#### TENDER DOCUMENT FOR

STRUCTURAL REPAIRS, EXTERNAL REPAINTING, RECTIFICATION OF SEEPAGE, INTERNAL RENOVATION OF FLATS, AT NABARD STAFF QUARTERS BUILDING NO. 5 (5A, 5B, 5C, 5D, 5E), DAMODAR PARK, GHATKOPAR (W), MUMBAI

Tender Schedule	
Issue of Tender	03 .11.2025
Pre-Bid Meeting	13.11.2025 on 11.00 Hrs.
Last date for submission of Tender	24.11.2025 up to 15.00 Hrs.
Opening of Technical Bids	25.11.2025 at 15.00 Hrs.
Opening of Price Bid	Will be communicated



# **Department of Premises, Security and Procurement**

NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT HEAD OFFICE, BANDRA KURLA COMPLEX, BANDRA (E), MUMBAI- 400051.

Architect / Consultant

B. J. MEHTA ARCHITECTURAL & STRUCTURAL CONSULTANTS PVT. LTD. 2&3 AMIT VIJAY APARTMENT, KASTURBA CROSS ROAD, KANDIVALI (WEST), MUMBAI 400067

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#### **Important Definitions**

- 1. "NABARD" means National Bank for Agriculture and Rural Development.
- 2. "The Bank" means NABARD, Head Office, BKC, Bandra (East), Mumbai.
- 3. "Recipient", "Respondent", "Agency", "Contractor", "Applicant" and "Bidder" means respondent to the Tender Document.
- 4. "HO" means NABARD, Head Office.
- 5. Selected Bidder and Bank shall be individually referred to as "Party" and collectively as "Parties".
- 6. "Bid", "Offer" means response to this Tender Document.
- 7. "Tenderer" or "Contractor" shall mean a firm or company, whether incorporated or not, undertaking the works and shall include the legal heirs/representatives of such individual or the partners composing firm and their legal heirs and successors.
- 8. "Contract Price" shall mean the final accepted rates in the Bill of Quantities.
- 9. "Accepting Authority" shall mean the Chief General Manager of the National Bank for Agriculture and Rural Development (the Employer), 'Approval' wherever used in the specifications or scope of work shall mean, approved by or approval of the 'Accepting Authority' in writing.
- 10. Notice in writing or written notice shall mean a notice in writing typed or written characters delivered to or sent by contractor and shall be deemed to have been received when in ordinary course of post, it would have been delivered, and/or delivered personally, or otherwise proved to have been received.
- 11. "Drawing" shall mean all drawings and/or design drawings of the installations and manual of operation of various equipment's or any such reference for operation and maintenance furnished by the tenderer/sketches duly signed by the authorised Bank Officer or the Consultant on behalf of the employer during the progress of the work.
- 12. "Letter of Acceptance" shall mean an intimation by a letter issued by the Accepting Authority of the Employer to tenderers that his tender has been accepted in accordance with the provisions in the said letter.
- 13. "DPSP" stands for Department of Premises, Security and Protocol
- 14. "CPPP" means Central Public Procurement Portal
- 15. "BOQ" pertains to Bill/Schedule of Quantities mentioned in Price Bid
- 16. "Consultant" shall mean M/s B.J. Mehta Architectural & Structural Consultants Pvt. Ltd.
- 17. "Authorized representative of Bank's / Bank Engineer / Bank Officer" means officials of NABARD looking after the project.

#### PART A - TECHNICAL BID

# निविदा आमंत्रण सूचना

#### **NOTICE INVITING e-TENDER**

REF. NO. NB. DPSP/ HO/ Ghatkopar Bldg no. 5 /109859/2025-26

Date: 3<sup>rd</sup> November 2025

Open tender on CPP portal

Dear Sir,

e-TENDER for STRUCTURAL REPAIRS, EXTERNAL REPAINTING, RECTIFICATION OF SEEPAGE, INTERNAL RENOVATION OF FLATS, AT NABARD STAFF QUARTERS BUILDING NO. 5 (5A, 5B, 5C, 5D, 5E), DAMODAR PARK, GHATKOPAR (W), MUMBAI

नबार्ड स्टाफ क्वार्टर बिल्डिंग नंबर 5 (5ए, 5बी, 5सी, 5डी, 5ई), दामोदर पार्क, घाटकोपर (वेस्ट), मुंबई में फ्लैट्स की संरचनात्मक मरम्मत, बाहरी पुनः रंगाई, रिसाव सुधार, आंतरिक नवीनीकरण के लिए ई-टेंडर

- 1. National Bank for Agriculture and Rural Development (NABARD) is India's apex development bank, established in 1982 under an Act of Parliament to promote sustainable and equitable agriculture and rural development. NABARD intends to invite e-tenders in two parts for Structural Repairs, External Repainting, Rectification of Seepage, Internal Renovation of Flats, at NABARD Staff Quarters Building No. 5 (5A, 5B, 5C, 5D, 5E), Damodar Park, Ghatkopar (W), Mumbai
- The tender document is available on Central Public Procurement Portal (CPPP)
  i.e. https://eprocure.gov.in and in NABARD's website www.nabard.org for
  download. No physical copy shall be provided by NABARD and submitted to
  NABARD.
- 3. The intending bidders shall upload their bids in two parts viz. Technical Bid and Financial/Price Bid along with duly signed scanned copies of all relevant documents etc., in support of their technical & financial bids on the website of CPPP only within the prescribed time limit. The evaluation of tenders will be based on online bids submitted by the bidders.
- 4. Please note that, to submit e-tender through electronic mode, interested bidders should have Digital Signature Certificates (DSC) to login to CPPP. In case of any further guidance, help, and support during submission of e-bids, bidders are advised to contact the support center of CPPP. There is no need for the submission of hard copies of the filled tender to NABARD.

- 5. Instructions regarding Technical Bid, Financial Bid, submission process and description & scope of works and the services required have been elaborated in the Terms and Conditions and other parts of the tender document.
- 6. Earnest Money Deposit (EMD) of ₹64,64,000/- (Rupees Sixty-Four lakh Sixty-Four thousand only) is to be paid to the designated account as mentioned below, if applicable to your firm. Counterfoil/ receipt/transaction/e-BG/BG details for the same must be enclosed with the tender. No interest shall be paid on the EMD thus collected. EMD of the successful bidder will be adjusted towards Initial Security Deposit (ISD), whereas EMD of the unsuccessful bidders will be refunded within 30 days of opening of price bid.

Name of Account	NATIONAL BANK FOR AGRICULTURE
	AND RURAL DEVELOPMENT
BANK NAME	NABARD
BRANCH NAME	HEAD OFFICE, MUMBAI
IFSC code	NBRD0000002
Account Number	NABADMNo7

- 7. The bids without EMD shall be rejected if your firm is not eligible for exemption from EMD amount. If the bidder wants to claim EMD exemption, the bidder must submit documentary proof of registration as MSE (Micro and Small Enterprises) as defined in MSE Procurement Policy of Govt. of India or registration with Central Procurement Organizations or empaneled with NABARD itself. If work is awarded to the MSE agency, he has to submit ISD amount within 10 days from the date of issue of work order. In case of non-deposit of ISD amount within the stipulated time period (i.e. 10 Days), an interest amount @ current Bank Rate (as decided by RBI in prevailing Monetary Policy) will be levied for this amount for the delayed period. The bidder may submit to the electronic Bank Guarantee if they choose so. Work Awarded will be withdrawn if the bidder fails to deposit ISD within 30 days of award of tender.
- 8. A Pre-Bid meeting is scheduled to be held in the Conference Hall at Ground Floor, A-Wing, NABARD Head Office, Plot C-24, G Block, Bandra Kurla complex, BKC Road, Bandra East, Mumbai, Maharashtra 400051 at 11 AM on 13<sup>th</sup> November 2025, in the presence of Bank's officials. The clarifications being sought in the prebid meeting may be submitted in writing at our Office mail id: dpsp@nabard.org at least two working days prior to the date of the pre bid meeting. The clarifications given in the pre bid meeting will also form part of the tender document and will be uploaded to the website. NABARD reserves the right to revise the bid after pre-

bid meeting, if required, and the same will be uploaded on the website. If any bidder wants to join the pre-bid meeting online, he may send request by email in this regard.

- 9. Date of pre-bid meeting, last date for submission of bids and date of opening of technical bid are indicated in the Schedule of the Tender. Bidders are requested to make note of dynamic time being displayed on e-Procurement portal of NABARD to ensure that the bids are submitted on time.
- 10. The tender will be rejected if any bidder proposes any deviation from the prescribed technical criteria requirement.
- 11. It may be noted that it will be two bids tendering wherein the first bid will be 'Technical Bid' and second bid will be the 'Price Bid'. Tenderers are advised to submit e-tender (e-bids) through CPPP portal ( <a href="https://eprocure.gov.in">https://eprocure.gov.in</a>) only, after carefully following the instructions related to systems and procedures as indicated in CPPP.

# 12. Technical Bid (Part-I) i.e. shall contain.

- a) EMD counterfoil OR required MSE certificate
- b) Notice Inviting Tender
- c) Covering letter for submission of Tender
- d) Form of Tender
- e) Proof of meeting Pre-qualification criteria of the contractors
- f) Special Instructions to Bidders
- g) General terms and conditions
- h) Technical Specifications
- i) List of approved makes of materials/trade
- j) Information to be furnished by Contractor (PART I, II, III of Annexure I) in support of fulfilling eligibility criteria.
- k) Safety Code
- 1) The following documents should be submitted presently:
  - i. Letter for submission of tender on the firm's letterhead and signed by authorised person
  - ii. Pre-contract Integrity Pact on ₹500/- stamp paper, signed on each page and uploaded
  - iii. An Undertaking by the Authorized Signatory of the Vendor/Bidder, on the letter head of the Vendor/Bidder stating that the Vendor/Bidder has not been blacklisted by any Central/State Government Organization or PSU for any corrupt and fraudulent practice
  - iv. EMD payment details

- m) Bidder shall upload the price bid in such a way that it does not get opened at the time of opening of technical bid on CPP portal.
- n) Bank has appointed Independent Monitor Dr Rabindra Kumar, IFS (Retd.) (hereinafter referred to as Monitor) for this consultation with the Central Vigilance Commission.
- 13. **Price Bid (Part-II) shall contain:** Duly filled Schedule of Quantities as per format only on CPP portal.
- 14. **Technical bid** will be opened as per schedule given in the NIT or on any other date as intimated to the bidders through online portal.

# 15. Price bid -

- a) It should not contain any conditions whatsoever and any conditional bids shall be rejected.
- b) Incomplete price bid would be summarily rejected.
- c) It is ensured that the Price Bid should not contradict the Technical Bid in any manner. In case of contradiction, Price Bid will prevail upon the technical bid.
- d) It will be opened on a suitable date, after opening of technical bid and its scrutiny, it will be communicated later.
- e) Bidders are requested to quote the price in CPP portal itself. The quoted price shall include all the costs for the entire scope of work as per the tender document. Bids based on a system of pricing other than that specified shall be rejected.
- f) The Bid Prices quoted by the bidders covers all the Contractor's obligations mentioned in or to be reasonably inferred from the Bidding Documents to successfully execute the intended services, on a "Single Responsibility" basis. Bidders are required to quote the price for the commercial, contractual and technical obligations outlined in the Bidding Documents.
- g) Bidders shall upload price breakup as per format attached with the price bid as a part of their price bid on CPP portal as per provisions available on CPP Portal.
- 16. NABARD does not bind itself to accept the lowest bid (L1). NABARD reserves the right to accept or reject any /all tender/s in part or whole of any firm / firms without assigning any reasons whatsoever.
- 17. The decision of the bank shall be final and binding with regard to Technical and Financial Bids and the complete e-tendering process.

- 18. Bidders must ensure attachment of relevant documents, supporting the Pre-Qualification Criteria.
- 19. All documents that comprise the offer should be uploaded on CPP portal with a digital signature certificate and will be considered as a token of acceptance by the bidder of the terms and conditions specified in the tender.
- 20. The submitted bid shall remain valid and open for acceptance for 90 days from the date of opening of the Financial/Price Bid.
- 21. NABARD reserves the right to change/modify/amend any or all provisions of the tender document. Such revision/amendment or corrigendum/addendum, if any, will be made available on CPP portal and NABARD's website only.
- 22. Bidder/s may inspect the existing site and other conditions up to their satisfaction before e-bidding.
- 23. Bids containing false and/or incomplete information are liable for rejection.
- 24. The successful bidder shall execute an 'Articles of Agreement' of work contract with NABARD in accordance with the standard / prescribed format within **15 days** from the date of acceptance of the offer failing even after giving 05 days grace period in such case bidder's EMD may stand forfeited as per decision of Bank.
- 25. The contractor shall participate in the "Kick Off meeting" which will be held after issuance of work order and before start of work at site. In the meeting, the bidder will be briefed about the requirement of personnel, maintenance of various registers, about site office, godown, etc.
- 26. Integrity pact The tenderer must submit the Integrity pact at its own cost on ₹500/- non judicial stamp paper as per the format given in Annexure V in the tender document to become eligible to participate in the tender.
- 27. You may contact Architect M/s B. J. MEHTA ARCHITECTURAL & STRUCTURAL CONSULTANTS PVT. LTD or officials of NABARD on <a href="mailto:dpsp@nabard.org">dpsp@nabard.org</a> or Shri R K Agrawal DGM on telephone no. 8008829847 mail ID <a href="mailto:rk.agarwal@nabard.org">rk.agarwal@nabard.org</a> or Shri N D Shaikh AGM telephone no 7738777532 and email id <a href="mailto:nd.shaikh@nabard.org">nd.shaikh@nabard.org</a>, Shri Nishkarsh Jaiswal AM, Telephone no 8289842180 email ID <a href="mailto:Nishkarsh.jaiswal@nabard.org">Nishkarsh.jaiswal@nabard.org</a>, for any further clarification on the tender.

Yours faithfully,

**-SD- (R K Agrawal)** Deputy General Manager

#### 2. FORM OF TENDER

To Date:

The Chief General Manager, Department of Premises, Security and Procurement National Bank for Agriculture and Rural Development Head Office, Mumbai – 400051

Dear Sir,

TENDER FOR STRUCTURAL REPAIRS, EXTERNAL REPAINTING, RECTIFICATION OF SEEPAGE, INTERNAL RENOVATION OF FLATS, AT NABARD STAFF QUARTERS BUILDING NO. 5 (5A, 5B, 5C, 5D, 5E), DAMODAR PARK, GHATKOPAR (W), MUMBAI

1. Having examined the tender document relating to the works specified in the Memorandum hereinafter set out, having visited and examined the site of the works specified in the said Memorandum and having acquired the requisite information relating thereto as affecting the tender, I/We hereby offer to execute the works specified in the said Memorandum within the time specified, at the rates mentioned in the Price Bid; in all respects of the tender and with such materials as are provided for, in accordance with such conditions in so far as they may be applicable.

#### 2. MEMORANDUM

Subject	Specification
Description of work	TENDER for Structural Repairs, External Repainting,
	Rectification of Seepage, Internal Renovation of Flats, At
	NABARD Staff Quarters Building No. 5 (5A, 5B, 5C, 5D, 5E),
	Damodar Park, Ghatkopar (W), Mumbai
Location	Damodar Park, Ghatkopar(W), Mumbai.
Earnest Money Deposit	₹64,64,000/-
Time allowed for	Work will be carried out in 3 Phases and first phase of all
completion of the work	works of one Building of 5-D and 5-A Block will be
completion of the work	completed in 06 Month Time from the 10th date of issue of
	work order in all respect. Total time of completion for all the
	project in 3 phases shall be 18 months.
Liquidated Damages	Will be levied at 0.25% of the value of the accepted tender
	for every week of delay or part thereof by the contractor,
	subject to maximum of 5% of the value of the accepted
	tender for delay in completion of the work within the
	stipulated period. Liquidated damages for each phase will
	be counted separately.

Defect Liability Period	1 year from the date of virtual completion as countersigned by consultant as per Annexure IV
Performance warranty for Structural Repair, External painting and waterproofing works and external painting	Undertaking in ₹500/- non judicial stamp paper as per the prescribed format indicated elsewhere in the tender document valid for 05 years from the date of virtual completion
Retention Money Deposit (RMD)	5% of the contract value. RMD shall be deducted @ 5% from every R.A. Bill (after adjustment of ISD of 2%) till the total recovery amounts to 5% of the contract amount. The EMD/ISD together with RMD will constitute Security Deposit. While determining the RMD, the EMD/ISD already with the Bank shall be considered. 50% of RMD shall be refunded after expiry of defect liability period of 01 year from the date of virtual completion of the work, provided the Contractor has satisfactorily carried out all the rectification works and attended to all defects to the satisfaction of NABARD. No interest will be paid on Security Deposit/Retention Money. No mobilisation advance will be given to contractor.
Security Deposit	Earnest Money Deposit and Retention Money Deposit will form a total Security Deposit (SD). The security deposit will be limited to 5% of the total value of work executed. No interest will be paid on it.
Clarification	Bidder will have to submit the detailed rate analysis with justification within 15 days, if required.
Min. Value of work for interim/ RA bills except final bill	₹ 1.25 Crore
Water & Electricity	As far as possible, water and electricity shall be provided by the NABARD. In case of non-availability or limited availability, contractors may have to arrange the additional water & electricity on their own.

- 3. Should this tender be accepted, I/We hereby agree to abide by and fulfil the terms and provisions or the said Conditions of the tender annexed hereto or in default thereof to forfeit the EMD and pay to the National Bank for Agriculture and Rural Development, the amount mentioned in the said tender conditions.
- 4. I/We hereby declare that I/we are not blacklisted by any Central/ State Government/ agency of Central/ state Government of India, Public Sector Undertakings/ any Regulatory authorities in India for any kind of fraudulent activities.

i) Branch, Branch,
ii) Bank, Branch,
iii) Type of account: Savings / Current account
iv) Bank Account No. :
v) IFS code of Bank and branch :
The names of partners of our firm are:
i)
ii)
iii)
Name of the partner of the firm
Authorized to sign:
OR
Name or person having Power of
Attorney to sign the contract
(Certified copy of the Power of
Attorney/Board Resolution/Gazette Notification etc. should be attached):
Yours faithfully,
Signature of Tenderer with stamp

# 3. PRE-QUALIFICATION CRITERIA OF THE BIDDER

The contractor shall fulfil the following eligibility criteria for participating in the tender with supporting documents. It is essential to upload the requisite documents on CPP portal only. NABARD will give one opportunity to the bidders for submission of any incomplete/missing documents. In case of non-compliance or non-production of the required documents, it will make the bid liable for rejection.

S.No.	Description
1.	The bidder should have experience of executing Structural Repairs, water proofing and internal renovation works for RCC building during the last 7 years as on 30.09.2025. Work Experience Details of service provided to Government Departments /Semi Government Depts./Corporate Bodies/Public Trust/PSUs/Banks/ Financial Institutions, such as Copies of Purchase Orders/work orders and related completion certificates from the respective Government Departments /Semi Government Departments/ PSUs / Banks/ Financial Institutions, Corporate bodies, Limited Companies, Public Trust etc. during the last seven years should be enclosed / uploaded with technical bid. Following documents should be submitted:  1. Copy of work order (s) /Contract document (s).  2. Completion Certificate (s).  Note: Joint Venture/Consortium are not permitted
2.	<ul> <li>Bidders should have successfully completed during last 7 years (ending 31.12.2024) at least:</li> <li>a. three similar works with individual work value costing not less than ₹ 12,93,00,000/</li> <li>b. two similar works with individual work value costing not less than ₹16,16,00,000/</li> <li>c. one similar work with individual work value costing not less than ₹25,86,00,000.</li> <li>Definition of Similar Works: The Bidder shall have executed civil works having at least one work each of Structural Repairs, water proofing, internal repairs and Rehabilitation/Retrofitting works, in multistorey buildings of G+7 or more. Documentary proof of execution of the above works shall be submitted by the bidders.</li> </ul>
3	Prospective bidders are expected to attend the pre-bid meeting and do the site visit who are interested to participate in tendering process. Uploading of Site Visit Report duly signed by the client is compulsory otherwise tenders shall be Summarily rejected.

Minimum Average Annual Turnover of the bidder (For 3 years ending 4 on 31.03.2025) – ₹ 970.00 lakhs. The contractor shall submit copies of balance sheet / Profit & Loss a/c of the firm for the last three years (FY ending 31.03.2025). Latest audited final accounts of the business of the contractor duly certified by a Chartered Accountant/certificate of turnover issued by a Chartered Accountant should be enclosed in proof of their credit worthiness and turnover for the last three years. Valid MSE/Udyam Aadhar certificate against the Works for seeking 5 exemption of EMD for Micro and Small Enterprises (MSEs) only (not for medium enterprises) - registered with Udyam Registration or NSIC for the relevant goods/services are exempted from payment of Earnest Money Deposit (EMD) as per the provisions of the Public Procurement Policy for MSEs, 2012. Eligible bidders claiming this exemption must submit valid supporting documents along with their bids to avail the benefit. 6 EMD amount of ₹64,64,000/-. 7 Registration Certificate as per existing norms (indicating the legal status – Company / Partnership firm/ Proprietorship Concern, etc.) 8 Copy of GST Registration Certificates 9 Copy of PAN Card 10 Copies of Income Tax Return filed for last three financial years ending 31.03.2025 12 Integrity pact – The bidder has to enter into the Integrity pact at his own cost on ₹500/- non judicial stamp paper at tenderer's cost with Bank as per the format given to become eligible to participate in the tender. It would be a preliminary qualification and bid documents will not be considered in the absence of the Integrity Pact. 14. The contractor should submit undertaking stating that his / their/her firm is not blacklisted in NABARD/ Govt. / Semi Govt. institutions on their letterhead. The undertaking/affidavit should be of latest date and in original.

#### 4. SCOPE OF WORKS

1. The scope of work is described in technical bid as well as in BOQ of the tender (price-bid) document. The Contractor shall carry out and complete the said works in every respect for o5 nos. twelve storeyed building in accordance with the specifications, terms & conditions in the tender document and with the directions of and to the satisfaction of the Consultant/ NABARD. Works shall be carried out in 3 phases and in first phase work in two building shall be taken and after completion of works in all respect works of second phase shall be taken for another building. The broad work scope is given as under: -

# 1) Structural & Allied Repairs: -

- a) Structural repairs using PMM (polymer modified mortar), micro concreting, Fiber Wrapping, Grouting, Jacketing, Carbon laminates, Structural steel fabrication works etc. as directed as per site requirement.
- b) Plastering works (External, Internal, Ceiling) in one or two layers as applicable after making the surface rough with tacking tool etc.
- c) Removing & replacing existing drainage, Rainwater and Vent pipes with new PVC pipes and fittings of approved quality, make and brand and making it operational.
- d) Removing & replacing existing Water pipes with new UPVC/CPVC pipes and fittings of approved quality, make and brand with proper clamping/anchorage and pedestal support, wherever required.
- e) Removing existing terrace water proofing in affected areas & applying water proofing coating over terrace areas, compound walls.
- f) Removing damaged flooring, dado in affected areas & providing new flooring.
- g) Providing new MS grills.
- h) External Painting Works on new and old area

# 2) Internal Renovation Works: -

- a) Removing existing toilet water proofing & redoing the same in identified areas.
- b) Removing & redoing flooring, dado, Kitchen platforms work in identified areas.
- c) Internal plumbing works in identified areas.
- d) Toilet renovation works in identified areas.
- e) Door Window Replacement works in identified areas.
- f) Modular Kitchen, Wardrobe.

# 3) Electrification Works: -

- a) Removing existing wiring & redoing the same.
- b) Providing new light, fans, switches etc.
- 2. The engaged consultant M/s B.J. Mehta as well as designated Bank Officer, may issue further drawings and/or written instructions, details, directions and explanations from time to time as per project requirement which are hereafter collectively referred to as "Instructions" reflected either in the minutes or in any other form in regard to:
  - i. The variation or modification of the design quality or quantity of works or the addition or omission or substitution of any work.
  - ii. Providing sample colour/shade of painting and the same may be showcased at site for selection prior to the execution.
  - iii. Any discrepancy in or divergence between the Drawings or between the schedule of quantities and/or drawings and/or specifications.
  - iv. The removal from the site of any material brought thereon by the Contractor and the substitutions of any other materials thereof.
  - v. The removal and/or re-execution of any works executed by the Contractor.
- vi. The postponement of any work to be executed under the provisions of this Contract.
- vii. The dismissal from the works of any person employed thereupon.
- viii. The opening up for inspection of any work covered up.
  - ix. The amending and making good of any defects.
  - x. Coordination of work with other agencies.
  - xi. The employer/NABARD shall have a right to delete any item of work from the scope of contract and contractor shall not make any extra claim on this account.
- xii. If the contractor fails to comply with Consultant / NABARD instructions within a fortnight after the written notice from the NABARD requiring compliance with such instructions, NABARD may employ some other agency to execute any work whatsoever which may be necessary to give effect to such instructions.
- xiii. For the purpose of entering day to day instructions by the Consultant, NABARD, the contractor shall maintain at his own cost, a **'Site Instruction Book'** in quadruplicate in which the instructions will be entered by NABARD.

#### 5.GENERAL INSTRUCTIONS TO BIDDERS

#### 1. Instructions to Bidder

- i. The bidders are advised to submit the tender strictly based on the prequalification criteria, General Conditions of the Contract and Technical Specifications contained in the tender documents, and not to stipulate any deviations. If acceptance of the terms and conditions given in the tender documents has any price implications, the same should be considered and included in the quoted price. Tender containing deviations from the terms and conditions will be rejected at the Bank's discretion.
- ii. Intending contractors are required to submit their profile by giving details in the enclosed Pro-forma about their organization, experience, professional personnel in their organization, competence, etc.
- iii. The bidder must obtain for himself on his own responsibility and at his own expense, all the information which may be necessary for the purpose of making a tender and for entering into a contract, 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. NABARD's decision in such cases should be final and shall not be open to arbitration

#### 2. Submission of Tender

- i. Tenderers are advised to use only the format as indicated in the tender document issued by NABARD. However, if they desire to submit additional information, they may do so on their own letterhead / paper. Each page of supported uploaded documents shall be signed by the contractor/bidder.
- ii. Part I (Technical Bid) This part shall consist of tender documents, NIT, Letter of submission, PQ criteria & supported documents, various Terms & conditions, complete technical specification etc. Part I of the tender shall also contain the Earnest Money Deposit in form of Bank Deposit or electronic Bank Guarantee with validity of three months
- iii. Signed, sealed and stamped pre-bid pre-contract Integrity Pact on non-judicial stamp paper of ₹500/- as per the proforma given in the tender document.

#### iv. Part II - Price Bid

a. This part shall contain prices in Indian Rupees only as per format on CPP portal. No other enclosure is to be uploaded. Changes of terms and conditions and technical deviations, if any, found in Part II of the tender

- will not be taken into account and will be treated as null and void. Tender in which prices are quoted in any other currency will not be considered.
- b. This contract is neither a fixed lump sum contract nor a piece work contract but is an item rate contract to carry out the work in respect of the provision of the tender to complete in all respects.
- c. Bills to be paid according to actual measured quantities at the rates/quantities provided in the schedule of rates stated in Price/Financial Bid. The mentioned mode of measurement of price/technical bid will be adopted. If not mentioned, then the IS 1200 & CPWD (Central Public Works Department) method of measurement will be adopted.
- d. The rates quoted shall be deemed to be for the finished work and shall be firm and binding without any escalation whatsoever till the completion of the work.
- e. No conditional price bid will be accepted.
- 3. Tenderer shall supply all the tools, plants, labor and consumables etc., as required for executing the work as per tender.
- 4. During evaluation of technical Bid, NABARD representatives may visit the applicant's completed or on-going projects and contact his past clients for verification of information given by the applicant. During the site visit, if quality of the work executed is found to be unsatisfactory, then it can lead to disqualification of the Contractor. Besides this, the documents submitted by the contractor is found to be fraudulent/ manipulated/ false/amended, the contractor shall be blacklisted for the period as decided by NABARD for participating and awarding any work in NABARD.
- 5. During the execution of work, contractor must deploy qualified personnel having experience in executing the similar works.
- 6. SITE VISIT: The bidder may visit and examine the Site of Works and its surroundings through offline/online mode and obtain all information that may be necessary for preparing the Price Bid and entering into a contract for the said works. The costs of visiting the Site shall be done at the Bidder's own expense.
- 7. The applicant should also produce original documents for verification, if called for. Failure to attach requisite documents with application will render applicant not eligible for qualification of bid without any intimation. If a bidder fails to submit the additional desired documents on the CPP portal within the stipulated time period, the bidder will not be considered technically qualified.

- It is essential to upload the desired documents instead of any unwanted documents to avoid disqualification.
- 8. The duly filled tender duly signed digitally through digital signature certificate (DSC) for uploading on CPP portal. Incomplete tender liable to be rejected.
- 9. Price bid shall be opened of only those contracting firms who are qualified in pre-qualification criteria.
- 10. Tender containing false and/or incomplete information is liable for rejection and consequences.
- 11. The tender must be submitted in the Pro-forma without editing the text whatsoever. Any Violation of this condition shall render the tender invalid. [Please ensure that contractors provide details of works fulfilling the eligibility criteria in PART I, II & III of Annexure I along with supporting documents.
- 12. The tenders shall be signed by the person/persons on behalf of the Organization having the necessary Authorization/Power of Attorney to do so. (Copy of Power of Attorney/Memorandum of Association/Board Resolution/Gazette Notification etc. shall be furnished along with application, if required).
- 13. If the space in the Pro-forma is insufficient for furnishing full details, such information shall be supplemented on separate sheets of paper stating therein the part of the Pro-forma. Separate sheets shall be used for each part of application, if required.
- 14. While filling up the tenders with regard to the list of important assignments completed or on hand, the contractors shall only include major assignments having agreement/completion value of ₹ 12.93 Crores and above or showing works done for the building more than seven storeyed building.
- 15. The contractor must have experienced professionals in the respective discipline as stated in the tender. Details of the same may be shared with NABARD as per requirement and posted at site during execution of work. Contractor shall also submit an undertaking that all the Electrical works shall be executed through registered approved/ Licensed Electrical contractors who are duly registered with appropriate government authority.
- 16. The Price bid will be evaluated on the basis of LCS (Least Cost System) for deciding on an L-1 agency. In case L-1 bidder quotes abnormally low rates, the bank may ask such bidder to submit the rate analysis of the item with justification. Failure to which, bid may be considered non-responsive and liable for rejection.

- 17. The client will provide Water & Electricity at one point. All the necessary arrangements for taking water and electricity from the defined points, shall be made by the contractor at its expense. In case of non-availability of the water, the contractor should make the arrangement at his own cost
- 18. The rates for each item as per scope of work shall be quoted by the applicant in the Price bid to be uploaded in the e-tendering process of CPP portal.
- 19. Taxes- The prices quoted for the work shall be deemed to be exclusive of GST including all other taxes, custom duty, excise duty, or any other taxes/duties imposed by /State Government/ Local Bodies/ Central Government, charges for labour, transport, insurance charges for transit, shipment, packing, freight from the factory to the destination site, handling, clearing, installation, and commissioning charges, insurance charges for storage, erection, testing and commissioning, CAR (Contractors All Risk) policy (1.25 times the Contract Value), workmen compensation and third party liability, overheads and profit, etc. The period of insurance should commence from the 10th day of issue of Work Order by NABARD to the date of issue of Virtual Completion Certificate. If the tenderer fails to include such taxes and duties in the tender, no claim thereof will be entertained by NABARD afterwards. As per laws, income tax and GST-TDS etc. will be deducted at source and a certificate for the same will be issued to the contractor. The tendered rates shall be firm and shall not be subject to any variations on account of fluctuations in the market rate or any other source. In case of time extension, the bidder/agency has to extend the insurance policy, e-BG at his cost and expenses for extended period.
- 20. Validity of Tender-The Tender along with the prices shall remain valid initially for a period of 90 days from the date of opening of Financial Bid, which period may be further extended by mutual agreement between NABARD and bidder, and the bidder shall not cancel or withdraw the tender during this period.
- 21. Earnest Money, Initial Security Deposit and Retention Money Deposit the Tender must be accompanied by an Earnest Money deposit receipt in the form of Direct Deposit in the Bank through NEFT/eBG/BG or Valid MSE registration certificate. A Tender not accompanied by EMD receipt or Valid MSE registration certificate shall be rejected. Should the Invitation to Tender be withdrawn or cancelled by the Bank, which shall have the right to do so at any time, EMD will be returned to the bidders. However, ISD must be deposited within 30 days from the award of tender, failing which work order may be treated as withdrawn.

- 22. Initial Security Deposit: The successful bidder to whom the Contract is awarded shall deposit as initial security deposit of a sum to make up 2% of the value of the accepted tender value after the appropriation of the Earnest Money Deposited by him, if any. The successful bidder shall pay the Initial Security Deposit within 10 days after receipt of the work order in form deposit through NEFT/ eBG/ BG. In case of late submission of ISD in the form of bank guarantee /cash deposit in bank account, penalty equivalent to interest at Bank Rate shall be charged for delayed period. No interest shall be paid on this security deposit. However, ISD should be deposited within 30 days, else the work will be treated as withdrawn. The initial security deposit, either in whole or in part thereof, shall be forfeited in the event of the Contractor's failure to observe any terms of this Contract/ or noncompliance with the conditions of the Contract.
- 23. Retention Money Deposit: Apart from the initial security deposit to be made by the Contractor as aforesaid, the retention money shall be deducted from running account bills 5% of the gross value of bill amount claimed and approved in each running account bill. However, the total security deposit, the initial security deposit amount plus the retention amount shall put together not exceed 5% of the Contract price as determined after considering all variations as approved in the form of cash/ eBG/ BG. On completion of the defect liability period on one year of the work, 50% of security deposit will be released to the contractor and the remaining 50% of SD shall be retained by the Employer till the end of the performance guarantee period in form of cash/ eBG/BG. Performance Warranty period for water proofing works, structural repairs and external painting works is 05 years reckoned from the virtual completion of work. The amount of security deposit shall be released after completion of defects liability period subject to removal of all defects during defects liability period. All repair costs during the aforesaid Defects Liability Period and Performance Warranty Period shall be borne by the Contractor. If the Contractors do not carry out the rectification work during the Defects Liability Period and Performance Warranty period, then the Employer shall have the right to get such defective work rectified after giving due notice in writing to the Contractor and recover the cost of such repairs from the amount so retained.

# 24. Lowest Tender Not Necessarily to Be Accepted

- 1. NABARD is not bound to accept lowest, any or all tenders or to assign any reason for non-acceptance.
- 2. The tenderer whose tender is not accepted shall not be entitled to claim any costs, charges, damages and expenses of and incidental to or incurred by him through or in connection with his submission of tenders, even though NABARD may elect to modify/withdraw the tender.
- 25. **Right to Accept Part Tender:** NABARD reserves the right to accept the tender either in whole or in part at the same prices quoted by the tenderer.
- 26. Labor stay at site: No Labor stay at site is allowed.

# 27. Signing of Contract Agreement

- i. The General instructions to the bidders and special conditions, herein before referred to, Conditions of Contract and Technical Specifications, schedule of works enclosed with the tender documents and the subsequent correspondence exchanged between NABARD and the bidder shall be the basis of the work Order/final contract to be entered into with the successful bidder.
- ii. The bidder shall go through the terms and conditions given in the general conditions of contract herewith, and his offer shall be strictly in line with the terms specified therein. No deviation from the terms and conditions specified shall be acceptable.
- iii. On receipt of intimation from NABARD of the acceptance of his/their tender, the successful bidder shall be bound to implement the Contract and within 14 days thereof, the successful bidder shall sign an agreement in accordance with the articles of agreement. Notwithstanding the signing of the agreement, the written acceptance by NABARD of a tender in itself will constitute a binding contract between NABARD and the person so tendering, whether such agreement is or is not subsequently executed. The stamp duty charges will have to be borne by the contractor.
- iv. The contractor shall not assign the contract to any other agency. He shall not sublet any portion of the contract except with the written consent of NABARD. In case of breach of these conditions, NABARD may serve a notice in writing on the Contractor rescinding the contract whereupon the security deposit shall stand forfeited to NABARD, without prejudice to other remedies against the Contract.

# 28. Inspection of materials/work at site

- NABARD Official/ Consultant at its discretion may inspect the material at site or elsewhere. The requisite arrangement for the consultant (if required) will be made by NABARD.
- ii. NABARD's officials/ Consultants shall have free and full access at any time during execution of the contract to the contractor's works or site in case of the execution of work for the aforesaid purpose, and he may require to make arrangements for inspection of work or any part thereof or any material at the work site or at any other place as specified by NABARD's officials and if the contractor has been permitted to employ the service of a sub-contractor, reserve to NABARD's officials a similar right.
- iii. The above will, however, not in any way absolve the contractor of responsibility for proper performance of the system/ components.
- iv. NABARD's consultants' officials carrying out the inspection shall have the power to certify/ accept/ reject as follows:
  - a. Before any material or part thereof is submitted for inspection to certify that they or any portion thereof are not in accordance with the contract owing to adoption of some unsatisfactory method of manufacture.
  - b. To reject any material or parts submitted as not being in accordance with the specification.
  - c. To mark the rejected material with a rejection mark so that it may easily be identified if re-submitted.
- 29. **Completion Period:** Work will be carried out in 3 Phases and first phase of all works of one Building of D and A Block will be completed in 06 Month Time from the 10th date of issue of work order in all respect. The total time allowed for carrying out the work for all the project in 3 phases shall be 18 months (including monsoon period) and shall be strictly observed by the Contractor. The work throughout the stipulated period of the contract should proceed with all the due diligence and if the contractor fails to complete the work within the specified period, he shall be liable to pay liquidated damages at 0.25% of the value of the accepted tender for every week of his delay or part thereof in completion of work, subject to maximum of 5% of the value of the accepted tender value.
- 30. The bidder shall, before commencing the work, prepare a detailed work program in the form of Bar Chart which shall be submitted to NABARD for approval. The contractor shall submit a Bar Chart for completion of the work within the contractual completion period within the 10th day of the Work

Order. Such chart shall include all activities like the date of supply of material at site, completion of work etc. NABARD may provide open space within the compound of the building for storing the material. However, the responsibility for and safety of the materials stored will be with the contractor. No accommodation will be provided for any worker by NABARD. The partitions/enclosures for lockable storage to be erected by the vendor at his cost and shall be dismantled upon completion of work and make the area good. All debris to be disposed of at designated municipal dump yards by the contractor at risk and cost.

31. **Insurance:** The contractor shall take all RELEVANT insurance policies at his cost within 10 days of issue of work order covering all kinds of risks till end of the contract period of the work, in the joint names of NABARD and the contractor (NABARD's name being first) and it shall take at least the following risk related policies:-Contractor's All Risk Policy at 1.25 times of the value of the contract. Workmen compensation policy for all the workmen of the contractor at site.

#### Note:

- The Contractor shall comply with the provisions of Contract, Labor (Regulation & Abolition) Act, 1970, Minimum Wages Act and all other Labor Laws and other Statutory Regulations (both Central and State) that may be enforced from time to time by the appropriate authorities. NABARD shall not be held responsible for any penalty on failure of any Labor Regulations by the contractor.
- The Contractor shall be responsible to fulfil all the obligations in connection with the workers employed by the Contractor for the purpose of the Contract and all the Statutory and other liabilities, if any, including minimum wages, leave salary, uniform, ex-gratia, gratuity, ESI, Provident Fund, Workman Compensation, if any, etc. in connection therewith shall be on the Contractor's account and payable by the Contractor.
- Any act of indiscipline / misconduct / theft / pilferage / careless activities
  on the part of any employee engaged by the Contractor resulting in any loss
  to NABARD in kind or cash will be viewed seriously and NABARD will have
  the right to claim damages or levy fine and / or terminate the Contract
  forthwith, if necessary.
- The Contractor shall provide NABARD with documentary evidence from time to time, that he has taken all the insurance policies mentioned in the

- foregoing paragraphs and that he has paid the necessary premium for keeping the policies valid till the completion of work.
- All insurance to be effected by the Contractor or nominated sub-contractors, if any.
- The Contractor has to Add-on covers under this policy, if at all they are not included under the original policy like:
- Clearing and removal of debris; Damage to surrounding property not forming part of the contract work. Maintenance visit / extended maintenance cover to cover accidental loss or damage whilst carrying out any rectification during maintenance period and / or any amount incurred for rectification of such original defects or faults during construction.
- 32. The work should be carried out with least inconvenience to the staff. The workmen employed by the Contractor should abide by the Rules and Regulations maintained by NABARD in the premises, especially in respect of working hours, entry of the workers to the premises, interpersonal relation with the staff of NABARD etc.

# 33. Terms of Payment

- a) Payment shall be paid in the Running bill against work done value as certified by the consultant as well as NABARD Officer after taking joint measurement and complied with all other terms and conditions. The payment will be made within one month period from date of submission of the bill along with certified measurement sheets by contractor and engaged consultant of NABARD.
- b) Final bill will be released after complete/full measurements along with issuance of VCC (Virtual Completion Certificate) by consultant, after obtaining approvals / certification from bank's authorities as required for usage of the system and after issue of VCC. The contractor has to submit No-objection certificate along with final bill. The payment will be made within two months period from date of submission of bill along with certified complete measurement sheets by contractor and engaged consultant of NABARD.
- c) The Bank will recover 5% amount in first paid bill towards Retention Money Deposit. The banks will also deduct the necessary statutory deductions (like IT-TDS, GST-TDS etc.) from the bill amount.
- d) No payment will be made without valid insurance policies.

# DECLARATION BY THE CONTRACTOR

We / I have read and understood all the instructions / conditions made above and we/ I have taken into account the above Instructions / Terms and Conditions while quoting the rates. We / I accept all the above Terms and Conditions without any reservation, in all respects.

(SEAL & SIGNATURE OF THE TENDERER through DSC)
ADDRESS:
PLACE:
DATE:

#### 6.TERMS AND CONDITIONS WITH SAFETY PRECAUTIONS

- 1. The quantities indicated in the BOQ are only tentative and shall be executed only at the sole discretion of NABARD.
- 2. Materials used should conform to relevant National/International Codes.
- 3. Specifications and Method of Measurements shall be followed as applicable/stated in tender. However, in the absence of the same and / or in case of any discrepancy, the CPWD specifications will be followed.
- 4. In case of extra item(s) (items that are completely new, and are in addition to the items contained in the contract), the Contractor may within thirty days of receipt of order or occurrence of the item(s) claim rates, supported by proper rate analysis (CPWD method shall be followed as far as possible) worked on the "actual cost basis" plus 15% towards establishment charges, Contractor's overheads and profit. Cconsultant, on the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the Contractor, recommend to NABARD for approval of the rates on the basis of the market rates and the Contractor shall be paid in accordance with the rates so determined. The contractor shall claim the payment for extra item only after the rate for these items is approved by Consultant, NABARD.
- 5. Rates quoted shall be exclusive of GST but including all Taxes, Duties, Octroi, Levies, Wages as per Act, service tax etc. and should be firm for the entire Contract period.
- 6. No escalation of rates will be allowed for the entire contract period and extended time if any on any account.
- 7. GST TDS and Income Tax TDS as applicable will be deducted from total payment due to the Contractor.
- 8. The Contractor should have valid License relating to his Contract and the workmen employed by the Contractor should also have the valid License and experience in their trade.
- 9. On-site storage space will be provided to the Contractor subject to availability. However, the Contractor may erect temporary sheds for storage purposes at his cost with the permission of NABARD. NABARD will not be responsible for Contractor's materials. The Contractor may be required to

- vacate the storage space and sheds as per exigency after making good the area clean without any extra cost to NABARD.
- 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 cause 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 of the project or in commencement or completion of such works. NABARD does not accept liability for any sum besides the tender amount, subject to such variations as are provided for herein.
- 11. The successful bidder is bound to carry out all items of work necessary for completion of the job even though such items are not included in the quantities and rates. Schedule of instruction in respect of such additional items and their quantities will be issued in writing by NABARD.
- 12. The successful bidder must co-operate with the other contractors appointed by NABARD so that the work shall proceed smoothly with the least possible delay. He should make his own arrangements for storage and protection of all materials supplied by him.
- 13. The work has to be carried out in Residential premises and has to be done with minimum disturbance to the occupants of the premises. Further, demolition and cutting works where noise pollution and dust pollution is high may have to be carried out during office hours / Saturdays / Sundays / NABARD's holidays, etc. with properly protecting the surroundings by covering the work site within hessian cloth enclosure and taking related safety measures.
- 14. 50% of security deposit will be released after satisfactory completion of defect liability period i.e. one year from the date of issue of VCC by the consultant. Any defect which may appear within the Defect Liability Period after the Virtual completion of work should be rectified by the Contractor at his cost and risk. Remaining Security Deposit of 50% shall be retained and will be refunded to the Contractor on expiry of Performance Warranty and shall be released on completion five years from date of completion of defects liability period. This sum can be retained in the form of BG / eBG.
- 15. The Contract can be terminated by NABARD on 15 days' notice if services are found to be unsatisfactory and if there is no improvement even after issue of three notices to the contractor.

- 16. **Confidentiality:** The Contractor shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out obligations under it or to comply with applicable Laws. The Contractor shall indemnify NABARD for any loss suffered by them as a result of disclosure of any confidential information. The Contractor shall not publish, permit to be published, or disclose any particulars of the Works in any trade or technical paper or elsewhere without the written permission of NABARD.
- 17. The Contractor should note that unless otherwise stated the tender is strictly on item rate basis and his attention is drawn to the fact that rates for each and every item should be correct, workable and self-supporting. The quantities in the Schedule of Quantities approximately indicate the total extent of work but may vary to any extent and may even be omitted thus altering the aggregate value of the Contract. No claim shall be entertained on this account.
- 18. The contractor should provide suitable scaffolding made from MS Pipes and stands with working platforms to his workers for carrying out the work hassle free, smoothly and safely.
- 19. Special care shall be taken by providing suitable covers like hessian cloth enclosure, tarpaulins, polythene sheets etc. to prevent dust nuisance and for protecting surrounding floors, furniture, equipment and other installations and parked vehicles in the influence area of his work in the premises. The work shall be carried out without any inconvenience to the residents of colony, the rates quoted shall include all the above precautions and for handling and re-arranging the equipment/ installation/ furniture etc. and place in its original position after completion of work and any damage to property caused by the Contractor shall be made good by the Contractor at his cost. The contractor has to wash and clean the floors in the influence area of his activities at his cost after his daily completion of work.
- 20. Rates should include for removal of debris out of work site to the safe limit earmarked in the premises daily basis, removal of debris out of the premises and dumping to Municipal Corporations dump yard periodically, removing stains, cleaning the site thoroughly and unless the same is done to the satisfaction of the Consultant /NABARD's Authorised official, the Bill will not be accepted. The bill should be enclosed with the certificate in this regard issued by the NABARD's Authorised official.
- 21. The bidders should quote their rates strictly adhering to Terms and Conditions stipulated in the Tender Document. Unsolicited correspondence

- after opening of the Tender shall not be entertained. Conditional / deviated tenders may be rejected without making any reference to the bidders.
- 22. The Contractor shall use necessary safety equipment and maintain all safety measures during the execution of works and ensure compliance of Safety Code as per Rules and Regulations in force.
- 23. Notwithstanding anything stated above, NABARD reserves the right to assess the Bidders capability and capacity to perform the contract, should the circumstances warrant such assessment in the overall interest of NABARD.
- 24. The decision of NABARD in awarding the work shall be final and cannot be subjected to arbitration.
- 25. NABARD also reserves the right of supersession of any of the conditions, stipulated in the Tender Document before opening of the financial bid.
- 26. CONTRACTOR'S LIABILITY AND INSURANCE: From commencement to completion of works, the Contractor shall take full responsibility for the care of the work and for taking precautions to prevent any loss or damage to the works and shall be liable for any damage or loss or theft that may arise to the works or any part thereof from any cause whatsoever, inherent defects and failures due to poor workmanship and causes such as lightning, explosion, earthquake, storm. hurricane, floods, inundation, riots excluding civil war, rebellion, revolution and insurrection) and shall at his own cost repair and make good the same so that at all times the work shall be in good order and condition and in conformity in every respect with the requirements of the Contract.

# **Explanation:**

- a. For the purpose of this condition, the expression "from the commencement to completion of work" shall mean the time commencing from the issue of the work order to the contractor and ending with the issue of Virtual Completion Certificate.
- b. Without limiting the obligations and responsibilities under this condition, the Contractor shall insure and keep insured the works from commencement to completion, as aforesaid, as per the clause 33 in General instruction to the bidder.
- 27. The contractor shall indemnify and keep indemnified the Employer against all losses and claims, damages or compensation under the provision of the payments of Wages Act 1936, Minimum Wage Act 1948, Employer's Liability Act 1938, Workmen's Compensation Act

1923, the Maternity Benefit Act 1961, Bombay Shops and Establishment Act 1947, Industrial Dispute Act 1947, and the Contractor Labour (Regulation and Abolition) Act, 1970 and Employee's State Insurance Act or any modification thereof or any other law relating thereto and rules made there under from time to time or as consequence of any accident or injury to any workmen or other person in or about the work whether in the employment of the employer or Contractor or not, and also against cost, charges and expenses of any suit, action or proceedings whatsoever out of such accident or injury of combination or any such claim.

- 28. SUFFICIENCY OF SCHEDULE OF QUANTITIES: The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works, and of the prices stated in the Schedule of Quantities and/or 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 the works.
- 29. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY: The Contractor shall provide everything necessary for the proper execution of the works according to the true intent and meaning of the Drawings, Specifications and Schedule of Quantities taken together whether the same may or may not be particularly shown or described therein, provided that the same can be inferred there from and if the Contractor finds any discrepancy in the Drawings or between the Drawings, Specifications and Schedule of Quantities he shall immediately refer the same in writing to the Employer, who shall decide which shall be followed, and their decision shall be final and binding on all parties. The Contractors will supply, fix and maintain at his cost during the execution of any works, all the necessary centring, scaffolding, staging, timbering, strutting, shoring, pumping, fencing, hoarding, watching and lighting by night as well as by day required not only for the proper execution and protection of the public and safety of any adjacent roads, streets, cellars, vaults, pavements, walls, houses, buildings and all other erections, matters or things. The Contractor shall pull down and remove any or all such scaffolding, after completing his work as occasion shall require or when ordered to do so and shall fully reinstate and make good all matters and things disturbed during the execution of the works, to the satisfaction of the Consultant / Employer.

# 30. AUTHORITIES, NOTICES, PATENTS, RIGHTS & ROYALTIES:

i. The Contractor shall confirm to the provisions of all the statutes relating

to the works, and to the Regulations and bye-laws of any local Authority, and of any Water, Lighting of other Companies or Authorities with whose systems the structure is connected, and shall before making any variation from the drawings or specifications that may be necessitated by so conforming, give to the Bank's Officer written notice, specifying the variations proposed to be made and the reason for making it, and apply for instruction thereon.

- ii. The Contractor shall bring to the attention of the Consultant/ NABARD all notices required by the said Acts, Regulations of Bye-laws to be given to any Authority by the Consultant/NABARD and pay to such Authority, or to any Public Officer, all fees that may be properly chargeable in respect of the works, and lodge the receipts with the Consultant/NABARD.
- iii. The Contractor shall indemnify the Employer against all claims in respect of patent rights, design, trademarks of name or other protected rights in respect of any plant, machine work or material used for or in connection with the works or temporary works and from against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. The Contractor shall defend all actions arising from such claims, unless he has informed the Consultant/NABARD, before any such infringement and received their permission to proceed, and shall himself pay all royalties, license fees, damages, costs and charges of all and every sort that may be legally incurred in respect thereof.
- WORKMANSHIP 31. MATERIALS **AND** TO **CONFORM** TO **DESCRIPTION:** All materials and workmanship shall be of the respective kinds specified in the Schedule of Quantities and/or specifications and in accordance with Consultants/NABARD's instructions and the Contractor shall upon the request of NABARD's Officer furnish to them 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 NABARD may require. The Specifications shall wherever not mention in the tender be taken in accordance with the latest CPWD Specifications and its latest revision or BIS, if any. If the Contractor contends that any of the material, goods or workmanship specified as aforesaid, is unobtainable, he shall submit to Consultant, NABARD, his grounds for his contention, and thereupon,

NABARD shall decide whether the same is unobtainable in fact. If NABARD shall decide that any of the materials, goods or workmanship is in fact unobtainable, they shall issue an order in writing as what is to be substituted thereof, and such order shall be deemed to be an order for variation; such order shall however be got financially approved by NABARD before purchase and execution.

# 32. CONTRACTOR'S SUPERINTENDENCE AND REPRESENTATIVE ON WORKS:

- i. The Contractor shall give all necessary personal superintendence with professional experience during the execution of the works and as long thereafter as NABARD may consider it necessary until the expiration of the "Defects Liability Period". The Contractor shall meet the NABARD's officer whenever required if demanded by NABARD.
- ii. The Contractor shall maintain and be represented on site by **one qualified site engineer with minimum 03 years' experience**, **one site supervisor & one safety manager having sufficient experience of minimum 02 years** in the said field, at all times while the work is in progress, details of the Site Supervisor must be shared prior commencement of the work. The site engineer & supervisor must thoroughly understand all the traces entailed and be constantly in attendance, while the men are at work. Any directions, explanations, instructions or notices given by NABARD's Officer to such Site Engineer shall be deemed to be given to the Contractor and shall be binding as such on the Contractor. The Engineer should be able to read, write and speak English and will be responsible for ensuring safety of workers during execution.
- 33. **DISMISSAL OF WORKMEN:** The Contractor shall on the request of the Bank's Officer immediately dismiss from the works any person Employed there-on who may, in the opinion of the NABARD, be unsuitable or incompetent or who may misconduct himself and such person shall not again be employed or allowed on the works without the permission of the Bank's Officer.
- 34. **ACCESS TO WORKS:** No person unless authorized by the Bank's Officer or the Employer, except the Representatives of Public Authorities, shall be allowed on the works at any time. If any work is to be done at place other than the site of the works, the Contractor shall obtain the written permission of the Bank's Officer for doing so.
- 35. **MEASUREMENT OF WORKS:** Consultant / NABARD's Officer will

intimate the Contractor from time to time about works to be measured or verification of prepared measurements. The Contractor shall ensure sending of qualified personnel to assist NABARD's Officer or their representative in taking such measurements and calculations and to furnish all particulars or give all assistance required by either of them. Should the Contractor not attend or neglect or omit to send such agent/person, then the measurements taken by Consultant, NABARD's Officer or approved by him shall be taken to be the correct measurements. The works shall be measured according to the mode of measurements stated in the annexed general specifications. The measurement shall wherever not mention in the tender be taken in accordance with the Indian Standard of "Method of Measurement IS 1200, if any" or CPWD specifications or CPWD Handbook on Repair & of Rehabilitation **RCC** Structures. The Contractor or his Agent/representative may take measurement at the time of execution and get it certified by NABARD representative/Engaged Consultant on continuous basis for faster settlement of contractor bill.

# 36.PRICES FOR EXTRA ITEM OF WORKS ETC. ASCERTAINMENT OF

If it is found that certain item of works is not mentioned in the tender, however these are to be executed for successful completion of work. The price/rate for these extra items of work shall be made in accordance with the following rules:

- i. The net rates or prices in the original Tender shall determine the valuation of the extra work where extra work is of a similar character and executed under similar conditions as the work priced therein.
- ii. The net rates or prices in 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 (iii) hereof.
- iii. Where the extra works are not of similar character and/or not executed under similar condition as aforesaid, the contractor will submit the rate analysis of the extra items with 15 % towards contractor's profit and overheads with all supporting documents within one month period from the instruction given for execution of this item. The rate analysis to be approved by Consultant, NABARD before submitting the claim for extra items by the contractor.
- iv. The extra items shall be executed after obtaining the written permission

or instruction given in Site Order Book. The contractor has to submit the rate analysis of the rate of extra/variation item for approval to consultant/bank.

#### 37. SUBSTITUTION/ VARIATION/DEVIATION ITEM OF WORKS

Should be contractor desire to substitute (due to non-availability of approved brand and make in the market or long period for supply) of any materials and workmanship, he/they must obtain the approval of the NABARD in writing for any such substitution well in advance. Materials designated in this specification indefinitely by such term as "Equal" or "Other approved" etc. needs specific approval of the NABARD in writing.

In case the contractor is constrained to substitute/variate in the material specifications on account of non-availability of the same in market or long delivery time, he/they must obtain the approval for any such substitution/variation/deviation from Bank. For variation/substitute item, Bank will make the suitable deduction/additional payment on the basis of difference in the cost of item specified in tender and substituted item or proportionate cost in case of variation in size plus 15 % towards contractor's profit and overheads from the quoted rate. In such cases, contractor shall submit the documents supporting the price of the material purchased and quotation of the material as per tender specification for consideration of the Bank.

# 38. CLEARING SITE ON COMPLETION

On completion of the works the contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and the works clean and in a workman like condition to the satisfaction of the NABARD.

shall, during the progress of the works, have power to order in writing from time to time the removal from the works, within such reasonable time as may be specified in the order, of any materials which, in the opinion of Consultant, Bank's representative/Consultant are not in accordance with the specifications or the instructions of NABARD's Officer and the substitution of proper materials and the removal and proper re-execution of any such work, which has been executed with materials or workmanship, not in accordance with the Drawings and Specifications or instructions, 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 out such order the Employer

shall have power to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be borne by the Contractor, and shall be recoverable from him on behalf of the Employer or may be deducted by NABARD from any money due or that may become due to the Contractor. If the correcting works are not done in accordance with the contract, NABARD in consultation with the contractor may allow such work to remain and, in that case, may make allowance for the difference in value together with such further allowance for damages to the Employer, as may be reasonable.

40. **DEFECTS AFTER COMPLETION**: Any defect appearing within the "Defects Liability Period" for a period of one year after the Virtual Completion of the work or latent/patent imperfections or defect becoming apparent during this period arising in the opinion of Consultant, Bank's materials or workmanship not in representative/Consultant from accordance with the Contract, shall upon the directions and writing of Bank's representative/Consultant, and within such reasonable time as shall be specified therein, be amended and made good by the Contractor, at his cost and making good and in case of default the Employer may employ and pay other persons to amend and make good such defects, or faults, and all damages, loss and expenses consequent thereon or incidental thereto shall be made good and borne by the Contractor and such damage, loss and expenses shall be recoverable from him by NABARD or may be deducted by NABARD upon NABARD's Officer Certificate in writing from any moneys due or that may become due to the Contractor or the Employer (NABARD) may in lieu of such amending and making good by the Contractor, deduct from any money due to the Contractor a sum, to be determined by Bank's representative/Consultant, equivalent to the cost of amending such woks, and in the event the amount retained (Certificate and Payments) being insufficient, recover the balance from the Contractor. Further, contractor shall be execute performance warranty for a period of five years from the completion of defects liability period and any deficiencies observed in the performance of the waterproofing membrane & external painting layer due to any reasons to be attended by the contractor at his own cost and shall be done within a reasonable time on intimation of the same by the Bank's representative/Consultant.

# **41. DELAY AND EXTENSION OF TIME**

If in the opinion of Consultant, NABARD's Officer the works be delayed

- i. by force majeure or
- ii. by reason of any exceptionally inclement weather or
- iii. by reason of proceedings taken or threatened by the dispute with adjoining or neighbouring owners or public authorities arising otherwise than through the Contractor's own default or
- iv. by the works or delays of other Contractors or tradesmen engaged or nominated by the Employer or the Bank's Officer and not referred to in the Schedule of Quantities and/or Specifications or
- v. by reason of Bank's Officer instructions, or
- vi. by reason of civil commotion, local commotion of workmen or strike or lock-out affecting any of the building trades or
- vii. in consequence of the Contractor not having in due time necessary instructions from Bank's representative/Consultant for which he shall have specifically applied in writing, ahead of time, giving NABARD reasonable time to prepare such instructions, NABARD shall make a fair and reasonable extension of time for completion of the Contracted works. In case of such strike or lock-out, the Contractor shall, as soon as may be, given written notice thereof to NABARD, but the Contractor shall nevertheless constantly use his endeavours to prevent delay and shall do all that may reasonably be required to the satisfaction of NABARD to proceed with the work. The Contractor shall take all practicable steps to avoid or reduce any delay in the execution and completion of the works.

# 42. Mobilization Advance

No advance payment shall be made.

# 43. Termination of the contract:

- i. The Contract can be terminated by NABARD after giving 15 days' notice if works are found to be unsatisfactory and if there is no improvement even after issuance of three notices to the contractor. In such cases, the contractor's EMD will be forfeited. The EMD/ISD will also be forfeited in case the contractor does not start the work after issuance of work order.
- ii. Further, the contract can also be terminated by NABARD on the following grounds by giving 15 days' notice:
  - a. In case of breach of any terms and conditions attached to this contract,
     NABARD reserves its right to terminate this contract.

- b. In case any of documents furnished by the Contractor is found to be false at any stage, it would be deemed to be a breach of terms of Contract making him/her liable for legal action besides termination of contract.
- c. If the Contractor becomes insolvent or found to have offered any bribe in connection with the contract or the contractor fails to observe or perform any condition of this contract then notwithstanding any previous waiver of such default or action being taken under any other clause hereof NABARD may terminate the contract and recover from the contractor any loss suffered by NABARD on account of the contract being terminated.
- d. Any act of indiscipline / misconduct / theft / pilferage / careless activities on the part of any employee engaged by the Contractor resulting in any loss to NABARD in kind or cash will be viewed seriously and NABARD will have the right to claim damages or levy fine and / or terminate the Contract forthwith, if necessary.
- iii. If the Chief General Manager, DPSP, considers that the situation in urgency/emergency so warrants then he shall be entitled to terminate this agreement by giving very short notice of seven day by citing the strong reasons in writing and the Contractor shall not be entitled to any compensation in the event of such termination.
- iv. Vacation of Premises on Termination of agreement On the expiry or earlier termination of this agreement the Contractor shall remove himself and his workmen from the premises and all articles belonging to him.

# 44. Dispute Resolution/ Arbitration:

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

The decision, opinion, direction, certificate of payment issued by the Consultant/NABARD in respect of all or any of the excepted matters as provided in the contract shall be final, conclusive and binding on the parties hereto and shall be without appeal. Such decision may be in the form of a final certificate or otherwise.

All other disputes and differences of any kind whatsoever arising out of or in connection with the contract or the carrying out of the works (whether during the progress of the works or after their completion and whether before or after the determination abandonment or breach of the contract) shall be referred to and settled by the Competent Authority of the Employer. The designated authority shall state its decision in writing within 28 days from the date of receipt of reference from the contractor. But If the Competent Authority (CA) fails to give his decision within the aforesaid period or if either party be dissatisfied on any matter, it may, within 28 days after receiving notice of such decision, give a written notice to the other party requiring that the matters in dispute be arbitrated upon. Such written notice shall specify the matters, which are in dispute or difference of which such written notice has been given. If both the parties agree, a single arbitrator would be appointed for the purpose. In case there is no agreement on the appointment of arbitrator, the employer shall prepare a panel of three person's names and forward to the contractor to select one among them as arbitrator. The arbitrator only appointed/selected shall confine himself the to SO dispute/difference referred to him while adjudicating and pronouncing his decision.

The arbitrator shall make his or their award within one year (or such further extended time as may be decided by him or them as the case may be with the consent of the parties) from the date of entering on the reference. In case during the arbitration proceedings the parties mutually settle or compromise their dispute or difference, on the parties filing their joint memorandum of the settlement or compromise, the arbitrator or the arbitrators as the case may be, shall make an award in terms of such settlement or compromise. Upon any such reference, the decision on the cost incidental to the reference and award respectively shall be in the discretion of the arbitrator as the case may be, who may determine the amount thereof or direct the same to be taxed as between the party and

party, and shall direct by whom and to whom and in what manner the same shall be borne and paid. This submission shall be deemed to be a submission to arbitration within the meaning of the Indian Arbitration and Conciliation Act, 1996 or any statutory modification thereof. The award of the arbitrator shall be final and binding on the parties. It is agreed that the Contractor shall not delay the carrying out of the works by reason of any such matter, question or dispute being referred to arbitration, but shall proceed with the works with all due diligence and shall until the decision of the arbitrator is given, abide by the decision of the Employer. No award of the arbitrator shall relieve the Contractor of his obligations to adhere strictly to the Employer's instructions with regard to the actual carrying out of the works. The Employer and the Contractor hereby also agree that arbitration under this clause shall be a condition precedent to any right of action under the contract. The place of Arbitration shall be Mumbai.

45. Details of Consultant & NABARD Officials: B. J. MEHTA ARCHITECTURAL & STRUCTURAL CONSULTANTS PVT. LTD. has been appointed as Consultant (PMC) for this project. They shall supervise the work during execution period. Details of designated NABARD officials for this work shall be informed from time to time. All decisions having financial bearings shall be approved by officials of NABARD.

#### **46. SAFETY PRECAUTIONS**

- i. Appropriate precautions should be taken during work.
- ii. The Contractor shall maintain in a readily accessible place first aid appliances including adequate supply of sterilized dressings and cotton wool.
- iii. An injured person shall be taken to a public hospital without loss of time, in cases where the injury necessitates hospitalization.
- iv. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm. Clear and the distance between two adjacent rungs shall not be more than 30 cm. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder.
- v. Care must be taken while unpacking. A band cutter should be used to cut all steel straps securing the package.

vi. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum

height shall be one meter.

vii. Workers employed on mixing and handling material shall be provided

with protective footwear and rubber gloves.

viii. The hoisting machine and tackle used in the works, including their attachments, anchorage and supports, shall be in perfect condition.

ix. The Employer reserves the right to instruct the Contractors to take

additional safety precautions if necessary.

x. All workers shall be provided with a helmet, Safety Shoes and Safety

belts.

DECLARATION BY THE CONTRACTOR

We / I have read and understood all the instructions / conditions made above and we / I have taken into account the above Instructions / Terms and Conditions while quoting the rates. We / I accept all the above Terms

and Conditions without any reservation, in all respects.

(SEAL & SIGNATURE OF THE TENDERER through DSC)

ADDRESS:

PLACE:

DATE:

# 7. TECHNICAL SPECIFICATIONS

#### I: General:

- i) All work shall be done strictly according to specifications described in the general specifications and schedule of quantities & rates and as per latest applicable CPWD specifications / latest BIS Codes in absence of specifications in tender documents. In the event of any item not finding a place in C.P.W.D. specification or in BIS codes, the matter will be referred to the Consultant for decision. The decision of Consultant shall be final regarding the specifications to be adopted. All Standards, codes, Technical Specifications, Codes of Practice referred to shall be of the latest editions including all applicable official amendments and revisions whether such reference has been made or not.
- ii) Testing of materials / works shall be carried out as per latest CPWD specification / BIS codes from approved test laboratory. The contractor shall carry out all such tests at his own cost & time wherever required. The nos. of samples to be submitted for testing and the frequency of testing shall be as specified in the specifications / standards or codes.
- iii) All the works shall be carried out in accordance with drawings, specifications, description of item in schedule of quantities or as per the direction of Consultant
- iv) to his full satisfaction. If the substitution of any approved / specified material and make, due to its non availability, with an alternative one, becomes necessary, the agency must get specific approval of the same before placing order for purchase of materials.
- v) Providing and operating necessary measuring and testing devices and materials are included in the Contractor's scope of work. The quoted price shall be inclusive of the cost of all such tests, which are required to ensure achievement of the specified quality. No separate payment for testing shall be made.
- vi) All finished work must be truly vertical & horizontal or in any other plane as specified. The rates quoted by the agency must include the cost for taking necessary measures to achieve it.
- vii)Any scaffolding used shall be of double vertical supports and no portion of scaffolding shall touch the wall surface.
- viii) The workmanship should be best available and of a high standard. Use of special trades men in all aspects of the work may be done. Contractor shall maintain uniform quality and consistency in workmanship throughout.
- ix) Any work not conforming *to* specifications or workmanship shall be rejected and the same shall be rectified or removed and replaced with work of the required standard of workmanship at no extra cost to the employer.
- x) Rates quoted for the items shall be valid for carrying out the item of work at any and / or all floor heights of the building as well as terrace & overhead water tanks.

#### II: GENERAL SPECIFICATIONS FOR CIVIL WORK

# A. GENERAL NOTES AND REQUIREMENTS OF ITEMS INVOLVING REPAIRS

o1. This covers the general requirements of items involved in Structural repairs viz breaking and chiseling, surface preparation and restoration and curing, etc. Since there is an element of judgement and actual extent of deterioration involved, definite instructions on these can be given only at site during actual execution. All repairs to the affected Structural members must be provided with a proper support system. This structural support system shall be worked out for various members. Necessary suitable propping is required to be provided to ensure release of loads on the treated members. The Contractor shall compulsorily seek prior approval of the intended support system from the Consultant.

### 02. Chiseling of concrete surface:

Wherever directed, the surface of the reinforced concrete element viz. column, beam, slab, wall, etc. will be exposed using chisel and hammer carefully up to the reinforcement rods. No hydraulic/power hammer will be allowed. The electrically powered stone/tile cutting machine may be used for loosening/cutting the damaged part, if required. All corrosion on the rods shall be physically/chemically removed and the concrete adjacent to the corroded rods will be further chiseled to further expose them. Where there are deep cracks in the concrete element, special precautions will be taken while chiseling so as to avoid further distress to the element. Steel rods or mesh may also be required to be removed during chiseling. The chiseled surface shall be cleaned with water and wire brush.

# 03. Breaking of Plaster

The delaminated or damaged layers (with single/two coats) of plaster over concrete and masonry walls, will be removed carefully such that the masonry / concrete element underneath is not damaged. All coats of the plaster shall be removed along with visible traces of cement / lime and the surface thoroughly cleaned and hacked where required, to receive new coats of plaster. For ease and neatness in working, the edges of the exposed portions shall be straightened.

The unsound and loosely bonded plaster shall be removed either by using an electrically operated power-driven cutter (but, not a hydraulic hammer) or by doing it manually by using hammer and chisel. The area shall be identified by tapping all areas or by using high pressure water jet, the same may be marked with color marking for approval of Bank's representative/Consultant or consultant in a rectangular shape. The plaster shall be removed completely to expose the surface of brick masonry or concrete surface. The contractor has to erect the sound and strong scaffolding for the work and debris has to be removed from site.

Measurement for breaking plaster shall be taken as the actual area exposed projected to the original surface of the element. Where the plaster is removed together with the chiseling or breaking of concrete, no measurement shall be taken separately for the concrete removal.

#### 04. Breaking of reinforced concrete:

Wherever directed, part of full reinforced concrete element viz. slab, beam, wall, column, fin, etc. will be broken carefully using chisel and hammer. For neatness of work, the edges of the broken portion shall be fairly straight. The broken surface shall be chiseled straight and cleaned to facilitate bond with new mortar / concrete. All highly deteriorated steel reinforcements shall be cut / removed as directed. Where insufficient lap length for new reinforcement is available, additional concrete may have to be broken (if possible) in order to expose adequate length of the existing reinforcement may be directed, otherwise electrical welding may be done with HYD bars.

### 05. Application of Rust Passivator/Coating:

Wherever directed, the entire surface of the exposed reinforced concrete element should be thoroughly cleaned. The reinforcement rods must be thoroughly cleaned using a chisel, scraper, wire brush, emery paper or/and with rust remover chemical. The rust passivator is to be applied carefully on the exposed dry surfaces of the reinforcement rods with a brush or cloth. The passivator must be applied as per the manufacturer's specifications. Allow air drying for 24 hours before any further treatment is done on this surface after cleaning.

Measurement shall be taken of the entire chiseled area where reinforcement rods are exposed and rust passivator applied or Actual quantity used as per details given in Bill of Quantities (BOQ).

# o6. Scaffolding:

Double Scaffolding shall be erected with all safety measures. Under no circumstances will holes be allowed to be made in the walls to support the scaffolding. Tying of scaffolding to the old pipes of the building is not allowed. Temporary props between balconies or chajjas to give lateral support to the scaffolding will be permitted where feasible. In general steel

scaffolding will be used. It may be noted that the payment for the scaffolding will be made once for all operations. The support shall be sound and strong, tied together by horizontal members over which scaffolding planks shall be fixed. Suitable double nylon net with a mesh size of 25mm shall be provided at 4 M. height from the ground level around the buildings up to a width/distance of minimum 3 M. from the edge of the building in all sides to catch any falling objects causing accidents and offer protection to vehicles parked and people around.

#### 07. Ready Mix Cement Mortar:

Approved brand of Ready-Mix Cement Mortar as mentioned in List of Brands shall be used as per work requirement and given in description of item of work.

# 08. Curing:

New concrete shall be maintained damp for a minimum period of 2 weeks. New plasters shall be cured at least 3 times a day for a period of not less than 14 days. The 1st plaster coat shall be cured for a period not less than 3 days. If required, the surface shall be maintained damp using wet hessian cloth.

#### 09. ADMIXTURES / ADDITIVES:

Chemical admixtures and additives must be used strictly as per the recommendations of the manufactures and in consultation with the Consultant. Any change in the effectiveness of the products shall be brought to the notice of consultant. A note of the expiry date must also be kept for each container. In the interest of proper use, the contractor shall maintain a complete record of the batch, procurement date, application time and location for works involving epoxy, polymer latex and rust passivator, etc. Measurements for these works shall be made as stated in the Bill of Quantities of tender.

#### 10. Ready Mix Polymer Modified Mortar:

Approved brand of Ready-Mix Polymer Modified Cement Mortar as mentioned in List of Approved Brands shall be used for all types of Structural Repair work.

#### **B. GENERAL SPECIFICATIONS FOR MATERIALS**

#### 01. QUALITY

All materials for incorporation into the works shall be of the best quality of their respective kinds as specified herein and shall be obtained from sources and suppliers approved by Consultant/NABARD and shall comply strictly with the tests prescribed hereinafter or, where tests are not laid down in this Specification, with the requirements of the latest edition of the relevant Indian Standards approved by Consultant.

#### **02. INSPECTION AND TESTING**

All materials before being incorporated into the Works shall be subjected to inspection and testing as provided in the Conditions of Contract and elsewhere in the Specifications. The cost of all samples for all tests (wherever required) by this Specification or approved Standards shall be deemed to the included in the Contract rates. No materials shall be used in the work unless they have first been approved by the Consultant or his Representative.

#### 03. SAMPLES

All major materials used for the works shall be tested before use as per relevant IS standards. Sampling and testing of aggregates shall be as per IS: 2386.

Samples of materials to be used on the work shall first be furnished by the contractor and got approved by the Consultant/ NABARD. All materials which are used in the works shall strictly conform to the samples, otherwise the materials shall be summarily rejected.

All sanitary wares as specified in the schedule of quantities & shall be of best quality manufactured by approved manufacturer and shall be finally approved by the Consultant / NABARD prior to installation. All samples of materials with necessary catalogues, performance data shall be submitted and approved before use for the work. Approved samples of all materials shall be neatly displayed on a board, and such a display board of samples shall always be in exhibition in the sample room of the construction office of the Consultant. Such a display shall be used for the day-to-day checking of the materials on site

#### **04.** INDEPENDENT TESTS (wherever required)

Independent tests and analysis of any of the materials (wherever required) may be made from time to time by a Testing House or Analyst appointed by the Consultant in order to check the supplier's works tests and analysis. The Contractor shall at his own expenses supply and deliver to a Testing House or Analyst such materials as may be directed by the consultant. Should the result

of any test be unsatisfactory to the Consultant, the materials represented will be rejected.

# C. DETAILED SPECIFICATIONS FOR ITEMS OF WORKS A) GROUTING BY USING NIPPLES

Following procedure shall be followed for grouting work:

- i) For grouting though injection grouting, the crack along the length has to be marked and members shall be supported with MS props etc. The crack surface shall be opened by making V groove of size 12 mm x 12 mm by removing plaster (if required) to reach the loose/honey-combed area.
- ii) The holes for 12 mm dia. nipple and 40 mm deep along the crack lines at spacing 400 mm or thickness of the damaged structural member whichever is less. The holes & grooves shall be further cleaned by using air-compressor or with hand operated blow out pump. Concrete surface for grouting shall be free from all loose and unsound material by mechanical means & wire-brush etc. by washing with water and shall be inspected by Consultant. The 12 mm dia. specified material injection nozzle shall be fixed along with crack line with epoxy or polymer modified mortar. The crack (on both sides of walls or structural member) shall also be sealed between the nipples by means of epoxy mortar after applying epoxy primer or polymer modified mortar (or cementitious grout) as directed.
- iii) The 6" width on both sides of the crack shall also be sealed with epoxy primer/mortar etc. as applicable. The epoxy mortar (applied along the crack line) shall be air cured for 24 hours, whereas the polymer-modified mortar or cementitious grout shall be cured for 1-3 days and allowed to gain strength before the grouting through nozzle. In case of cementitious grout, the crack surface shall be saturated with water.
- iv) For Cement slurry, the cement, water, integral waterproofing compound, sand and approved admixture (plasticizers of approved make or CONBEX-100 of M/s Fosroc) shall be mixed in the approved proportion as per manufacturer specifications or by Consultant or consultant. The water cement ratio shall be between 0.5 and 1.0 depending on the characteristics of each hole which will be ascertained during grouting operation. The shrinkage compensating cement may be added to cement slurry to control shrinkage. The slurry should have creamy consistency by using a mechanical mixer and cement particle shall be in suspension till the grout is injected. Only small batches (up to 1 litter) will be allowed for manual mixing with spatulas, knives etc.

- v) For SBR/ Acrylic Polymer cement slurry, the shrinkage compensating cement mixed with polymer and water in specified proportion similar to preparation of cement slurry as above.
- vi) The prepared slurry shall be grouted thorough nozzles into the cracks or by means of suitable gun or pump at a pressure of 1-2 kg/cm2. For vertical cracks, the injection grouting shall be started at lowest nipple and continue until the injected grout begins to flow from the next higher nipple. In case of horizontal locations, the injection shall be started from one nipple and continued until the injected grout begins to flow out from adjoining nipples. The first nipple shall then be closed off, and injection process shall be continued in this manner at other nipple locations. The process shall be repeated until the whole crack has been sealed. As soon as the system is cured, the nipples shall be cut.
- vii) For the Honeycombed area, each nipple shall be grouted individually. The grouting pressure will be in the range of 1 to 3 kg/cm<sup>2</sup> and depend upon the locations and site conditions.
- viii) The consultant has to carry out the pre and post repair evaluation by using Ultrasonic Pulse Velocity Test (UPV) in an approved manner prior to injection grouting for RCC (Reinforced Cement Concrete) members and after injection grouting to ascertain the quality and efficacy of the grout work as directed by Bank's representative/Consultant. In case, there is no improvement in the test results, the contractor has to do re-grouting till satisfactory results are achieved.

# B) REPAIRING CONCRETE/MASONRY WORK WITH POLYMER MODIFIED CEMENT MORTAR (PMM)

PMM is typically supplied as a pre-packaged, ready-to-use cementitious powder material having compressive strength more than 45 N/mm<sup>2</sup> at 28 days. The work has to be carried out in the specified manner for the given thickness as stated in Bill/Schedule of Quantities and as per the procedure mentioned below:

1. Material: The polymer modified cement mortar shall be pre-mixed of approved make and of desired mix and strength. The material shall be stored as per manufacturer specification. Mix it with the specified amount of clean water using a mechanical mixer to achieve a homogeneous, lump-free consistency. The potable water (PH not less than 6) shall be arranged by contractor for mixing and curing purpose. The reinforcement shall be conformed to IS: 1786 and free from loose mill scales, loose rust and coats of paints etc. If directed, the

welded wire mesh or chicken wire mesh will be used as reinforcement or strengthening the area.

2. Preparation - All substrate's/surface shall be clean and free of dust, plaster, oil paint, grease, corrosion deposits and any other deleterious substances. Excess laitance shall be removed by mechanical means or by hacking etc. to make it rough to receive the repair work. All surfaces so treated shall be thoroughly washed with clean water and achieve the condition of saturated but dry surface. All cracks in RCC columns/beams, wherever notice, shall be sealed by injection grouting, if required.

Any steel in repair area shall be exposed and cleaned to remove all loose scale and corrosion deposits and then coated with one coat of approved Rust Remover and two coats of approved rust preventor or anti-corrosive coating or zinc rich primer on exposed reinforcement bars.

- 3. Additional steel- If required, in the form of R/F (Reinforcement) bars or welded wire mesh shall be properly secured to substrate with rust passivator coating.
- 4. Priming Immediately before priming the concrete substrate shall be thoroughly dampened with water with any excess being brushed off. Bonding slurry shall be prepared and applied into the substrata. Care should be taken to avoid pudding of emulsion. The repair mortar shall be applied while the primer is still tacky.
- 5. Application The surfaces shall be thoroughly prepared as recommended. All sharp edges shall be rounded off. All surfaces shall be primed including edges by using approved polymer modified cementitious slurry in required proportions which may also act as bond coat or apply the specified bond coat as directed.

All applications shall be done on wet surface. The primer shall not be allowed to dry. Water contents shall be kept to minimum necessary. The mortar has a limited working time, so only mix enough material that can be applied before it begins to set. Apply the mixed PMM with a trowel or spatula, pressing it firmly into the repair area to eliminate air pockets and ensure intimate contact with the prepared substrate and rebar. For deeper repairs (e.g., thicker than 20–25mm), apply the mortar in multiple layers. Under no circumstances should the thickness of PMM in a specific layer exceed then that recommended by the manufacturer and directed by consultant. A fresh bonding coat should be applied between layers to maintain optimal adhesion. Use a wooden or plastic float for initial levelling and a steel float for the final, smooth finish. Cure the

repair by covering it with a wet hessian cloth or by applying a specialized curing compound for at least 72 hours. All mortars shall be thoroughly cured for minimum 07 days and shall not be retempered after initial set.

# C) REPAIRS OF DAMAGED REINFORCED CONCRETE MEMBERS WITH MICRO-CONCRETE

Micro concrete is a high-strength, non-shrink, polymer-modified cementitious material used for repairing and strengthening damaged or weak concrete structures, including beams. Micro-concrete is a ready to use dry powder which requires only addition of clean water at site to produce a free flowing non shrink repair micro concrete. Its fine-grained, free-flowing nature allows it to fill restricted and densely reinforced areas where traditional concrete cannot be properly compacted.

- **1.** Material It shall be ready mix of approved make and meeting the compressive strength requirement of 40 to 50 N/mm<sup>2</sup> at 07 days, 50 to 60 N/mm<sup>2</sup> at 28 days. The flexural strength may be in range of 05 to 06 N/mm<sup>2</sup>. The chloride content should be around 0.2 %. The bidder has to submit the manufacturer specification to meet these criteria.
- 2. Preparation All substrate's/surface shall be clean and free of dust, plaster, oil paint, grease, corrosion deposits and any other deleterious substances. Excess laitance shall be removed by mechanical means or by hacking etc. to make it rough to receive the repair work. All surfaces so treated shall be thoroughly washed with clean water. All cracks in RCC columns/beams, wherever notice, shall be sealed by injection grouting.

Any steel in repair area shall be exposed and cleaned to remove all loose scale and corrosion deposits and then coated with one coat of approved Rust Remover and two coats of approved rust preventor or anti-corrosive coating or zinc rich primer on exposed reinforcement bars.

- 3. Additional steel If required, in the form of R/F bars or welded wire mesh shall be properly secured to substrate with rust passivator coating and ensure the dryness of coating.
- 4. Priming Pre-wet the concrete surface with water for several hours before application to prevent it from absorbing water from the micro concrete mix. Ensure there is no standing water before beginning the pour. All surfaces shall be primed including edges by using approved polymer modified cementitious slurry in required proportions which may also act as bond coat or apply the specified bond coat as stipulated by manufacturer/ directed by consultant.

- 5. Form work Build a secure, leak-proof formwork around the beam to contain the micro concrete mix and achieve the desired jacketing thickness. Use a release agent on the formwork for easier removal.
- 6. Mixing Use the PAN Mixer for mixing of Micro-concrete. Do the mixing by using potable water of 3.75 to 4 litres for 25 kg bag of micro-concrete or follow the manufacturer's specific instructions for the water-to-powder ratio (typical ratio is around 1:8 by weight). The micro-concrete powder shall be added slowly under continuous mixing for 02 minutes. Add balance 15-20% of mixing water and again mix for another 02 to 05 minutes to form a homogenous, free flowing, uniform and lump-free mix. It should be done by a qualified person to ensure a safe and long-lasting repair.
- 7. Application The process of repairing a concrete member with micro concrete is often referred to as "jacketing" or "encasement." The prepared micro-concrete shall be poured/pumped into a watertight shuttering/form work immediately after mixing to maintain its optimal flow properties. It should be places in such a way that continuous pour is maintained to avoid air voids. Due to its self-levelling properties, compaction is not necessary. Remove the formwork after 24 to 48 hours, depending on weather conditions and manufacturer recommendations. For proper curing, keep the repaired area moist for a minimum of 7 days by covering it with a wet hessian cloth or by applying a high-quality curing compound. The readymade micro-concrete may be used for thickness up to 100mm. For thickness more than 100 mm on one face, the aggregate (washed/cleaned) of size 6.4 mm and downsize for specified ratio, may be added as directed by the consultant, wherever required. The cost of stone aggregate will be paid extra.

#### D) PLAIN/ REINFORCED CEMENT CONCRETE

For concreting purpose Ready Mix Concrete (M20 with integral waterproofing compound) from reputed manufacturer like L&T, Ultra Tech etc. shall be procured for the quantities more than 5.0 cu m. In other cases, the cement concrete may be prepared at site.

1. <u>MATERIALS</u>: The cement concrete for RCC member shall be prepared at site adding 43 grade cement (IS: 8112), sand (washed river sand from Gujrat of required grading as per IS 383 or ready to use sandbags of the approved make) and good quality graded coarse aggregate of nominal size of 20 mm. The contractor may submit the mixing application procedure for our approval. The approved integral waterproofing compound may be added. The potable water

(PH not less than 6) shall be arranged by contractor for mixing and curing purpose. The reinforcement shall be conformed to IS: 1786 and free from loose mill scales, loose rust and coats of paints etc. Approved admixtures conforming to IS:9103 shall be used by the Contractor, wherever required.

2. Preparation & Placing - The concrete shall be of required proportion and shall surround all reinforcements and completely fill the formwork after compaction. Characteristic compressive strength of concrete at 28 days shall be 20N/mm2 (or nominal mix of 1 cement :1.5 sand :3 coarse aggregate by volume). The concrete will have slump of 75mm to 125 mm. The concrete shall have minimum cement content of 400 Kg/M3 and a maximum water cement ratio of 0.4. The approved plasticizer may be added to improve the workability of concrete. Concrete shall be mixed in a mechanical mixer until there are uniform distribution of the materials and the mass with uniform colour and consistency. Generally, the mixing time shall be 1.5 to 2 minutes. The concrete shall be transported to desired location either through pipe with the help of pump or manually. The concrete shall be deposited as nearly as practicable in its final position to avoid rehandling. The concrete shall be placed and compacted before setting commences and shall not be subsequently disturbed. Concrete shall be thoroughly compacted and fully worked around the reinforcement, around embedded fixtures and into corners of the formwork by means of tamping and mechanical vibrators. Over vibration or vibration of very wet mixes as well as under vibration shall be avoided. Methods of placing shall be such as to preclude segregation. Care shall be taken to avoid displacement of reinforcement or movement of formwork. The complete process shall be done as per direction of consultant.

Hand mixing of concrete shall be allowed only on express permission of Bank's representative/Consultant or consultant who shall satisfy himself of the adequacy of the arrangements for hand mixing. In the event of hand mixing minimum cement content of the mix shall be 440 kg/Cu.m.

For moist curing, the exposed surface of concrete shall be kept demp/wet condition continuously by ponding or by covering with a layer of sacking, canvas, hessian or similar materials for at least seven days from the date of placing of concrete.

In case of Membrane Curing – The approved curing compounds may be used in lieu of moist curing with the permission of the Bank's representative/Consultant /consultant. Such compounds shall be applied to all exposed surfaces of the concrete as soon as possible after the concrete has set.

Immediately after stripping the formwork, all concrete shall be carefully inspected and any defective work or small defects either removed or made good before concrete has thoroughly hardened. In case the Bank's representative/Consultant /consultant is not satisfied about the concrete used, either due to poor workmanship or based on results of cube strength tests (which were prepared during casting of concrete members). The contractor has to re-do the work by dismantling the poor concrete at its risk & cost.

### E) FORM WORK:

General - The form work shall be designed and constructed to the shapes, lines and dimensions shown on the drawings. Deviations from specified dimensions of cross sections of columns and beams shall be within the tolerance of - 6mm to + 12mm.

Cleaning and Treatment of Forms - All rubbish, particularly chippings, shavings and sawdust, shall be removed from the interior of the forms before the concrete is placed and the formwork in contact with the concrete shall be cleaned and thoroughly wetted or treated with an approved composition. Use a proper & approved release agent on the formwork for easier removal. Care shall be taken that such approved composition is kept out of contact with the reinforcement. Stripping Time - Minimum time period for striking form work after placing of concrete shall be in conformity with IS: 456.

#### F) ASSEMBLY OF REINFORCEMENT:

Straightening, Cutting and Bending - reinforcement shall be bent and fixed in accordance with procedure specified in IS:2502 or as per detail drawings or instructed by consultant and shall not be straightened in a manner that will injure the material.

All reinforcement shall be placed and maintained in the position as shown in the drawings by means of cement mortar/concrete cover blocks of same grade as concrete and 16 G. annealed binding wire.

Tolerance on Placing of Reinforcement - unless otherwise specified, reinforcement shall be placed within the following tolerances:

- a.For effective depth of 200 mm or less + 10mm
- b.For effective depth more than 200 mm + 15mm

The cover shall in no case be reduced by more than one third of specified cover or 5mm whichever is less.

# **G) JACKETING OF RCC MEMBERS**

1. <u>MATERIALS:</u> The cement concrete for RCC member jacketing shall be prepared at site adding 43 grade cement (IS: 8112), sand (washed river sand from Gujrat of required grading as per IS 383 or ready to use sandbags of the approved make) and good quality graded coarse aggregate of nominal size of 20 mm. The contractor may submit the mixing application procedure for our approval. The approved integral waterproofing compound may be added. The potable water (PH not less than 6) shall be arranged by contractor for mixing and curing purpose. The reinforcement shall be conformed to IS: 1786 and free from loose mill scales, loose rust and coats of paints etc. Approved admixtures conforming to IS:9103 shall be used by the Contractor.

In case, the jacketing has to be done with Micro-concrete, the approved make material may be used and adopt the procedure as described previously.

2. <u>Preparation and Placing</u>: The surface shall be prepared properly for successful application of Jacketing. The loose & unsound concrete material shall be first removed by the contractor up to the required depth as directed. Chipping shall continue until there are no offsets in the cavity which will cause an abrupt change in the thickness of repaired surface. No square shoulders shall be left at the perimeter of the cavity; all edges shall be tapered. The final cut surface shall be critically examined to make sure that it is sound and properly shaped.

After it has been ensured that the surface to which jacket concrete is to be bonded is sound, holes of required depth and diameter shall be drilled as per spacing shown in the drawing. The drilled holes shall be thoroughly cleaned off loose particles by oil free air blast.

Approved epoxy dipped steel bars of required length, shape and diameter shall then be driven inside the holes to form shear keys, which shall be allowed to set for 24 hours.

The balance of the concrete surface shall then be cleaned off all loose and foreign materials by means of stiff wire brushing. All dust and loose particles resulting from such pre-treatments shall be removed by oil free air blast.

All old, exposed steel rods shall be treated with one coat of approved rust remover/passivator and two coats of anti-corrosive coatings.

Approved latex modified polymer bonding coat shall be applied to the prepared concrete and reinforcement substrata before jacketing after tying in new reinforcement, inserts etc. Shuttering shall be erected and fresh concrete poured as soon as possible after application of epoxy/polymer bonding coat, but always during open time of adhesive.

The proper form work shall be erected around the member after fixing the structural members at the desired location as described above. The reinforcement works may also be carried out as stated at respective para above. The concrete shall be prepared and placed as stated at relevant para above.

#### H) STRUCTURAL STEEL WORK

- 1. Material: All structural steel used shall, before fabrication conform to IS:226. The welding electrode shall conform to IS: 814. All bolts, nuts, washers etc. shall be in conformity with IS:800. The heads of bolts shall be forged and solid, truly concentric and square with the shanks and hexagonal in form and shall be screwed with proper threads well and cleanly cut in oil in such a way that they hold for the entire length of the screwed parts. The nuts shall fit so tightly on the bolts that they cannot be screwed down without a spanner. All bolts shall be provided with washers under the nuts of such thickness that the thread is clear off the hole in the plate. The shank shall project at least one full thread beyond the nuts. The nuts shall be secured to avoid the risk of their becoming loose.
- 2. Fabrication and Erection: All materials shall be straightened/ flattened by pressure, if necessary, before being worked. The erection clearance for cleated ends of members connecting steel to steel shall be not greater than 2mm at each end. The erection clearance for cleated ends of members connecting steel to steel shall be not greater than 2mm at each end. Where black bolts are used, the holes shall be made not more than 1.5mm greater than the diameter of the bolts. Cutting shall be effected by shearing, cropping or sawing. Gas cutting shall be permitted for mild steel. Except, where the material is subsequently joined by welding, no load shall be transmitted into metal through a gas cut surface. Shearing, cropping and gas cutting shall be clean, reasonably square and free from any distortion and the edges shall be round afterwards, if required and directed.

Holes through more than one thickness of material for members where possible, be drilled after the members are assembled and tightly clamped together. Punching may be permitted before assembly, provided the holes are punched 3mm less in diameter than required size. The thickness of material punched shall not be greater than 16mm. When holes are drilled in one operation through two or more separate parts, these parts when so specified by the Consultant shall be separated after drilling and the burrs removed. Holes in connecting angles and plates other than splices may be punched full size

through material not over 13mm thick except where required for closer tolerance. Holes for bolts shall not be formed by gas cutting process. Joints or splices in structural members or its components will be strictly as directed. The component parts shall be assembled and aligned in such a manner that they are neither twisted nor otherwise damaged. Where necessary, washers shall be tapered or otherwise suitably shaped to give the heads and nuts of bolts a satisfactory bearing. The threaded portion of each bolt shall project through the nut at least one thread.

All the welding work will be carried out in accordance with IS:9595. Allowance shall be made for the contraction of butt weld and care shall be taken that it is not restrained against such contractions. Vertical welding by downward method shall not be used.

The whole of the workmanship shall be of first-class quality and true to dimensions. Utmost accuracy shall be observed in every part of the work. Work during fabrication shall be inspected by the bank's consultant and facilities to do so shall be given by the contractor during all working hours.

# I) <u>Repair Scheme for damaged RCC members & carbonation depth</u> of concrete has reached to reinforcement:

# A) Column Foundations

- 1 First break and remove the flooring concrete around the columns to expose the foundations. Excavate the soil around the columns below the flooring concrete to expose the foundations to assess the degree of damage to the foundations.
- 2 Assuming the foundation has RCC footing, chip open the cover concrete until all the corroded steel rods exposed or all the concrete affected by carbonation is removed whichever is deeper. Clean the steel rods with steel wire brush to remove the rust completely by applying rust remover/anti-corrosive coatings.
- 3 Chip the spalled surface of concrete to remove all loose materials. Remove concrete all around the reinforcement to get average 25 mm air gap all around including behind the reinforcement. Then brush it with steel wire brush to remove all loose particles. Wash the surface with potable water.
- 4 Measure the net diameter of corroded steel bars and assess the net area of steel available using a vernier calliper, if possible. The area of steel originally provided can be determined / assessed from the physical observation of the rods exiting in the column.
- 5 Apply two coats of anticorrosive coating like NITO-ZINC PRIMER manufactured by M/s. FOSROC CHEMICALS LIMITED or approved

equivalent mentioned in the tender document to all the existing reinforcements. The rust of the reinforcement shall be removed with help of rust remover. It shall be ensured that the NITO-ZINC is coated all throughout the surface of the rods including al crevices.

- 6 If the difference between the area of steel originally provided and the measured net area is more than 5 to 10% provide extra/additional steel. Tie the steel to the existing steel.
- 7 Leak proof form work which should not deform or leak due to pressure of micro concrete shall be fabricated and erected in position. The form work should be coated with mould release agent Reebol or equivalent prior to the final fixing in position. Proper supporting arrangements are to be made for keeping the shutter in correct line and length.
- 8 Encasement is done using micro concrete viz RENDEROC RG(S) manufactured by FOSROC CHEMICALS LIMITED or approved equivalent with proper procedure as prescribed previously.
  - 9. Faces of all repaired foundation shall be coated with DECKGAURD S (protective layer) or approved equivalent mentioned in the tender document in 2 coats at the rate of 0.35 lit / sq.m The quoted rates for structural repair item shall be inclusive of this coating.

### B) Columns:

The following repair scheme is recommended for the corroded column:

- **1.** Prop the beams on all the sides of the columns for all the storeys. Ensure that the props come in the same vertical line. The props shall be able to take the total load coming on to the column.
- **2.** Chip open the cover concrete until all the corroded steel rods are exposed or all the concrete affected by carbonation is removed whichever is deeper. Clean the steel rods with steel wire brush to remove the rust completely.
- **3.** Chip the spalled surface of concrete to remove all loose materials. Remove concrete all around the reinforcement to get average 25 mm air gap all around including behind the reinforcement. Then brush it with steel wire brush to remove all loose particles. Wash the surface with potable water.
- **4.** Measure the net diameter of corroded steel bars and assess the net area of steel available using a vernier calliper, if possible.
- **5.** The area of steel originally provided can be determined from the drawings / assessed from physical observation of the rods existing in the columns.

- **6.** Apply a coat of anticorrosive coating like NTIO-ZINC PRIMER manufactured by M/s. FOSROC CHEMICALS LIMITED or approved equivalent mentioned in the tender document to all the existing reinforcements. It shall be ensured that the NTIO-ZINC is coated all throughout the surface of the rods including all crevices.
- 7. If the difference between the area of steel originally provided and the measured net area is more than 10% provide extra steel. The extent of taking the steel below floor level shall be decided at the site depending on the area affected by corrosion. If the steel in the column below the foundation is not corroded for a sufficient length (Lap length) the extra steel provided can be tied to the existing rods for a length of lap length as directed. If the existing steel in the column is corroded up to the top of the foundation new bars have to be anchored by drilling holes in the foundation for a length of development length in tension as directed. Additional bars thus introduced are bonded with the concrete using polymer-based epoxy LOKSET manufactured by M/s. FOSROC CHEMICALS or approved equivalent mentioned in the tender document. Anti corrosive coating can be applied to the new longitudinal bars before placing. But to the ties this coating has to be applied after placing in position in order to avoid crack in the coating. New longitudinal bars have to be tied using new column ties as directed, if the additional bars are provided only at the corners and also if the number of new bars is less than 12 numbers with the spacing of the corner bar and adjacent bar less than 75mm. In case more than 12 rods are provided the ties have to be anchored into the concrete by drilling holes in the concrete and inserting the ends of the ties into the holes as per site requirement. The depth of drilling shall be such that length of the ties from the centre of new longitudinal bar is 8 times the diameter of tie. The ends of the rods are bonded with the concrete using lock set. The arrangement of fixing the column bars at top will be as per site conditions. The shear keys wherever required shall also be placed.
- **8.** The repair of the columns shall be carried in either of two ways; mentioned below:
  - a) BY using Polymer Modified Mortar In case, the work is to be carried in small patches up to a thickness of 30mm, the work may be carried out as mentioned for repair by PMM.
  - b) BY Micro-concrete In case, there repair work has to be carried out on a larger area with a thickness more than 30 mm, and it is easy to erect the form

work at the place and ease of pouring of micro-concrete with the procedure as mentioned previously.

c) Faces of all repaired columns shall be coated with DECKGAURD S (protective layer) or approved equivalent mentioned in the tender document in 2 coats at the rate of 0.35 lt / sq.m. The quoted rates for structural repair item shall be inclusive of this coating.

### C) Beams:

Basic steps involved in the repair of beams are almost the same as that for columns.

- 1. Prop the slabs with a runner on sides of the beam as required, so that even if the beam is removed the slab shall be safe.
- 2. Chip open the cover concrete at the bottom face & sides until all the corroded steel rods exposed or all the concrete affected by carbonation is removed whichever is deeper and clean the steel rods with steel wire brush to remove the rust completely by applying rust remover.
- 3. Chip the spalled surface of concrete to remove the loose materials. Remove concrete all around the reinforcement to get average 20 mm air gap all around including behind the reinforcement. Then brush it with steel wire brush to remove all loose particles. Wash the surface with potable water.
- 4. Measure the net diameter of corroded steel bars and assesses the net area available using vernier callipers, if possible.
- 5. Apply two coats of anti-corrosive agent like NITO-ZINC PRIMER or approved equivalent mentioned in the tender document to the existing bars.
- 6. The additional area of steel to be provided can be determined once we know the original area provided in other location of beams or by physical observation of the rods.
- 7. If the additional area required is coming to be more than 10% of the original area provided, provide extra steel. Tie the steel to the existing steel by welding or as directed. The details will be also be explained at site when the vertical leg of the stirrups is also corroded. In case the longitudinal steel and bottom leg of the ties alone are corroded without much damage to the vertical leg of the stirrups, the additional bars may be welded and anchored to existing bars. Ties/Shear keys can be anchored by drilling holes through the slab and bonded with polymer-based epoxy locket. Anticorrosive coating can be applied to new longitudinal bars before placing. But to the ties this coating has to be applied after placing in position in order to avoid crack in the coating.
- 8. The repair of the beam shall be carried in either of two ways; mentioned below:

- a) BY using Polymer Modified Mortar In case, the work is to be carried in small patches up to a thickness of 30mm, the work may be carried out as mentioned for repair by PMM.
- b) BY Micro-concrete In case, there repair work has to be carried out on a larger area with a thickness more than 30 mm, and it is easy to erect the form work at the place and ease of pouring of micro-concrete with the procedure as mentioned previously.
- c. Faces of all repaired beams shall be coated with Dek guard S or approved equivalent mentioned in the tender document in 2 coats at the rate of 0.35 lt /sq.m. The quoted rates for structural repair item shall be inclusive of this coating.

#### D) Slabs:

The repair of slabs is also almost the same as that of columns and beams. The other details are as under:

- i) Prop the slab at intervals of say about 1.5m (Try to avoid propping at the centre.)
- ii) Chip open the cover concrete at downside of the slab until all the corroded steel rods exposed or all the concrete affected by carbonation is removed whichever deeper & clean the steel with steel wire brush to remove the rust completely by applying rust remover.
- iii) Chip the spalled surface of concrete to remove all loose materials. Remove concrete all around the reinforcement to get average 15 mm air gap all around including behind the reinforcement. Then brush it with steel wire brush to remove all loose particles. Wash the surface with potable water.
- iv) Measure the net area of steel available using vernier callipers, if possible.
- v) The area of steel originally provided can be determined from the drawings / assessed from physical observation of the rods existing in the slab.
- vi)Apply two coats of anticorrosive coating like NITO-ZINC PRIMER manufactured by M./s. FOSROC CHEMICALS LIMITED or approved equivalent mentioned in the tender document to all the existing reinforcements. It shall be ensured that the NITO-ZINC is coated all throughout the surface of rods including all crevices.
- vii) If the difference between the area of steel originally provided and the measured net area is more than 5% to 10% provide extra steel. Additional bars thus introduced are anchored to the beam for a length of Ldt/3, where Ldt is the development length in tension. These additional bars are bonded to the beam by using polymer-based epoxy locket. Additional steel shall be tied to the

existing steel or anchored using anchors drilled into the slab or by welding. The shear keys wherever required shall be provided. For certain areas, the welded wire mesh of 18-gauge wire having opening size 1.5" x 1" may be welded with existing reinforcement.

- viii) The repair of the slab shall be carried in either of three ways; mentioned below:
- a) BY using Polymer Modified Mortar In case, the work is to be carried in small patches up to a thickness of 30mm, the work may be carried out as mentioned repair by PMM above.
- b) BY Micro-concrete In case, there repair work has to be carried out on a larger area with a thickness more than 30 mm, and it is easy to erect the form work at the place and ease of pouring of micro-concrete. The process will be adopted as mentioned at repair by Micro-concrete.
- ix) Faces of all repaired beams shall be coated with Dekguard S or approved equivalent mentioned in the tender document in 2 coats at the rate of 0.35 lt /sq.m. The quoted rates for structural repair item shall be inclusive of this coating.

#### J) STRUCTURAL REPAIR BY CARBON FIBER WRAPPING SYSTEM

The structural strengthening of RCC members shall be done with the approved unidirectional, mid-strength carbon fibre (tensile strength 3,500–4,000 N/mm², Modulus of Elasticity 2.30x10<sup>5</sup> N/mm², elongation at failure 1.7%) along with a high-performance, two-component epoxy resin and resin system as per manufacturer specifications and as directed by consultant. The further details are as under:

#### **Method of Application:**

- 1.Concrete to be treated shall be free from oil residues, demoulding agents, curing compounds, grouting lines and protrusions.
- a. The concrete surface to be wrapped shall be structurally repaired prior to treatment for corrosion induced damage / structural damage by epoxy / monomer grouting and epoxy / polymer modified mortar repair systems.
- b. Depressions in the concrete shall be filled by epoxy putty. Differences in concrete levels shall not be more than 1 mm. Corners shall be rounded with the epoxy putty with a radius of 25 mm minimum.
- c. Disk grinders or similar equipment may be used to remove paint, stains and other surface substances that may affect the bond. Once the substrate is thoroughly cleaned properly, use pressurized air blower for removal of dust

from the substrate.

- 2. Mix the epoxy primer in specified proportion and stir thoroughly for 5-10 minutes with a clean stirrer in preferably a plastic container. Allow the mixed material to remain for 5-10 minutes before taking up for application over the prepared surface. Apply the mixed epoxy primer by roller or by brush and follow it up by mixing and applying the epoxy putty adhesive by trowel preferably within 30 to 40 min. Coverage will vary according to substrate profile.
- 3. Application of unidirectional carbon fibre wrapping sheet shall be done subsequently over 1st coat application of the epoxy saturant. The carbon fibre wrapping sheet shall be squeezed in the longitudinal direction of the fibres using roller and rubber spatula. Squeeze out the resin through the fibre as much as possible. The fabrics provide the necessary strength in the primary direction of their fibres. Therefore, it is paramount that the plies and fibres in the fabric be oriented in the directions that are shown on the construction documents and drawings. The installed fibres must be free of kinks, folds, waviness and misalignments. Apply additional epoxy saturant at the overlap interface. Apply second overcoat of the epoxy saturant as above and allow it to cure. Precaution shall be taken to eliminate air gaps underneath the carbon fibre wrapping sheet. The second coat of the saturant should be applied before 24 hours (for better bonding and mechanical properties, it is recommended to apply the second layer within first 3 - 6 hours) from the application of the first layer of the saturant. Apply the remaining quantity of the saturant as per the given consumption calculations. The coated surface should be strongly squeezed in the fibre longitudinal direction 2 - 3 times with the help of hard PVC roller to impregnate the fabric.
- 4. In case where more than 1 layer of carbon fibre wrapping sheet shall be applied, the same method as above shall be repeated. In case of application of multiple plies, the proper procedure is to apply only one ply per day. The previous ply must be dry and be inspected for any air pockets, bubbles or areas of non-adhesion and repaired. etc complete all as per manufacture specification and as directed by consultant.
- 5. Sprinkling quartz/ river sand (in last layer only) over it as directed by consultant.

#### K) SPECIFICATIONS FOR SHEAR CONNECTORS

Shear connectors in the form of 'L-shaped' Bars have to be anchored into the Existing concrete to ensure integral action of the reinforced concrete jacket portion with the hardened core concrete

Holes shall be drilled on either side, and the depth of the hole shall be 10 times the diameter of shear connector.

Hole has to be shifted if encountered with any reinforcement during drilling Fix shear connectors 8-10 mm dia., spacing 200 mm c/c or as advised by the consultant, on the surfaces of the slab or any other structural member as the case may be.

Clean the same using air blowers and make sure there is no fine particle present in the hole Insert a wire cleaning brush to the bottom of the hole and brush out 4 times. Using a hand pump or compressed air insert the nozzle to the back of the hole and blow out an additional 4 times.

If dust is still present, repeat the process until no further dust is visible. Ensure the drill bit and the cleaning brush is of suitable diameter for the fixing used.

For anchoring/fixing dowel bars into the holes to serve as shear connectors. - Adopt at least 10 mm dia. bars as shear connectors for which 12-mm dia. holes may be needed. Material as per approved manufactures specifications shall bleed up to 3/4 of depth of the hole.

#### L) SPECIFICATIONS FOR WATER PROOFING COATING

- 1. Surface Preparation: All loose and de-bonded water proofing layer, loose particles, dirt & should be removed. The substrate must be pressure-washed with water with, a minimum working pressure of 1,400 psi is to be used to and/or remove all dirt, dust, chalking and waste products. Remove algae, Mold by using bleach solution or bio wash.
- 2. Crack Repair: All visible hairline cracks on existing water proofing more than 0.50 mm and not giving hollow sound, should be cut and widen in V shape with mechanical cutter in the size (10mm W x 6mm D). Fill cracks with PU sealant / Hybrid Sealant with suitable gun and smoothed with a putty knife or trowel. Allow sealant to cure a minimum (72 Hrs.).
- 3. Treatment to existing water proofing area: Remove loose and damaged water proofing with mechanical cutter. Clean the surface with high pressure water jet to remove dirt and loose particles. Brush applies a bond coat in the ratio of 1:1 (URP 1: Cement 1) by volume to make it lump free slurry when applied on in the pre wet surface. Carry out brick bat coba water proofing in affected areas as per consultants' instruction & directions to provide proper level slope as per site condition.
- 4. Coating application: Stir well prior to application. All joints / corners / drainage outlets and penetration points shall be treated prior to all application of coating. All corners, gaps, joints, protrusions and outlets

should be coated with an extra coat incorporating reinforcing fabric. Apply one self-Priming coat of PU acrylic hybrid emulsion coating of Dr. Fixit Roofseal Classic (diluted with water in the ratio 2: 1) or equivalent at the rate of 7.5 to 9.0 Sq.mtr / Ltr. Allow it to dry for 2-3 hours. Substrate MUST be in SSD condition for application of primer. Allow coating to dry for 4 hours prior to applying first coat & second coat. Apply the first coat of Dr. Fixit Roofseal Classic or equivalent at the rate of 2 to 2.2 Sq.mtr / Ltr / coat. Allow the coating to air cure for minimum 4-6 hours to walk and apply second coat at  $90^{\circ}$  to the first coat Apply second coat, at the rate of 2 to 2.2 Sq.mtr / Ltr / coat. The system will achieve a total dry film thickness of 450-500 microns. Allow the system to air cure for 7 days minimum.

5. Pond Test: Conduct pond test after 7 days, for 24 hrs, stagnated with water for 50mm height.

#### M) Plaster Work with/without integral waterproofing compound

Plastering work may be carried out by using 43 grade cement and washed sand conforming to IS: 383 (or approved pre-packed bags) and integral waterproofing compound may be added wherever required as per manufacturer specification. The surface to be patched shall be wet thoroughly and if plain, shall be recked or roughened up by hacking. The cement mortar used shall be 1:4 (one part cement to four parts of sand by volume with integral water proofing compound) and the work shall be done as directed by consultant. Wide cracks in plaster, if any due to separation of brick work from the concrete or woodwork or between two masonry panels or diagonal cracks shall be grooved as directed, filled with 1:2 cement plaster with the addition of "Groutex" or "Expandex" and surface finished with plaster of paris or mentioned in schedule of quantities specifications. Minor cracks in plaster due to separation of brick work from the concrete or woodwork or between two masonry panels or diagonal cracks shall be grooved as directed, filled and finished with "SNOW FILLA" or with the material mentioned in schedule of quantities. The rates quoted for respective items shall be inclusive of crack filling operation. The potable water shall be used for preparation of mortar and curing for a period of seven days.

In suspending work at the end of the day, the plaster shall be left, cut clean to line both horizontally and vertically, when recommencing the plaster, the edge of the old work shall be scraped, cleaned aid wet with water before plaster is applied to the adjacent area. Plastering work shall be closed at the end of the day on the body of the wall and not nearer than 150mm to any corners or rises.

It should not be closed to the body of features like bands, cornices etc. and nor at the corners. Horizontal joints in plaster work shall not also occur on parapet top and copings. The joint of first and second coat of plaster should not fall at the same location.

The thickness of the specified plaster shall be measured exclusively by the thickness of tie key i.e grooves, or open joints in the masonry. The average thickness of plaster shall not be less than the specified thickness. The minimum thickness over any portion of the surface shall not be less than specified thickness by more than 3mm. As this being a repair project, at some places patch plastering may have to be done in 2/3 coats due to more thickness but nothing extra shall be paid for that. Also, area more than 0.1 Sq M will be taken into measurement for payment.

The curing shall be started as soon as the plaster has hardened sufficiently not to be damaged when watered. The plaster shall be kept wet for a period of at least 7 days. The dates on which plastering is done shall be legibly marked on the various sections plastered to help watching of curing period.

For plastering work, double scaffolding having two sets of vertical supports shall be provided so that scaffolding is independent of walls. The contractor shall be responsible for providing and maintaining sufficiently strong scaffolding so as to withstand all loads likely to come upon it.

#### PROCESS OF APPLICATION OF PLASTER

Plaster shall be applied in two coats namely,12/20mm under coat and 8/18mm finishing coat. Ceiling plasters should be preferably completed before commencement of wall plaster. Plastering shall start from top and work down towards floor. All holes in masonry shall be properly filled in advance of plastering.

#### a) 12/20 MM THICK UNDERCOAT

The undercoat coat of cement mortar 1 cement :4 sand (by volume) shall be applied on internal/external surface as per site requirement and directed by consultant. Before starting the actual plastering dhadas/dots of 12/20 mm thick (as applicable) and of size 150 x 150 mm shall be applied horizontally and vertically, at no more than 2m intervals over entire surface to serve as gauges. The plaster shall be applied in a uniform surface slightly more than 12/20 mm thick (as applicable) and then brought to a true surface, by working a wooden straight edge reaching across the gauges, with small upwards and sideways movements at a time. The surface shall be left rough and furrowed 2mm deep with scratching tool diagonally both ways, to form key for finishing

coat. The surface shall be kept wet till finishing coat is applied. In case, one layer of plaster is written in BoQ, then one layer of plaster is to be done with requisite thickness.

# b) 3/8/ 18 MM FINISHING COAT

The finishing coat of cement mortar 1 cement :4 sand (by volume) shall be applied after the undercoat has sufficiently set but not dried and in any case within 48 hours. The second coat shall be struck uniformly over the first coat and firmly pressed and levelled using a batten. The surface then shall be firmly trowelled, and sponge floated to remove excess moisture and bring the sand to the surface. The surface thus prepared shall be uniformly roughened for texture, by running a fine wire brush lightly over the surface if necessary.

# N) <u>Specifications for Plumbing, Drainage pipes and sanitary fittings:</u>

- •uPVC/CPVC: All pipes and fitting shall be of good quality uPVC/CPVC ISI marked, dimensionally stables and not prone to mechanical damage in handling/ transportation. All pipes shall be bearing I.S. quality or equivalent. The contractor has to lay the pipes as per drawing and include the prices of all the necessary fittings viz. elbow, bend, tee with brass threads etc. in their quoted prices. The PVC drainpipes shall be of IS mark with 6kgf pressure capacity. The connection with existing CI pipe shall be made by using jute/rope and last one inch depth shall be filled with M-seal to make it water-tight. The connection with floor trap and PVC pipes shall be made properly.
  - **Sanitary Fittings:** All control valves, bib cocks, stop cocks, ball valves etc, shall be of the best approved quality as per BoQ and approved by consultant.
  - Where pipes have to be cut or rethreaded, ends shall be carefully filed out so that no obstruction to bore is offered. In joining the pipes, the inside of the socket and the screwed ends of the pipe shall be rubbed over with white zinc and few turns of hemp yarn/Teflon tape wrapped round the screwed end of the pipe which shall then be screwed home in the socket with a pipe wrench or may be fixed with requisite solvent. Care must be taken that all pipes and fittings are kept at all times free from dust and dirt during fixing.
  - **Internal Work:** For internal work, concealed CPVC Pipes and fittings inside the walls shall be fixed by making proper chasing in the walls and fixed with holders/nails/clamp to keep them inside the wall. The chasing of wall shall be filled with cement mortar in the ration of 1 cement: 4 mortars with rough surface as directed by the consultant. All pipes and fittings shall be fixed truly vertical and horizontal or as directed by consultant. The pipes

shall be laid as per the given drawings and should not place in such a way which may cause air lock due to water stuck in U shape pipe. The pressurised testing of the internal pipes shall be carried out for each flat.

• **External Work:**\_The external PVC/CI pipes of requisite diameter shall be fixed/anchored with proper clamps, pedestal to avoid any sagging and vibration during water flow. The joints shall be done neatly and by using proper solvent on the prepared surface.

### O) Preparation of Kitchen Platform:

- •The locally available best quality mirror polished granite slabs (around 3 pieces on top counter) of approved shade will be provided and fixed by pasting the same to the top surface of the RCC kitchen counter with proper cement mortar ratio (1 Cement: 4 Sand by volume) or as per BoQ.
- Openings /holes of appropriate dimensions shall be provided on the slab to insert SS (stainless steel) sink and for hose pipe from LPG cylinder.
- •All exposed surfaces shall be shaped to the approved profile and polished to get the same finish of the top surface. The edge of the platform is to be moulded to full round with smooth finish.
- The granite skirting at the top border/front facia should be of locally available approved best quality granite of approved shade to match with the granite countertop.

#### P) Fixing of Granites and vitrified tiles on floors

The old marble mosaic tiles from the floor and dado area, the cuddapah stone slab from the staircase tread & landing area should be removed completely without damaging the base concrete. If any damage occurs to the concrete, it has to be made good with fresh cement concrete and the surface had to be brought to level. After cleaning the surface, a semi-viscous cement slurry layer has to be spread over the base concrete, which will act as a bond coat for the new tile / granite base course. The rich cement mortar of 1:4 (1 cement: 4 sand by volume) of workable mix shall be spread over the cement slurry applied floor to receive the jointless vitrified tiles / granite slabs. The same shall be fixed properly to line, level and slope with tapping with light weight hammer on all over the body of the granite slab / vitrified tiles. There should not be any entrapped air below the tiles / slab. After fixing of the slab / tile, there should not be any hollow sound after tapping with coin/wooden mallet. The tile / slab joint is to be sealed with matching shade cemented pigment and cleaned properly. The staircase tread / landing granite slab should be moulded at the

edges to the desired shape to mirror finished polish before fixing. The moulded edge of granite slab should be kept projected by about 5 to 10 mm from the face of the riser.

Fixing of Granites and vitrified tiles on wall / dado / **Q**) **skirting / staircase riser/handrails** All the old tiles from the wall / dado / skirting / staircase riser / lift door jamb / staircase window jamb & sill / reveal area should be removed completely without damaging the base concrete / masonry. If any damage occurs to the concrete, it has to be made good with fresh cement concrete and the surface had to be brought to level. The staircase balustrade area (staircase wooden hand rail should be removed completely and taken away without any extra cost), entrance lobby wall dado, lift lobby wall dado, head room wall dado etc. are to be scrapped completely to remove the paint / neeru up to the cement plastered surface and subsequently the plastered surface is to be chipped with hammer & chisel thoroughly to make it sufficiently rough to receive the wall tiles. After cleaning the surface, a semiviscous cement slurry layer has to be spread over the base concrete, which will act as a bond coat for the new tile / granite base course. The rich cement mortar of 1:4 (1 cement : 4 sand by volume) of workable mix shall be applied over the cement slurries surface to receive the vitrified tiles / granite slabs in vertical position. The same shall be fixed properly to line and level with tapping with light weight hammer on all over the body of the granite slab / vitrified tiles. There should not be any entrapped air below the tiles / slab. After fixing of the slab / tile, there should not be any hollow sound after tapping with coin. The tile / slab joint is to be sealed with matching shade cemented pigment and cleaned properly. The lift collapsible gate side granite slab and any such other place, where semi-circular shape moulding is advised, should be done before fixing to them in position. The moulded edge of granite slab should be kept projected by about 15 to 20 mm from the plane face. The edge of the vitrified tile / granite slab should be properly filled up with cementitious material with matching pigment or with white cement and evenly finished from top. While fixing granite in the handrail portions, baby metal chips fixed to the granite using chemicals such as Aerolite/Araldite has to be provided for more bonding, as directed by the Consultant.

The work of scaffolding shall be deemed to be the part of the work of respective items under schedule and no extra payment in this regard under any circumstance shall be admissible.

The scaffolding thus erected shall have to be got approved from the Consultant or his representative before commencing the work or actual painting. However, it should be noted that approval from the Consultant shall not relieve the Contractor of his responsibility and any damage to the property or any loss of life due to the negligence on this regard shall be at the Contractor's account.

# R) Painting Works on various building elements:

The work of painting and color washing shall be done according to IS: 2395 (1994 & reaffirmed 2005) and IS: 1477 (1971 & reaffirmed 2000) and shall be to the entire satisfaction of the consultant.

# 1. Exterior painting:

- a) **Graphene powered exterior emulsion** with advanced Lamination and Fiber technology like Ultima Protek of M/s Asian Paint
- i) Surface Preparation The surface shall be prepared by removing existing fungus or mould growth by thoroughly scrapping and rubbing down with water jet, bristle/scrap with brush and sandpaper. Then washing down with clean water and allowed to dry. The surface shall be brushed with a soft bristly brush to remove any dust particles 24 hours after the wash. All the cracks shall be properly defined and widened up to 03 mm using with sharp edge tool (scrapper blade or angle cutter), cleaned. Prime the cracks using by prescribed primer (viz. Asian paints Acrylic Exterior Wall Primer) before applying crack seal. Then the demarcated cracks may be filled with two coats of recommended crack filler/ approved sealants (like GP seal of M/s Fixit or Asian Paints Smartcare Crack Seal; flexible & glass fibre acrylic filler as recommended by manufacturer).
- ii) Priming It shall be done by applying one coat of fiber reinforced liquid applied membrane having crack bridging ability up to 2.00 mm (like Asian paint Ultima Protek Base coat or equivalent) without dilution with a coverage ratio of 30-35 Sq Ft./litre/coat.
- iii) Application On prepared surface, one coat of paint may be applied and ensured it should dry properly. Subsequently, the second coat may be applied and necessary the third coat may be applied for bringing uniformity of the shade. The coverage of paint may be around 60-65 Sq ft/litre/coat with 30-35% dilution with water. The work shall be carried out in such a way to ensure the waterproofing of 05 years from the virtual date of completion of work.

#### b) With Elastomeric acrylic waterproof exterior coating paint:

i) Surface Preparation - Same as above

- ii) Preparation of paint: The ready mixed elastomeric acrylic waterproof paint shall be prepared strictly according to the manufacturer's specification.
- (iii) Application of Painting: The painting shall be carried out as follows:
  - a) Apply one coat of specified primer of approved quality, as required for patch plastering or area of putty etc.
  - b) Apply 1st coat of exterior paint as per manufacturer's specification. The shade of the first coat shall always be one or two tone lighter than the final shade which would be achieved. After allowing the first coat to dry, the excessive air holes, indentations, cracks etc. should be made up with putty to yield uniform plain surface.
  - c) After overnight drying (or 6 to 8 hours as per manufacturer's specifications) and light sand papering of surface, apply second coat of exterior paint of final approved shade.
  - d) If directed by the consultant, additional coat of paint should be given to bring the surface to uniform shade and tone at no extra cost and to achieve the desired dry film thickness of 110 micron or more.

#### 2. Painting for Interior surfaces:

- **(A) Oil Bound Distemper:** The paint shall be of approved manufacturer and shade.
- (i)Preparation of surfaces: The surface shall be prepared according to the instructions of manufacturer specifications and as directed. In addition, before application of primer coat the surface shall be cleaned with water and allowed to dry, if required in case of patch plastering and application of putty etc.
- (ii)Preparation of paint: The paint shall be prepared strictly according to the manufacturer's instructions and specifications.

# (iii)Application of paint:

- (a) Before application of primer coat, the surface shall be thoroughly dusted and then a coat of approved primer shall be applied. After allowing the surface to dry, the surface shall be sand papered lightly and indentations, unevenness etc. shall be made up by giving a coat of putty to obtain a uniform and plain surface.
- (b) First coat of oil bound distemper of approved brand and shade or two tones lighter than the final approved shade shall be applied uniformly by using soft bristle brush.

(c) After allowing the surface to dry for a minimum period of 18 hours, light sand papering and touching up uneven spots with putty, second coat of oil bound distemper shall be applied. This coat may be of final shade where two coats of oil bound distemper is specified. Where painting is specified to be in three coats, the shade of paint of the second coat may be one tone lighter than the final shade. The third coat where specified shall be of final approved shade. The final coat of oil bound distemper shall always be finished by using rollers to obviate brush marks.

# **(B)** Interior grade flat oil paint or plastic Emulsion/Acrylic paint/ **Premium Emulsion:** The paint shall be of approved manufacturer and shade.

- (i)Preparation of surface: The surface shall be prepared as specified at 2 (A) above
- (ii) Application of paint: As specified in 2A (iii) above under oil bound distemper.

# (C) Enamel painting: Wood and Plastered surface

Surface Preparation & Application -

- a) While preparing surface in old woodwork, accumulated dirt, grime, mold due to dampness etc. shall be removed and the surface examined for defects. All projections such as glue or whiting spots shall be carefully removed with stopping knife and cleaned after which all knots shall be filled with knotting solution. Resinous or loose knots shall be removed and gaps filled with seasoned timber pieces and made level with the rest of the surface.
- b) Surface of previously painted woodwork, if it is smooth and in good condition, shall be cleaned with white spirit or other detergent. Rub surfaces with abrasive paper, wash clean, remove with fresh water and allow the surface to dry. Defective and loose putty shall be replaced.
- c) Where old painted surface has become badly blistered and cracked, the paint shall be completely removed either with blow lamp or with an approved quality paint remover.
- d) In case of walls dados required to be painted with enamel paint, if the old paint is white or color wash, distemper or oil bound distemper, the old coating shall be thoroughly scraped off till the original plaster surface is exposed. If old paint is oil paint and in good condition, surface shall be sand papered and cleaned.

e) Painting shall be carried out as much as possible in dry and warm weather. Two coats of first quality paint shall be applied to the surface as per manufacturer specifications. The primer coat may be applied, if required on any surface.

# 3. Enamel painting to steel work:

Surface Preparation and Application -

- a. The painting work shall generally be carried out as per I.S. 1477 (1971 & reaffirmed 2000), wherever applicable and as directed by consultant.
- b. The surface shall be thoroughly cleaned of all scales, rust, dirt, old paint, grease and other imperfections by scrapping and brushing with steel wire brushes and if necessary, the surface shall be cleaned by chipping or any other best-known methods, such as sand blasting and burning. The surface shall be made thoroughly dry.
- c. Apply a coat of anti-corrosive metal primer of approved make, if required.
- d. Apply a putty coat to make the surface even and uniform.
- e. Apply first coat of ready mixed enamel paint of approved make, quality and shade. The first coat shall be a tone lighter when compared to the final approved shade.
- f. Apply finishing coat of approved shade as directed.

# 4. Painting C.I. G.I. Asbestos etc., pipes and fittings:

The details are as under:

**Paints: Paints**, unless otherwise specified, shall be first quality enamel paint of approved make and shade. The primer coat shall be red oxide or any approved suitable metallic primer ready mixed and of approved manufacture, if required.

- (a) Surface Preparation -All rust and scales shall be removed by scraping or by brushing with steel wire brushes. All dust and dirt shall be carefully and thoroughly wiped away. The surface if wet, shall be sun dried.
- (b) Application After preparing the surface, one coat of primer shall be applied, if required. Care shall be taken to ensure that the surface is fully and completely covered, special attention being paid to the joints.

When the primer coat has dried up and before any moisture, dirt, dust etc. settles on the surfaces, paint of the desired shade shall be applied to pipes. Application shall be done with brushes, and the paint shall be spread evenly.

The surface shall be given two or more coats and shall finally present a uniform appearance.

#### Note -

# **Scaffolding for painting:**

Bank will make the payment for external scaffolding once for all the associated works including painting. The work of scaffolding (internal & external) shall be deemed to be the part of the work of respective items under schedule and no extra/additional payment in this regard under any circumstances.

The scaffolding thus erected shall have to be got approved from the consultant or his representative before commencing the work or actual painting.

However, it should be noted that approval from the consultant shall not relieve the Contractor of his responsibility and any damage to the property or any loss of life due to negligence in this regard shall be at the Contractor's account.

**Modular Kitchen:** - To be provided as per drawing & BOQ. Supplying prefabricated / factory made modular kitchen units below existing kitchen platform/counter (approximately 750 mm in height and 700 mm in depth) as per the following specifications and enclosed sketch.

- •The framework of the cabinets including drawer fascia/ sides/bottom, shelves etc. shall be made out of 16 mm thick Marine plywood (Century plywood, Kit Gold, Greenply, Western India Plywood, AEON or approved equivalent make).
- •Shutters shall be made out of 16 mm thick Marine plywood (Century plywood, Kit Gold, Greenply, Western India Plywood, AEON or approved equivalent make). Each shutter shall be fixed to the framework using two numbers of best quality EURO type Slip/Auto Hinges (Ebco, Hettich, Hafele or approved equivalent make) and provided with one approved quality and profile brush finished Stainless Steel (SS) handle of grade 304 (minimum 150 mm long)
- •Each drawer fascia shall be made out of 16 mm thick Marine plywood (Century plywood, Kit Gold, Greenply, Western India Plywood, AEON or approved equivalent make) and approved quality and make SS 304 grade baskets / accessories (Hettich, Ebco, Hafele or approved equivalent make) shall be mounted on approved quality, high precision telescopic channels/slides (Ebco, Hettich, Hafele or approved equivalent make) to be

designed as per drawer size and to meet the weight requirement with minimum length of 500 mm to ensure smooth movements of drawer with /without content weights and provided with approved quality 150mm size SS handles of grade 304. The telescopic channel rails may be provided as per specifications.

- •In each kitchen there should be a minimum of 1No. perforated Cutlery basket(4" size), 1 No. cup & saucer basket(6" size), 1 No. 'Thali' basket(8" size), 2 Nos of plain multipurpose baskets(8" size), 1 No. three tier oil/masala 'Pull out', 1 No. shutters below the sink with bin holder(Dia 250mm, Height 145mm), 1 No foldable shutter at the mid corner portion & 1 No plain shutters at left hand corner. The shutters shall be 16-18mm Marine plywood fascia/ sides/bottom as required as per the drawings given.
- •All the stainless-steel baskets shall be of maximum size which can be accommodated in the respective space available inside each cabinet for smooth functioning of railing. The Stainless-Steel rods provided in the baskets shall be of combination of 5.5mm dia. and 2.8mm dia. rods and the spacing of these various steel rods in the baskets shall not be less than that of the samples' baskets available with the Bank (Tenderers are advised to view the baskets available with the bank before quoting rate).
- •All shelves shall be supported on approved quality Stainless Steel (SS) pins and shall be adjustable for various height requirements.
- •The unit shall be firmly fixed to the walls/slabs/floor using non-corrosive metal screws of appropriate size and rawl plugs.
- •All exposed surfaces and internal surfaces of the units shall have machine pressed lamination having thickness 1mm and 0.8mm respectively of approved shade and make (Merino, Greenlamor approved equivalent) and pasted with synthetic resin based adhesive (Fevicol, Vamicol or approved equivalent) etc.
- •The thickness of four edge PVC lipping for shutters and drawer fascia shall be 2mm thick, thickness of edge lipping of carcass/ plywood partition should be 0.8mm and thickness of four edge lipping around the rebate of glass shutter shall be 0.6mm. The lipping's/banding shall match with the external laminate shade.
- All faces and edges of Cuddapah support slabs below the kitchen slab, wooden planks for supporting telescopic channel rails and wooden fillers shall be painted with a coat of synthetic enamel primer and two coats of white color synthetic enamel paint.

- Payment shall be made on the basis of front elevation area of modular units only. It is clarified that sides, top and bottom surfaces will not be measured for payment.
- •The wooden frame for shutter shall be made of minimum 70 mm wide marine plywood with lamination, wherever required. The telescopic channel shall be supported with 75 mm wide vertical and horizontal marine plywood members with laminate fixed on vertical Kadaph stone. If there is a need of erecting additional vertical marine plywood members with laminate on account of site conditions, the quoted rate shall have provision of carrying out these works.
- •All necessary hardware, wooden members with required thickness for fixing telescopic channel rails and filling the gaps shall be included in the quoted rate.
- The quoted rate shall include making of vertical partition below the existing kitchen slab with 16 mm thick marine plywood if necessary to accommodate modular kitchen units as per the requirement.

**Modular wardrobe**:- Removing of existing wardrobe of any size as per the site condition and Providing, making & assembling Wardrobe **1740/1805/1975** x 600 x 2100 mm in height as per architectural drawing and instructions. The system shall comprise with following:-

Ply Boxing – Providing, making and fixing 18mm thick commercial ply (IS 303) boxing (for Vertical & horizontal sides). Centre vertical portion shall be made of 2nos. 18mm thick sandwiched commercial ply (IS 303). 12mm commercial ply (IS 303) shall be fixed to the Wardrobe back work as per architectural drawing & instructions. Finished the wardrobe with 1mm thick approved white laminate (IS 2046-1969/1995) from inside and 1mm thick approved laminate (IS 2046-1969/1995) from outside at visible side and hidden surface shall be finished with French polish as per drawing.

Wardrobe Shutters- Providing & making 4 nos. equal wardrobe shutters 2100 mm high made out 25mm thick block board (IS 1659:2004) hung to the ply boxing with heavy duty ss hinges of approved make. Shutter shall be finished with 1mm thick approved laminate (IS 2046-1969/1995) from outside and 1mm thick approved white laminate (IS 2046-1969/1995) from inside. 12mm thick teak wood beading for shutter finished with approved melamine polish matching to the laminate (IS 2046-1969/1995) as per drawings.

**Drawers** - Providing & fixing 4 Nos **390/405/450** x **150** mm high Drawers to be made in 18 mm thick commercial ply (IS 303) front & side, back & bottom from 12 mm thick commercial ply (IS 303) drawer shall be finished with 1 mm thick approved laminate (IS 2046-1969/1995) from outside and 1mm thick approved white laminate (IS 2046-1969/1995) from inside. Fixed the drawers to the wardrobe with telescope channels properly as per architectural drawings and as per specification and instructions. Rate also included providing, making & fixing 20mm thick fixed shelves (2 no's – **840/870/955** x 600mm in size in size) made of 18mm commercial ply (IS 303) finished with approved 1mm thick white laminate (IS 2046 1969/1995) at all sides. Rate also included p/f 8mm thick modi or equivalent make approved mirror on shutter as per architectural drawing including necessary hardware of approved make, necessary beads, mouldings, 75 mm high skirting, lipping, providing & fixing 25mm dia. **840/870/955** mm long 2no. SS pipe for hanger of approved make, providing & fixing 8 nos ss hooks of approved make completed as specified.

Hardware fittings & Fixtures-

- a) SS finished Heavy duty 'L' Hinges (75 x 19 x 6mm in size)-
- b) Concealed Lock-
- c) 150mmlong SS Tower Bolt-
- d) Heavy duty magnetic catch-
- e) SS handle 225 mm long-
- f) Drawer locks-
- g) SS Hooks -

#### III: GENERAL SPECIFICATIONS FOR ELECTRICAL WORK

#### **SPECIAL CONDITIONS**

#### 1. General:

- 1.1 These special conditions shall be read in conjunction with the description of the item of work in the Bill(s) of Quantities, the particular Specifications, Local Statutory Regulations, Indian Standards Specifications/Codes and the drawings. All the above quoted documents, shall be considered supplementary to each other. However, in the case of conflict amongst the various provisions the owner's and the consultants opinion will be final and shall be adopted.
- 1.2 The tenderer is advised to inspect the site to ascertain the nature of site, access thereto, local facilities for procurement of materials and working labour rates prevalent in the area, in fact all matters affecting his prices and execution of the work. The tenderer shall be deemed to have full knowledge of the site and drawings whether or not he actually inspects them.

#### 2. Rates for electrical items

- 2.1 The rates quoted shall be deemed to allow for all minor extras and constructional details which are not specifically shown on drawings or given on the specifications but are essential in the opinion of the consultant to the execution of works to confirm to good workmanship and sound engineering practice. The Consultant/Employer reserves the right to make any minor changes during the execution without any extra payment.
- 2.2 The consultant to clarify any item under minor changes, minor extras and constructional details shall be final, conclusive and binding on the Contractor.
- 2.3 The rates quoted by the Contractor shall be net so as to include all requirements described in the contract agreement and no claim whatsoever due to fluctuations in the price of material and labor will be entertained.
- 2.4 The rates quoted by the Contractor shall include for supplying materials and labor necessary for completing the work in the best and most workmanship like manner to the satisfaction of the Consultant/Employer and which in the opinion of the Consultant cannot be made better, and for maintaining the same. The rates shall be complete in all respects also including cost of materials, erection, fabrication, labor, supervision, tools and plant, transport, sales and other taxes royalties, duties and materials, contingencies, breakage, wastage, sundries, scaffoldings, etc., on the basis of works contract. The rates quoted shall include all taxes, duties, transport, insurance, octroi, or any other levies applicable under the statute.

#### 3. Materials:

3.1 The Contractor shall ensure to the satisfaction of the Consultant/Employer that the materials are packed in original sealed containers/packing bearing manufacturer's markings and brands etc., except where the gross quantity required is a fraction of the smallest packings. Materials not complying with this requirement shall be rejected.

#### 3.2 Testing of Materials:

a) When required by the Consultant, the Contractor shall provide all facilities at site or at manufacturer's works or in an approved laboratory for testing the materials and/or workmanship. All the expenditure in respect of this shall be borne by the Contractor unless specified otherwise in the Contract. The Contractor shall, when required to do so by the Consultant shall submit at his own cost, manufacturer's certificate of tests, proof sheets, mill sheets etc., showing that the materials have been tested in accordance with requirements of these specifications wherever required. The samples for Tests shall be selected by the Client/ Consultant, if required.

## 4. Rectification of Defects:

Any defect in the work done or materials used in the works pointed out by the Consultant shall be rectified within a week or such extended time as may be allowed in this failing which the said defect shall be got rectified by the Consultant at the risk and cost of the Contractors.

## 5. Conduit and Cables Layout:

Prior to the pulling of wires, the Contractor shall ensure the conduits laid at site by his civil wing and satisfy themselves about the adequacy of the same. The contractors shall prepare Wiring layout along with Conduit layout. Prior to laying of the cables, the Contractor shall submit to the consultant detailed layout plans of the cable net work for consideration and approval. The layout plans shall contain particulars regarding size and routes of the cables. In case of any deviation of layout in a particular flat/area, the same may be informed to consultant.

## 6. Regulations & Standards:

The installation shall conform in all respects to Indian Standard Code of Practice for Electrical Wiring Installation IS:732 and IS:2274. It shall also be in conformity with the current Indian Electricity Rules and Regulations and requirements of the local Electric Supply Authority in so far as these become applicable to the installation. Wherever this specification calls for higher standard of material and/or workmanship than those required by any of the above regulations then this specification shall take precedence over the said regulations and standards.

#### 7. Shop Drawings:

The Contractor shall prepare and submit to the Consultant for the approval of detailed fabrication drawings for Main LT Panels/Switchgears/Rising Mains special boxes and Distribution Board, switch board, special any other equipment to be fabricated by Contractor, if required at per site condition. In this regard, the necessary instructions will be issued in writing by the consultant.

#### 8. Completion Drawings:

- 8.1 At the completion of the work and before issuance of certificate of virtual completion the contractor shall submit to the consultant/Employer layout drawings drawn at approved scale indicating the complete wiring system "As Installed". These drawings shall in particular, give the following information.
- (a) Run and size of conduits, inspection, junction and pull boxes.
- (b) Location and rating of sockets and switches, controlling the light and power outlets.

- (c) Number and size of conductors in each circuit.
- (d) Location and details of distribution boards, mains, switches, switchgear and other particulars.
- (e) A complete wiring diagram, as installed and schematic drawings showing all connections in the complete electrical system.
- (f) Location of telephone outlets, T.V. Music & Fire Alarm outlet boxes, junctions boxes, sizes of various conduits.
- (g) Locations of all earthing stations, routs and size of all earthing conductors, manholes etc.
- (h) Layout and particulars of all cables.

#### 9. Manufacturer's Instructions:

Where manufacturers have furnished specific instructions, rating to the materials used in this job, covering points not specifically mentioned in the documents, these instructions shall be followed in all cases.

## 10. Completion Certificate:

On completion of the Electrical Installation a certificate shall be furnished by the Contractor counter signed by a licensed supervisor, under whose direct supervision the installation was carried out.

This certificate shall be in the prescribed format as prescribed by the local supply authority, if required. The Contractor shall be responsible for getting the drawings and Electrical Installation inspected and approved by the local Authority concerned, if required and instructed by Bank. If any official fee is to be paid to local authority/body, the same will be paid by Bank directly. However, the liasioning work will be done by the engaged contractor.

#### 11. Qualified Competent Supervision:

The Contractor shall employ competent fully licensed, qualified supervisor for supervision of electrical work, whenever required.

#### IV: GENERAL SPECIFICATIONS INTERNAL ELECTRIFICATION

#### 1. Scope:

This specification is intended to cover the requirements of supply, installation, testing and commissioning of electrical wiring installation and other accessories required for its satisfactory operation. This covers the essential requirements or precautions regarding wiring installations for ensuring satisfactory and reliable service.

#### 2. Standards:

The Electrical wiring installations and other accessories shall comply with latest IS: 732 - 1989 and National Electrical code - 1985.

### 3. Construction:

Wall mounted switch boards shall be installed such that the bottom is at a minimum height of 1.35 m above finished floor level wherever applicable, as indicated in the drawing.

Equipment which is on the front of a switch board shall be so arranged that inadvertent personnel contact with live parts is unlikely during the manipulation of switches, changing of fuses or similar operation.

In every case in which switches and fuses are fitted on the same pole, these fuses, shall be so arranged that the fuses are not live when their respective switches are in 'OFF' position.

No fuses other than fuses in instrument circuit shall be fixed on the back or behind a switch board panel or frame.

#### 4. Capacity of circuit:

Lighting Circuits shall not have more than a total of ten points of fans, 5A socket outlets and light points and its total load shall not exceed 800 watts. Lights, fans, and 5A socket outlets can be wired on a single common circuit. If fan circuit is drawn separately, circuit shall not be used more than eight points and load shall not exceed more than 800 watts. In the circuit, the neutral and earth wires can be looped up to 10points. From distribution boards Neutral & Earth wires shall be run for every circuit.

The power circuits shall not have more than two outlets per circuit if load to be fed by each outlet is less than 1KW, and if load is more than 2KW, each outlet shall be connected to a separate circuit.

Modular Switches: All switches shall be placed in the live conductor of the circuit and no single pole switch or fuse shall be inserted in the earth or earthed neutral conductor of the circuits. Single pole switches (other than for multiple control) carrying not more than 15amperes may be of the piano flush type and the switch shall be 'ON' When the knob is down.

Lamp holders: Lamp holders for use on brackets and the like shall have not less than 1.3 cm nipple and all those for use with flexible pendant shall be provided with cord grips. All lamp holders shall be provided with shade carriers. Where centre contact Edison screw lamp holders are used, the outer or screw contact shall be connected to the 'middle wire' or the neutral or to the earthed conductor of the circuit.

Lamps: All incandescent lamps, unless otherwise specified shall be hung at a height of not less than 2.5 m above the finished floor level.

Ceiling rose: a) A ceiling rose, or any other similar attachment shall not be used on circuit, the voltage of which normally exceeds 250 volts.

A ceiling rose shall not embody fuse terminals as an integral part of it.

Every socket outlet shall be controlled by a switch. The switch controlling the socket shall be on the 'live' side of sideline. 5 Amps and 15 Amps socket-outlets shall normally be fixed at any convenient place 60 cm above the floor level or near such level as indicated in drawing. 15 Amps socket outlets in kitchen shall be fixed at convenient place 23cm above the working platform. In a room containing a fixed bath or shower, there shall be no socket outlet and there shall be no provision for connecting a portable appliance.

## 5. Recessed uPVC conduit/pipe (complying IS 9537 Part 3) wiring system:

- a) Making of chase: The chase in the wall shall neatly be made and shall be of suitable dimension to permit the conduct to be fixed in the manner desired by the consultant. In the case of buildings under construction, chases shall be provided in the wall, ceiling, etc. at the time of their construction and shall be filled up neatly after erection of conduit and brought to the original finish of the wall.
- b) Fixing of uPVC conduit in chase: The uPVC conduit of stipulated size, shall be fixed by means of staples or by means of saddles not more than 600 mm apart. Fixing of standard uPVC bends or elbows shall be made, if required. The existing electrical conduits in slabs may be connected with the newly laid uPVC pipes. The chase shall be filled with requisite mortar.
- c) Inspection boxes: To permit periodical inspection and to facilitate replacement of wires, suitable MS inspection boxes shall be provided at convenient locations. They shall be mounted in flush with the wall. The minimum size of inspection boxes shall be 75 x 75 mm or of round shape as per site requirement. Suitable ventilating holes shall be provided in the inspection box covers.
- d) Types of accessories to be used: All outlets, such as switches and sockets, may be either of flush mounting type or of surface mounting type.

The switches and other outlets shall be mounted on required MS boxes of given sizes and of approved make decided by consultant. The metal box shall be efficiently earthed with the earth continuity wire run along the conduit.

When crossing through expansion joints in buildings, the conduit sections across the joint may be through flexible copper bellows of the same size as PVC conduct. The Number of wires that can be drawn through a conduit shall be strictly as per IS 732 and as mentioned in Drawings.

## 6. Testing of wiring:

The following tests shall be carried out on all types of wiring on completion of the work & before energizing the installation or as directed by consultant:

- i) Insulation resistance test,
- ii) Electrical continuity test,
- iii) Earth continuity test,
- iv) Earth electrode resistance test,
- v) Switch polarity test.
- i) Insulation Resistance test:

The insulation resistance shall be measured by using 500 v megger between the following points.

Phase and neutral conductor with all fuses in position and all switches in closed condition and main switch in OFF position with lamps and other devices removed.

Between earth and whole system of conductors with all fuses in place, all switches closed and all lamps in position.

Between all conductors connected to one phase of the supply of the above tests shall not be less than 50 divided by the number of points on the circuit. Where a whole installation is being tested, a lower value than that given by the above formula is acceptable subject to a minimum of one megaohm.

The insulation resistance in megaohm as obtained by each of the above tests shall not be less than 50 divided by the number of points on the circuit. Where a whole installation is being tested, a lower value than that given by the above formula is acceptable subject to a minimum of one megaohm.

### (ii) Electrical continuity test:

Each and every circuit shall be tested for electrical continuity by using a multimeter.

#### (iii) Earth continuity test:

The earth continuity conductor including metal conduit shall be tested for electrical continuity and the resistance of the same along with the earthing lead measured from the connection with the earth electrode to any point in the earth continuity conductor in the complete installation shall not exceed one ohm.

#### iv) Earth electrode resistance test:

The earth electrode resistance shall be tested as specified in section

#### (v). Switch polarity test:

Test shall be made to verify that all switches in every circuit have been fitted in the same conductor throughout and such conductor shall be marked for connection to the phase conductor.

#### 7. Distribution Boards:

All the distribution boards shall be with MCBs as described in the respective schedule or drawings as applicable.

The distribution boards shall be controlled by a switch fuse, miniature circuit beaker or an isolator as described in the respective schedule. Each outgoing circuit shall be provided either with MCB or a fuse on the phase. The neutral shall be connected to a common link and be capable of being disconnected individually for testing purposes.

The distribution boards shall be located as indicated in the respective electrical working drawings and as directed by consultant. The distribution boards shall be fixed on wall in the niche provided and marked with the details of circuits, source of supply, size of incoming wires Etc.,

All marking shall be clear and legible.

The total load of the consuming devices shall be evenly distributed between the number of ways of distribution board.

The consuming devices circuit shall be connected to distribution board in proper sequence, so as to avoid unnecessary crossing of wires.

Cables shall be connected to a terminal only by crimped lugs.

Cables shall be rigidly fixed in such a manner that a clearance of at least 2.5cm is maintained between conductors of opposite polarity or phase and between the conductors and any material other than insulating material.

The incoming and outgoing cables shall be neatly bunched.

#### 8. MOUNTING HEIGHTS:

The Mounting heights of various fixtures shall be as specified in the Drawings.

## 8. LIST OF APPROVED MAKES OF MATERIALS / TRADE

Unless otherwise mentioned any one of the approved makes or brands shall be allowed to be used. Other specific equivalent brands with BIS mark may be allowed to be used if approved by NABARD.

The tenderer shall distinctly understand that it will not be their prerogative to insist on a particular brand from the list. Final selection will be done with the approval of NABARD.

If the schedule of quantities prescribes a particular brand of materials or fittings, the same may be considered while quoting the rates.

Sr. No	Item /Make	Make or brand
1	Cement	ACC Cements, <u>Ultra-tech</u> Cements, Gujrat Ambuja or equivalent approved
2	Sand	River sand only or packed bag sand.
3	Glazed Tiles	Johnson, Kajaria, Somany, Simpolo, ARK or equivalent approved
4	Painting Material - Synthetic Enamel Paint	Kansai Nerolac, Asian Paints, killick Nixon, Jenson & Nicholson, ICI, Berger, Shalimar or equivalent approved by NABARD.
5	Acrylic Emulsion Paint ( Interior )	Premium Emulsion of Asian Paint and Beauty Gold washable emulsion of Nerolac or equivalent
6	Elastomeric Paint	Excel Total of Goodlas Nerolac, Apex Ultima of Asian paints, Jotun ,M/s Mcon or equivalent
7	Elastic crack filling compound or waterproofing compound	Specified / Prescribed by the manufacturer viz. M/s. Sunanda specialty coatings pvt. ltd / M/s. Asian Paints / M/s. Nerolac / M/s Mcon/ M/s. Dr.FIXIT / M/s. ICI Dulux or other approved equivalent make ( like of M/s Choksey, M/s Sika)
8	Polymer for PM Mortar, Bond Coat, Micro-concrete, Shotcrete, Corrosion Inhibitor, Bonding agent, Grout, Plasticizer, Anti-corrosive, Primer	Specified / Prescribed by the manufacturer viz. M/s. Sunanda specialty coatings pvt. ltd / M/s. Dr.FIXIT / or other approved equivalent make ( like of M/s Choksey, M/s Sika, M/s BASF, M/s Mcon M/s Multichem, M/s Fosroc, M/s MC-Bauchmie)), M/s Roff, M/s Krishna Conchem
9	Silicon Sealant	M/s Dow Corning / M/s Sunanda speciality coating/ Dr. Fixit/ M/s Mcon M/s Choksey Chemical or other approved equivalent
10	Plywood	Marino, Greenply, Century or equivalent
12	CP fittings	Jaguar, Essco, Somany or equivalent
13	Sanitary Hardware	Parryware, Hindware, Somany or equivalent
14	PVC/CPVC pipes	Supreme, Astral, Kisan or equivalent

Sr. No	Item /Make	Make or brand
15	Reinforcement Bar/Structural Steel	TATA, Sail, Rathi, Kamdhenu, Jindal or equivalent
16	Auto-hinges, sliding rails etc.	Ebco, Hettich or equivalent
	Modular Switches ,sockets, holders and ceiling rose etc.	Anchor/Havell/Legrand/Schneider/L &T or equivalent
	Tube lights, Bulbs, Halogens / Mercury bulbs	Philips/Crompton or Equivalent
19	MCB / RCCBs/ ELCBs	Legrand/Havell or equivalent
20	Wires	Finolex, Polycab or R RKabel
21	Casing capping & PVC conduits	Precision/Shivam or equivalent
22	Switchboards	Presto teak or equivalent
23	Kit-Kat fuses (porcelain)	Anchor or equivalent
	Fan regulators – Electronic	Anchor type or approved equivalent
	Fan capacitor	Asian, Crompton, Philips or equivalent.
26	Tubelight	Philips or equivalent
27	Geysers	Usha, Racold, Bajaj or equivalent
	Contactors	Siemens, L &T
29	LED	Philips, Syska or equivalent

- 1. The tenderer shall distinctly understand that it will not be their prerogative to insist on a particular brand from the list. Final selection will be done with the approval of NABARD.
- If the schedule of quantities prescribes a particular brand of materials or fittings, the same shall be considered while quoting the rates.
   Accepted above terms & Conditions

Date:
Place:

Seal & Signature of the Contractor

#### **BASIC RATE OF MATERIALS**

For carrying out certain items of work, the tender provides for procurement of certain materials at "Basic Prices/ Basic Rates" as specified in the tender document.

While quoting the rates, the tenderer should base their item rates at "the Basic Prices" wherever specified. The said prices are ex- Godown and are inclusive of excise duty, sales tax, octroi and all other taxes and duties levied by Government or any other statutory body. (ex-Godown referred here will be dealer's Godown or Rail head within the Municipal or city limits or the city where the work is being done).

The contractor shall obtain written approval from the Bank's representative/Consultant before procuring any material for which "Basic Price/ Basic Rate" is specified in the tender Document.

Basic Price adjustment shall be done on the measured quantities for the finished items of work with specified "Basic Prices/Rates". In addition to the difference in the Basic Price/ Rate and the actual purchase Rate/ Price, contractor's overhead and profit @ 15% on the difference shall be considered for the Basic price/ Rate adjustment. While carrying out price adjustments, No other components such as wastage, transportation, handling, insurance, labour, etc. shall be taken in to account. v) The contractor shall submit copies of all tax paid vouchers (original tax paid vouchers shall be shown to the Consultant/NABARD for verification as and when required by him) for full quantity for all items to the Consultant/NABARD in support of their claim for adjustment in Basic Rates/Prices. In absence of these documents, his claim for adjustment in Basic rates/Prices shall not be considered

	List of items with BASIC Rates						
Sr no.	Description	Basic Rate(Excluding ApplicableGST) per Unit in ₹	Unit				
1	Granite	2500/-	Sqm				
2	Vitrified tile	750/-	Sqm				
3	Ceramic tile	600/-	Sqm				
4	Water Closet	8000	each				
5	Two-way bib cock	1250	each				
6	Angular stop cock	800	each				
7	Bib cock with wall flange	1100	each				
8	Wall mixer with provision of Overhead shower	4300	each				
9	Shower head with shower arm	3500	each				
10	Soap dish	650	each				
11	Paper holder	1000	each				
12	Health Faucet	1400	each				
13	Concealed stop cock	1000	each				
14	Towel rail	1150	each				
15	Wash Basin	1700	each				

## <u>ANNEXURE – I</u>

# INFORMATION REQUIRED FOR PRE-QUALIFCATION CRITERIA

## <u>PART-I</u> BASIC INFORMATION

Sl. No.	Particulars	Bidder's/Contractor Response
1	Name of the organization/ Firm and address of Registered office	
2	Year of Establishment	
3	Type of Organisation (like Sole Proprietorship, Partnership, private limited company, Public limited company, co-	
4	Name of the Proprietor/Partners/Directors in the organisation	1. 2. 3.
5	Details of Registration  a) Whether registered as partnership firm or	2)
	company etc.  b) Name of Registering Authority c) Registration No. d) Date of Registration	d) b) c) d)
6	Whether registered/ empanelled for similar works with  a) Government / Semi-Government / Municipal Authority / Public Organisation / reputed Private organisation / Bank/ Autonomous bodies or registered housing society/trust (Yes/No)  b) If Yes, name of authority; and c) Since When	a) b) c)
7	Details of experience in the field of civil construction work	- Years
8	<ul><li>a) Areas of business activities, other than civil construction, if any, and</li><li>b) Place and address of such business</li></ul>	a) b)

Sl. No.	Particulars	Bidder's/Contractor Response
9	proposed work of the bank will be handled in	a) b)
10	Name and Full address of the Bank/Bankers, Bank Code, IFSC code, Type of Account & Account no.	
11	Yearly turnover of the organization for the last 3 years ending 31st March 2025  (Please, enclose copy of Audited Final Accounts in support.)	
	Year 2022-23 2023-24 2024-25	
12	Whether working with any of the Govt./Semi Govt. Undertaking/s etc. as approved contractors and if so, furnish details in Part II as per PQ criteria	
13	Whether any technical personnel are employed in the organization and if so, give details of their experience, qualification etc. in Part III	
14	<ul> <li>a) Indicate if involved in any litigation, arbitration or any civil suits pending in any of the works executed during last 05 years/being executed.</li> <li>b) If yes, please furnish the name of the project, employer, nature of work, work order and date, contract value, present stage of work and brief details of litigation. Attach a separate sheet if required.</li> </ul>	
15	Kindly mention if your firm/agency/company is blacklisted/ debarred by NABARD or any other government organization mention the relevant details	
16	PAN No. Details	

Sl. No.	Particulars	Bidder's/Contractor Response
17	GST No. Details	
18	Details of UDYAM registration; if required for EMD exemption	
19	CKYC no. of bidder	

N	lote- 1	Please	attach	self-cer	tified c	opies o	of the :	follo	wing d	locumei	its :
a	) Late	est Inc	ome Ta	x Cleara	ance Ce	ertifica	te		O		

b)Audited Balance Sheets and Profit & Loss Account for the past three years

Signature of the applicant ( with seal )

Address:

## PART – II

## **CONSTRUCTION CAPABILITY AND PREVIOUS EXPERIENCE**

# (a) LIST OF SIMILAR WORKS OF HIGHER VALUES EXECUTED BY THE FIRM DURING THE LAST 07 YEARS (Costing more than Rs. 12.93 crore as mentioned in the eligibility criteria & completed latest by 30 September 2025)

\* The Details of previous experience and work for NABARD in any of the centres may be separately provided. (in tabular form).

(Amt. in crore)

Sl. No	Name of the work &  Locatio n	Nature of work Involved in the contract eg. Resident ial etc.	Name & addres s of the owner & archite ct.	The name & full address of the officer under whom the work was carried out. Also indicate whether Govt. or semi Govt. body		Actua l value of work done	Date of com menc emen t of work	Sched uled date of comp letion	Actua l date of comp letion	Reaso n for Delay if any	Whether the work was left incomplete or contract was terminated from either side. Give full details.	Litigatio n / Arbitrati on if any with details	Any other relevant informatio n including reason, if any, for delay in completio n of work.
(1)	(2)	(3)	(4)	(5)	(	(6) (7)		(8)	(9)	(10)	(11)		

### SIGNATURE OF THE APPLICANT/BIDDER

(WITH SEAL)

<sup>\*</sup> Attach a separate sheet, if required.

**(b) LIST OF IMPORTANT WORKS COMPLETED** (Showing work done of any value in the building having more than eight storeyed as mentioned in the eligibility criteria and completed latest by 30 September, 2025 and not prior to 01 October, 2018)

(Amount in crore)

Sl. No.	Name of the work & Location	Nature of work Involved in the contract eg. Residential etc.	Name & address of the owner & architect.	The name & full address of the officer under whom the work was carried out. Also indicate whether Govt. or semi Govt. body	Contract Amount	Completion period stipulated	Completion period actual	Whether the work was left incomplete or contract was terminated from either side. Give full details.	Any other relevant information including reason, if any, for delay in completion of work.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

(WITH SEAL)

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#### **PART-III**

- 1. List of technical personnel, Giving Details About their Technical Qualifications, Experience, etc.
- 2. Indicate other points, if any, to show applicant's technical and managerial competency to indicate any important point in applicant's favour.
- 3. No. of supplementary sheets attached for Part III.

Sl. No	Name	Age	Qualifications	Experience in year	Nature of works handled	Name of the projects handled costing more than Rs 158 lakhs	Date from which employed in your organization	Any other remark like special experience of PERT/ CPM etc.
1	2	3	4	5	6	7	8	9

Signature of the applicant Seal

<sup>\*</sup> Attach a separate sheet, if required

#### ARTICLES OF AGREEMENT

(On a ₹ 500/- Non- Judicial stamp paper purchased in Mumbai)

THIS AGREEMENT is made in Mumbai on thisday of 2025	

#### BETWEEN

National Bank for Agriculture and Rural Development a body corporate established under an Act of Parliament viz. the National Bank for Agriculture and Rural Development Act,1981 having its Head Office at C-24, G-Block, Bandra Kurla Complex, Bandra (E), Mumbai – 400051, hereinafter referred to as **NABARD** (which expression shall, unless repugnant to the context of meaning thereof, means and includes its successors and assigns) of the **ONE PART**.

includes its successors and assigns) of the <b>ONE</b>			ig thereof,	means and
<u>And</u>				
M/s registered/incorporated under the Companies A at		•	• ,	compang stered office
hereinafter referred to as the unless repugnant to the context of meaning there and assigns) of the <b>OTHER PART.</b>		-	-	
(NABARD and the Contractor are collective <b>Parties</b> ")	ely he	ereinafte	referred	to as "the
WHEREAS				
(1) NABARD, DPSP, Head Office, Mumbai, relating to (hereinafter referred to " <b>the said v</b> (hereinafter collectively referred to as <b>th</b> no Dated	works	s" of it d premi	s residenti ses" had v	_, Mumba ial colonie

- (4) The parties hereby agree, record and confirm the various terms and conditions for carrying out the said works as per tender terms & conditions at the said Premises hereinafter appearing.

## NOW THIS INDENTURE WITNESSES AS FOLLOWS:

1. The Contractor shall commence work from 10<sup>th</sup> day of award of work . NABARD shall agreed to pay according to tender amount of consideration of

**Rs**\_\_\_\_\_\_ **for the said work** to the contractor for carrying out the said works in the said Premises as per the details given in the Tender. The rate will remain fixed throughout the entire period of contract and is exclusive of GST but including of all other taxes such as, insurance, taxes, duties, levies, labour cess, transportation, debris disposal etc.

- 2. In consideration hereinafter mentioned, the Tenderer will upon and subject to the conditions annexed, carry out and complete the works shown in the contract, described by or referred to in the Schedule of Quantities and in the said conditions.
- 3. The Employer shall pay the Tenderer the said contract amount or such sum as shall become payable at the times and in the manner specified in the said conditions.
- 4. The said Conditions and Appendix thereto and the documents attached hereto shall be read and construed as forming part of this Agreement and the parties hereto shall be respectively abide by, submit themselves to the said Conditions and the correspondence and perform the agreements on their part respectively in the said conditions and the documents contained herein.
- 5. This Agreement and documents mentioned herein shall form the basis of this contract.
- 6. This contract is an item rate contract for the complete work to be paid for according to rate quoted in the price bid.
- 7. The Tenderer shall afford every reasonable facility for carrying out of all works of other Contractors employed by the Employer and shall make good any damage done to walls, floors, etc. after the completion of such works.
- 8. The Employer reserves to itself the right of altering the nature of work by adding to or omitting any items of works or having portions of the same carried out without prejudice to this contract.
- 9. Time shall be considered as the essence of this contract, and the Tenderer hereby agrees to complete the entire work within the time period prescribed in the tender (work from 10<sup>th</sup> day of award of work) reckoned from the date of commencement of the work subject nevertheless to the provision for extension of time.
- 10. All payments by the Employer under this contract will be made only in Mumbai.
- 11. That the several parts of this contract have been read by the tenderer and fully understood by the tenderer.
- 12. In case of breach of any terms and conditions of this Agreement or refusal of accepting the work order, the EMD of the Contractor will be liable to be forfeited by NABARD besides annulment of the Agreement.
- 13. conditions of this Agreement till date of termination this Agreement.
- 14. This Agreement, its Annexures and the NIT constitute the entire Agreement between the Contractor and NABARD, and supersede any prior or contemporaneous communications, representations or agreements between the parties, whether oral or written, regarding the subject matter of this Agreement. In the event of conflict between the provisions of this Agreement and any attached Annexure or the NIT, the provisions of this Agreement will prevail to the extent of such conflict take precedence. In the event of conflict between the provisions of any attached Annexures and the NIT, the provisions of any attached Annexures will to the extent of such conflict take precedence. The terms and conditions of this Agreement may not be changed except by an

amendment signed by an authorized representative of each party. NIT shall be the reference document to the extent the terms and conditions are either not reiterated or not given a contrary meaning under this Agreement.

- 15. This agreement is being executed in duplicate, NABARD should keep the original and the Contractor shall keep the duplicate.
- 16. The Contractor shall bear the stamp duty on this agreement for both the original and the duplicate copies. In witness whereof the parties hereto, have caused their presence to be signed on the above by the duly authorised officials at the place and on the...... day, .....month and...... year first herein above written.

IN WITNESS WHEREOF the Employer has set its hands to these presents through its duly authorized officials and the Tenderer has caused its common seal to be affixed hereunto and the said two duplicates/ has caused these presents and the said two duplicates here of to be executed on its behalf, the day and year first herein above written. (If the Tenderer is a company).

Signature Clause

SIGNED AND DELIVERED by the National Bank for Agriculture and Rural Development by the hand of Shri

(Name & Designation)

In the presence of:

Witness #1

Signature:

Name:

Address

Witness #2

Signature:

Name:

Address

#### SIGNED & DELIVERED by

(Authorised person of bidder)
If the bidder is a partnership firm or an individual should be signed by all or on behalf of all the partners. in the presence of:

## The COMMON SEAL OF:

was hereunto affixed pursuant to the resolutions passed by its Board of Directors at the meeting held on:

Directors who have signed these Presents

If the bidder signs under

Common seal, the signature clause should tally with the sealing clause in the Articles of Association

Duly Constituted Attorney.

Signature:		
Name:		
Address		
Witness #2		
Signature:		
Name:		
Address		

#### ANNEXURE – III

#### INDEMNITY BOND

(On ₹500/- non-judicial stamp paper purchased in Mumbai)

Know all	men by tl	hese prese	ents that 1	I, Shri	•••••	•••••	•••••	of
M/s			do he	reby execu	te Inden	nnity B	Bond in fa	avour of
National	Bank for	Agricult	ire and I	Rural Deve	lopment	(NABA	RD), havi	ng their
Registere	d Office a	at C-24, (	G Block,	Bandra-Kuı	·Ia Comp	olex, Ba	andra(E) I	Mumbai-
400051	and M	I/s	•••••		having	their	registere	d office
at	•••••	, Mun	nbai – 400	0051	on this	da <u>y</u>	y of	2025.
Whereas	NABARD	have app	ointed M/	s	•••••	as	the Contr	actor for
their	]	proposed		work		relati	ing	to
"								"

#### THIS DEED WITNESSETH AS FOLLOWS: -

I/We, on behalf of M/s ....... hereby do indemnify to keep NABARD and its Employees harmless against and from 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, for our 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,

any damages, loss or expenses due to or resulting from negligence or breach of duty on the part of me/us or any *of our* sub-contractor/s if any, servants or agents.

any claim by an employee of mine/ours or of sub-contractor/s, if any, under the Workmen Compensation Act and Employers Liability Act, 1939 or any other law, rules and regulations in force for the time being and any Acts replacing and/or amend 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 workmen/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 M/s has set their hands on thisday of
••••	
	GNED AND DELIVERED BY THE AFORESAID M/s through their thorized representative (Shri).
IN	Signature THE PRESENCE OF WITNESSES:
1.	Name & Signature :
2.	Name & Signature:

#### **ANNEXURE IV**

#### VIRTUAL COMPLETION CERTIFICATE

Having executed the work in terms of the contract, we hereby certify and affirm that we have virtually completed the contracted works.

We hereby certify that the work has been executed wholly to our satisfaction and with materials and workmanship in accordance with the contract.

We do certify further that we have executed the work in accordance with the applicable laws and without any transgression of such laws.

Signature of the Contractor:
(Seal & Stamp of Contractor)
Place :
Date :
Countersigned by
(Consultant)
Stamp & Address:
Place:
Date:

#### PRE CONTRACT INTEGRITY PACT

(to be submitted on ₹500/- Non-judicial stamp paper)

#### Between

National Bank for Agriculture and Rural Development (NABARD) hereinafter referred to as "The Principal"

And	
hereinafter referred to	as
"The Bidder/Contractor"	
<b>.</b>	

#### **Preamble**

In order to achieve these goals, the Principal will appoint Independent External Monitors (IEMs) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

#### Section 1 – Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will, in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
  - c. The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

#### Section 2 – Commitments of the Bidder(s)/Contractor(s)

- (1) The Bidder(s) / Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s) / Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution:
  - a. The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal'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 of any kind whatsoever during the tender process or during the execution of the contract.
  - b. The Bidder(s)/Contractor(s) will not enter with other Bidders 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 cartelisation in the bidding process.
  - c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any.
  - e. The Bidder(s) /Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
  - f. Bidder(s) /Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.
- (2) The Bidder(s) /Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

#### Section 3 – Disqualification from tender process and exclusion from future contracts

If the Bidder(s) /Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form which put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s) /Contractor(s) from the tender process.

## **Section 4 – Compensation for Damages**

(1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 1, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.

(2) If the Principal has terminated the contract according to Section 1, or if the Principal is entitled to terminate the contract according to Section 1, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

#### Section 5 – Previous transgression

- (1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process.

### Section 6 – Equal treatment of all Bidders / Contractors/ Subcontractors

- (1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor.
- (2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors
- (3) The Principal will disqualify from the tender process all bidders who do not sign the Pact or violate its provisions.

# Section 7 – Criminal charges against violating Bidders(s) / Contractor(s)/ Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

#### **Section 8 – Independent External Monitor**

(1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by the Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

The Independent External Monitor appointed for NABARD is: Dr Rabindra Kumar

Email Id: rabindra us@yahoo.com Mobile: 9411714138, 8415080837

- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his/her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders /Contractors as confidential. He / she reports to the Chairman, NABARD.
- (3) The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and

demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.

- (4) The monitor is under contractual obligation to treat the information and documents of the Bidder(s) /Contractor(s) / Sub-contractor(s) with confidentiality. The Monitor has also signed declarations on 'Non-disclosure of Confidential Information and of 'Absence of Conflict of Interest'. In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, NABARD and recuse himself/herself from that case.
- (5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project, provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (7) The monitor will submit a written report to the Chairman, NABARD within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposal for correcting problematic situations.
- (8) If the Monitor has reported to the Chairman, NABARD, a substantiated suspicion of an offence under the relevant IPC/PC Act, and the Chairman NABARD has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- (9) The word 'Monitor' would include both singular and plural.

#### **Section 9 – Pact Duration**

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharge/determined by the Chairman of NABARD.

## Section 10 – Other provisions

- (1) This agreement is subject of Indian Law, Place of performance and jurisdiction is the Head Office of the Principal, i.e. Mumbai.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.				
(5) Issues like Warranty/Guarantee etc. shall be outside the purview of IEMs.				
(6) In the event of any contradiction Clause in the Integrity Pact will p	between the Integrity Pact and its Annexure, if any, the prevail.			
(For & On behalf of the Principal)	(For & on behalf of the Bidder/Contractor)			
(Office Seal)	(Office Seal)			
Place				
Date				
Witness 1:				
(Name & Address)				
Witness 2:				
(Name & Address)				

#### **ANNEXURE VI**

#### PERFORMANCE UNDERTAKING FROM THE CONTRACTOR

(On ₹500/- non-judicial stamp paper purchased in Mumbai)

National Bank for Agriculture and Rural Development,

Plot No. C-24, 'G' Block,

Bandra - Kurla Complex,

Bandra (East), MUMBAI - 400 051

## **WHEREAS**

- 1. National Bank for Agriculture and Rural Development (NABARD) is desirous of carrying out structural repairs plastering, plumbing, painting , waterproofing of terrace, sunken area of toilets/bathrooms, external walls painting etc in Building no. 5 (5A, 5B, 5C, 5D, 5E), of NABARD Staff Quarters, Damodar Park, Ghatkopar (W), Mumbai (hereinafter referred to as "the said Buildings").
- 2. Pursuant to the acceptance by NABARD of the tender dated ...... submitted by us i.e. ............ NABARD has issued Work Order bearing ............ dated ............ (hereinafter referred to as "the said order")
- 3. It is one of the terms of the of the said order that works of "\_\_\_\_\_\_" shall be carried out as per the waterproofing works as well as external painting as per manufacturer's specifications for protecting the structure from seepage and water leakage issues.

# NOW, THEREFORE, THIS PERFORMANCE UNDERTAKING WITNESSETH THAT:

- 1. We have carried out the said Structural Repairs, Waterproofing and External Painting Work. We have read and understood the specifications, terms and conditions of the said work as provided in the said order.
- 2. After Virtual Completion of the said Work and before the completion of the ..... day of ......, if at any time or times, any defects such as physical damage of any elements of the said Structural Repairs, Waterproofing and External Painting work due to weathering action or due to failure of the components or due to inferior quality of material/workmanship and any structural defect, painting defect and water seepage/ leakage either due to inadequacy of the work carried out or due to any other reason, whatsoever

relating to the specifications, workmanship, etc., we hereby undertake to carry out necessary remedial measures up to five years from the date of virtual completion of the said work to such extents so and often as may be necessary to free the premises from such structural defect, painting defect and leakages/dampness without any extra cost to the NABARD. The decision of the NABARD in regard to the question as to whether there is any leakage or the treatment has given way to water or moisture shall be treated as final and binding on us. We shall diligently, efficiently and satisfactorily rectify the defects or faults detected/arising, during the aforesaid period to the full satisfaction of NABARD and also undertake to attend to the rectification work and reinstate the surfaces disturbed to its original condition after carrying out the rectification work, if necessary, by arising new materials at no extra cost to NABARD.

- 3. We agree that NABARD will retain an amount of 50 % of RMD after completion of defect liability period towards performance of waterproofing guarantee. In case, we fails to repair the reported defects within 30 days from the date of NABARD letter, we authorise Bank to utilise this amount for rectification of defects on our cost and expenses.
- 4. We shall not revoke it without written consent of NABARD.

Signed l	y:
For and	on behalf of M/s
Date	:
Place	:

## Proforma of EMD credit details ( If paid)

## (EMD details to be filled by bidders)

Account Number	NABADMNo7
IFSC code	NBRD000002
BRANCH NAME	HEAD OFFICE, MUMBAI
BANK NAME	NABARD
	AND RURAL DEVELOPMENT
Name of Account	NATIONAL BANK FOR AGRICULTURE

Name of depositor	
Mode of transfer – Online (NEFT / RTGS)/ Bank Guarantee/ Electronic Bank Guarantee (eBG)	
UTR No. / BG No. / e BG No.	
Transaction date	
Amount deposited (Rs.)	
** Attach Bank Statement showing before last date of submission of RI	g amount debited from account, on or GQ.
Date:	
Place:	Signature with seal:

#### FORMATS OF BANK GUARANTEE

#### A) PROFORMA FOR BANK GUARANTEE IN LIEU OF EMD AMOUNT

(To be stamped as per Stamp Act of the State and purchased in name of issuing bank & may submit e-BG)

Bank Guarantee No.:
Bank Guarantee Amount:
Bank Guarantee cover From:to
Last date of lodgement of claim:
To Date:
The Chief General Manager,
Department of Premises, Security and Procurement
NABARD-HO, BKC, Bandra (E)
Mumbai
This deed of guarantee made this
conditions has agreed to furnish a Bank Guarantee valid up to
instead of deposit of earnest money in cash.

NOW THIS WITNESSETH:

That the surety in consideration of the above Tender made by the Tenderer to the NABARD hereby undertakes to guarantee payment on demand without demur to the NABARD the said amount of INR.....(INR only) within one week from the date of receipt of the demand from the NABARD on presentation of this deed of guarantee.

This guarantee shall not be affected by any infirmity or irregularity on the part of the Tenderer or by the dissolution or any change in the constitution of the NABARD, Tenderer or the Surety.

NABARD shall be eligible to make any claim under this guarantee if the Tenderer after submitting his Tender, rescinds from his offer or modifies the terms and conditions thereof in a manner not acceptable to the NABARD or expresses his unwillingness to accept the order after the NABARD has decided to place order with the Tenderer.

The Surety shall not and cannot revoke this guarantee during its currency except with previous consent of the NABARD in writing.

Notwithstanding anything contained in foregoing, the Surety liability under the guarantee restricted to INR ...... (INR only).

This guarantee shall remain in force and effective up to and shall expire and become in effective on intimation thereof being given to the Surety by the NABARD in which event this guarantee shall stand discharged.

The Surety will make the payment pursuant to the demand notice issued by the NABARD notwithstanding any dispute that may exist or arise between the Tenderer and the NABARD.

Any forbearance, act or omission on the part of Tenderer in enforcing any of the conditions of the said Tender or showing of any indulgence by the NABARD to the Tenderer shall not discharge the Surety in any way and the obligation of the Surety under this guarantee shall be discharged only on the intimation thereof being given to the Surety by the NABARD.

Notwithstanding anything contained hereinabove, unless a demand or claim under this guarantee is made on the Surety in writing on or before, the Surety shall be discharged from all liabilities under guarantee thereafter.

The Surety has the power to issue this guarantee under its Memorandum and Articles of Association and the person who is hereby executing this deed has the necessary power to do so under the power of Attorney granted to him by the Surety.

#### SIGNED AND DELIVERED

For and on behalf of above named Bank

For and on behalf of (Banker's Name and Seal)

Branch Manager (Banker's Seal)

B) Format of Bank Guarantee in	lieu of Initia	l Security	Deposit
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То
<del></del>
In consideration of National Bank for Agriculture and Rural Development (NABARD)
having Head Office at C-24, G-Block, Bandra-Kurla Complex, P.O. Box No.8121,
Bandra (E), Mumbai – 400 051 (hereinafter referred to as "Employer") having agreed
to(type of work) at
(Place - HO/RO/TE) (hereinafter referred
to as "Work") from (hereinafter referred to as
"Contractor") on the terms and conditions contained in the Work Order (Ref.
NO Dated)and their agreement (hereinafter referred to as the
"Contract") and subject to the contractor furnishing a Bank Guarantee to the
purchaser as to the due performance of the
(hereinafter referred to as "Proposed Work") as per the terms and conditions as set
forth in the said contract and also guaranteeing the Proposed work as per the terms
and conditions of the said contract;
1) We, (Bank) (hereinafter called "the Bank"), in consideration
of the premises and at the request of the contractor, do hereby guarantee and
undertake to pay to the purchaser, forthwith on mere demand and without any demur,
at any time up to (validity date of BG) money or monies not
exceeding a total sum of Rs/- (Rupeesonly) as may be
claimed by the employer to be due from the contractor by way of loss or damage caused
to or would be caused to or suffered by the Employer on failure of the contractor to
complete proposed work as per the terms and conditions of the said contract.

- 2) Notwithstanding anything to the contrary, the decision of the Employer as to whether the contractor has failed to complete proposed work as per the terms and conditions of the said contract will be final and binding on the Bank and the Bank shall not be entitled to ask the Employer to establish its claim or claims under this Guarantee but shall pay the same to the Employer forthwith on mere demand without any demur, reservation, recourse, contest or protest and/or without any reference to the contractor. Any such demand made by the Employer on the Bank shall be conclusive and binding notwithstanding any difference between the Employer and the contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority.
- 3) This Guarantee shall expire on \_\_\_\_\_\_ (validity date) without prejudice to the Employer's claim or claims demanded from or otherwise notified to the Bank in writing on or before the said date i.e. \_\_\_\_\_\_ .
- 4) The Bank further undertakes not to revoke this Guarantee during its currency except with the previous consent of the Employer in writing and this Guarantee shall continue to be enforceable till the aforesaid date of expiry or the last date of the extended period of expiry of Guarantee agreed upon by all the parties to this Guarantee, as the case may be, unless during the currency of this Guarantee all the dues of the Employer under or by virtue of the said contract have been duly paid and its claims satisfied or discharged or the Employer certifies that the terms and conditions of the said contract have been fully carried out by the contractor and accordingly discharges the Guarantee.
- 5) In order to give full effect to the Guarantee herein contained, the Employer shall be entitled to act as if we are Employer's principal debtors in respect of all the claims of the Employer against the contractor hereby Guaranteed by us as aforesaid and we hereby expressly waive all our rights of surety-ship and other rights, if any, which are in any way inconsistent with the above or any other provisions of this Guarantee.
- 6) The Bank agrees with the Employer that the Employer shall have the fullest liberty without affecting, in any manner, the Bank's obligations under this Guarantee to extend the time of performance by the contractor from time to time or to postpone for any time or from time to time any of the rights or powers exercisable by the Employer against the contractor and either to enforce or forbear to enforce any of the terms and conditions of the said contract, and the Bank shall not be released from its liability for the reasons of any such extensions being granted to the contractor for any forbearance, act or omission on the part of the Employer or any other indulgence shown by the

Employer or by any other matter or thing whatsoever which under the law relating to sureties would, but for this provision, have the effect of so relieving the Bank.

- 7) The Guarantee shall not be affected by any change in the constitution of the contractor or the Bank nor shall it be affected by any change in the constitution of the purchaser by any amalgamation or absorption or with the contractor, Bank or the purchaser, but will ensure for and be available to and enforceable by the absorbing or amalgamated company or concern.
- 8) This Guarantee and the powers and provisions herein contained are in addition to and not by way of limitation or in substitution of any other guarantee or guarantees heretofore issued by the Bank (whether singly or jointly with other banks) on behalf of the contractor heretofore mentioned for the same contract referred to heretofore and also for the same purpose for which this guarantee is issued, and now existing uncancelled and the Bank further mention that this guarantee is not intended to and shall not revoke or limit such guarantee or guarantees heretofore issued by the Bank on behalf of the contractor heretofore mentioned for the same contract referred to heretofore and for the same purpose for which this guarantee is issued.
- 9) Any notice by way of demand or otherwise under this guarantee may be sent by special courier, e-mail or registered post to the local address of the Bank as mentioned in this guarantee.

10) Notwithstanding anything contained herein:-

For and on behalf of ----- Bank.

i) Our liability	under this Bank Guarantee only);	e shall not excee	ed ₹/-	(Rupees
ii) This Bank G	uarantee shall be valid up to	)	(validity date)	;
date) all rights	ns to enforce the claims is fi under the said guarantee scharged from all liabilities	shall be forfeit		Ţ.
Bank Guarante	liable to pay the Guaranteed e only and only if the Emp d on or before	oloyer serves up	•	
•	wer to issue this Guarantee l power to sign this Guaran		•	n and the
Date this	day of	2025 at		

Guarantee;

#### C) Proforma of Bank Guarantee in lieu of 5 % of Retention Money Deposit To Chief General Manager, DPSP National Bank for Agriculture Date: and Rural Development HO, BKC, Bandra (East), Mumbai Dear Sir, Name of work..... **Bank Guarantee for Retention Money WHEREAS** 1. You have awarded a contract dated \_\_\_\_\_\_ for the(NAME OF WORK) at \_\_\_\_\_ to our constituents M/s. \_\_\_\_ Company/Firm a having its Registered Office/Office at \_\_\_\_\_\_ hereinafter referred to as "the Contractors" which expression shall include its successors and assigns/partners for the time being and from time to time) on the terms and conditions mentioned in the contract; 2. One of the terms of the Agreement is that the Employer shall be entitled to deduct and keep in deposit with them a sum equivalent to 5% of the Running Bills submitted or to be submitted by the Contractors in connection with the said construction work subject to a maximum of Rs.\_\_\_\_\_ (Rupees \_\_\_\_\_ only) in the manner provided in the said Agreement. It is further provided that the Employer may, inter-alia, at its discretion agree to hold the said deposit partly in cash by deduction as aforesaid and partly by a Bank Guarantee; 3. The Contractors have requested the Employer, and the Employer has agreed to deduct the Retention Money from the Running Bills submitted by the Contractors only

up to a sum of Rs.\_\_\_\_\_(Rupees \_\_\_\_\_

and accept the remaining amount of Retention Money in the form of a Bank

only)

4. The Contractors, who are our constituents, have since requested us to furnish the
said Guarantee to the Employer in respect of the said sum of Rs
(Rupees only);
NOW, THEREFORE, THIS LETTER OF GUARANTEE WITNESSETH THAT -
In consideration of the National Bank for Agriculture and Rural Development having
agreed at our request not to deduct from the Running Bills submitted or to be
submitted by the Contractors further sums towards the Retention Deposit in terms of
the said Agreement dated in excess of Rs (Rupees
only) and also to accept this Guarantee in lieu of the
remaining sum or sums of Rs (Rupees
only) to be deducted from the Running Bills
submitted or to be submitted by the Contractors towards the Retention Money
Deposit.
1. WE, THE BANK, hereby unconditionally
and irrevocably guarantee unto the National Bank for Agriculture and Rural
Development (hereinafter referred to as "the National Bank", which expression shall
include its successors and assigns) that in the event of the National Bank coming to
the conclusion that the Contractors have not performed their obligations under the
said Agreement or have committed a breach thereof in particular or failed to rectify
the defect in the construction/workmanship brought to their notice in terms of the
said Agreement which conclusion shall be final and binding on us. We shall on demand
and without demur pay to the National Bank the sum of
Rsonly) or
any lower amount that may be demanded by the National Bank and our this guarantee
shall be treated as equal to the Retention Money/Earnest Money Deposit kept with the
National Bank for the due performance of the aforesaid obligations of the Contractors
under the said Agreement.
under the said rigiteement.
2. We, the Bank, also agree and confirm that the sum not
exceeding Rs(Rupees
only) as indicated in the written
demand issued by the National Bank shall be final and binding on us and we shall not
ask for any further proof or evidence and we shall not question the same either inside
or outside in any Court, Tribunal or Arbitration, etc.;
And that we will make the payment pursuant to the demand notice issued by National

Bank without reference to the Contractors and notwithstanding any dispute or

difference that may exist or arise between the National Bank and the Contractors or any other person;

And that this guarantee shall be a continuing guarantee and shall not be revoked by us without prior consent in writing of the National Bank;

- 3. We hereby further agree that -
- a) any neglect or forbearance, act or omission on the part of the National Bank in enforcing any of this conditions of the contract or granting of any time or the showing of any indulgence by the National Bank to the Contractors in respect of the completion of the building or any other matter in connection therewith or any variation in the terms of the said contract made by mutual agreement between the National Bank and the Contractors or any other act or deed on the part of the National Bank, which, but for this Clause, may have the effect of discharging the guarantor under the Law of Sureties, shall not discharge us in any way and our obligation under this guarantee shall be discharged only by payment in full of the sums guaranteed hereunder;
- b) it shall not be necessary for the National Bank to exhaust its remedies

against the Contractors before invoking this guarantee and the guarantee herein contained shall be enforceable notwithstanding that any other security, which the National Bank may have obtained or may obtain from the Contractors, is outstanding and unrealized;

c) our liability under this guarantee shall not be affected by any infirmity or irregularity on the part of the Contractors in entering into the said contract or by the dissolution or change in the constitution or name of the Contractors;

d) our liability under the	his guarantee shall not exceed the sum of Rs
(Rupees	only) mentioned above;

- 4. This guarantee shall remain in force up to provided that if so desired by the National Bank, this guarantee shall be renewed by us for a further period as may be indicated by the National Bank on the same terms and conditions as contained herein but at the cost of the Contractors, failing which the amount guaranteed hereunder shall become payable to the National Bank on demand.
- 5. Our liability under this guarantee will terminate on the aforesaid date, unless renewed as provide hereinabove, or on the day when the Contractors comply with the obligations under the said Agreement, in particular that relating to the rectification of defects in the construction or workmanship during the period of defects liability as provided in the said Agreement (as to which a certification in writing by the National

Bank alone shall be conclusive proof), whichever date is earlier. Unless a claim or suit or action is filed against us within 6 months from the date aforesaid or the extended period of this guarantee, all the rights of the National Bank against us under this guarantee shall stand forfeited and we shall be released and discharged from all our obligation and liabilities hereunder.

Yours faithfully,	
For and on behalf of	
Bank	
Authorized Signatory	
N.B.: This guarantee will require stamp duty as applicable in executed and shall be signed by the official whose signature a verified.	
D) Proforma of Bank Guarantee in lieu of 50% of Retent	tion Money Deposit
То	
Chief General Manager , DPSP	
National Bank for Agriculture	Date :
and Rural Development	
HO, BKC, Bandra ( East), Mumbai	
Dear Sir,	
Name of work	
Bank Guarantee for Retention Money	
WHEREAS	
1. You have awarded a contract dated	_ for the(NAME OF
WORK) at to our constituents M/s.	
, , , , , , , , , , , , , , , , , , ,	
having its Registered Office/Office at to as "the Contractors" which expression shall include	
assigns/partners for the time being and from time to time) on the	
mentioned in the contract;	

2. One of the terms of the Agreement	is that the Employer shall be entitled to deduct
and keep in deposit with them a sum e	equivalent to 5% of the Running Bills submitted
or to be submitted by the Contractors	in connection with the said construction work
subject to a maximum of ₹	(Rupees
only) in the manner provided in the s	said Agreement. It is further provided that the
Employer may, inter-alia, at its discret	ion agree to hold the said deposit partly in cash
by deduction as aforesaid and partly	by a Bank Guarantee; Seal & Signature of the
Contractor	
3. NABARD will release 50% of the RM	ID/Security deposit on expiry of Defect Liability
Period and will release the remaining	50% of the RMD/Security deposit amount of ₹
	submission of a Bank Guarantee of the same
amount.	
1 The Contractors who are our const	ituents, have since requested us to furnish the
	spect of the sum of ₹ (Rupees
only);	
NOW, THEREFORE, THIS LETTER C	OF GUARANTEE WITNESSETH THAT –
In consideration of the National Bank	for Agriculture and Rural Development having
agreed at our request to accept this Gu	arantee in lieu of the remaining sum or sums of
₹ (Rupees	only) WE, THE
	_ BANK, hereby unconditionally and
irrevocably guarantee unto the Nationa	al Bank for Agriculture and Rural Development
(hereinafter referred to as "NABARD"	, which expression shall include its successors
and assigns) that in the event of the	NABARD coming to the conclusion that the
Contractors have not performed their	obligations under the said Agreement or have
committed a breach thereof in pa	rticular failed to rectify the defect in the
construction/workmanship brought to	o their notice in terms of the said Agreement
which conclusion shall be final and bit	nding on us, WE shall on demand and without
demur pay to the NABARD	the sum of $\mathbf{\xi}$ (Rupees
	only) or any lower amount that
may be demanded by the NABARD and	d our this guarantee shall be treated as equal to
the Retention Money Deposit/ Securi-	ty Deposit kept with the NABARD for the due
performance of the aforesaid obligation	ns of the Contractors under the said Agreement.
2. WE, the	Bank, also agree and confirm that the sum
	₹(Rupees
	only) as indicated in the written
demand issued by the NABARD shall l	be final and binding on us and we shall not ask

for any further proof or evidence and we shall not question the same either inside or outside in any Court, Tribunal or Arbitration, etc.; And that we will make the payment pursuant to the demand notice issued by NABARD without reference to the Contractors and notwithstanding any dispute or difference that may exist or arise between the NABARD and the Contractors or any other person; And that this guarantee shall be a continuing guarantee and shall not be revoked by us without prior consent in writing of the NABARD;

#### 3. We hereby further agree that -

- a) any neglect or forbearance, act or omission on the part of the NABARD in enforcing any of this conditions of the contract or granting of any time or the showing of any indulgence by the NABARD to the Contractors in respect of the completion of the building or any other matter in connection therewith or any variation in the terms of the said contract made by mutual agreement between the NABARD and the Contractors or any other act or deed on the part of the NABARD, which, but for this Clause, may have the effect of discharging the guarantor under the Law of Sureties, shall not discharge us in any way and our obligation under this guarantee shall be discharged only by payment in full of the sums guaranteed hereunder;
- b) it shall not be necessary for the NABARD to exhaust its remedies against the Contractors before invoking this guarantee and the guarantee herein contained shall be enforceable notwithstanding that any other security, which the NABARD may have obtained or may obtain from the Contractors, is outstanding and unrealised;
- c) our liability under this guarantee shall not be affected by any infirmity or irregularity on the part of the Contractors in entering into the said contract or by the dissolution or change in the constitution or name of the Contractors;

d) our liability	under this guarantee shall not exceed the sum of ₹
(Rupees	only) mentioned above ;

- 4. This guarantee shall remain in force up to provided that if so desired by the NABARD, this guarantee shall be renewed by us for a further period as may be indicated by the NABARD on the same terms and conditions as contained herein but at the cost of the Contractors, failing which the amount guaranteed hereunder shall become payable to the NABARD on demand.
- 5. Our liability under this guarantee will terminate on the aforesaid date, unless renewed as provide hereinabove, or on the day when the Contractors comply with the obligations under the said Agreement, in particular that relating to the rectification of defects in the construction or workmanship during the period of defects liability as

provided in the said Agreement (as to which a certification in writing by the NABARD alone shall be conclusive proof), whichever date is earlier. Unless a claim or suit or action is filed against us within 6 months from the date aforesaid or the extended period of this guarantee, all the rights of the NABARD against us under this guarantee shall stand forfeited and we shall be released and discharged from all our obligation and liabilities hereunder.

Yours faithfully,	
For and on behalf of	
	_Bank
Authorised Signatory	

N.B.: This guarantee will require stamp duty as applicable in the State, where it is executed and shall be signed by the official whose signature and authority shall be verified.

#### **Annexure IX**

#### **Undertaking for declaration of debarment by public institution(s):**

(To be submitted by the tenderer on their letterhead)

(Note: strike out one of the above two declarations which is not applicable)

\*Allied firm: A firm would be termed as "allied firm" if the management is common, or substantial or majority shares are owned by the banned/ suspended firm and by virtue of this it has a controlling voice. Further all successor firms will also be considered as allied firms.

#### FORM OF BANKERS CERTIFICATE FROM A SCHEDULED BANK

#### (On Bankers' Letter Head)(Not Applicable)

Date:
То
Chief General Manager
DPSP, NABARD-HO
C-24, G Block, BKC, Bandra (East)
Mumbai – 400 051
This is to certify that to the best of our knowledge and information M/s./Shria customer of our bank having marginally noted address, Are/is respectable and can be treated as good for any engagement up to a limit of Rs(Rupees).This is issued without any guarantee or responsibility on the bank or any of its officers.
For The Bank with Name, Designation & Seal

Note: - (I) Bankers' Certificate Should Be On Letter Head of the Bank
(ii) In Case Of Partnership Firm, Certificate to Include Names of All Partners as
Recorded with the Bank

#### FORMAT OF MEASUREMENT BOOK

M.B No	Page
No	

Tender	Full	Measurements			Quantity	
item no/	Description					
Tender	of item of					
	work					
Page no						
		No.	L	В	D/H	
					•	

#### **FORMAT OF RUNNING BILL**

Abstract of cost for	
Running /final bill	
Running bill no:	
M.B No	Page No

Serial No	Tender item no.	Description	Quantity	Rate Rs	Unit	Amount Rs
1	2	3	4	5	6	7

#### UNDERTAKING

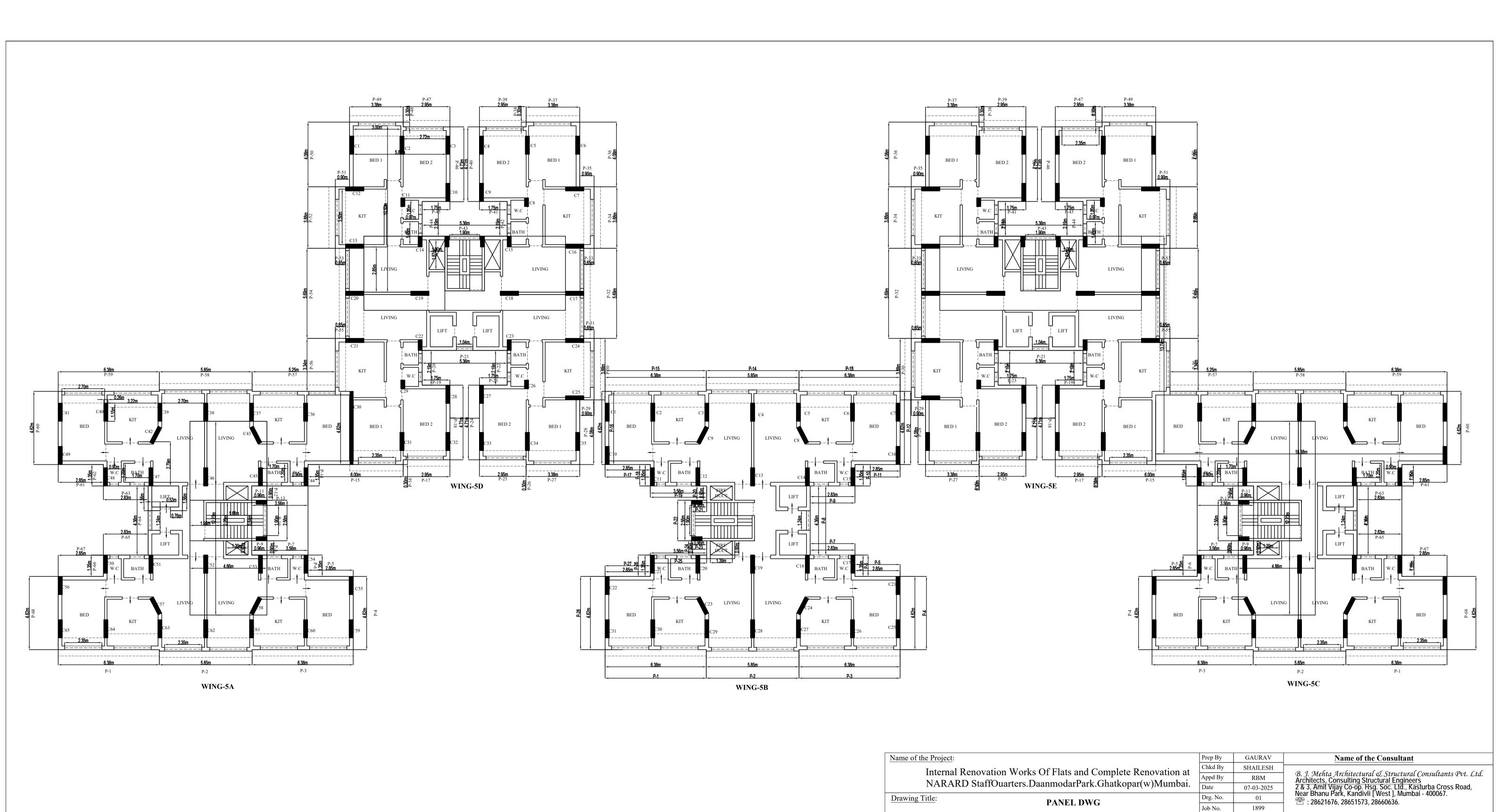
(Regarding site visit by the tenderer in order to understand the work)
To Date :
The Chief General Manager,
DPSP
NABARD-HO, BKC, Bandra (E)
Mumbai
Dear Sir,
NAME OF WORK: TENDER FOR STRUCTURAL REPAIR, EXTERNAL REPAINTING, RECTIFICATION OF SEEPAGE, INTERNAL RENOVATION OF FLATS, AT NABARD STAFF QUARTERS BUILDING NO. 5 (5A, 5B, 5C, 5D, 5E) DAMODAR PARK, GHATKOPAR (W), MUMBAI
We,
Yours faithfully,
()
Authorised signatory
(Name and address of the company with Company Seal)
Date:

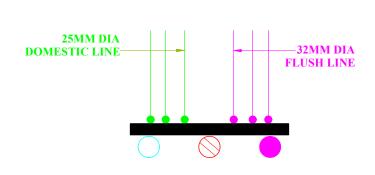
#### **Drawings**

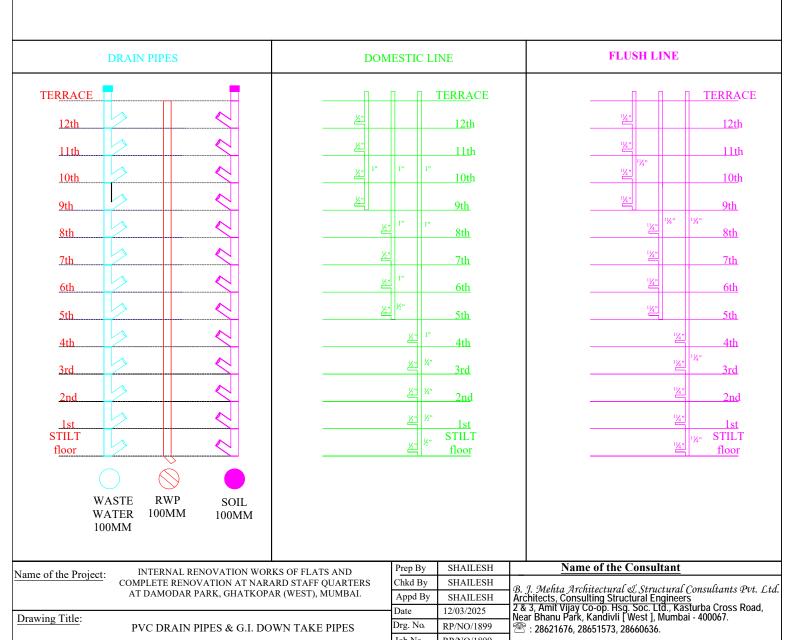
Set of drawings for tendering is shared herewith for reference. There may be modifications in drawings as per site condition work requirement which shall clearly be noted & contractor shall abide the same.

List of drawings shared herewith is as under:-

- 1) Panel Drawing
- 2) PVC &GI Pipe details
- 3) Furniture layout of 1 BHK flat
- 4) Plumbing layout of 1 BHK flat
- 5) Electrical layout of 1 BHK flat
- 6) Furniture layout of 2 BHK flat
- 7) Plumbing layout of 2 BHK flat
- 8) Electrical layout of 2 BHK flat
- 9) Modular kitchen details for 1 BHK & 2 BHK.
- 10) Wardrobes for 1 BHK & 2 BHK Flats.

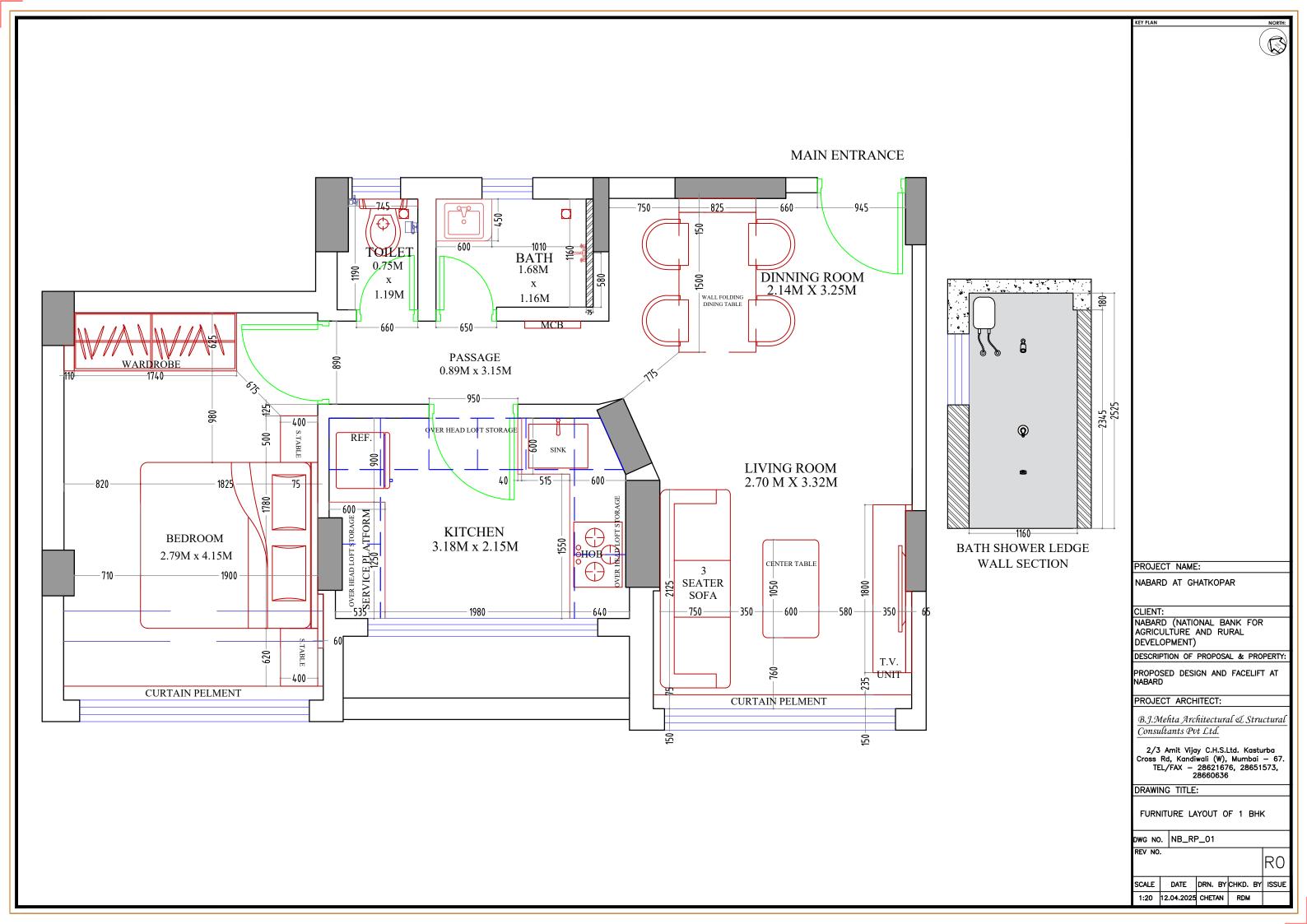


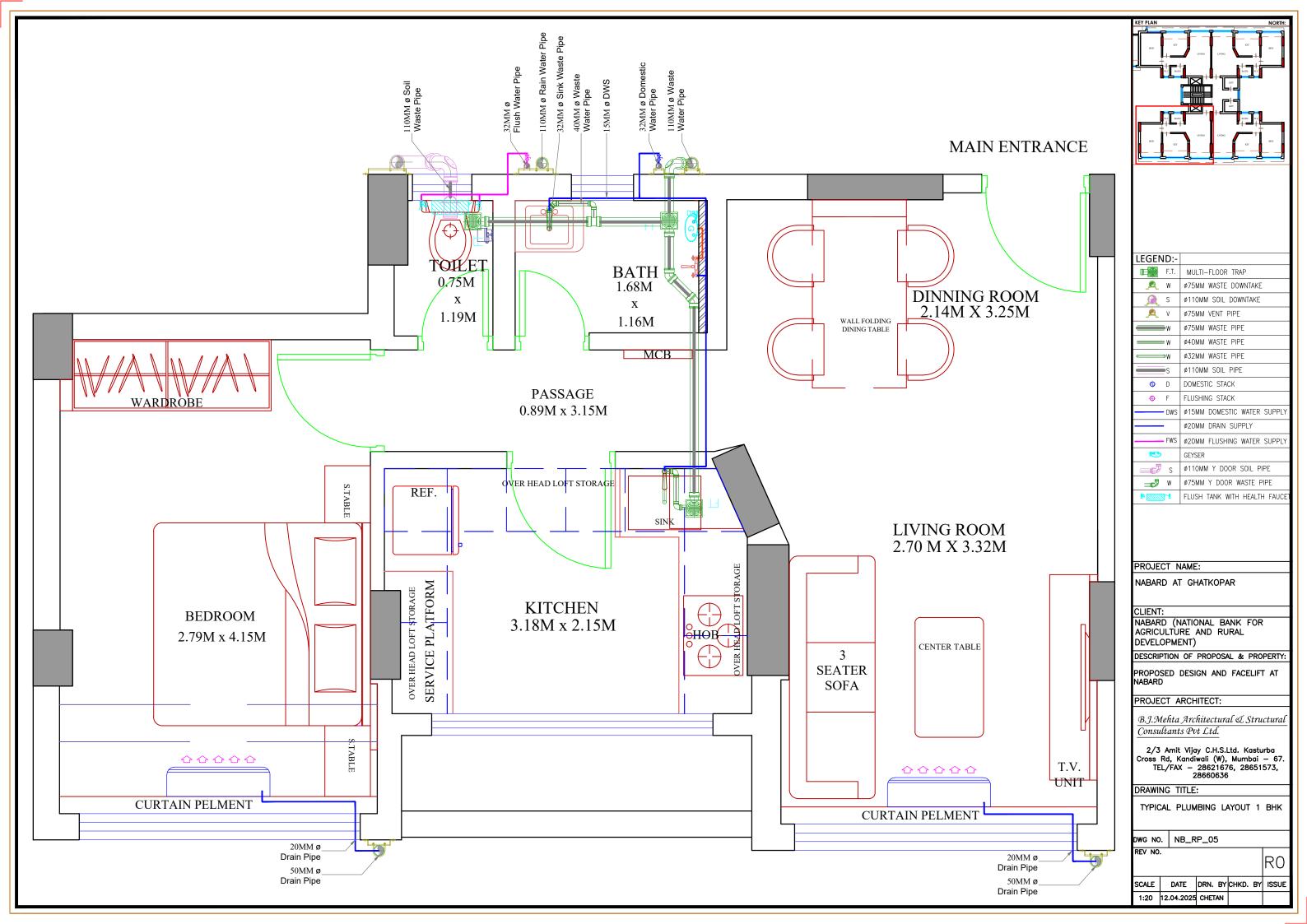


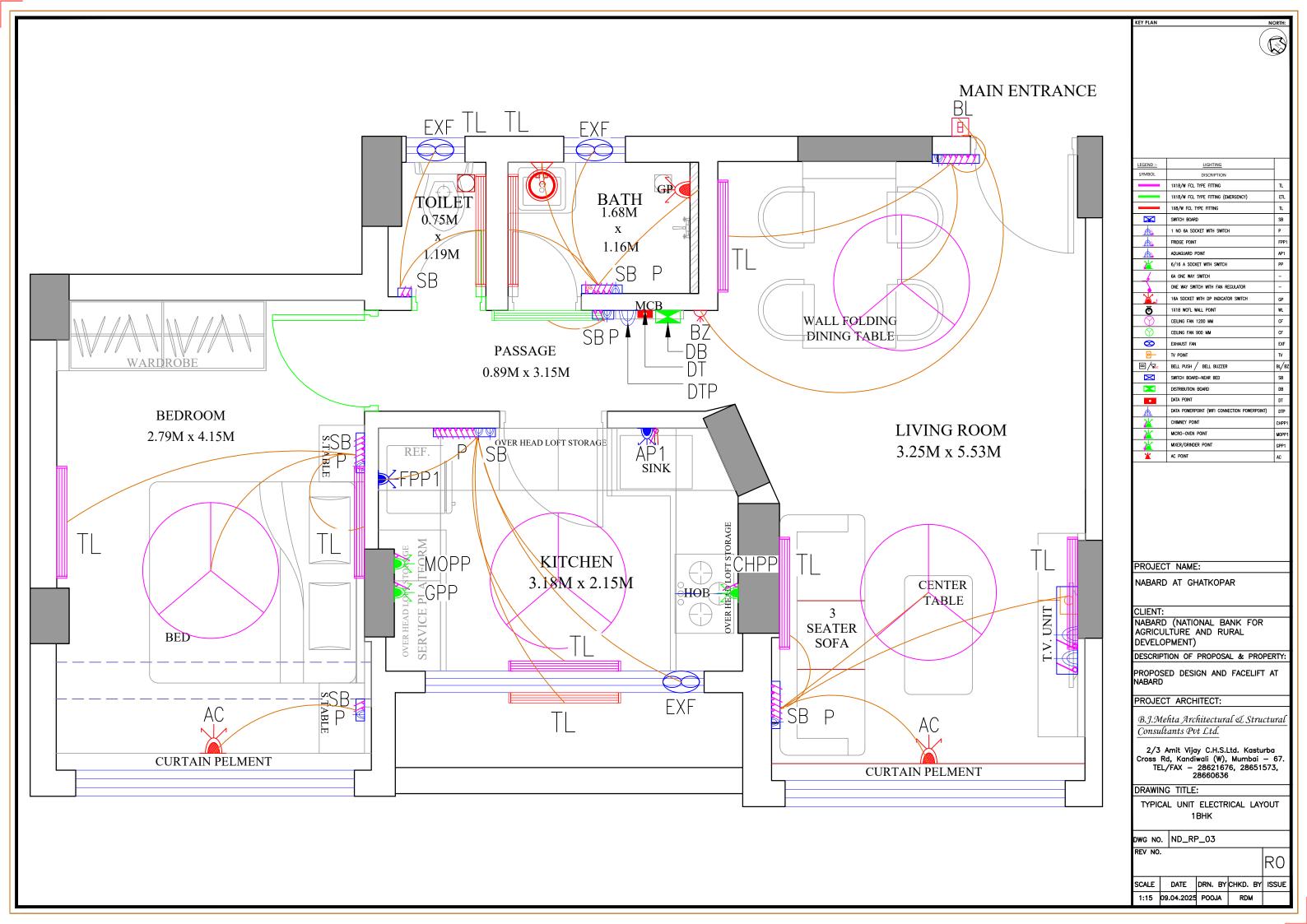


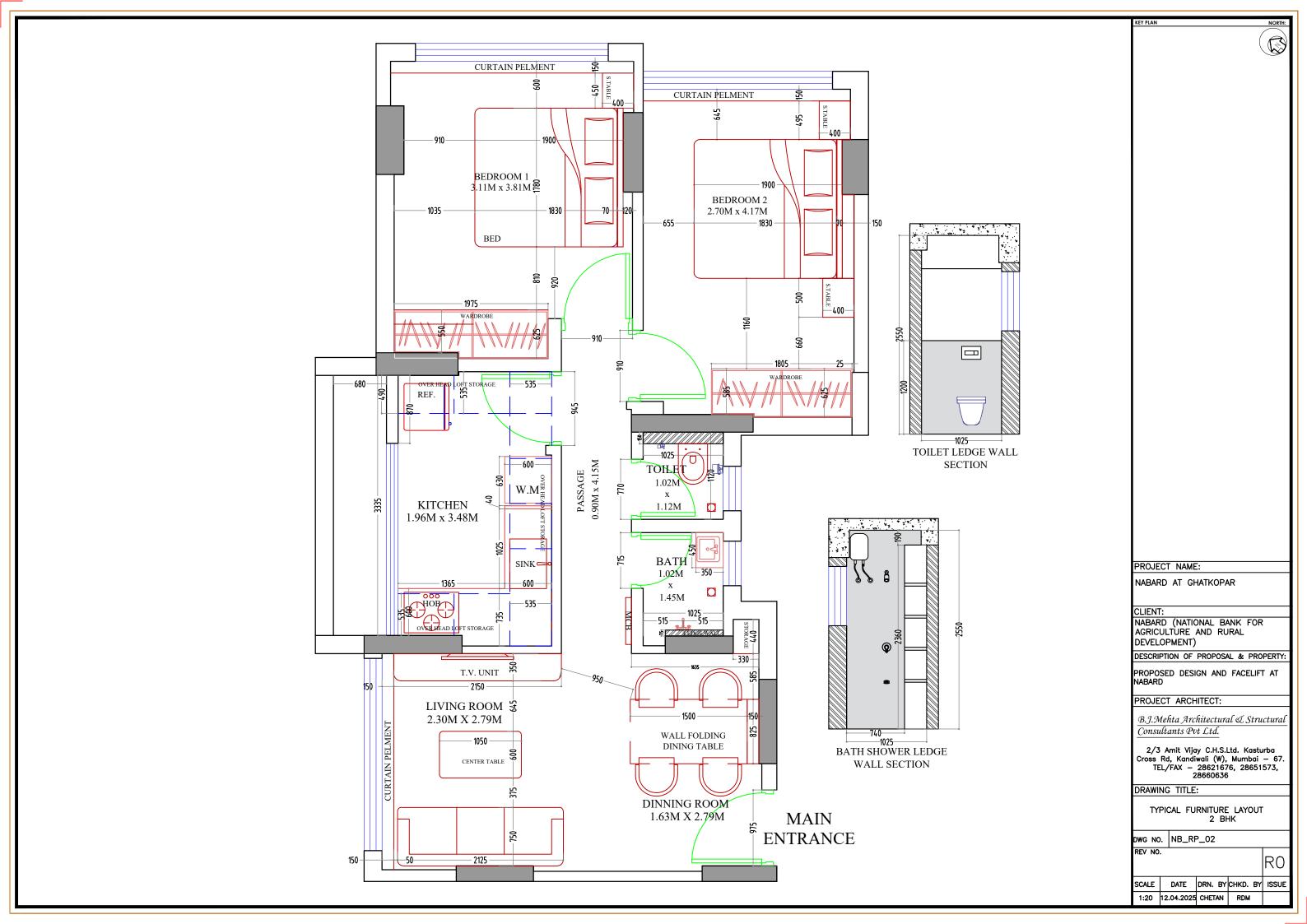
RP/NO/1899

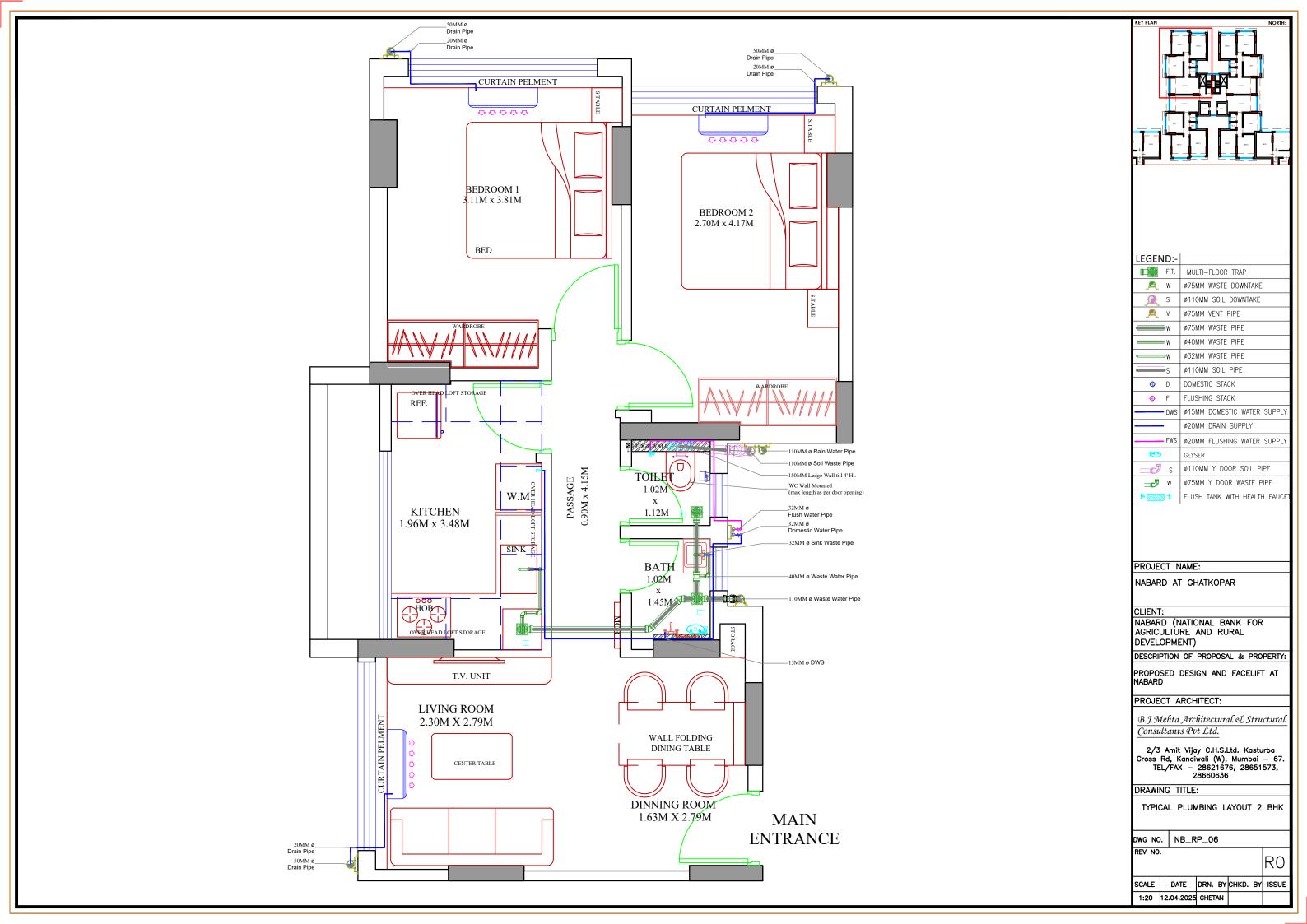
Job No.

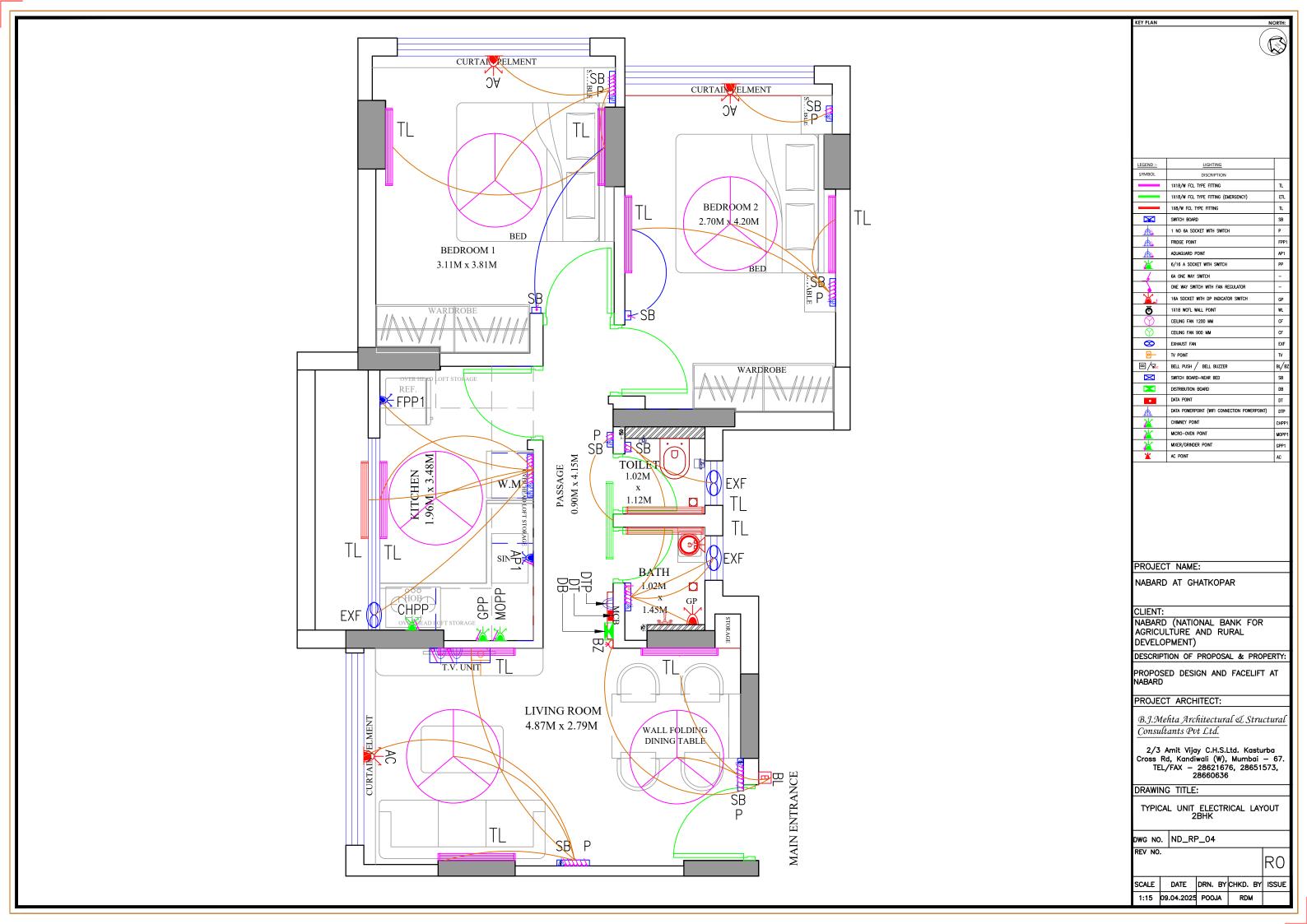




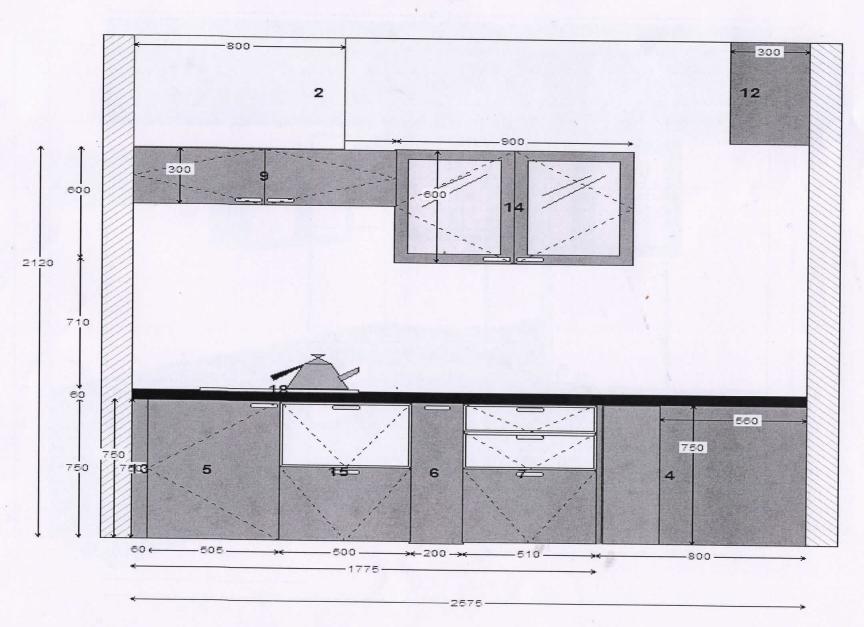






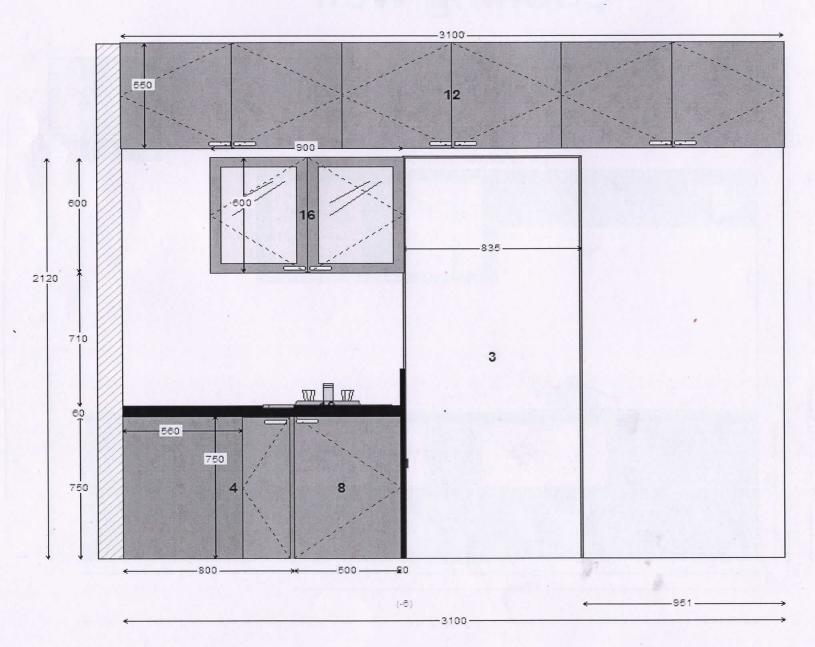


## Cooking wall

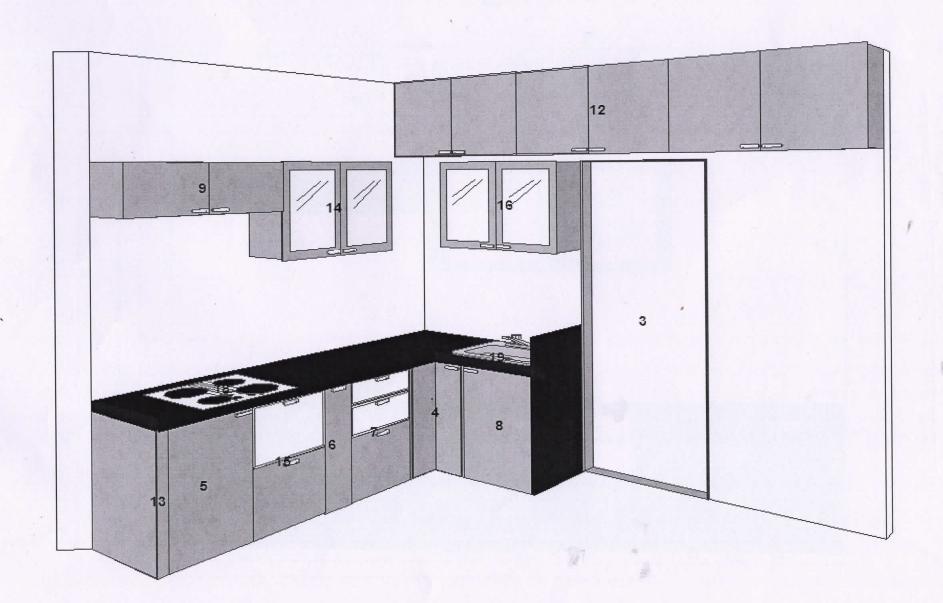


Modelin Kidelin - BAK - Keds

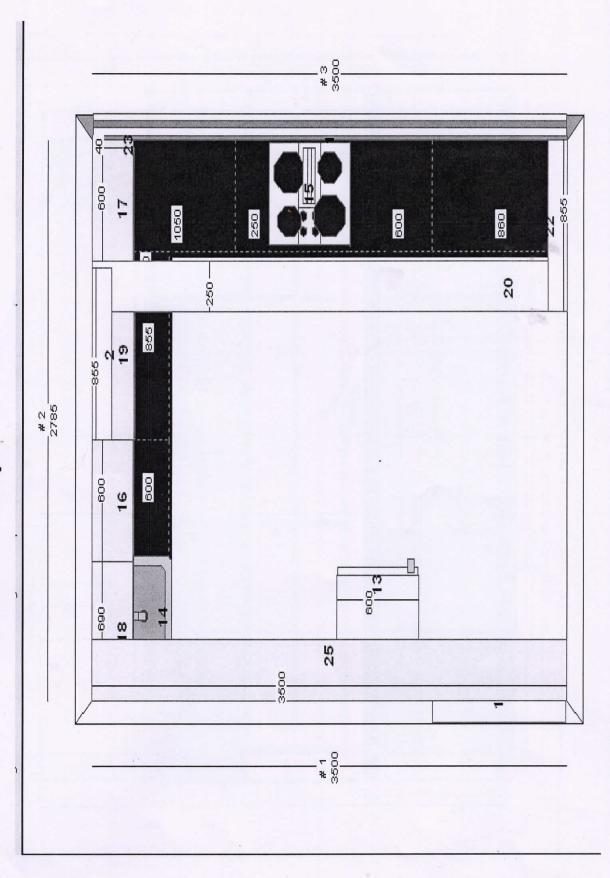
## Sink wall



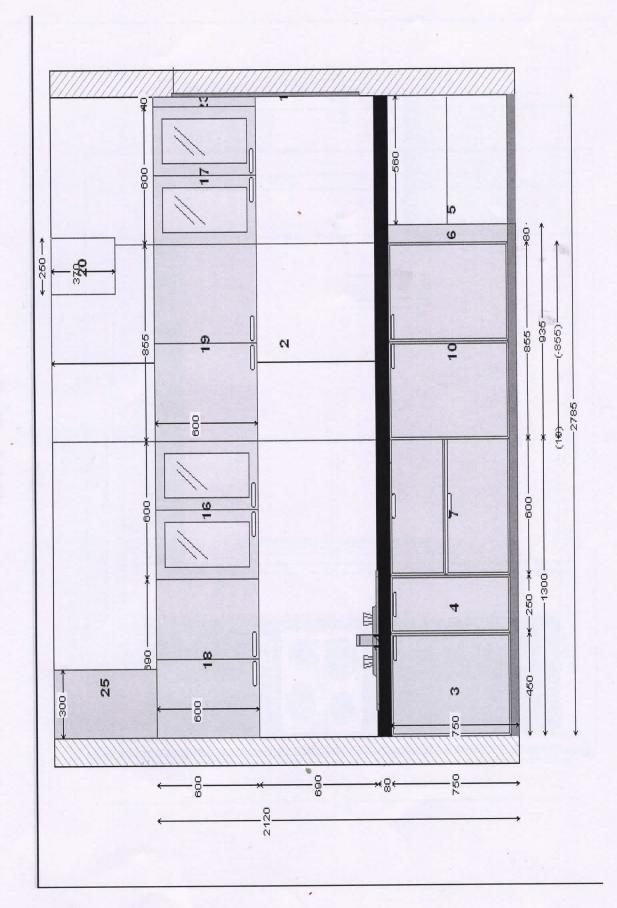
### 3D view

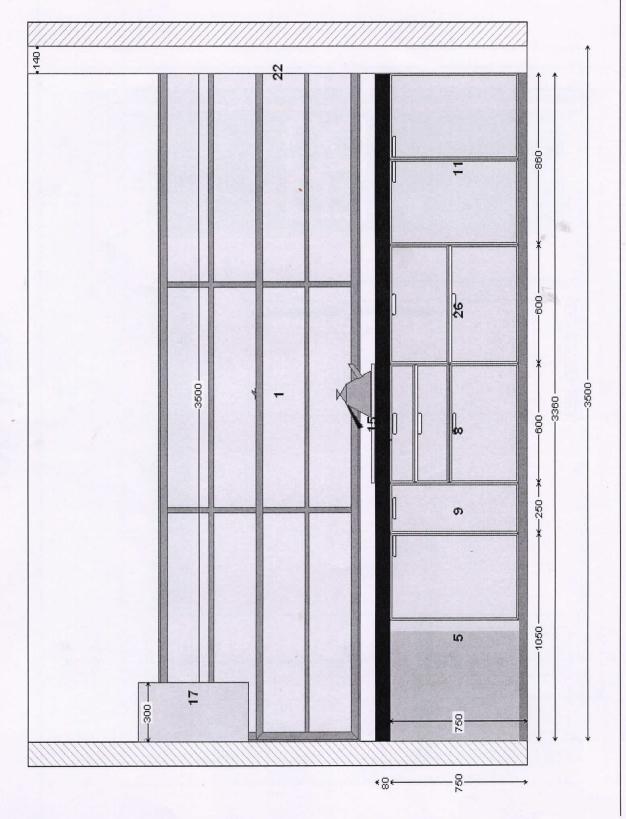


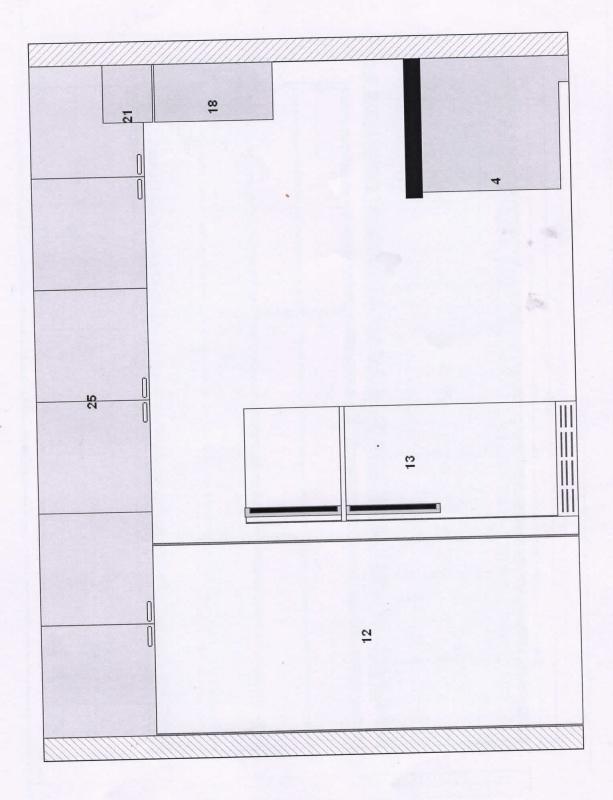
# Top view

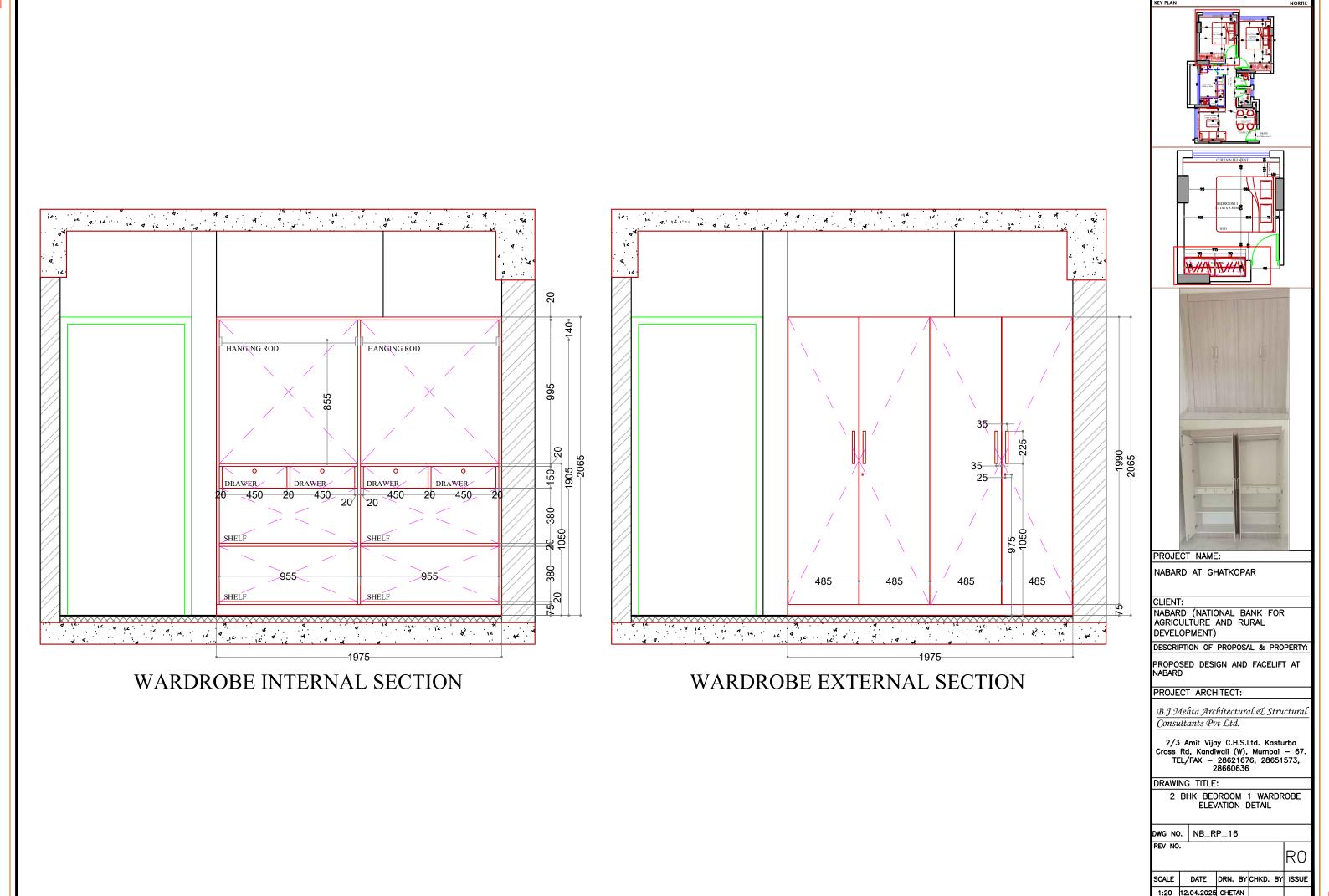


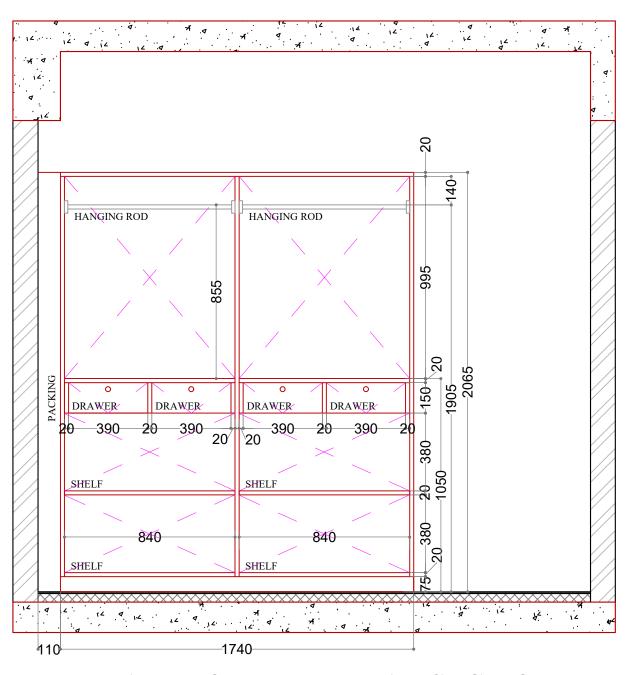
## Wall 1



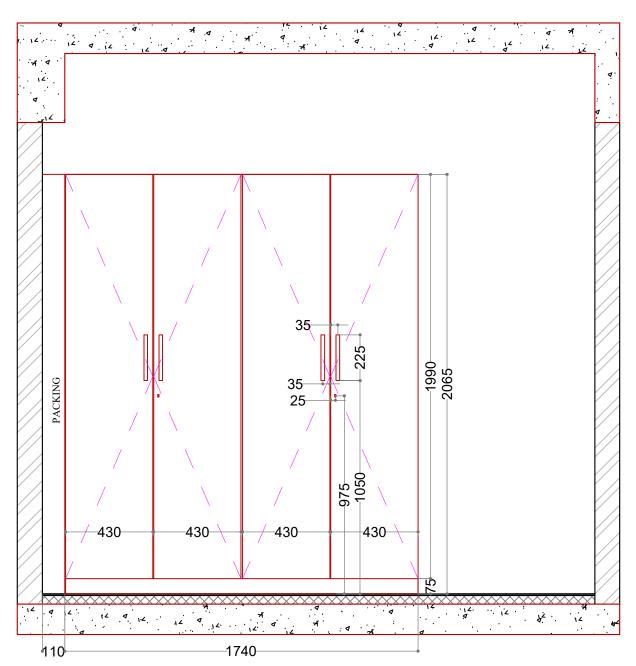






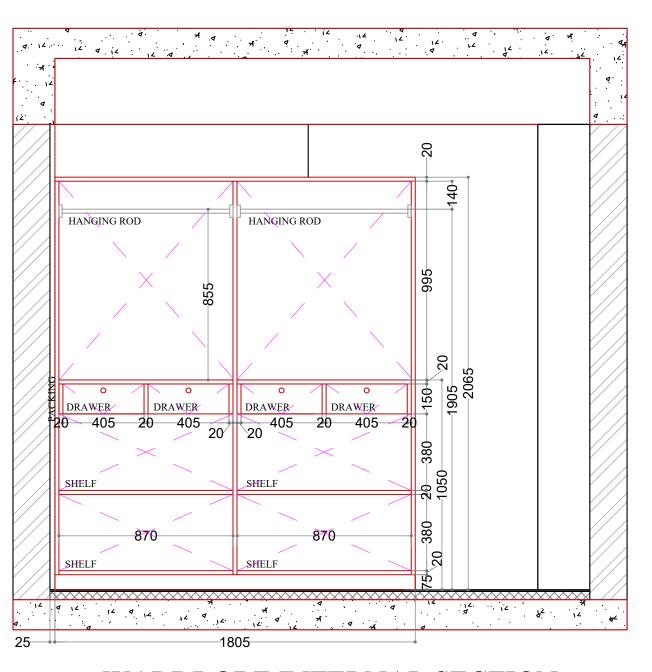


WARDROBE INTERNAL SECTION

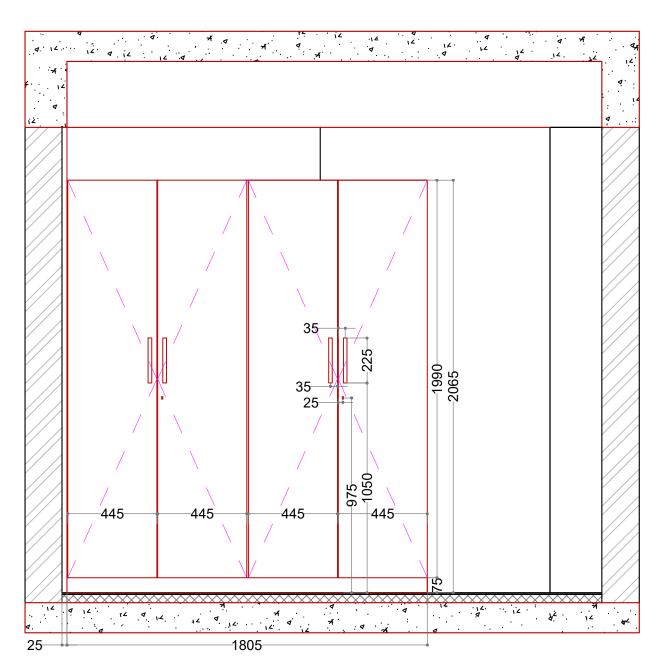


WARDROBE EXTERNAL SECTION





WARDROBE INTERNAL SECTION



WARDROBE EXTERNAL SECTION

