addresses of the Monitors to be given in RFQ).
- 11.2 As soon as the Integrity Pact is signed, the Buyer shall provide a copy thereof, along with a brief background of the case to the Independent External Monitors.
- 11.3 The Bidder(s) / seller (s), if they deem it necessary, may furnish any information as relevant to their bid to the Independent External Monitors.
- 11.4 If any complaint with regard to violation of the IP is received by the buyer in a procurement case, the buyer shall refer the complaint to the Independent External Monitors for their comments / enquiry.
- 11.5 If the Independent External Monitors need to peruse the records of the buyer in connection with the complaint sent to them by the buyer, the buyer shall make arrangement for such perusal of records by the Independent External Monitors.
- 11.6 The report of enquiry, if any, made by the Independent External Monitors shall be submitted to GM, Karnataka Vikas Grameena Bank, Head Office Building Belguam Road Dharwad within 2 weeks, for a final and appropriate decision in the matter keeping in view the provision of this Integrity Pact.

12. Law and Place of Jurisdiction: This Integrity pact is subject to Indian Laws, and exclusive Jurisdiction of Courts at Mumbai, India.

13. Other Legal Actions The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

14. Integrity Pact Duration

- 14.1 This Integrity Pact begins when both parties have legally signed it. It expires for the successful Bidder / Seller 10 months after the last payment under the contract, and for all other Bidders / Sellers within 6 months from date of placement of order / finalization of contract.
- 14.2 If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this Integrity Pact as specified above, unless it is discharged / determined by Chief Manager, Karnataka Vikas Grameena Bank.
- 14.3 Should one or several provisions of this Integrity Pact turn out to be invalid, the remainder of this Integrity Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

15. Other Provisions

- 15.1 Changes and supplements need to be made in writing. Side agreements have not been made.

- 15.2 The Bidder(s)/Seller(s) signing this IP shall not initiate any Legal action or approach any court of law during the examination of any allegations/complaint by IEM and until the IEM delivers its report.
- 15.3 In view of the nature of this Integrity Pact, this Integrity Pact shall not be terminated by any party and will subsist throughout its stated period,
- 15.4 Nothing contained in this Integrity Pact shall be deemed to assure the Bidder/ Seller of any success or otherwise in the tendering process.
16. This Integrity Pact is signed with Karnataka Vikas Grameena Bank exclusively and hence shall not be treated as precedence for signing of IP with MoD or any other Organization.
17. The Parties hereby sign this Integrity Pact at _____ on _____ (Seller/Bidder) and _____ on _____ (Buyer)

BUYER

BIDDER* / SELLER*

Signature:

Signature:

Chief Manager,

Authorized Signatory (*)

Karnataka Vikas Grameena Bank,

Head Office Dharwad

Date:

Date:

Stamp:

Stamp:

Witness

Witness

1. _____

1. _____

2. _____

2. _____

(*) - Authorized signatory of the company who has also signed and submitted the main bid

BIO - DATA OF CONTRACTING AGENCY

1. Name of the firm :
- Address :
- Telephone No. :
- Office :
- Residence :
- Mobile :
- Fax :
- E-Mail :

2a) Whether proprietary/partnership/:
Pvt. Ltd. / Public Ltd. (certificate
of registration / partnership deed
to be enclosed as Annexure-I).

b) Name of the Proprietor,
Partners, Directors

I)

II)

c) Year of establishment :

3. Registration with Tax Authorities :

- i) Income-tax (PAN) No. :
- ii) GST No. :
- iii) EPF Regn. No. :
- iv) ESI Regn. No. :
- v) TIN / VAT No. :

(Copies of certificates of registration with relevant authorities to be enclosed as Annexure-II-A, II-B, II-C, II-D & II-E)

4. Names of the Bankers with address & telephone numbers:

I)

II)

5. Enclose solvency certificate of the : Enclosed/ Not enclosed
Amount of 30% of estimated cost

Note: The solvency certificate should be addressed to “Whom so ever it may concern” and not older than six months from the date of advertisement.

6. Furnish copies of audited balance- : Enclosed/ Not enclosed
Sheet and Profit & Loss A/C. for the last
3 years i.e. Assessment years-2019-2020,
2020-2021, 2021-2023 as Annexure-IV-A, IV-B & IV-C.

(Signature of the Contractor with Seal)

7. Registration with Govt. / Public Sector / Banks (certificates of Registration to be enclosed as Annexure-V.

Name of the Organization	Year since empaneled

8. Give details if at present involved in litigation in similar type of contracts:

Sr. No.	Name of Project	Name of Employer	Nature of work	Work order dated	Date of completion of work	Value Rs.

9. Details of civil suit, if any, that arose :
during execution of contract in the
past 10 years.

10. Specify maximum value of single :
value project executed during the
last three years.

11. Name & relation, if any, with the staff :
Member of Karnataka Vikas Grameena
Bank.

12. Details of work executed during the last 3 years:

Type of work	Work executed for (name of the Institution / Body)	Nature of work (in brief)	Location	Value Rs.	Duration of work with dt Commence completion	If work left incomplete or terminated (give reasons)

Note: Copies of work orders along with Xerox copies of relevant TDS certificate, satisfactory completion certificate obtained from the client shall be enclosed as Annexure VI. Please note without the copies of certificates, your application is liable to be rejected.

(Signature of the Contractor with Seal)

13. Details of work on hand (photo copies of performance certificate, work orders issued by valued clients, preferably Banks, Govt., and Semi-Govt. Bodies should be enclosed as Annexure VII).

Type of work	Work executed for (name of the Institution / Body)	Nature of work (in brief)	Location	Value Rs.	Duration of work, stipulated time	Present stage of work

14. Details of Pre-Qualifying work (Filling of columns is mandatory and to be supported by copies of work order and completion letters as per the criteria. On Non-filling of columns or not enclosing credentials, the application form submitted will be rejected without assigning any reason thereof.)

Name of the work	Name of the client	Work order reference/date	Completion letter reference/ date	Value of work completed

15. LIST OF NAME/S OF PROPRIETOR/ PARTNERS & EMPLOYEES

Name	Qualifications	Experience	Particulars of work done	Employed in your firm since	Value of work done

16. Turnover in last 5 years:

Sr. No.	Year	Turnover (Rs.in lacs)	Income-tax paid	VAT paid	Service Tax paid
1	2018-19				
2	2019-20				
3	2020-21				
4	2021-22				
5	2022-23				

Copies of income-tax returns / assessment orders for each year to be enclosed as Annexure VIII-A,B,C,D & E

17. List of equipment's / machinery owned:

Sr. No.	Name of equipment	Year of manufacture	Nos. available

18. PRE-QUALIFICATION CRITERIA:

➤ **Mandatory Criteria (1st Stage of evaluation):**

1. Must be registered with income tax authority (Yes / No)
2. Must be registered with GST authority (Yes / No)
3. Firm should have Registered Branch Office in State of Karnataka (Yes / No)
4. Should have submitted solvency certificate of 30% of estimated cost i.e. Rs.52,50,000.00 (not older than 6 months).

➤ **Prequalification Criteria (2nd Stage of evaluation):**
(Estimated Cost: Rs. 175.00 lakhs + GST)

Sr. No.	Criteria	Weightages	Self-rating marks
1	Should have executed one similar work of 80% of estimated cost i.e. Rs.140.00 Lacs OR Should have executed two similar work of 50% of estimated cost i.e. Rs.87.50 Lacs ➤ At least One similar work is to be in state of Karnataka. ➤ At least One similar work is to be from Govt./Public Sector/Banks.	50	
2	Average turnover for the last three years shall be 30% of estimated cost i.e. Rs.52.50 and above.	25	
3	Should have made profit at least in two years during last three years.	25	

NOTE:

- The value of work executed will be enhanced by 5% per year to ascertain current value of the work done. Criteria mentioned above are just minimum requirement. The Bank at its discretion may upgrade the criteria. No complaint on this account will be entertained. Contractors scoring 80 marks & above will only be considered for pre-qualification. Contractors themselves have to fill in self-rating marks column in the above table.
- The **similar work** means Interior furnishing work including furniture/furnishing along with related service of Civil, Electrical, Air Conditioning, Networking, Fire Alarm System, Access Control works etc.

19. LIST OF ENCLOSURES:

ANNEXURE NO.	PARTICULARS	TICK IF ENCLOSED
I	Certificate of registration of Company / partnership deed.	
IA, IB	Certificates of registration with Income Tax, GST, EPF authorities,	
IC	Proof for having registered branch office in state of Karnataka	
ID	Solvency Certificate.	
IYA, IYB, IYC	Audited Balance Sheet & Profit & Loss A/c Statement for 2019-2020, 2020-2021 and 2021-2022, 2022-23	
V	Certificates of Registration with Govt./ Public Sector/ Banks.	
VI	Copies of work orders along with Xerox copies of relevant TDS certificate, satisfactory completion certificate mentioning value of work.	
VII	Copies of performance certificate, work orders issued by valued clients, preferably Banks, Govt. and Semi-Govt. Bodies.	
VIIIA, VIIIB, VIIIC, VIID, VIIIE	Copies of income-tax returns/ assessment orders for each year from 2019 to 2023	
IX	Payment Received certificate from client of each project	

Note: In absence of any of the above enclosures, your application is likely to be rejected.

(Signature of the Contractor with Seal)

DETAILS OF PREQUALIFYING WORKS - I

(Filling all details is mandatory without which application will be summarily rejected)

1.	NAME OF FIRM & ADDRESS FOR WHOM THE WORK IS EXECUTED	
2.	DETAILS OF WORK DONE BY THE FIRM	1. FURNISHING WORK=Rs. _____ 2. CIVIL WORK = Rs. _____ 3. ELECTRICALS = Rs. _____ 4. AIR-CONDITIONING = Rs _____
3.	PHOTOGRAPHS OF WORK COMPLETED (PLEASE ENCLOSE COPY)	
4.	VALUE OF CONTRACT EXECUTED	
5.	BRIEF DISCRIPTION OF THE WORK	
6.	PERIOD DURING WHICH THE CONTRACT IS EXECUTED	
7.	WORK ORDER REFERENCE (PLEASE ENCLOSE COPY OF THE WORK ORDER)	
8.	COMPLETION CERTIFICATE REFERENCE (PLEASE ENCLOSE COPY OF THE COMPLETION OF WORK)	
9.	DELAY IN EXECUTION OF WORK	
10.	WHETHER TIME SCHEDULE IS ADHERED TO	
11.	ANY OTHER INFORMATION WHICH YOU CONSIDER WILL HELP US IN TAKING OUR DECISION.	

PLACE:

DATE:

(Signature of the Contractor with Seal)

DETAILS OF PREQUALIFYING WORKS - II

(Filling all details are mandatory without which application will be summarily rejected)

12.	NAME OF FIRM & ADDRESS FOR WHOM THE WORK IS EXECUTED	
13.	DETAILS OF WORK DONE BY THE FIRM	1. FURNISHING WORK=Rs. _____ 2. CIVIL WORK = Rs. _____ 3. ELECTRICALS = Rs. _____ 4. AIR-CONDITIONING = Rs _____
14.	PHOTOGRAPHS OF WORK COMPLETED (PLEASE ENCLOSE COPY)	
15.	VALUE OF CONTRACT EXECUTED	
16.	BRIEF DISCRIPTION OF THE WORK	
17.	PERIOD DURING WHICH THE CONTRACT IS EXECUTED	
18.	WORK ORDER REFERENCE (PLEASE ENCLOSE COPY OF THE WORK ORDER)	
19.	COMPLETION CERTIFICATE REFERENCE (PLEASE ENCLOSE COPY OF THE COMPLETION OF WORK)	
20.	DELAY IN EXECUTION OF WORK	
21.	WHETHER TIME SCHEDULE IS ADHERED TO	
22.	ANY OTHER INFORMATION WHICH YOU CONSIDER WILL HELP US IN TAKING OUR DECISION.	

PLACE:

DATE:

(Signature of the Contractor with Seal)

DETAILS OF PREQUALIFYING WORKS - III

(Filling all details are mandatory without which application will be summarily rejected)

23.	NAME OF FIRM & ADDRESS FOR WHOM THE WORK IS EXECUTED	
24.	DETAILS OF WORK DONE BY THE FIRM	1. FURNISHING WORK=Rs. _____ 2. CIVIL WORK = Rs. _____ 3. ELECTRICALS = Rs. _____ 4. AIR-CONDITIONING = Rs _____
25.	PHOTOGRAPHS OF WORK COMPLETED (PLEASE ENCLOSE COPY)	
26.	VALUE OF CONTRACT EXECUTED	
27.	BRIEF DISCRIPTION OF THE WORK	
28.	PERIOD DURING WHICH THE CONTRACT IS EXECUTED	
29.	WORK ORDER REFERENCE (PLEASE ENCLOSE COPY OF THE WORK ORDER)	
30.	COMPLETION CERTIFICATE REFERENCE (PLEASE ENCLOSE COPY OF THE COMPLETION OF WORK)	
31.	DELAY IN EXECUTION OF WORK	
32.	WHETHER TIME SCHEDULE IS ADHERED TO	
33.	ANY OTHER INFORMATION WHICH YOU CONSIDER WILL HELP US IN TAKING OUR DECISION.	

PLACE:

DATE:

(Signature of the Contractor with Seal)

FORMAT OF CONFIDENTIAL REPORT

(To be submitted by the Client of applicant on their letter head in sealed envelope to the Bank - Mandatory requirement)

To:
CHIEF MANAGER,
Premises Maintenance Division,
Head Office,
Karnataka Vikas Grameena Bank
Belguam Road DHARWAD

Sir,

Confidential Report on M/s. _____

This is to certify that M/s. _____, having Office at _____ have completed the work of _____ . Confidential Report for our project executed is as under:

1.	DETAILS OF PROJECT EXECUTED BY THE FIRM	
2.	NO OF FLOORS	
3.	AREA OF CONSTRUCTION	
4.	DATE OF COMMENCEMENT OF PROJECT	
5.	DATE OF COMPLETION OF PROJECT	
6.	TOTAL VALUE OF PROJECT EXECUTED	
7.	QUALITY OF SERVICE RENDERED	
8.	COMPETENCE TO HANDLE WORKS	
9.	INTEGRITY AND RELIABILITY OF THE FIRM	
10.	DEALING IN EXECUTION OF WORK	
11.	WHETHER TIME SCHEDULE IS ADHERED TO	
12.	WHETHER ANY PENALTY IMPOSED FOR THE DELAY	
13.	GENERAL ATTITUDE OF THE FIRM	
14.	ANY OTHER INFORMATION WHICH YOU CONSIDER WILL HELP US IN TAKING OUR DECISION	

PLACE:

SIGNATURE: _____

NAME: _____

DATE:

DESIGNATION: _____ OFFICE SEAL

(Signature of the Contractor with Seal)

DECLARATION

I / We have read the instructions appended to the Proforma and I / We understand that if any false information is detected at a later date, any future contract made between ourselves and Karnataka Vikas Grameena Bank, on the basis of the information given by me / us can be treated as invalid by the Bank and I / We will be solely responsible for the consequences.

I / We acknowledge that:

It shall be deemed that by submitting the Proposal, I/we have:

- a) made a complete and careful examination of the RFP;
- b) received all relevant information requested from the Authority;
- c) accepted the risk of inadequacy, error or mistake in the information provided in the tender/ RFP or furnished by or on behalf of the Authority or relating to any of the matters referred above;
- d) satisfied itself about all matters, things and information, including matters referred above, necessary and required for submitting an informed Application and performance of all of its obligations there under;
- e) acknowledged that it does not have a Conflict of interest: and
- f) Agreed to be bound by the undertaking provided by it under and in terms hereof.

I / We agree that the decision of Karnataka Vikas Grameena Bank in selection of contractors will be final and binding to me / us.

I / We agree that I / we have no objection if enquiries are made about the work listed by me / us in the accompanying sheets.

I / We agree that I / We have not applied in the name of sister concern for the subject tender process.

All the information furnished by me hereunder is correct to the best of my knowledge and belief.

Place :

Date :

SIGNATURE

NAME & DESIGNATION

SEAL OF ORGANISATION

Government of India Guidelines On Purchase Preference:

1.1. Procurement through Micro & Small Enterprises [MSEs]:

Procurement through MSEs will be done as per the Policy guidelines issued by the Ministry of Micro, Small & Medium Enterprises from time to time. Following are the conditions applicable as per the Government of India Guidelines

1.1.1. This MSEs should have registered with :

1.1.1.1. District Industries Centers or

1.1.1.2. Khadi Village Industries Commission or

1.1.1.3. Khadi & Village Industries Board or

1.1.1.4. Coir Board or National Small Industries Corporation or

1.1.1.5. Directorate of Handicrafts & Handloom or

1.1.1.6. Any other body specified by the Ministry of Micro, Small & Medium Enterprises.

1.1.2. MSEs participating in tenders, quoting price within price band of L1+15% shall also be allowed to supply a portion of requirement by bringing down their price to L1 in a situation where L1 price is from someone other than MSE & such MSE shall be allowed to supply up to 20% of total tendered value. In case of more than one such MSE, the supply shall be shared proportionately according to the tendered quantity.

1.1.3. Bank shall procure minimum 20% of their annual value of goods or services from MSEs.

1.1.4. Special provisions for MSEs owned by SC or ST-

Out of the 20% annual target from MSE, a sub-target of 20% [i.e. 4% out of 20%] shall be earmarked for procurement from MSE owned by SC or ST entrepreneurs.

1.1.5. MSEs are also exempted from paying Application fee/cost & EMD.

1.1.6. MSEs should submit the relevant documentary proof for claiming the exemptions.

1.1.7. MSEs shall have basic required qualification under eligibility criteria specified in the RFP and the above Policy will be applicable to those qualifying Bidders only.

1.2. The Eligible MSEs who intend to match the L1 Price (ultimately decided by the Bank) shall indicate the willingness to match the L1 Price within 6 working days from the date of communication from the Bank to avail the purchase preference.

1.3. Applicable for Indian Bidders only as defined in gazette notification no. D.L-33004/99 dated 11.04.2018 of Ministry of Commerce and Industry and as amended from time to time.

1.4. As mentioned in Section-II of O.M. No.F.20/2/2014-PPD(Pt.) dated 20.09.2016 of Procurement Policy Division, Department of Expenditure, Ministry of Finance on Prior turnover and prior experience, relaxations may be applicable for all Startups [whether Micro & Small Enterprises (MSEs) or otherwise] subject to meeting of the quality and technical specifications specified in tender document.

1.5. Further, the Startups are also exempted from submission of Tender Fee and EMDs.

1.6. For availing the relaxations, bidder is required to submit requisite certificate towards Startup enterprise registration issued by Department of Industrial Policy and Promotion, Ministry of Commerce and the certificate should be certified by the Chartered Accountant (not being an employee or a Director or not having any interest in the bidder's company/firm) and notary public with legible stamp.

1.7. Bidder has to submit a self-declaration accepting that if they are awarded the contract and they fail to sign the contract, or to submit a performance security before the deadline defined in the RFP, they will be suspended for the period of three years from being eligible to submit Bids for contracts with KVG Bank as per Form PP-B.

(Signature of the Contractor with Seal)

- 1.8. Procurement through Local Suppliers (Make in India): Department for Promotion of Industry and Internal Trade under Ministry of Commerce and Industry vide letter no. P-45021/2/2017-PP (BE-II) dated 04/06/2020 has notified revised guidelines to be followed to promote manufacturing and production of goods and services in India under “Make in India” initiative.
- 1.9. Definitions: Local content means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed under the aforesaid order or by the Competent Ministries/Departments in pursuance of the aforesaid order.
- 1.10. 'Class-I local supplier' means a supplier or service provider, whose product or service offered for procurement, has local content equal to or more than 50% (unless otherwise prescribed by the Nodal Ministry).
- 1.11. 'Class-II local supplier' means a supplier or service provider, whose product or service offered for procurement, has local content more than 20% but less than 50% (unless otherwise prescribed by the Nodal Ministry).
- 1.12. 'Non - Local supplier' means a supplier or service provider, whose product or service offered for procurement, has local content less than or equal to 20% (unless otherwise prescribed by the Nodal Ministry).
- 1.13. The Margin of purchase preference shall be 20%.
- 1.14. Eligibility of 'Class-I local supplier'/ 'Class-II local supplier'/ 'Non-local suppliers' for different types of procurement:
- 1.15. In procurement of goods, services or works in respect of which the Nodal Ministry/Department has communicated that there is sufficient local capacity and local competition, only 'Class-I local supplier', shall be eligible to bid irrespective of purchase value.
- 1.16. In procurement of goods, services or works, not covered under Clause above, and with estimated value of purchases less than Rs.200 Crore, only 'Class I local supplier' and 'Class-II local supplier' shall be eligible to bid, except when Global tender enquiry has been issued. In Global tender enquiries, 'Non-local suppliers' shall also be eligible to bid along with 'Class-I local suppliers' and 'Class-II local suppliers'.
- 1.17. For award of contract, the following clauses shall be applicable in addition to other provisions in the bidding document in this regard:
- 1.18. In the procurements of goods or works, which are covered under above and which are divisible in nature, the "Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure: a. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract for full quantity will be awarded to L1. b. If L1 bid is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.
- 1.19. In the procurements of goods or works, which are covered under Clause above and which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure: a. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L 1. b. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to

matching the L 1 price. c. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L 1 price, the contract may be awarded to the L1 bidder. d. "Class-II local supplier" will not get purchase preference in any procurement.

- 1.20. Purchase preference for domestic manufacturer/local supplier, methodology of its implementation, value addition to be achieved by domestic manufacturers, self-certification, compliance, monitoring and other terms & conditions shall be as per the aforesaid Guidelines/Notifications. The Guidelines may be treated as an integral part of the tender documents.
- 1.21. The preference to 'Public Procurement (Preference to Make in India) Order 2017' shall be subject to meeting technical specifications and full compliance of other terms and conditions of the RFP and Contract.
- 1.22. Verification of local content:
- 1.23. The 'Class-I local supplier'/ 'Class-II local supplier' shall be required to indicate percentage of local content and provide self-certification (as per Form PP-C) along with the bid that the item offered meets the local content requirement for 'Class-I local supplier'/ 'Class-II local supplier', as the case may be. Bidders shall also give details of the location(s) at which the local value addition is made.
- 1.24. The 'Class-I local supplier'/ 'Class-II local supplier' quoting value in excess of Rs.10 crores, shall be required to provide a certificate (as per Form PP-D) bid from the statutory auditor or cost auditor of the company (in case bidder is a company) or from a practicing cost accountant or practicing chartered accountant (in case bidder is other than company) giving the percentage of local content.
- 1.25. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules issued by the Ministry of Finance for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.
- 1.26. All the relevant documents/information regarding claim for preferential treatment under this policy must be submitted along with offer by the Bidder. Post tender submission of these information/documents shall not be considered. Further firms seeking these considerations shall be completely responsible for the truthfulness and authenticity of their claim for these benefits.
- 1.27. Ministry of Electronics and Information Technology (MeitY): In furtherance of the Public Procurement (Preference to Make in India) Order 2017 notified vide reference cited above, Ministry of Electronics and Information Technology, Government of India has notified thirteen (13) electronic products vide reference F.No.W-43/4/2019-IPHW-MeitY dated 07.09.2020.
- 1.28. Domestic Manufacturers are required to indicate the domestic value addition/Local Content in terms of Bill of Material (BoM) for the quoted products, in terms of aforesaid guidelines, in their bid. Bidders, claiming to bid in the status of domestic manufacturer/local supplier on behalf of domestic manufacturer are also required to give an undertaking in the format as given in MeitY Form-1.
- 1.29. KVG Bank shall also have the authority to audit as well as witness production processes to certify the achievement of the requisite local content and/or to obtain complete back up calculation.
- 1.30. In case a bidder is eligible to seek benefit under Purchase PP-LC policy as well as PPP for MSE 2012, then the bidder should categorically seek benefits against only one of the two policies i.e. either PP-LC and MSE policy in Form PP-A. The option once exercised cannot be modified subsequently.
- 1.31. Purchase preference benefits shall be extended to the bidder based on the declared option subject to the bidder meeting the requirements contained in that purchase preference policy.

- 1.32. In case an MSE bidder opts for purchase preference based on PP-LC, he shall not be entitled to claim purchase preference benefit available to MSE Bidders under PPP-2012. However, the exemptions from furnishing Bidding Document fee and Bid security/EMD shall continue to be available to MSE Bidders.
- 1.33. For price matching opportunities and distribution of quantities among bidders (bidder's option to avail any one out of two applicable purchase preference policies, i.e., PP-LC-2017 or PPP2012 will be considered), the precedence shall be in the following order:
 - 1.33.1. Public Procurement Policy for MSE 2012.
 - 1.33.2. Purchase Preference linked with Local Content (PP-LC).

INSTRUCTION WITH REGARD TO SUBMISSION OF TENDER

- 1) Rates should be quoted both in figures and words in columns specified. All erasures and alterations made while initials of the tenderer must attest filling the tender. Overwriting of figures is not permitted. Failure to comply with either of these conditions will render the tender invalid and it will be the option of Karnataka Vikas Grameena Bank to accept or reject the tender. No request of any change in rate or conditions after opening of the tender will be entertained.
- 2) In the case of figures, the word Rs. should be written before the figures of rupees and the word 'P' written after the decimal figures e.g. Rs. 3.25 P. In the case of words, the word Rupee should similarly precede and the words "Paise only" should be written at the end, closely following each the Item rate. The word "only" should not be written in the next line unless the rate quoted is in whole Rupees closely followed by the word "only". The amount should invariably be upto two decimal places.
- 3) The different Schedules should be filled as follows:
 - (a) The "Rate" Column wherever applicable to be legibly filled in ink in both figures & words.
 - (b) The "Amount" Column also to be legibly filled in ink in both figures and words.
 - (c) All corrections to be initialed.
 - (d) No over writing is allowed.
 - (e) The figure of Item of rate shall be legibly filled in ink in both figure and words.
- 4) Errors in the bill of quantities shall be dealt with in the following manner.
 - a. In the event of any discrepancy between the rates quoted in words and the rates in figures the former shall prevail.
 - b. In the event of an error occurring in the amount column of the bills of quantities as a result of the wrong extension of the unit rate and the quantity, the unit rate shall be regarded, as firm and extension shall be amended on the basis of the rates.
 - c. All the errors in totaling in the amount column and in carrying forward the totals shall be corrected.
- 5) The tender shall be signed and dated at all places provided therein. Also, all pages, drawings and corrections/ alterations shall be initialed. The tender submitted on behalf of a firm shall be signed by all the partners of the firm or by a partner who has the necessary authority on behalf of the firm to enter into the proposed contract. Otherwise the tender may be rejected by Karnataka Vikas Grameena Bank.
- 6) The time allowed for completion of works is **3 months** from 10th day of the date of acceptance of work order by contractor or handing over the site whichever is later. Time shall be considered the essence of contract.
- 7) It shall be the responsibility of the contractor to arrange for water and electricity required for completing construction. However, contractor will have to make arrangement of pipeline for distributing water.
- 8) Every tender shall be accompanied by earnest money by way of Demand Draft/ Pay Order drawn from Nationalized Bank only favoring KARNATAKA VIKAS GRAMEENA BANK, payable at Dharwad. Tender submitted without earnest money shall be summarily rejected. Applicants registered as MSME/ NSIC / Udyog Aadhar/ SSI Scheme are exempted from depositing cost of BID document/ EMD provided they attach self-attested copy of the relevant certificate.
- 9) The successful bidder will have to submit initial performance security deposit for a sum of **5%** of the value of the accepted tender in the form of an Account Payee DD or Performance Bank Guarantee from a commercial bank in an acceptable form safeguarding the interest of the bank in all respect. The Earnest Money shall be returned to successful bidder on submission

of performance Bank Guarantee or retained in the case the successful tenderer desires to do so, as part of the performance security deposit for due fulfillment of the Contract. No interest shall be paid on this deposit.

- 10) Failure to enter into the Contract agreement within the stipulated time of 10 days from the date of acceptance of work order or withdrawal from bidding during bid validity period shall entail the forfeiture of the Earnest money Deposit.
- 11) The Earnest money of unsuccessful tenderer will be released after issue of work order, without any interest.
- 12) The tenderer shall submit his tender after carefully examining the whole of the tender document and the terms and conditions of contract, the drawings and specifications, the schedule of quantities etc., and also after examining the site and conditions prevailing in and around site.
- 13) The Bank does not bind himself to accept the lowest or any tender and reserve to them the right of accepting the whole or any part of the tender and tenderer is bound to perform the same at the rates quoted. The Bank will not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tender without assigning any reasons whatsoever. The work may also be divided among the contracting agencies depending on the exigencies of the Bank.
- 14) Bank shall not be responsible for any expenses incurred by bidders in connection with the preparation and delivery of their bids, including expenses incurred during bidding.
- 15) Bids from consortium shall not be accepted. Telex / Telegraphic / Fax / Email bids shall not be accepted. Late/ Delay / post tenders shall be rejected, and representative of such bidder shall not be allowed to attend the bid opening.
- 16) The Bank is not concerned with any rise or fall in the prices of materials and labor. The rates quoted shall include all costs, allowances, taxes including sales tax on works contract or any other charges including any enhanced labor rates etc. which may become effective for any reason including those due to acts of Government/ Statutory Bodies enacted from time to time by the State and or the Central Government. Under no circumstances, shall the Bank be held responsible for compensation or loss to the contractor due to any increase in the cost of labor or materials etc.
- 17) Contractor to coordinate and assist the Architect/Interior Designer in obtaining all statutory approvals and any other State and Central rules in force. Any expenses incurred in obtaining such approvals are deemed included in the rates quoted by the Contractors.
- 18) Tenders shall remain valid for a period of 90 days from the date of opening of the tender which period may be extended by mutual agreement and the tenderer shall not cancel or withdraw the tender during the initial validity period of 90 days.
- 19) The successful tenderer shall be bound to implement the Contract and mobilize and sign specified agreements within 10 days from the date of acceptance of work order.
- 20) Tenderer must include in their rates all taxes excluding GST. Due to change in taxes structure by orders from Central Govt. / State Govt. after opening of tenders shall be reimbursed to the contractor as per actual and upon verifying the proof of having made the payment.
- 21) This contract shall be an Item Rate contract. The Contractor shall be paid for actual quantity of work done, as measured at site including any deviation plus or minus. The rate of any non-schedule items of work shall be decided as mentioned in the conditions of contract.

- 22) The tender drawings exhibited/enclosed are preliminary drawings intended for the guidance of the Contractor only. They may be subject to revision and alteration without vitiating any of the terms of the contract and the Contractor shall be bound to execute the works as shown on the final drawings without claiming any extra payment.
- 23) No correspondence will be entertained in respect of this tender other than any clarifications strictly pertaining to this tender.
- 24) The tender price quoted by a tenderer shall be kept strictly confidential and shall not be divulged to any other party even approximately before the time limit for delivery of tender. The only exception be for obtaining an insurance quotation, you may give your insurance company or agent any essential information they ask for, so long as it is done in strict confidence. No information about other's tender price should be obtained and no arrangement with anyone else should be made whether or not he submits the tender.
- 25) For electrical, sanitary, water supply and drainage work, tenderer must possess respective valid licenses from the competent authority of the area where the site is located.
- 26) Contractor should sign at the end of every page prior to submitting the tender. Conditional tenders will be summarily rejected.
- 27) COMPLETION PERIOD OF THE PROJECT WILL BE **3 MONTHS** from 10th day of the date of acceptance of work order by contractor or handing over the site whichever is later.
- 28) The contractor shall be responsible for obtaining all the necessary statutory permissions for the same.
- 29) COMMERCIAL EVALUATION: Only the technically qualified bidders who are successful will be asked to participate in commercial bid/price Bid opening. The indicative commercial bids of all the bidders' found ineligible as per the requirements of this RFP will be unopened or returned to them unopened against acknowledgement.
- 30) After opening of Commercial Bid, the lowest amount quoted by the bidder will be termed as L1 Bidder. The evaluation of the Commercial Bids will also be done by the Project Architect and premises committee.
- 31) If any cartel formation is found during any stages of the tender process, the bank has every right to cancel all the offers of shortlisted vendors and will be debarred / expelled from applying from the tenders for KVG Bank for 2 to 3 years. The Bank's decision is final and binding.

**CHIEF MANAGER,
Premises Maintenance Division,Head Office,
Karnataka Vikas Grameena Bank Belguam Road DHARWAD**

TENDER FORM

To,
Chief Manager,
Premises and Maintenance Division,
Karnataka Vikas Grameena
Bank, Belgaum Road
Dharwad - 580008.

PROPOSED RENOVATION OF FIRST FLOOR KVG BANK HEAD OFFICE BUILDING, DHARWAD.

Sir,

1. We have read and examined the following documents as received by us:
 - a) Notice Inviting Tender
 - b) Instructions to Tenderer
 - c) Conditions of Contract.
 - d) Supplementary Conditions.
 - e) Specifications
 - f) Drawings
 - g) Schedule of Quantities.
 - h) Addition condition of contract
2. We are well aware and familiar with CPWD/ PWD, Schedule of Rates 2018 and their specifications, CPWD/ PWD Specification, BIS publication and National Building code which shall apply to this contract to supplement any missing details in this contract in order of preference.
3. Further to the above, we have visited and examined the site of the proposed works and have acquired the requisite information relating thereto as affecting the tender invited by Bank.
4. We agree that any other terms or conditions of contract or any general reservation which may be printed on any correspondence emanating from us in connection with this tender or with any contract resulting from this tender shall not be applicable to this tender or to the contract.
4. We have obeyed the rules about confidentiality of tenders and will continue to do so as long as they apply.
5. We are enclosing along with our tender an earnest money of Rs. _____ (Rupees _____ only) drawn from Nationalized Bank favoring Karnataka Vikas Grameena Bank, payable at Dharwad (Pay Order/ DD No. ----- dated ----- drawn on _____).
We hereby agree that this sum shall be forfeited by Karnataka Vikas Grameena Bank in the event of our tender being accepted and if we fail to execute the contract when called upon to do so.
6. Subject to and in accordance with paragraphs 3 & 4 above and the terms and conditions contained or referred to in the documents listed in paragraph 1, we agree and offer to execute all the Works referred to in the said documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered to be valued as per the conditions of contract.
7. We undertake to complete and deliver the whole of the works within a period i.e. 3 Months FROM 10th day of the date of acceptance of work order by contractor or handing over the

(Signature of the Contractor with Seal)

site whichever is later, as specified in the contract and further confirm that the time allowed for completion is adequate. Time allowed for completion of entire job or part job assigned shall be reckoned from the tenth day of the date of acceptance of work order. We shall be under the obligation to pay the sum as stated in the contract for every day that the works shall remain incomplete, damages as compensation subject to the conditions of contract relating to extension of time.

8. We hereby agree that unless & until a formal agreement is prepared & executed in accordance with the Articles of agreement, this tender together with your acceptance thereof, shall constitute a binding contract between us.
9. EMD submitted shall be by way of DD/PO drawn from Nationalized Bank in favor of KARNATAKA VIKAS GRAMEENA BANK, payable at Dharwad.
10. Validity of the tender is **90 days** from the date of opening of tender or it may be beyond 90 days if mutually accepted.
11. The Bank is at liberty to accept or reject any tender, without assigning any reasons whatsoever.
12. The work may be split up in the first instance as per exigencies of the Bank. It may be split up in more parts or parts combined if so desired by the Bank without assigning any reasons whatsoever. We will not have any claim either for loss of profit or revision in rates.
13. Adherence to the pert chart will be ensured by us as the project is to be executed in a very strict time frame.
14. We are aware that the quantities of work indicated in the bill of quantities are approximate, may vary to any extent, even it may be omitted. We will not have any claim of any kind against the Bank.

Signed in the capacity of duly authorized
to sign tenders for and on behalf of

Address

Telephone No.....

.....

Telex No.

.....

Fax No.

..... ..

Date:

SUPPLEMENTARY CONDITIONS

On the acceptance of his tender, the contractor will be required to execute an Indemnity Bond with-in 10 days of issue of work order in favor of the Bank against third party claims, civil or criminal complaints, site mishaps and other accidents or disputes and, against any damages, loss or expenses caused to bank and bank's any of articles, fixtures, fittings, infrastructure, due to or resulting from any negligence, misconduct or breach of duty on the part of the contractor, his subcontractors/assignees or his employees and agents, representatives etc., as per the appropriate Indemnity Bond attached.

It will also be covered by labor laws of the Govt. of India.

Any other conditions suggested by the Bank may be added subsequently.

The EMD/SD may be forfeited:

If the Bidder withdraws his Bid during the period of Bid validity specified in this RFP.

or

If the Bidder makes any statement or submit information which turns out to be false / incorrect at any time prior/post of issuing Purchase order.

or

If the Bidder fails to furnish security Deposits or is there any benefit of doubt of formation of cartel by bidders.

or

If the bidder backs out or do not accept the work order after being declared L-1 bidder.

or

In case of a successful Bidder, if the Bidder fails to sign/execute the contract in accordance with this RFP.

or

If a bidder refuses to accept the corrections of errors calculated in accordance with the provisions of the bidding documents, its bid shall be rejected and its EMD shall be forfeited.

INDEMNITY BOND
(On Non-Judicial Stamp Paper of Rs. 200/-)

KNOW all men by these presents that I/We _____ residing at _____ do hereby execute Indemnity Bond in favour of the Karnataka Vikas Grameena Bank on this _____ day of _____ 2023, in connection with renovation works of karnataka vikas grameena bank at first floor head office building dharwad.

WHEREAS Karnataka Vikas Grameena Bank, (address of the office) _____, have appointed _____ as the Contractors for their Proposed Karnataka Vikas Grameena Bank Project at _____.

THIS DEED WITNESS AS FOLLOWS:

I/We _____, duly authorized by Resolution dated (in case of a Company) hereby do Indemnify and save harmless KVG Bank, _____ against

1. Any third party claims, civil or criminal complaints/liabilities, site mishaps and other accidents or disputes and/or damages occurring or arising out of any mishaps at the site due to faulty work, negligence, faulty construction and/or for violating any law, rules and regulations in force, for the time being while executing/executed works by me/us.
2. Any damages to any of articles, fixtures, fittings, infrastructure of bank, loss or expenses to Bank due to or resulting from any negligence or breach of duty on the part of me/us or my sub contractor's if any, servants or agents.
3. The Contractor shall at all times indemnify and keep indemnified the Bank against all losses, claims, damages or compensation including under the provisions of the payment of the Wages Act 1936, Minimum Wages Act 1948, Bank's Liability Act 1938, Workman's Compensation Act 1923, the Maternity Benefit Act 1961, the Bombay Shops and Establishments Act 1947, Industrial Disputes Act 1947, and Contract Labour (Regulation and Abolition) Act 1970 and Employees State Insurance Act 1948, Motor Vehicles Act 1988 or any modifications thereof or under any other law relating thereto and rules made there under from time to time or as a consequence of any accident or injury to any workman or other person in or about the work whether in the employment of the Bank or Contractor or not, and also against all costs, charges and expenses of any suit, action or proceedings whatsoever out of such accident or injury or combination of any such claims arising out of and in the course of the execution of the contract.
4. Any claim by an employee of mine/ours or of sub-contractors if any, under the Employee's Compensation Act and Owners Liability Act, 1939 or any other law, rules and regulations in force for the time being and any Acts replacing and/or amending the same or any of the same as may be in force at the time and under any law in respect of injuries to persons or property arising out of and in the course of the execution of the contract work and/or arising out of and in the course of employment of any workman/employee.

Any act or omission of mine/ours of sub-contractor's if any, our/their servants or agents which may involve any loss, damage, liability, civil or criminal action.

IN WITNESS WHEREOF THE _____ has set his/their hand on this day of _____ 2023.

I/we hereby affix my signature to this indemnity bond.

SIGNED AND DELIVERED BY THE NAME AND ADDRESS

AFORESAID _____ 2.
(Contractor)

IN THE PRESENCE OF WITNESSES:

1.

(Signature of the Contractor with Seal)

PERFORMANCE BANK GUARANTEE FORMAT

(To be prepared on Stamp paper issued in the name of Bank)

This BANK GUARANTEE No. _____ made this day of _____ between _____ a bank incorporated and having its registered office at _____ (hereinafter called Bank) which expression shall unless repugnant to the context or contrary to the meaning thereof include its successors and assigns on the one part and **KARNATAKA VIKAS GRAMEENA BANK**, a body corporate constituted under the Banking Companies (Transfer of Undertakings) Act, 1970 and having its Head Office at Karnataka Vikas Grameena Bank at Dharwad to the context or contrary to the meaning thereof include its successors and assigns on the other part. WHEREAS in pursuance to the agreement No. _____ dated _____ (hereinafter called CONTRACT) entered into between KVG Bank, Head Office Dharwad (hereinafter called OWNER and _____ a Company incorporated in _____ (hereinafter called CONTRACTOR) which expression shall unless repugnant to the context or contrary to the meaning thereof include its successors and assigns, for supply of _____ as envisaged in the Contract, Contractor has to submit a Performance Bank Guarantee for Rs. _____ (Rupees _____ only). CONTRACTOR accordingly agrees to furnish the Performance Bank Guarantee as herein after contained towards fulfillment of all of its obligations under the contract. Now this Deed witness as follows:

1. In pursuance of the Contract, the Bank hereby guarantees as a direct responsibility to OWNER that the BANK is holding the amount of Rs. _____ (Rupees _____ only) at Owner's disposal and hereby promises and shall be bound to pay to OWNER, forthwith at Owner's written notice stating that the contractor has failed to fulfill its obligations under the contract for reasons for which contractor is liable and without any protest or demur and without recourse to contractor and without asking for any reasons as to whether the amount is lawfully asked for by Owner or not, the entire amount or the portion thereof as mentioned by Owner in the notice. The decision of the Owner as to whether the terms and conditions of this Performance Bank Guarantee have been observed or not shall be final and binding on the BANK. In any case, however the Bank's responsibility under this Performance Bank Guarantee is limited to Rs. _____ (Rupees _____ only).
2. This Performance Bank Guarantee shall be valid for an initial period of _____ months from the date of this Bank Guarantee No. _____ dated _____ given by the Bank to Owner become effective. Upon issuance of Commissioning/ Erection/Completion certificate according to terms of contract on expiry of _____ months after the issuance of the above-mentioned certificate 69 of commissioning / erection / completion certificate, the Performance Bank Guarantee shall become null and void.
3. This Performance Bank Guarantee shall be in addition to and shall not affect or be affected by any other security now or hereafter held by Owner on account of money hereby intended to secure and Owner at its discretion and without any further consent from the Bank, and without affecting its rights against the Bank, may compound with, give time or other indulgence to or make any other arrangement with Contractor and nothing done or

(Signature of the Contractor with Seal)

omitted to be done by Owner in pursuance of any authority or permission contained in this guarantee, shall effect discharge of the liability of the Bank.

4. UNLESS PREVIOUSLY CANCELLED BY THE OWNER, this Performance Bank Guarantee will remain in force initially up to _____ months from the effective date of Bank Guarantee No. _____ dated _____ given by the Bank to the Owner and subject to provisions of paragraph 2 above will stand automatically cancelled on the expiry of the said period. Unless demand or claim under this Bank Guarantee is made on Bank in writing within three months from the date of expiry of this Bank Guarantee, all the rights of Owner against the Bank shall be forfeited, and Bank shall be relieved and discharged from all the liabilities hereunder.
5. We are liable to pay the guarantee amount or any part thereof under this bank guarantee only and only if you serve upon a written claim or demand on or before (Date of expiry of guarantee plus one-year claim period shall be stipulated).

Any notice by way of request, demand or otherwise hereunder may be sent by post to the Bank, addressed as aforesaid, and if sent by post, it shall be deemed to have been given at the time when it would be delivered in due course of post, and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate, signed by an officer of the owners, to the effect that the envelope was so posted, shall be conclusive.

6. The Performance Bank Guarantee is to be returned to the Bank after its expiry in terms of Paragraph 4 above.
7. The Bank declares that it has the power to issue this guarantee and the undersigned have full power to do so. Dated _____ this _____ day of _____ 23 (Indicate the name of the Bank with stamp)

ARTICLES OF AGREEMENT

(Draft will be modified by Bank's Law Officer as per requirement)

ARTICLES OF AGREEMENT made at _____ this _____ day of _____ Two Thousand and twenty-three.

BETWEEN

KARNATAKA VIKAS GRAMEENA BANK, a body corporate constituted under the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970 and having its Office at _____, represented by _____ hereinafter called "the Bank/owner/employer" (which expression shall, unless it be repugnant to the context or meaning thereof, include its successors and assigns) of the **ONE PART**

AND

MESSRS _____, having its registered office at _____, hereinafter called the "Contractor" (which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) of the **OTHER PART**.

WHEREAS

- i. The Bank is desirous of _____ (Works) on its _____ at _____.
- ii. The Bank has already appointed and retained M/s _____, having its Office at _____ and Registered Office at _____ as Architect / Consultant for the Works or the Project.
- iii. The Bank has caused the drawings and bills of quantities showing and describing the Works to be done to be prepared by or under the direction of the Consultants / Architect;
- iv. The Bank had invited tenders for _____ work in accordance with the general conditions of contract, special conditions of contract, technical specifications, bills of quantities and working drawings, as prepared by the Interior Consultants / Architect and furnished to the Contractor.
- v. Having examined the general conditions of contract, special conditions of contract, technical specifications, bills of quantities and working drawings as prepared by the Consultants / Architect, the Contractor offered to execute, complete and maintain the whole of the Works relating to the Project in conformity with the said general conditions of contract, special conditions of contract, technical specifications, bills of quantities and working drawings and in accordance with instructions issued by the Consultants / Architect and the Contractor submitted its tender for the contract sum of Rs. _____ towards the said work.
- vi. The tender submitted by the Contractor was, after negotiations, modified/ altered upon the Contractor agreeing to revise the rates of certain items and further offering a rebate for execution and completion of the Project thereby reducing the tender amount to Rs. _____ as confirmed by its letters dated _____.
- vii. Towards the implementation of the Project, the Contractor has supplied the Bank with a fully priced copy of the said bills of quantities (which copy is hereinafter referred to as "the Contract Bills") and the drawings numbered as mentioned in the Annexure 11 of the Tender document inclusive (hereinafter referred to as "the Contract Drawings") and the Contract Bills and the contract Drawings have been signed by or on behalf of the parties hereto.

(Signature of the Contractor with Seal)

- viii. The Contractor has already agreed with the Bank to implement and execute the Project in full on the basis of the contract documents as hereinafter defined on the terms and conditions therein contained.
- ix. The parties are now executing this Agreement setting out the basic terms of the agreement between them for smooth implementation and execution of the Project without any unnecessary difference or dispute.

NOW IT IS HEREBY AGREED as follows:

1. The Contract Document is comprising of
 - i. Tender document including technical bid (Part.-I) and price-bid (Part.-II).
 - ii. Notice Inviting Tender issued vide letter _____
 - iii. Subsequent letters issued by the Bank vide _____
 - iv. Clarifications submitted by the contractor vide letter dt. _____.
 - v. Minutes of Meeting held on _____
 - vi. Rebate/ Discount offered by the contractor vide letter _____
 - vii. Work Order issued by the Bank vide letter _____
 - viii. Acceptance letter _____ from the contractor
 - ix. Drawings numbering as mentioned in the Annexure 11 of the Tender document enclosed along with the tender document.
- 1.1 Unless the context otherwise requires the contract documents above mentioned shall be harmoniously construed and in the chronological order.
- 1.2 Unless otherwise expressly provided under these presents, contract documents (iii) to (ix) above shall be construed as modifying only those general and special terms and conditions in tender document in so far and to the extent referable to the clauses in the said tender document.
- 1.3 Unless otherwise stated expressly hereunder, all the general and special terms and conditions shall apply and binding on the contractor.
2. The Contract Document is complimentary. What is called for in any one shall be as binding as called for by all. The aforesaid shall form integral part of contract and in the event of any inconsistency between any provisions herein the provisions of the Contract Documents shall prevail. When any of the General and Special Conditions are at variance, the condition stipulated in the Special Conditions of Contract shall supersede relevant provisions in General Conditions. For all matters not specifically provided for herein the provisions of General and Special Conditions in the Tender Documents shall apply and the rights and liabilities of the parties shall be decided accordingly. The decision of the Bank in this regard shall be final and binding.
3. All time limits stated in the Contract Document are of the essence of the contract where the work has to be completed within 3 months failing which liquidated damages will be recovered @ 0.5% of contract amount for per week of delay subject to maximum recovery of 10 % of the contract amount
4. For the consideration hereinafter mentioned, the Contractor shall carry out and complete the Works in conformity with the contract documents and in accordance with the instructions issued by the consultant from time to time including all modifications extra and additional works and obligations to be carried out either on the Site or at any factory or work shop or any other place for subsequent incorporation as required for the due performance of the contract.

5. The general character and the scope of the Works is illustrated and defined by the specifications and the bills of quantities herewith attached and by the signed drawings. The scope includes furnishing all materials, labor, tools, equipment, transportation and management necessary for and incidental to the construction and completion of the Works. If the Contractor shall find any discrepancy in or divergence between the contract drawings and/or the contract bills he shall immediately give to the Consultant a written notice specifying the discrepancy or divergence and the Consultant shall issue instructions in regard thereto which shall be complied with by the Contractor.

6. **INTENT**

The intention of agreement is to secure the performance of the Contractor's obligations to the satisfaction of the Bank/ Architect/ Consultant. All labor, material, equipment, constructional plant and transportation necessary for the proper execution of the Project is to be provided by the Contractor and should only be of the approved manufacturer/agencies respective kinds as described in the Contract Documents which is to be subjected from time to time to such tests as the Engineer/ Consultant's representative may direct. In case the required material/services of approved manufacturers/agencies are not available or are not upto the mark the Contractor shall procure material/ services from such other manufacturer/agencies as may be approved by the Consultant / Bank and the Contractor shall submit rate analysis for such material.

7. **EXTENT**

The Contractor shall carry out and complete the Works in every respect in accordance with this contract and with the directions of and to the reasonable satisfaction of the Consultant. The Consultant may in their absolute discretion and from time to time issue further drawings, details and/or written instructions and written explanations whole of which are collectively referred to as Consultants' instructions. All such drawings and instructions shall be consistent with the Contract Document true developments thereof as reasonably inferable there from.

8. **TYPE OF CONTRACT**

The Contract is Item Rate contract. The Contractor shall be paid for the actual quantity of Work done, as measured at Site, at the Item quoted by him in the Contract Bills. The contractors have

- 8.1 Been informed that the schedule of approximate quantities is liable to alteration by omission, deduction, substitution or additions at the discretion of the Consultant/Bank without affecting the terms of the contract and no compensation to Contractor.
- 8.2 Fully and correctly understood the meaning of all the tender documents, the General Conditions of Contract, Special Condition of Contract, Technical Specifications, Bill of Quantities and working drawings or part thereof, Invoices shall be submitted in accordance with the payment.

9. **CONTRACTORS COVENANTS**

- 9.1 The Tender form conditions, priced schedule of quantities, contract drawings and General and Special Conditions of Contract, specifications, Drawings, priced Bill of Quantities, Schedule of Rates and Prices, if any, Tender, pre-contract correspondence, Letter of Intent/Acceptance, Work order, shall be read and construed as forming part of this agreement and the Contractor shall abide by and submit themselves to all the conditions and stipulations contained therein; which are not specifically incorporated herein;
- 9.2 The Contractor shall obtain necessary licence/approval/permissions/ certificates/ order from the Competent Authority in respect of work & workmen employed by them for the Project and shall keep the Bank safe, harmless and reimburse all amounts/expenses incurred or suffered by the Bank in connection with any such claim;

The contractor shall comply with all applicable local laws, state laws & rules and regulations related to

providing goods and services under the agreement.

The Contractors shall not make any claim as regards want of information of any particular point or any change in the rate or conditions save and except as provided herein;

- 9.3 The Contractors shall have a duly authorized agent at the place of Work to accept services of notice and to agree to extras, omissions, additions and substituted items of Works and rates from the commencement of the Work until it is virtually completed.
- 9.4 In the event of any discrepancy between the details and/or description given in the Bill of Quantities, the Drawings and the Technical Specifications, such item shall be deemed to have been priced in accordance with the details and/or description confirming to the most superior provisions contained in any of the following :-
 - a) Bill of Quantities
 - b) Drawings
 - c) Technical Specifications
- 9.5 It shall be understood that the details and/or description not specifically mentioned in the Bill of Quantities and/or the drawing shall be the same as those mentioned in the Technical Specification. Any further interpretation of above Clause shall be at the discretion of the Consultants, whose decision shall be final and binding on the parties to the contract.
- 9.6 The Contractors shall not make any claim for increase in the contract consideration on the basis of incorrectness and insufficiency of the information available at the time of submitting the Tender and/ or incorrectness and insufficiency of the rates and prices stated in the price bill of quantity and schedule of rates and prices or otherwise alleging insufficiency of the tender amount to cover their obligation under the contract or matters concerning the execution of the Project.
- 9.7 The Contractor shall be fully responsible for the adequacy, stability and safety of all site operations and methods of construction, provided that the Contractor shall not be responsible, except as may be expressly provided in the Contract, for the design or specification of the Permanent Works, or for the design or specification of any Temporary Works prepared by the Consultant.
- 9.8 The Contractor shall promptly inform the Consultant of any error, omission, fault and other defects in design, drawing or specifications for the Works, which are discovered while reviewing the Contract Documents or in the process of execution of the Works.
- 9.9 The Contractor shall arrange for the permits and licenses for release of materials, which are under Government control subject to the Bank giving all the necessary assistance and upon being advised by the Consultant signing any forms or applications that may be necessary.
- 9.10 The Contractor shall comply with the provisions of legislation prevailing during the currency of contract.
- 10. The Contractor shall keep the Bank saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the Bank in connection with any claim that may be made by any workmen.

11. GENERAL CONDITIONS

- 11.1 The schedule of Quantities given in the Contract Bill is provisional and is meant to indicate the intent of the Work and to provide a uniform basis for tendering. The Bank reserves the right to increase or decrease any of the quantities or to totally omit any item of Work and the Contractor shall not claim any extras or damages on these grounds.
- 11.2 Any error in description or in quantity or omission of items from the Contract Bill shall not vitiate this Contract but shall be treated as a variation.
- 11.3 The rates quoted by the Contractor in the priced bill of quantities (Contract Bills) shall be treated as firm and the contract sum shall be deemed to have been calculated with

reference to the cost of execution of Works as set out in Contract Documents and shall not be adjusted or altered for any reason.

12. Notwithstanding anything contained elsewhere in any of the clauses of the tender, the prices/rates quoted for each item/Work in the Bills of Quantities shall be deemed to be inclusive of all direct and indirect costs, and taxes, etc. on any of inputs, royalty on quarried items etc. that may be involved in completing the item/Work as required in the fulfillment of all obligations under the contract and to the satisfaction of the Engineer. Additional Taxes/ Levies by Central/ State Government legislations after opening of tender shall be reimbursed to the contractors as per actual.
13. All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for Work actually done and completed, and shall not preclude the repairing of bad, unsound, and imperfect or unskilled Work to be removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim, nor shall, it conclude, determine or affect in anyway the power of the Bank under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the Contractor within one month of the date fixed for completion of the Work or of the date of certificate of completion furnished by the Consultant and payment shall be made within eight (8) weeks from the date of receipt of final Certificate from the Consultant.

14. INSURANCE

Without limiting the obligations and responsibilities under Contract Clause for Care of Work the Contractor shall effect third party insurance with an insurer and in terms approved by the Bank in the joint names of the Bank and the Contractor-

- 14.1 against all loss or damage from whatever cause arising, other than the excepted risks stated in contract clause of the General Conditions for which the Contractor is to be held responsible under the terms of the Contract so as to cover the Bank and the Contractor during the period beginning with commencement of the Works until the date stated in the Certificate of Completion for the whole of the Works.
- 14.2 against any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purposes of completing the outstanding Work during the Defects Liability period pursuant to the Undertaking given at the time of applying for the issue of Certificate of Completion.
- 14.3 against any loss or damage occasioned by the Contractor in the course of any operations carried out by him for rectifying any defect in perfection or fault appearing during the progress of the Work or during the Defects Liability Period.
- 14.4 against any loss or damage occasioned by the Contractor in the course of any operations carried out by him for searching the cause of any defect, imperfection or fault appearing during the progress of the Works or during the Defects Liability Period.
- 14.5 against any liability for or in respect of any damages or compensation payable at law in respect of or in consequence of any accident or injury to any workmen or other person in the employment of the sub-Contractor provided the sub-contractors shall not have insured against such contingency. (Insurance against accident etc. to workman)
- 14.6 Unless otherwise instructed the Contractor shall insure the Works and keep them insured until the virtual completion of the contract against loss or damage by fire and/or earthquake, flood.
- 14.7 The Contractor shall maintain Contractors' all risks insurance policy covering loss, damage, theft, burglary etc. of all materials and equipment's, temporary Works and the Work shall be insured for a total sum equal to the value of all such items plus 10% of such value.

Provided always that all the insurance under the contract documents shall be arranged by the Contractor from a first class insurance company having a branch near the site who can deal with all matters pertaining to the subject, the insurance must be placed with a company approved by the Bank, in the joint names of the Bank and the Contractor for such amount and for any further sum if called to do so by the Bank, the premium of such further sum being allowed to the Contractor as an authorized extra.

15. The Contractor shall deposit the policy and receipt for premiums paid with the Bank within 21 (twenty-one) days from the date of issue of Work order unless otherwise instructed. In default of the Contractor insuring as provided above, the Bank on his behalf may so insure and may deduct the premiums paid from any money due, or which may become due to the Contractor. The Contractor shall as soon as the claim under the policy is settled or the Work reinstated by the Insurance Company should they elect to do so, proceed with due diligence with the completion of the Works in the same manner as though the insured risk/contingency has not occurred and in all respects under the conditions of the contract. The Contractor in case of rebinding or reinstatement after the occurrence of the insured risk/contingency shall be entitled to such extension of time for completion as the Bank may deem fit.
- 15.1 Such insurance shall continue during the whole of the time of continuance of Work and/or during such time that any persons are employed by him on the Works and shall when required produce before the Bank or the consultant, such policy of insurance and the receipt for payment of the earlier premium and the current premium.
- 15.2 The insurance shall be effective in such manner that the Bank is indemnified under the policy. In the event of the sub-contractor having affected an insurance against accident etc. to the workmen the Contractor shall require such sub-contractor to produce to the Bank/ consultant when required, such policy of insurance and the receipt for the payment of the current premium, then in that event insurance under clause (vii) hereof by the Contractor shall not be necessary.
16. The Contractor shall provide for adequate cover to the Bank as per the provisions of Workmen Compensation Act.
17. The Contractor shall make available the insurance cover note before the commencement of the Work and shall notify any change in the nature or extent of the Work and also make available additional insurance of Works if required in special circumstances.

18. DEFECTS LIABILITY

- 18.1 Any defects, shrinkages or other faults which shall appear within the Defects Liability Period of 12 months from the date of handing over the works and which are due to materials or workmanship not in accordance with this contract or on account of failure on the part of the Contractor to comply with any of his obligations expressed or implied shall be specified by the consultant in a schedule of defects which he shall deliver to the Contractor not later than 14 days after the expiration of the Defects Liability Period, and within a reasonable time after receipt of such schedule the defects, shrinkages and other faults therein specified shall be made good by the Contractor and (unless the consultant shall otherwise instruct, in which case the contract sum shall be adjusted accordingly) entirely at his own cost.
- 18.2 The Contractor shall make good at his own costs and to the satisfaction of the consultant, all defects, shrinkages or small faults arising in the opinion of the consultant/ engineer from Work or materials not being in accordance with the drawings or specifications or schedule of quantities or the instructions of the Engineer/ consultant which may appear within the **"Defects Liability Period of 12 months from the date of handing over completed site"** referred to in the Appendix to General Conditions. All defects, shrinkages or small faults arising from any other cause not attributable to the Contractor shall be rectified by the Contractor as an additional work.

- 18.3 In the event of failure of the Contractor to carry out any such work to the satisfaction of the Engineer/ consultant, the Bank shall be entitled to carry out the same at the Contractor's costs and all expenses consequential and incidental thereto shall be deducted by the Bank from any monies due or to become due to the Contractor.
- 18.4 When in the opinion of the Engineer/consultant any defects, shrinkages or other faults which he may have required to be made good under sub-clause (1) and (2) of this condition shall have been made good he shall issue a certificate to that effect, and completion of making good defects shall be deemed for all the purposes of this contract to have taken place on the day named in such certificate.

19. SPECIAL RISK

The Contractor shall not be liable for or in respect of any consequences arising out of any special risks as enumerated in relevant clause of the General Conditions. The responsibilities, rights and liabilities of the parties in such case shall be determined with respect to Clause 65 of the General Conditions.

20. STATUTORY OBLIGATIONS, NOTICES, FEES AND CHARGES

The Contractor shall comply with and give all notices required by any Act of Parliament, any instrument rule or order made under any Act of Parliament, or any regulation or byelaw of any local authority or of any statutory undertaker which has any jurisdiction with regard to the Works or with whose systems the same or will be connected. The Contractor before making any variation from the contract drawings or the contract bills necessitated by such compliance shall give to the Engineer / consultant a written notice specifying and giving the reason for such variation and the Engineer / consultant may issue instructions in regard thereto. If within 7 days of having given the said written notice the Contractor does not receive any instructions in regard to the matters therein specified, he shall proceed with the Work confirming to the Act of Parliament, instrument, rule, order, regulation or byelaw in question and any variation thereby necessitated shall be deemed to be a variation required by the Engineer / consultant.

There shall be no employer -Employee relationship whatsoever between the bank and the successful bidder/his sub-contractors/ agents/ labourers/ employees/ staff/ representatives. The bidder shall be liable for compliance of all labor laws applicable in connection with the contract and shall be responsible for payment of wages/arrears of wages under the applicable laws.

21. MATERIALS, WORKMANSHIP, SAMPLES, TESTING OF MATERIALS

- 21.1 All the Works specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and most workmanlike manner with materials of the best and approved quality of the respective kinds in accordance with the particulars contained in and implied by the specifications and as represented by the drawings or according to such other additional particulars, and instructions as may from time to time be given by the consultant /Engineer during the execution of the Work, and to his entire satisfaction.
- 21.2 If required by the consultant /Engineer the Contractor shall have to carry out tests on materials and workmanship in approved materials testing laboratories or as prescribed by the consultant /Engineer at his own cost to prove that the materials etc., under test conform to the relevant I.S. Standards or as specified in the specifications. The necessary charges for transporting, testing etc., shall have to be borne by the Contractor. No extra payment on this account should in any case be entertained.
- 21.3 In case contractor is delaying or refusing or avoiding testing of material, the consultant/engineer shall arrange for carrying out testing of material and the necessary expenditure in carrying out the testing, transportation and incidental expenses shall be recovered from the contractor.

22. All the materials (except where otherwise described) stores and equipment required for the full performance of the Work under the contract must be provided through normal channels and must include charge for import duties, sales tax, octroi and other charges and must be the best of their kind available and the Contractor/s must be entirely responsible for the proper and efficient carrying out of the Work. The Work must be done in the best workmanlike manner. Samples of all materials to be used must be submitted to the Consultant/Engineer when so directed by the Consultant / Engineer and written approval from Consultant / Engineer must be obtained prior to placement of order.
23. During the inclement weather the Contractor shall suspend concreting and plastering for such time as the Consultant /Engineer may direct and shall protect from injury all Work when in course of execution. Any damage (during constructions) to any part of the Work for any reason due to rain, storm or neglect of Contractor shall be rectified by the Contractor in an approved manner at no extra cost.
24. If the Work be suspended by reason of rain, strike, lock-outs or any other cause, the Contractor shall take all precautions necessary for the protection of Work and at his own expenses shall make good any damage arising from any of these causes.
25. The Contractor shall cover up and protect from damage from any cause, all new work and supply all temporary doors, protection to windows, and any other requisite protection for the execution of the Work whether by himself or special tradesmen or sub-contractor and any damage caused must be made good by the Contractor at his own expenses.

26. SUBSTITUTION

Should the Contractor desire to substitute any materials and workmanship, he/they must obtain the approval of the Bank / Consultant in writing for any such substitution well in advance. Materials designated in this specification indefinitely by such term as "Equal" or "Other approved" etc. specific approval of the Bank/Consultant has to be obtained in writing. The term equivalent means, if material specified is not available, then after satisfying to the fact, the consultant / engineer may give other material to be used which will be subject to adjustment in purchase prices.

27. INSPECTION OF WORKS

- 27.1 All materials and workmanship shall be subject to inspection, examination and test at any and all times during manufacture and/or construction. The Consultant may issue instructions requiring the Contractor to open up for inspection any Work covered up or to arrange for or carry out any test at any and all times.

The Consultant / Engineer shall have the right to reject the defective material and workmanship or require its correction.

- 27.2 The test of any materials or goods (whether or not already incorporated in the Works) or of any executed Work, and the cost of such opening up or testing (together with the cost of making good in consequence thereof) shall be added to the contract sum unless provided for in the contract bills or unless the inspection or test shows that the Work, materials or goods are not in accordance with this contract.
- 27.3 The Consultant / Engineer may issue instructions in regard to the removal from the site of any Work, materials or goods, which are not in accordance with this contract.
- 27.4 The Engineer may (but not reasonably or vexatious) issue instructions requiring the dismissal from the Works of any person employed thereon.
- 27.5 On the failure of the Contractor to comply with any of the Engineer's instructions the Engineer may proceed to replace or correct such material/workmanship entirely at the cost of the Contractor.

28. REMOVAL OF IMPROPER WORK

The Bank shall during the progress of the Work have power to order in writing from time to

time the removal from the Work within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Consultant/ Engineer are not in accordance with specification or instructions, the substitution or proper re-execution of any Work executed with materials or workmanships not in accordance with the drawings and specifications or instructions. In case the Contractor refuses to comply with the order the Bank shall have the power to employ and pay other agencies to carry out the Work and all expenses consequent thereon or incidental thereto as certified by the Consultant/ Engineer shall be borne by the Contractor or may be deducted from any money due to or that may become due to the Contractor. No certificate which may be given by the Engineer shall relieve the Contractor from his liability in respect of unsound Work or bad materials.

29. PROTECTIVE MEASURES

The contractor shall implement an emergency response plan for addressing any kind of accident, fire, injuries etc.

- 29.1 The Contractor from the time of being placed in possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays.
- 29.2 Contractor shall indemnify the Bank against any possible damage to the building, roads, or members of the public in course of execution of the work.
- 29.3 The contractor shall provide necessary temporary enclosures etc. for the protection of the work and materials and for altering and adopting the same as may be required and removing on completion of the works and making good all works disturbed.

30. NOTICE AND PATENTS OF APPROPRIATE AUTHORITY AND OWNERS.

- 30.1 The Contractor shall conform to the provisions of any Acts of the Legislature relating to the Work, and to the Regulations and Bye-laws of authorities, and/or any water, lighting and other companies, and/or authorities with whose systems the structures were proposed to have connection and shall before making any variations from the drawings or specification that maybe associated to so conform, give the Consultant/ Engineer written notices, specifying the variations proposed to be made and the reasons for have making them and apply for instruction thereon. The Consultant / Engineer on receipt of such intimation shall give a decision within a reasonable time.
- 30.2 The Contractor/s shall arrange to give all notices required for by the said Acts, Regulations or Bye-laws to be given to any authority, and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the Work and lodge the receipts due with the Bank.

31. ASSIGNMENT AND SUB-LETTING

- 31.1 The whole of the Works included in the contract shall be executed by the Contractor and the Contractor shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein nor, shall take a new partner, without written consent of the Bank and no subletting shall relieve the Contractor from the full and entire responsibility of the contract or from active superintendence of the Work during their progress.
- 31.2 The Contractor shall not assign the Contract or any benefit or interest therein or there under, otherwise than by a charge in favour of the Contractor's Bankers of any monies due or to become due under this Contract, without the prior written consent of the Bank.
- 31.3 The Contractor shall not sub-let the whole of the Works except where otherwise provided by the contract, the Contractor shall not sublet any part of the Works without the prior written consent of the Engineer, which shall not be unreasonably withheld, and such consent, if given shall not relive the Contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults and neglects of any sub- contractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Provided always that the provision of labor on a piecework basis shall

not be deemed to be a subletting under this clause. The Contractor shall co-ordinate and shall be responsible for all aspects of his sub- contractor(s) without being relieved of any of his obligation under the contract.

31.4 If, the contracting agencies are violating the tender terms and sub-let the work without Bank's consent and the same is brought to the notice of the Bank, the Bank will be entitled to recover 10% of such work as penalty besides initiating measures as provided in contract.

32. If, at any time during the execution of the Works, the Consultant/ Engineer shall require the Contractor to make boreholes or to carry out exploratory excavation, such requirement shall be ordered in writing and shall be deemed to be an addition ordered under the provisions of the General Conditions unless a provisional sum in respect of such anticipated Work shall have been included in the Bill of Quantities.
33. The Contractor shall in connection with the Works provide and maintain at his own costs all lights, guards, fencing and watching when and where necessary or required by the Consultant / Engineer or the Bank, or by any duly constituted authority, for the execution and for the protection of the Works, and/or for the safety and convenience of the public / others.
34. The Contractor shall, in accordance with the requirements of the Consultant/ Engineer, afford all responsible opportunities for carrying out their Work to any other Contractors employed by the Bank and their workmen and to the workmen of the Bank and of any other duly constituted authorities who may be employed in the execution on or near the Site of any Work not included in the contract or of any contract with the Bank may enter into in connection with or ancillary to the Works. The Contractor will not be paid any compensation on this account.
35. Shall keep the Site reasonably free from unnecessary store of constructional plant and machinery, wreckage and rubbish during progress of Works and on completion leave the whole site clean and in a workmanlike condition to the satisfaction of the Consultant / Engineer.

36. Default of Contractor

36.1 If the Contractor

- i. being a company presents a petition for winding up and/or goes into liquidation (other than voluntary liquidation for the purposes of amalgamation or reconstruction) or
- ii. shall make an assignment or a composition for the benefit of the greater part, in number of amount of his creditors or shall enter into a Deed or arrangement with his creditors, or
- iii. if a Receiver of the Contractor's firm appointed by the court shall be unable, within fourteen days after notice to him requiring him to do so, to show to the reasonable satisfaction of the Bank that he is able to carry out and fulfill the contract, and if so required by the Bank to give reasonable security therefore, or
- iv. if the Contractor shall suffer execution to be issued, or
- v. shall suffer any payment under this contract to be attached by or on behalf of and of the creditors of the Contractor, or
- vi. shall assign, charge or encumber this contract or any payments due or which may become due to the Contractor without the consent in writing of the Bank first obtained, there under, or
- vii. shall agree to carry out the contract under a committee of inspections of his creditors, or
- viii. shall have an execution levied on his goods, or
- ix. shall use improper materials or workmanship in carrying on the Works, or

- x. shall in the opinion of the Bank not exercise such due diligence and make such due progress as would enable the Work to be completed within due time agreed upon, and
 - xi. the Consultant/ Engineer certifies in writing that the Contractor has failed to commence the Works or failed to proceed with the Works after the suspension order when so called upon by the Consultant/ Engineer, or
 - xii. shall abandon the contract,
 - xiii. without reasonable excuse has failed to commence the Works or have suspended the progress of Works for 28 days after receiving from the Consultant/ Engineer written notice to proceed on
 - xiv. has failed to remove materials from the site or to pull down or replace for 28 days after receiving from the Consultant/ Engineer written notice that the said materials or Work has been condemned and rejected by the Consultant/ Engineer under these conditions or
 - xv. despite previous writings by the Consultant/ Engineer in writing has failed to execute Works in accordance with the contract, or is persistently or flagrantly neglecting to carry out his obligations under the contract or as to the detriment of good workmanship or in defiance of the Consultant / Engineer's instructions to the contrary, sublet any part of the contract then and in any of the said cases the Bank may notwithstanding previous waiver
 - xvi. Fails to perform any obligation in this agreement.
- a) determine the contract by after giving 14 days' notice in writing to the effect as hereinafter mentioned, but without thereby affecting the powers of the Bank or the obligations and liabilities of the Contractor the whole of which shall continue in force as fully as if the contract, had not been so determined and as if the Works subsequently executed had been executed by or on behalf of the Contractor (without thereby creating any trust in favour of the Contractor)
 - b) further the Bank or his agent, or servants, may enter upon the Site and take possession of the Work and all Constructional Plant, amenities, unused materials, tools, scaffolding, sheds, machinery, steam and other power, utensils and materials lying upon premises or the adjoining lands or roads reserved for the execution of the Works and
 - sell the same as his own property or
 - may employ the same by means of his own servants and workmen in carrying on and completing the Works or
 - by employing any other Contractors or other persons or person to complete the Works, and the Contractor shall not in any way interrupt or do any act, matter of thing to prevent or hinder such other Contractors or other persons or person employed from completing and finishing or using the materials and plants for the Works when the Works shall be completed, or as soon thereafter as conveniently may be, the Bank shall give notice in writing to the Contractor to remove his surplus materials and plants and should the Contractor fail to do so within a period of 14 days after receipt by him the Bank may sell the same by Public Auction and shall give credit to the Contractor for the amount so realized.
- 36.2 Any expenses or losses incurred by the Bank in getting the Works carried out by other Contractors shall be adjusted against the amount payable to the Contractor by way of selling his tools and plants or due on account of Work carried out by the Contractor prior to engaging other Contractors or against the Security Deposit.
- 36.3 Upon such entry and expulsion by the Bank the Consultant/ Engineer may adopt an appropriate mode at his discretion and certify the amounts, if any, that had at the time of such entry and expulsion reasonably been earned in respect of the work actually done by him and the value of any unused or partially used materials, any Constructional Plant and any amenities brought into existence exclusively for execution of the Works.

- 36.4 If the Bank shall enter and expel [the Contractor] under this Clause, he shall not be liable to pay to the Contractor any money on account of the Contract, until the expiration of the Defects Liability Period and thereafter until the costs of execution, damages for delay in completion, if any, and all other expenses incurred by the Bank have been ascertained and the amount thereof certified by the Consultant / Engineer. The Contractor shall then be entitled to receive only such sum or sums, if any, as the Consultant / Engineer may certify would have been payable to him upon due completion by him after deducting the said amount. If such amount shall exceed the sum which would have been payable to the Contractor on due completion by him, then the Contractor shall, upon demand, pay to the Bank the amount of such excess and it shall be deemed a “debt due” by the contractor to the Bank and shall be recoverable accordingly.

37 NOTICES

- 37.1 All certificates, notices or written orders to be given by the Bank or by the Consultant/ Engineer to the Contractor under the terms of the Contract shall be served by sending by registered post or by Courier or delivering the same to the Contractor’s principal place of business, or such other address as the Contractor shall nominate for this purpose.
- 37.2 All notices to be given to the Bank or to the Consultant/ Engineer under the terms of the Contract shall be served by sending by registered post or by Courier or delivering the same to the respective addresses nominated for that purpose in Part II of these conditions.
- 37.3 Either party may change a nominated address to another address in the country where the Works are being executed by prior written notice to the other party and the Consultant / Engineer may do so by prior written notice to both parties.
- 38 The work should be executed is time bound and Bank has the right to exit/cancel /terminate the contract with immediate effect and engage another contractor, in case the bidder defaults or commit breach of any Tender terms. In such an event, bank shall recover from the bidder the cost, expenses for loss, damage caused due to the bidder, by various means not limited to forfeiture of security deposit and unpaid bills.

39 ARBITRATION

- 39.1 Wherever, in any of the documents forming part of the Contract, the Bank’s General Manager LRD OF KVG Bank, HO Dharwad has been vested with the final powers, his decision, opinion, certificate or any other discretion shall be final conclusive and binding on the parties and shall be without appeal. All other matters shall be subject to the right of arbitration.
- 39.2 All disputes or differences of any kind whatsoever save and except matters referred to in clause 1) arising out of or in connection with the Contract, whether during the progress of Work or after Completion and shall after written notice by either party to the contract to the either of them and to the Bank herein after mentioned be referred for adjudication to two Arbitrator, one each to be nominated by the Contractor and the Bank, who shall thereafter appoint an Umpire. The provisions of Indian Arbitration and Conciliation Act 1996 shall apply for the purposes.
- 39.3 The Work under the Contract shall, however, continue during the arbitration proceedings and no payment due or payable to the Contractor shall be withheld on account of such proceedings.
- 39.4 The Arbitrator shall be deemed to have entered on the reference on the date he issued notice to both the parties fixing the date of the first hearing.
- 39.5 The Arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the award.
- 39.6 The Arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute in accordance with the terms of the contract and give a reasoned award. The venue of arbitration shall be such place as may be

fixed by the Arbitrator in his sole discretion.

- 39.7 The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award including the fees, if any, of the Arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid and may fix or settle and amount of costs to be so paid.
- 39.8 The award of the Arbitrator shall be final and binding on both the parties.
- 39.9 Subject to aforesaid the provisions of the Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause.
- 39.10 The Bank and the Contractor hereby also agree that arbitration under clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

IN WITNESS WHEREOF the Bank and the Contractor have set their

Respective hands to these presents through their authorized representatives the day, month and year first herein above written.

Signed by the said

In the presence of

Bank

Witness

Name:

Address

Signed by the said

In the presence of

Contractor

Witness

Name:

Address

DOCUMENTS ATTACHED TO THE AGREEMENT FORMING PART & PARCEL OF THE AGREEMENT

- Tender document & tender drawings.
- NIT vide
- Addendum issued vide
- Contractor's letter dated
- Work order vide.

(Signature of the Contractor with Seal)

GENERAL INSTRUCTIONS TO CONTRACTORS AND SPECIAL CONDITIONS

- 1) Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- 2) The Tender Form must be filled in English and all entries must be made by the hand and written in ink. If any of the documents is missing, or unsigned, the Tender may be considered invalid by the Bank in its discretion.
- 3) Performance Security deposit to be kept @ 5 % of the contract value. This deposit is kept with the bank. The Performance Security Deposit may be refunded 15 days after the end of completion of defect liability period i.e after one year of work completion, provided the contractor has satisfactorily carried out all the works and rectified all the defects in accordance with the conditions of contract. The Bid Security or Bank Guarantee/security deposit may be forfeited by the Bank for any default/failure to implement any of the terms by the successful bidder.
- 4) The contractor shall not assign the contract. He shall not sub-let any portion of the contract except with the written consent of the Bank. In case of breach of these conditions, the Bank may serve a notice in writing on the contractor rescinding the contract where upon the Security Deposit shall stand forfeited to the Bank, without prejudice to his other remedies against the contractor. Central Govt./ State Govt. organization will not be allowed to sublet the work on back to back basis.
- 5) The contractor shall carry out of all the work strictly in accordance with Drawings, details and instructions of the Architect, Consultant and the Bank. If in the opinion of the Architect, consultant or the Employer, changes have to be made in the design and with the prior approval in writing of the Employer, they desire the contractor to carry out the same, the contractors shall carry out the same without any extra charge. The Bank's decision in such cases shall be final and shall not be open to arbitration.
- 6) A Schedule of probable quantities in respect of each work and specifications accompany these special conditions. The Schedule of probable quantities is liable to alteration by omission, deductions or additions at the discretion of the Architect/ Bank. No claim will be entertained from the contractor on account of loss of profit over revising the tender rates.
- 7) The Tenderer must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of filling of Tender and for entering into a contract and must examine the drawings and must inspect the site of the work and acquaint himself with all local conditions, means of access to the work, nature of the work and all matters pertaining thereto no compensation will be paid on account of not getting proper information.
- 8) The rates quoted in the Tender shall be inclusive of all charges for clearing of site before commencement as well as after completion, water, electrical consumption, meters, double-scaffolding, centering, boxing, staging, planking, timbering and pumping out water, including bailing, fencing, planking, timbering and pumping out water, including bailing, fencing, hoarding, plant and equipment, storage sheds, watching and lighting by night as well as day, including Sundays and Holidays, temporary plumbing and electric supply, protection of the public and safety of adjacent roads, streets, cellars, vaults, open pavements, walls, houses, buildings and all other erections, matters or things and the contractor shall take down and remove any or all such centering, scaffolding, staging, planking, timbering, strutting, shoring, etc. as occasion shall require or when ordered so to

do, and fully reinstate and make good all matters and things disturbed during the execution of the work and to the satisfaction of the Bank / Consultant.

- 9) Time allowed for carrying out the work as mentioned in the Memorandum shall be strictly observed by the contractor and its shall be reckoned from the 10 days after acceptance of order to commence the work or the date of handing over the site to the contractor whichever is later. The work shall throughout the stipulated period of the contract be proceeded with all due diligence and if the contractor fails to complete the work within the specified period i.e. 3 Months, he shall be liable to pay compensation as defined in the conditions of contract.
- 10) The contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work, whatever the case of delays may be, including delays arising out of modifications to the work entrusted to him or in any sub-contract connected therewith or delays in awarding contracts for other trades if the project or in commencement or completion of such works or in procuring government controlled or other building materials or in obtaining water and power connections for construction purposes or for the other reasons whatsoever and the Employer shall not be liable for any claim in respect thereof. The Employer does not accept liability for any sum besides the Tender amount, subject to such variations as are provided for herein.
- 11) The successful Tenderer is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the quantities and rates. Schedule of instructions in respect of such additional items and their quantities will be issued in writing by the Architect/ consultant with the prior consent in writing of the Bank.
- 12) The successful Tenderer must co-operate with the other contractors appointed by the Employer so that the work shall proceed smoothly with the least possible delay and to the satisfaction of the Architects/ Consultant.
- 13) The contractor must bear in mind that all the work shall be carried out strictly in accordance with the specifications made by the Architect/ Consultant and also in compliance of the requirements of the Authorities concerned and no deviation on any account will be permitted.
- 14) (i) The rates quoted in the Schedule rates also include the expenditure for providing all the water required for the work and the contractor shall make his own arrangements for the supply of good quality water including obtaining Municipal connection for his labor as well as for construction purpose and all charges shall be borne by him. If Municipal water connection is not available and should it become necessary for the contractor to drill a bore well for obtaining water for construction purposes or to bring water from outside by Tankers, The Bank shall not be liable to pay any charges in connection therewith.

(ii) The rates quoted in the Tender shall also include Electric consumption charges for Power. If no power is available at site, the contractor shall have to make his own arrangement to obtain electric power connection and maintain at his own cost an efficient service of electric light and power and shall pay for the electricity consumed.

(iii) For water and power, the contractor to whom the work is allotted shall maintain the same in good working conditions.

(iv) Contractor for other trades appointed by the Bank shall also be allowed to use water and power available by fixing reasonable charges mutually agreed.

(v) Any dispute regarding payment for water and power charges by the other contractor and or by subsidiary agencies appointed by the Bank to the contractor, who has obtained the temporary connections and allowed sub-connections, will be settled by the Bank / Consultant and the decision taken by the Bank / Consultant shall be final and shall be that of the contractor.

(vi) The Bank as well as the Consultant shall give all possible assistance to the Contractor to obtain the requisite permission from the various authorities, but the responsibility for obtaining the same shall be that of the contractor.

(vii) If no such facility is available at the site of work and if available found inadequate, it shall be the responsibility of the contractor to make his own arrangement for obtaining water and power at his cost.

- 15) The contractor will have to obtain completion / clearance certificate in respect of services such as water supply, sewerage, etc. The contractor will also obtain permanent water connection for the entire project. The Bank will pay necessary fee to be made to Govt. authorities.
- 16) The Contractor shall strictly comply with provision of safety code annexed hereto.
- 17) The contractor shall indemnify Karnataka Vikas Grameena Bank, against any claim or legal action arising out of the said Act due to the failure of non-compliance of the provisions of the said Act and the penalty or any other amount levied by the authorities, shall be recoverable from the payments due to the contractors.
- 18) The Contractor shall comply with the provision of the Apprentices Act, 1961, and the Rules and Orders issued there under from time to time. Failure to do so will be in a breach of the contract and the Architect / consultant and the Bank may in their discretion cancel the contract. The contractor shall also be liable for any pecuniary or other liabilities arising on account of any violation by him of the provisions of the Act.
- 19) The Security Deposit of the successful Tender will be forfeited if he fails to comply with any of the conditions of the contract.
- 20) The contractor shall be responsible for the observance of all Central Rules and Regulation framed by the Central Government under the Contract Labour (Regulation and Abolition) Act, 1970. The Bank shall be entitled to deduct all damages, which it might suffer on account of non-observance of these rules by the Contractor, from the amount payable to the Contractor.
- 21) Contractors are not allowed to remove materials brought at Site against which advances have been paid.
- 22) The Contractor is to provide at all times during the progress of the works and the maintenance period / defect liability period proper means of access, with ladders, gangways, etc., and the necessary attendance to move and adopt as directed for the inspection or measurement of the works by the Consultant or their representatives.
- 23) Materials shall be of approved quality and the best of their kind available and shall generally conform to I.S. Specifications. The Contractor shall order all the materials required for the execution of work as early as necessary and ensure that such materials are on site well ahead of requirement for use in the work. The work involved calls for approved standard of workmanship combined with speed and to the entire satisfaction of the

Architect/ consultant. All the material shall be approved by the Consultant / Bank before use. Contractor to arrange samples well in time.

- 24) The Contractors shall after completion of the work clear the Site of all debris and left-over materials at his own expenses to the entire satisfaction of the Bank / Consultant and Municipal or other public authorities.
- 25) The contractor herewith agrees that in respect of inspection of works by the Chief Technical Examiner of the works, a wing of Central Vigilance Commission and the bills of the contractor including all supporting vouchers, abstract etc. to be made after payment of the bills and if as a result of such audit and technical examination any sum is found to have been over paid in respect of any work done by the contractor under the contract of any work claimed by him to have been done by him under the contract and found not to have been executed or any work is found not to have been executed in accordance with the contract, the contractor shall be liable to refund the amount of over payment made already and it shall be lawful for the Bank to recover the same from him in any manner the Bank deems fit either from any payments due and / or becoming due to the contractor or from the security deposit or retention money or through any further bills and / or final bill or in any other manner whatsoever not excluding through recourse to legal action. The certification of bills / measurements by consultant / Architect and Engineer will be scrutinized by the Bank's Central Office / Audit / Vigilance and any deficiency will be corrected accordingly. Contractor cannot insist for payment just because it is signed by consultant / architect / engineer. The contractor herewith agrees to co-operate with the Bank / Consultant while such examinations of works and redo the things without any extra cost to the Bank. It is essential and agreed condition of the contract that any such action taken by the Bank shall deemed to be the fully legal and valid and binding on the contractor.
- 26) Contractors are requested to note that no extra item or deviated item of work to be executed without taking prior permission, the Bank shall not be held responsible for the payment of such works executed. Contractors will have to submit all the particulars including purchase bills/price list for the materials along with the rate analysis for verification of Item Rates.
- 27) If it is observed the existing compound wall, gates railings are damaged then the contractors will have to make good the same at their own cost.
- 28) If contractors fail to pay the taxes/royalties to the Authorities concerned, the Bank reserve their rights to recover the said amount from the amount payable to the contractor and pay the same to the Authorities concerned.
- 29) Work is to be executed & measurements are to be paid as per the detail specification & description of item given in the Standard Specification Book except for the items which are specifically mentioned in the tender for which the details of item and mode of measurements to be followed as indicated separately in the conditions of contractors.
- 30) If there are any contracting clauses mentioned in the tender, the interpretation of the same will be done by the Architect / consultant. However, the decision of the Bank will be final and binding.
- 31) After awarding the work, contractor shall get registered with the office of the Labour commissioner and inform Bank accordingly. Contractors shall follow all rules and regulations stipulated by the Labour Commissioner strictly.

- 32) Contractors shall quote consistent rates for the items of similar nature or analogous in specifications for the sections in schedule of quantities. If it is observed that the rates quoted for similar nature of items or analogous in specification under different sections, are inconsistent, then the Bank reserves his right to consider the lowest of rates for all such items and work out the final amount for payment, unless the competent authority finds that there is justifications for such inconsistent rates.
- 33) The contractor shall give a list of his relatives working with the Bank along with their designations and addresses.
- 34) No employee of the Bank is allowed to work as a contractor for a period of two years of his retirement from Bank service, without the previous permission of the Bank. The contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the Bank as aforesaid before submission of the tender or engagement in the contractor's service.

THE CONDITIONS HEREIN BEFORE REFERRED TO

1. Definition of terms/ interpretation:

In construction these conditions, the specification schedule of quantities and contract agreement, the following words shall have the meanings herein assigned to them expect where the subject or context otherwise requires.

- (a) "Employer/ owner / Bank" shall mean" Karnataka Vikas Grameena Bank, A SCHEDULED BANK Government of India undertaking SPONSORED BY CANARA BANK" having Head Office at Belguam Road Dharwad 580008 and any of its employees representatives authorized on their behalf.
- (b) "Architect / consultant" - shall mean "M/s Kulkarni Associates, having their Registered office at No. 203, Suryaprema Bldg., Above Canara Bank, Raghuvanahalli, Kanakpura Road, Bangalore 560062 or in the event of his or their easing to be Architect/ Consultant for the purpose of this contract such other person as the Bank shall nominate for the Purpose.
- (c) "Contractors" (in case of partnership) shall mean.....andtrading as partners in the name and style of and shall include partners for the time being of the said firm and the legal representatives of a deceased partner.
"Contractors" (in case of individuals) shall mean.....andtrading in the name and style ofand shall include his / their heirs, legal representative assigns or successors.
"Contractors" (in case of company) shall mean.....a company incorporated under19.....and having its registered office atand shall include its successors and assigns.
- (d) "Site" shall mean "Work Place located at Karnataka Vikas Grameena Bank, First Floor Head Office Building Dharwad 580008 includes any building and erections thereon and any other land (inclusively), as aforesaid, allotted by the Bank for the contractor's use.
- (e) Site Engineer / Engineer: The Engineer appointed by the Bank/ Architect/ Consultant for the management of the project.
- (f) "The works" shall mean the work or works to be executed or done under this contract.
- (g) "This Contract" shall mean Articles of Agreement, the special conditions, the general conditions of contract, the appendix, the schedule of quantities and specifications, attached hereto and duly signed.
- (h) "Notice in writing" or written notice shall mean a notice in written, typed or printed characters sent (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 when in the ordinary course of post, it would have been delivered.
- (i) "Act of Insolvency" shall mean any Act of Insolvency as defined by the Presidency Towns Insolvency Act, or the Provincial Insolvency Act or any amending such original.
- (j) "The Schedule of Quantities" shall mean the schedule of quantities as specified and forming part of this contract.
- (k) "Priced Scheduled of Quantities" shall mean the schedule of quantities duly priced with the accepted quoted rates of the contractor.
- (l) "Net Prices" If in arriving at the contract amount, the contractor shall have added to or deducted from the total of the items in the Tender any sum either as a Item or otherwise, then the net price of any item in the Tender shall be the sum arrived at by adding to or deducting from the actual figure appearing in the Tender as the price of that item a similar Item or proportion of the sum so added or deducted of the sum so added or deducted by

the contractor the amount of any Prime Cost items and provisional sums of money shall be deducted from the total amount of the Tender. The expression “net rates” or “net prices” when used with reference to the contract or accounts shall be held to mean rates or prices so arrived at.

2. SCOPE OF WORK:

The work consists of refurnishing works at First Floor of Karnataka Vikas Grameena Bank, Head Office Building, Dharwad including dismantling of existing furniture in accordance with drawings, schedule of quantities. It also includes all the necessary allied work required such as Carpentry, Civil work, Flooring, False Ceiling, Painting, polishing, Electrical & Allied works, HVAC, Smoke Detection & Fire Alarm, Access Control, CCTV, or any other work, etc. as required on site. It includes furnishing all materials, labor, tools and equipment and management necessary for and incidental to the construction and completion of the work. It includes liaisoning with Statutory bodies for execution of work & disposal of garbage/ Mosquito/ noise control, as per the local statutory rules & also all documentation & registration with all statutory bodies, central/ state such as Insurances, Labour commissioner, etc. All work, during its progress and upon completion shall conform to the lines, elevations and grades as shown on the drawings furnished by the employer/ architects. Should any detail essential for efficient completion of the work be omitted from the drawings and specifications it shall be the responsibility of the contractor to inform the Bank/ Consultant and to furnish and install such detail with Bank/ Consultant's concurrence, so that upon completion of the proposed work the same will be acceptable and ready for use.

The term the ‘Architects/Consultants’ in the said conditions shall mean the said M/s Kulkarni Associates, No. 203, Suryaprema Bldg., Above Canara Bank, Raghuvanahalli, Kanakpura Road, Bangalore 560062 or in the event of the said Architect /Consultants ceasing to be the Architect /Consultants for the purpose of this contract for whatever reason, such other person or persons as shall be nominated for that purpose by the Owner/Employer, provided always that no person subsequently appointed to be the Architect /Consultants under this contract shall be entitled to disregard or over rule any decision or direction or approval given or expressed in writing by the Outgoing Architect /Consultants for the time being if the same had been done under instruction from the Bank/ Employer.

3. CONTRACTOR'S RESPONSIBILITY

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 Consultant/Bank. The Consultant may in his absolute discretion and in consultation with the Bank (with prior approval from the Bank) and from time to time issue drawings and/or written instruction, details directions and explanations which are hereafter collectively referred to as “Consultant/Bank's Instruction”.

In regard to:-

- a. The variations or modifications of the design, quality or quantity of works or the additions or omission or substitution of any work.
- b. Any discrepancy in the drawings or between the schedule of quantities and/or drawings and or drawings and or specification.
- c. The removal from the site of any defective materials brought thereon by the contractor and the substitution of any other materials thereof.
- d. The removal and/or re-execution of any works executed by the contractor.

- e. The dismissal from the works of any person employed thereupon.
- f. The opening up for inspections of any work covered up.
- g. The amending and making good of any defects under clauses 19 hereof and those arising during the maintenance/ defect liability period.

The contractor shall forth with comply with and duly execute any work comprised in such Consultant/Bank instructions, provided always that the verbal instructions, directions, and explanations given to the contractor or his representative upon the works by the Consultant/Bank shall, if involving a variation, be confirmed in writing by the contractor within seven days, and if not dissented from in writing within a further seven days by the Consultant, such shall be deemed to be Consultant /Bank instructions within the scope of the Contract.

4. VISIT TO SITE

The contractor shall visit the site and make himself thoroughly acquainted with the local site condition, nature and requirements of the works, facilities of transport condition, effective labor and materials, access and storage for materials and removal of rubbish. The tenderer shall provide in their tender for cost of carriage, freight and other charges as also for any special difficulties and including police restriction for transport, etc. for proper execution of work as indicated in the drawings. The successful tenderer will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site condition which existed before the commencement of the work or which in the opinion of the Bank or Consultant might be deemed to have reasonably been inferred to be so existing before commencement of work.

5. AGREEMENT

The successful contractor is required to sign agreement as may be drawn up to suit local conditions and shall pay for all stamps and legal expenses, incidental thereto.

6. PERMITS AND LICENSES

Permits and licenses for release of materials which are under Government control will be arranged by the contractor. The Bank will render necessary assistance, sign any forms or applications that may be necessary.

The contractor shall at his own cost arrange for storage shed adequate for taking delivery and storing of the quantity of controlled materials released by the authorities or supplied by the Bank. The costs of storing, transporting, etc. of all materials including those under Government control are to be included by the tenderer in his quoted rates.

The Bank / Consultant shall be indemnified against all Government or legal actions for theft or misuse of any controlled materials in the custody of the contractor.

7. GOVERNMENT AND LOCAL RULES

The contractor shall conform to the provisions of all local Bye-laws and Acts relating to the work and to the Regulations etc. of the Government and Local Authorities and of any company with whose system the structure is proposed to be connected. The contractor shall give all notices required by said Act, Rules, Regulations and Bye-laws, etc. and pay all fees payable to such authority / authorities for execution of the work involved. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities for license, fees for footpath encroachment and restorations etc. and shall indemnify the Bank against such liabilities and shall defend all actions arising from such claims or liabilities.

8. QUANTITY OF WORK TO BE EXECUTED

The quantities shown in the schedule of quantities are intended to cover the entire new structure indicated in the drawings, but the Bank reserves the right to execute only a part or the whole or any excess thereof without assigning any reason therefore. The quantity may vary to any extent and even the same will be omitted. No separate payment/ compensation/ revision in the rates will be entertained.

9. VARIATIONS TO BE APPROVED BY THE BANK/ CONSULTANT

Notwithstanding anything herein contained, the Consultant or his representative shall not, without prior concurrence in writing of the Bank, issue any instructions, verbal or in writing, the Consultant can get the work done upto an amount of Rs.10,000.00 (Rupees Ten thousand only) and all instruction issued to the contractor should forthwith be brought to the notice of the Bank. The contractor shall submit through the Consultant, a statement of variations giving rise quantity and rates duly supported by analysis of rates, vouchers, etc. The rates on scrutiny and final acceptance by the Bank shall form a supplementary tender. The Bank shall not be liable for payment of such variations until these statements are sanctioned by the Bank.

10. DRAWINGS AND SCHEDULE OF QUANTITIES AND AGREEMENT

The contractor on the signing hereof shall be furnished by the Consultant free of cost one copy of each of the said drawings and of the specifications and one copy of all further Drawings issued during the progress of the works. Any further copies of such drawings required by the contractor shall be paid by him. The contractor shall keep one copy of all drawings on the works and the Consultant/ Bank or their representatives shall at all reasonable times have access to the same.

11. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

The contractor shall provide everything necessary for the proper execution of the works according to the intent and meaning of the Drawings, Schedule of quantities and Specification taken together whether the same may or may not be particularly shown or described therein provided that the same can be reasonably be inferred there from, and if the contractor finds any discrepancies therein, he shall immediately and in writings, refer the same to the Bank/ Consultant whose decision shall be final and binding. The contractor shall provide himself for ground and fresh water for carrying out of the works at his own cost. The Bank shall on account be responsible for the expenses incurred by the contractor for hired ground or fresh water obtained from elsewhere.

- 11.1 The rates quoted against individual items will be inclusive of everything necessary to complete the said items work within the contemplation of the contract, and beyond the unit price no extra payment will be allowed for incidental or contingent work, labor and /or materials inclusive of all taxes and duties whatsoever except for specific items, if any, stipulated in the tender documents.
- 11.2 The contractor shall supply, fix and maintain at his own cost, for the execution of any work, all tools, tackles, machineries and equipment and all the necessary centering, scaffolding, staging, planking, timbering, strutting, shoring, pumping, fencing, boarding, watching and lighting by night as well as by day required not only for the proper execution and protection of the said work but also for the protection of the public and safety of any adjacent roads, streets, walls, houses, buildings, all other erections, matters and things and the contractor shall take down and remove any or all such centering, scaffolding, plumbing, timbering, strutting, shoring etc., as occasion shall be required or when ordered so to do, and shall fully reinstate and make good all matters and things disturbed during the execution or when ordered so to do, and shall fully reinstate and make good all matters and things disturbed during the execution of works to the satisfaction of the Bank / Consultant.
- 11.3 The Contractor shall also provide such temporary road on the site as may be necessary for the proper performance of the contract and for his own convenience but not otherwise.

Upon completion, such roads shall be broken up and leveled where so required by the drawings unless the Bank shall otherwise direct.

- 11.4 The contractor shall at all times give access to workers employed by the Bank or any men employed on the buildings and to provide such parties with proper sufficient and if required, special scaffolding, hoists and ladders and provide them with water and lighting and leave or make any holes, grooves etc., in any work, where directed by the Bank as any be required to enable such workman to lay or fix pipes, electrical wiring, special fittings etc. The quoted rates of the tenderers shall accordingly include all these above-mentioned contingent works.

12. AUTHORITIES NOTICES AND PATENTS

The contractor shall confirm to the provisions of any Act of the legislature relating to the works, and to regulations and bye-laws of any authority, and or any water electric supply and other companies and/or authorities with and whose the systems the structures is proposed to be connected, and shall, before making any variations from the drawing or specifications that may be associated to so confirming, give to the Architect written notice, specifying the variations proposed to be made and the reason for making it and apply for instructions thereon. In case the contractor shall not within ten days receive such instructions, he shall proceed with the work confirming to the provisions, regulations, or byelaws in questions, and variations so necessitated shall be dealt with under clause 13 hereof.

The contractor shall bring to the attention of the Consultant/ Bank all notices required by the said Acts, regulations or bye-law to be given to any authority and pay to such authority, or to any public office, all fees that may be properly chargeable in respect of the said work, and lodge the receipt with the Consultant/ Bank.

The contractor shall indemnify the Bank against all claims in respect of patent rights, royalties, and damages to buildings, roads or members of public in course of execution of work and shall defend all actions arising from such claims and shall keep the Bank saved harmless and indemnified in all respects from such actions, costs and expenses.

13. CLEARING SITE AND SETTING OUT WORKS

The site shall be cleared of all obstructions, loose stone, and material rubbish of all kind. All holes or hollows either originally existing or produced by removal of loose stone or material shall be carefully filled up with earth, well rammed and leveled of as directed at his own cost. The contractor shall set out the works and shall be responsible for the true and perfect setting out of the work and for the correctness of the positions, dimensions, levels and the alignment of all the parts thereof. If at any time any error in this respect shall appear during the progress of any part of work or within the period of one year from the completion of the works, the contractor shall at his own expenses rectify such error to the satisfaction of the Consultant / Bank.

14. CONTRACTOR IMMEDIATELY TO REMOVE ALL OFFENSIVE MATTERS

All soil, filth or other matters of any offensive nature taken out of any trench, sewer, drain, cesspool or other place shall not be deposited on the surface but shall be at once carted away by the contractor to place provided by him.

The contractor shall keep the foundations and works free from water and shall provide and maintain at his own expenses electrically or other power-driven pumps and other plant to the satisfaction of the Bank for the purpose, until the building is handed over to the Bank. The contractor shall arrange for the disposal of the water so accumulated to the satisfaction of the Bank and local authority and no claims will be entertained afterwards if he does not include in his rates for the purpose.

All the rates quoted are inclusive of removal of rubbish / debris collected during the progress of work, rejected material and clearance of site before and after the work is

completed. Not more than one truckload shall be stored that to for not more than 3 days. The contractor shall arrange to remove the same immediately. If the contractor is failing to remove the same and the expenses shall be recovered from the contractor and he will not dispute for the expenses so incurred.

15. MATERIALS, WORKMANSHIP, SAMPLES, TESTING OF MATERIALS:

All the works specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and most workman like manner with materials of the best and approved quality of the respective kinds in accordance with the particulars contained in and implied by the specifications and represented by the drawings or according to such other additional particulars and instructions as may from time to time be given by the Bank/Consultant during the execution of the work, and to his entire satisfaction.

The contractor shall have to carry out test on materials and workmanship in approved materials testing laboratories or as prescribed by the Bank/ Consultant at own cost to prove the materials quality and test sample, confirm to the relevant I.S. Standard or as specified in the specifications. The necessary charges for transporting testing etc. shall have to borne by the contractors. No extra payment on this account should in any case be entertained.

All the materials (except where otherwise described) store and equipment required for the full performance of the work under the contract must be provided through normal channels and must include charges for import duties, sales tax, octroi and other charges and must be the best of their kind available and the contractors/must be entirely responsible for the proper and efficient carrying out the work. The work must be done in the best workman like manner. Samples of all materials to be used must be submitted to the Bank/ Consultant when so directed by the Engineer/ Consultant and written approval from Bank/ Consultant must be obtained prior to placement of order.

16. INCLEMENT WEATHER:

During the inclement weather the contractor shall suspend concreting and plastering for such time as the Bank / consultant may direct and shall protect from injury all work when in course of execution. Any damage (during construction) to any part of the work for reasons due to rain, storm, or neglect of contractor shall be rectified by the contractor in an approved manner at no extra cost.

Should the work be suspended by reason of rain, strike, lockouts or any other cause, the contractor shall take all precautions necessary for the protection of work and at his own expenses shall make good any damage arising from any of these causes. The contractor shall cover up and protect from damage, from any cause, all new work and supply all temporary doors, protection to window, and any other requisite protection for the execution of the work whether by himself or special tradesmen or sub-contractor and any damage caused must be made good by the contractor at his own expenses.

17. MATERIALS AND WORKMANSHIP TO CONFORM TO DESCRIPTIONS:

All materials and workmanship shall so far as procurable be of the respective kinds described in the schedule of quantities and/ or specifications and in accordance with the Consultant's instructions, and the contractor shall upon the request of the Consultant furnish him with all invoices, accounts, receipts and other vouchers to prove that the materials comply therewith. The contractor shall at his own cost arrange for and/ or carry out any test of any materials which the architects may require from Government approved laboratories.

18. CONTRACTOR'S SUPERINTENDENCE & REPRESENTATIVE ON THE WORKS:

The contractor shall give all the necessary personal superintendence during the execution of the works, and as long thereafter as the Bank/ Consultant may consider necessary until

the expiration of the defect's liability period stated in the Appendix hereto. The contractor shall also during the execution of works maintain an experienced qualified supervisor as required who shall be in constantly attendance at work while the men are at work. Any directions, explanations, instructions, or notices given by the Bank/ Consultant to such representative shall be held to be given to the contractor. For non-compliance an amount of Rs.10,000/- pm shall be deducted from the contractor for the period required if supervisor is not provided. However, deduction of payment shall not exonerate contractor for his responsibility for executing quality work.

19. DEPLOYMENT OF LABOURS:

No laborer below the age of eighteen years shall be employed on the work. Any labourer supplied by the contractor to be engaged on the work on day-work basis either wholly or partly under the direct order or control of the Bank or his representative shall be deemed to be a person employed by the contractor.

20. FACILITIES TO BE PROVIDED TO WORKERS:

The contractor shall comply at his own cost with the order of requirement of any Health Officer of the State or any local authority or of the Bank regarding the maintenance of proper environmental sanitation of the area where the contractor's laborer's are housed or accommodated, for the prevention of small pox, cholera, plague, typhoid, malaria and other contagious diseases. The contractor shall provide, maintain and keep in good sanitary condition adequate sanitary accommodation and provide facilities for pure drinking water at all times for the use of men engaged on the works and shall remove and clear away the same on completion of the works. Adequate precautions shall be taken by the contractor to prevent nuisance of any kind on the works or the lands adjoining the same.

The contractor shall arrange to provide first-aid treatment to the laborer's engaged on the works. He shall within 24 hours of the occurrence of any accident at or about the site or in connection with execution of the works, report such accident to the Bank and also the competent authority where such report is required by law.

21. DISMISSAL OF WORKMEN:

The contractor shall at the request of the Bank/ Consultant immediately dismiss from the works, any person employed thereon by him who may in the opinion of the Bank/ Consultant incompetent or misconduct himself and such person shall not be engaged again. Such discharges shall not be the basis of any claim for compensation or damages against the Bank or any of their officer or employee.

22. ACCESS TO WORK:

The Bank/ Consultant and their responsible representative shall at all reasonable times have free access to the works and/ or to the workshops, factories or other places where materials are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained the contractor shall give every facility to the Bank, the Consultant and their representative necessary for inspection and examination and test of the materials and the workmanship. No persons not authorized by the Bank or the Consultant except the representatives of Public Authorities shall be allowed on the works at any time.

23. ASSIGNMENT/ SUB-LETTING:

The whole of the works included in the contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign, or under-let the contract or any part share there of or any interest therein without the prior written consent of the Bank and no undertaking shall relive the contractor of the full and entire responsibility of the contract or from active superintendence of works during their progress. Central Govt./ State Govt. companies shall not be allowed to sublet the work on back to back basis/ labor basis without approval from the Bank. In case, in case contractor sub-let the work, the

Bank will be entitled to deduct 10% of cost of work executed besides initiating other measures provided in the contract.

24. VARIATIONS:

No alterations, omissions or variations shall vitiate this contract, but in case the Architect thinks proper at any time during the progress of the works to make any alterations in, or additions to or omissions from, the work or any alteration in the kind or quality of materials to be used therein and shall give notice thereof in writing under his hand to the contractor, the contractor shall alter, add to, or omit from, as the case may be, in accordance with such notice, but the contractor shall not do any work extra to or make any alterations or additions to or omissions from the works or any deviations from any of the provisions of the contract, stipulation specifications or contract drawings without the previous consent in writing of the consultant /Architect / Bank and the values of such extras, alternations, additions or omissions shall in all cases be determined by the Consultant with the prior approval in writing of the Bank in accordance with the provision of the Clause hereof, and the same shall be added to, or deducted from the contract amount, as the case may be accordingly.

25. SCHEDULE OF QUANTITIES:

The Schedule of quantities, unless otherwise stated shall be deemed to have been prepared in accordance with the standard method of quantity measurement.

Any error in description or in quantity or in omission of items from the Schedule of quantities shall not vitiate this contract but shall be rectified and the value thereof shall be added to or deducted, from the contract amount (as the case may be), provided that no rectification of errors, if any, shall be allowed in the contractor's Schedule of rates.

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of this tender for the works and the prices stated in the Schedule of quantities and or the schedule of rates and prices which rates and prices shall cover all his obligations under the contract and all matters and things necessary for the proper completion of works.

The quantities of work may vary to any extent or may be omitted; the contractor cannot claim loss of profit/ overhead on this account.

26. MEASUREMENT OF WORKS:

- 26.1 The Consultant may from time to time intimate to the contractor and the Bank that he requires works to be measured, and the contractor shall forthwith attend or send a qualified agent to assist the Consultant in taking such measurements and calculations and to furnish all the particulars or to give all assistance required by any of them.
- 26.2 The Engineer will take measurement of the work jointly with the contractor and enter the same in measurement books. Based on these measurements the contractor will raise the bill as per the prescribed format. Consultant to verify the bill/ measurement and issue certificate stating that the work completed is as per the specifications and the measurement claimed for the works are actually executed at site. This certificate shall be issued within 14 days after bill submission by the Contractor. The Bank will release bill amount within 21 days. If for some reason checking of the bill/ measurement is not completed, 75% of the bill amount at least shall be released within 21 days and the balance within 30 days.
- 26.3 Should the contractor not attend or neglect or omit to send such agent then the measurement taken by the Architect or a person approved by him shall be final and binding on the contractors.
- 26.4 The contractor or his also supply without charge the requisite number of persons with means and materials necessary for the purpose of measurements or examinations at any time and from time to time of the work or counting weighing of the materials, etc.

26.5 All authorized extra works, omissions and all variations made without the Consultant's knowledge, if subsequently sanctioned by him in writing (with the prior approval in writing of the Bank) shall be included in such measurement.

26.6 Measurements shall be recorded as per IS 1200 mode measurement and in metric system. Measurement shall be recorded in 100 pages bounded measurement book to be supplied by Karnataka Vikas Grameena Bank. The M.B. shall be kept in the custody of the consultant / Bank.

27 PROCEDURE FOR MEASUREMENT AND BILLING OF WORK IN PROGRESS:

27.1 The Contractors will have to keep the materials at Site under their safe custody and at their risk and cost. The Bank is not responsible for damages and losses of such materials brought at site.

27.2 Running Account Payments to be regarded as Advances:

All running account payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed and accepted and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the contract, or any part thereof, in this respect, or the accruing of any claim, nor shall it conclude, determine or effect in any way the powers of the Bank/ consultant under these conditions or any of them as to the powers of the Bank/ consultant under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary/affect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for completion of the work; otherwise the Consultant/ Engineer-in-charge's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on all parties. Interim Bill value to be minimum of **Rs.40 Lacs**.

28 COMPLETION CERTIFICATE:

28.1 APPLICATION FOR COMPLETION CERTIFICATE

The Consultant /Engineer-In-Charge shall normally issue to the contractor the completion certificate within one month after receiving, an application thereof from the contractor and after verifying from the completion documents and satisfying himself that the work has been completed in accordance with and as set out in the construction and erection drawing and contract documents.

The contractor, after obtaining the completion certificate, is eligible to present the final bill for the work executed by him under the terms of contract.

28.2 Completion Certificate

Within one month of the completion of the work in all respects, the Contractor shall be furnished with a certificate by the Consultant/ Engineer-In-Charge of such completion but no certificate shall be given nor shall the work be deemed to have been completed until all scaffolding, surplus materials and rubbish is cleared of the site completely. The work will not be considered as complete and taken over by the Bank, until all the temporary works, labor etc., are removed and the works site cleared to the satisfaction of the Consultant/ Engineer.

If the Contractor shall fail to comply with the requirements of this clause on or before the date fixed for the completion of the work, the Consultant/ Engineer-In-Charge may at the expenses of the contractor remove such scaffolding, surplus materials and rubbish and dispose off the same as he thinks fit and clean up the site and the contractor shall forthwith pay the employer for all expenses so incurred and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except of any sum actually realized by the sale thereof.

28.3 CERTIFICATE (to be issued by the consultant/ engineer)

It is certified that various items of works claimed in the RA Bill by Contractor has been completed to the extent claimed and at appropriate rates and that the items are in accordance with and fully confirming to the standard and/or prescribed specifications and drawings. Quality and rates verified. The material supplied and work done conform tender specifications. We further certify that we have checked the measurement to the extent of 100 per cent of each item claimed in this bill. As net amount of Rs..... (Rupees) is recommended to be paid to the contractor making the total upto date payment of Rs.....

(Rs.....)

Quality and rates verified. The material supplied and work done confirm with the tender specifications.

DATE :

SITE ENGINEER / CONSULTANT

The above certification shall be endorsed in the relevant Measurement Books also by the Consultant.

28.4 FORMAT FOR RUNNING BILL

ON LETTER HEAD OF CONTRACTOR

Running Bill No.

Tender Amount Rs.

Value of work done Rs.

Less rebate (-) Rs.

Net Value of work done Rs.

Extra variation items after settlement @100% Rs.

Extra variation items without settlement @75% Rs.

Total

Total payable Rs.

Deductions

1. Retention money Rs.

2. Recovery of advance if any Rs.

3. Income-tax Rs.

4. Any other Rs.

5. Total bill paid till last bill Rs.

Total deductions Rs. Rs.

Net payable Rs.

Amount certified for payment Rs.

Note : This page shall be signed and stamped by the Site Engineer, Contractor and Project Architect.

(Signature of the Contractor with Seal)

v. **FORMAT FOR RUNNING BILL (To be submitted by the contractor)**

I	Name of the Contractor / Agency	:	
II	Name of the Work	:	
III	Sr.No. of the Bill	:	
IV	Sr.No. of the Previous Bill	:	
V	Reference to Agreement No.	:	
VI	Date of written order to commence	:	
VII	Date of Completion as per Agreement	:	
VIII	Date of Measurements	:	
XI	Present status of work	:	

Sno.	Items Description	Unit	Rate	Qty. as per measurement	Tender Amount Rs.
1	2	3	4	5	6

Up to previous RA Bill		Up to date gross		Present bill		remark
Qty	Amt.	Qty.	Amt.	Qty.	Amt.	
7	8	9	10	11	12	13

Note :

1. If part rate is allowed for any item, it should be indicated with reasons for the allowing such a rate.
2. If adhoc payment is made, it should be mentioned specially.

29. Any representative of the Architect/ Consultant, or the Bank shall have power to give notice to the contractor or to his representative, of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the Architect is obtained. The work will be from time to time be examined by the Architect/ the Bank's Engineer or the Architect's representative, but such examination shall not in any way exonerate the contractor from the obligations to remedy any defects which may be found to exist at any stage of the works or after the same is complete. Subject to the limitations of this clause, the contractor shall take instructions only from the Architect/ Bank.

30. DUTIES OF CONTRACTOR

- i. To make a thorough study of contract documents, Architectural/Structural drawings and other details so as to bring out ambiguities/discrepancies between them and to obtain clarification from the Competent Authority well in time to avoid delays.
- ii. To render a certificate to the Competent Authority to the effect that he has studied the contract documents, drawings and specifications.

(Signature of the Contractor with Seal)

- iii. To take charge of objects of value and antiquity found on site or in excavations, immediately, after their discovery, to hold them in safe custody and to hand them over to the Competent Authority of the Bank for further action.
- iv. To ensure that the quality of materials and workmanship as laid down in the contract is maintained and the accuracy of dimension shown on drawings is attained in the construction/ work.
- v. To watch the validity of the building permission issued by the Local Authority and to ensure that the revalidation, if necessary, is obtained well in time.
- vi. To arrange periodical reconciliation of materials and work.
- vii. To maintain the undernoted records at the site of work, in addition to normal routine requirements of an office:
 - a. Daily Progress Record
 - b. Work Site Order Book.
 - c. Instruction by Bank's Officers.
 - d. Cement Statement (Receipt/Consumption/Balance).
 - e. Steel Register/any other costly Material Register.
 - f. Contract Pour Reports including Slump Test Record.
 - g. Concrete Cube Test Register.
 - h. Test Registers of other materials/fittings, fixtures, equipment's as stipulated in the tender.
 - i. Register of Drawings and Working Details.
 - j. Log Book of Defects.
 - k. The Site Engineer should maintain in a Hindrance Register giving details of commencement and removal of each hindrance.
 - l. Dismantled Materials Account Register.
 - m. Supply and consumption register of scarce/costly materials like bitumen, lead, laminates, special paints etc.
 - n. Record of materials used/received: Day to day record of materials used/received shall be entered in the register and signed by contractor's representative at site.
 - o. Record of reinforcement bars received at site: Necessary entry for reinforcement bars of each category shall be made in the register for steel and signed by the contractor representative daily.
- viii. To study the quality of approved coarse and fine aggregate and get the design of the concrete mix in accordance with modern practice. The contractor shall ensure that the mix design for RCC work shall be carried out by the Architect/Structural Consultant, if applicable.
- ix. To record measurements of completed work jointly and to process them in running account bills.
- x. To submit to the Competent Authority the Progress Report fortnightly.
- xi. To watch that the concerned contract does not lapse for want of extension of time. Therefore, to keep it alive and in operation from point of consideration that "Time is the essence of contract".
- xii. To ensure that progress on every contract is in accordance with the appropriate stage of its Time and Progress Chart.

- xiii. To submit the final summary of costs for the project to the Competent Authority.
- xiv. To submit the Competent Authority authentic information on and the under noted records pertaining to the completed work in order to enable the Competent Authority to finalize them in the due course:
 - a) Record i.e. as completed drawings.
 - b) Record of Standard Measurements for periodical services.
 - c) Inventory of fittings and fixtures.

To hand over to the Competent Authority a “first draft” of “A Note of Comprehensive Information to the User” containing detailed instructions on how to use and maintain the completed building to the best advantage of the Bank.

31. PRICES FOR EXTRAS ETC. ASCERTAINMENT OF NON-TENDER ITEMS

The contractor may, when authorized, and shall, when directed in written by the Architect / Consultant with the approval of the Bank, add to, omit from, or vary the works shown upon the drawings, or described in the specification or included in the schedule of quantities, but contractor shall make no addition, omission or variation without such authorization or direction. A verbal authority or direction by the Architect / Consultant shall, if confirmed by them in written seven days, be deemed to have been given in writing. Any such extra is herein referred to as authorized extra and shall be made in accordance with the following provisions.

- (a) (i) The net rates or prices in the original tender shall determine the valuations of the extra work where such extra work is of similar character and executed under similar conditions as the work priced therein.
 (ii) Rates for all items, wherever possible, should be derived out of the rates given in the priced schedule of quantities.
- (b) The net prices of the original tender shall determine the value of the items omitted, provided if omissions vary the conditions under which any remaining items of works are carried out, the prices for the same shall be valued under sub-clause C hereof.
- (c) Where the extra works are not of similar character and /or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items of works are carried out or if the amount of the whole of the contract works or to any part thereof shall be such that in the opinion of the Architect the net rate or price contained in the priced schedule of quantities or tender or for any item of the works involves loss or expense beyond that reasonably contemplated by the contractor or is by reason unreasonable or inapplicable, the Architect shall fix such other rate or price as in the circumstances he shall feel reasonable and proper, with the prior approval in writing of the employer.
- (d) Where extra work cannot be properly measured or valued the contractor shall be allowed days work prices as the priced schedule of quantities or, if not so stated, then in accordance with the local day work rates and wages for the district; provided that in either case vouchers specifying the daily time (and if required by the Architect, the workman's name) and materials employed to be delivered for verification to the Architect, or his representative at to the Architect or his representative at or before the end of the week following that in which the work has been executed.

Actual cost of materials..... Rs.
 Add for Labour charges..... Rs.
 Add for Taxes, Transportation, If any..... Rs.

(Signature of the Contractor with Seal)

Add for Wastage of Materials (Upper Limit 5% wherever applicable) Rs.
 Add for water and electricity Charges if any
 required, upper limit 2% of basic cost of materials Rs.
 Add for 15% towards contractor's overheads and profit..... Rs.
 Final rate arrived. Rs.

32. UNFIXED MATERIALS WHEN TAKEN INTO ACCOUNT TO BE THE PROPERTY OF THE BANK

Where in any certificate (of which the contractor has received payment), the Architect has included the value of any unfixed materials intended for and/or placed on adjacent to the works, such materials shall become the property of the Bank and they shall not be removed except for use upon the works, without the written authority of the Architect/Bank. The contractor shall be liable for any loss of or damages to such materials.

33. REMOVAL OF IMPROPER WORKS

The Architect/Bank shall, during the progress of the works, have power to order in writing from time to time the removal from the work within such reasonable time or times as may be specified in order, of any materials which in the opinion of the Architect/Bank are not in accordance with the specifications or the instructions, the substitution of proper materials, the removal and proper re-execution of any work executed with materials or workmanship not in accordance with the drawings and specification instruction and the contractor shall forthwith carry out such order at his own cost. In case of default on the part of the contractor to carry such order, the Bank shall have the power to employ and pay other persons to carry out the same and all expenses consequent thereon, or incidental thereto, shall be deducted by the Bank from any money due or that may become due, to the contractor.

No certificate, which may have been issued by the Architect, shall relive the contractor from his liability in respect of unsound work of bad materials.

34. DEFECTS AFTER COMPLETION

The contractor shall make good at his own cost and to the satisfactions of the Bank all defects, shrinkage, settlements or other faults, which may appear within 12 months after completion of the work. In default the Bank may employ and pay other persons to amend and make good such damages, losses and expenses consequent thereon or incidental there to shall be made good and borne by the contractor and such damages, loss and expenses shall be recoverable from him by the Bank or may be deducted by the Bank, in lieu of such amending and making good by the contractor, deduct from any amount due to the contractor, a sum equivalent to the cost of amending such work and in the event of the amount retained being insufficient, recover that from the contractor from the amount retained as retention money together with any expenses the Bank may have incurred in connection therewith.

35. CONCEALED WORK:

The contractor shall give due notice to the Bank/ architects whenever any work is to be buried in the earth, concrete or in the bodies of walls or furniture wood, otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such burial, in default whereof the same shall, at the opinion of the Bank/ architect be either opened up for measurement at the contractor's expense or no payment may be made for such materials. Should any dispute or differences arise after the execution of any work as to measurements etc., or other matters which cannot be conveniently tested or checked, the notes of the employer/ architects shall be accepted as correct and binding on the contractor.

36. CERTIFICATE OF VIRTUAL COMPLETION & DEFECTS LIABILITY PERIOD

The work shall not be considered as completed until the Architect has certified in writing that they have been virtually completed. The defects Liability Period shall commence from the date indicated in the virtual completion certificate issued by the Architect.

37. NOMINATED SUB-CONTRACTORS

All specialist, Merchants, Tradesmen and others executing any work of supplying and fixing any goods for which prime cost prices or provisional sums are included in the Schedule of Quantities and/or Specifications who may be nominated or selected by the Architect/ Bank are hereby declared to be Sub-Contractors employed by the Contractors and are herein referred to as nominated Sub-Contractors.

No nominated Sub-Contractor shall be employed on or in connection with the works against whom the Contractor shall make reasonable objection or (save where the Architect and Contractor shall otherwise agree) who will not enter into a Contract providing:-

- a. That the nominated Sub-Contractor shall indemnify the Contractor against the same obligations in respect of the Sub-Contract as the Contractor is under in respect of this contract.
- b. That the nominated Sub-Contractor shall indemnify the Contractor against claims in respect of any negligence by the Sub-Contractor, his servants or agents or any misuse by him or them of any scaffolding or other plant, the property of the Contractor or under any workmen's Compensation Act in force.
- c. Payment shall be made to the nominated Sub-Contractor within fourteen days of his receipt of the Architect's Certificates provided that before any certificate is issued, the contractor shall upon request furnish to the architect proof that all nominated Sub-Contractor's accounts included in the previous Certificate have been duly discharged; in default whereof the Employer may pay the same upon a Certificate or the Architect and deduct the amount thereof from any sums due to the Contractor. The exercise of this power shall not create privacy of Contract as between Employer and Sub-Contractor.

38. OTHER PERSONS ENGAGED BY THE BANK

The Bank reserves the right to execute any part of the work included in this contract by other agency or persons and contractor shall allow all reasonable facilities and use of his scaffolding for the execution of such work. The main contractor shall extend all co-operations in this regard.

39. INSURANCE

a. IN RESPECT OF DAMAGE TO PERSONS AND PROPERTY

- (i) The contractor shall be responsible for all injury to the work or to persons, animals or things, and for all damages to the structural and / or decorative part of the property which may arise from the operation or neglect of himself or of any nominated sub-contractor or any of his / sub-contractor's employee, whether such damage/ injury arises from carelessness, accident or any other cause whatsoever in any way connected in the carrying out of this contract. This clause shall be held to include inter alias, any damage to buildings, whether immediately adjacent or otherwise, and any damage to the roads, streets, foot-paths, bridge or ways as well as damage caused to the building and work forming the subject of this contract by rain, wind or other inclement of the weather. The contractor shall indemnify the Bank and hold it harmless in respect of all and any expense arising from such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury and damage under any Act of any Legislature or otherwise and also in respect of any award of compensation or damage consequent upon such claims.

- (ii) The contractor shall reinstate all damage of every sort mentioned in this clause, so as to deliver up the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property or third parties.
- (iii) The contractor shall indemnify the Bank against all claims which may be made against the Bank by any member of the Public or third party in respect of anything which may arise in respect of the works or in consequence thereof and shall at his own expense arrange to effect and maintain, until the virtual completion of the contract, with an approved office, a Policy of Insurance in the name of the Bank and the contractor against such risks and deposit such policies with the Bank from time to time during the currency of this contract. The contractor will also similarly indemnify the Bank of all claims which may be made upon the Bank whether under the Workmen's Compensation Act or any other statute in force during the currency of this contract or at common law in respect of any employee of the contractor or any sub-contractor and shall at his own expense effect and maintain, until the virtual completion of the contract, with an approved office, a Policy of Insurance in the joint name of the Bank and the Contractor against such risks and deposit such policy or policies with the Bank from time to time during the currency of the contract.
- (iv) The contractor shall be responsible for any liability which may be excluded from the Insurance Policies above referred to and also for all other damages to any person animal or property arising out of incidental or defective carry in out of this contract. He shall also indemnify the Bank in respect of any cost, charges or expenses arising out of claims or proceeding and also in respect of any award of composition and damages arising there from.
- (v) The Bank shall be entitled to deduct the amount of any damage, compensation, cost, charges and expenses arising from or accruing from, or in respect of, any such claims or damage from any or all sums due or to become due to the contractor without prejudice to the Bank's other rights in respect thereof.

b. FIRE INSURANCE

- (i) The Contractor shall, within fourteen days from the date of commencement of works, insure the works at his cost and keep them insured until the virtual completion of the contract, against loss or damage by fire and/ or earthquake, flood with an office to be approved by the Architect in the joint name of the Bank and the Contractor (the name of the former being placed first in the policy), for the contract amount only. The Contractor shall deposit the policy and receipts for the premium with the owner within 21 days from the date of issue of work order, unless otherwise instructed by commencement of the works, unless otherwise instructed by the Architect. In default of the Contractor insuring as provided above, the Bank or the Architect on his behalf, may so insure the works and may deduct the premium paid from any money due or which may become due to the Contractor without prejudice to the other rights of the Bank in respect of such default. In case it becomes necessary to suspend the works, the Contractor shall as soon as the claim under the policy is settled, or work reinstated by the Insurance office should they elect to do so, proceed with all due diligence with the completion of the works in the same manner as though the incident had not occurred and in all respects under the same conditions of the Contract. The contractor in case of rebuilding or reinstatement after fire, shall be entitled to such extension of time for completion as the Bank/ Architect deemed fit.
- (ii) The amount so due as aforesaid shall be the total value of the works duly executed and of the contract materials and goods delivered upon the site for use in works upto and including a date not more than seven days prior to the date of the said Certificate less the amount to be retained by the Employer (as hereinafter provided) and less any installments previously paid under this clause. Provided that such Certificate shall only include the value of the said materials and goods as and from time to time as they are reasonably, properly and not prematurely brought upon the site and then only if properly stored and/or protected against weather.

(Signature of the Contractor with Seal)

- d) The Contractors will have to take out following Insurance Policies:
- 1) Contractors All Risks Insurance Policy to cover-
 - Earthquake- Fire & Shock
 - Landslide/Rockslide/Subsidence.
 - Flood/Inundations.
 - Storm/Tempest/Hurricanes/Typhoon /Cyclone Collapse.
 - Theft/Burglary.
 - Damage to material brought at Site and to be subsequently used in the work.
 - 2) Third party Insurance Policy
 - a. For accidental loss or damage caused to the property of other persons.
 - b. For fatal or non-fatal injury to any person other than insured own employees or work men of employees of the owner of the works any other construction work thereon, or member of the Insured's family or of any of the aforesaid; directly consequent upon or solely due to the construction of any property described in the Schedule.
 - 3) Workmen's Compensation Insurance.

40. ACCOUNTS RECEIPTS & VOUCHERS:

The contractor shall, upon the request of the employer furnish them with all the invoices, accounts, receipts and other vouchers that they may require in connection with the works under this contract. If the contractor shall use materials less than what he is required under the contract, the value of the difference in the quantity of the material he was required to use and that he actually used shall be deducted from his dues. The decision of the Bank shall be final and binding on the contractor as to the amount of materials the contractor is required to use for any work under this contract.

41. LIQUIDATED DAMAGES/ DAMAGES FOR NON-COMPLETION

If the Contractor fails to complete the works by the date stated in the Appendix or within any extended time and the Architect certifies in writing that in his opinion, the same ought reasonably to have been completed, the Contractor shall pay the Bank liquidated damages @ 0.5% of the contract amount per week of delay subject to maximum deduction of 10 % of the contract amount.

42. TOOLS, STORAGE OF MATERIALS, PROTECTIVE WORKS AND SITE OFFICE REQUIREMENTS

- i) The contractor shall provide, fix up and maintain in an approved position proper office accommodation for the contractor's representative and staff which offices shall be open at all reasonable hours to receive instruction notices or communications and clear away on completion of the works and make good all work disturbed.
- ii) All drawings maintained on the site are to be carefully mounted on Boards of appropriate size and covered with a coat of approved varnish. They are to be protected from ravages of termites, ants and other insects.
- lii) The contractor shall provide at his own cost all artificial light required for the work and to enable other contractors and sub-contractors to complete the work within the specified time.
- iv) The washrooms assigned for use of contractor workers and field staff shall be kept in a clean and sanitary condition to the satisfaction of the Public Health Authorities. Any damages shall be made good at contractors cost and handed over back after work completion.
- vi) Every precaution shall be taken by the contractor to prevent the breeding of mosquitoes on the works during the construction and all receptacles, cisterns, water tanks, etc., used for

(Signature of the Contractor with Seal)

the storage of water must be suitably protected against breeding of mosquitoes. The contractor shall indemnify the Employer against any breach of rules in respect of anti-malarial measures.

- vii) The contractor shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed in or upon any boarding, gantry, building structure other than those approved by the Bank.

43. PROTECTIVE MEASURES

The contractor from the time of being placed in possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays.

Contractor shall indemnify the Bank against any possible damage to the building, roads or members of the public in course of execution of the work.

The contractor shall provide necessary temporary enclosures, gates, entrances, etc. for the protection of the work and materials and for altering and adoption the same as may be required and removing on completion of the works and making good all works disturbed.

Storage of materials: The contractor shall provide and maintain proper sheds for the proper storage and adequate protection of the materials etc. and other work that may be executed on the site including the tools and materials of sub-contractors and remove same on completion.

Tools: Theodolite levels, prismatic compass, chain, steel and metallic taps and all other surveying instruments found necessary on the works shall be provided by the contractor for the due performance of this contract as instructed by the site engineer. All measuring tapes shall be of steel and suitable scaffolding and ladders that may be required for safely taking measurement shall be supplied by the contractor.

The mistaries and the supervisors on the works shall carry with them always a one meter or two meter steel tape, a measuring tape of 30 meters, a spirit level, a plum bob and a square and shall check the work to see that the work is being done according to the drawing and specifications. The Site Engineer will use any or all measuring instruments or tools belonging to the contractors as he chooses for checking the works executed or being executed on the contract.

The contractor should cover in his rates for making provisions for all reasonable facilities for the use of his scaffolding, tools and plant etc. by sub-contractors for their work.

44. DATE OF COMMENCEMENT & COMPLETION

The Contractor shall be allowed admittance to the Site on the "Date of Commencement" stated in the Appendix hereto, or such later date as may be specified by the Architect / Consultant and he shall there upon and forthwith begin the works and shall regularly proceed with and complete the same (except the painting or other decorative works the Architect / Consultant may desire to delay) on or before the "Date of Completion" stated in the Appendix subject nevertheless to the provision for extension of time hereinafter contained. As the work is to be carried out in a running office, the contractor should take care so as not to disturb the day to day functioning of the office & should properly cordon off the section where the work is being carried out from the working section.

45. TIME OF COMPLETION, EXTENSION OF TIME & PROGRESS CHART

- (i) Time of completion: The entire work is to be completed in all respects within the stipulated period i.e. 3 months from 10th day of the date of acceptance of work order by contractor or handing over the site whichever is later. The work shall deem to be commenced within 10 days from the date of acceptance of work order or date of handing over of site, whichever is later. Time is the essence of the contract and shall be strictly observed by the contractor. The work shall not be considered as complete until the Bank /

Architects have certified in writing that this has been completed and the Defects Liability Period shall commence from the date of such certificate.

- (ii) Extension of time: If in the opinion of the Architect / Consultant the work has been delayed
 - (a) By force majeure; or
 - (b) By reason of any exceptionally inclement weather or
 - (c) By reason of proceedings taken or threatened by or dispute with adjoining or neighboring Owners or public authorities arising otherwise than through the Contractors own default or
 - (d) By the works or delay or the other Contractors or tradesmen engaged or nominated by the Bank or the Architect and not referred to in the Schedule of Quantities and/or specification or
 - (e) By reasons of the Architect's instructions as per clause 2 hereof or
 - (f) By reason of any combination of workmen or strike or lock-out affecting any of the building trades or
 - (g) in consequence of the Contractor not having received in due time necessary instructions from the Architect for which he shall specifically applied in writing or
 - (h) From other cause which the Bank may consider as beyond the control of the Contractor or
- (iii) In the event, the value of work exceeds the value of the Priced Schedule of Quantities owing to variation, the architect may with the previous approval in writing of the Bank make a fair and reasonable extension of time for the completion of the Contract works. In case of such strike or lockout, the Contractor shall as soon as give written notice thereof to the Architect / Consultant, but the Contractor nevertheless constantly use his endeavor to prevent delay and shall do all that may be reasonably required to the satisfaction of the Architect/Bank to proceed with the work and on his doing so that it will be ground of consideration by the Bank for an extension of time as above provided. The decision of the Bank as to the period to be allowed for an extension of time for completion hereunder (which decision shall be final and binding on the contractor) shall be promulgated at the conclusion of such strike or lock-out and the Bank shall then, in the event of an extension being granted, determine and declare the final completion date. The provision in clause with respect to payment of liquidated damages shall, in such case, be read and construed as if the extended date fixed by the Bank were substituted for and the damage shall be deducted accordingly.
- (iv) **PROGRESS OF WORK:** During the period of work, the contractor shall maintain proportionate progress on the basis of a Programme Chart submitted by the contractor immediately before commencement of work and agreed to by the Bank / Architects. Contractor should also include planning for procurement of scarce material well in advance and reflect the same in the Programme Chart so that there is no delay in completion of the project.

46. FAILURE BY CONTRACTOR TO COMPLY WITH ARCHITECT/CONSULTANT'S INSTRUCTION.

If the Contractor after receipt of written notice from the Architect / Consultant requiring compliance within ten days fails to comply with such further drawings and/or Architect's instructions, the Bank may employ and pay other persons to execute any such work whatsoever the may be necessary to give effect thereto, and all costs incurred in connection therewith shall be recoverable from the Contractor by the Bank on the Certificate of the Architect / Consultant as a debt or may be deducted by him from any moneys due to the Contractor.

47. Idle labor:

Whatever the reasons may be no claim for idle labor, additional establishment cost of hire and labor charges of tools and plants would be entertained under any circumstances.

48. Suspension:

If the contractor except on account of any legal restraint upon the Bank preventing the continuance of the work or in the opinion of the employer shall neglect or fail to proceed with due diligence in the performance of his part of the contract or if he shall more than once make default, the Bank shall have the power to give notice in writing to the contractor requiring the work to be proceeded within a reasonable manner and with reasonable dispatch, such notice purport to be a notice under this clause.

After such notice shall have been given the contractor shall not be at liberty to remove from the site of the works or from any ground contiguous thereto any plant or materials to subsist from the date of such notice being given until the notice shall have been complied with. If the contractor fails to start the work within seven days after such notice has been given to proceed with the works as therein prescribed, the employer may proceed as provided in clause Termination of Contract by employer.

49. TERMINATION OF CONTRACT BY THE BANK

If the Contractor being an individual or a Firm, commits any “act of insolvency” or shall be adjudged an Insolvent or being an Incorporate company, shall have an order for supervision of the court and the official Assignee or the Liquidator in such acts of insolvency and winding up, as the case may be, shall be unable within seven days after notice to him requiring him to do so, to show the reasonable satisfaction of the Architect that he is able to carry out and fulfill the Contract and to give security therefore, if so required by the Architect / Consultant.

OR if the Contractor (whether an individual, Firm or Incorporated Company) shall suffer execution or other process of court attaching property to be issued to the Contractor.

OR shall suffer any payment under this Contract to be attached by or on behalf of any of the creditors of the Contractors.

OR shall assign or sublet this Contract without the consent in writing of the Bank first obtained.

OR shall charge or encumber this Contract or any payment due or which may become due to the Contractor hereunder.

OR if the architect / consultant shall certify in writing to the Bank that the contractor:

- i. Has abandoned the Contract, or
- ii. Has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for fourteen days after receiving from the Architect notice to proceed, or
- iii. Has failed to proceed with the works with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or
- iv. Has failed to remove materials from the Site or to pull down and replace work within seven days after receiving from the architect written notice that the said materials or work were condemned and rejected by the Architect under these conditions or,
- v. Has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this Contract to be observed and performed by the contractor to observe or perform the same.

Then and in any of the said cases the Bank may, notwithstanding any previous waiver, after giving seven days notice in writing to the Contractor, determine the Contract but without thereby affecting the powers of the Architect/Bank or obligations and liabilities of the Contractor, the whole of which shall continue in force as fully as if the contract has not been so determined, and as if the work subsequently executed had been executed by or on behalf of the Contractor, And further, the Bank by his agent or servants may enter upon and take possession of the work and all plant, tools, scaffoldings, shed, machinery, steam and other power utensils and materials lying upon the premises or on the adjoining land or roads and use the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the works or by the employing any other contractor or person or persons to complete the works and the contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other contractor or other person or persons employed for completing or finishing or using the materials and plant for the work. When the work shall be completed or as soon as thereafter as convenient the Architect shall give a notice to the Contractor to remove his surplus materials and plant, and should the Contractor fail to do so within the period of fourteen days after receipt thereof by him, the Bank may sell the same by public auction, and give credit to the Contractor for the net amount realized. The architect shall thereafter ascertain and certify in writing under his hand what (if anything) shall be due or payable to, or by the employer, for the value of the said plant and materials so taken possession of by the Bank and the expense or loss which the Bank shall have been put to in procuring the works to be completed and the amount, if any, owing to the Contractor and the amount, which shall thereupon be paid by the Bank to the Contractor or by the Contractor to the Bank, as the case may be and the certificate of the architect shall be final and conclusive between the parties.

50. Certificates & payments:

The Contractor shall be paid by the Bank from time to time by installments under Interim certificates to be issued the Architect / Consultant to the Contractor on account of the works executed when in the opinion of the Architect, work to the approximate value named in the **appendix** as value of work for Interim Certificates (or less at the reasonable discretion of the Architect / Consultant has been executed in Accordance with this contract, subject, however, to a retention of the Item of such value named in the appendix here to as “retention Item from Interim Certificate”, until the total amount retained shall reach the named in the Appendix as “Total Retention Money”, after which time the installments shall be upto the full value of the work subsequently so executed and fixed in the building. The Architect / Consultant may in his discretion include the Interim Certificate, such amount, as he may consider proper on accounts of the works which have been virtually completed and the Architect/ Consultant shall have certified in writing that they have been completed, the contractor shall be paid by the Bank in accordance with the certificate to be issued by the Architect / Consultant the sum of money named in the Appendix “Installment after virtual completion” being a part of the said Total Retention Money. And the contractor shall be entitled to the payment of the Final Balance in accordance with the Final Certificate to be issued in writing by the Architect at the expiration of the period referred to as “The Defects Liability Period” in the appendix hereto from the date of virtual completion, or as soon after the expiration of such period as the works shall be finally completed and all defects made good according to the true intent and meaning and hereof whichever shall last happen, provided always that the issue of the Architect / Consultant of any certificate during the progress of the works or at or after the completion shall not relieve the contractor from his liability under clause 2 and 20 nor relieve the Contractor from his liability in case of fraud, dishonesty or fraudulent concealment relating to the works or materials or to any matter dealt with in the certificate, and in case of all the defects and insufficiencies in the works or materials which is a reasonable examination would not have disclosed. No certificate of the Architect shall of itself be conclusive evidence that any works or materials to which it relates are in accordance with the contract, neither will the contractors have a claim for any amounts

which the Architect / Consultant might have certified in any interim bill and paid by the Bank and which might subsequently be discovered as not payable and in this respect the Bank's decision shall be final and binding.

The Architect/ Consultant shall have power to withhold any Certificate if the works or any parts thereof are not being carried out to his satisfaction.

The Architect/ Consultant may by any certificate make any correction in any previous certificate, which shall have been issued by him.

No certificate of payment shall be issued by architect if the contractor fails to ensure the works and keep them insured till the issue of Virtual completion certificate.

All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim nor shall it conclude determine or affect in any way the power of the Bank under these conditions or any of terms as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract.

51. EXCEPTED MATTERS / MATTERS TO BE FINALLY DECIDED BY THE BANK:

The decisions, opinion, direction, certificate with respect to all or any of the matters under this tender shall be final and conclusive and binding on the contractor and shall be without appeal. Any other decision, opinion, direction, certificate or valuation of the architect or any refusal of the architect to give any of the same, shall be subject to the right of arbitration and review. The Architect/ Consultant to give recommendations/ opinion in respect of interpreting the various clauses. However, the decision from the competent authority of the Bank shall be final and binding.

52. SETTLEMENT OF DISPUTES BY ARBITRATION

Wherever, in any of the documents forming part of the Contract, the Bank has been vested with the final powers, his decision, opinion, certificate or any other discretion shall be final conclusive and binding on the contractor and shall be without appeal. All other matters shall be subject to the right of arbitration.

All disputes or differences of any kind whatsoever save and except matters referred to in clause 1) arising out of or in connection with the Contract, whether during the progress of Work or after Completion and shall after written notice by either party to the contract to the other of them and to the Bank hereinafter mentioned be referred for adjudication to two Arbitrator, one each to be nominated by the Contractor and the Bank, who shall thereafter appoint an Umpire. The provisions of Indian Arbitration and Conciliation Act 1996 shall apply for the purposes.

The Work under the Contract shall, however, continue during the arbitration proceedings and no payment due or payable to the Contractor shall be withheld on account of such proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issued notice to both the parties fixing the date of the first hearing.

The Arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the award.

The Arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute in accordance with the terms of the contract and give a reasoned award. The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion.

The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award including the fees, if any, of the Arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid and may fix or settle and amount of costs to be so paid.

The award of the Arbitrator shall be final and binding on both the parties.

Subject to aforesaid the provisions of the Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause.

The Bank and the Contractor hereby also agree that arbitration under clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

The Bank and the contractor hereby also agree that arbitration under clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

Jurisdiction: All matters arising out of or in any way connected with this contract shall be deemed to have arisen in Dharwad and only the courts in Dharwad shall have jurisdiction to determine the same.

53. RIGHT OF TECHNICAL SCRUTINY OF FINAL BILL

The Bank shall have right to cause a technical examination of the works and the final bill of the works and the final bill of the contractor including all supporting vouchers, abstracts, etc., to be made at the time of payment of the final bill. If as a result of this examination or otherwise any sum is found to have been overpaid or over certified, it shall be lawful for the Bank to recover the sum. The Bank reserves the right to alter / reduce amount certified by Consultant / Engineer, if noticed that certification is not proper.

The subject work will be scrutinized by the **Chief Manager PMD of the Bank**. Decision of this Authority shall be binding on the contractor. Any discrepancy noted defected shall be rectified by the contractor free of cost or appropriate amount will be recovered from the contractor's payment.

54. BANK ENTITLED TO RECOVER COMPENSATION PAID TO WORKMEN:

The Bank is obliged, by the virtue of the provisions of the workmen's compensation Act, 1923, or any statutory modification or re-enactment thereof to pay compensation to a workman employed by the contractor in execution of the works, the Bank shall be entitled to recover from the contractor the amount of compensation so paid, and without prejudice to the rights of the Bank under said Act. The Bank shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due to the contractor under this contract or otherwise. The Bank shall not be bound to contest any claim made against it under the said Act, except on written request of the contractor and upon his giving to the Bank full security to the satisfaction of the Bank for all costs for which the Bank might become liable in consequence of contesting such claim.

55. ABANDONMENT OF WORKS:

If at any time after the acceptance of the Tender, the Employer shall for any reasons whatsoever not require the whole or any part of the works to be carried out, the Architect/ Bank shall give notice in writing 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 whole works but which did not derived in consequence of the foreclosure of the whole or part of the work.

56. RETURN OF SURPLUS MATERIALS:

Notwithstanding anything to the contrary contained in any or all the clauses of this contract, where any material for the execution of the contract is procured with the assistance of the Bank by purchase made under orders or permits or licenses issued by the Government, the contractor shall hold the said materials economically and solely for the purpose of the contract and not dispose of them without the prior written permission of the Bank, if required by the Bank, at the price to be determined by the Architect having due regard to the condition of the materials, the price to be determined not to exceed the purchase price thereof inclusive of Sales Tax, Octroi Duty and other such levies paid by the contractor in respect thereof. In event of the breach of the aforesaid condition, the contractor shall, in addition to being liable to action for contravention of the terms of license or permit and /or criminal breach of trust, be liable to Bank for all such moneys, advantage or profits resulting or which in the usual course would have resulted to him by reason of such breach.

57. RIGHT OF BANK TO TERMINATE CONTRACT IN THE EVENT OF DEATH OF CONTRACTOR IF INDIVIDUAL.

Without prejudice to any of the rights or remedies under this contract, if the contractor, being an individual die, the Bank shall have the option of terminating the contract without incurring any liability for such termination.

58. SECURITY ARRANGEMENT AT SITE

Upon taking possession of the site, the contractor shall make arrangement of security by posting required number of security guards and flood light arrangement.

APPENDIX / MEMORANDUM TO CONDITIONS OF CONTRACT

Estimated cost	Rs. 175.00 lakhs + GST
EMD	EMD shall be Rs.3,50,000.00 payable in form of Demand Draft/Pay Order drawn from Nationalized Bank favoring Karnataka Vikas Grameena Bank payable at Dharwad.
Performance security deposit	The amount of performance security shall be 5% of the accepted value of the tender.
Date of commencement	10 th day from the date of acceptance of work order OR date of site possession, whichever is later.
Time for completion of work	As per time schedule given in tender document i.e.3 months.
Retention money-to be deducted from the bills.	8% in each running bill 5% in final bill
Security Deposit	5 % of total Contract amount
Defect Liability Period	Twelve months from the virtual completion. However, if all the works or more than one works awarded to one contractor the defects liability period will be reckoned from the date of virtual completion of last work.
Period of Final Measurement	1 month.
Liquidated damages	Shall be 0.5% of contract amount per week of delay subject to ceiling of 10% of the accepted contract amount.
Value of works for InterimCertificates	Value not less than Rs.40.00 lacs (Rs. Forty Lacs only) or as decided by the Bank.
Period for honoring interim certificate.	80% of the bill amount shall be honored within 7 days after getting certificate from project architect and submitting to the Bank. Balance 20% bill amount payable within 10 days after checking by the Bank.
Return of Security Deposit and Retention Money	Retention 15 Days after completion of defect liability period of Twelve months and Security Deposit 15 days after completion of project/ after getting Virtual completion certificate from Architect.
Recovery towards taxes.	As per rules applicable from time to time.

SAFETY CODE

1. Scaffolds

- i. Suitable scaffolds shall be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except in the case of short duration work which can be done safely from ladders. When a ladder is used, it shall be of rigid construction made either of good quality wood or steel. The steps shall have a minimum width of 450 mm and a maximum rise of 300 mm. Suitable hand holds of good quality wood or steel shall be provided and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to 1 ($\frac{1}{4}$ horizontal and 1 vertical).
- ii. Scaffolding or staging more than 4 m. above the ground floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly bolted, braced or otherwise secured, at least 1 m. above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- iii. Working platforms, gangways and stairways shall be so constructed that they do not sag unduly or unequally and if the height of the platform, gangway or stairway is more than 4 m. above ground level or floor level, they shall be closely boarded and shall have adequate width and be suitably fenced as described in (ii) above.
- iv. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 m.

Wherever there are open excavations in ground, they shall be fenced off by suitable railing and danger signals installed at night so as to prevent persons slipping into the excavations.
- v. Safe means of access shall be provided to all working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m. in length while the width between side rails in rung ladder shall in no case, be less than 290 mm. for ladder up to and including 3 m. in length. for longer ladders this width shall be increased at least 20 mm. for each additional meter of length.
- vi. A sketch of the ladders and scaffolds proposed to be used shall be prepared and approval of the Engineer obtained prior to construction.

2. Other Safety Measure

- vii. All personnel of the contractor working within the plant site shall be provided with safety belts & helmets. All welders shall wear welding goggles while doing welding work and all metal workers shall be provided with safety gloves. Persons employed on metal cutting and grinding shall wear safety glasses.
- viii. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public.

3. Excavation & Trenching

- ix. All trenches, 1.25 m. or more in depth shall at all times be supplied with at least one ladder for each 30 m. in length or fraction thereof. The ladder shall be extended from bottoms of the trench to at least 1 m. above the surface of the ground. Sides of trenches which are 1.5 m. or more in depth shall be stepped back to give suitable slopes or securely held by timber bracing so as to avoid the danger of sides of collapsing. The excavated materials shall not be placed within 1.5 m. of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.

- x. The contractor shall take all measure on the site of the work to protect the public from accidents and shall be bound to bear the expenses of deference of every suit, action or other proceedings at law that may be brought by any persons for injury sustained owing to neglect of the above precautions and to pay any such persons or which may with the consent of the contractor, be paid to compromise any claim by any such person.

4. Demolition

- xi. Before any demolition work is commenced and also during the process of the work:
 - a. All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - b. No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
 - c. All practical steps shall be taken to prevent danger to persons employed from the risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.

5. Personal Safety Equipment

- xii. All necessary personal safety equipment as considered adequate by the Engineer should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, the contractor should take adequate steps to ensure proper use of equipment by those concerned.
 - a. Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - b. Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.
 - c. Those engaged in welding works shall be provided with welder's protective eyesight lids.
 - d. Stone breaks shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - e. When workers are employed in sewers and manholes, which are in use, the contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into manholes and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.
 - f. The contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead or any toxic material in any form. Wherever men above the age 18 are employed on the work of such painting the following precautions should be taken:
 - i. No paint containing lead or lead products shall be used except in the form paste or readymade paint. Paints like vinyl and epoxies having toxic fumes should be applied after following all precautions laid down by manufactures.
 - j. Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
 - k. Overalls shall be supplied by the contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
- xiii. When the work done near any public place where there is risk of drawings all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

6. Hoisting Machines

- xiv. Use of hoisting machines and tackle including their attachments anchorage and supports shall confirm to the following standards or conditions:
 - i.a. These shall be of good mechanical constructions sound material and adequate strength and free from patent defect and shall be kept in good repair and in good working order.
 - i.b. Every rope used in hoisting or lowering materials or as means of suspension shall be of durable quality and adequate strength and free from patent defects.
 - ii. Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years shall be in charge of any hoisting including any scaffolding winch or give signals to operator.
 - iii. In case of every hoisting machine and of every chain ring hook, shackle shovel and pulley block used in hoisting or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - iv. In case of departmental machines, the safe working load shall be notified by the Engineer. As regards contractor's machines, the contractor shall notify the safe working load of the machine to the Engineer whenever he brings any machinery to site of work and get verified by the Engineer concerned.
- xv. Motors, gearing, transmission, electrical wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum of the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary, should be provided. The workers should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
- xvi. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use.

Adequate washing facilities should be provided at or near places of work.
- xvii. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
- xviii. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer, Engineer of the Department or their representatives.
- xix. Notwithstanding the above clause from (i) to (xviii), there is nothing in these to exempt the contractor from the operation of any other Act or Rule in force in India.

ADDITIONAL CONDITIONS

1. **Tenderer to inspect Site:** The tenderer shall visit and examine the construction site and satisfy himself as to the nature of the existing roads or other means of communications, the character of the soil and the excavation, the extent of magnitude of the work and facilities for obtaining material and shall obtain generally his own information on all matters affecting the execution of the work. No extra charges made in consequence of any misunderstanding or incorrect information on any of these points or on grounds of insufficient description will be allowed. All expenses incurred by the contractor in connection with obtaining information for submitting this tender including his visits to the site or efforts in compiling the tender shall be borne by the Tenderer and no claim for reimbursement thereof shall be entertained.
2. **Access to Site:** The tenderer is to include in his rates for forming access to the Site with all temporary roads gangways required for the works.
3. **Treasure Trove:** Should any treasure, fossils, minerals, or works of art of antiquarian interest be found during excavation or while carrying out the works, the tenderer shall give immediate notice to the Architects of any such discovery and shall make over such finds to the Employer.
4. **Attendance upon all Trades :** The general tenderer shall be required to attend on all the Tradesman or Sub-contractor/ contractors appointed by the Bank for Water-Supply & Sanitary, Electrical installation, Air-conditioning, Security Equipment, Hardware, Telephone and other special contractors. The rates quoted shall be inclusive of attendance and also allow the contractors and retain until such times the relevant Sub-contract works are completed.
5. **Gate-Keeper and Watchmen:** The tenderer from the times of being placed in possession of the Site must make arrangements for watching, lighting and protecting the work, all materials, workmen and the public by day and night on all days including Sundays and holidays at his own cost.
6. **Sheds for materials :** The contractor shall provide all necessary sheds of adequate dimensions for storage and protection of materials like cement, paints, lime, timber, and such other materials including tools and equipment's which are likely to deteriorate by the action of sun, wind, rain or other natural causes due to exposure in the open.
7. All the materials (except where otherwise described) stores and equipment required for the full performance of the Work under the contract must be provided through normal channels and must include charge for import duties, sales tax, octroi and other charges and must be the best of their kind available and the Contractor/s must be entirely responsible for the proper and efficient carrying out of the Work. The Work must be done in the best workmanlike manner. Samples of all materials to be used must be submitted to the Consultant/Engineer when so directed by the Consultant / Engineer and written approval from Consultant / Engineer must be obtained prior to placement of order.
8. **Stacking of material:** The contractor is not to stack any of his material recklessly so as to endanger the safety of the building and cause any nuisance to the occupants and the public.
9. **Extra charges:** It must be clearly understood that all the conditions of contracts are intended to be strictly enforced and that no extra charges in respect of extra work will be allowed unless they are clearly outside the spirit and meaning of the condition and unless such work shall have been ordered in writing.
10. **Protection of material and work:** The contractor shall be responsible for storing and watching his own material and protecting the work at his own cost. The contractor and his worker will be allowed to use lift. However, no paint drums or heavy bag of cement / paint will be allowed to be taken into the lift. Any damage / spoiling of lift / floor / dado

caused during such act will have to be made good by the contractor at his own expenditure.

11. **Cost of transporting:** The tenderer shall allow in his cost for all transporting, unloading stacking and storing or supplies of goods and materials for this work on the site and in the places approved from time to time by the Architects. The tenderer shall allow in his price for transport of all materials controlled or otherwise to the site.
12. **Materials, Workmanship & Samples:** Materials shall be of approved quality and the best of their kind available and shall generally conform to I.S. Specifications, The Contractor shall order all the materials required for the execution of work as early as necessary and ensure that such materials are on site well ahead of requirement for use in the work. The work-involved calls for high standard of workmanship combined with speed and to the entire satisfaction of the Architects.
13. **Rates for Non-Tender Items:** Rates of items not included in Schedule of Quantities shall be settled by the Architects as mentioned in the variation clause of the Contract Conditions.
14. **Rate to include:** The rates quoted shall be for all heights and depths and for finished work.

The contractor shall ascertain from other contractors as directed by the Architects all particulars relating to their work with regard to the order of its execution and the position in which cases, holes and similar items will be required, before the work is taken in hand as no claims for extras will be allowed for cutting away work already executed in consequence of any neglect by the contractors to ascertain these particulars beforehand.

Before ordering materials, the contractors shall get the samples approved from the Architects well in time.
15. **Testing of work and material:** The contractors will have to carry out testing of the material at regular interval to proof quality, soundness and efficiency of the material. Expenditure required for testing and transportations shall be borne by the tenderer.
 - Cost of testing and transport will be borne by contractors.
 - Any other materials will be tested by contractors at his own cost as per the instruction of Architect and Bank from time to time.
 - Contractor may have to test materials with any frequency or as instructed by Bank/Architects without any cost.

If after any such test the work or portion of works is found in the opinion of the Architect to be defective or unsound, the contractor shall pull down and re-do the same at his own cost. Defective materials shall immediately be removed from the site.
16. **Foremen and Tradesmen:** All tradesmen shall be experienced men properly equipped with suitable tools for carrying out the work of carpentry and joinery and other specialist trades in a first class manner and where the Architects deemed necessary, the contractor shall provide any such tools, special or ordinary which are considered necessary for carrying out the work in a proper manner.

All such tradesmen shall work under an experienced and properly trained foremen, who shall be capable of reading and understanding all drawings, pertaining to this work and the contractor shall also comply with other conditions set out in Clause 9 of the conditions of the contract.
17. **Work Programmed/ weekly progress report:** The contractor shall prepare and submit to architects for approval, a bar chart showing the programme of works of various items, fitted within the period stipulated for completion, within 15 days of the communication of the acceptance of the tender. The contractor shall also furnish necessary particulars to the site engineer for compiling weekly progress reports in the form furnished by the architects.

18. **Photographs:** The contractor shall at his own expense supply copies of large photographs not less than 25cm x 20cm (10"x8") of the works taken from two approved portions of each building, during the progress of the work, or at every important stage.
19. **Clearing of Site:** The contractor shall after completion of the work clear the site of all the debris and left-over materials at his own expense to the entire satisfaction of the Architects and Municipal or other public authorities.

The whole of the work shall be thoroughly inspected by the contractor and all deficiencies and defects put right. On completion of such inspection, the contractor shall inform the Architects in writing that he has finished the work and it is ready for the Architects inspection.

20. **Vouchers:** The contractor shall furnish the Architects with vouchers on request, to prove that the materials are as specified and to indicate the rates at which the materials are purchased in orders to work out the rate analysis of the non-tender items which he may be called upon to carry thereafter.
21. **TYPE OF CONTRACT:** The Contractor shall be paid for the actual quantity of Work done, as measured at Site, at the Item quoted by him in the Contract Bills.
22. **Schedule of Quantities:** The schedule of Quantities given in the Contract Bill is provisional and is meant to indicate the intent of the Work and to provide a uniform basis for tendering. The Bank reserves the right to increase or decrease any of the quantities or to totally omit any item of Work and the Contractor shall not claim any extras or damages on these grounds.
23. **Contract Sum (Consideration):** The rates and Items quoted by the Contractor in the priced bill of quantities (Contract Bills) shall be treated as firm and the contract sum shall be deemed to have been calculated with reference to the cost of execution of Works as set out in price bid of Contract Documents and shall not be adjusted or altered for any reason.
24. **Idle Labour/ Machinery:** Whatever the reason may be, **no claim** for idle labor, additional establishment cost of hire and labor charges of tools & plants would be entertained under any circumstances, even if the work is delayed / abandoned for any reason.
25. **Provisional Completion of works:**

The Works shall be deemed to have been provisionally accepted after fulfillment of all the following by the Contractor:

- (a) Submitting As-Built drawings (Contractor shall mark all the services on drawings issued by the Engineer), Catalogues, Brochures, Data Sheets, manuals as directed by the Engineer.
- (b) Obtaining certificate of Completion from the Consultant.
- (d) Handing over of the Works to the Bank as directed by the Consultant.

26. **Non-compliance of instructions:** If within seven days after receipt of a written notice from the Consultant, requiring compliance with an instruction the Contractor does not comply therewith, then the Bank may employ and pay other persons to execute any Work whatsoever which may be necessary to give effect to such instructions and all cost incurred with such employment shall be recoverable from the Contractor by the Bank as a debt or may be deducted by him from any monies due or to become due to the Contractor under this Contract.

Upon receipt of what purports to be instruction issued to him by the Consultant the Contractor may request the Consultant to specify in writing the provision of these conditions which empowers the issue of the said instructions. The Consultant shall forthwith comply with any such request, and if the Contractor shall thereafter comply with the said instruction, then the issue of the same shall be deemed for all purposes of this

Contract to have been empowered by the provision of these Conditions specified by the Consultant in answer to the Contractor's request.

27. **Certification of Bills in absence of 'Claimant's Engineer:** If the Contractor fails to attend or neglects or omits to send his agent at the time of taking measurement or for examining the records or drawings then the measurements so taken by the Consultant, the records and drawings as prepared by the Engineer shall be taken to be correct, final and conclusive.
28. **Interim payment as adhoc against final bill:** All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for Work actually done and completed, and shall not preclude the requiring of bad, unsound, and imperfect or unskilled Work to be removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim, nor shall, it conclude, determine or affect in anyway the power of the Bank under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the Contractor within one month of the date fixed for completion of the Work or of the date of certificate of completion furnished by the Engineer and payment shall be made within six (6) weeks from the date of receipt of final Certificate from the Consultant.
29. **Cessation of Bank's liability:** The Bank shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or the execution of the Works, unless the Contractor shall have made a **claim in writing** before the giving of Certificate of Final Completion.
30. **In respect of building cleaning:** On completion the Contractor shall clean all windows and doors including the cleaning and oiling if necessary, of all hardware, inside and outside, all floors, staircases, and every part of the building. He will leave the entire building neat and clean and ready for immediate occupation and to the satisfaction of the Bank.
31. **In respect of extension and claims of contractor:** The Contractor, in his application for grant of time shall clearly bring out the **financial effect** of extension of time requested by him. In case no financial effect is stated in the request for grant of extension of time, the same shall be taken as zero and it shall be presumed that the Contractor has mitigated whole of the losses due to the delays of all kinds.
32. **In respect of contractor cannot claim extra cost:** Provided that the Contractor shall **not been titled to recover** any such extra cost unless he gives written notice to the Consultant of his intention to claim within twenty-eight days of the Consultant's order. The Consultant shall in consultation with the Bank settle and determine such extra payment and/or extension of time to be made to the Contractor in respect of such claim as shall, in the opinion of the Consultant, be fair and reasonable, and provided the Contractor has taken all steps to mitigate the losses.
33. **In respect of no compensation to contractor for increasing work progress:**
If for any reason, the contractor is not provided with an extension of time, if the rate of progress of the works or any section is at any time, in the opinion of the Consultant, too slow to ensure completion by the prescribed time or extended time for completion. The Consultant shall so notify the contractor in writing and the contractor shall thereupon take such steps as are necessary and the Consultant may approve to expedite progress so as to complete the works or such sections by the prescribed time or extended time. The contractor shall **not be entitled** to any additional payment for taking such steps.
34. **In respect of no additional cost for scheduling and programming:**
The contractor shall mobilize or remobilize or adjust his resources according to the priorities set by the Employer **at no extra cost** to the Employer.

PROFORMA OF APPLICATION FOR EXTENSION OF TIME PERIOD

1.	Name of Contractor	:	
2.	Name of the work as given in the Agreement	:	
3.	Agreement No.	:	
4.	Estimated tender amount	:	
5.	Date of Commencement of work as per Agreement	:	
6.	Period allowed for completion of work as per Agreement.	:	
7.	Date of Completion stipulated in Agreement.	:	
8.	Period for which extension of time has been give previously	:	
a)	1st extension vide Architect's /Bank's letter	:	
	No. Dated Month Days		
b)	2 nd extension vide Architect's /Bank's letter	:	
	No. Dated Month Days		
c)	3 rd extension vide Architect's /Bank's letter	:	
	No. Dated Month Days		
d)	4 th extension vide Architect's /Bank's letter	:	
	No. Dated Month Days		
	Total extension previously given	:	
9.	Reason's for which extensions have been previously given (Copies of the previous applications should be attached)	:	
10.	Period for which extension is applied for	:	

(Signature of the Contractor with Seal)

11.	Hindrances on account of which extension is applied for with dates on which hindrances occurred and the period for which these are likely to last.	:	
a)	Serial No.		
b)	Nature of Hindrance		
c)	Date of occurrence		
d)	Period for which it is likely to last.		
e)	Period for which extension required for this particular hindrance		
f)	Over lapping period if any, with reference to item (e) above		
g)	Net extension applied for		
h)	Remarks, if any		
12.	Extension of time required for extra work	:	
13.	Details of extra work and the amount involved	:	
a)	Total value of extra work		
b)	Proportionate period of extension of time on estimated amount put to tender.		
14.	Total extension of time required for 11 & 12	:	

Submitted to the Architect/Bank

Date:

Signature of Contractor

(Signature of the Contractor with Seal)

DETAILED TECHNICAL SPECIFICATIONS

1. DEMOLITION AND DISMANTLING

GENERAL

SCOPE OF WORK

Work included:

This section covers the requirements of works involving demolition and/or dismantling parts of building interiors not involving the structure or any part of the building that contributes to the integrity and stability of the building

This section includes preliminary works in preparation for demolition such as obtaining permits; disconnection and/or controlled operation of building services; precautionary measures for the safety of the building, its occupants and workers.

This section includes demolition of non-load-bearing masonry and concrete walls; ally types of partitions and wall cladding; doors and windows; suspended ceiling; wall and floor finishes.

This section includes the dismantling of built-in cabinets, counters, Kitchen Platform, furniture and fixtures.

This section includes disconnection, dismantling and controlled operation of electrical systems, water supply, drainage and sanitary systems, HVAC systems and all other building services by skilled operatives competent in their respective fields.

This section includes the salvaging, retrieval and safe storage of all material as required by the contract and the transport and disposal of all unwanted material and debris.

Work excluded:

This section does not include structural demolition or modifications.

RELATED WORK SPECIFIED ELSEWHERE

Temporary works

Electrical

Water supply & drainage

HVAC

SUBMITTALS

The contractor shall submit the following to the architect for review and approval well before the commencement of work.

- Required approvals from all concerned authorities
- Proposed demolition and dismantling plan and day-to-day progress schedule showing clearly the sequence of operations for disconnection of building services, controlled operation of services to retain and safety precautions. This shall be accompanied by description of procedures proposed to be followed.
- Equipment proposed to be used for demolition and dismantling.
- Proposals for temporary works to partition and protect adjacent or nearby areas in use, including dust control and clean up procedures.
- Proposal for temporary storage of salvaged material and for debris to be transformed off site.

CONTROL OF PROCEDURES AND SAFETY

The contractor shall devise and be responsible for all procedures to ensure the safety of the building, the workers and the other occupants during the demolition and dismantling work. The

(Signature of the Contractor with Seal)

work shall at all times be under the direct supervision of experienced foremen under the overall supervision of the contractor's site engineer.

HANDLING, STORAGE, TRANSPORTATION AND DISPOSAL

Handle and store materials retrieved from the demolition and dismantling in accordance with IS:7969. Whenever there is a conflict in the requirements of IS:7969 and the provisions herein, the more stringent of the specifications shall apply.

Store debris and salvaged material separately in designated places approved by the submittals procedure described above. All salvaged material shall be classified and stored separately by categories agreed upon prior to commencement of demolition.

Do not pile up material in a manner that will cause the structure to be over loaded. Stack material so that the stacks are stable and do not cause obstruction to movement.

Do not allow debris to accumulate beyond the capacity of the approved area for temporary storage. Do not dump debris in public rights-of-way, in private property without owners consent, in municipal garbage receptacles etc. The contractor shall dispose of debris only at dumping grounds approved by the local authority in manner not objectionable to the authority.

Transport debris to the approved dumping grounds at times permissible by law and acceptable by local practice. Take precautions to avoid spillage of debris from the transport vehicle en-route.

MATERIALS AND PRODUCTS

SCAFFOLDS AND LADDERS

Scaffolds and ladders used in the demolition and dismantling shall be in accordance with IS:3696 Part 1 and Part 2.

The scaffolding shall be designed and erected by the contractor in accordance with the requirements of the work, by experienced workers. All scaffolding material shall be in good serviceable condition and assembled to be stable in the conditions of the work being performed.

MECHANICAL EQUIPMENT

Do not use mechanical equipment without the prior approval of the architect.

Do not use gas cutting and electric welding or cutting without the prior approval of the architect. Take special precautions to prevent fire if permission is granted for gas and electrical cutting and welding.

EXECUTION

GENERAL

Survey and mark out clearly the portions that are to be demolished or dismantled. Proceed with demolition and dismantling strictly in conformance with the plans, sequence, schedules and procedures proposed by the contractor and approved by the architect.

Proceed with work only in the presence and under control of skilled supervisors.

Do not proceed with work if latent conditions contrary to expectations or assumptions are encountered as work proceeds. Do not proceed with work if any part of the building assumed to be non-structural and non-load-bearing is discovered or suspected to be structural and contributing to the stability of the building. Report to the architect and obtain approval to proceed further.

Maintain in a journal with serially numbered pages, inventories of all salvaged items as the work proceeds.

WATER SUPPLY AND SANITATION PIPES, FIXTURES AND FITTINGS

Dismantling of water supply, drainage and sanitary installation shall be carried out under the supervision of a licensed plumber, employing competent skilled workers.

Coordinate dismantling work with related permanent work to be installed, if any.

Shut off water supply and drainage pipes by closing valves or by providing plugs to isolate the systems to be dismantled from those to be retained. Ensure that areas in use are not disturbed during the progress of work by providing temporary service connections. If possible complete and protect proposed permanent modifications before commencing dismantling and demolition work.

Fixtures and fittings shall be removed only by skilled technicians to salvage them with minimum damage. Dismantle in the following sequence:

- Fittings such as faucets, showers, taps, valves, meters, gauges etc.
- Fixtures such as wash basins, WC's, urinals, pumps etc.
- Pipes, tanks, and heavy equipment
- Brackets, supports, hangers and foundations

Complete dismantling of water supply, drainage and sanitary installation before commencing demolition of walls and partitions, flooring, ceiling etc. Closely coordinate the works if this is not practically possible.

ELECTRICAL

Dismantling of electrical installation shall be carried out under the supervision of a licensed electrical contractor, employing competent certified electricians.

Carefully survey the entire existing system and coordinate dismantling work with related temporary permanent works, if any. Modify the existing system, if required before commencing dismantling work to ensure that the functioning of systems outside the demolition areas is not affected.

Shut off and isolate electric supply to the demolition and dismantling area. Take precautions to ensure that the disconnected circuits may not be accidentally re-energized.

- Disconnect supply cables and isolate all distribution boards within the work areas. Disconnect and remove the distribution boards. Provide temporary service connections to the work areas from a temporary DB fed by an exclusive cable tapped from a board outside the work area with an isolation switch close to the temporary DB. Do not provide temporary services through any existing circuits in the areas to be demolished.
- If DB and circuits located within the demolition areas cannot be disconnected or diverted, they shall be clearly marked out and identified with cautionary signs to distinguish them from others that are to be dismantled.
- Have a skilled electrician on standby.
- Fixtures and fittings shall be removed only by skilled technicians to salvage them with minimum damage.
- Complete dismantling of electrical installation before commencing demolition of walls and partitions, flooring, ceiling etc.

OTHER SERVICES

Carefully survey each of the existing systems in its entirety and coordinate dismantling work with related temporary and permanent works, if any. Modify the existing system, if required, before commencing dismantling work to ensure that the functioning of systems outside the demolition areas is not affected.

Systematically shut off and isolate each system from the demolition and dismantling area. Take precautions to ensure that the portions to be retained are clearly marked out and identified with cautionary signs to distinguish them from others that are to be dismantled.

Follow a sequence of dismantling by which valuable equipment, fittings and other material are recovered with minimum damage.

Complete dismantling of all services before commencing demolition of walls and partitions, flooring, ceiling etc.

2. CIVIL AND PLUMBING

CERAMIC WALL AND FLOOR TILING

SCOPE OF WORK

The tiles will be selected by the Architect/ Bank. The scope of work under this specification section covers the unloading of materials at site, storage and safekeeping, furnishing of all other materials, accessories, labor, tools, equipment and the installation of tiles.

QUALITY CONTROL

The tiling shall be carried out under the direct supervision of an experienced tiller foreman who shall continuously check the work of the tiling teams to ensure stringent quality control.

COORDINATION WITH OTHER TRADES AND CONTRACTORS

The tiling work shall be coordinated with other trades and contractors. The contractor shall check and ensure that all work preceding tiling is complete before commencing the work

PROTECTION

Protect other finished work during tiling work to prevent damage and protect the finished tiling work from any damage after completion and handed over in good condition after thorough cleaning.

PAINTING

SCOPE OF WORK

Work Included: This section covers the surface preparation, field priming and field painting or finish coating of all wood, plaster, concrete and metal surface, (both interior and exterior) as called for in the finish schedule. In addition, all surface, schedule or not, such as piping, tanks, equipment and machinery shall be painted when called for in the finish schedule or in their respective section of these specifications. Contractor shall finish all labor materials, tools and equipment required to complete the work.

Surface not to be painted: The following surface shall not be painted stainless steel, aluminum, brose, copper, lead, brass, factory pre-finished surfaces and installed surfaces. In addition surface of steel member which ate to have concrete cast against them or are to be fully embedded in concrete shall be pointed.

Shop primed Equipment: Final field painting or touch-up of manufacturer's shop primed or shop painted equipment shall not be done until operational testing has been complete and certified.

TRANSPORTATION, HANDLING AND STORAGE

Cement and dry admixtures shall be stored in dry, water proof, well ventilated housing or silos. Liquid admixtures shall be stored in clean, isolated containers.

All formwork materials that may be affected by moisture or whether shall be stored in dry, weatherproof, well ventilated housing. All formwork material shall be handled and stored to prevent damage.

WATER PROOFING: -

The cement based waterproofing work shall be carried out through approved contractor with 5 years guarantee as per their specifications under the supervision of the contractor.

JOINERY

1. **General:** The type of shutters for doors, windows, ventilators etc. viz. paneled glazed wire gauzed and flush shall be as indicated and detailed in the drawing.

2. **Flush Door shutters:** Door shutters shall be 35 mm thick flush door shutters/solid core type non decorative factory made confirming to IS- 2202 and ISI marked with block board core (confirming to the requirements as per IS-1659 1969) with internal hard wood clippings and both faces commercial ply veneered. Adhesive used shall be phenyl form aldehyde synthetic resin conforming to BWP types specified in IS-848-1974.
3. Contractor shall obtain the approval for the name of the manufacturer of the flush door shutters from the Site Engineer/Architect before placing the supply order. While asking for the approval, copy of the "Bureau of Indian Standard" letter under which manufacturer has been authorized to mark the product with ISI marking should be attached. Site Engineer and Architect before giving the approval shall ensure that the validity date of license has not expired.
4. **Glazed & Gauzed Door Shutters:** Shutters shall be 35mm thick. These shall consist of first class i.e. champ, hillock, mango wood styles, top, bottom and lock rails as per details shown on drawings. Timber to be used for these shutters shall be of good quality, seasoned of material growth and conforming to IS-4021-1963. Seasoning and ASCU treatment shall be done as per IS-402-1962. Styles and rails of shutters shall be in one piece only. Styles and rails shall be jointed to each other by tonen or mortice at right angles. Mountings and glazing bars shall have joints and shall be shrub tanned to the maximum depth, which the size of member would permit.
5. The glass panes shall be free from flaws, specks or bubbles and shall have square corners and straight edges. The glass panes shall be so cut that it fits slightly loose in the frames. The glass pane shall be fixed to the shutter with first class hardwood beading of size as indicated properly screwed to the shutter with steel nails and necessary adhesive as per details as shown on drawings.

NOTE: On all toilet door shutters, aluminum sheet 18 gauge bent to U shape shall be provided at the bottom of the flush shutters. This sheet shall be upto 30cm height on the inner face of the shutters and upto 20cm height on the outer face of the shutters. This shall be fixed with 12mm steel Nails.

BUILDERS HARDWARE

1. Manger shall be provided to all doors/windows/ventilator/shutters with necessary matching screws of suitable size
2. Fittings and fixtures to all doors window and ventilators etc. shall be Aluminum anodized Matt finish ISI marked of make as specified. These shall be ISI marked where manufacturer contractor shall obtain the approval of the name of the manufacturer and brand of fittings from page of Director/Architect before placing the supply order. While asking for the approved copy of bureau of Indian Standard letter under which the manufacturer has been issued the license and authorized to make the items of builder hardware with ISI marking should be attached and one sample of each fillings of the particular brand duly ISI marked shall be given by contractor.
3. Butt hinges for doors shall be ISI marked cold rolled mild steel heavy quality of size as specified with mild steel pin and shall be oxidized finish. These shall be welded to pressed steel frames as specified.
4. Handles for window shutters shall be 75mm long & door shutters shall be 125 mm D-Type Aluminum anodized.
5. Link chain and sliding channel shall be sturdy of CP brass and shall be provided to main entrance door of all units as specified.
6. Magic eye for entrance door shall be wide-angle best quality. This shall be fixed at 1400mm height from finished floor level.

7. One sample piece of each fitting shall be produced for approval of Site Engineer /Architect. The bulk supply order shall be placed by the contractor only after approval is accorded by Site Engineer/Architect.
8. **Schedule of Builder's Hardware:** Schedule of Hardwares/ittings to door, window and ventilator shutters shall be as per drawing.
9. **Mortice Latch (Vertical Type):** Mortice latch (Vertical type) shall confirm to IS 5930-1970. Specification for mortice latch (Vertical type). These latches shall be capable of being operated inside and outside and shall be provided with a pair of Aluminium anodized lever handle fitted on the handle plate in order to close the door. The latches shall be of brass alloy. Faceplate shall be provided in front of the ease plate, size of latch shall be 65mm.
10. **Mortice Locks:** These shall conform to IS 2209-1976. Specification for Mortice locks (Vertical Type). These shall have body, body covers, cast plate, faceplate, skirting plate lever, follower of cast brass and locking bolt and latch bolt extruded brass. Lever spring and latch spring shall be of phosphor bronze. The locks shall be supplied with 2 Nos. stainless steel keys. Locks shall be 6 lever. The lock shall be easy working with lever and shall be capable of being opened with from both inside and outside and shall be provided with a paid of Aluminium anodized lever handles on the handle plate in order to close the door from both side.
11. **Hydraulic Door Closer (Floor Type) :**The Contractor shall provide double acting Hydraulic Door Closer model No.F-32, Cat No.1204 with SS Plate, Capacity to carry door weight upto 380Kg of EVERITE brand or Cat No.OFS 9621 of OPEL brand. These shall be of approved brand and manufacturer as above (Confirming to IS-6315) for Aluminium door including cost of cutting floor as required, embedding in floors and cover plate etc.

NOTE:

- i) It shall insure that all builder's hardware are from one manufacturers only for the entire work, However, if due to any reason contractor progress to provide part quantity from other manufacturer approved in Para 2 above, then he may be permitted but he will have to obtain specific approval of Project Engineer/Architect for this change in brand. This will be subject to that all items and fixtures in any particular blocks shall be always of one manufacturer only. In no circumstances items of two manufacturers shall be used in all of the particular blocks.
- ii) Project Engineer before giving the approval of the name of the manufacturer and brand shall ensure that the validity date of license for making the fittings, as ISI marked has not expired.
- iii) Those fittings which are not manufactured, as ISI marked shall also be of the one brand of which the ISI marked fittings are approved by Project Manager.

INTERNAL PLUMBING WORK (INTERNAL WATER SUPPLY PLUMBING, INTERNAL DRAINAGE).

1. GENERAL

- 1.1. The form of Contract shall be according to the "Conditions of Contract". The following clauses shall be considered as an extension and not in limitation of the obligation of the Contractor
- 1.2. Work under this contract shall consist of furnishing all labor, materials, equipment and appliances necessary and required. The Contractor is required to completely furnish all the plumbing and other specialized services as described hereinafter and as specified in the schedule of quantities and /or shown on the plumbing drawings.
2. Scope of internal water supply, plumbing, internal sewerage and drainage shall consist of providing and fixing of the following for each units of each unit blocks/other buildings as shown on drawings.

3. The entire work shall be carried out by licensed plumbers
 - (a) CPVC/UPVC/GI pipe with fittings and valves for cold and hot water supply.
 - (b) Sanitary fixtures, CP fittings and accessories.
 - (c) Soil, waste, vent, rain water pipes and fittings
 - (d) Overhead water tank at Terrace with supports.
 - (e) Internal Drainage including gully traps.
4. **Water supply-** All GI/CPVC/UPVC pipes and fittings from overhead tank to all taps, wall mixers, wash basins, cisterns, sinks, geyser points, washing machine and showers as shown on drawings.

5. MATERIALS

All GI pipes shall be galvanized steel tubes medium grade conforming to IS-1239 and ISI marked of makes Jindal Hissar/Prakash. All CPVC/UPVC pipes shall conform to the relevant IS standards.

All GI fittings shall be conforming to IS-1879 and ISI marked.

Valve shall be heavy Gun metal full way conforming to IS-778-1971 class I and ISI marked.

LAYING, FIXING AND FITTINGS OF GI PIPES

6. All GI pipes below ground shall be laid in trenches and shall have minimum cover of 600 mm.
7. The runs of the pipes shall be straight, and pipes shall not run diagonally. Proper bends, elbows, tees at turnings/corners shall be used.
8. All pipes with necessary fittings wherever they are laid on internal faces of the walls shall be concealed in chase. On external faces they will be laid on walls fixed with clamps or on M.S. angle iron brackets as shown in drawings.
9. In the concealed portion of plumbing no joints shall be provided in the pipe lines except in the fittings i.e., bends, elbows, tees and nipples where required.
10. All pipes for water supply (Hot or cold) within toilets and kitchen shall be laid on walls only. No pipe shall be laid in sunken portion of toilets/kitchen.
11. For each unit the size of down comers, branch pipes from the ring (at terrace) from overhead tank and branch pipes from down comers shall be of sizes as shown on drawing.
12. Pipes and fittings shall be jointed with screwed fittings, care shall be taken to remove burrs from the end of the pipe after cutting by a round file. Genuine white/red lead and a few strands of cotton thread shall be applied. All pipes shall be fixed in accordance with layout shown on the drawings. Care shall be taken to avoid air pockets. Pipes inside toilets shall be fixed in wall chases at least 30cm above the floor.
13. Pipes in shafts and other locations shall be supported by clamps of design as indicated in the typical detail. Pipes in wall chases shall be anchored by iron hooks.
14. **Unions:** Contractor shall provide adequate number of unions on all pipes to enable dismantling later. Unions shall be provided near each gun metal valve, stop cock, or check valve and on straight runs as necessary at appropriate locations.
15. **Puddle Flanges:** Puddle flanges shall be provided to all connection i.e. inlet overflow, and scour of the overhead tank wherever required.
16. **Pipe Protection:** All pipes in chase or under floors or below ground shall be protected against corrosion by applying two coats of bitumen paint, covered with polythene tape and finished with a final coat of bitumen paint.

17. **Painting:** All exposed pipes shall be painted with two coats of oil paint over one coat of primer. Pipes shall be painted to standard color code as approved by Project Architect.
18. **Vent pipes:** Each down take pipe shall be provided with a vent pipe. The height of the vent pipe shall be 150mm above the top of the water tank.
19. **Approval of layout of pipes and position of fixtures at site:** The contractor shall mark the location of all fixtures and fittings and layout of GI pipes on the terrace walls/ ground at site and take approval of Site Engineer/Architect before commencement of cutting chases for GI pipes within the building and digging trenches outside the building.
25. **Sanitary Fixture and CP Fittings and Accessories**
 All sanitary ware shall be first quality white-vitreous china and shall be inclusive of all fixing devices nuts, bolts and hangers/Brackets.
 These shall be from one of the following manufactures:-
 (a) Hindustan Sanitary Ware
 (b) Parry Ware
 (c) CERA (Madhu Sudan Ceramics)
 (d) NEYCER Ceramic
20. It will be ensured that all sanitary fixtures are from one manufacturer only for the entire work i.e. for all the units. However, if due to any reason contractor proposes to provide part quantity from other manufacturer as approved above, then he may be permitted, but he will have to obtain specific approval of Site Engineer/Architect for this change in brand. This will be subject to that all items and fixtures in any particular block/other buildings shall be always of one manufacturer only. In no circumstances items of two manufacturers shall be used in all of the toilets of particular block/other buildings.
21. All bib cocks, stop cocks, angle-valves, pillar taps, mixtures, showers rose & arm, bottle traps, CP waster and inlet connections and other minor fittings shall be brass chromium plated. These shall be ISI marked where manufactured. Contractor shall obtain the approval of the name of the manufacturer and brand of CP brass fittings from Site Engineer/Architect before placing the supply order. While asking for the approval, copy of the Bureau of Indian Standard letter under which the manufacturer has been issued the license and authorized to mark the five items of CP brass fittings as listed in hereinafter below with ISI marking should be attached and one sample of each fittings of the particular brand duly ISI marked shall be given by contractor. The fittings shall be of CONTINENTAL range from Jaguar Make.
22. Project Engineer before giving the approval of the name of the manufacturer and brand shall ensure that the validity date of license for marking the fittings as ISI marked has not expired.
23. Those CP brass fittings which are not manufactured as ISI marked shall also be of the same brand of which the ISI marked CP brass fittings are approved by Site Engineer as per para above.
24. It will be ensured that all CP fittings are from one manufacturer only for the entire work i.e. for all units in D'unit blocks/other buildings. However, if due to any reason contractor proposes to provide part of quantity from other manufacturer approved in para hereinafter then he may be permitted, but he will have to obtain specific approval of Site Engineer/Architect for this change in the brand. This will be subject to that all items and fittings in any particular block/other buildings shall be always of one manufacturer only. In no circumstances items of two manufacturers shall be used in any of the toilets of particular block/other buildings.
25. All chromium plated brass fittings and accessories shall be provided with CP cast brass wall flanges.

26. For fixing of CP brass fittings wherever required CP brass extension pieces shall be provided.
27. Fixing screws shall be half round head chromium plated brass screws with CP washers.
28. All exposed pipes, if any, within the toilets and near the fixtures shall be chromium plated brass except otherwise specified.

Schedule of Sanitary and CP Brass fittings in all buildings shall be for Toilets: - All vitreous china sanitary wares shall be "white". The fittings and fixtures in toilets of each unit shall be as under:-

(A) Wash Hand Basin

- (i) Vitreous china first quality wash basin 550 x 400mm wall mounting type on MS Angle brackets.
- (ii) Same as above but Oval Shape under counter WB.
- (1) CP Brass waste 32mm dia with over flow
- (2) CP Brass bottle trap with CP brass pipe to wall with CP cast brass wall flange
- (3) Brass pillar taps 15mm
- (4) CP Brass Basin Mixer
- (5) CP Brass angle valves with CP copper
- (vii) Connecting pipes with nuts and washers.
- (viii) CPVC waste pipe 32 mm dia

Note: Outlet of CP brass bottle trap shall be connected to nearest floor trap by GI waste pipe (concealed) as per details shown on drawings

(B) Water Closets and Cisterns

- (1.) European type white vitreous china ware and cistern with S-trap without vent horn
- (2.) White 10.00 Litre capacity low level HIP flushing cistern water bird "COMMANDER MODEL" ISI marked complete with Delrin valve and float, fittings and specials of standard make & 40mm white flush bend, over flow with mosquito proof coupling, all washers and rubber bed etc. complete including fixing accessories
- (3.) CP brass angle valve with CP copper connecting pipe with nut and washer
- (4.) Bakelite solid type seat and cover ISI marked Type 1A (IS-2548-1983) with CP brass Hinges commander brand (black color)

(C) Urinals with integrated sensor technology

- (i) Range of one and three urinals
- (ii) Chinaware cistern
- (iii) Bottle trap
- (iv) CP brass angle valve with CP copper connecting pipe with nut and washer.
- (D) Mirror of size as specified in the items and 5mm thickness over every wash hand basin. The mirrors shall be of make Modifloat or Atul Brand made from Tata Ashi float glass. The mirror shall have marine ply backing 6mm thick mounted on kail wood frame $\frac{3}{4}$ " x 1 $\frac{1}{2}$ " with Aluminum angle 30 x 15 x 2mm around & hung on to wall with key hole hooks.

Peg Sets: Aluminum Anodized with 3 hooks

(E) Gratings:

- (i) All floor traps (FT) and floor drains (FD) shall be provided with 125mm and 100mm round stainless-steel gratings respectively of approved design and shape. The weights of 125mm dia and 100mm dia gratings shall not be less than 130gms and 100 gms respectively.
- (ii) Gratings for floor drain (FD) below sink in kitchen shall have suitable hole for passing GI waste pipe from sink.

29. Installation of Sanitary Fittings:

- (a) European Type water closets shall be fixed with brass screws of suitable length with PVC plugs or phill plugs embedded in the floor after drilling hole in floor. It should be coupled with low level flushing cistern complete with rubber cone adapters etc., all as per manufacturer instructions.
- (b) Wash hand basins shall be fixed firmly to wall with MS angle iron brackets. The brackets shall be given two coats of white enamel paint over a coat of primer. In addition, the wash basin shall be securely fixed to walls with a pair of 25x3mm MS clips screwed with raw plugs to walls (placing of basin over the brackets without secure fixing on wall shall not be accepted).
- (c) Indian type Water Closets shall be embedded firmly in the floor and its surrounding packed with cement concrete 1:3:6 (1 cement: 3 coarse sand: graded aggregate 40mm graded aggregate) below the level of top of the Closet to receive the top layer of floor finish. WC shall be set in the CI trap in cement concrete 1:3:6 (1cement:3 coarse sand:6 graded stone aggregate 20mm nominal size), joint between WC and Flush pipe will be made in the pre-moulded rubber joint.
- (d) Urinals: Urinals shall be with integrated sensor technology lipped type half stall (small) white glazed vitreous china of first quality and size 610x 400 x 380 mm size.
- (i) Half stall urinal shall be provided 15 mm dia spreader, 32 mm dia CP domical waste and C.P. cast brass bottle trap with pipe and wall flange and shall be fixed to wall by one CI bracket and two CI wall clips complete as recommended by manufacturer's directives/Site Engineer.
- (ii) Half stall urinals shall be fixed with C.P. brass screws.
- (iii) Flushing cistern for urinals shall be automatic type vitreous china as given in the schedule of quantities. Each flushing cistern shall have a copper siphon and inlet nozzle cock to control the flow. Flushing cistern shall be fixed to wall with R.S. or C.I. brackets painted with two coats of white enamel paint.
- (iv) Flush pipes shall be G.I. pipes concealed in wall chase but with chromium plated bends at inlets and outlets.
- (v) Urinals may be flushed with flush valves as described in the item.
- (vi) Waste pipes for urinals shall be any of the following.

- a. G.I. pipes. b. Rigid PVC

Waste pipes may be exposed on wall or concealed chase as directed by the engineer-in-charge. Specifications for waste pipes shall be same as given in Section II.

- (e) Urinal Partitions: Urinal partitions shall be 19mm thk jet black polished granite on all edges of size specified in the schedule of quantities. Partitions shall be fixed at proper heights with screws with anchor fasteners and MS clips as recommended by the manufacturer and directed by engineer-in-charge.
- (e) All fixtures shall be fixed at proper heights, as shown in drawings and workmanship which shall be of acceptable standards.

30. Soil, Waste, Vent and Rain Water Pipes: All pipes shall be sand cast iron and shall comply to IS-1729 of 1979 and shall be ISI marked. Where shown on drawings the floor drains (FD) shall be of GI pipe medium grade ISI marked.
31. All cast iron pipes fittings like bends, branches, floor traps, tees 'Y' junctions, in waste, soil and vent pipes shall be sand cast iron comply with IS 1729 of 1979 and shall be ISI marked. These shall be spigot and socket "Access door shall be made up with 3mm thick insertion rubber washer and white lead. The bolts shall be lubricated with grease or white lead for easy removal later. The fixing shall be air and water tight".
32. Cast Iron Traps: Floor trap shall be cast iron, deep seal with an effective seal of 50mm. The trap and waste pipes shall be set in cement concrete blocks firmly supported on the structural floor. The blocks shall be in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) and extended to 40mm below finished floor level. The concrete portion at top of the floor trap inlet shall be finished smooth and water proofed by applying neat cement slurry mixed with water proofing compound. Size of the blocks shall be 30x30cms of the required depth. The trap shall be 100mm inlet and 100mm outlet for kitchen and for toilets. Traps shall have extension pieces to receive waste lines as indicated in typical details.

Urinal Traps: Urinal traps shall be cast iron P&S trap with or without vent and set in cement concrete block specified in para above without extra charge.

Cleanout Plugs: Contractor shall provide cast brass clean out plugs as required. Cleanout plugs shall be thread and provided with key holes for openings. Cleanout plugs shall be fixed to the pipe by a G.I. socket lead caulked.

PVC pipes & fittings: PVC pipes for drainage system shall be rigid upvc pipes conforming to I.S. 13592 Type B.

- i. Fittings for the pipes shall be injection moulded with approved type of sockets and 'O' rings joints.
- ii. Jointing shall be done as per the manufacturer's recommendation. The pipes and fittings must have matching dimensions for a perfect joint. Loose or excessively tight joints in the system shall not be accepted. Fittings must have sufficient gap (approx. 10 mm) for permissible thermal expansion of pipes.

Fittings

- i. Fittings shall conform to the same Indian Standard as for pipes. Contractor shall use pipes and fittings of matching specifications.
- ii. Fittings shall be of the required degree of curvature with or without access door of rear, LH or RH .

3. FURNISHING

GYPSUM BOARD PARTITIONS AND CEILING

It is intended that these specifications cover principal requirement of new gypsum board partition and ceiling construction.

To prevent weakening due to calcimine, gypsum wallboard should not be exposed to temperature over 125F (52 C) for extended periods of time.

The Contractor shall furnish all materials, labor and scaffolding required to complete satisfactorily of all gypsum board partitions and ceiling work shown on the Drawings and / or specified.

MATERIALS

All materials shall be of an approval manufactures (India gypsum or equivalent) and shall comprise of the following:

G.I Framing for suspended ceiling

(Signature of the Contractor with Seal)

G.I Framing for partition and wall cladding.

G.I. corner beads and edge trims.

Dry-wall screw.

Regular gypsum wall board shall be ½” thick. Long edges shall be square. Joint treatment materials shall be.

Joint Tape

Joint compound to be ready-Mixed

Fast hardening joint compound.

Topping compound to be ready-mixed.

Adhesive materials shall be joint compound for board application and wallboard /panel adhesive for board for framing application as recommended by manufacturer.

INSTALLATION

Preparation of work:

Commerce gypsum board and ceiling only after all work are complete.

Examine and inspect materials to which gypsum board is to be applied. Remedy all defects prior to installation of drywall. Any defects in the finished installation due to misaligned framing or the work performed under that section of the specification and such defects shall be remedied under that section of the specification.

Installation of wallboard:

Gypsum wallboard shall be applied to wall. Board of maximum practical length shall be used so that an absolute minimum number of end joints occur. Board edges shall be brought into contact with each other but shall be forced into place.

Wallboard joints at opening shall be located so that no end joint will align with edges of opening unless control joints will be installed at these points. End joints shall be staggered, and joint on opposite sides of a partition shall not occur on the same stud.

Gypsum wallboard shall be held in firm contact with framing member while fasteners are being driven. Fastening shall proceed from center portion of the wallboard toward the edges and ends. Fasteners shall be set with the heads slightly below the surface of the wallboard in a dimple formed by the hammer or power screwdriver. Care shall be taken to avoid breaching the face paper of the wallboard. Improperly driven nails or screws shall be removed.

ARCHITECTURAL WOODWORK

Work included -This section covers the furnishing of all materials, equipment, accessories and labor for architectural woodwork, including but not limited to:

Wall paneling

Staircases

Railings and balustrade

Wood flooring and decks

Built-in-cabinetry, including plastic emulsion

Miscellaneous finished woodwork

Rough carpentry and framing associated with the above

Preservative treatment of wood

Metal fasteners, accessories and adhesives

(Signature of the Contractor with Seal)

Work not included-The following work is not included in this section and is covered elsewhere:

Structural woodwork

Wood doors

Wood windows

RELATED WORK SPECIFIED ELSEWHERE

Structural woodwork, Wood doors and windows, Painting and finish coatings

QUALITY CONTROL

The contractor shall be responsible for the quality of all work and material used in the work and shall implement a programme for inspection and testing to monitor the quality of work.

Wood shall be of the best select grade free of defects in accordance with IS:1629

COORDINATION WITH OTHER TRADES AND CONDITIONS

The contractor shall schedule and coordinate the structural woodwork with other trades and contractors whose work may be affected by the Architectural woodwork.

MATERIALS AND PRODUCTS

WOOD

Generally, wood for all architectural wood work shall be teak, except for parquet flooring for which the wood shall be Laurel.

The moisture content of wood shall be in conformance to IS:287 and shall generally be between 12% to 14%.

All wood shall be heartwood from mature trees, of the best grade, with minimum sapwood, free of defects, selected for goods finished appearance.

All grades of wood with the following defects shall be prohibited for use:

Timber with loose grain, splits, compression wood in coniferous timber, heartwood-rot and sap rot and wraps.

Worm holes and pitch knots

Wood, that has been badly stored and damaged.

LAMINATES

Plastic laminates shall be from an approved manufacturer, shall conform to IS: 2046 and shall be of new stock & 1.0-1.5mm in thickness.

PLYWOOD

Plywood shall be of new stock from an approval manufacturer, complying IS:303 BWR (and preservative treated respectively)

Plywood having the following defects shall be prohibited for use:

Damaged surfaces

Loose joints between ply

Badly stored

FASTENER AND ACCESSORIES

Screws shall be of Mild steel, complying to IS:451

Mild steel wire nails shall be in compliance with IS:723

(Signature of the Contractor with Seal)

Copper wire nails shall be in compliance with IS:725

ADHESIVES

Adhesive shall be synthetic resin adhesives complying with IS: 851, Fast setting glues such as Rubber solutions/ "Zat Pat" shall not be used.

IRON MONGERY

Flanges, bolts, hasps, screws and other hardware shall be brass of the best quality approved by the architect.

Locks and architectural finish hardware such as handles and knobs will be selected by the owner against the allowance made in the contract documents.

The contractor shall order, take delivery and arrange for the transportation of the hardware from the supplier nominated by the owner. The costs for ordering, transportation etc. upto delivery at site will be adjusted the allowance.

EXECUTION

The preservative treatment of wood shall be performed after conversion of lumber to the required sizes in construction so as to keep subsequent working on them to a minimum.

Brush supply two heavy coats of the same wood preservative chemical to any surfaces which were exposed by cutting, sawing, drilling etc.

Set out all architectural woodwork accurately in accordance with the contract drawings or approved shop drawings, true to line, angles, slopes and panes.

All members shall be in continuous lengths between supports without any immediate joints or splices unless otherwise shown on the drawings.

All sizes shown on the drawings are the finished dimensions and shall be within the tolerances given below:

- For measurement upto and including 100mm in width or thickness +/- 0.5mm.
- For measurement above 100mm in width and thickness +/- 0.1mm

All bearing surfaces shall be constructed to achieve full contact between surfaces over the entire bearing area.

All joints shall be worked to achieve accurate and tight fit with full contact between surfaces.

As far as possible grain and of wood shall be matched for adjacent pieces.

PANELING

- Install the wall paneling in accordance with the design and details shown on the drawings.
- Check alignment, plumb, plane and dimensions of the backing which is to receive paneling. Make necessary corrections prior to commencing paneling.
- Layout paneling in accordance with actual dimensions obtained at site location. Adjust detailed dimensions to obtain the intent of the design.
- Install sub-frames and grounds and secure them firmly to the backing, true to line, plumb, alignment and plane to avoid adjustment while installing paneling.
- The panel frames shall be true to dimensions, sections, profiles, mouldings etc. as shown on the drawings. Members shall be in one piece between joints.
- Panels shall be of the thickness and profiles shown in the drawings. When a large panel is required to be built up from two or more pieces, the joints shall be tongue and grooved flush joints, glued and drawn tight by means of vices, clamps or other means to obtain permanently indiscernible joints. The color and grain of the wood shall be matched to conceal the joints.

- The frames and panels shall be planed and sanded smooth to remove all tool marks before assembly.
- The panel frames shall be joined by 'all wood' joints without metal fasteners by means of the most appropriate glued mortise-and-tenonned joints and wood pins. Mortises and tennons shall be tooled to obtain intimate contact between their surfaces and shall be fully glued with glue.
- Joints shall be tightened with vice, clamps, draw straps or other means to obtain tight, indiscernible joints. The grain of wood pins shall match the surface grain of the frames.
- Mouldings shall be mitered at 45 degrees to obtain a perfect match of lines, edges and profiles between abutting pieces.
- After assembly the joints shall be tooled and sanded to remove minor unevenness at joints.
- Planted mouldings and architects shall be fixed by means of headless-nails, neatly punched below the surface of wood.

Tolerances: Plane surfaces when tested with a straight edge placed anywhere, in any direction shall not show a gap of more than 1mm between the surface and the edge in any 2 meter length, provided that there is no noticeable abrupt differences in smaller areas.

- Straight lines and edges when tested with a 2 meter long straight edge shall not show a variation of more than 2mm, provided that there are no noticeable abrupt differences.

WOOD VENEERS AND PLYWOOD

Wood veneered plywood shall be 4mm. thick of an approved manufacture. Veneered plywood shall be selected from the best quality new stock for grain and color appearance.

Plywood shall comply with IS: 5509 and IS: 5539

ADHESIVES AND FASTENERS

Adhesives shall be synthetic resin adhesive complying with IS: 851

Screw shall be of brass.

Copper wire nails shall be in compliance with IS:725

TREATMENT AGAINST DECAY AND INSECT ATTACK

Treatment against and insect attack shall be by means of an approved proprietary product, proven to have outstanding durability under any conditions of exposure, to provide long-lasting protection against decay producing fungi and insects.

The material used for treatment shall be clean, oil-free. Odorless and harmless to people, planes and animals, evens when exposed to fire.

The material shall be spray or brush applied for deep-penetration, fiber- fixed to prevent leaching. The treated wood shall be capable of being subsequently painted or stained without being discolored.

No coal -tar based products shall be used for preservative treatment.

The material used for preservative treatment shall be compatible with the material used for fire retardant treatment.

HARDWARE

All hardware for wood doors and wood windows will be selected by the owner.

The Contractor shall order, take delivery and arrange for the transportation of the hardware from the supplier nominated by the owner. The costs for ordering, transportation etc. up to delivery at site will be adjusted against the Allowance.

GLASS

Glass All shall be float glass of glazing quality conforming to BS:952 part 1 or other acceptable standard.

Wired glass: All wired glass shall be polished both sides with square pattern stainless steel wire mesh complying to BS:925, part 1 or other acceptable standard

Insulating glass insulating glass units shall consist of one exterior pane of tinted glass and one pane of clear glass, separated by a 15mm. Thick spacer filled with moisture absorbing desiccant. Each unit shall be hermetically sealed with primary butyl rubber sealant completely covering the unit's edge. Glass and sizes and thickness shall be as shown on the contract Drawings.

All glass shall bear the label of its manufacturer and the standard to which it is manufactured.

Glazing gaskets : All glazing gaskets shall be 'U' shaped of flexible vinyl or synthetic rubber (Neoprene) to fit the glass thickness.

Setting blocks: All setting blocks shall be of synthetic rubber to provide the necessary edge clearance from frames for the glass.

Glazing components: These shall be clear silicone sealant.

WEATHER STRIPS

The weather strip to seal the perimeter gaps between sashes and frames shall be flexible vinyl or synthetic rubber suitable for heavy-duty application.

Sealant caulk for sealing joints between frames and structural opening shall be a one -part polysulphide sealant suitable for application by a caulking gun

MODE OF MEASUREMENTS FOR INTERIOR FURNISHING WORKS:

1. DOORS, WINDOWS AND GRILLS.

Clear area over one face inclusive of frame shall be measured. Hold fasts and portion embedded in masonry or flooring shall not be measured.

2. PARTITIONS IN WOOD WORK

The partition height shall be measured up to bottom of false ceiling and framing members / ply going above shall not be measured

3. DECORATIVE PANELLING OVERWALL OR OVER PARTITIONS

The actual area of cladding shall be measured in square meter.

4. CARPETS

The actual area covered by the carpet shall be measured. No extra shall be allowed for wastage. No deduction shall be made for columns up to 0.5 sq. meter.

5. PAVING AND TILE WORK

The work mentioned in this section shall be measured in square meter and shall be priced per unit of square meter. In all paving work, the slabs shall be touching the walls and go well under the plaster, but the measurements shall be the clear measurements of the rooms or areas finished. No allowance shall be made for portions going under the plaster.

6. ALUMINIUM SLIDING WINDOWS

The measurement of aluminum sliding windows shall be taken only after the frame going with shutter is fixed in its final finished position in line level and plumb. Width and height shall be measured net between the out to out portion of the aluminum window frames.

7. FALSE CEILING

For false ceiling work, the measurement shall be for the actual area covered. No deductions shall be made for the cutouts, for light fittings, speakers, AC grills and column up to 0.5 sq. meters.

8. **WOODWORK**

For conversion of centimeters to meter the resultant figure shall be taken upto two digits after decimal point. Third digit shall not be taken into account.

4. Electrical

SCOPE OF WORK: -

The scope of internal electrification and external electrification under this contract shall include the design, engineering, manufacture, assembly, testing, delivery, erection and commissioning of electrical system including supply of all material, labor, T&P etc. for followings -

- Sub and branch distribution boards, MCB's and RCCB's etc.
- Mains and Sub mains between various panels, and distribution boards.
- Point wiring with Conduits for all type of wiring including circuits, sub mains, light, fans, power and AC etc.
- Switches and socket outlets for light, fans, plug, power, Tel, TV, computer network etc. with suitable MS/GI boxes with accessories complete.
- Earthing and Lightning Protection with earth leads/strips.
- Conduits and wiring for Telephone, EPABX, TV system, PA system, Music system and Computer networking, broad band etc.
- Cables and other allied works.
- Underground cables.

All the above work shall be complete in all respects up to the satisfaction of architect, consultant, Client and Engineer in charge as per the details mentioned in BOQ and drawings supplied time to time.

RATES: -

The rates tendered shall be for complete items of work inclusive of Cost of material, erection, connection, testing, labor, supervision, tool & plants, storage, contingencies, breakage, wastage, execution at any level & height, (including works contract tax, if any), duties, and levies etc. and all charges for items contingent to the work, such as, packing, forwarding, insurance, freight and delivery at site for the materials to be supplied by the contractor. Prices quoted shall be firm and no variation shall be allowed during contract period.

INFORMATION REQUIRED FROM CONTRACTOR

- Typical GA drawing of all equipment to be supplied and disposition of various fittings and loading.
- All Annexure of this specification duly filled in and signed by the contractor.
- Catalogue of all equipment and components explaining construction features.
- Type test certificates for all equipment on similar type of equipment.
- Bill of Materials, Control & schematic line diagram for, terminal connection/Master Terminal box diagram, wiring diagram with physical location of components for all equipment.
- Detailed cabling layout showing cable trench / tray layout, earthing layout.
- Detailed lighting layout showing position of fixtures / type of fixtures, circuiting and route of wires / cables / fixing details, DB details.
- Cable schedule & interconnection chart.

(Signature of the Contractor with Seal)

- Test certificates.
- Instruction manuals of all major equipment.
- Test Procedures at sites.
- Test reports of all tests carried out at site.
- 'AS BUILT' drawings (2 sets of soft copies on CD and six sets of hard copies duly wound).
- All layout drawings shall be made in scale of 1:50 or 1:100 unless until agreed by the Owner/ Consultant.

COMPLETENESS OF TENDER: -

All sundry fittings, assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections as required, and all other sundry items which are useful and necessary for proper assembly and efficient working of the various components of the work shall be deemed to have been included in the tender, whether such items are specifically mentioned in the tender documents or not.

WORK IN OCCUPIED BUILDINGS: -

- When work is executed in occupied buildings, there should be minimum of inconvenience to the occupants. The work shall be programmed in consultation with the Engineer-in-charge and the occupying department. If so required, the work may have to be done even before and after working hours.
- The contractor shall be responsible to abide by the regulations or restrictions set regarding entry into, and movement within the premises.
- The contractor shall not tamper with any of the existing installations including their switching operations or connections there to without specific approval from the Engineer-in-charge.

STATUTORY REGULATION AND APPROVALS: -

All electrical works shall be carried out only Class I/II Electrical contractors issued by the Chief Electrical Inspector or equivalent of Govt of Karnataka. A copy of the license under which works are being executed shall be submitted.

It shall be the responsibility of the Contractor to comply with the regulations laid down by the Indian Electricity Rules and local authorities. The Contractor shall also be responsible for obtaining all the statutory approvals/certificates for the work from the concerned Departments and these certificates shall be handed over to the Architects/Clients at the completion. All coordination with the local electric supply authorities, submitted of application, getting the desired load sanctioned shall be in the scope of contractor. The fees required to obtain the desired load sanctioned and other legal and miscellaneous charges by local electric supply authority / undertaking shall be given by the client but all follow-ups etc. shall be the contractor's responsibility.

On completion of the work, the contractor shall obtain the certificates of final inspection and approval by the local electric supply authority and deliver these certificates to the Owner/Architects in original. The contractor shall bear all expenses and fees required to obtain these certificates without which the work shall not be taken over and shall not be considered complete.

PROVISIONS AGAINST ACCIDENTS AND SAFETY MEASURES

All safety rules and codes as applicable to work including rules applicable as per factory inspector shall be followed during execution of above work.

All safety appliances and protective devices including hand gloves, aprons, helmets, shields, goggles, safety belts etc. shall be provided by Contractor for his personnel.

The Contractor shall arrange to provide guards and prominent display caution notices if access to any equipment/ area is considered unsafe and hazardous.

SPECIFICATIONS

In the absence of specifications for any work or materials, relevant Indian Standard Specifications shall be applicable. If such codes for a particular subject have not been framed, the decision of the Employer/ Consultant will be final and binding.

TOOLS FOR HANDLING AND ERECTION: -

All tools and tackles required for handling of equipment and materials at site of work as well as for their assembly and erection and also necessary test instruments shall be the responsibility of the contractor.

CARE OF BUILDINGS

Care shall be taken by the contractor to avoid damage to the building during execution of his part of the work. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of his work from the site, from time to time as designed by the Engineer-in-charge.

SITE VISIT

It is recommended that contractor shall visit site before submission of his offer. Time and date shall be fixed with employer.

VARIATION IN QUANTITY

The Owner shall have right to delete or increase/ decrease quantity specified in this specification as specified in preamble to Bill of Materials.

Quantities indicated in Bill of Materials are based on engineering status of the project as on date. It is necessary that proper engineering is carried out by the contractor before procurement of material.

For procurement of any material & sequential delivery at site from point of view of erection etc. Contractor shall take prior approval from the employer.

All left over material for which payment has been made by the employer, has to be taken back by the contractor. The employer shall make necessary deduction from the bills of contractor.

STRUCTURAL ALTERATIONS TO BUILDINGS: -

No structural member in the building shall be damaged/altered, without prior approval from the competent authority through the Engineer-in-charge.

Structural provisions like openings, cutouts if any, provided by the department for the work, shall be used. Where these require modifications, or where fresh provisions are required to be made, such contingent works shall be carried out by the contractor at his cost.

All such openings in floors provided by the department shall be closed by the contractor after installing the cables/conduits/rising mains etc. as the case may be, by any suitable means as approved by the Engineer-in-charge without any extra payment.

All chase required in connection with the electrical works shall be provided and filled by the contractor at his own cost to the original architectural finish of the buildings.

MATERIAL SAMPLES AND SHOP DRAWINGS: -

It shall also be the responsibility of the Contractor to submit without any extra charge the samples of the materials/equipment as and when asked by the Architect/Consultant. If the Contractor wishes to use an alternative make due to non-availability of the approved one, he should take the prior approval of the Architect/Consultant. Under such situations the Contractor shall show such promptness as not to hamper the progress of the work.

The Contractor shall submit for Architect/Consultant's approval the shop drawings at approved scale indicating the custom-built equipment, L.T. Panels, run of cables and conduits he proposes to install.

TESTING AND COMMISSIONING: -

The Contractor shall be responsible for testing and commissioning the entire electrical installation described in these specifications and relevant IS specifications and will demonstrate the operation of the systems to the entire satisfaction of the Architect/Consultant and to the Client approval.

GUARANTEE

At the close of work and before issue of final certificate of virtual completion by Owner / Consultant, the contractor shall furnish a written guarantee indemnifying the owner against defective materials and workmanship for a period of one year after commissioning. The contractor shall hold himself fully responsible for reinstallation or replacement of defective material free of cost to the owner.

INTERNAL ELECTRICAL WIRING

POINT WIRING: -

Definition: -

A point (other than socket outlet point) shall include all work necessary in complete wiring to the following outlets from the controlling switch or MCB. The scope of wiring for a point shall, however, include the wiring work necessary in tapping from another point in the same distribution circuit.

- Ceiling rose or connector (in the case of points for ceiling/exhaust fan points, pre wired light fittings and call bells).
- Ceiling rose (in the case of pendants except stiff pendants)
- Back plate (in the case of stiff pendants).
- Lamp holder (in the case of goose neck type wall brackets, batten holders and fittings which are not pre wired).

Scope: -

Following shall be deemed to include in point wiring.

- Conduit/casing and capping as the case may be, accessories for the same and wiring cables between the switch box and the point outlet.
- All fixing accessories such as clips, nails, screws, Phil plug, rawl plug etc. as required.
- Metal switch boxes for control switches, regulators, sockets etc., recessed or surface type, and phenolic laminated sheet covers over the same.
- Outlet boxes, junction boxes, pull-through boxes etc., but excluding metal boxes if any, provided with switchboards for loose wires/conduit terminations.
- Any special block required for neatly housing the connector.
- Control switch as specified.
- Connections to ceiling rose, connector, switch etc.
- Interconnecting wiring between points on the same circuit, in the same switch box or from another.
- Protective (loop earthing) conductor from one metallic switch box to another in the distribution circuits, and for socket outlets. (The length of protective conductor run along with the circuits/sub mains is excluded from scope of points)

Measurement: -

Contractor shall measure the work jointly with the site engineer and prepare measurement sheets in triplicate. Three copies of measurement sheets shall be submitted along with running account bills. Bills received without proper measurements of work shall not be considered submitted.

Should the contractor neglect to measure the work, then the measurement taken by Engineer/Architect or a person approved by the Bank shall be final and binding to him. Such measurements shall be taken in accordance with the mode of measurements wherever specified or as per actual executed quantities.

All authorized extra works, omissions and all variations made without the Engineer/Architect/Bank's knowledge, or subsequently sanctioned by him in writing (with the prior approval of the contractor in writing) shall be included in such measurement.

All bills for the work shall be submitted in the tender price bid format.

Point wiring (other than socket outlet points):-

Unless and otherwise specified, there shall be no linear measurement for point wiring for light points, fan points, exhaust fan points and call bell points. These shall be measured on unit basis by counting.

No separate measurement will be made for interconnections between points in the same distribution circuit and for the circuit protective (loop earthing) conductors between metallic switch boxes.

Point wiring for socket outlet points: -

The light plug (5A/6A) point and power (15A/16A) point wiring shall be measured on linear basis, from the respective tapping point of live cable, namely switch box, another socket outlet point, or the sub distribution board as the case may be, up to the socket outlet.

The metal box with cover, switch/MCB socket outlet and other accessories shall be measured and paid as a separate item.

The power point outlet will be 15A/5A or 16A/6A six-pin socket outlet.

Group control Points wiring: -

In the case of points with more than one point controlled by the same switch, such point shall be measured in parts i.e.

(a) from the switch to the first point outlet as one point.

(b) for the subsequent points each shall be treated as separate point.

No recovery shall be made for non-provision of more than one switch in such cases.

CIRCUIT AND SUBMAIN WIRING: -

Circuit Wiring: -

Circuit wiring shall mean the wiring from the distribution board up to the tapping point for the nearest first point of that distribution circuit, viz. up to the nearest first switch box.

Sub Main Wiring: -

Sub main wiring shall mean the wiring from one main/distribution switchboard to another and from Distribution Board to Power Outlet/ AC Outlet.

Measurement of Circuit and Submain Wiring: -

Circuit and sub main wiring shall be measured on linear basis along the run of the wiring. The measurement shall include all length from end to end of conduit or casing and capping as the case may be, exclusive of interconnections inside the switchboard etc. The increase on account of diversion or slackness shall not be included in the measurement.

The length of circuit wiring with two wires shall be measured from the distribution board to the first nearest switch box in the circuit irrespective of whether the neutral conductor is taken to switch box or not.

when wires of different circuits are grouped in a single conduit/casing and capping, the same shall be measured on linear basis depending on the actual number and sizes of wires run.

When circuit wires and wires of point wiring are run in the same conduit/casing and capping, circuit wiring shall be measured on linear basis depending on the actual number and sizes of wires run in the existing conduit/casing capping.

Protective (loop earthing) conductors, which are run along the circuit wiring and the sub main wiring, shall be measured on linear basis and paid for separately, if not included in item.

Except as specified above for point wiring, circuit wiring and sub main wiring, other types of wiring shall be measured separately on linear basis along the run of wiring depending on the actual number and sizes of wires run.

System of Distribution and Wirings: -

Main distribution board shall be controlled by the circuit breaker. Each outgoing circuit shall be controlled by a circuit breaker on the phase or live conductor.

The branch distribution board shall be controlled by a circuit breaker. Each outgoing circuit shall be provided with a MCB of specified rating on the phase or live conductor.

The load of the circuits shall be divided, as far as possible, evenly between the number of ways of the distribution boards, leaving at least one spare circuit for future extension.

The neutral conductors (incoming and outgoing) shall be connected to a common link (multi way connector) in the distribution board and be capable of being disconnected individually for testing purposes.

Wiring shall be separate for essential loads (i.e those fed through stand by supply) and non-essential loads throughout.

BALANCING OF CIRCUITS: -

The balancing of circuits in three wire or poly phase installations shall be arranged up to the satisfaction of the Engineer-in-charge.

WIRING SYSTEM: -

Unless and otherwise specified the wiring shall be done only by the "Looping system". Phase or live conductors shall be looped at the switch boxes and neutral conductors at the point outlets.

Lights, fans and call bells shall be wired in the 'lighting' circuits. 15A/16A socket outlets and other power outlets shall be wired in the 'Power' circuits. 5A/6A socket outlets shall also be wired in the "Lighting" circuit both in residential as well as non-residential buildings.

The wiring throughout the installation shall be such that there is no break in the neutral wire except in the form of linked switchgear.

Surface wiring shall run, as far as possible, along the walls and ceiling so as to be easily accessible for inspection.

In no case, the open wiring shall be run above the false ceiling without the approval of Engineer-in-charge.

In all types of wiring, due consideration shall be given for neatness, good appearance and safety.

PASSING THROUGH WALLS OR FLOORS: -

When wiring cables are to pass through a wall, these shall be taken through a protection (steel/PVC) pipe or porcelain tube of suitable size such that they pass through in a straight line without twist or cross in them on either end of such holes. The ends of metallic pipe shall be neatly bushed with porcelain, PVC or other approved material.

Where a wall pipe passes outside a building to be exposed to weather, the outer end shall be bell mouthed and turned downwards and properly bushed on the open end.

JOINTS IN WIRING: -

No bare conductor in phase and/or neutral or twisted joints in phase, neutral, and/or protective conductors in wiring shall be permitted.

There shall be no joints in the through-runs of cables. If the length of final circuit or sub main is more than the length of a standard coil, thus necessitating a through joint, such joints shall be made by means of approved mechanical connectors in suitable junction boxes.

Termination of multi-stranded conductors shall be done using suitable crimping type thimbles.

CONFORMITY TO I.E. ACT, I.E. RULES AND STANDARDS: -

All electrical works shall be carried out in accordance with the provisions of the Indian Electricity Act, 1910 and Indian Electricity Rules 1956 amended up to date.

The work shall also conform to relevant Indian Standard codes of practice for the type of work involved.

In all electrical installation works, relevant safety codes of practice shall be followed.

The complete wiring installation shall conform to IS: 732 amended up to date.

QUALITY OF MATERIALS: -

All materials and equipment supplied by the contractor shall be new. They shall be of such design, size and material as to satisfactorily function under the rated conditions of operation and to withstand the environmental conditions at site.

RATING OF COMPONENTS: -

All components in a wiring installation shall be of appropriate ratings of voltage, current and frequency, as required at the respective sections of the electrical installation in which they are used.

All conductors, switches and accessories shall be of such size as to be capable of carrying the maximum current, which will normally flow through them, without their respective ratings being exceeded.

CONFORMITY OF STANDARDS: -

All components shall conform to relevant Indian Standard specification, wherever existing. Materials with ISI certification mark shall be preferred. However, for conduits, wiring cables, piano/tumbler switches and socket outlets, ISI marked materials shall only be permitted.

INTERCHANGEABILITY: -

Similar parts of all switches, lamp holders, distribution fuse boards, switch gears, ceiling roses, brackets, pendants, fans and all other fittings of the same type shall be interchangeable in each installation.

SWITCHES / SOCKETS & OTHER ACCESSORIES (MODULAR TYPE)

CONTROL SWITCHES/ SOCKETS/ REGULATORS/ MODULAR BOXES FOR POINTS: -

The switch box or regulator box shall be made of metal on all sides, except on the front. Since Modular type switches are to be used in the project, hence the boxes shall also be used of the same make and model. The size of box shall be governed by the number of switches/outlets/regulators on the respective board. The boxes shall be with zinc plating and yellow passivation to comply with the rust test as per IS 3854. The boxes should have slotted holes for level adjustments. The boxes shall be fitted with riveted brass earth terminals for earth connections. Clear depth of the box shall not be in a range of 50 mm to 65 mm depending upon the size of board and manufacturer.

An earth terminal with stud & 2 metal washers shall be provided in each MS box for termination of protective conductors and for connection to socket outlet/metallic body of fan regulator etc.

Control switches (single pole switches) carrying not more than 16 A shall be of Modular type, as specified, and the switch shall be "ON" when the nob is down.

Control switch shall be placed only in the live conductor of the circuit. No single pole switch or fuse shall be inserted in the protective (earth) conductor or earthed neutral conductor of the circuit.

All switches, regulators, outlets & other accessories shall be white color with matching white cover plate. In no case ivory or off-white switches shall be accepted.

Socket outlet shall be of the same type, white Modular type as their control switches. These shall be rated either for 5A/6A or 15A/16A. Combined 5A/15A or 6A/16A six pin socket outlet shall be provided in power' circuits.

Every socket outlet shall be controlled by a switch or MCB, as specified. The control switch/MCB shall be connected on the live' side of the line.

Unless and otherwise specified, the control switches for the 5A/6A and 15A/16A socket outlets shall be kept along with the socket outlets.

Control switch shall be placed only in the live conductor of the circuit. No single pole switch or fuse shall be inserted in the protective (earth) conductor or earthed neutral conductor of the circuit. The switches shall be provided with silver contacts. The neutral should make first and breaks last.

Socket outlet shall be rated either for 5A/6A or 15A/16A. 5/6 Amp sockets shall be of 5 pin type with shutters. Combined 5A/15A or 6A/16A six pin shuttered socket outlet shall be provided in power' circuits. The earth pin shall be connected to earth through protective (loop earthing) conductor. All sockets shall be provided with safety shutters to allow easy entry of two pin plugs without the need to force the earth terminal by unsafe means. All sockets shall confirm to IS: 1293.

The switches and sockets shall be manufactured using engineering plastic to make it fire retardant and highly resistant to impact.

The fan speed regulators shall be of electronic and stepped type

SWITCHGEAR AND CONTROLGEAR

GENERAL ASPECTS: -

- All items of switchgear and distribution boards (DB's) shall be metal clad type.
- The types, rating and/or categories of switchgear and protective gear shall be as specified in the tender schedule of work.
- RCCB's, ELCB's and RCBO's where specified, shall conform to the requirements of current rating, fault rating, single phase or three phase configuration and sensitivity laid down in the tender documents.
- While each outgoing way of distribution board (D.B.) shall be of miniature circuit breaker (MCB) as specified, and of suitable rating on the phase conductor, the corresponding earthed neutral conductor shall be connected to a common neutral terminal block and shall be capable of being disconnected individually for testing purpose.

INDEPENDENT EARTH TERMINAL BLOCK.

Every distribution board (single phase as well as three phase) shall have an earth terminal block identical to, but independent from neutral terminal block, to enable termination of protective (loop earthing) conductors (incoming as well as out goings) individually by screwed connection and without twisting.

Earthing terminal (1 for single phase and 2 for three phase) shall be provided on the metal cladding of switches and D.B.'s for body earthing. These shall be suitably marked.

Knock out holes, with or without end plates as per standard design of manufacturers, shall be provided in the metal cladding of switches and D.B.'s for termination of conduits/cables.

Each distribution board shall be provided with a circuit list giving details of each circuit, which it controls, and the current rating of the circuit, and the size of the fuse element.

MCB TYPE DISTRIBUTION BOARDS (MCB DB):-

MCB DB's may be of single phase, three phase (horizontal type) suitable for feeding single phase loads or 3 phase (vertical type) suitable for feeding single phase as well as three phase loads, each phase isolation type three phase DB in which each phase can be isolated by a separate circuit breaker or RCCB, as specified. These shall be complete with accessories, but without MCB's, which shall be specified as a separate item in the tender documents.

The current ratings and the number of ways shall be as specified. Blanking plates shall be provided to close unused ways. These shall be indicated as a separate item in the Schedule of work.

MCB DB's shall be of surface/flush mounting pattern according to the requirement of their location and shall be suitable to accommodate MCB's and MCB type isolators and RCCB (ELCB) at incoming in single pole or multi pole configuration, as required.

MCB DB's shall be double door type; dust and vermin proof conforming to IP 42, and shall be fabricated out of CRCA sheet steel, 1.6 mm thick, with stove enameled paint finish.

In case of Concealed / Recessed D.B.'s, cutting of brick work, providing suitable lintel, making good the wall including plastering etc. with necessary civil work including all Civil material shall be included in contractor's scope for proper completion of work.

MCB DB's shall have removal type end plates with knockouts at the bottom and top, and shall have hinged covers with locking arrangement.

Only the knobs of the MCB's shall protrude out of the front covers through openings neatly machine made for the purpose.

The bus bars used shall be solid electrolytic copper of appropriate sections.

Din bar(s) shall be provided for mounting the MCB's.

The complete board shall be factory fabricated and shall be duly pre-wired in the works, ready for installation at site.

The board shall be fully pre wired with single core PVC insulated copper conductors/insulated solid copper links, and terminated on to extended type terminal connectors, suitable for connections to the sizes of the respective conductors.

All incoming and outgoing wiring to the pre wired MCB DB's shall be terminated only in the extended terminal connectors to be provided within the DB. The terminal connectors shall therefore be so provided as to facilitate easy cable connections and subsequent maintenance.

MCCB TYPE DISTRIBUTION BOARDS (MCCB DB) :-

All MCCB DB's shall be of three phase suitable for feeding single phase loads or 3 phase loads through SP/TP MCB's, IP 42 enclosure, sheet steel, double door with tinned copper bus bar, neutral bar, earth bar, knock outs etc. The DB's shall be original factory fabricated of approved make.

The current ratings of Incomer MCCB shall be upto 250 amp and the number of ways shall be as specified. Blanking plates shall be provided to close unused ways.

MCCB DB shall be of surface/flush mounting pattern according to the requirement of their location and shall be suitable to accommodate Four pole MCCB at incomer and SP/TP MCB's at outgoings, as required.

MCCB DB's shall be dust and vermin proof conforming to IP 42, and shall be fabricated out of CRCA sheet steel, 1.6 mm thick, with stove enameled paint finish.

In case of Concealed / Recessed D.B.'s, cutting of brick work, providing suitable lintel, making good the wall including plastering etc. with necessary civil work including all Civil material shall be included in contractor's scope for proper completion of work.

MCCB DB' s shall have removal type end plates with knock-outs at the bottom and top and shall have hinged covers with locking arrangement.

The bus bars used shall be solid electrolytic copper of appropriate sections.

WORKMANSHIP: -

Good workmanship is an essential requirement to be complied with. The entire work of manufacture/fabrication, assembly and installation shall conform to sound engineering practice.

The work shall be carried out under the direct supervision of a first class licensed foreman, or of a person holding a certificate of competency issued by the state Government for the type of work involved, employed by the contractor, who shall rectify then and there the defects pointed out by the Engineer-in-charge during the progress of work.

CIRCUIT BREAKERS

MINIATURE CIRCUIT BREAKERS (MCB): -

- Miniature Circuit Breaker shall comply with IS-8828-1996/ IEC898-1995 amended up to date.
- Miniature circuit breakers shall be quick make and break type for 240/415 V AC, 50 Hz application with magnetic thermal release for over current and short circuit protection.
- The breaking capacity shall not be less than 10kA at 415V AC.
- MCBs shall be DIN mounted.
- MCBs shall be current limiting type (class-3).
- MCBs shall be C-curve.
- MCBs shall have minimum power loss (watts) per pole defined as per the IS/IEC and the manufacturer shall publish the values.
- MCBs shall be of self-extinguishing ULV0 grade thermoset plastic material. The housing shall be heat resistant and having high impact strength. The terminals shall be protected against finger contact to IP20 Degree of protection.
- All DP, TP, TPN and 4pole MCBs shall have a common trip bar independent to external operating handle.
- Mechanical Life shall be 20000 operations and Service life at rated load for In below 32A shall be 20000 and for In above 32A shall be 10000 operations.

EARTH LEAKAGE CIRCUIT BREAKER / RESIDUAL CURRENT CIRCUIT BREAKER - CURRENT OPERATED TYPE (ELCB / RCCB / RCBO)

Neutral Advance Feature

The neutral moving contact shall be so mounted on the common bridge that, at the time of closing, the neutral shall make contact. First before the phases; and at the time of opening, the neutral shall break last after allowing the phases to open first. This is an important safety feature which is also required by regulations.

Testing Provision

A test device shall be incorporated to check the integrity of earth leakage detection system and the tripping mechanism. When the unit is connected to service, pressing the test knob shall trip the ELCB/RCCB/RCBO and the operating handle shall move to the "OFF" position.

MOULDED CASE CIRCUIT BREAKER (MCCB's)

General

Molded case circuit breakers shall be incorporated in the switchboard wherever specified. MCCB shall conform to IS: 13947 (Part-2): 1993 or IEC-60947-2 in all respects. MCCB shall be suitable either for single phase AC 230 Volts or three phase 415 volts $\pm 10\%$. The rated insulation voltage shall be 600 volts. Suitable discrimination shall be provided between upstream and downstream breakers in the range of 10-20 milli seconds. The MCCBs will have earth fault module (if specifically asked) and front operated.

MCCB shall indicate its suitability for isolation and this should appear clearly on the MCCB with the symbol as specified in standard IS: 13947/IEC 60947. The rated normal current should be specified at 40°C

Construction.

The MCCB cover and case shall be made of high strength heat-resistant and flame retardant thermosetting insulating material; operating handle shall be quick make/quick break. The operating handle shall have suitable ON' OFF' and TRIPPED' mechanical indicators notable from outside. Three phase MCCBs shall have a common operating handle for simultaneous operation and tripping of all the three phases.

Suitable arc extinguishing device shall be provided for each contact. Tripping unit shall be thermal-magnetic type up to 250A and Microprocessor based above 250A (or as specified specifically in Bill of Quantities and drawings) provided on each pole and connected by a common trip bar such that tripping of any one pole operates all three poles to open simultaneously. Tripping device shall have IDMT characteristics for sustained over load and short circuits.

Contact tips shall be made of suitable arc resistant, sintered alloy for long electrical life. Terminals shall be of liberal design with adequate clearances.

Accessories

All the accessories shall be mounted from the front and shall be adjustment free. MCCBs shall have the electrical accessories fitted even without removing the circuit breaker from the switchboard so that site changes, if any, can be carried out easily. MCCB shall be provided with the following accessories, if specified in schedule of quantities, such as Under voltage trip, Shunt trip, Alarm switch, auxiliary switches, Rotary and motorized operating mechanism, Plug in and with draw able mechanism etc.

Interlocking

- Molded case circuit breakers shall be provided with the following interlocking devices for interlocking the door of a switchboard.
- Handle interlock to prevent unnecessary manipulations of the breaker.
- Door interlock to prevent the door being opened when the breaker is in ON position.
- Defeat-interlocking device to open the door even if the breaker is in ON position.

Rupturing capacity

The molded case circuit breaker shall have a rupturing capacity as mentioned against each in Schedule of Quantity at 415 volts. Wherever required, higher rupturing capacity breakers to meet the system short circuit fault shall be used. In absence of any capacity specifically mentioned in the bill of quantities and drawings, following rupturing capacities shall be used -

100 / 125 Amp	: 25 KA
160/200/250 Amp	: 35 KA
300/400/630/800 Amp	: 50 KA

The MCCB shall be current limiting type and comprise of quick make - break switching mechanism. MCCBs shall be capable of defined variable overload adjustment. For thermal magnetic protection the O/L adjustment should be 75%-100% and for microprocessor-based release the adjustment should be 40%- 100% and S/c for 2 to 12 times. All MCCBs rated 200 Amps and above shall have adjustable magnetic short circuit pick-up.

Electrical Features

All MCCB's & shall be selected on the basis of rated current. Four poles MCCBs shall be always supplied with neutral protection. The MCCBs having 400A & should have category B as per the IEC standards to ensure the selectivity. Minimum Electrical & Mechanical Endurance of MCCB Shall be as follows

Rating of MCCB	Electrical Endurance	Mechanical Endurance
Upto 160 A	7000 Opns	25000 Opns
Above 160 A	4000 Opns	15000 Opns

The trip command shall override all other commands. The manufacturer shall provide both the discrimination tables (with test certificates) and let-through energy curves. Line and Load connections shall be interchangeable.

Installation

It should be possible to terminate Aluminum cable of required size for the defined current carrying capacity. The requisite size should be made available by means of extended terminals (as a standard offer) in case the direct terminals are not of adequate size. Adequate phase to phase clearance has to be ensured in case of extended terminations.

circuit breaker should provide the flexibility of terminating line and load from any direction. Manufacturers should test the circuit breaker for this condition and requisite test certificate should be available. Phase barrier should be provided as a standard feature.

Testing

Original test certificate of the MCCB as per BS 3871 or JS-C-8370 shall be furnished.

Pre-commissioning tests on the switchboard panel incorporating the MCCB shall be done as per standard specifications.

PVC CONDUIT WIRING SYSTEM

SCOPE: -

This chapter covers the detailed requirements for wiring work in non-metallic conduits. This chapter covers both surface and recessed types of wiring work.

APPLICATION: -

Recessed conduit work is generally suitable for all applications. conduit work may be adopted in places like workshops etc. and where recessed work may not be possible to be done. The type of work shall be as specified in individual works. Flexible non-metallic conduits shall be used only at terminations, wherever specified.

CONDUITS: -

All non-metallic conduit pipes and accessories shall be of suitable material complying with IS: 2509-1973 and IS : 3419-1988. for rigid conduits and IS: 9537(V)-2000 for flexible conduits. The interior of the conduits shall be free from obstructions. The rigid conduit pipes shall be ISI marked.

The conduit shall be circular in cross-section. The conduit shall be designated by their nominal outside diameter. The dimensional details of rigid non-metallic conduits are given in Table-3.

WIRING CAPACITY: -

The maximum number of PVC insulated aluminum/copper conductor cables of 650/1100 V grade conforming to IS: 694-1990 that can be drawn in one conduit of various sizes is given in table-4. Conduit sizes shall be selected accordingly.

CONDUIT ACCESSORIES: -

- The conduit wiring system shall be complete in all respect including accessories.
- Rigid conduit accessories shall be normally of grip type.
- Flexible conduit accessories shall be of threaded type.
- Bends, couplers etc. shall be solid type in recessed type of works, and may be solid or inspection type as required, in surface type of works.
- Saddles for fixing conduits shall be heavy gauge non-metallic type with base.
- The minimum width and the thickness of the ordinary clips or girder clips shall be as per Table-5.
- For all sizes of conduit, the size of clamping rod shall be 4.5mm (7 SWG) diameter.

INSTALLATION: -

Common Aspects for Both Recessed And Surface Conduit Works.

The erection of conduits of each circuit shall be completed before the cables are drawn in.

Conduit Joints: -

All joints shall be sealed/cemented with approved cement. Damaged conduit pipes / fittings shall not be used in the work. Cut ends of conduit pipes shall have no sharp edges or any burrs left to avoid damage to the insulation of conductors while pulling them through such pipes.

The Engineer-in-charge, with a view to ensuring that the above provision has been Carried out, may require that the separate lengths of conduit etc. after they have been prepared, shall be submitted for inspection before being fixed.

Bends In Conduits: -

All bends in the system may be formed either by bending the pipes by an approved method of heating, or by inserting suitable accessories such as bends, elbows or similar fittings, or by fixing non-metallic inspection boxes, whichever is most suitable. Where necessary, solid type fittings shall be used.

Radius of bends in conduit pipes shall not be less than 7.5 cm.

Care shall be taken while bending the pipes to ensure that the conduit pipe is not Injured, and that the internal diameter is not effectively reduced.

Painting: -

After installation, all accessible surfaces of metallic accessories shall be painted.

Additional Requirements for Surface Conduit Work: -

Conduit pipe shall be fixed by heavy gauge non-metallic saddles with base, secured to suitable approved plugs with screws in an approved manner, at an interval of not more than 60 cm, on either side of couplers or bends or similar fittings, saddles shall be fixed at a closer distance from the center of such fittings. Slotted PVC saddles may also be used where the PVC pipe can be pushed in through the slots.

Where the conduit pipes are to be laid along the trusses, steel joists etc. the same shall be secured by means of saddles or girder clips as required by the Engineer-in-charge. Where it is not possible to use these for fixing, suitable clamps with bolts and nuts shall be used.

Additional Requirements for Recessed Conduit Work: -

Chase in the wall shall be neatly made, and of ample dimensions to permit the Conduit tube fixed in the manner desired.

In the case of buildings under construction, the conduits shall be buried in the wall Before plastering and shall be finished neatly after erection of conduit.

In case of exposed brick/rubble masonry work, special care shall be taken to fix the conduit and accessories in position along with the building work.

The conduit pipe shall be fixed by means of staples, or by means of non-metallic saddles, placed at not more than 40 cm apart, or shall be fixed by any other approved means of fixing.

At either side of the bends, saddles/staples shall be fixed at a distance of 15 cm from the center of the bends.

Fixing Inspection Boxes: -

Suitable inspection boxes to the minimum requirement shall be provided to Permit Inspection, and to facilitate replacement of wires, if necessary.

These shall be mounted flush with the wall or ceiling concrete. Minimum 65 mm Depth junction boxes shall be used in roof slabs.

Suitable ventilating holes shall be provided in the inspection box covers.

Fixing Switch Boxes and Accessories: -

Switch boxes shall be mounted flush with the wall. All outlets such as switches, socket outlets etc. shall be flush mounting type, unless otherwise specified in the additional specification.

Bunching of Cables: -

Cable carrying alternating current, installed in metal conduit, shall always be bunched so that the outgoing and return cables are drawn into the same conduit.

Where the distribution is for single phase loads only, conductors for these phases shall be drawn in one conduit.

In case of three phase loads, separate conduits shall be run from the distribution boards to the load points, or outlets as the case may be.

Earthing Requirements: -

A protective (earth) conductor shall be drawn inside the conduit in all distribution circuits to provide for earthing of non-current carrying metallic parts of the installation. These shall be terminated on the earth terminal in the switch boxes, and/or earth terminal blocks at the DB's.

Protective conductors of large size which may not be possible to be carried inside the conduits (as in the case of some sub mains etc.) may be laid external to the conduits and clamped thereto suitably.

Gas or water pipes shall not be used as protective conductors (Earth medium).

DIMENSIONAL DETAILS OF RIGID NON-METALLIC CONDUITS.**(All dimensions in mm)**

S.No.	Nominal outside diameter (In mm)	Maximum outside diameter (In mm)	Minimum inside diameter (In mm)	Maximum permissible eccentricity (In mm)	Maximum permissible ovality (In mm)
1.	20	20 ^{+0.3}	17.2	0.2	0.5
2.	25	25 ^{+0.3}	21.6	0.2	0.5
3.	32	32 ^{+0.3}	28.2	0.2	0.5
4.	40	40 ^{+0.3}	35.8	0.2	0.5
5.	50	50 ^{+0.3}	45.0	0.4	0.6

MAXIMUM NUMBER OF PVC INSULATED 650/ 1100 VOLT GRADE COPPER CONDUCTOR CABLE THAT CAN BE DRAWN INTO RIGID PVC CONDUIT

Nominal cross-sectional area of conductor in Sqmm.	20 Mm	25 mm	32 Mm	40 mm
1.50	5	10	14	-
2.50	5	8	12	-
4.00	3	8	10	-
6.00	2	5	8	-
10.00	-	3	5	6
16.00	-	-	3	6
25.00	-	-	2	4

Note:-

The above table shows the maximum capacity of conduits for a simultaneous drawing of cables.

ORDINARY CLIPS OR GIRDER CLIPS.

S.No.	Size of conduit	Width	Thickness
1.	20 mm & 25 mm	19 mm	20 SWG (0.9144 mm)
2.	32 mm & above	25 mm	18 SWG (1.219 mm)

EARTHING**SCOPE: -**

This chapter covers the essential requirements of earthing system components and their installation. For details not covered in these specifications. IS code of Practice on earthing (IS: 3043-1987) shall be referred to.

INSTALLATION: -**Electrodes: -**

Maintenance free rod electrode shall be buried in ground with its faces vertical, and its top not less than 3 m below the ground level. The installation shall be carried out as per standard drawing.

(Signature of the Contractor with Seal)

When more than one electrode is to be installed, a separation of not less than 2 m shall be maintained between two adjacent electrodes.

The strip or conductor electrode shall be buried in trench not less than 0.5 m deep.

If condition necessitate the use of more than one strip or conductor electrode, they shall be laid as widely distributed as possible, in a single straight trench where feasible, or preferably in a number of trenches radiating from one point.

Earth Electrodes shall be kept clear of the building foundation & in no case shall it be nearer than 2 meters from the outer surface of the wall.

Earthing Conductor (Main Earthing Lead):-

The earthing conductor shall be securely terminated on to the plate with two bolts, nuts, check nuts and washers.

A double C-clamp arrangement shall be provided for terminating tape type earthing conductor with GI watering pipe coupled to the pipe earth electrode. Galvanized "C" shaped strips, bolts, washers, nuts and check nuts of adequate size shall be used for the purpose.

The earthing conductor from the electrode up to the building shall be protected from mechanical injury by a medium class 15 mm dia GI pipe in the case of wire, and by 40 mm dia, medium class GI pipe in the case of strip. The protection pipe in ground shall be buried at least 30 cm deep (to be increased 60 cm in case of road crossing and pavements). The portion within the building shall be recessed in walls and floors to adequate depth in due co-ordination with the building work.

The earthing conductor shall be securely connected at the other end to the earth stud/earth bar provided on the switchboard by:

Soldered or preferably crimped lug, bolt, nut and washer in the case of wire, and,

Bolt, nut and washer in case of strip conductor.

Earthing Terminal/ neutral point/ earth bus in case of equipment's/ sub stations.

Protective (Loop Earthing/Earth Continuity) Conductor: -

Earth terminal of every switchboard in the distribution system shall be bonded to the earth bar/terminal of the upstream switchboard by protective conductor(s).

Two protective conductors shall be provided for a switchboard carrying a 3 phase switch gear thereon.

All the mountings of industrial type switchboards shall be bonded to the earth stud/earth bar using a protective conductor looping from one to another. Loop earthing of individual units will not be however necessary in the case of cubical type switchboards.

The earth connector in every distribution board (DB) shall be securely connected to the earth stud/earth bar of the corresponding switchboard by a protective conductor.

All metallic switch boxes and regulator boxes in a circuit shall be connected to the earth connector in the DB by protective conductor (also called circuit protective or loop earthing conductor), looping from one box to another up to the DB.

The earth pin of socket outlets as well as metallic body of fan regulators shall be connected to the earth stud in switch boxes by protective conductor. Where the switch boxes are non-metallic type, these shall be looped at the socket earth terminals, switch or at an independent screwed connector inside the switch box. Twisted earth connections shall not be accepted in any case.

Double earthing strips in rising mains, bus trucking etc. shall be securely connected to the earth bar/earth stud at the sending end switchboard. In the case of overhead bus bar systems, protective conductors shall be provided in addition to feeder cable armoring connection.

Earth Resistance: -

The earth resistance at each electrode shall be measured. No earth electrode shall have a greater ohmic resistance than 5 ohms as measured by an approved earth testing apparatus. In rocky soil the resistance may be up to 8 ohms.

Where the above stated earth resistance is not achieved, necessary improvement shall be made by additional provisions, such as additional electrode(s), different type of electrode, or artificial chemical treatment of soil etc., as may be directed by the Engineer-in-charge.

If the earth resistance is too high and the multiple electrode earthing does not give adequate low resistance to earth, then the soil resistivity immediately surrounding the earth electrodes shall be reduced by adding sodium chloride, calcium chloride, sodium carbonate, copper sulphate, salt and soft coke or charcoal in suitable proportions.

Marking: -

- Earth bars/terminals at all switchboards shall be marked permanently either as "E".
- Main earthing terminal shall be marked "SAFETY EARTH - DO NOT DISCONNECT".

CABLES

GENERAL

All cables shall be supplied, inspected, laid tested and commissioned in accordance with drawings, specifications, relevant Indian standards specifications and cable manufacturer's instructions. The cable shall be delivered at site in original drums with manufacturer's name clearly written on the drum.

The recommendations of the cable manufacturer with regard to jointing and sealing shall be strictly followed.

The laying of cable shall be done as per IS 1255 amended up to date.

Cable Identification

Cable identification shall be provided by embossing on the outer sheath the following:

- (i) Manufacturer's name or trade mark
- (ii) Voltage grade
- (iii) Year of manufacture
- (iv) Type of insulation
- (v) Printing of cable length on each meter

Core Identification

Respective cores of power/control cables shall be identified with the following pattern:

- | | | |
|--------|---|--|
| 2 core | : | red (R), black (BK) |
| 3 core | : | red (R), yellow (Y),blue (BL) |
| 4 core | : | red (R),yellow (Y),blue (BL), black (BK) |

Tests

- (i) Shop Tests The cables shall be subject to shop tests in accordance with relevant standards to prove the design and general qualities of the cables as below:
- (ii) Routine tests on each drum of cables.
- (iii) Acceptance tests on drums chosen at random for acceptance of the lot.
- (iv) Type tests on each type of cable, inclusive of measurement of armour D.C. resistance of power cables.

MATERIAL

L T Power Cables

The 1.1 KV cables shall be XLPE insulated PVC sheathed aluminum conductor armored conforming to IS : 7098 (part - 1) amended up to date or PVC insulated, extruded PVC inner sheath, steel strip armored and extruded PVC overall sheath conforming to 15:1554 (PI).as mentioned in the Bill of Quantities and drawings, laid in trenches, ducts and underground as shown on drawing or as per instruction given by engineer-in-charge.

Compression Glands

Cable glands shall be made of brass casting, machined accurately to the required size with protective coating of nickel.

Cable glands shall be of heavy-duty type and shall consist of gland nipple, neoprene seal for inner sheath, armor clamping cone, gland body, neoprene seal for outer sheath, skid washer, gland body nut.

The Aluminium conductor shall be stranded, grade H4 class 2 as per IS 8130 and copper conductor shall be annealed copper class 2 as per IS 8130.

COMPUTER NETWORKING

GENERAL REQUIREMENTS:

Computer Net Working System should adhere to relevant and recognized standards.

The Structural Cabling System shall be a hierarchical star topology utilizing CAT 6 copper cable in horizontal sub system and multi-mode fiber optic cable in the backbone subsystem.

All components within the cabling system shall be from a single manufacture and shall be covered by the manufacturer's system performance warranty. The warranty shall be independent of application and will support all ratified protocols, and the warranty shall be minimum of 25 years.

DATA CABLING - UNSHIELDED TWISTED PAIR

- Unshielded Twisted pair (UTP) CAT 6A cable shall be used for LAN connectivity to the Desktop. To enable increased performance UTP-CAT 6A cabling should support 100/1000 Mbps Ethernet and ATM 155 Mbps as per IEEE 802.3ab connectivity standards.
- Unshielded Twisted Pair (UTP) CAT 6A cable and other relevant products shall be in accordance with EIA/TIA 568 standards.
- Unshielded Twisted Pair (UTP) CAT 6A cable shall meet developments in applications technology and shall perform for a worst case four-connector channel to support applications that utilize full-duplex transmission schemes, such as Gigabit Ethernet.
- All cables shall be fitted with strain relief boots.
- Contractor shall furnish 25 Year warranty certificate to cover Bandwidth of the specified and installed cabling system and installation costs.
- Cable shall be manufactured by using 24 AWG solid bare coppers with polyethylene insulation and Flame-retardant PVC jacket.
- Cable shall be suitable in operating temperature of -20° C to 60° C.
- The cable shall be tested up to 350 MHz frequencies. Delay skew should not be more than 25ns/100m.
- Impedance of the cable shall be 100 Ω +/- 15 Ω .
- Following installation practice shall be followed by the Contractor
 - a. Do not place cable near equipment that may generate high levels of electromagnetic interface.
 - b. Place cabling at a sufficient distance from equipment.

(Signature of the Contractor with Seal)

- c. Do not over tighten cable ties, use staples or make sharp bend with cables.
- d. Tie and dress horizontal cables neatly and with a minimum bend radius of 4 times the cable diameter.
- e. Maintain the twist of horizontal and backbone cable pairs up to the point of termination. Do not leave any wire pairs untwisted.
- f. Do not create multiple appearances of the same cable at several distribution points (called Bridging Taps)
- g. Do not use connecting hardware that is of lower category than the cable being used.
- h. Terminate each horizontal cable on a dedicated telecommunications outlet.
- i. Use connecting hardware that is compatible with the installed cable.
 - The contractor shall note that the above installation practices are not exclusive. It is the responsibility of the contractor to ensure that the installation is compliant to required specifications. Installation Practices shall also meet all applicable local and national codes, standards and ordinances. Where a conflict exists between these standards, it is the responsibility of the contractor to detail these conflicts to the consultant prior to installation commencing.

CAT 6A RJ 45 MODULAR JACK

- Copper outlets shall be presented into work area as an RJ45 connector. The outlet shall have a shuttered cover to prevent the ingress of dust and other contaminants.
- One outlet/Double outlet of required color and type should be provided to each workstation as per the final approval of the consultant.
- All outlets shall be modular type and made from ABS plastic.
- The outlet shall be provided with icons or circuit identification and labels for port identification.
- All outlets should include cable management facilities as per standards.
- The modular outlets shall be factory assembled.
- The termination of the installed horizontal cable shall be by insulation displacement connectors.

UTP JACKS

- UTP Jacks shall be suitable for CAT 6A cable, PCB Based and as per TIA/EIA 568 standards.
- The durability of Modular jack shall be minimum 750 mating cycles and minimum 200 termination cycles for wire terminals.
- Housing of UTP Jack shall be made out of Polyphenylene oxide rated for 94V and wiring block shall be of Poly Carbonate rated for 94 V.

UTP JACK PANELS

- UTP Jack Panels shall be suitable for CAT 6A cable with 24 port, modular type, PCB based, 1 U height and as per the EIA/TIA 568-B2 standards.
- UTP Jack panel shall have icons on each of 24 Ports.
- 9mm or 12mm labels on each of 24 ports shall be provided as per the final approval of the consultant.
- The durability of Modular jack shall be minimum 750 mating cycles and minimum 200 termination cycles for wire terminals.

- The UTP Jack Panel shall be made out of Powder Coated Sheet Steel with UTP Jack shall be made out of Polyphenylene oxide rated for 94V and wiring block shall be of Poly Carbonate rated for 94 V.

WORK AREA CABLING

- Work area equipment and cables shall be as per ANSI/TIA/EIA-568-A and ISO/IEC 11801.
- Equipment Cords are assumed to have the same performance as patch cords of the same type and category.
- To ensure consistency of performance, the same manufacturer as the installed cabling shall provide all the work area cables (patch/mounting cords) throughout this project.
- The patch cord shall be manufactured out of 24 AWG 7/32, Stranded copper conductor, with PVC insulation, flame retardant polyethylene jacket and shall have length as mentioned in schedule of quantities as per the standards of CAT 6.
- The patch cord shall be provided with matching colored snag-less, elastomeric polyolefin boot.
- Housing of the plug shall be of Clear Polycarbonate and the Load Bar shall be of PBT polyester.
- Terminals shall be made out of Phosphor Bronze, 50-micron gold plating over selected area and gold flash over remainder, over 100-micron nickel under plate.
- All cables shall be fitted with strain relief boots.
- The onsite fabrication of work area cabling shall not be permitted.

DATA RACKS

- The contractor shall also examine the location of the Data Rack to
- Ensure the Air Flow around the same and sufficient clearance is available to allow access for inspection and maintenance.
- The specification for patching frames shall match that detailed in UTP cabling.
- The patch panels shall meet or exceed the transmission
- Performance requirements of ANSI/EIA/TIA 568-A5.

TERMINATION AND CONNECTORS

- The wiring schedule used at the point of termination should be
- Complete with ANSI/EIA/TIA 568-A.
- All termination shall be made using CAT 6 connectors and Panels.
- When terminating both ends of the connection should be tested,
- Labeled and documented according to the requirement of the OEM and site practices.
- All termination should be made by an approval installer so as to Meet warranty.

LABELING AND COLOR-CODING CONVENTIONS

- All Cables shall be labeled so as to ultimately and the end user in
- The maintenance and administration of the installed cabling system.
- Contractors shall make allowance for labeling of all cables at both
- Ends and for the full labeling of all patch panels and outlets with a unique circuit identifier.

INSTALLATION ACCEPTANCE TESTING SPECIFICATIONS

- Installed UTP Cabling system shall be tested with TIA/EIA 568
- Level IIE/Level III hand held testers. Each installed UTP drop shall be tested as per the latest revisions of TIA/EIA 568 CAT5e specifications.

- The contractor shall after completion of the installation, submit a
- Detailed documentation of the cable plant. The documentation shall cover minimum following:
 - a. As built diagrams of the Network.
 - b. Test results for UTP
 - c. Consolidated Bill of Materials with manufacturer's part Nos. and quantities used.
 - d. Warranty certificate from OEM Supplier.

SUBMISSIONS

Contractor to note that the following Minimum Documents shall be furnished along with the Bid.

UTP CABLING SYSTEM

- ETL verification of the Cable as per TIA/EIA 568 B.1 standards.
- Performance characteristics for Attenuation, Pair to Pair and PS NEXT, ELFEXT and PSELFEXR, Return Loss, ACR and PS ACR for 4 - Connector Channel.
- Certificate of UL listing.

UTP JACKS

- Certificate of UL listing.
- Performance characteristics for Attenuation, NEXT, PS NEXT, FEXT and Return Loss.

UTP JACK PANELS

- Certificate of UL listing.
- Performance characteristics for Attenuation, NEXT, PS NEXT, FEXT and Return Loss.
- Certificate for termination pattern as per TIA/EIA 568 A and B.

After the system is fully supplied, installed, tested, Commissioned, successfully handed over and such certified by the Employer, the contractor should carry out his defects liability responsibilities as specified for a period of one year. During this period the Contractor shall carry out all repairs to the equipment and replace all defective components at his own cost.

TELEPHONE WIRING

Telephone Wiring should be carried out with 0.5 Sqmm Tinned Copper flexible wire through PVC Casing Capping / Conduit. And terminated in the Jack on workstation and on the Krone in the Krone Junction Box place at Server Room.

The Krone Junction Box should be joint less type.

5. AIR CONDITIONING SYSTEM

INTRODUCTION

The A.C. TENDER consists of DUCT INVERTABLE / HIGH WALL MOUNTED SPLIT/ CASSETE UNITS / TOWERUNITS and modification of existing ducting to suit the newly designed Interiors.

The system will be catering to a most modern facility accordingly the system offered shall be suitable for continuous trouble-free operation.

The facility is having no planning for ceiling fans accordingly the system selected should be highly efficient and trouble free with minimum trouble shooting time requirement.

In the event of an order being placed, the Contractor shall supply four copies each of the following within TWO WEEKS from the date of placement of the order-

- a. Complete installation drawings showing details of the Indoor & Outdoor units, Refrigerant pipes and their sizes, electrical circuit diagrams, air distribution system etc.

- b. Instruction books for operation, maintenance and servicing of all components.
- c. List of recommended spares for two years of operation. M/s. Kulkarni Associates. will provide all the working drawings. However, for items of proprietary nature, working drawings and as built drawings shall be provided by the contractor, which will have to be approved by the Employer / Consultants.

Note : Before taking up the installation work at site the supplier should ensure that the installation drawings are approved by the Employer and Consultants.

ERECTION

This specification provides for the complete erection including minor civil works like wall cutouts for pipes, ducts etc. The tenderer shall make his own arrangements for the storage of materials & their safe custody at site.

The Contractor shall make good all damages to the Purchaser's building, property, equipment's and articles, how so ever arising from the erection of the equipment. The Contractor shall indemnify and hold harmless the employer against all claims in respect of injury to any person how so ever arising out of the erection of the equipment in the course of such installation.

COMPLETENESS OF CONTRACT

All items whether specifically mentioned or not but which are usually required to make a complete working system and to ensure safe and satisfactory operation are to be provided by the Contractor without any extra charge. All appliances, apparatus, labor or material which may complete the work in accordance with the intent or purpose of the specifications shall be considered to be in the scope of work of the Contractor and shall be furnished without extra charge, as if fully described and called for in these specifications and shown in the drawings.

SPECIFICATIONS

The tenderer shall be deemed to have satisfied him before tendering as to the correctness of the capacities offered after making his own independent calculations. He must guarantee and demonstrate that the installation shall maintain the required indoor design conditions.

The specifications, drawings and other parts of this contract are to be considered as explanatory to each other or should anything appear in the one that is not described in the other or should any discrepancy or any misunderstanding arise on account of such discrepancy, or inconsistency, the site instruction given by the consignee shall prevail. The contractor shall execute the work according to such instructions/explanations given by the different part of this contract, even though such works are not specifically shown and described therein.

GUARANTEE

The tenderer shall guarantee against manufacturing and installation defects of all equipment supplied by him and carried out by him for a period of 12 months from the date when the equipment is accepted & taken over by the Employer for running purposes as specified. The tenderer shall confirm that he is agreeable to give this guarantee.

INSURANCE OF WORK

The tenderer will insure entire equipment and materials for transit / storage during erection & up to commissioning against losses, damages, due to fire, earth-quake, war, floods, insurrections etc. No claims will admissible on this account.

ITEMS INCLUDED IN THE CONTRACT

Entire equipment under supply as mentioned in the specification and shown in the drawings including installation, painting (as per the color code mentioned in Annexure-I), trial commissioning, final adjustments and testing.

- Complete electrical work, including equipment wiring, control wiring, control panels etc. as specified.

- Drain piping suitably insulated where necessary to the drain points in the equipment rooms, as per drawing.
- First fill of refrigerant, oil or other contingent material.
- Any loss of refrigerant, oil etc. due to the defects of the equipment or installation system during guarantee period shall be made good.
- Operation of system until the time, system is handed over.

CO-ORDINATION

Work shall be carried out in confirmation with specifications, accompanying drawings and with the requirements of the general architectural and structural plans after approval by the Employer. The Contractor shall be responsible for taking actual measurements at site and effecting variations in the work in details, if required, to meet the site conditions. Such deviations shall however be subject to the approval of the Employer.

The Contractor shall also co-operate with other Contractors employed by the employer, compare plans, specification & time schedules & shall forward to the Employer copies of all correspondence & drawings so exchanged, failure to check plans and conditions will render the Contractor responsible for bearing the cost of any subsequent change.

DRAWINGS & LITERATURE / DOCUMENTATION AS PER ANNEXURE ATTACHED

- a. Before proceeding with the work, the Contractor shall submit the following documents in duplicate -
 - i. Descriptive leaflets for all the equipment viz. indoor units, outdoor units, instrumentation Data, Electrical Components, Controls etc. having details of Capacity, Power Consumption, Efficiency, Performance Curves, best duty points, electrical details, mechanical details, dimensional details, operating weight etc.
 - ii. General layout and assembly drawings.
 - iii. Foundation drawings / frame details for all equipment.
 - iv. Operational and maintenance manuals / instruction book.
 - v. Trouble shooting details.
 - vi. All working drawings other than Consultants drawings.
 - vii. Detailed BAR CHART with activity schedules.
- b. Approval by the Employer on the drawings shall not relieve the Contractor of any part of his obligation to meet all the requirements of the contract or of the correctness of his drawings. The Contractor shall be responsible for and pay for all alterations of the work due to discrepancies or omission in the drawings or other particulars supplied by him, whether the Employer has approved such drawings.
- c. Six copies of the comprehensive manual for use by the Employer before & during erection and subsequent operation & maintenance of the system shall be furnished after approval of the Contractor's drawings.
- d. The Contractor shall furnish and install in the machine room a neatly prepared set of operating instructions securely framed.
- e. The Contractor shall furnish information required in the tender document.

VARIATION OF WORK

The Employer shall have the power from time to time during the course of the work, by notice in writing to instruct the Contractor to make any alteration, omission, addition or variation in the work (herein after referred to as variation).

The difference in the cost of such variation shall be added to or deducted from the contract price as the case may be in accordance with the rates available in the contract, and if in the opinion of the contractor the variation would prevent him from meeting any of his obligations or guarantees in the contract, he shall give the same in writing failing which he shall not be entitled to any modifications in his obligations.

The variation required should never the less be carried out. The matter in difference shall be settled by arbitration.

The Employer shall give a reasonable notice to the Contractor to enable him to make arrangements for variation in work required by him.

NEGLIGENCE

If the Contractor shall neglect to execute the work with the due diligence or shall contravene the provisions of the contract, the Employer may give notice in writing to the Contractor, calling upon him to make good the neglect or contravention complained of.

If the Contractor fails to comply with such notice within a reasonable period, the Employer shall have the option and be at liberty to determine the contract and to take the work wholly or in part out of the Contractor's hands and complete it either by himself or his agents at a reasonable price. The Employer shall then be entitled to retain any balance payment which may otherwise be then due on the contract.

The cost of execution of such work as aforesaid will be adjusted against the payment due to the Contractor. If the cost of execution shall exceed the balance due to the Contractor, the Employer shall be at liberty to dispose off any of the Contractor's material or consumption system that may be at site and apply the proceeds for payment of the difference of such cost and recover the balance by process of law, or from any moneys due to the Contractor.

INITIAL INSPECTION

- a. The equipment offered shall be inspected by Employer/Consulting Engineers at site or at the Contractor's / Manufacturer's premises as per conditions.
- b. The Employer or his authorized representatives shall have full power to inspect drawings of any portion of the work or examine the materials and workmanship of the system at the Contractor's works or at any place from which the material or equipment is obtained. Acceptance of any material or equipment shall in no way relieve the Contractor of his responsibilities for meeting the requirements of specifications.
- c. All types of routine and type tests shall be carried out at the works of the Contractor or the manufacturers of the components. The Employer shall be free to witness any or all tests if he so desires. If required by the Employer, the Contractor shall permit his representative to be present during any of the tests.

EXTRA ITEM

Any kind of extra work not specifically mentioned in the bill of quantity and also other than the variable items, shall be approved based on nearest rates available for any other items closed to the nature of the work of the extra item or by rate analysis or by cost + 15% margin as approved by us.

SEASONAL TESTS & TAKE OVER

A. "INITIAL TEST" for Air-conditioning Equipment-

The System ready for seasonal tests of summer & monsoon. The contractor shall arrange to carry out various initial tests as detailed below in the presence of & to the complete satisfaction of the Employer or his representative. Any defects or shortcoming found during the tests shall be speedily rectified or made good by the Contractor at his own expenses.

The initial tests shall include but not be limited to-

- i. Test & check the proper functioning & settings of switchgear, starters, contractors, safety controls and electrical motors etc., to ensure their proper functioning.
- ii. Check the system against leaks in different circuits, alignment of motors, V-belt adjustment, control setting & all such other tests, which are essential for smooth functioning of the system.
- iii. No load test to be carried out.
- iv. Operate and check the proper functioning of all Components viz, compressors, pumps, air handling units, water softening plant etc.
- v. Check and adjust the water flow in the system to the original design through such components viz, chiller and cooling coils etc.
- vi. Check air distribution system and provide design air flow in all areas by adjusting the grilles, diffuser and dampers whether specifically shown on the drawing or not.
- vii. Check the performance of the equipment on cooling cycle in summer and monsoon taking hourly DB and WB readings in all rooms non-stop for 72 hours (3 days) for trial test.
- viii. The initial test performs in the above manner, shall be concluded with reports specifying completeness of all supplied equipment’.

B. “CONTINUOUS TEST” for Air-conditioning Equipment-

In addition to the “Initial Tests” the Contractor shall also give continuous running tests of the system i.e. during peak summer and monsoon, when the ambient conditions are close to the design ambient conditions. Each test shall be for (3) three continuous days non-stop in case the System is normally used for 24 hours, otherwise, for the duration of the normal use of the system for six consecutive days. The first summer test may be taken on the completion of the installation and satisfactory commissioning provided the ambient temperature and Humidity are near their peaks. The Employer / Consultant will provide 3-Days’ notice for conducting the tests.

The Contractor shall provide all necessary tools, instruments, gauges, flow meter, anemometer etc., as may be required for conducting the various tests. He shall also provide necessary lubricants, refrigerant gas etc. and required personnel for the tests. However, the Employer shall provide water and power for the tests.

C. “PERFORMANCE TEST” -

After erection of various air handling units and fan coil Units, all the units shall be tested for their rated capacity. Following parameters have to be assured by the contractor-

- i. TR PRODUCED:
 - A) By airflow, temperature & humidity of air.
 - B) By water circulation.
- ii. CFM specified at given temp. & R. H. conditions.
- iii. Static pressure.
- iv. Electric power consumption for each equipment.
- v. Any other utilities required shall also have to be measured compared to the committed consumption.
- vi. Consumption of items whatsoever nature not specified in the tender shall be considered as extra consumption and will disqualify the performance test.
- vii. Delta T and Delta P to be checked and noted.
- viii.

Canvass Temperature	-	°C / °F
Grille Temperature	-	°C / °F
Return Air Temperature	-	°C / °F

(Signature of the Contractor with Seal)

REJECTION OF DEFECTIVE SYSTEM

If the completed system or any portion thereof before it is taken over is found defective or fails to fulfill the intent of the specifications, the Contractor shall on receipts of notice from the Employer forthwith make defective system good. Should he fail to do so within a time considered reasonable by the Employer, The Employer may reject and replace at risk, and expense to the Contractor, the whole or any portion of the system, which is defective or fails to fulfill the requirement of the contract.

The Employer shall have the right to operate all equipment, if in operating condition, whether or not such equipment have been accepted as complete and satisfactory.

TAKING OVER: After completion of the installation and satisfactory commissioning of the system, the same shall be taken over by the Employer.

CLEAN-UP OF THE WORK SITE: During erection the Contractor shall at all times keep the working and storage areas free from waste or rubbish. On time-to-time, as directed by Employer in Charge, he shall remove all temporary structures, debris, insulation bitumen, EPS wastage and leave the premises neat and clean in a satisfactory condition.

DEFECT LIABILITY: The Contractor shall guarantee that all material, machinery and components, supplied, fabricated, designed and installed by him shall be free from defects due to faulty material and/or workmanship and that the system shall perform satisfactorily, and the efficiency of the system and all the components shall not be less than the values laid down in the specifications and the capacities shall be at least equal to those specified. The period of the guarantee shall be twelve (12) months from the date of commissioning of one month after the successful final test whichever is later, during which period any or all components found to be defective shall be replaced or repaired free of charge and shortcoming found in the system as specified shall be removed at no extra cost.

The Contractor shall make good any loss of refrigerant and oil at his own cost. The Contractor shall provide the necessary personnel and tools for fulfilling the guarantee.

If the defects are not remedied within a reasonable time, the Employer may proceed to get the defects remedied at the Contractor's risk & expenses without prejudices to his right.

The Contractor shall without any cost to the Employer carry out during the guarantee period all routine and special maintenance of the system and attend to any defects that may arise in the operation of the system.

SAFETY

All equipment shall be complete with approved safety devices wherever a potential hazard to personnel exists and with provision for safe access of personnel to and around equipment for operational and maintenance functions.

These items shall include not only those usually furnished with elements of machinery but also covers, guards, crossovers, stair ways, ladders, platforms, handrails etc. which are necessary for safe operation of the system. The tenderer shall include for all safety devices including but not limited to the following items-

- a. Belt guards shall be designed with approved provision to facilitate belt inspection, adjustment, replacement and general servicing.
- b. All couplings are to be covered with an approved guard, fabricated from welded plate and structural steel.
- c. Access Ladders and Platforms

Provisions shall be made for access ladders (particularly for cooling tower) and platforms with handrails as necessary to provide operator's safe access to inspection.

TEST PROCEDURE

Design Conditions

The inside and outside conditions will be recorded for 48 hrs. (2 days) duration on hourly basis. The outside and inside Dry Bulb and Wet Bulb temperatures shall be recorded by the means of a sling psychrometer with mercury thermometers. The relative humidity shall be computed from the psychrometric chart. The inside Dry Bulb Temp. And relative humidity shall fall within the specified limits.

Capacity of the System

The following aspects shall be checked before conducting the performance tests

- The outside conditions shall be as close to the design values as possible. The tests shall be arranged during the peak summer and monsoon.
- The internal loads of various spaces shall be close to the design values as far as possible.
- The system shall be fully loaded, and the temperatures stabilized.
- Hourly readings of airflow shall be recorded by a calibrated flow meter.
- Hourly readings of pressure, temperature, electrical current. Voltage and power factor shall be properly recorded.
- The flow of air over the cooling coil will be measured by recording the velocity of air across each filter placed before the cooling coil. The velocity shall be measured by means of an anemometer.

MODE OF MEASUREMENT

THE FOLLOWING MEASUREMENT CODE SHALL APPLY TO THIS CONTRACT

Piping

- a) Piping will be measured in running lengths (meters)
- b) No special measurement of bends, elbows, reducer, expanders, tees, cross etc. will be made. All such fittings/accessories will be treated as normal piping.
- c) The length of the piping including accessories and fittings will be measured along the center line of piping.

Electrical Work

- a) All cables shall be measured in running lengths as finally installed at site. No wastage measurement will allow.
- b) Control Cable / wiring for a plant inside the plant room shall be treated as a lump sum item.
- c) All measuring instruments indicating lamps etc. shall form part of the equipment specified and no separate measurement shall be made for such items.

Note - Contractor should note that all the measurement should be carried out strictly as per mode of measurement stated above. However, all the work should be carried out as per relevant I. S. codes specified.

LIST OF INDIAN STANDARDS

All work shall conform to the I.S. Standards (latest additions), Local Supply Authorities Rules and Regulations, Indian Electricity Act & rules, National Building code and Fire Safety Norms. All works, equipment, cables, wires & components thereof should be manufactured & installed as per standards specified by Bureau of Indian Standards (BIS) Where such standards do not exist, then the covered items should be approved from Architects/ Consultants /Clients prior to purchase & delivery to site

- **IS 4081:** Safety code for blasting and related drilling operation
- **IS 6313:** Code of practice for anti termite measures in building
- **Part 1:** Constructional measures.
- **Part 2** Code of practice for ant termite measures in buildings: Pre constructional chemical treatment measures
- **CONCRETE**
- **IS 456:** Code of practice for plain and reinforced concrete.
- **MASONRY WORK -BRICK WORK**
- **IS 1077:** Specification for common burnt clay building bricks.
- **IS 2212:** Code of practice for brick work
- **IS 2250:** Code of practice for preparation and use of masonry mortars.
- **PLASTERING AND POINTING**
- **IS 412:** Specification for expanded metal steel sheets for general purposes
- **IS 1635:** Code of practice for application of cement and cement-lime plaster finishes
- **IS 2402:** Code of practice for external rendered finishes.
- **IS 1542** Specification for sand for plaster (Class A grading)
- **FLOORING**
- **IS 1443:** Code of practice for laying and finishing of cement concrete flooring tiles.
- **IS 4457:** Specification for ceramic unglazed vitreous acid resisting tiles.
- **DOORS AND WINDOWS**
- **IS 287:** Recommendation for maximum permissible moisture content for timber used for different purposes in different zones
- **IS 848:** Specification for synthetic resin adhesive for plywood (Phonetic and amino plastic)
- **IS 1141:** Code of Practice for seasoning of timber
- **IS 2202:** Specification for wooden flush door shutters (solid core type)
- **Part I:** Plywood face panels
- **Part II:** Particle board panels and hard board faced panels
- **GLAZING**
- **IS 1081;** Code of practice for fixing and glazing of metal, (steel and aluminium) doors, windows and ventilators.
- **IS 2553:** Specification for safety glass
- **IS 2835:** Specification for flat transparent sheet glass
- **IS 3548:** Code of practice for glazing in building

➤ **PAINTING AND POLISHING**

- **IS 1477:** Code of Practice for painting of ferrous metals in building
- **Part I:** Pre-treatment
- **Part II:** Painting
- **IS 2338:** Code of Practice for finishing of wood and wood based materials
- **Part I:** Operation and workmanship
- **Part II:** Schedule
- **IS 2395:** Code of Practice for painting, concrete, masonry and plaster surfaces
- **IS 3537:** Specification for ready mixed paint, finishing interior, for general purposes to IS colors
- **IS 5410:** Specification for cement paints colour, as required
- **IS 6278:** Code of Practice for white washing and colour washing
- **IS: 732** Code of Practice for Electrical wiring installation (System Voltage not exceeding 650V)
- **IS: 1646** Code of Practice for fire safety of buildings (General Electrical Installation)
- **IS: 2509** rigid non-metallic conduits for electrical installations.
- **IS: 1293** Pin Plugs and Sockets.
- **IS: 694** PVC insulated cables with copper conductors for voltages up to 1100 Volts
- **IS: 9532** Specification for conduits for Electrical Installation
- **IS: 3854** 5A & 15A Switches.
- **IS: 3043** Earthing.
- **Indian Electricity Act, 1956 and Rules and Fire Insurance Regulations.**
- **IS: 5216** Guide for safety procedures & practices in electrical work
- **IS: 3072** Installation & maintenance of Switch gear
- **IS: 2551** Guide for danger notice plates
- **IS: 8923** warning symbols for dangerous voltages
- **IS :13947** Specification for low-voltage switchgear & Control gear
- **IS :1777** Industrial luminaries with metal reflectors
- **IS :1913** General & safety requirement of luminaries
- **IS :116** Circuit Breakers for AC system
- **IS :3427** Metal enclosed switchgear & Control gear
- **IS :4237** General requirements for switchgears not exceeding 1000 Volts
- **IS :4615** Switch socket outlets
- **IS:159:** Busbars & busbars connections
- **IS: 415** marking & arrangement for switchgear board's main connections & auxiliary wiring.
- **IS: 722** Three phase watt hour meter with MDI
- **IS: 1248** Directing acting electrical indicating instruments
- **IS: 1293** three pin plugs & sockets outlets.
- **IS: 2147** Degree of protection provided for enclosure for switchgear

- **IS: 2509** PVC electrical Conduits
- **IS: 2075** Current Transformer
- **IS: 2834** LT Capacitors
- **IS: 3106** Code of practice for installation & maintenance of switchgear.
- **IS: 1753** aluminium Conductors for insulated conductor
- **IS: 3961** Recommended current ratings for cables
- **IS: 1646** Code of fire safety of building (General Electrical installation)
- **IS: 6381** Specifications for construction & testing of electrical apparatus.
- **IS: 1818** Isolator & Earthing switches
- **IS: 3106** Code of practice for selection
- **IS: HRC** Cartridge fuse unit up to 650 Volts
- **IS: 10332** Part I to Part V Specification of Luminaries

List of Approved Makes/Brands

The contractor shall quote for the best of the materials specified below with ISI mark wherever applicable. The contractor shall obtain prior approval from the Bank / Architect before placing order for the specific materials agencies. In case of non-availability of any of the approved/ specified materials/agency during the execution of the work, the Bank /Architect may approve suitable equivalent brand/agency and his decision shall be final and binding on the contractor.

CIVIL, PLUMBING AND FURNISHING	
Materials	Manufacturers
Plywood	Signature /ANCHOR / ARCHID / CENTURY / KENWOOD / PLANO/ GREEN MAYUR (6mm, 9mm, 12mm, 19mm).
Medium Density Fireboard (MDF)	GREEN/ VIR/CENTURY/ARCHIDS/ASIS/NUWOOD
Laminates	Signature/Formica /Greenlam / Century / Signature / Heritage / Archid / Newmica / Amulya, Sunmica (1.0 / 1.5mm thick)
Block board	Anchor / Century / Archid / Kenwood / Samrat / Greenply
Soft Board (pin up board)	Jolly board, Western India plywood
Gyp. Board	India gypsum/ST.GOBIN
Metal ceiling	Luxelon, Superseal, Trident, Armstrong
Vertical blinds	Vista, Universal
Screws	GKW / Mettle fold
Brass hinges	Reliance / Punit heavy duty
Hardware/Patch fittings	Shalimar, Everite / HATTICH/EBCO (brass powder coated)/Dorma HATTICH/EBCO /Ozone
Drawer shutter lock	Vijayan / Godrej (3 set of keys)/EBCO
Ball catch	Magnetic (M-2) / Brass
Door lock / handles	4-C ACME, Golden, Godrej, Ultra
Veneer	Anchor / Green / Durian / Century/TIMEX
Adhesives	Fevicol (SH), Mowicoll, Mahacol, Araldite
Wood preservatives	Woodguard, PCI, Black Japan
Door closure	Yale / Efficient gazets, Everite Hyper/ HATTICH/EBCO
Glass/ Glass tainted	Modi / Triveni / Hindustan Palington / Asahi / Saint Gobain
Melamine Polish	Asian paint, MRF, Nerolac, French / Zinc oxide
Paint	Asian / Kansai Nerolac /Berger / Akzonoble/ Nippon
AC grill	Air products/ Omicron / Patrawala
Vitrified tiles	Marbonite, / Navin / Orient Bell / Jonson, Kajaria/Simpholo/Somani
Ceramic tiles (Non-Skid)	Jhonson & Jhonson, Kajaria, Nitco, Regency/Somani
Alu. Door & window sections	Ajit India / Jindal / Indal / Hindalco Bhansali of 25 microns.
Floor springs	Everite / Hemco / Hyper/Ozone
Wood preservative	Asian paint / British paint

(Signature of the Contractor with Seal)

Grey Cement (43 or 53 Grade)	A.C.C, L&T, AMBUJA, Jaypee
White Cement	Birla White, J.K.
Putty	Birla White Putty
Sun control film	3M/Garware or equivalent
Carpet	Hitkari / Modi / Trans Asia
Rubber foam	34 density mm foam
Toilet paper holder	Parryware / Hindustan / Nycer
Pressed Steel frames for Doors	Fabricated P.S. frames approved by Engineer/Architect.
Pressed Steel frames for Aluminium- Windows, Ventilators.	Indal / Jindal of 25 microns approved by Engineer/Architect.
Flush Door Shutters	Century/ Anchor / Archid / Green / Samrat / Kenwood ,Signature
Aluminum Hardware/ fittings	Argent / Classic / Shalimar
Brass Mortice Locks & Latches	Godrej
Latches with Internal locks	Godrej / Ultra/Ebco
Floor Type Hydraulic door closer (Floor spring) Heavy duty	Everite / Hypper / Hemco/Ozone/Godrej or Equivalent
Water proofing material / compound.	CICO - I / Roff
Glazed Tiles	Johnson & Johnson / Naveen / Nitco / Regency / Khajaria
Synthetic Enamel Paint	Asian / Kansai Nerolac /Berger / Akzonoble/ Nippon
Oil Bound Distemper	Asian / Kansai Nerolac /Berger / Akzonoble/ Nippon
Plastic Paint	Asian / Kansai Nerolac /Berger / Akzonoble/ Nippon
Panelled Doors	National / Century / Swastik / Kitply
P.V.C. Doors	Sintex / Mihir / Fixopan
Rolling Shutter & Grills	Good quality locally available material.
Hardeners	"Ironite".
Red Oxide	"Asian"
Waterproof cement paint / acrylic paint	Asian / Kansai Nerolac /Berger / Akzonoble/ Nippon
Glazing	"Hindustan Pilkington" Tiveni, Modi
Water seal (Epoxy-sterarate) compound	As approved by Architect / Engineer
Ironmongers and brass fittings	Jiranna / CIEF/ Shalimar / Everite.
Drawer sliding fitting	Earl bhihari

(Signature of the Contractor with Seal)

Polish	French/Zinc Oxide / Melamine (Asian)
Chairs	Godrej/ Featherlite / Officetech / Nilkamal / Eurotech / Bosch
Seats & Covers solid (W.C.)	Commander/ Admiral/ Supreme
PVC Low level flushing cisterns	Commander / Parryware / Hindustan
C P Fittings / Toilet Accessories ISI Marked	Jaquar / Aquel / ESS ESS / Marc
UPVC Pipes (S/W/R Pipes)	Diplast / Supreme / Finolex / Prince
Centrifugal cast CI Pipes & Fittings	RIF / Neco
G.I. Pipes (B-Class)	ITC / Tata / Zenith
G.I. Fittings (ISI Brand)	Unik / AMCO
Gunmetal valves (Full way, check and globe valves)	Leader / Zoloto (with ISI mark) / Sant
S.W. Pipes / Fittings & Gully traps	Perfect / Tirmurti / Bharat
Ball valves	Voltec / Zoloto
Stainless steel sinks	Nirali / Neelkanth/ Diamond
HDPE Tanks	Sintex / Polycon / Unitank
Mirrors	Modiguard
C.I. Manhole Cover	RIF / BIC / Neco
Chemical Doser	Asia Lmi / Prominent / Ion Exchange
Pressure Gauge	H. Guru
Level Indicator	RM Approved Make
Air Relief Valves	RB / Zolto
PVC Encapsulated footrest.	KGM approved make
C.I. Sluice valves	Kirloskar, Leader with ISI mark on the boAsst.
A.C. Pipes	Everest Ramco
R.C.C. Pipes	Indian Hume pipe
Brass & Gun metal globe, gate valves, foot valves	Leader NETA with ISI marking on the boAsst.
Sanitary Fixture	Hindware / Parryware / Cera
urinals with integrated sensor technology	Parryware/ Cera / Hindware / Johnson & Johnson, /Jaguar
Storage Heaters	Recold / Spherehot
Sand cast soil pipes and fittings	NECO sand cast / B.I.C.

(Signature of the Contractor with Seal)

Bracket supports	Hi-tech/MS brackets as per drawings
Connection pipe-PVC	Kohinoor/Viking
Butterfly valve	Intervalve
PVC Fittings (Moulded)	Clarion / Finolex / Prince
Non-return valve	Intervalve
UV filter	Alfa-level
Fire Door	RDG / Shakti / Metdor
RCC pipe	Indian Hume Pipe Co. / Spun Pipe Co.
Stoneware Pipe and fittings	Trimurti / Perfect Potters / Bharat
ELECTRICAL AND AIRCONDITIONING	
M.C.B. / RCCB / RCBO	Havells/ Legrand/Indo Asian/ABB
Distribution Boards	Havells/ Legrand/Indo Asian/ABB
Switch Fuse Units with HRC fuses	GE / L&T / ABB
Molded Case Circuit Breaker (MCCB)	Havells/ Legrand/Indo Asian/ABB/L & T (D sine)
Current Transformer / Meters / Voltage Transformers / Relays / Starters / Contactors / Selector Switch / Indicating Lamps	L & T / SIEMENS / AUTOMATIC ELECTRIC / CONTROL & SWITCH GEARS / ABB
Cable Glands and Sockets	SIEMENS
PVC insulated Copper conductor wires	Havells/FINOLEX / RR / POLYCAB
Telephone Wires and cables	FINOLEX / (RPG/BIRLA ERICSSON POLYCAB
Television Coaxial cable	FINOLEX / RR / RPG / L&T
PVC / XLPE Insulated 11 KV / 1.1 KV Cables	Havells/ Gloster/ NICCO / FINOLEX/POLYCAB
Switches and Sockets outlets (Conventional piano type)	Havells/ANCHOR/Legrand
Switches and Sockets outlets (Modular type)	Havells/ANCHOR/Legrand
Industrial outlet	Havells/ Legrand/Indo Asian/ABB
PVC Conduits and accessories	AKG/BEC/CAP/SEIKO /POLYCAB
Ceiling Fans / Exhaust Fans	Havells/CROMPTON/BAJAJ
Floor / Wall Raceways to	MK/ LK/ MDS

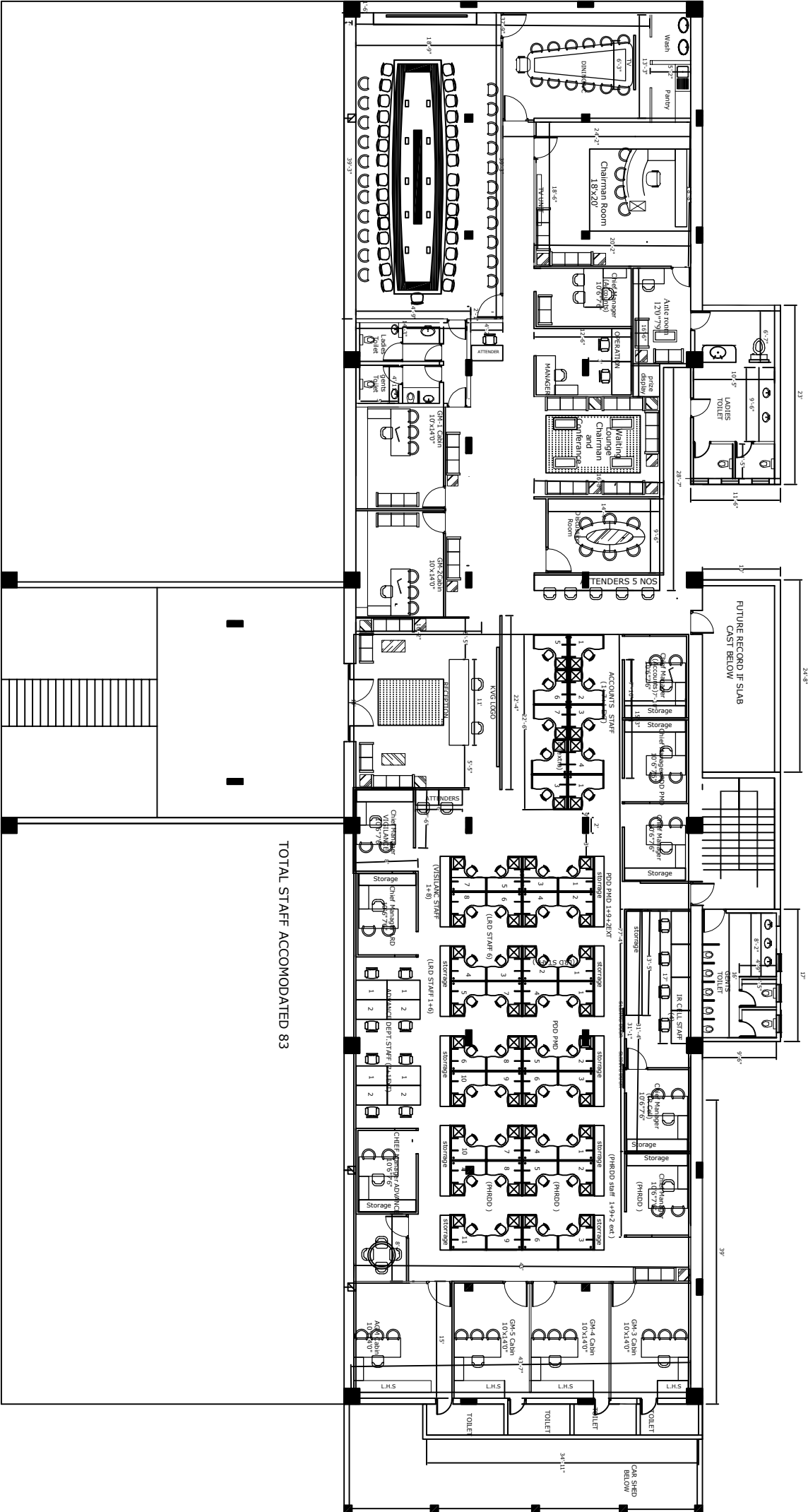
(Signature of the Contractor with Seal)

date	
Computer networking - outlet	AMP/SYSTEMAX / LUCENT
Ceiling Rose holders	Havells/ANCHOR/Legrand
Buzzers/Bell Push bell	Havells/ANCHOR/Legrand
MCB Distribution Board	Havells/ Legrand/Indo Asian/ABB
Cable Glands/Lugs	SIEMENS/DOWELLS
Electronic Regulator	Havells/ANCHOR/Legrand
Contactors	SIEMENS/L&T/ABB/SCHNIEDER
RO water purifier 50LPH capacity,	Aquaguard
Inverter AC Duct Units	Toshiba/Carrier/Bluestar/Daikin/Samsung

NOTE:

Sr. No.	Description
1.	The choice of the final makes shall be made by the bank/ consultant
2.	The samples or Cat. No. of all should be approved before execution.

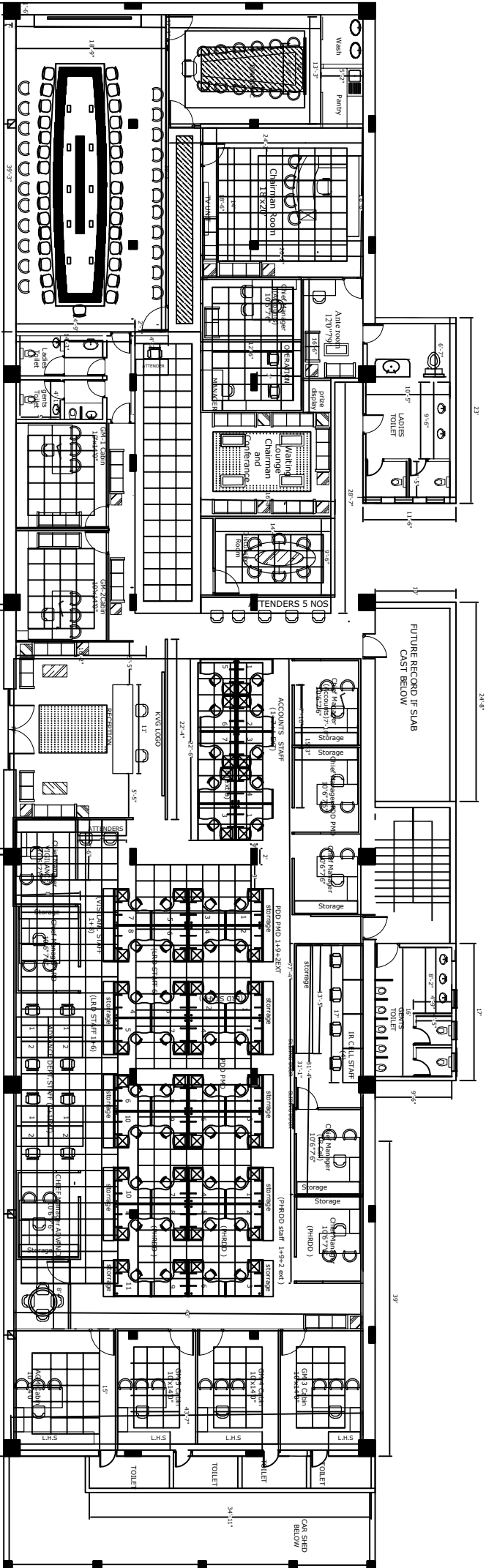
(Signature of the Contractor with seal)



TOTAL STAFF ACCOMMODATED 83

FIRST FLOOR CARPET AREA 7600.0 Sft APPROX (excluding toilet & Open Terrace).

PROJECT : PROPOSED INTERIORS OF FIRST FLOOR KVG BANK HO AT DHARWAD		DRAWING TITLE : FIRST FLOOR INTERIOR LAYOUT OPTION-2 REVISED-1		PURPOSE:- TENDER		NOTE:	
CLIENT : KARNATAKA VIKAS GRAMIN BANK H.O. AT DHARWAD	SCALE:	N T S					
	DEALT:	Ar.Pavi, M.S					
	CHECKED:	Ar.Anil Kulkarni					
	DATE:	08-08-2023					
				Commenced Date : 15/07/2023		STATUS FOR APPROVAL	
				REV.		DWG NO: KVG/ARCH001	
				REVISION DESCRIPTION			
				R1		04-08-2023	



TOTAL STAFF ACCOMMODATED 83

PROJECT :
PROPOSED INTERIORS OF FIRST FLOOR KVG BANK HO AT DHARWAD

DRAWING TITLE :
FALSE CEILING

NOTE:

STATUS

DWG NO:

CLIENT :

SCALE: N T S

DEALT:

CHECKED:

DATE:

REV/

REVISION DESCRIPTION

DATE

KULKARNI ASSOCIATES

Consulting Architects, Engineers,Project Management Consultants Interior Designers & Regd. Valuers
Sankarapada Road No-203,2nd floor Above Canara bank Raghuvahalli
Kankdeputa Road No-203,2nd floor Above Canara bank Raghuvahalli
Branch Raghuvahalli Village,Utaranhalli hodi Bangalore-560062
Email Id : kulkarni.associates@yahoo.com

NOTE

AREAS

LEGEND

PROJECT:
PROPOSED INTERIOR LAYOUT FOR
KVG BANK DHARWAD

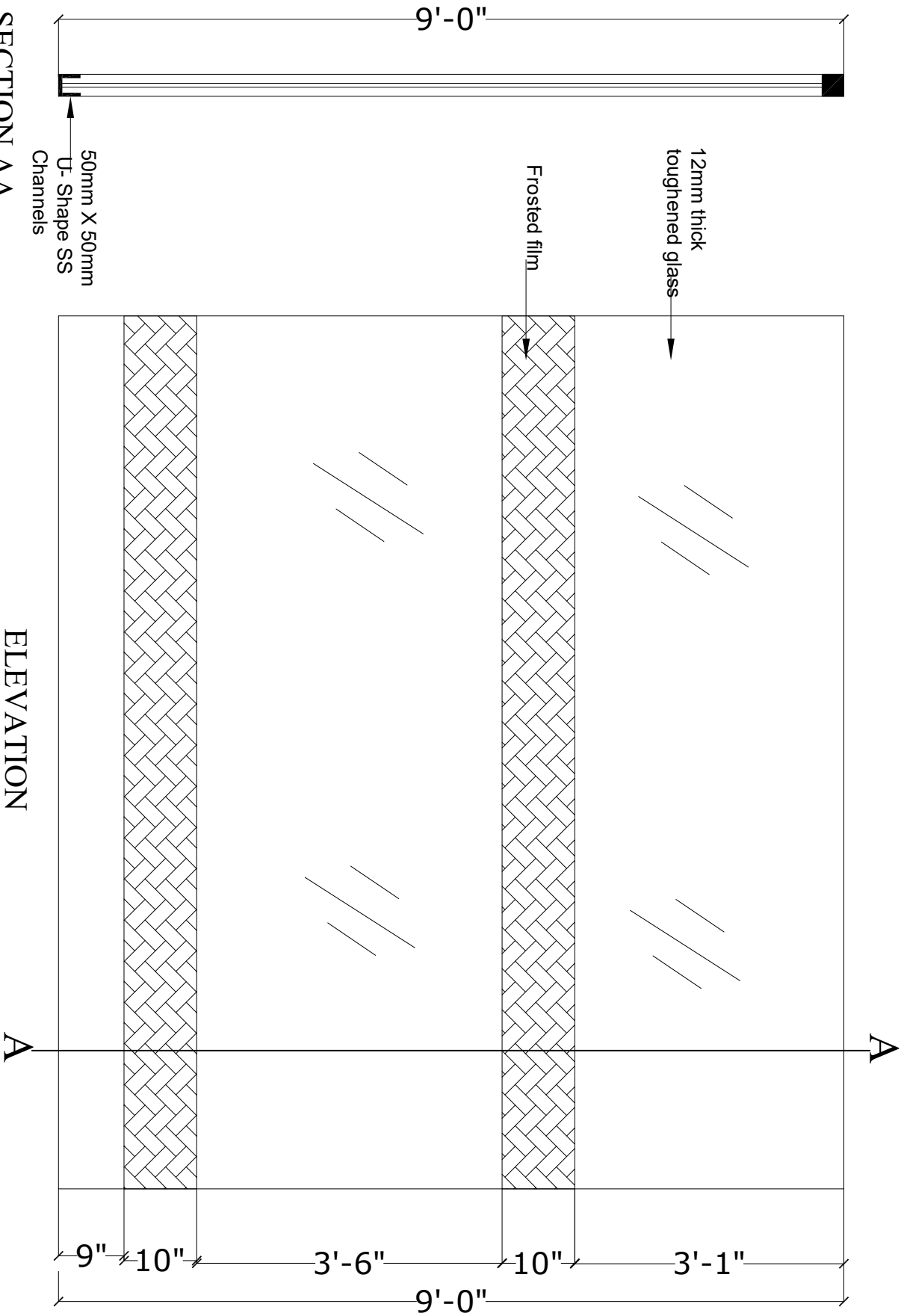
CLIENT : KVG BANK

DRAWING TITLE :
FULL HEIGHT GLASS PARTITION

REV	REVISION DESCRIPTION	DATE
SCALE :	N T S	
DEALT :	S/MK	
CHECKED :	A-Arifi Kulkarni	
DATE :	10 - 10 - 23	
STATUS :		DWG NO. :
GOOD FOR CONSTRUCTION		ARCH-004

KULKARNI ASSOCIATES

Consulting Architects, Engineers, Project Management Consultants Interior Designers & Regd. valuers
Surya Prerna Building next to Adiga's Restaurant,
Kankarapura Road No-203, 2nd floor, above Camara bank, Rajghughnalli
Block1, Rajghughnalli Village, Uttarahalli, north Bangalore-560062
Email Id: kulikamati.associates@yahoo.com



SECTION AA

ELEVATION

PLAN

NOTE

AREAS

LEGEND

PROJECT:

**PROPOSED INTERIOR LAYOUT FOR KVG
BANK DHARWAD**

CLIENT : KVG BANK

DRAWING TITLE :
PARTLY GLAZED FULL HEIGHT
PARTITION

REV	REVISION DESCRIPTION	DATE

SCALE: NTS

DEALT: SMK

CHECKED : Ar.Anil Kulkarni

DATE: 19-11-23

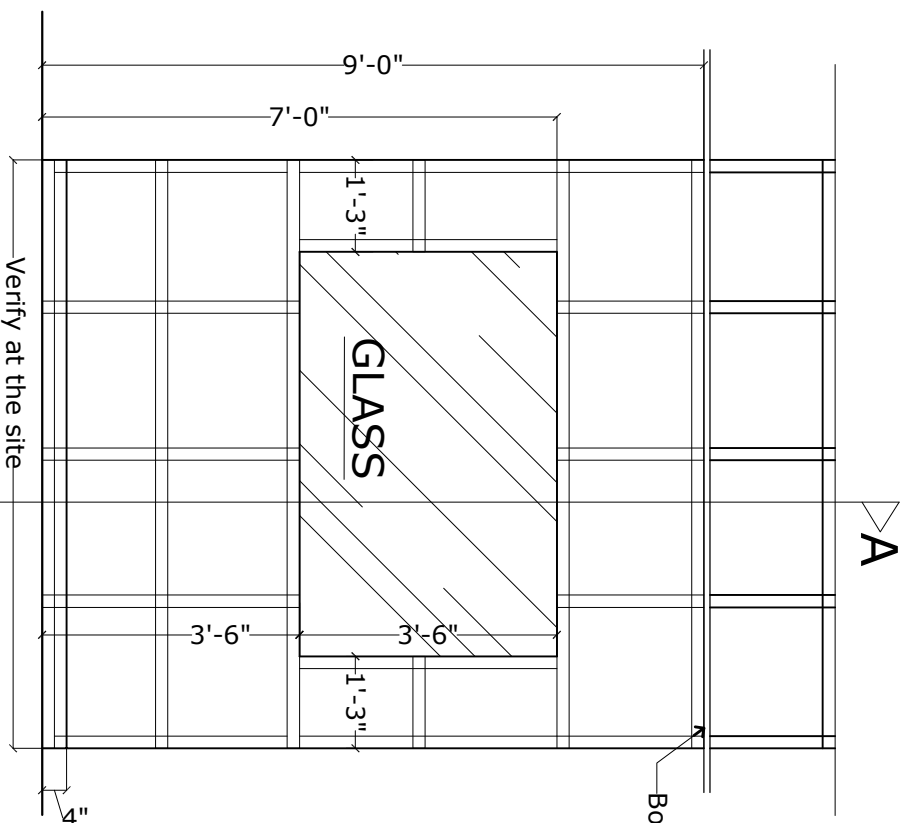
STATUS:

GOOD FOR CONSTRUCTION

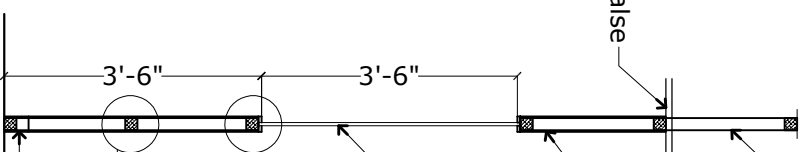
DWG NO:
ARCH005

KULKARNI ASSOCIATES

**Consulting Architects, Engineers, Project Management
Consultants Interior Designers & Regd. valuers**
Surya Prema Building next to Adiga's Restaurant,
Kankapura Road No-203, 2nd floor, Above Canara bank Raghuvahalli
Branch Raghuvahalli Village, uttarahalli noli Bangalore- 560062
Email id: kukkurmahesh@yahoo.com



Bottom of false ceiling



- Partition to be made of 2"x2" Aluminium frame work at 2'-0" center to center both ways.

- Aluminum frame work to be covered with 8mm thk BWR plywood, finished with 1mm thk laminate and/or 4mm thk veneer.

-10mm thk Float Glass to be fixed with $\frac{1}{2}$ "thk beading [beach wood or equivalent] finished melamine polish.

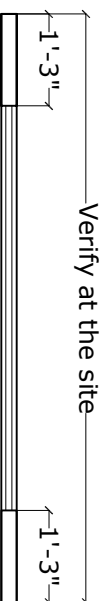
Detail - 2

Detail - 1

Skirting finished with 12mm thk BWR plywood, finished with 1mm thk laminate and/or 4mm thk veneer.

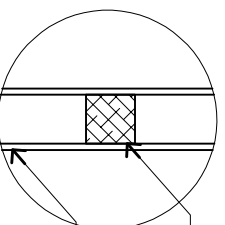
ELEVATION

SECTION-AA



- Verify at the site

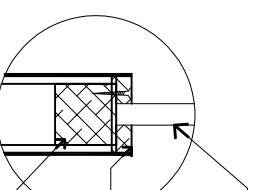
PLAN



- 2"x2" Aluminium frame
work at 2'0" center to
center bothways.

DETAIL-1

Aluminum framework to be covered with 8mm thk BWR plywood, finished with 1mm thk laminate and/or 4mm thk veneer, all veneer and beading surfaces to be finished with melamine polish.

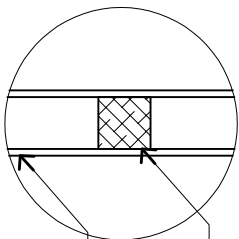


– 12mm thk Float Glass
with edges machine
polished fixed with $\frac{1}{2}$ "
thk beading work.

- Beading surfaces to be finished with melamine polish.

DETAIL-2

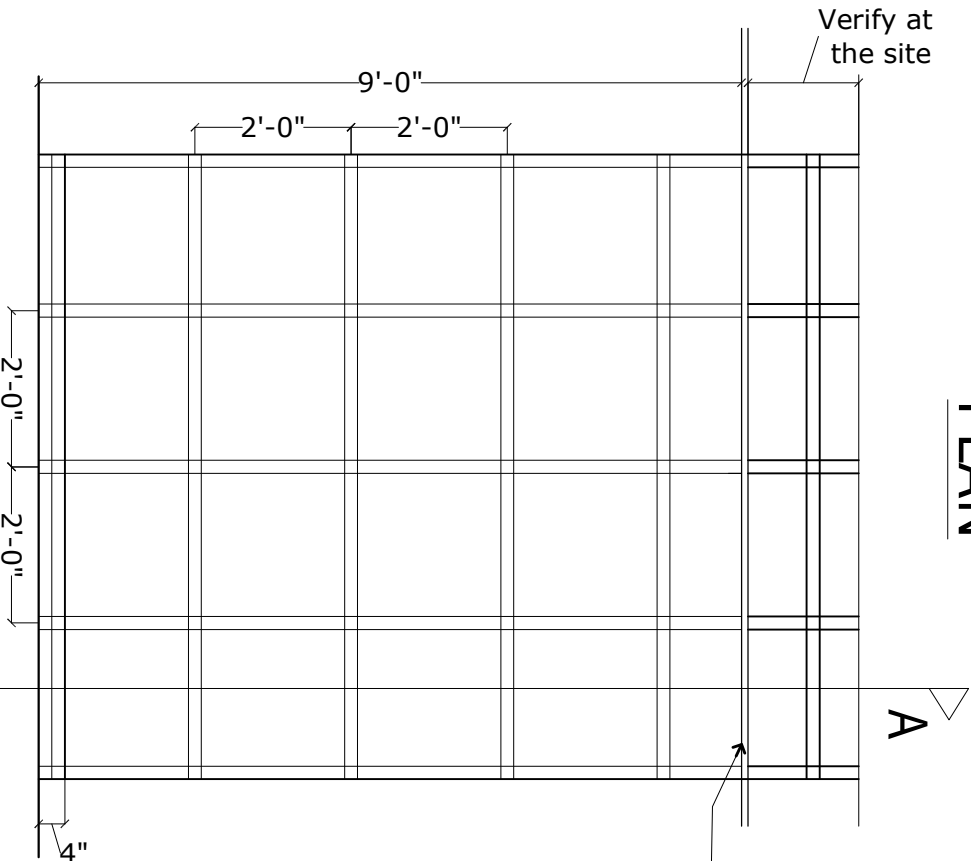
— 2"x2" Aluminium frame
work at 2'0" center to
center bothways.



2"x2" Aluminium frame work at 2'0" center to center both ways.

Aluminium framework to be covered with 8mm thk BWR plywood, finished with 1mm thk laminate and/or 4mm thk veneer, all veneer and beading surfaces to be finished with melamine polish.

PLAN



DETAIL-1

Bottom of false ceiling

Partition to be made of 2"x2" Aluminium frame work at 2'-0" center to center both ways.

Aluminium frame work to be covered with 8mm thk BWR plywood, finished with 1mm thk laminate and/or 4mm thk veneer.

Detail - 1

Skirting finished with 12mm thk BWR plywood, finished with 1mm thk laminate and/or 4mm thk veneer.

ELEVATION

SECTION-AA

NOTE

AREAS

LEGEND

PROJECT:

PROPOSED INTERIOR LAYOUT FOR KYG BANK DHARWAD

CLIENT : KYG BANK

DRAWING TITLE :
FULL SOLID HEIGHT PARTITION

REV	REVISION DESCRIPTION	DATE
SCALE :	NTS	
DEALT :	SMK	
CHECKED :	Ar.Arnil Kulkarni	
DATE :	19 - 11 - 20	
STATUS :	GOOD FOR CONSTRUCTION	DWG NO: ARCH006

KULKARNI ASSOCIATES

Consulting Architects, Engineers, Project Management Consultants, Interior Designers & Regd. Valuers
Kulkarni Associates Pvt. Ltd. Regd. Office: 2nd Floor, Above Canara Bank, Rajghunhalli
Branch: Rajghunhalli, Village: Utanahalli, Hoalli: Bangalore-560062
Email Id : kulkarni.associates@yahoo.com

NOTE

.....

.....

PROJECT:
PROPOSED INTERIOR LAYOUT FOR KVG
BANK DHARWAD

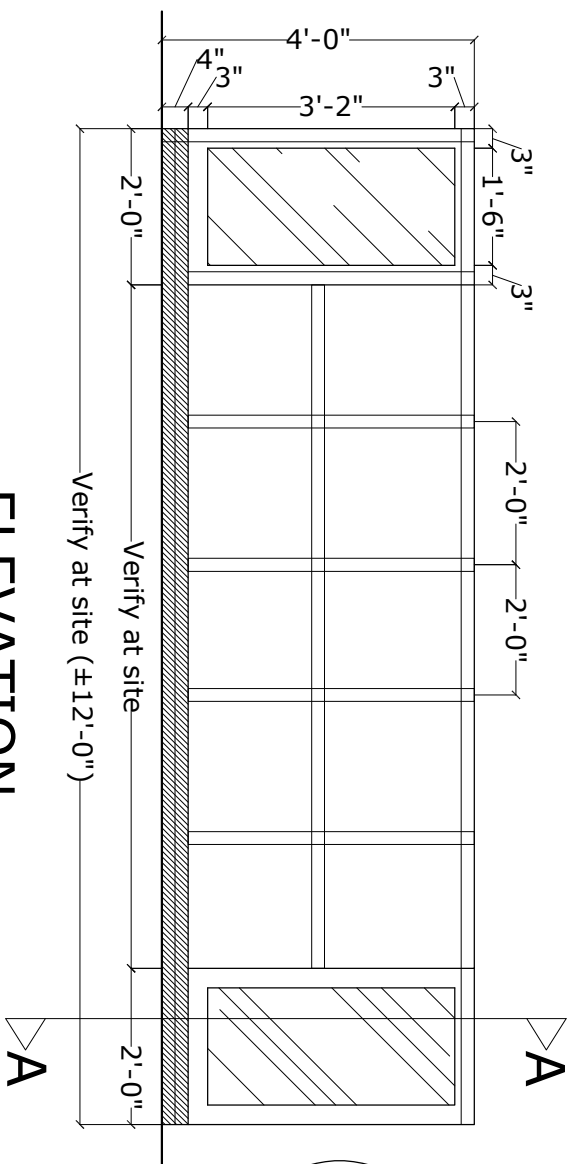
CLIENT: KVG BAN

DRAWING TITLE :
PARTLY GLAZED LOW HEIGHT
PARTITION

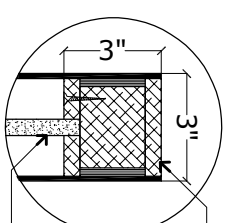
REV	REVISION DESCRIPTION	DATE
SCALE :	N T S	
DEALT :	SMK	
CHECKED :	Ar.Anil Kulkarni	
DATE :	19 - 11 - 20	
STATUS :		
GOOD FOR CONSTRUCTION		
	DWG NO. : ARCH007	

KULKARNI ASSOCIATES

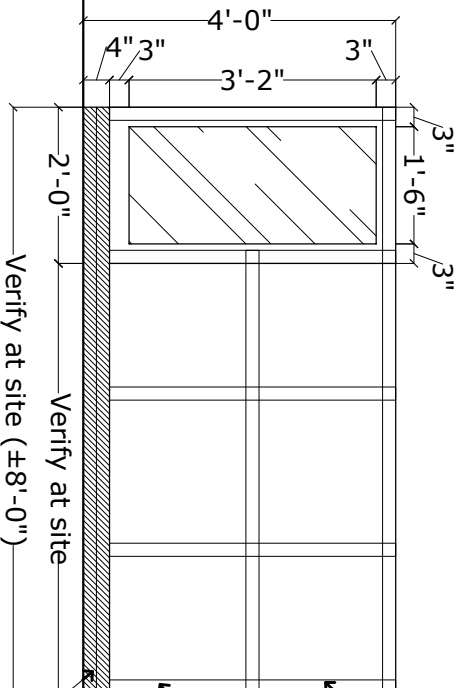
**Consulting Architects, Engineers, Project Management
Consultants Interior Designers & Regd. valuers**
Surya Penna Building next to Adiga's Restaurant,
Kannakapura Road No-203, 2nd floor, Above Canara bank Raghuvahalli
Branch, Raghuvahalli Village, Uttarahalli, nobel Bangalore- 560062
Email Id : kulikum.associates@yahoo.com



DETAIL-1

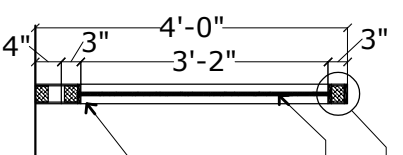


- All exposed edges of the partition to be fixed with $\frac{1}{2}$ " thick wood beading around finished with melamine polish.
- 8mm thick Float Glass with edges machine polished fixed with $\frac{1}{2}$ " thick beading work.



ELEVATION

- Partition to be made of 2"x2" Aluminum frame work at 2'-0" center to center both ways.
- Aluminum frame work to be covered with 8mm thk BWR plywood, finished with 1mm thk laminate and/or 4mm thk veneer.
- Skirting finished with 12mm thk BWR plywood, finished with 1mm thk laminate and/or 4mm thk veneer.

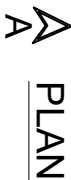


– Detail - 1

8mm thk Float Glass to be fixed with $\frac{1}{2}$ "thk beading [beach wood or equivalent] finished melamine polish.

— Partition to be made of 2"x2" Aluminum frame work and covered with 8mm thk BWR plywood, finished with 1mm thk laminate and/or 4mm thk veneer.

SECTION-AA



NOTE		
AREAS		
LEGEND		
PROJECT:		
PROPOSED INTERIOR LAYOUT FOR KVG BANK DHARWAD		
CLIENT : KVG BANK		
DRAWING TITLE :		
COLUMN PANNELLING		
REVIEW	REVISION DESCRIPTION	DATE
SCALE :	NTS	
DEALT :	SMK	
CHECKED :	Ar.Anil Kulkarni	
DATE :	19 - 11 - 23	
STATUS :	GOOD FOR CONSTRUCTION	
DWG NO.:	ARCH008	

KULKARNI ASSOCIATES
Consulting Architects, Engineers, Project Management
Consultants Interior Designers & Regd. -valuers
Surya Prem Building, next to Adaga's Restaurant,
Kankarapeta Road No-203, 2nd floor, Above Carat bank Raghunathalli
Branch Raghunathalli village, Itanagaralli hobli Bangalore- 560062
Email Id : kulkarniassociates@yahoo.com

6'-9"

Pivot

12mm thick toughened
glass

SS bush finished handle
30mm thick 750mm long

DOOR WITH PATCH FITTINGS

(Door width as per site condition)

Floor spring

NOTE

AREAS

LEGEND

PROJECT:

PROPOSED INTERIOR LAYOUT FOR KVG
BANK DHARWAD

CLIENT : KVG BANK

DRAWING TITLE :
ENTRANCE GLASS DOOR DETAIL

REV	REVISION DESCRIPTION	DATE
SCALE :	NTS	
DEALT :	SMK	
CHECKED :	Ar.Anil Kulkarni	
DATE :	28 - 11 - 23	
STATUS :		DWG NO:
GOOD FOR CONSTRUCTION		ARCH009

KULKARNI ASSOCIATES

Consulting Architects, Engineers, Project Management
Consultants, Interior Designers & Regd. Valuers
Karnataka Road No-203, 2nd floor Above Canara Bank, Rajgurunahalli
Branch, Rajgurunahalli, Village, Uttarahalli, Hoalli Bangalore-560062
Email Id : kulkarni.associates@yahoo.com

NOTE

AREAS

LEGEND

PROJECT:

PROPOSED INTERIOR LAYOUT FOR KYG BANK DHARWAD

CLIENT : KYG BANK

DRAWING TITLE :
DOOR WITH VIEW PANEL

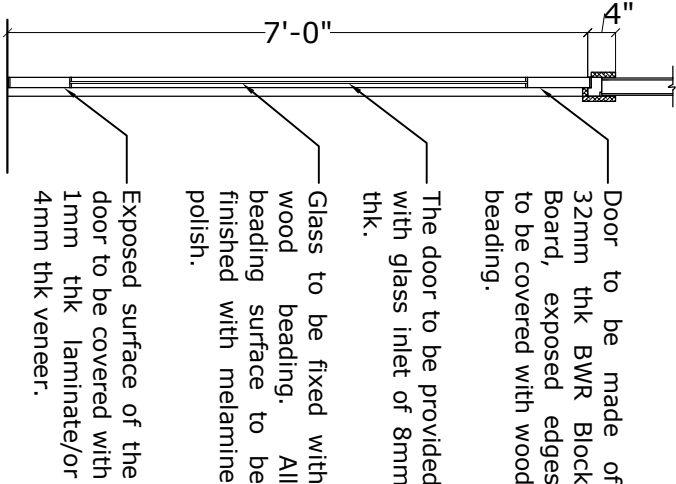
REV	REVISION DESCRIPTION	DATE
-----	----------------------	------

SCALE :	NTS
DEALT :	SMK
CHECKED :	Ar.Arnil Kulkarni
DATE :	19 - 11 - 23

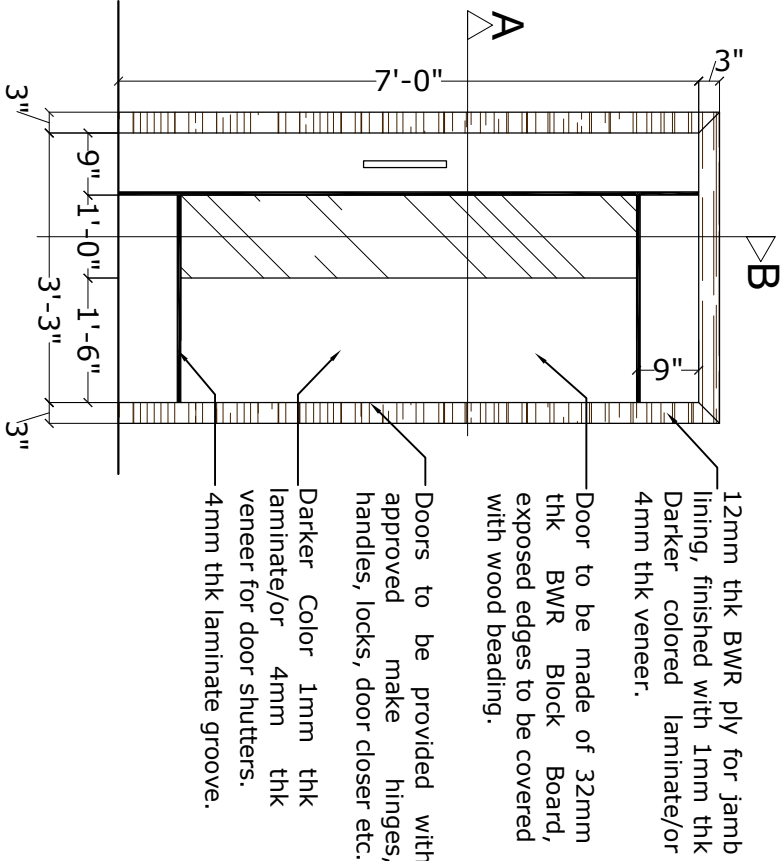
STATUS :	DWG NO:
GOOD FOR CONSTRUCTION	ARCH010

KULKARNI ASSOCIATES

Consulting Architects, Engineers,Project Management
Consultants, Interior Designers & Regd. Valuers
Kankalappa Road No-203,2nd floor Above Canara Bank Raghunathalli
Branch,Raghunathalli Village,Uttarahalli Hoalli Bangalore-560062
Email Id : kulkarni.associates@yahoo.com

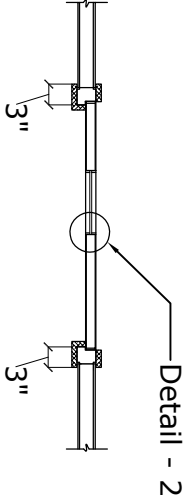


SECTION - BB

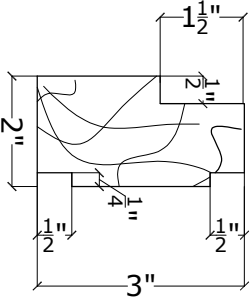
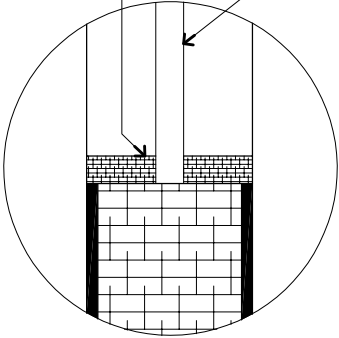


ELEVATION

SECTION - AA



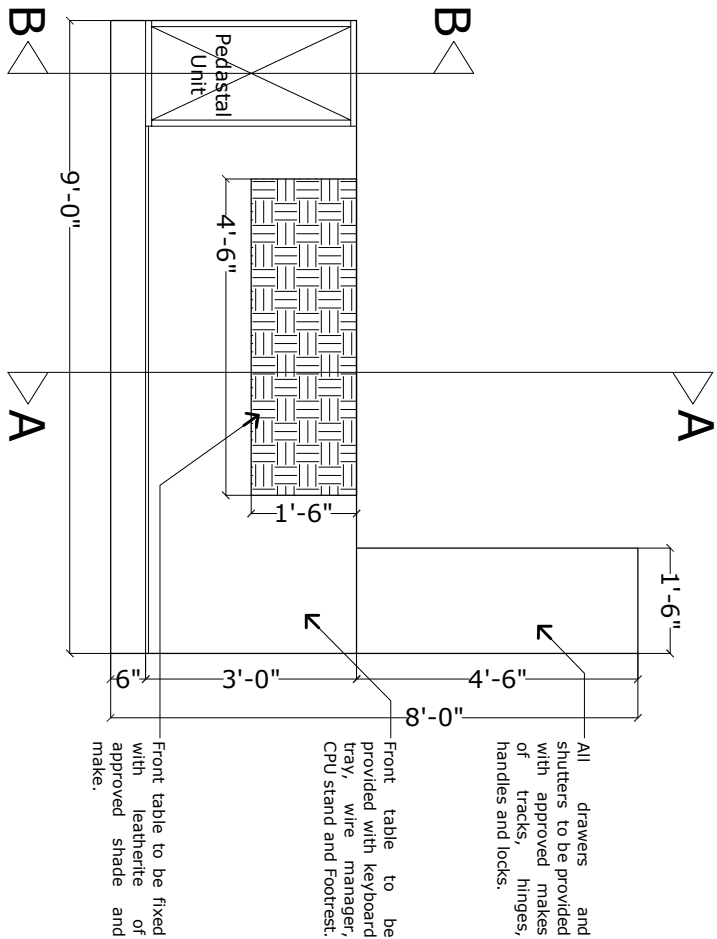
The door to be provided with glass inlet of 8mm thick. Glass to be fixed with 1/2" thick beading finished with melamine polish.



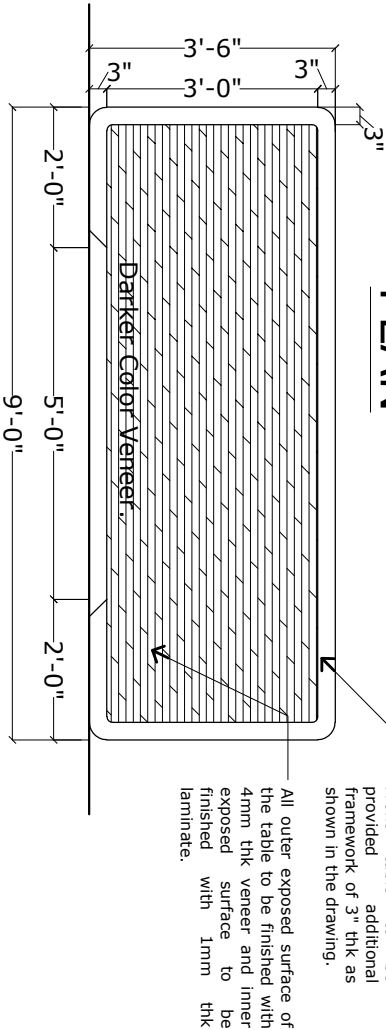
FRAME

DETAIL - 2

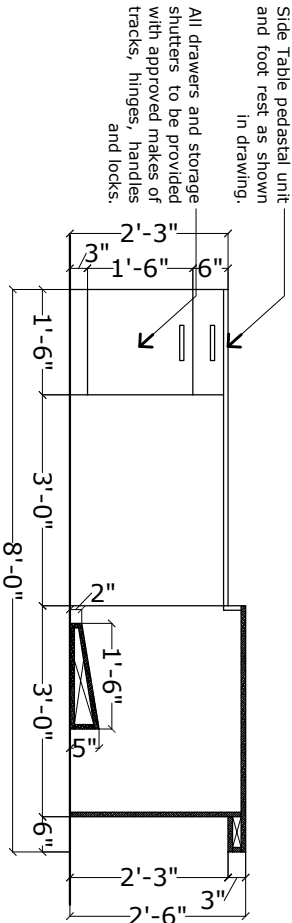
DETAILS



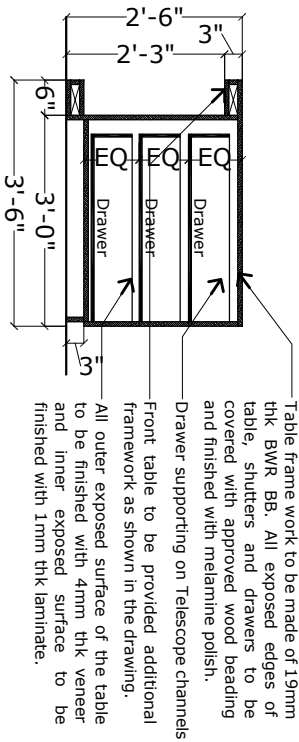
PLAN



ELEVATION

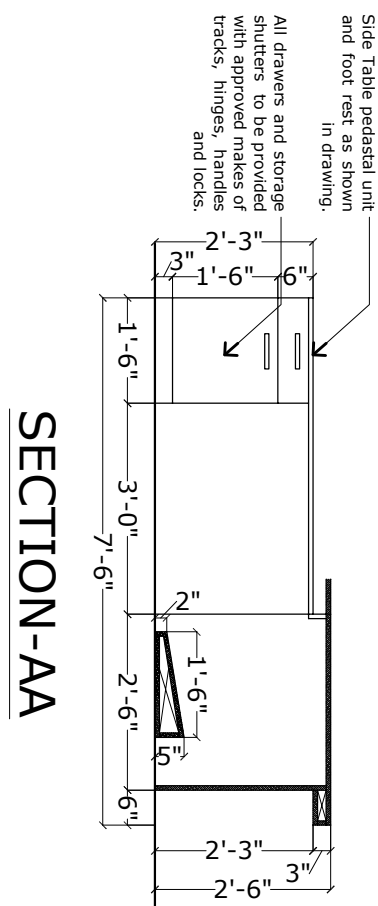


SECTION-AA



SECTION-BB

PROJECT : PROPOSED INTERIOR LAYOUT FOR KYG BANK DHARWAD		DRAWING TITLE : CHAIRMAN TABLE		NOTE:	
CLIENT : CANARA BANK		SCALE:	N T S		
		DEALT:	SMK		
		CHECKED:	Ar Anil Kulkarni		
		DATE:	19 - 11 - 20		



PLAN

Dimensions: 2'-9" (total width), 3" (top edge thickness), 2'-3" (inner width), 3" (bottom edge thickness), 1'-0" (left edge thickness), 4'-0" (total length), 1'-0" (right edge thickness).

Material specifications: DAKER COLOR LEATHERITE LAMINATE.

Notes: Front table to be provided additional framework of 3" thick as shown in the drawing. All outer exposed surface of the table to be finished with 1mm thick LAMINATE and inner exposed surface to be finished with 1mm thick laminate.

Technical drawing of a table frame showing dimensions and components. The drawing includes the following dimensions and labels:

- Overall width: 2'-6"
- Distance between drawers: 2'-3"
- Drawer width: 3"
- Distance between drawers (inner): 2'-6"
- Distance between drawers (outer): 3'-0"
- Drawer height: 6"
- Drawer depth: 3"
- Labels: EQ (Exposed surface), Drawer, and Telescope channels.

Table frame work to be made of 19mm thick BWR BB. All exposed edges of table, shutters and drawers to be covered with approved wood beading and finished with melamine polish.

Drawer supporting on Telescope channels

Front table to be provided additional framework as shown in the drawing.

All outer exposed surface of the table to be finished with 1mm thick Laminated inner exposed surface to be finished with 1mm thick laminate.

ELEVATION

PROJECT : PROPOSED INTERIOR LAYOUT FOR KYG BANK DHARWAD		DRAWING TITLE : CM TABLE		NOTE:		STATUS GOOD FOR CONSTRUCTION		DWG NO: ARCH-012	
CLIENT : CANARA BANK									
SCALE:		NTS				KULKARNI ASSOCIATES Consulting Architects, Engineers, Project Management Consultants Interior Designers & Regd. valuers Surya Preme Building, next to Adiga's Restaurant, Kanakapura Road No-203, 2nd floor, Above Canara bank Raghunathalli Erceni, Begurupalli Village, Uthmanur Taluk, Bangalore-560002 Email ID : Kulkarni.associates@jainbo.com			
DEALT:		SMK							
CHECKED:		Ar: Anil Kulkarni							
DATE:		19 - 11 - 20							

NOTE

AREAS

LEGEND

PROJECT:
PROPOSED INTERIOR LAYOUT FOR KVG
BANK DHARWAD

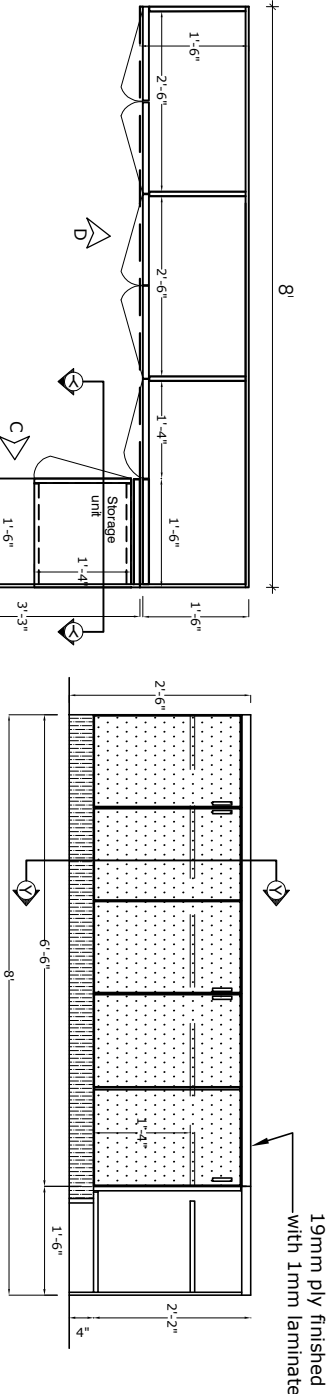
CLIENT : KVG BANK

DRAWING TITLE :
CM FRONT AND SIDE TABLE WITH
STORAGE

REV	REVISION DESCRIPTION	DATE
SCALE :	NTS	
DEALT :	SUSHMITHA M K	
CHECKED :	Ar Anil Kulkarni	
DATE :	10 - 10 - 23	
STATUS :		DWG NO:
ONLY FOR TENDER PURPOSE	WD-12a-FD	

KULKARNI ASSOCIATES

Consulting Architects, Engineers, Project Management
Consultants, Interior Designers & Regd. Valuers
Kondalapur Road No-203, 2nd floor Above Canara Bank, Rajpudhaili
Branch, Rajpudhaili, Village, Utnarahalli, Hoel, Bangalore-560062
Email Id : kulkarni.associates@yahoo.com



ELEVATION - D

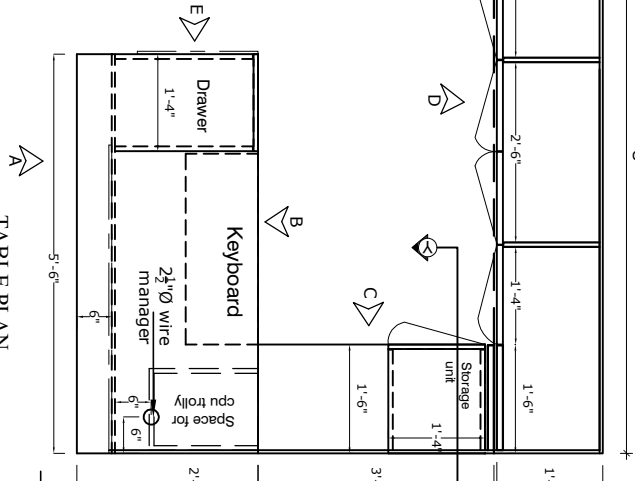
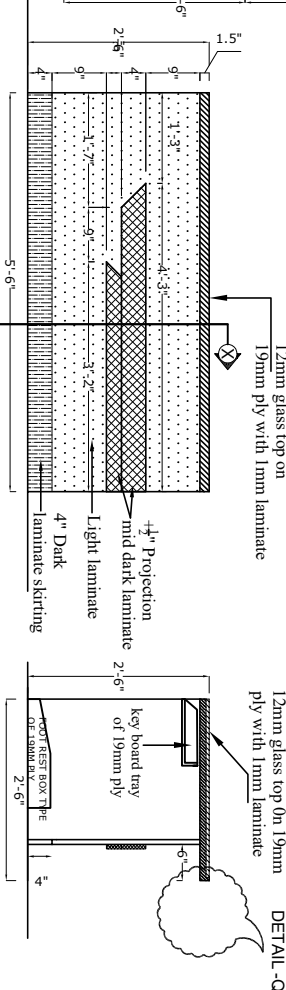
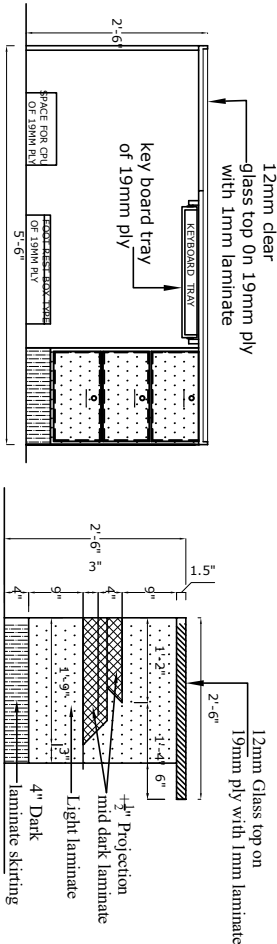


TABLE PLAN

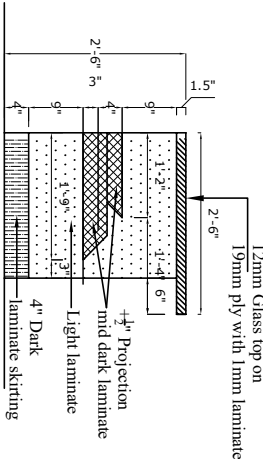


ELEVATION - A

SECTION - X-X

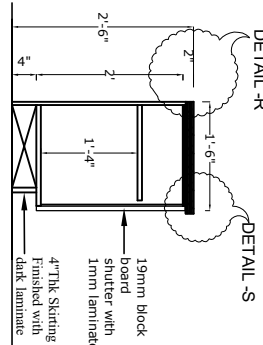


ELEVATION - B



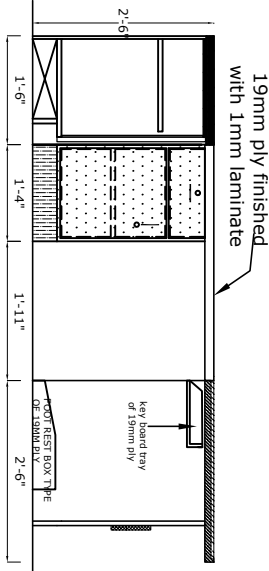
ELEVATION - E

SECTION @ -Y-Y'

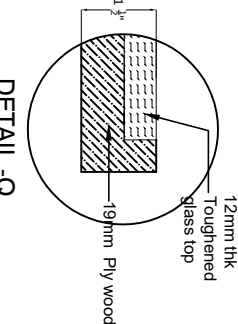


DETAIL - R

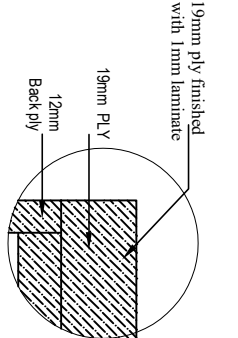
DETAIL - S



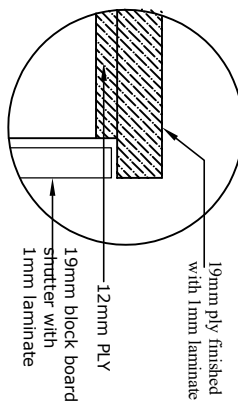
ELEVATION - C



DETAIL - Q



DETAIL - R



DETAIL - S

NOTE

100

0000000000

PROJECT:

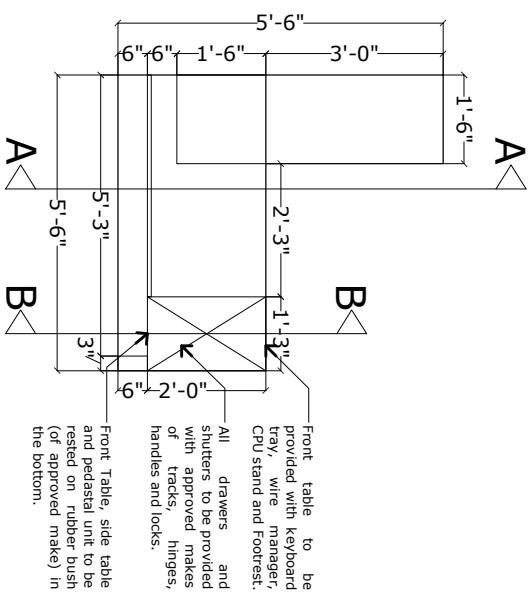
CLIENT:
KVG BANK

DRAWING TITLE :
CHIEF MANAGER
TABLE

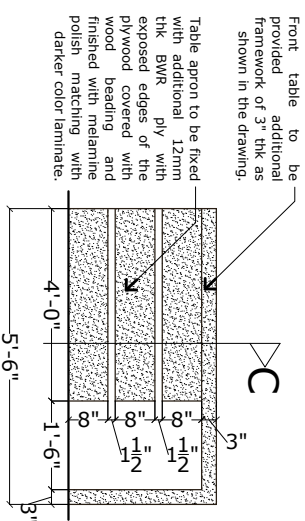
<u>REV</u>	<u>REVISION DESCRIPTION</u>	<u>DATE</u>

KULKARNI ASSOCIATES

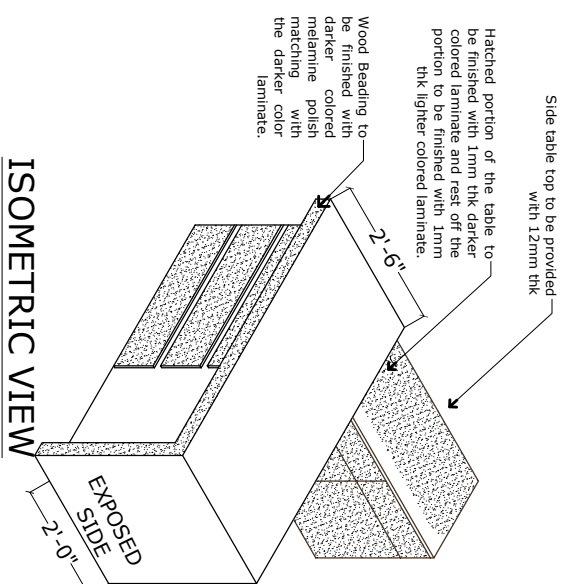
**Consulting Architects, Engineers, Project Management
Consultants Interior Designers & Regd. valuers**
Surya Penna Building next to Adiga's Restaurant,
Kannakapura Road No-203, 2nd floor, Above Canara bank Raghuvahalli
Branch, Raghuvahalli Village, Uttarahalli, nobel Bangalore- 560062
Email Id : kulikumari.associates@yahoo.com



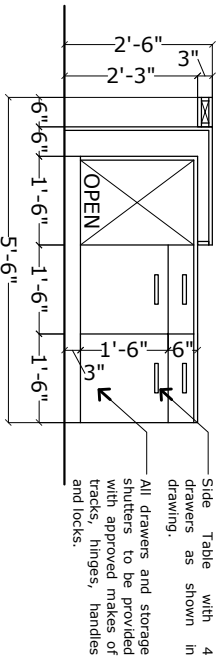
PLAN



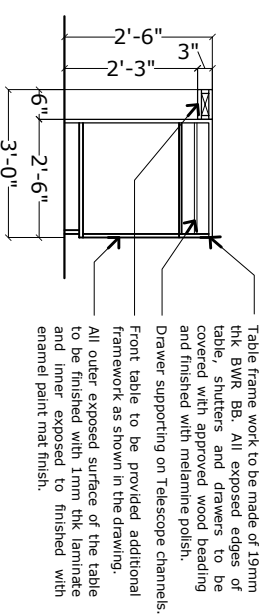
ELEVATION



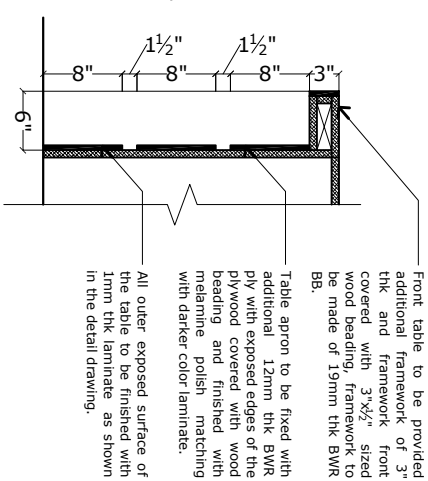
ISOMETRIC VIEW



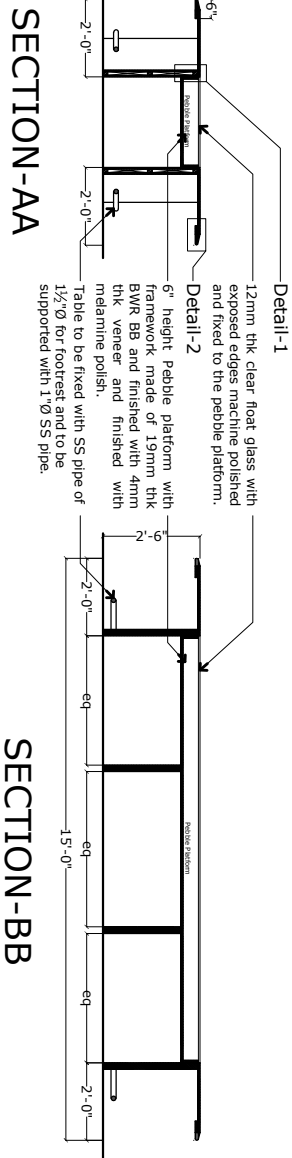
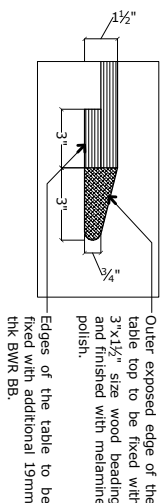
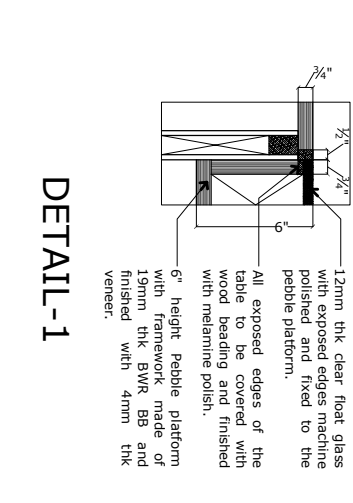
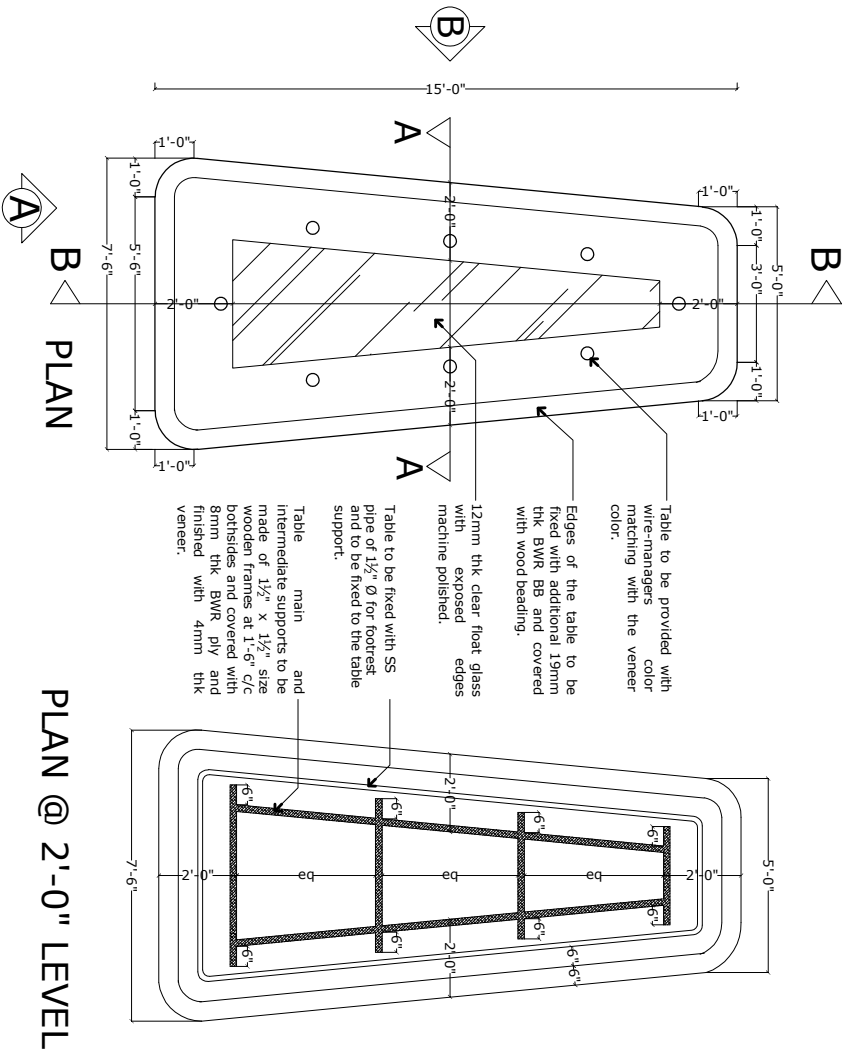
SECTION - AA



SECTION - BB



DETAIL - C



NOTE

AREAS

LEGEND

PROJECT:

PROPOSED INTERIOR LAYOUT FOR KVG
BANK DHARWAD

CLIENT : KVG BANK

DRAWING TITLE :

VIDEO CONFERENCE/DINING TABLE

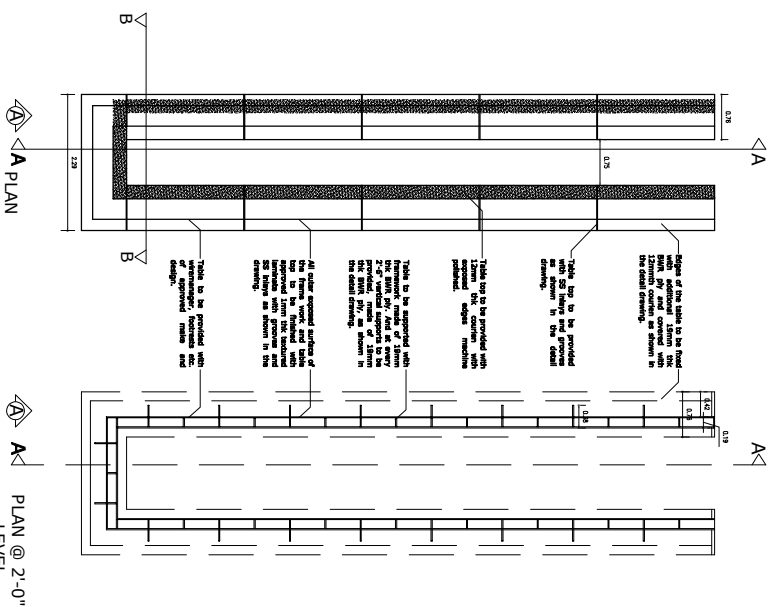
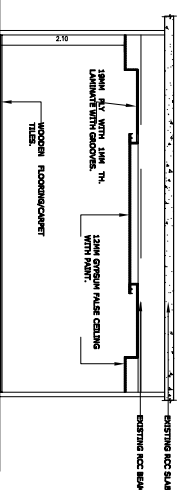
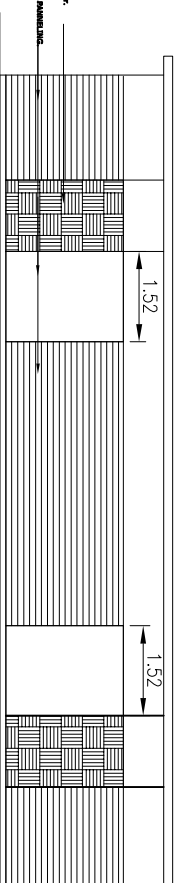
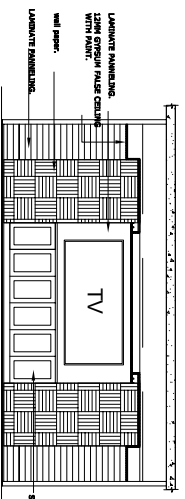
REV	REVISION DESCRIPTION	DATE
-----	----------------------	------

SCALE :	NTS
DEALT :	SUSHMITHA M K
CHECKED :	Ar.Anil Kulkarni
DATE :	10 - 10 - 23

STATUS :	DWG NO:
ONLY FOR TENDER PURPOSE	WD-04b-FD

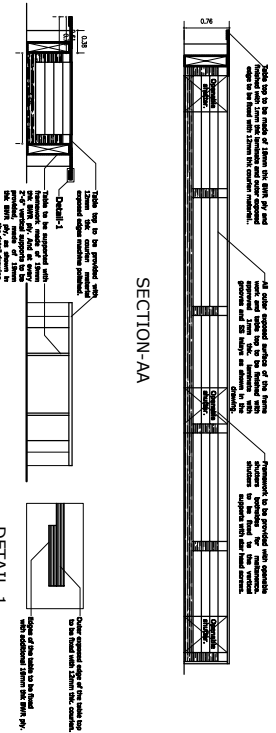
KULKARNI ASSOCIATES

Consulting Architects, Engineers, Project Management
Consultants, Interior Designers & Regd. Valuers
Kulkarni Associates Pvt. Ltd.
Branch: Rajgurunhalli, Village: Utanahalli, HoDl: Bangalore-560062
Email Id : kulkarni.associates@yahoo.com



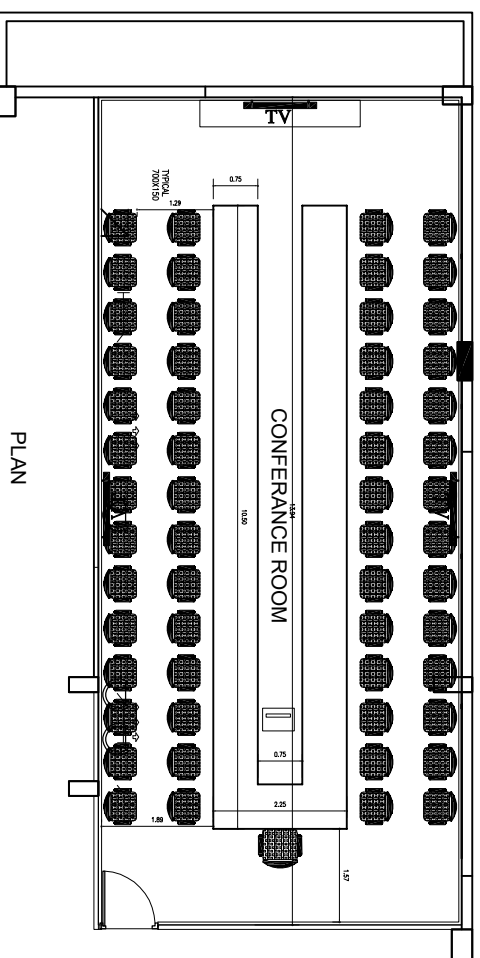
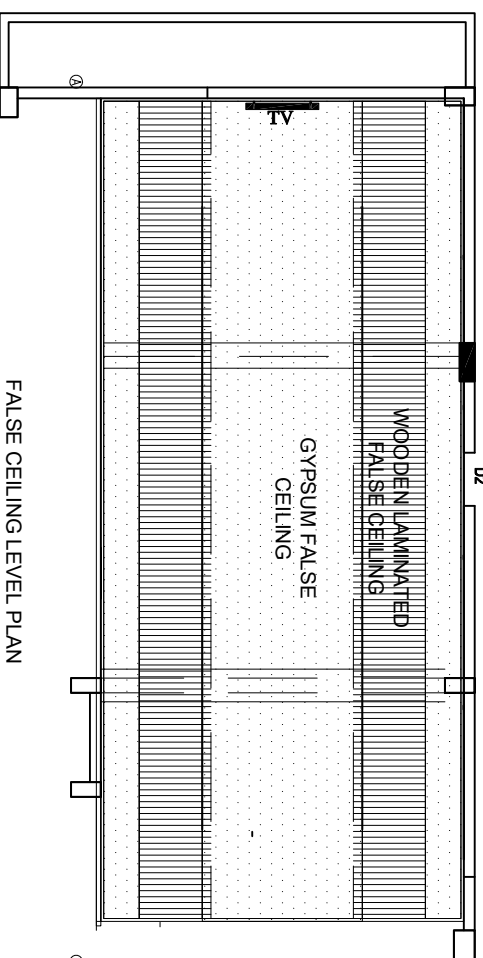
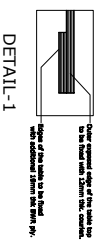
PLAN @ 2'-0"
LEVEL

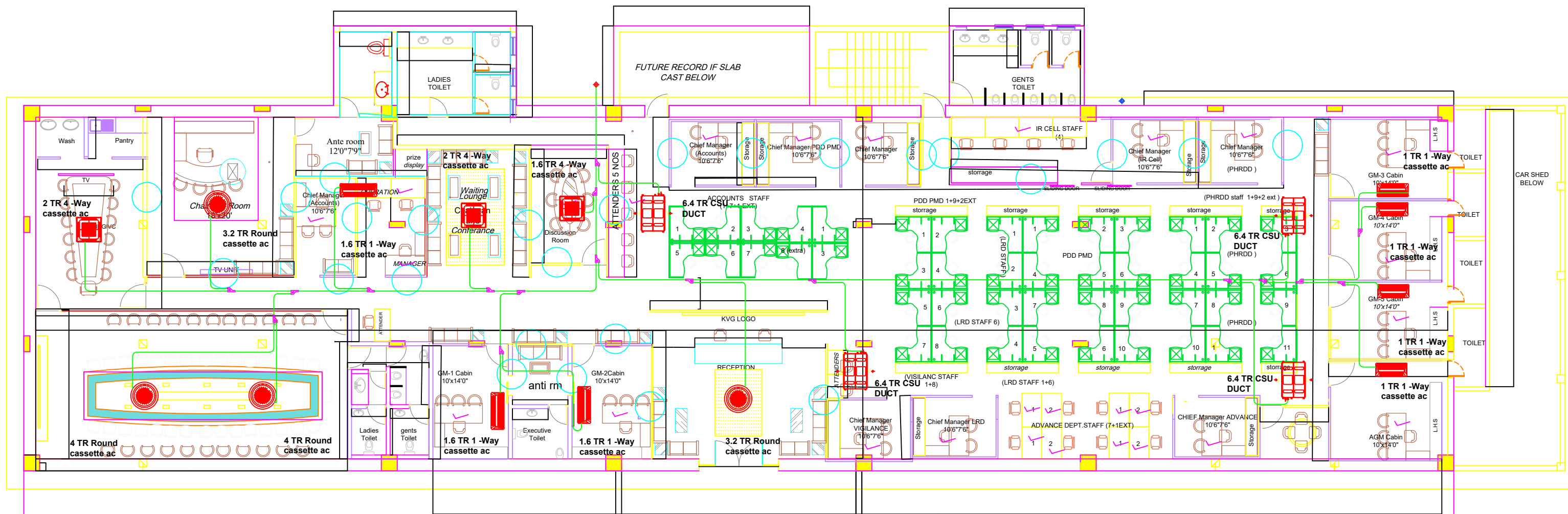
SECTION-AA



SECTION-BB

ELEVATION-A





Tender Ref. No. KVG/PMD/01/2023-24/Contractor

Dt. 05.12.2023

**SUBJECT: PROPOSED RENOVATION OF FIRST FLOOR AT KARNATAKA
VIKAS GRAMEENA BANK HEAD OFFICE BUILDING, DHARWAD.**

**TENDER FOR CIVIL, INTERIOR FURNISHING, ELECTRICAL,
NETWORKING AND AIRCONDITIONING WORKS**

PART-2

COMMERCIAL / PRICE BID

Owner:

CHIEF MANAGER,
Premises Maintenance Division,
Head Office,
Karnataka Vikas Grameena
Bank Belguam Road -
DHARWAD

Consultant:

M/s Kulkarni Associates,
No. 203, Suryaprema Bldg.,
Above Canara Bank, Raghuvanahalli,
Kanakpura Road, Bangalore 560062
Ph. No. 9448374916/ 6362396112
E-Mail: kulkarni.associates@yahoo.com

(Signature of the Contractor with Seal)

PRICE BID

(On letter head of the contractor)

PROPOSED RENOVATION OF FIRST FLOOR@ KVG BANK HEAD OFFICE BUILDING, DHARWAD

To,
CHIEF MANAGER,
Premises Maintenance Division, Head Office,
Karnataka Vikas Grameena Bank
Belgaum Road - DHARWAD - 580008

Dear Sir,

We have gone through the details of tender terms / conditions and nature of services to be provided. We have visited the site and got all necessary details. Accordingly, our bid price would be as per the following tables:

Sl. No	Works	Amount (Excluding GST)	Amount in words (Excluding GST)
A	CIVIL WORK		
B	INTERIOR FURNISHING		
C	MODULAR WORKS		
D	ELECTRICAL		
E	Air-conditioning		
F	FIRE FIGHTING		
Grand Total after deducting buy back value			

GST as applicable shall be paid over and above the charges as quoted.

(Signature of the Contractor with Seal)

TENDER BOQ FOR PROPOSED RENOVATION WORKS OF KVG BANK AT FIRST FLOOR HEAD OFFICE BUILDING DHARWAD					
A	CIVIL & PLUMBING WORKS				
SL No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A	CIVIL & PLUMBING WORKS				
1	Demolision works				
a	Carefully demolishing the existing walls, toilet fittings etc identified by the bank/Architect and disposal of debris to a location outside the premises identified by the EIC including cost of tools, labour , lead & lift, transport etc used to complete the job.	Sft	1500.00		
b	Carefully removing the existing ceramic flooring & skirting both in the hall as well as toilets by using precised tools and disposal of debris to a location outside the premises identified by the EIC including cost of tools, labour , lead & lift, transport etc used to complete the job.	Sft	500.00		
2	Vitrified Flooring-Removing,Providing & Laying New Tiles				
	Removing the existing floor tiles and clearing the premises by shifting the debris out of Bank premises.Providing and laying Vitrified tile of size 800mm x 800mm of Marbonite / Vitrified , Ivory/ Snowwhite stains free shade of approved make and colour and for the full area including laying with thick cement slurry or BAL ENDURA Adhesive (whichever is applicable at site) pointing with matching shade, curing, cost and conveyance of materials etc complete after surface preparation, levelling and filling of any gaps.It also includes cutting for race ways in existing flooring complete.The laying to be done by providing 2mm spacer and filling it with 2 component Epoxy Grouting using Ultra Green make The cost includes all labour, material & transportation etc. Note :The skirting area of 4" width if done also will be measured in the same qty. Note: Basic Cost of Tile-Rs 70 per sft exclusive of taxes, transporatation and lift.	Sft	8,200.00		
3	Ceramic Flooring and wall tiles				
a	Providing and laying 1st quality Antiskid Satin Matt Finish Ceramic tiles of size 300mm x 300mm for Flooring of approved colour and brand for the toilet after removing existing floor tiles using cement mortar with levelling,cost including removal of debris, labour, transport, cement plastering etc., Note : Basic cost of tile - Rs 55/sft.exclusive of taxes, transporatation and lift. The laying to be done by providing 2mm/3mm spacer and filling it with 2 component Epoxy Grouting using Ultra Green make	Sft	500.00		
b	Ceramic wall tiles				
	Supply and fixing of glazed wall tiles upto 7'0" height of approved colour and brand using proper adhesive after removing existing wall tiles using cement mortar with levelling,cost including removal of debris, labour, transport, cement plastering etc ,The edges and corners should be fixed with matching pvc profile beadings. Note : Basic cost of tile - Rs 55/sft.exclusive of taxes, transporatation and lift.	Sft	1300		
4	Painting Works				
a	Ceiling				
	Providing & applying two coats of plastic emulsion paint to ceilings of approved brand and shade including cleaning the ceiling from any dust & cement and filling the holes and cracks with acrylic putty wherever necessary and applicable including scaffolding, cost and conveyance of materials etc complete	Sft	700.00		
b	Enamel Painting				

	Providing & applying two coats of Synthetic enamel paint over one coat of primer including cleaning railing/door/grills from any dust & cement cost and conveyance of materials etc complete	Sft	750.00		
5	Water Proofing works for Toilet				
	Providing and laying waterproofing treatment with 2 coats of waterproofing plaster 25mm thick mixed with the cement mortar 1:4 and special water proofing compound as specified,with finishing smooth for bottom and 1ft vertical walls with proper slope including providing 3/4" seepage pipe. by the EIC/Architect. (Contractor to issue Warranty Certificate for minimum 5 years)	Sft	900.00		
6	Plastering works				
a	Internal Walls				
	Providing and applying cement plaster of C.M 1:5 of 12mm thk with Trovel finish Including providing of G.I plaster mesh for all masonry to R.C.C joints if required, including scaffolding, curing, cost and conveyance of materials etc complete	Sft	1,200.00		
b	Rough plastering works				
	Providing and applying rough cement plaster of C.M 1:5 of 12mm / 15mm thk with rough finish Including providing of G.I plaster mesh if required including curing, cost and conveyance of materials etc complete	Sft	1200.00		
7	Pipe line works				
	Supplying and providing 3/4" CPVC pipe,1" PVC pipe,1 1/2" UPVC pipe,1 1/2" PVC pipe,2 1/2" PVC pipe,4" PVC pipe,2" PVC pipe,1 1/4" PVC pipe,1 1/2" UPVC pipe with all fittings such as Tees,Elbows,Bend, Reducer,Nipple,gum 45 bend,Tee Reducers,Couplings,adopter for concealed flush valve with pressure checking system etc with patchwork including labor charges for fixing Wash basin,mixer valve,geyser,health faucet,wall mounted commode,multi floor trap,towel rod,soap tray etc.all complete as per the directions of the EIC/Architect.Note the above specs are for only toilet /Pantry internal plumbing lines and if the outer connecting lines are more than 1 metre away then it will be seperately considered and billed. Note : Toilet of approximate area 40 Sft , wash area of approximate area 50 sft , wash basin area of approximate area to accomodate 4 nos and Pantry sink area of approximate area to accomodate 2nos Each.				
a	G.Toilet including urinals and wash basins complete all	Nos	3.00		
b	L.Toilet	Nos	2.00		
c	Toilet - chairman	Nos	1.00		
d	MINOR REPAIRS IN GM TOILETS	Nos	4.00		
e	Pantry Area	Nos	1.00		
8	Concrete Block Masonry 6" thk				
	Providing and constructing solid concrete blocks having block density not less then 1800kg/m3 having a minimum average compressive strength of 4.00N/mm2 confirming to IS2185(Part1); 2005 and constructed with CM 1:4 as per IS 2572; 2005 including cost of all materials, labour charges, scaffolding, curing, hire charges of machineries etc complete as per specifications.	Sft	1,500.00		
9	Cinder filling	Cft	120.00		
10	PCC 1:3:6, 75 MM THK.for toilet sunken portion				
	Providing and laying PCC (1:3:6) using 20mm & down size aggregates for flooring incld.providing necessary machine mixing, placing,compacting and curing etc complete	Sft	400.00		
11	Plumbing Fitting Works				

a	Supply and fixing of Parryware make/Jaquar Floor Mounted/wall mounted Water Closet with Cistern Set [White] with connections, angle cock, connection tube, seat cover, bolt and all other accessories. Basic Cost Rs 5000/each. exclusive of taxes, transportation and lift.	Nos	7.00		
b	Supply and fixing of Parryware make/Jaquar 22" wash basin with half pedestal including bolt, spring set and all other accessories. Basic Cost Rs 3500/each. exclusive of taxes, transportation and lift.	Nos	7.00		
c	Providing and laying New Waste pipe for Wash Basin and making it proper for satisfactory usage.	Nos	7.00		
d	Supplying and fixing of Waste Coupling for wash basin	Nos	7.00		
f	Supply & fixing of angle cock of Jaguar make	Nos	14.00		
g	Supplying and fixing of Connection pipe of Watertec/Viking make of 2' length	Nos	8.00		
h	Supply and fixing of health faucet of Jaguar make	Nos	7.00		
i	S/F Mirror to be fixed with SS stud Size	Sft	40.00		
j	Supplying and fixing of Bib Cock, quarter turn of Jaguar make complete as per the requirement	Nos	7.00		
k	Supplying and fixing of Two way tap, quarter turn of Jaguar make complete as per the requirement	Nos	2.00		
l	Supplying and fixing of Angle Valve for the above as per the requirement.	Nos	8.00		
m	Supplying and fixing of square type Steel Jally	Nos	16.00		
n	Providing and fixing CPVC gate valve for Toilet Control	Nos	4.00		
o	Supplying & fixing PVC multi floor trap for waste line	Nos	5.00		
p	Providing & fixing of SS towel ring of 8" dia	Nos	5.00		
q	Providing & fixing of SS towel rod of 1'6"	Nos	3.00		
r	Providing & fixing of SS tissue holder	Nos	5.00		
s	Providing & fixing of SS soap dish	Nos	5.00		
12	Urinals				
a	Providing and fixing Whiz urinal basin of 360x345x570mm of Parryware/Jaquar/Cera make including assembly kit and GI clamps, cutting and making good wall and floor wherever required, including cost of material, labour complete as per specifications. Urinal Product code - C0580 & assembly kit product code - C8123 Basic Cost Rs 6500/each. exclusive of taxes, transportation and lift	Nos	7.00		
13	Granite works in Pantry Platform				
	Supplying and providing 20mm thk jet black granite for platform as well using cement mortar and providing proper slope so that the sink water does not flow out of the platform including providing 24 Rft skirting with edge polish to the exposed portion of the platform. Note cost to include material cost, labor, sink cutting (if applicable), edge polishing charges and transportation all required to complete the job. Note : Basic cost of granite of Rs.220 per Sft and the platform height would be upto 34".	Sft	12.00		
14	Pantry Sink				

	Providing and fixing Kitchen sink, single bowl of DURA/Franklin make and size of 18"x16" Satin matching to the site condition including 3" PVC elbow, 1'0" Pipe & CM including chipping for centre waste coupling & Adhesive filling all complete as directed by the EIC. .Note-The size and brand to be finalised in presence of the EIC/Client before laying. Note : Basic cost of Rs.6500/each	Nos	1.00		
15	Sink Tap Long body				
	Providing and laying Kitchen tap of Jaguar make with spout as matching to the site condition including accessories all complete as directed by the EIC to complete the job.cost and conveyance of materials etc complete .Note-The brand to be finalised in presence of the EIC/Client before laying.	Nos	1.00		
20	Granite Separator				
	Providing and fixing granite separators for toilet entrance door sill of size 2'9" X 0'6" using 19mm thk granite of desired colour and desired shape as per the instructions of the Architect, including edge polish , wherever required, including cost of material, labour complete as per specifications	Rft	20.00		
16	Urinal Partitions				
	Providing & fixing Urinal partitions made out of 12mm thk solid compact laminate (High Pressure Laminate / Core Laminate) without any joints with the bottom curved to achieve the profile. The solid compact laminate to be based on thermo setting resins , homogeneously reinforced with cellulose fibres. Top surface on both sides to be melamine coated which is scratch and impact resistant. The top rail and wall fixing to be made with exterior polyamide coating. Aluminium U channel to be used for the fixing of intermediate panels to the wall. Cost to include accessories like 4 nos clamps all as per the directions of the EIC.				
i	Size: 460 (W) * 900 (H)	Nos	7.00		
17	Buy Back works				
	Buy back of existing partitions, counters, false ceiling, paneling etc after dismantelling the same which includes all labour charges, transportation and carting away from site.Credit Item (Minimum 2,00,000 Rs.) Amount should also be considered for providing temporary arrangement to sitting staff using same furnitures and UPS functioning wherever bank requires in same campus (If required only). . Note : Vendor to inspect the site and understand the scope of work involved before quoting the unit rate	Job	-1		
	TOTAL - A				
B	INTERIOR WORKS				
No.	Description	Unit	Qty		
	Partition, Paneling and Doors				
1	Providing and fixing full height Glass Partition . Partition to be made of 12mm thk toughened glass with exposed edges machine polished upto the false ceiling height. Partition to be fixed with SS glazed partition profiles/ channels of approved make and design, taking necessary MS / wooden supports from the existing ceiling. Ends of profiles to be closed with caps (fabricated in SS if not available in market). Cost inclusive providing and fixing 3M make "crystal design" frosted Flim Sheet for the glass partition. All complete as per drawings and/or instructions of the architect.	Sft	680		

2	Supplying and fixing Partly Glazed/SOLID Full Height Partition. Partition from 3'-6" to 7'-0" height to be fixed with 12mm thk Float Glass Partition with exposed edges machine polished. Partition From floor to 3'-6" height and 7'-0" to the existing Ceiling height to be made of 2"x2" Alluminium frame work at 2'-0" center to center both ways. The frame work both sides to be covered with 8mm thk BWR plywood upto the false ceiling, finished with 4mm thk veneer / 1mm thk laminate/ 1mm digital laminate with necessary inlays and grooves as per drawing. Partition at floor level to be fixed with 4" high skirting, made of 12mm thk BWR plywood finished with 4mm thk veneer / 1mm thk laminate and edges covered with approved wood beading. Cost inclusive providing and fixing 3M make "crystal design" frosted Flim Sheet for the glass partition. All veneer and beading surface to be finished with melamine polish as instructed by architects. All as per drawings and/or instructions of the architect. All materials to be approved by the architects.				
a	Partly Glazed/SOLID Full Height Partitions (finished with 1mm thk laminate with necessary inlays and grooves as per drawing). The item includes 3'3"x7'0" 30mm thk door door with beach wood door frame of size 2"x3" with melamine polish etc complete with all necessary hardwares and door closer	Sft	1900		
3	Providing and fixing Full Solid Height Partition. Partition in 2"x2" Alluminium frame work at 2'-0" center to center upto the Existing Ceiling height. The frame work both sides to be covered with 8mm thk BWR plywood upto the false ceiling, finished with 4mm thk veneer and/or 1mm thk laminate/ 1mm digital laminate with necessary inlays and grooves as per drawing. Partition at floor level to be fixed with 4" high skirting, made of 12mm thk BWR plywood finished with 1mm thk laminate and edges covered with approved wood beading. All veneer and beading surface to be finished with melamine polish as instructed by architects. All as per drawings and/or instructions of the architect. All materials to be approved by the architects.				
a	Providing and fixing Solid wooden partition (One side Veneer Finish and other side 1mm laminate finish) The item includes 3'3"x7'0" 30mm thk door door with beach wood door frame of size 2"x3" with melamine polish etc complete with all necessary hardwares and door closer Basic Rate FOR Veneer RS. 180/Sft excluding tax transportation	Sft	420		
b	both side Veneer .Basic Rate FOR Veneer RS. 180/Sft excluding tax transportation	Sft	875		
c	Both side 1.5mm th digital laminate .Basic Rate For Digital RS. 160/Sft excluding tax transportation	sft	600		
4	Providing and fixing Low height partition (Laminate Finish)				
	Providing and fixing 5'-0" height Partly Glazed Partition. Solid Partition to be made of 2"x2" Alluminium frame work at 2'-0" center to center both ways. The frame work both sides to be covered with 8mm thk BWR plywood finished with 4mm thk veneer / 1mm thk laminate/ 1.5 mm th digital laminate with necessary inlays and grooves as per drawing. Partition at floor level to be fixed with 4" high skirting, made of 12mm thk BWR plywood finished with 4mm thk veneer / 1mm thk laminate and edges covered with approved wood beading. Glazed partition to be made of 8mm thk Float Glass fixed with necessary wood beading [beach wood or equivalent]. Cost inclusive providing and fixing 3M make "crystal design" frosted Flim Sheet for the glass partition and making necessary cutouts in glass wherever necessary. All veneer and beading surface to be finished with melamine polish as instructed by architects. All as per drawings and/or instructions of the architect. All materials to be approved by the architects.				

a	Solid Low height partition (finished with 1mm thk laminate with necessary inlays and grooves as per drawing).	Sft	550		
b	Fixing of 8mm thk float glass for the side partitions.	Sft	100		
5	Providing and fixing Full height Wall Panelling made out of 2"x1" wood frame at 2'-0" c/c both way, covered with 8mm thk BWR plywood, finished with approved 4mm thk veneer / 1mm thk laminate / 1mm digital laminate with necessary inlays and grooves as per drawing. Paneling at floor level to be fixed with 4" high skirting, made of 12mm thk BWR plywood finished with 4mm thk veneer / 1mm thk laminate and edges covered with approved wood beading. All veneer and beading surface to be finished with melamine polish as instructed by architects. All as per drawings and/or instructions of the architect. All materials to be approved by the architects.				
a	Full Height Wall Panelling (finished with 4mm thk veneer with necessary inlays and grooves as per drawing).	Sft	875		
b	Full Height Wall Panelling (finished with 1mm thk laminate with necessary inlays and grooves as per drawing).	Sft	1800		
c	Full Height Column Panelling with 4mm thk veneer with mlamine finish	Sft	250		
d	Full Height Column Panelling (finished with 1mm thk laminate with necessary inlays and grooves as per drawing).	Sft	250		
e	Full Height Column Panelling with 10mm thk glass necessary inlays vynyl sheet fixing).	Sft	250		
f	Wall Panneling with 6mm lacqured glass	Sft	275		
g	same specification with Glow or decorative /Lux Loovers Basic Price 300/sft	Sft	350		
6	Glass Doors				
	Providing and fixing Glass Door . The glass shutter to be 12mm thk. toughened glass, all exposed edge machine polished. Shutter to be fixed with Patch Fitting. The door handle shall be 30mm thk. 750 mm long SS brush finished handles, lock as per approved design & make. The rate shall include the cost of all hardware such as patch fittings, handle, locks, rubber bushes etc. and other necessary hardwares. Cost inclusive providing and fixing 3M make "crystal design" frosted Flim Sheet for the glass partition. All complete as per drawings and/or instructions of the architect. All materials to be approved by the architects.	Sft	230		
7	Providing & fixing Door With View Panel . The door frame made of approved quality Beach/Safeli wood. The Shutter to be 32mm thk BWR Block Board with both side finished with 4mm thk veneer / 1mm thk laminate with necessary inlays and grooves as per drawing. The door inlet with 8mm thk glass. The edges of the door and four side of the glass shall be fixed with beading. The door to be provided with handles, locks, door closers and stoppers etc. and other necessary hardwares. Door frames to be covered with 12mm thk BWR ply (Jamb lining) on both sides of the frame and finished with 4mm thk veneer / 1mm thk laminate and exposed edges covered with beading. All veneer and beading surface to be finished with melamine polish as instructed by architects. Frame size of B/W or T/W 3"x2" All complete as per drawings and/or instructions of the architect. All materials to be approved by the architects.				
a	Door with view panel and finished with 4mm thk veneer. Size of Door 3'-3"x7'-0"	Sft	80		

b	Door with view panel and finished with 1mm thk laminate. Size of Door 3'-3"x7'-0"	Sft	240		
8	Providing & fixing Solid Door . The door frame made of approved quality Beach/Safeli wood. The Shutter to be 32mm thk BWR Block Board with both side finished with 4mm thk. veneer with necessary inlays and grooves as per drawing. The edges of the door to be covered with beading (beach wood or equiv) and beading surface to be finished with melamine polish. The door to be provided with door closures, handles, locks, stoppers etc. and other necessary hardwares. Cost inclusive of fixing 1mm thk SS Sheet of 1'-0" ht at bottom of the door. All veneer and beading surface to be finished with melamine polish as instructed by architects. All complete as per drawings and/or instructions of the architect. B/W frame 3"x2"				
a	Solid Wooden Door (Veneer Finish) Size of Door 2'-6"x7'-0"	Sft	42		
	Tables and storages.				
1	Providing and fixing L Shape (CHAIRMAN,) Table (front table to be curve as shown in the detailed drawing) , using 19mm thk BWR block board and additional 19mm thk BWR BB around the edges, top to be supported with SS brackets, above 3" wide leg frame on one side and side table on other side as shown in the detail drawing. Leg, pedestal unit and side table frame work to be made of 19mm thk BWR Block Board, side table to have drawers and storage as shown in the detail drawings. Table shall have a apron made of 19mm thk BWR block board and MDF decorative panels fixed to the frames with SS brackets. All outer exposed surfaces to be finished with 4mm thk veneer with necessary SS inlays and grooves as per drawing, internal surfaces to be finished with 1mm thk laminate. The front table shall have 12mm thk courien, Keyboard Tray, CPU Stand, Wiremanager and footrest. Pedestal unit and side table to be provided with drawers and storage as shown in the detail drawing. All drawers and storage to have SS brush finished handles, telescope channels, box hinges and locks of approved makes. The table top, all shutters/drawers edges to be closed with approved wood beading finished with melamine polish. The edges of the Leg frame and Side table top curien finish and other areas to be finished with SS profiles/leaping as shown in the detailed drawing. All as per drawings and/or instructions of the architect. All materials to be approved by the				
i	Chairman Table Size 9'-0"x3'-6" .Side table 4'-6"x1'-6" (LxD)	Nos.	1		

2	<p>Providing and fixing L Shape Table (GM, CM, Manager' and Officer's table), using 19mm thk BWR Block Board for main framework. Table to have a pedestal unit with framework made of 19mm thk BWR Block Board. The front table to be provided with 12mm thk Clear Glass top, Keyboard Tray with track, CPU Stand, footrest and Wiremanager of approved make. The side table frame work to be made of 19mm thk BWR Block Board side table to have drawers and storage as shown in the drawings. All outer exposed surfaces to be finished with 1mm thk laminate with necessary inlays and grooves as per drawing, internal surfaces to be finished with 0.8mm laminate. Pedestal unit should have 2 drawers and storage below. All drawers and storage to have SS brush finished handles, telescope channels, box hinges and locks of approved make. Front table shall have additional framework as shown in the detailed drawing made of 19mm thk BWR block board and finished with 1mm thk laminate. Cost inclusive of making niche in the front as shown in the detailed drawing. The plywood and block board edges to be covered with approved wood beading (beach wood or equiv.). All beading surfaces to be finished with melamine polish as instructed by architects. All as per drawings and/or instructions of the architect. All materials to be approved by the architects.</p>				
i	CM's Table (Laminate Finish) Size - Front table 5'-6" x 2'-6" & Side Table 3'-3" x 1'-6".	Nos.	10		
ii	GEN, Manager's and Officer's Table. (Laminate Finish) Size - Front table 6'-0" x 2'-9" & Side Table 3'-6" x 1'-6".	Nos.	6		
3	<p>Providing and fixing 2'-0" deep working counter for workstation, using 19mm thk BWR Block Board for frame work and 12mm thk ply for backing. Each counter to be provided with Pedestal units, Keyboard Tray, CPU Stand, Wiremanager and footrest as shown in the drawing. Pedestal unit should have a drawer and storage. All outer exposed surface of the table to be finished with 1mm thk laminate with necessary inlays and grooves as shown in drawing, internal surfaces to be finished with 0.8mm laminate. All drawers and storage to have SS brush finished handles, telescope channels, box hinges and locks of approved makes. The table top, all shutters/drawers edges to be closed with approved wood beading finished with melamine polish. All as per drawings and/or instructions of the architect. All materials to be approved by the architects.</p>	Rft	42		
4	<p>Providing & fixing Video Conference Table. Table top to be made of 19mm thk BWR Block Board with additional 19mm thk BWR BB at edges for increasing the thickness of the table top. Table main and intermediate supports to be made of 1.5" x 1.5" thk Alluminium frame work at 1'-6" c/c on both sides covered with 6mm thk BWR plywood, table edges to be fixed with wood beading [teak wood or equi.] of size 2"x1.5" thk with a cornice design as shown in the drawing. Table to have foot rest of 4"x2" size, fixed to the table supports. All outer exposed surface of table to be covered with approved 4mm thk veneer with necessary SS inlays and grooves and finished with melamine polish. Frames with openable shutters to be provided to run wiring below the table top and in apron and wire-managers to be provided as shown in the drawing. Cost inclusive of fixing 6mm thk laquered glass with edges machine polished/6mm thk courien in the centre of the table, fixed to the table with wood beading. All as per drawings and/or instructions of the architect.. All materials to be approved by the architects. 12'x6'0"x2'6"</p>	Nos.	1		

5	<p>Providing & fixing 2'-6" wide Conference Table. Table top to be made of 30mm thk BWR Block Board with additional 19mm thk BWR BB at edges for increasing the thickness of the table top. Table main and intermediate supports to be made of 1.5" x1.5" thk Alluminium frame work at 1'-6" c/c on bothsides covered with 6mm thk BWR plywood, table edges to be fixed with wood beading [teak wood or equi.] of size 2"x1.5" thk with a cornice design as shown in the drawing. Table to have foot rest of 2"dia SS pipe, fixed to the table supports. All outer exposed surface of table to be covered with approved 4mm thk veneer with necessary SS inlays and grooves and finished with melamine polish. all internal surface should finished with 1mm thk laminate Frames with openable shutters to be provided to run wiring below the table top and in apron and wire-managers to be provided as shown in the drawing. Cost inclusive of fixing 6mm thk laquered glass /6mm th courien of 9"-15" wide with edges machine polished in the edge of the table, fixed to the table with wood beading. All as per drawings and/or instructions of the architect. All materials to be approved by the architects.65'X2'6"X2'6"</p>	Rft	65		
6	<p>DINING /VC TABLE Providing and fixing Dining / VC RoomTable with Table top of 25mm thk BB of size as given below and fixed on the PLYWOOD supporting frame with screws, bolts etc and PVC edge banding / beading as required.Supporting frame made of 50mm x 50mm beechwood - 4nos legs joined together alround at top/ bottom with 50mmx50mm beechwood members for fixity. All visible surfaces to be finished with 1.0mm thk laminate sheet/6MM TH COURIEN AS PER DRAWING and all internal and underside surfaces to be fixed with 0.8mm thick lamination sheet with matching grains & grooves polished with melamine spray.All wooden members to be polished with melamine finish complete. 13'X6'X2'6"</p>	Nos.	1		
7	<p>Providing and fixing Reception TableSize : 10'0"X2'6"X3'6" Providing, making and placing in position Table with following specifications. Main Table Top to have 25mm block board with 6mm thick acrylic solid surface. The vertical supports of the table is to be made with two side boxing of 75mm x 700mm x 950 mm made with 18mm EG-MDF and the front side boxing to 100mm x 400mm x 950mm on either sides and central boxing of 150mm x 420mm x 1050mm, all made with 18mm EG-MDF finished with 1.0mm laminate on exposed sides. The front of the table to have a 420mm x 1050mm proud portion with provision for cove lighting at bottom and this central portion to be cladded with 6mm thick colour RAL-5017-Traffic Blue blue colored lacquered glass.All other members to be with 18mm EG-MDF and all exposed faces of the table to have 4mm veneer finish as specified to be used.All the edges of 18mm EG-MDF to have 20mm x 6mm beech wood /PVC edge banding.Two readymade CPU mobile pedestal.One Molded Key Board Tray with channels etc.,Two pedestal of 400mm width having Three Drawer Unit made with 18mm EG-MDF and 12mm EG-MDF. The unit to have one vertical filing drawer at bottom and two equal drawers on top. The rate to include all necessary hardware viz., telescopic drawer channels, handles, locks, etc., and 20mm x 6mm beech wood /PVC edge banding etc.,All the exposed surface should finish with 4mm thk veneer with malamine polish and unexposed faces to have 0.8mm Laminate.Ready Made Modular Foot Rest - 400mm x 350mm x 65mm The cost to include all materials, labour etc. for a finished</p>	Nos.	1		

8	Providing and fixing Storage Cabinet using 19mm thk BWR Block Board for main framework, 12mm thk BWR plywood for shelves and 8mm thk BWR plywood for backing. All outer exposed surfaces to be finished with 4mm thk veneer / 1mm thk laminate with necessary SS inlays and grooves as per drawing, internal surfaces to be finished with 1mm thk laminate. Storage to have SS brush finished handles, box hinges and locks of approved makes. All exposed plywood edges shall be covered with wood beading. All as per drawings and/or instructions of the architect. All materials to be approved by the architects.				
i	18" deep storage.(4mm thk veneer for outer exposed surface and 1mm thk laminate for inner exposed surface).	Sft	50		
ii	18" deep storage.(1mm thk laminate for outer exposed surface and 0.8mm laminate for inner exposed surface).	Sft	350		
9	Providing and fixing Storage with Display Unit , using 19mm thk BWR block board for frame work, intermediate partition and shutters with 8mm thk BWR plywood for backing. Unit to have drawers, glass shelves and shutters as shown in the drawing. Shutters and shelves to be made of 12mm thk glass with exposed edges machine polished, shutters to be fixed with approved make of pivot hinges and shelves to be fixed with brackets of approved makes. All exposed surfaces to be finished with 1mm thk laminate with necessary SS inlays and grooves. All drawers and storage to have SS brush finished handles, telescope channels, box hinges and locks of approved makes and design. All as per drawings and/or instructions of the architect.	Sft	25		
10	Providing and fixing 2'-6" height Storage Cabinet with granite top , using 19mm thk BWR Block Board for main framework, 12mm thk BWR plywood for shelves and 8mm thk BWR plywood for backing. All outer exposed surfaces to be finished with 1mm thk laminate with necessary inlays and grooves as per drawing, internal surfaces to be finished with enamel paint. Storage top to be provided with 20mm thk Granite top (basic price of granite 220/sft) as per drawing, with edges polished (cost inclusive of making necessary cutouts in the granite counter with SS Sink). Storage to have SS brush finished handles, box hinges and locks of approved makes. All exposed plywood edges shall be covered with wood beading. All as per drawings and/or instructions of the architect. All materials to be approved by the architects.	Sft	25		
11	Providing and fixing TV Unit using 19mm thk BWR block board for paneling and counter frame work, intermediate partitions, shelves and shutters and 8mm thk BWR plywood for backing and paneling. TV Unit to have drawers and 12 mm thk clear float glass shelves fixed with SS brackets. All outer exposed surface to be finished with 4mm thk veneer with necessary SS inlays and grooves and all internal exposed surfaces to be finished with 1mm thk laminate. All veneer surface to be finished with melamine polish. All drawers and storage to have SS brush finished handle profiles, soft closing telescope channels, box hinges and locks of approved makes and design. All as per drawings and/or instructions of the architect. size of base unit: 8'x1'6"x1'6"	Nos.	2		

12	Providing and fixing Center & Corner Tables with 12mm thk glass top [Modi/Saint Gobain make] with edge machine polished. Top shall be supported with SS stud above 3" wide base both side. Table base frame work to be made of 19mm thk BWR Block Board and to be finished with 1mm thk laminate with necessary SS Strip, inlays and grooves as per drawing. Table below 12mm thk glass shelf [Modi/Saint Gobain make] fixed with 'D'-bracket. All as per drawings and/or instructions of the architect.				
i	Centre Tables - 3'-6" x 1'-6" x 1'-6" (LxDxH)	Nos.	8		
ii	Corner Tables - 1'-6" x 1'-6" x 1'-6" (LxDxH)	Nos.	14		
13	Chairs and Sofa's Bosq/Eurotech/zodaic/Featherlite				
13.1	Providing & supplying Sofas make as approved.				
i	Two Seater Sofa [Make: Featherlite,/BOSQ/GODREJ Color: Black] (design and quality to be matching for other brands).	Nos.	5		
ii	Three Seater Sofa [Make: Featherlite, Model: Pearl - 238 Color: Black] (design and quality to be matching for other brands).	Nos.	15		
iii	Leather Chair High Back for chairman	Nos.	1		
	GODREJ - LA SEDE				
	BOSQ-HC 101				
iv	Leather medium back visitor for Chairman	Nos.	5		
	GODREJ LA SEDE				
	BOSQ-HC 201				
v	Medium Back leatherite chairs conference	Nos.	30		
	MAKE BOSQ/FEATHERLITE/ EUROTECH				
vi	HIGH BACK CHAIR	Nos.	12		
	APPROVED MAKE &MODEL				
	HOF KAR-1007				
	BOSQ TQ-Z-101				
	EUROTECH Mate-HB				
	FEATHERLITE FP Anatom HB				
vii	Medium Back Chairs	Nos	108.00		
	Manager Visitors, Officers, Counters, Discussion, Staff				
	MAKE &MODEL				
	HOF -KAR-7005				
	BOSQ -TQ-Z-201				
	EUROTECH-Look-02				
	FEATHERLITE-Astro MBGS				
viii	Low Back Chairs - Visitors	Nos	40.00		
	Without castors.				
	MAKE &MODEL				
	HOF -VIT-1004				

	BOSQ-TQ-Z-301				
	EUROTECH-Ecomesh-04				
	FEATHERLITE-Astro VA				
14.00	False Ceiling and Painting Works.				
i	Gypsum Board False Ceiling.				
	Providing and fixing 12mm thick Gypsum Board False Ceiling with painting finish with G. I. frame work, main framing at 1200mm c/c and intermediate framing at 450mm c/c (as per manufacturers specification) in perfect level including making grooves at the junction of ceiling and walls/columns wherever required. All joints shall be fixed with star screws finished with gypsum jointing tape. Rate shall include providing all curves and moldings, providing cutouts for all the services such as - speakers, AC grills, light fittings, wooden members etc. and also providing & painting of ceiling with 1 or more coats of putty shall be finished [sand paper to be applied to receive paint]. 2 or more coats of Plastic Emulsion Paint to be applied over a coat of primer of approved make and color as approved by architect. Vertical bands more than 9", quantity will be taken in " Sft ". All as per drawings and/or instructions of the architect.	Sft	3750		
ii	Supplying and installing Grid False Ceiling of Armstrong or equivalent make. Grid work shall be made out of approved Silhouette frame. The main tee, cross tees (length 2'0") filled with Quick release speed steel clips the main frame work of 600x600mm c/c height adjustment. The tiles of 600x600 (2'0"x2'0") of approved design. Rate shall include providing all curves and moldings, providing cutouts for all the services such as - speakers, AC grills, light fitting etc. All as per drawings and/or instructions of the architect.	Sft	4500		
iii	Providing & fixing veneer false ceiling with required framing from ceiling using 19mm ply finished with 4mm thk veneer finished with malamine polish. Basic rate 180/sft	Sft	250		
iv	Providing and Fixing Luxa Loovers Panel Ceiling with necessary frames. Basic 175/sft	Sft	450		
15.00	Texture Paint :Providing & applying special design effects on to the existing wall surface as per selected design and texture including surface preparation as manufacturer recommendation with all necessary cleaning/sanding the existing surface, applying primer, emulsion base coat and Dune/Safari top coat in selected design. All coats applied as per layers recommended and with all necessary special effect, tool, roller, masking tape etc. Due care to be taken to ensure that adjacent wall partition, false ceiling, furniture is not stained / marked during above process.with basic preparations etc complete, as approved by the bank/architect.(Quoted (without GST) Basic rate for texture is 50/- sq.ft.).	Sft	700		

16.00	Providing and fixing wall paper :-Providing and fixing approved make and design of wallpapers completely strippable, non- woven, environment friendly wall paper/wall covering of minimum weight 250 gsm as per selected design, model , shade, colour, steady and good impact resistance, good breathability, washable, no deformation, no shrinkage and no air gap after decorfixed on surface of the glass/wall/partition/panneling/false ceiling. Wall papers to be fixed on smooth surface cost inclusive making the surfaces smooth with 2 coats of primer coat etc.complete. Cost also inclusive of all wastages, labour, lead etc. complete. (Basic price of wall paper Rs.120.00/- per Sft excluding taxes, transportation etc. complete)	Sft	300		
17.00	providing and fixing graphics to glass on column:- Providing and fixing approved make and design of graphic films fixed on surface of the glass/wall/partition/panneling. Films to be fixed on smooth surface, cost inclusive making the surfaces smooth with 2 coats of primer coat & all wastages etc.complete.	Sft	100		
18.00	Royal Emulsion Paint: Providing & painting of ceiling/wall using 1 coat of birla putty after proper rubbing the surface with sand paper, making the surface even. Finish with 2 coats of primer and 2 or more coats of Royal Emulsion Paint [approved make as per list of makes].	Sft	3000		
19.00	Miscellaneous				
a	Providing & fixing Roller Blinds of approved make and finish. Cost shall include top chanel, fixing charges etc. All as per drawings and/or instructions of the architect. All materials to be approved by the architects.	Sft	350		
b	Providing & fixing 100mm wide Vertical Blinds of approved make and finish. Cost shall include top chanel, fixing charges etc. All as per drawings and/or instructions of the architect. All materials to be approved by the architects.	Sft	30		
c	Providing & fixing Soft Board Panels with 8mm th BWR plywood for backing and 12mm thk soft board covered with approved fabric, all edges covered with wood beading, finished with melamine polish, all as per drawings and/or instructions of the architect. All materials to be approved by the architects.	Sft	20		
d	Providing and fixing Writing Board, made of 12mm thk clear float glass with edges machine polished. A white colored opaque film sheet to be fixed behind the glass. Glass to be fixed to the wall / partition using SS studs. All as per drawings and/or instructions of the architect.	Sft	64		
e	Providing and fixing 3m etching stickers garware/3M	Sft	500		
f	Providing and fixing 6mm Curien Fixing with all necessary buffing polishing etc complete.	Sft	200		
g	Providing, making and fixing in position 12mm thick toughened clear float glass in sizes as per design with studs. All the edges of the glass to be polished for a smooth finish and the glass is to be fixed with " D " brackets. The cost to include all materials, labour, hardware etc., for a neat finished job as per drawings and diretions etc., complete.	sft	40		

20	LACQUERED GLASS WORK Providing and fixing in position 12mm toughened lacquered glass (colour -) for columns. The work to include making necessary template for all the glasses and then cutting the glass to correct size, making all the necessary holes, cuts etc., and then toughening the same. The cost to include all hardware required viz., single corner patch, bracket etc., The approximate size of each glass will be 2'x7'subject to site conditions. The rate is for a finished item of work etc., complete as directed.	sft	125		
21	NOTICE BOARD :- P/F in position notice board of size 900x1500x150mm. The side shall be made out of 19mm thick commercial board with 1mm thick laminate(as approved) on all exposed surfaces. It shall have 12mm thick tack board (cellotex or equivalent) wrapped with stretched blazer cloth (raymonds of approx Rs. 200.00 per mtrs.) of approved colour and pattern by Bank. It shall be fixed with the help of dash fasteners of required size. The front shall have 6mm thick float glass sliding shutter in two parts. It shall also have 19mm wide two track aluminium channels for sliding arrangements, all round along with locking arrangements. All the exposed edges of board and ply shall be provided with 6mm thick teak/cedar wood lipping which shall be polished and other internal surfaces to be painted with enamel paint with two or more coat over a coat of primer with the desired shade. The item includes hanging and proper grouting of the notice board in the desired place property as per requirement of the Bank. Complete in all respect.	No.	2.00		
	TOTAL B				
C	MODULAR WORS				
1	Providing and fixing Modular Tables having specifications as follows				
	LOW HEIGHT (1200mm) MODULAR DOUBLE SKIN PARTITION:				
	Providing and fixing multi panelled tile based double skin modular partition of minimum 60 mm thickness and of minimum 1200 mm height as per the following technical specifications.				
	The internal frame shall be made of 16 gauge (minimum 1.60 mm thick) MS material with epoxy powder coating of 50 micron thick. Basic frame is of welded type with connectivity between frames is with bolt & nut arrangement. There shall be 2 race ways to draw the electrical, computer, telephone cables etc at skirting and table top levels.				
	The vertical connecting frames (corner as well as intermediate ones), top & side rails/trims, corner caps shall be made of 18 gauge thick aluminium extruded sections with powder coating of appropriate colour as per Bank's requirement.				
	The overall thickness of the partition shall be minimum of 70 mm with internal cavity between tiles shall be 45 mm. The tiles shall be made of minimum 9 mm thick both side pre-laminated particle boards of Novapon/Bhutahan boards/archidlam or equivalent make, with edges lipped with melamine edge banding. The tiles shall have proper clipping arrangement to get fixed in to the MS frame work. Necessary openings in the boards shall be made for fixing the electrical boxes/sockets, telephone socket, LAN/computer Information outlets etc.				

i	<p>Only at select places the tile panels shall be finished with fabric of approved colour with basic rate not less than 250 per metre or plain glass of 6mm thickness with necessary channels, clips, instead of laminate finish. The colour combination of modular partition is as decided by the Bank and approval of the shades shall be obtained at the time of finalising the shop drawings of the modular partitions and before placing orders for fabrication. The payment is based on the elevation area of the modular partition erected at site including trims/finished surface sizes.</p> <p>WORK STATION TABLES 1500X1500X750</p> <p>Providing & fixing new modular Self standing type work tables of following sizes having 750 mm height, using 25 mm thick pre-laminated particle board of Novopan or equivalent make for table top & for all verticals and of approved shade for table top & for all verticals. The front modesty panel shall be also for the full height of 750 mm without any openings at the bottom. Verticals shall be provided with bottom bushes.</p> <p>All the edges shall be lipped with 2 mm thick PVC edge banding of matching colour. Necessary provision for cable/wire manager to be made. The table top shall be fitted to verticals and front fascia using knock down fittings. The unit for payment is per table unit. Any variation in size of the table will be paid on proportionate basis taking volume of the table as the parameter.</p> <p>Providing & fixing new modular Self standing type tables having 750 mm high, using 25 mm thick pre-laminated particle board of Novopan or equivalent make for table top & for all verticals and of approved shade for table top & for all verticals. The front modesty panel shall be also for the full height 750 mm without any openings at the bottom. Verticals shall be provided with bottom bushes. All the edges shall be lipped with 2 mm thick PVC edge banding of matching colour. Necessary provision for cable/wire manager to be made. The table top shall be fitted to verticals and front fascia using knock down fittings. INDEPENDENT WORK TABLES L-SHAPE tables of 1500 mm (L) 1500(L)x 600 mm (w) x 750 mm (H)</p>		60		
2	METAL BODY MOBILE PEDASTAL UNIT	NOS	60		
	<p>Providing & Installing 3 drawer mobile pedestal boxes of minimum size 460mm wide, 500mm deep and 690mm ht. Pedestal unit shall be made out of CRCA Metal of 20 swg thickness with minimum of 50 micron thick approved colour / shade powder coating on both sides. Facia of the Mobile drawer unit shall be made of 18mm thick pre-laminated particle board. Out of the 3 drawers the top first 2 nos. shall be of 100mm deep drawer & the bottom one shall be of filing drawer with single key Central locking mechanism. The mobile unit shall be supported on 4 nos. lockable castor wheels. The central locking mechanism to be provided on the front side. The drawers shall have push pull arrangements with sliding channels on the bottom mounted glides of Ebco or Hettich make.</p>				
	<p>The top two drawers shall be of 100 mm height and the bottom drawer shall have minimum 380 mm height with gallery fitting and fileset fitted inside. The front pre-laminated particle boards all edges shall be finished with 2mm thick matching PVC edge banding. The drawers shall have suitable handles for opening & closing.</p>				
3	KEY BOARD DRAWER	NOS	60		

	Providing & fixing EBCO or equivalent make computer Keyboard platform of minimum 500 mm length (without any sharp edges), made of metal or prelaminated MDF or PVC body with raised arm rest, height adjustment telescopic channels, pull out mouse pad and with soft palm. The tray movement shall be on ball slides. The internal dimension of these trays shall be suitable to accommodate any standard key board. The front edge of the tray is provided with a soft pad, which serves as a wrist rest. The key board shall be firmly fixed to the bottom of the work station's top using anti-rust CP screws, with proper alignment to have smooth push-pull arrangement of key board tray.				
4	CPU TROLLY	NOS	60		
	Providing & fixing MS body CPU keeping trolley finished with epoxy coating. The trolley shall be mounted on 4 Nos caster wheels for mobility.				
	Providing and fixing readymade footrest of size 2'x12"x6"	NOS	60		
	TOTAL C				
D	ELECTRICAL WORKS				
	PART - A				
A.	MV PANELS & DISTRIBUTION BOARDS				
1.0	Supply, installation, testing and commissioning of M.V. panels and switch gears suitable for 415V, 3 phase, 4 wire, 50Hz power distribution system. The panel shall be free standing Wall / floor mounting type 14G/16G sheet steel enclosed, flush front with single aluminium bus bars and separate earth bus to be provided through out the length of the panel. The incoming and out going feeders breakers, changer over switches, fuses indicating lamps shall be accommodated in a modular multitier arrangement. Minimum clearance of 400mm shall be provided from the floor level to the bottom most termination point adequate size cable alley and bus bar chamber shall be provided, all round the panel and it shall be connected through solid bus bars. Flexible cable links are not acceptable.				
	Bus bars shall be provided with sleeves or heat resistant insulated paint. The paint shall be suitable for both top/bottom cable entry. The minimum fault rupturing capacity of all incoming and out going breakers/ switches shall be as per SLD only. The panel shall be painted in conformity with the relevant IS code. The panel shall be fabricated only after obtaining approval of the GA drawings. The rate shall also include cost of civil works including fixing accessories, all complete as required.				
1.1	Floor Distribution Panel	set	1		
	Incomer:				
	1No.250A,36KA,4P,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x Ir				
	KWH Dual Source,Energy Meter, Counter type: 1 No.				
	MFM Meter:1				
	CTs : 6 Nos.				
	ELR with CBCT: 1 No.				
	Indicating Lamps:6 Nos.				
	300A,TP+N,Aluminum Bus bars				
	Out Going:				
	2Nos.160A,25KA,TPN,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x Ir				

	2Nos.100A,25KA,TPN,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x Ir				
	2Nos.63A,25KA, TPN,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x Ir				
	5Nos.63A,TPN,MCB,15KA				
1.2	UPS Output Panel	set	1		
	Incomer:				
	1No.160A,25KA,4P,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x Ir				
	Indicating lamps:6 Nos.				
	MFM Meter:1				
	CTs : 3 Nos.				
	Bus bar:200A,TP+2N,Cu, Bus bar				
	Out Going:				
	2Nos.63A,25KA, TPN,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x Ir				
	5Nos.63A,TPN,MCB,15KA				
1.3	AC PANEL OUT DOOR WEATHER PROOF	set	1		
	Incomer:				
	1No.160A,25KA,4P,MCCB, O/L; 0.7 - 1 x In, SC: 5 – 10 x Ir				
	ELR with CBCT..1 No.				
	Indicating lamps:6 Nos.				
	MFM Meter:1				
	CTs : 3 Nos.				
	Bus bar:200A,TP+N,Aluminum, Bus bar				
	Out Going:				
	5Nos.63A,TPN,MCB,15KA				
2.0	MCB DISTRIBUTION BOARDS : ALL DOUBLE DOORS				
	Supply, installation, testing and commissioning of the following cubicle type 1.2 mm thick CRCA sheet steel enclosed powder coated with approved shade and partitions to segregate phase with approved covers, single / double door, factory made recessed in wall or surface mounted final distribution boards of the following description. All final DB's shall have outgoing with internal wiring brought upto terminal block for external cable connections.				
	NOTE : 1) Surface mounted DB's on walls shall be provided with suitable size frame work and neatly grouted on to wall and DB shall be fixed on to the frame work using bolts & nuts and other fixing accessories.				
	2) DB's concealed in wall shall include cut of necessary civil works and other fixing accessories.				
	3)The DB's shall be horizontal / vertical type as per configuration of incoming/outgoing feeders.				
	4)The DB's shall be factory made of approved make and necessary available higher size configured DB's shall be used.				
2.1	LDB				
	ETPN MCB DB-6 WAY				
	Incomer:				
	1No.32A , 4P, ELCB + MCB (0-30mA) (B curve)				
	Outgoing:				
	14 Nos. of 6/10/16A, SP, MCBs (B curve)	Set	2		
2.2	PDB				

	ETPN MCB DB-6 WAY				
	Incomer:				
	1 No. 60A. 4P. ELCB + MCB (0-100mA) (B curve)				
	Outgoing:				
	12 Nos. of 16/20/25/32 A, SP. MCBs (B curve)	Set	2		
2.3	ACDB				
	VTPN MCCB DB				
	Incomer:				
	1 No, 100A-4P MCCB				
	Outgoing:				
	14 Nos. of 25/32 A SP MCBs (C/D curve)				
	2Nos. of 32A TP MCBs (C/D curve),	Set	2		
2.4	Computer DB - Type 1				
	4-VTPN MCB-DB				
	Incomer:				
	1 No. 40A, 4P, MCB (D curve)				
	Outgoing:				
	10 Nos. of 6/10 A SP MCBs (D curve)	Set	2		
2.5	Computer DB - Type 2				
	8-VTPN MCB-DB				
	Incomer:				
	1 No. 63A, 4P, MCB (D curve)				
	Outgoing:				
	18 Nos. of 6/10 A SP MCBs (D curve)	Set	1		
2.6	Computer DB Type-3, 4 WAY for Server DB, ELDB				
	ETPN MCB DB				
	Incomer:				
	1 No32.A, 4P MCB (D curve)				
	Outgoing:				
	...8... Nos. of 6/10 A SP MCBs (D curve)	Set	1		
4.0	MCCB/MCB with weather proof, MS BOX Enclosure				
a	125A TPN MCCB 25 KA with MS Enclosure Suitable	Set	1		
	for Terminating 1Rx3.5C X95 Sqmm AYFY Cable IN/OUT				
b	63/100A TPN MCCB 16 KA with MS Enclosure Suitable	Set	RO		
	for Terminating 1Rx3.5C X25 Sqmm AYFY Cable IN/OUT				
c	32 to 63 A TPN MCB 10 KA with MS Enclosure Suitable	Set	2		
	for Terminating 1Rx4C X10 Sqmm AYFY Cable IN/OUT				
d	16 to 32 A TPN MCB 10 KA with MS Enclosure Suitable	Set	1		
	for Terminating 1Rx4C X6 Sqmm CU Cable IN/OUT				
e	16 to 32 A DP MCB 10 KA with MS Enclosure Suitable	Set	1		
	for Terminating 1Rx3C X4 Sqmm CU Cable IN/OUT				
	PART - A TOTAL AMOUNT				
	PART - B				
B.	LT CABLES AND CABLE END TERMINATION :				

1.0	Supply & Laying of 1100V grade, XLPE/ PVC insulated, PVC sheathed, Aluminium / copper conductor, steel armoured cables. The cable shall be laid in existing trench, cable tray / clamped on to the walls using necessary fixing accessories. The cable shall be provided with cable identification tags made out of Aluminium strip, engraved with cable size and the routing. (Note : cost of cable tray, supports, excavation, sand cushioning, brick protection and back filling measured separately).				
1.1	3.5C 240 Sq.mm XLPE Cable	M	30		
1.2	3.5C 185 Sq.mm XLPE Cable	M	30		
1.3	3.5C 120 Sq.mm XLPE Cable	M	60		
1.4	3.5C 95Sq.mm XLPE Cable	M	RO		
1.5	3.5C 70Sq.mm XLPE Cable	M	RO		
1.6	3.5C 50Sq.mm XLPE Cable	M	RO		
1.7	3.5C 35Sq.mm XLPE Cable	M	30		
1.8	4C x 25 Sq.mm XLPE Cable	M	150		
1.9	4 C 16Sq.mm AYFY Cable	M	120		
2	4 C 10 Sq.mm AYFY Cable	M	RO		
2.1	4 C 6 Sq.mm AYWY Cable	M	RO		
2.2	3 C 2.5 Sq.mm copper un arm Cable	M	RO		
2.3	3 C 10Sq.mm AYFY Cable	M	RO		
2.4	3 C 6 Sq.mm AYFY Cable	M	RO		
2.5	3 C 4 Sq.mm AYWY Cable	M	RO		
2.6	4 Core x 25 Sq. mm Copper Armoured Cable (PVC)	M	20		
2.7	4 Core x 16 Sq. mm Copper Armoured Cable (PVC)	M	60		
2.8	4 Core x 10 Sq. mm Copper Armoured Cable (PVC)	M	15		
2.9	1 Core x 50 Sq. mm flexible copper Cable (PVC)	M	RO		
3	1 Core x 35 Sq. mm flexible copper Cable (PVC)	M	40		
3.1	1 Core x 25 Sq. mm flexible copper Cable (PVC)	M	30		
3.2	1 Core x 16 Sq. mm flexible copper Cable (PVC)	M	40		
1.21	1 Core x 10 Sq. mm flexible copper Cable (PVC)	M	40		
1.22	1 Core x 6 Sq. mm flexible copper Cable (PVC)	M	40		
2.0	CABLE END TERMINATIONS:				
	Supply and providing end termination for below listed PVC insulated, PVC sheathed, aluminium conductor, steel armoured, 1100V grade, cable using brass cable glands and copper lugs etc, all complete as required.				
2.1	3.5C 240 Sq.mm XLPE Cable	set	2		
2.2	3.5C 185 Sq.mm XLPE Cable	set	2		
2.3	3.5C 120Sq.mm XLPE Cable	set	2		
2.4	3.5C 70Sq.mm XLPE Cable	set	RO		
2.5	3.5C 50Sq.mm XLPE Cable	set	RO		
2.6	3.5C 35Sq.mm XLPE Cable	set	2		
2.7	4 C 16Sq.mm AYFY Cable	set	4		
2.8	4 C 10 Sq.mm AYFY Cable	set	4		
2.9	4 C 6 Sq.mm AYWY Cable	set	RO		
2.10	3 C 2.5 Sq.mm copper un arm Cable	set	RO		

2.11	3 C 10Sq.mm AYFY Cable	set	RO		
2.12	3 C 6 Sq.mm AYFY Cable	set	RO		
2.13	3 C 4 Sq.mm AYWY Cable	set	RO		
2.14	1 Core x 50 Sq. mm flexible copper Cable (PVC)	set	8		
2.15	1 Core x 35 Sq. mm flexible copper Cable (PVC)	set	8		
2.16	1 Core x 25 Sq. mm flexible copper Cable (PVC)	set	4		
3.0	Supply and fixing of hot dipped galvanized GI ladder type cable tray, conforming to IEC- 61537. The cable tray shall be supplied in standard length of 3000mm. The rate shall include cost of necessary fixing accessories like bends, off sets, collar, Tee, fish plate etc., as required. Note : The cost of supports shall be measured separately				
3.1	200mm width x 50 mm height x 1.5 mm thick	Rmtr	100		
3.2	300mm width x 50 mm height x 1.5 mm thick	Rmtr	125		
4.0	Supply and fixing of 8mm threaded rod supports include bolts, nut & washer	Rmtr	50		
5.0	Supply and fixing of UPVC trunking. The rate shall include cost of necessary fixing accessories as required.				
a)	UPVC Trunking 100 x 50 mm	Mts	25		
b)	UPVC Trunking 50 x 50 mm	Mts	25		
	PART - B TOTAL AMOUNT				
	PART - C				
C.	WIRING SYSTEM				
1.0	Supply & Wiring for Lights, Ceiling fans, exhaust fan and 6A socket outlets using 3 x 1.5 sqmm flexible copper, 1100 volts grade PVC insulated FRLS wires drawn through 2mm thick, suitable size FR PVC conduit in concealed manner using necessary conduit accessories like junction boxes, Switch boxes, modular double plate and inner plate shall be of metal, bends, collars, clamps, ceiling roses, 6A/16A switches, Fan regulator and hook boxes, etc., and shall be flush mounted in brick wall or in the built up furnitures or on the surface of wall for surface installation as required. The rate for point wiring shall include the wiring from first point (light/switch) and then looping between lights/fans/6A socket outlets etc., Also the rate shall include earthing of each light, fan outlet boxes, switch control boxes, 6A sockets. (switches & sockets shall be of Anchor roma make /equivalent). The rate shall also include cost of civil works involved in fixing of boxes, replastering of walls chased. All the switch / sockets shall have stickers for identification				
a)	Single light point controlled by a 6A SP switch.	Nos	60		
b)	Single light point controlled by 2nos. 2Way 6A SP switch.	Nos	RO		
c)	Two light point controlled by a 6A SP switch	Nos	50		
d)	Two light point controlled by 2nos. 2Way 6A SP switch.	Nos	RO		
e)	Three light points controlled by a 6A SP switch	Nos	10		
f)	Ceiling fan point controlled by a 6A SP switch and fan regulator. The rate shall include cost of stepped fan regulator, fan hook, switch outlet box etc., all complete as required.	Nos	6		
g)	Exhaust fan point (Single phase) controlled by a 6A SP switch and ceiling rose near the exhaust fan. /Wall Fan	Nos	20		

h)	Supply and wiring for call bell point with 3 x 1.5sqmm PVC insulated copper conductor FRLS wires in 20mm dia FR PVC conduit, including providing bell push with outlet box, inter-connection to the lighting circuit for power supply.	Nos	5		
2.0	LIGHTING WIRING / SUB MAINS :				
	Supply & Drawing power wiring circuit /sub mains using flexible, copper conductor, FRLS wires of 1100V grade, PVC insulated wires drawn in 2mm thick suitable size FR PVC conduit. The rate shall also include running of PVC insulated copper conductor as earth wire. All circuits starting from the respected db should have ferrulling arrangements.				
a)	3 x 1.5 sqmm Copper wires in 20 mm dia PVC conduit	Rmtr.	150		
b)	3 x 2.5 sqmm Copper wires in 20 mm dia PVC conduit	Rmtr.	600		
3.0	POWER WIRING / SUB MAINS :				
	Supply & Drawing power wiring circuit /sub mains using flexible, copper conductor, FRLS wires of 1100V grade, PVC insulated wires drawn in 2mm thick suitable size FR PVC conduit. The rate shall also include running of PVC insulated copper conductor as earth wire. All circuits starting from the respected db should have ferrulling arrangements.				
a)	3 x 2.5 sqmm Copper wires in 20 mm dia PVC conduit.	Rmtr.	1200		
b)	3 x 4.0 sqmm Copper wires in 20 mm dia PVC conduit.	Rmtr.	1000		
c)	3 x 6.0 sqmm Copper wires in 32 mm dia PVC conduit	Rmtr.	60		
d)	2 x 10.0 sq.mm + 1 x 6.0 sq.mm copper wires in 32mm dia PVC conduit.	Rmtr.	20		
e)	6 x 4.0 sqmm Copper wires in 25 mm dia PVC conduit.	Rmtr.	20		
f)	4 x 10.0 sq.mm + 2 x 6.0 sq.mm copper wires in 38mm dia PVC conduit.	Rmtr.	25		
4.0	POWER RECEPTACLES				
	DOMESTIC TYPE:				
	Supply & fixing of 3/5 pin, commercial combination type socket outlet with indicator mounted on a outlet box with necessary interconnection. The box shall be flush mounted in brick/stone wall. The switches shall be of type Anchor roma make / equivalent. The rate shall also include cost of civil works involved in fixing of boxes, replastering of walls chased. All the switch / sockets shall have stickers for identification				
4.1	RAW POWER SOCKET				
a)	6A socket outlet controlled by 6A SP Switch (Soc.type-1)	Nos.	95		
b)	2 Nos. 6A socket outlet controlled by 2 Nos. 6A SP Switch Soc.type2	Nos.	25		
c)	6/16A socket outlet controlled by 1 Nos. 16A SP Switch Soc.type3	Nos.	95		
d)	16A Master switch with indicator	Nos.	RO		
e)	16A, socket outlet	Nos.	RO		
f)	16A, switch	Nos.	RO		
g)	16A, switch with indicator	Nos.	RO		
4.2	UPS/ RAW POWER SOCKET				
a)	6A socket outlet controlled by 6A SP Switch with indicator	Nos.			
b)	2 Nos. 6A socket outlet controlled by 2 Nos. 6A SP Switch	Nos.			

c)	3 Nos. 6A socket outlet controlled by 1 Nos. 16A SP Switch with indicator	Nos.	95		
d)	6/16A socket outlet controlled by 1 Nos. 16A SP Switch with indicator	Nos.	RO		
e)	2 Nos. 6/16A socket outlet controlled by 2 Nos. 16A SP Switch with indicator (Soc. Type-5)	Nos.	7		
f)	16A Master switch with indicator	Nos.	25		
5.0	INDUSTRIAL SOCKETS :				
5.1	Supply, installation, testing and commissioning following sizes MCB in IP 65 Weather proof enclosure. The rate shall include cost of MCB isolator. The MCB shall be wall mounted using necessary brackets and fixing accessories.				
a)	63A, 4P MCB isolator (D curve)	Set	2		
a)	32A, 4P MCB isolator (D curve)	Set	2		
	PART - C TOTAL AMOUNT				
	PART - D				
D.	SUPPLY AND INSTALLATION OF LIGHT & FAN FIXTURES				
1.0	Supply, installation, testing and commissioning of following type light and fan fixtures with all necessary fixing accessories as required. The efficacy of the LED lamp shall be not less than 100lm/Watt				
1.1	1 x 20W, 4000K, 4 Feet LED tube, Surface/suspension light fixture of type REGALBATTENT 8UPTO1X22WSSBSWH + CRYSTAL 1213T8DSTL20WLED865SGGLASS of similar to Havells/Philips/Crompton make/equivalent.	Nos.	15		
1.2	2 x 20W, 4000K, 4 Feet LED tube, Surface/suspension light fixture of type REGALBATTENT 8UPTO2X22WSSBSWH + CRYSTAL 1213T8DSTL20WLED865SGGLASS of similar to Havells/Philips/Crompton make/equivalent.	Nos.	10		
1.3	15W-18W LED Recessed down Lighter of type ENDURANEODLR18WLED830S of similar to Havells/Philips/Crompton make/equivalent.	Nos.	45		
1.4	15W LED surface down Lighter of type INTEGRANEOSURFA CEDLS15WLED857S of similar to Havells/Philips/Crompton make/equivalent.	Nos.	15		
1.5	5W LED Recessed down Lighter of type ORBITDLR5WLED830S of similar to Havells/Philips/Crompton make/equivalent.	Nos.	10		
1.6	42W, 4000K LED, square surface mounted Light fixture (2' x 2') of type PLUTOSURFA PLUTOSURFA CE2X2PLS42WLED857S of similar to Havells/Philips/Crompton make/equivalent.	Nos.			
1.7	36W, 4000K LED, square Recess mounted Light fixture (2' x 2') of type BZRSQ 36W GZi WH of similar to bajaj make/equivalent.	Nos.	100		
1.8	Supply and Installation of LED STRIP indoor, 10W / meter including driver and necessary fixing accessories as required	Mts	50		
1.9	Supply and fixing of 1200mm sweep, ceiling fan without fan regulator and shall be of crompton /equivalent.	Nos.	6		
1.10	Supply and fixing of 400mm sweep, WALL fan of crompton /equivalent.	Nos.	15		
1.11	Supply and fixing of 150/225mm dia. single phase. exhaust fan with necessary angle iron bracket.	Nos.	6		

1.12	Supply & fixing of Timer for UPS room Exhaust Fans	Nos.	1		
2.0	INSTALLATION OF LIGHT & FAN FIXTURES (existing)				
2.1	Installation of 15/5W LED surface / recess down lighter	Nos	100		
2.2	2' x 2', surface / recess, mounted Light fixture	Nos	100		
2.3	S/I 1200/900.mm sweep, ceiling fan without fan regulator and shall be of crompton /equivalent.	Nos	11		
	S/I 150/225mm dia. single phase. exhaust fan with necessary angle iron bracket.	Nos	8		
2.4	S/I Wall Fan with necessary fittingst.	Nos	22		
	PART - D TOTAL AMOUNT				
	PART - E				
E.	EARTHING SYSTEM				
1.0	Supply & installation of 38mm dia, 2.5 Mtr. long G.I.pipe electrode earthing station complete with manholes, brick masonry chamber, heavy duty CI covers, funnel etc., The cost shall also include providing of salt and charcoal layer by layer, excavation and back filling etc., all complete as required and shall confirm to IS - 3043.	Set	1		
2.0	Supply & installation of 600 x 600 x 3 mm, copper plate earthing station complete with GI pipe, manholes, brick masonry chamber, heavy duty C I covers, funnel, etc., The cost shall also include providing of salt and charcoal layer by layer, excavation and back filling etc., all complete as required and shall confirm to IS - 3043.	Set	2		
3.0	Supply, installation & connecting of G.I.tape /wire being clamped to walls, cable trays, ladders, run in pipes with Sleeves etc , laid underground etc.,as required including interconnection between the earth stations etc.,all complete as required. (Note : The excavation and back filling is measured separately) .				
a)	25 x 6mm G.I. tape	M	30		
b)	25 x 3mm G.I. tape	M	100		
c)	25 x 3 mm Copper tape	M	4		
d)	10swg. Cu. wire	M	100		
e)	8 swg. G.I. wire	M	100		
	PART - E TOTAL AMOUNT				
	PART - F				
F.	TELEPHONE SYSTEM				
1.0	Supply and laying of 2mm thick FR PVC conduit with all necessary accessories like junction boxes, pull boxes. G.I fish wires and other fixing accessories as required. The rate shall also include chasing of walls, floor and plastering of the chased portion etc; all complete as required.				
a)	20mm dia	M	800		
2.0	Supply and wiring for telephone outlet with 0.51mm dia, copper conductor, PVC insulated, unarmoured, telephone cable in existing conduit.				
2.1	2 pair	M	1100		

3.0	Supply and wiring of multicore 0.51mm, copper conductor, PVC Insulated, PVC sheathed, armoured telephone cable laid drawn through existing trench/cable tray / wall supports with all necessary accessories as required.				
a)	5 Pair Cable	M	0		
b)	10 Pair Cable	M	20		
c)	20 Pair Cable	M	20		
d)	50 Pair Cable	M	20		
4.0	Supply and installation of clip on plug type telephone outlet with interconnection of the outlet. The cover plate of telephone shall match with the other wiring accessories. (Telephone socket outlet shall be of modular of type Anchor roma / equivalent) .	Nos.	30		
5.0	Supply, installation, testing & commissioning of telephone junction box. The junction box shall be with sheet steel enclosure enclosing krone connector and shall be provided with padlock arrangement.				
a)	10 Pair TJB.	Nos.	1		
b)	20 Pair TJB.	Nos.	1		
c)	50 Pair TJB.	Nos.	1		
6.0	Supply, installation, testing and commissioning of Analog table mounted telephone instrument of make Beetel B-11 / equivalent	Nos.	30		
	PART - F TOTAL AMOUNT				
	PART - G				
G.	DATA SYSTEM				
1.0	Supply and laying of 2mm thick FR PVC conduit with all necessary accessories like junction boxes, pull boxes. G.I fish wires and other fixing accessories as required. The rate shall also include chasing of walls, floor and plastering of the chased portion etc all complete as required.				
a)	25 mm dia	M	1200		
2.0	Supply, installation of Single RJ-45 , CAT -6 information outlet with necessary back mount box and other fixing accessories. (socket outlet shall be of modular of type Dilink / equivalent) .		90		
	Supply, installation of Dual RJ-45 , CAT -6 information outlet with necessary back mount box and other fixing accessories. (socket outlet shall be of modular of type Dilink / equivalent) .	Nos.	30		
3.0	Supply, drawing and connecting of cat-6, UTP cable in existing conduit for LAN network.	M	2200		
4.0	Supply and connecting of UTP CAT -6E mounting cords				
a)	1 mtr. Patch Cord	Nos.	95		
b)	3 mtr. Patch Cord	Nos.	95		
5.0	Supply, installation , testing & commissioning of patch panel with CAT-6 I/O mounted on existing rack with all necessary fixing accessories. The rate shall include cost of ferrule, numbering, stickering & necessary fixing accessories as required				
a)	24 port jack panel	Nos.	4		

6.0	Supply, installation , testing & commissioning of 600mm width, 500mm depth wall mounted, closed rack with 1 PDU 1 tray1 cable manager and all necessary fixing accessories as required.				
a)	24 U Rack	Nos.	2		
	PART - G TOTAL AMOUNT				
	PART - H				
H.	TV SYSTEM				
1.0	Supply and installation of T.V. Co-axial socket outlet with inter connection of the outlet The cover plate of T.V. Co-axial socket outlet shall match with other wiring accessories. (The socket outlet shall be of make Anchor roma /equivalent) The rate shall also include cost of civil works involved in fixing of boxes.	Nos	4		
2.0	Supply & drawing of RG 6 co-axial cable in existing conduit.	M	60		
3.0	Supply and laying of 2mm thick FR PVC conduit with all necessary accessories like junction boxes, pull boxes. G.I fish wires and other fixing accessories as required. The rate shall also include chasing of walls, floor and plastering of the chased portion etc all complete as required.				
a)	25 mm dia	M	60		
	PART - H TOTAL AMOUNT				
	PART -I				
I.	PA SYSTEM				
1	Amplifier:Amplifier S & I of Central Music Station comprising of 1No. of 200 Watts Amplifier with CD player and micro phone all interconnected as directed (Philips)/BOASCH	No's	1		
2	Goose Mic	No's	1		
3	Ceiling Speakers:Ceiling Speakers 6watts LBD 8353	No's	15		
4	Mixer	No's	1		
5	Player	No's	1		
6	1.5Sqmm Cable	Mtr	450		
	TOTAL PART-I				
	PART-J				
J	CCTV SYSTEM				
1	Supply of AHD Camera IR Bullet / Dome IRB AHD 2.4MP/BW-01/36L/6MM/20 METERS,PREMIUM SERIES - Day & night color mode STARLITE	Nos	8		
2	Supply of AHD DVR 16CH - 4U / Recording 720P / Viewing 1080P Supports -> Analog + AHD + IP Camera + TVI(2.0 and further versions) + CVI	Nos	1		
3	HDD 2 TB	Nos	1		
4	Supply of connectors accessories	Nos	12		
5	Supply of Power supply support SMPS	Nos	2		
6	Cable supply and laying	PRM	150		
7	PVC conduit supply and laying	Prm	60		
8	Supply of PVC box for Cameras	Nos	10		

	TOTAL PART-J				
	PART - k				
J.	MISCELLANEOUS WORKS:				
1.0	Electrical safety - RUBBER mats of 1.1kV grade 1.8mx.0.9m	Nos	2		
2.0	Supply and fixing : of 1nos First aid kit, Safety chart, Danger boards-2nos , No Admission boards-1nos	set	1		
3.0	Prepare As Build Drawing by Contracor	L.S	1		
	TOTAL PART-L:-				
	ABSTRACT				
PART - A	MV PANELS & DISTRIBUTION BOARDS				
PART - B	LT CABLES AND CABLE END TERMINATION :				
PART - C	WIRING SYSTEM				
PART - D	SUPPLY AND INSTALLATION OF LIGHT & FAN FIXTURES				
PART - E	EARTHING SYSTEM				
PART - F	TELEPHONE SYSTEM				
PART - G	DATA SYSTEM				
PART - H	TV SYSTEM WIRING				
PART - I	PA SYSTEM				
PART-J	CCTV SYSTEM				
PART - K	MISCELLANEOUS WORKS:				
	TOTAL D				
E	VRF AIR COOLING SYSTEM -				
1	TOSHIBA /BLUE STAR / DAIKIN/CARRIER				
I	Supply of new factory supplied Air cooled VRFSsystem WITH INVERTOR SCROLL COMPRESSOR.. Supply of variable Refrigerant Flow modular type air-conditioning system complete with indoor & outdoor units with individual corded & Cordless controller as per the following capacities of the IDU, ODU & Accessories				
	OUT DOOR UNITS - Single Module				

	Modular type outdoor units equipped with highly efficient optimised scroll compressors with inverter Technology only, special gold precoated heat exchanger, dc inverter fan motor with low noise, with Hot gas by pass arrangement in order to prevent the flow of liquid gas in to the compressor, Oil separator at the discharge side of the compressor, with Oil pump at the bottom of the compressor motor in order to keep the motor at low temperature even during part load condition. each outdoor unit must consist of 2 compressors, with 4 way heat exchanger. Outdoor includes of Black box, and fault detection system as safety device during the commissioning stage. All refrigerant piping system are of imported. Refrigerant of R410A.				
a	60 HP - ODU - Only Cooling	1	NOS		
2	INDOOR UNITS				
I	Supply of 1-Way Cassette indoor units with compact cooling coil, electronic expansion valve, multispeed fan motor & cordless remote controller. The blower shall be statically & dynamically balanced and designed for silent operation, The unit shall also consist of drain pan with Drain Pump in order to lift the drain water to 700mm lift. The indoor unit shall be suitable for ceiling suspension above the false ceiling and capacities are as follows. Indoor is compatible to upgrade the filtration level to 0.3 micron at 95 % efficiency on demand				
a	1 tr Capacity	1	NOS		
b	1.6 tr Capacity	8	NOS		
II	Supply of 4-Way Cassette indoor units with compact cooling coil, electronic expansion valve, multispeed fan motor & cordless remote controller. The blower shall be statically & dynamically balanced and designed for silent operation, The unit shall also consist of drain pan with Drain Pump in order to lift the drain water to 700mm lift. The indoor unit shall be suitable for ceiling suspension above the false ceiling and capacities are as follows. Indoor is compatible to upgrade the filtration level to 0.3 micron at 95 % efficiency on demand				
a	1.6 tr Capacity	2	NOS		
b	2 tr Capacity	2	NOS		
c	4 tr Capacity	8	NOS		
d	3.2 tr Capacity	2	NOS		
e	Inter-connecting Y-Branches for copper pipes for controlling the flow of Refrigerants to connecting branches/ indoor units	1	LOT		
f	Central Controller	1	LOT		
	TOTAL FOR SUPPLY OF EQUIPMENT				
2	ANCILLARY WORKS				
1	Lifting, shifting of Outdoor units to its respective positions as per the layout, using crane / suitable alternate arrangement.	1	LOT		

2	Lifting, shifting & Installation of Indoor Units with proper supporting arrangements for specified indoor types				
a	Cassette type Units	22	NOS		
3	Supply and Laying of copper pipes with proper fittings & accessories like elbow, collar, tee, brazing set & copper pipes are insulated with tuber insulation of thickness 13mm for suction & 19mm for liquid pipe lines . (details specified below)				
	06.35 mm	80	Rmt		
	09.52 mm	150			
	12.70 mm	110			
	15.88 mm	110			
	19.05 mm	35			
	22.22 mm	30			
	28.58 mm	30			
	31.80 mm	36			
	38.10 mm	35			
	41.3 mm	20			
4	Providing & fixing rigid CPVC piping complete with fittings, supports as per specifications and pre insulate with 6mm thick closed cell elastomeric nitrile rubber tubular insulation				
a	25 mm dia	34	Rmt		
b	32 mmdia	RO	Rmt		
5	Supply & Laying of control / Communication cable between indoor & outdoor units for proper communication with pvc conduit.				
a	4Core 16 Sqmm (input power supply for outdoor unit)	10	Rmt		
b	Shielded Communication cable	510	Rmt		
6	Supply and Laying of GI Cable tray with top cover for all exposed area for protecting the copper pipe.		Rmt		
7	Pressure testing of copper pipe upto 600 psi with nitrogen gas, Check for leak test, Vaccumizing the system with proper tools & Commissioning the system by charging R-410A Gas.	1	lot		
8	Civil Core cutting	2	nos		
9	Supply & Fixing of M.S Bracket for outdoor units with proper rubber pad	1	Lot		
10	Supply and Fixing of Airdrier and Shuttle Valve For Outdoor Unit	1	No		

11	Transportation	1	Lot		
	Freh air supply				
12	Supply and fixing of Fresh Air Fan with necessary supports and fittings.	2	no		
13	Supply and fixing of Disc valves of following size				
a	75mm dia	20			
14	Supply and fixing of PVC Pipes with necessary supports and fittings.				
a	90 mm dia	115	Rmt		
b	160 mm dia	6	Rmt		
	Installation charges for above Fans, disc valves and accessories	1	lump sum		
	TOTAL FOR ANCILLARY WORKS				
	TOTAL E				
F	FIRE ALARAM SYSTEM				
1	Supply, installation, Testing & commissioning (S/I/T/C) of microprocessor based automatic fire alarm panel of 6 zone, having provision of fire & fault conditions complete with, battery charger facility complete with LCD display, m switch complete in all respect Zonal floor wise ,	No.s	2		
2	Main control panel as all above necessities req. (System sensor, Agni)	No.s	1		
3	S/I/T/C breaking type typical smoke detector ionization /photo electric type with lcd indicator (System sensor make)	No.s	70		
4	S & I of conventional heat detector , rate of rise cum fixed temp type	No.s	4		
5	S/I/T/C of Manual call Point Type with red LCD & front glass cover with chain hammer Agni / System sensor	No.s	6		
6	S/I/T/C of Electronic Hooter wall mounted type (Agni,system sensor ASE)	No.s	6		
	S & I of response indicator	NOS	20		
7	Supply & Laying of 1.5MMX2 CORE. Sq. mm copper armoured cable complete with all required fittings & accessories as required (Finolex, Polycab,)	Rmt	700		
8	S/I/T/C 12 volt battery 7 AH for panel battery backup Exide / Amron	No.s	4		
	TOTAL -F				
	Summary				
No.	Description				
A	CIVIL WORK				

B	INTERIOR WORKS				
C	MODULAR WORKS				
D	ELECTRICAL				
E	AC WORKS				
F	FIRE FIGHTING				
	GRAND TOTAL				
	GST 18%				
	GRAND TOTAL				
	TOTAL AMOUNT IN RUPEES:				