



NABARD

Department of Premises, Security and Procurement,
NABARD Kerala Regional Office,
Punnen Road, Statue, Post Box No.220
Thiruvananthapuram -695001
Email: - dpsp.trivandrum@nabard.org

Invites
TENDERS
FOR

"Tender for Undertaking Repair, Rehabilitation and Repainting works in C Block of the NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram"

Date of issue of tender document	04 th January 2022
Due date and time for submission of tender	25 th January 2022, 13:00hrs
Date and time of opening technical bids	25 th January 2022, 15:00hrs
Earnest Money to be deposited	NIL

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NB. Kerala/ DPSP/SQ-65/ 2509 /2021-2022

04 January 2022

NOTICE INVITING TENDER

(Empaneled Agencies Only)

Dear Sir,

Tender for Undertaking Repair, Rehabilitation and Repainting works in C Block of the NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram.

National Bank for Agriculture and Rural Development (NABARD) invites sealed offers/ tenders in two parts from empaneled contractors as per the terms and conditions contained in the **tender for Undertaking Repair, Rehabilitation and Repainting works in C Block of the NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram** having office in Kerala only owing to COVID19 pandemic situation.

2. The tender Document may be obtained from the Bank's office located at National Bank for Agriculture and Rural Development. Kerala Regional Office ,Punnen Road, Statue Thiruvananthapuram – 695001 or downloaded from <https://www.nabard.org>

3.It may be noted that the tender document down loaded from the website is free of cost for the empaneled vendors.

4.The other details are given below:

Date of commencement of issue of tender	04 January 2022
Last date for receipt of tender queries	24 January 2022
Last date and time for receipt of Bids	13:00, 25 January 2022
Date and time of opening of technical bid	15:00, 25 January 2022
Place of receiving and opening of tenders	Kerala Regional Office ,Punnen Road, Statue Thiruvananthapuram – 695001 Ph 0471-2701653 email- dpsp.trivandrum@nabard.org
Number of envelopes (non-window, sealed) to be submitted	Three (3) Envelopes a) Sealed Envelope 1 -Pre Contract Integrity Pact b) Sealed envelope 2 containing technical bid of tender document c) Sealed envelope 3 containing Price Bid All the envelopes to be placed in one sealed envelope with " <u>Tender for Undertaking Repair,</u>

	<u>Rehabilitation and Repainting works in C Block of the NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram.</u> Super scribed on the top of the cover.
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5. Bank reserves the right to change the dates mentioned in the tender document which will be displayed, as corrigendum/ amendment, at the above websites on which tender documents are available. The Bidder may go through the above website for any corrigendum/ amendment issued if any.

6. Please note that all the information desired needs to be provided by the bidder in the formats specified by the Bank. The bidder shall bear all the costs associated with the preparation and submission of the bid and NABARD will, in no case, be responsible or liable for such costs, regardless of the conduct or outcome of tendering process.

7. Technical specifications, terms and conditions, various formats and proforma for submitting the tender offer are described in the tender document and its enclosures/ annexures.

8. Tender offer will be opened in the presence of the bidders or their representatives who choose to attend the opening of tender on the above mentioned date, time and place. The details of the representative who are going to participate in tender opening is to be emailed to dpsp.trivandrum@nabard.org on or before **24 January 2022**, only that personnel will be allowed in the premises in view of COVID protocol. Submitted Tenders of Empanelled Vendors if later found that they do not have office in Kerala will invariably be rejected and no request on any of the grounds will be entertained later.

9. PRE-CONTRACT INTEGRITY PACT: Pre-contract Integrity Pact as per the format given below may be filled and submitted along with the Technical Bid, failing which the tender will not be considered. Pre Contract Integrity Pact should be submitted on Rs. 100 Stamp Paper only on first page and remaining document on normal A4 size pages duly signed by the bidder. We bring to your notice that the Name of the Independent External Monitor (IEM) Shri Pramod Kumar Sangewar, IRSS (Retd.) H. No. 12-5-65/1, Flat No. log Sri Harsha Sethuram Unique Vijayapuri Colony, South Lalaguda Secunderabad 5000 17 Telangana State.

Yours faithfully



K Ramalingam
Deputy General Manager

FORM OF TENDER

04 January 2022

The Chief General Manager
NABARD, Kerala Regional Office
Punnen Road,
Thiruvananthapuram - 695001

Dear Sir,

Tender for Undertaking Repair, Rehabilitation and Repainting works in C Block of the NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram.

Having examined the Technical bid and price bid of 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 and in accordance with all respects of the tender and with such materials are provided for, by and in all other respects in accordance with such conditions so far as they may be applicable.

MEMORANDUM

- a) Description of work : Tender for Undertaking Repair, Rehabilitation and Repainting works in C Block of the NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram.
- b) Time allowed for completion : 90 Days
of the work
- d) Retention Money Deposit : 5% from every R.A. Bill.

We understand that the time for completion shown above shall be reckoned 10 days from the date of issue of the Work Order.

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 so far as they may be applicable

Our Bankers are:

- i)
- ii)

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 should be attached*):

Yours faithfully,

Signature of Tenderer

PRE CONTRACT INTEGRITY PACT

(To be submitted on Rs. 100 Stamp Paper only on first page and remaining document on normal A4 size pages duly signed by the bidder)(Tenders without Pre-Contract Integrity Pact on Rs.100 stamp paper shall be rejected out rightly)

Between

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

And

..... hereinafter referred to as “The Bidder/Contractor”

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for **“Tender for Undertaking Repair, Rehabilitation and Repainting works in C Block of the NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram.”**. The Principal values full compliance with all relevant laws of the land, rules, regulation, and economic use of resources and of fairness /transparency in its relations with its Bidder(s) and/or Contractor(s).

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 3, 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 3, or if the Principal is entitled to terminate the contract according to Section 3, 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: Note: The Name of the Independent External Monitor (IEM) mentioned in section 8 is **Shri Pramod Kumar Sangewar, IRSS (Retd.) H. No. 12-5-65/1, Flat No. 10 Sri Harsha Sethuram Unique Vijayapuri Colony, South Lalaguda Secunderabad 5000 17 Telangana State**

(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. Notice Inviting **Tender for Undertaking Repair, Rehabilitation and Repainting works in C Block of the NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram.**

(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 between the Integrity Pact and its Annexure, if any, the Clause in the Integrity Pact will 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)

Place:

(SIGNATURE OF THE TENDERER)

Name:

Date:

Seal:

GENERAL INSTRUCTIONS TO THE CONTRACTORS/ TENDERERS

1. Contractors are advised to visit the site and thoroughly understand the nature and scope of the works and be familiar with the site conditions before quoting.
2. The pre-qualification that has to be mandatorily that has to be complied with for participating in this bidding process is as listed below. The documents indicating the following criteria is to be included along with the bid for verification process.
 - a) The bidder should have **experience** of similar works during the last **7 years**
 - b) The annual turnover of the bidder during each of the last **3 years** should be at least **₹5.5lakh** and above
 - c) The firm should have done at least:
 - i) **three** similar works valuing not less than **₹ 7.39 lakh** of the estimated cost;
 - or
 - ii) **two** similar works valuing not less than **₹9.23 lakh** of the estimated cost;
 - or
 - iii) **one** similar work valuing not less than **₹14.78 lakh** of the estimated cost.
3. The quantities indicated in the Bill of Quantities (BOQ) are only tentative and shall be executed only at the sole discretion of NABARD.
4. Quoted rates should be workable and reasonable and should include incidental and all overheads and profits. The contractor should furnish Rate Analysis for scrutiny of the rates by NABARD, if required.
5. Rates should include all Taxes, Duties, Levies, Wages as per Act, GST, loading, unloading, transportation of material to site, carting away the debris, scaffolding, shuttering, centering, curing etc. and should be firm for the entire Contract period. No escalation of rates will be allowed for the entire contract period and extended time if any on any account.
6. Materials used should conform to relevant National/ International Codes.
7. Specifications and Method of Measurements shall be followed as applicable. However, in the absence of the same and / or in case of any discrepancy, the decision of NABARD will be final.
8. The items not covered in the Schedule of Quantities of the Contract Document shall be paid at the rates as per Rate Analysis based on the market prices supported by

documentary proof with 15% towards Contractor's Overhead charges, plus Works Contract Tax and GST as applicable. The Rate Analysis shall be submitted by the Contractor for scrutiny and approval of NABARD.

9. Income Tax, GST, Works Contract Tax and other taxes as applicable will be deducted from total payment due to the Contractor.
10. 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.
11. The Contractor should take necessary Insurance cover (CAR policy – contractor's all risk policy) and Workmen Compensation policy at 1.25 times the work value at his cost for his persons employed at site and for third Party. Policies should be taken in the joint names of NABARD and the Contractor for which first name should be NABARD. The policy in original shall be deposited to NABARD within 14 days of awarding the work.
12. All the Standard Conditions of the Contract shall be binding on the parties as per Indian Contract Act and prevailing Rules.
13. The entire work is required to be completed as specified in the tender.
14. 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 the any Labor Regulations. NABARD shall have the power to inspect the Wage Register and for physical verification of salary paid to the staff with reference to any records of the Contractor and to insist the Contractor to comply with Laws.
15. The Contractor should 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.
16. The Contractor should obtain necessary permission that may be required for the purpose of this Contract from such authorities as may be prescribed by Law from time to time.
17. The Contractor or his authorized representative should visit the site regularly and if necessary meet NABARD's Engineer with prior appointment for any clarifications and to receive instructions, take measurements, etc. at the site. A measurement book to be maintained at site & the bill will be cleared based on the entries of the same. A site register will also be maintained recording the progress of the work.
18. The Contractor shall be fully responsible and shall compensate NABARD with suitable Insurance cover in the event of any damage to men or material, injury /

damage or death as the case may be, caused directly or indirectly due to the negligence of the Contractor or his agents and / or his employees, or workmen. The decision of NABARD in this regard shall be final and binding.

19. 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.
20. In case of any default or failure on Contractor's part to comply with all / any one of the Terms / Conditions, NABARD reserves to itself the right to take necessary steps to remedy the situation including, inter-alia, the deduction of appropriate amount/s from dues otherwise payable to Contractor and / or by taking recourse to appropriate recovery proceedings.
21. If any dispute arises on any matter concerning this Contract, the decision of NABARD shall be final and binding.
22. The Contractor should not at any time do, cause or permit any nuisance on the site / do anything which shall cause unnecessary disturbances or inconvenience to the staff/visitors at site or near the site of work.
23. The work should be carried out with least inconvenience to other residents in the quarters. 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 occupants etc. The workers have to strictly follow Government laid down Covid Protocols.
24. The Contractor should obtain approvals, if any, necessary for the work from the statutory bodies on behalf of NABARD. The fees and other statutory charges, if any, will be reimbursed to the Contractor based on the original receipts produced to NABARD.
25. 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.
26. On-site storage space will be provided to the Contractor subject to availability. 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.
27. The Contractor shall provide everything necessary for the proper execution of the works. NABARD will not supply any 'T & P' and materials or any other equipment, materials, labor, etc. and no payment in this respect will be made by NABARD.
28. The Contractor shall supply, and maintain suitable single or double bamboo/MS scaffoldings with working plat forms at all levels, T&P etc. or any other area if required at his cost during the execution of any work and remove them as soon as

the work is completed without any damage to existing structure/fittings/fixtures. The rate quoted is inclusive of all such aforesaid items.

29. The Contractor shall not directly or indirectly transfer, assign or sublet the Contract or any part of it, without written permission of NABARD.
30. 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 and only thereafter the Security Deposit will be refunded to the Contractor.
31. **Security Deposit:** In addition to ISD, Retention Money Deposit (RMD) will be deducted @ 5% of the gross value of the work done / each Running Bill and Final Bill till the Security Deposit (i.e. ISD plus RMD) amounts to 5% of contract value. This amount shall not bear any interest. The Security Deposit (SD) will not bear any interest. 50% of the total security deposit is refunded after virtual completion of the work and rest 50% will be refunded after Defects Liability Period from the date of Virtual Completion of works provided the Contractor has satisfactorily carried out all the rectification works and attended to all defects to the satisfaction of NABARD.
32. **Defects LIABILITY period: 12 Months** from the date of Virtual Completion of works certified by NABARD.
33. **Validity of Tender:** Three months from the date of opening of Tender.
34. **Liquidated Damages:** 0.25% of the accepted Tender Value per week or part of the week subject to maximum of 5% of the value of work.
35. **PAYMENT:** The contractor shall be entitled to receive upto Rs5.00lakh as Running Bill payment after completion of work of approximately 50% of value of the contract and after submission of the bill with joint measurements with the Architect deputed by the Bank/Banks Engineer.

We accept all the above Terms and Conditions in all respects without any reservation.

(SIGNATURE OF THE TENDERER)

Place:

Name:

Date:

Seal:

SPECIAL CONDITIONS

1. The Tender is strictly on Item Rate basis.
2. All the pages of the Tender Document shall be signed by the Tenderer.
3. NABARD takes no responsibility for delay / loss in post or non-receipt of Tender Documents.
4. Tenders submitted by unauthorized agents and FAX / Telex / Telegraphic bids shall not be entertained / considered.
5. **Tenderers are advised to visit the site at their cost, conduct inspection of existing conditions so as to familiarize themselves with the site conditions, nature of works etc. and get all clarifications as necessary from NABARD before quoting the rates. The tenderer can also discuss with our Consultant M/s Foxgreen Consultancy LLP for any clarifications with regard to the proposed work.**
6. The contractor should provide suitable scaffolding made out of bamboos / MS Pipes and stands with working platforms to his workers for carrying out the work hassle free, smoothly and safely. The rates quoted include the charges for supplying and erecting scaffolding and its removal after completion of work. The rate should include rate of props required for supporting the RCC member as and where required are to be supplied by the contractor at no extra cost to NABARD.
7. Special care shall be taken by providing suitable covers like tarpaulins, polythene sheets etc. to prevent dust nuisance, if any, in the influence area of his work in the premises. The rate quoted should include charges for the same.
8. The work shall be carried out without any inconvenience to the staff / residents, addressing required Covid protocol the rates quoted shall include all the above precautions and for handling and re-arranging the materials used in the work or otherwise and also to 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 surrounding area of his activities at his cost after his daily completion of work.
9. 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 NABARD's Engineer, the Bill will not be accepted.
10. The Contractor shall make necessary arrangement for watch and ward of his materials, tools, machines, scaffolding etc. stored for the execution of the work at his own risk and cost and NABARD will not be responsible on any account.
11. If the last date of receipt of Tender is a holiday, then submission of Tenders shall be shifted to next working day without change of time and venue.

12. The tenderers 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.
13. No tenderer will be allowed to withdraw his Tender during the validity period. Subletting of the Contract is not permitted.
14. Rates should be filled in the Tender neatly and as far as possible, no correction shall be made. The rates quoted should be written legibly in words and figures. If on check, differences are observed between the rates given by the Contractor in words and figures or in the amount worked out by him, the following procedure shall be followed.
 - a. When there is a difference between the rates in figures and in words the rates which corresponds to the amounts worked out by the Contractor shall be taken as correct.
 - b. When the amount of an item is not worked out by the Contractor or it does not correspond with the rate written either in figures or in words, then the rate quoted by the Contractor in words shall be taken as correct.
 - c. When the rates quoted by the Contractor in figures and in words tallies, but the amount is not worked out correctly, the rate quoted by the Contractor shall be taken as correct and not the amount.
15. No advance shall be paid towards mobilization and cost of materials.
16.
 - a. No compensation shall be admissible for any loss suffered by the Contractor during the execution of the work. It shall be the Contractor's sole responsibility to protect NABARD's staff and its employees against accidents from any cause and the contractor shall indemnify NABARD against any claims for damage for injury to person or property, resulting from any such accidents with necessary Insurance cover.
 - b. The Contractor should take necessary Insurance cover (CAR policy – contractor's all risk policy) and Workmen Compensation policy at 1.25 times the work value at his cost for his persons employed at site and for Third Party. Policies should be taken in the joint names of NABARD and the Contractor in which first name should be NABARD.
 - c. Any damages caused to the building / premises during the execution of the work shall be made good by the Contractor at his risk and cost and if necessary, through suitable Insurance cover.
 - d. The contractor at his cost and risk should shift / displace the Bank's furniture / fixtures etc. as per the needs to facilitate the job during the time of work and should re-shift the goods at its initial place without any damage.

17. 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. If the workers are found not adhering to the safety regulations, the work will be stopped at no cost to NABARD.
18. The Contractor shall engage necessary qualified and experienced supervisory staff at his cost during the execution of the work for attending to day to day affairs. He shall keep record of daily work schedule and keep inform the progress to the Banks Engineer on daily basis. The contractor has to maintain a register indicating progress of the work on weekly basis.
19. The Contractor shall submit the bills along with the accepted and jointly recorded measurements with Architect/consultant deputed by the Bank / Banks Engineer and duly certified by the consultant/ NABARD's Engineer.
20. The Contractor should have necessary Contract License and comply with the Labour Laws as applicable.
21. 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.
22. The decision of NABARD in awarding the work shall be final and cannot be subjected to arbitration.
23. NABARD reserves the right to accept/ negotiate / reject any Tender either in whole or in part without assigning any reasons therefore whatsoever and without entering into any further correspondence and hence, NABARD shall be under no obligation to accept the lowest or any other Tenders received in response to this Tender. The decision of NABARD in this regard shall be final and undisputable.
24. NABARD also reserves the right of supersession of any of the conditions, stipulated in the Tender Document.
25. Rates quoted by the contractor shall be as indicated in the tender and is firm throughout the contract period and extended period if any.

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.

Place :
DATE :

(SIGNATURE OF THE TENDERER)
ADDRESS:

NAME and SEAL

SCOPE OF WORK

REPAIR & REHABILITATION WORKS

1) Repair of Slab cracks

Repair of minor cracks in slabs by using epoxy resin pressure grouting technic by suitable gun/pump at required pressure with pre testing with water including surface preparation by standard power driven percussion or pneumatic chisel ,including cutting of nipples after curing complete as per direction of engineer in charge

2) Repair of Column/ beams due to Corrosion (Diameter of reinforcement has NOT corroded beyond 35 %)

Repair of damaged columns/beams/slabs due to spalling (carbonation depth has reached the reinforcement) by shotcreting method using polymer modified cement sand mortar after surface preparation by standard power driven percussion or pneumatic chisel, brushing, and bond coat with polymer modified cement slurry and finishing using 6mm cement plaster (1:3) including curing as per the direction of engineer in charge.

3) Repair of Column/ beams due to Corrosion (Diameter of reinforcement has Corroded beyond 35 %)

Repair of damaged columns/beams/slabs due to spalling (carbonation depth has reached the reinforcement and reinforced diameter reduced more than 35%) by shotcreting method using polymer modified cement sand mortar after surface preparation by standard power driven percussion or pneumatic chisel, brushing, and bond coat with polymer modified cement slurry, providing with anti-corrosive treated reinforcement wherever necessary and finishing using 6mm cement plaster (1:3) incl curing as per the direction of engineer in charge.

4) Repair for Wall regions

Repair of damaged columns/beams/slabs due to spalling (carbonation depth has reached the reinforcement and reinforced diameter reduced more than 35%) by shotcreting method using polymer modified cement sand mortar after surface preparation by standard power driven percussion or pneumatic chisel, brushing, and bond coat with polymer modified cement slurry, providing with anti-corrosive treated reinforcement wherever necessary and finishing using 6mm cement plaster (1:3) including curing as per the direction of engineer in charge.

- 5) Removal of Brick Jelly, Provide Screed Concrete, Re-plastering of the top of the surface and Finishing with Terracotta Tile.
- 6) Repainting of the exterior surface with weather proofing Apex Ultima Paint and the interior surface with Plastic Emulsion Paint.
- 7) Re-polishing of the entrance door to Glossy Finish.

TECHNICAL SPECIFICATION

I) REPAIR & REHABILITATION WORKS

In order to repair / retrofit the concrete structural element or its plaster, the repair/ retrofit measures can be classified into three. In the portions where there are only minor cracks without much distress, the repair can be carried out by method one. For the distress with much damage of concrete or mortar, and if there is no corrosion of reinforcement, the repair can be carried out by method two. For the distress with much damage of concrete, and if there is considerable corrosion of reinforcement with reduction in diameter of 35 % or more, the retrofit can be carried out by method three. For the infill wall region, adopt method four. The detailed procedure regarding the repair/retrofitting work to be carried out to column, beam and slab should be as per CPWD manual.

The location to be marked for the appropriate treatment before commencement of work in consultation with the consultant & NABARD.

1) Method 1: Repair of Slab cracks

- In the case of minor cracks, the repair can be carried out by Pressure grouting technique using Epoxy resin injection.
- For this, the structural or plaster surface with minor cracks may be tamped, and if no spalling has occurred due to tamping of slab/ beam /column/ or plaster of concrete surface and if the reinforcement are found not to be corroded, then apply pressure grouting using epoxy resin injection.
- **Injection of Low viscous Epoxy Resin in the slab areas of bathrooms.**

Drill 13mm dia. holes in to the concrete surface to a depth of 50mm and the depth should not be more than 1/3rd of the total thickness of the slab. The spacing of the holes should not be more than 300mm center to center in grid pattern. Clean the holes and wash the same followed by air. Provide metal based non return nipple and fix the same using polyester resin.

Mix the base and hardener of the low viscous epoxy resin mechanically using a slow speed heavy duty drilling machine fitted with mixing paddle. The base and hardener comes in pre weighed and pre packed forms and hence should not be part mixed. Pour the entire base and entire hardener followed by mixing as explained above.

Inject the same using an electrically operated pressure grouting machine until the nipple refuses the grout or the grout comes out of the nearby nipple. Continue the operation until all the nipples are grouted. Cut the nipple and finish the surface to match the nearby surface.

- **Sequence To Be Considered While Pressure Grouting:**

- ✓ Holes are drilled in structure along cracks and in an around hollow spots at spacing of 50 cm to 70 cm spacing in both directions. Hole spacing can be varied based on site conditions. PVC nozzles are fixed in the holes with rich cement mortar.
 - ✓ All the cracks and annular space around pipes are sealed with rich cement mortar. All the cracks are cut open to a 'V' shaped groove, cleaned & sealed with rich cement mortar.
 - ✓ All the grout holes should be sluiced with water so as to saturate the masonry. All holes are first plugged with proper wooden plugs or locked in the case of PVC nozzles. The bottom most plug and the two adjacent plugs are removed and water injected in the bottom most hole under pressure.
 - ✓ When the clear water comes out through the adjacent holes the injection of water is stopped and the plugs in the bottom hole and the one above are restored. The process of grouting of concrete cracks is repeated with other holes till all the holes are covered. On the day of grouting all the plugs are removed to drain out excess water and restored before commencing the grouting.
 - ✓ Same sequence as described above is adopted for injecting the cement grout also. The grout is fully stirred and agitated under pressure through the grouting. The grouting is carried out till refusal / grout starts flowing from the adjacent hole.
 - ✓ A proper record of the quantity of grout injected into every hole should be maintained. After grouting, curing should be done for 14 days
- For the slab region: Adopt Pressure grouting technique using Epoxy resin injection. Finally new Atactic Polypropylene (APP) membrane has to be applied in the top of exposed roof slab.
 - For the beam region: Adopt Pressure grouting technique using Epoxy resin injection, chip off the plastered surface and apply micro concrete and apply rich mix of plaster.

2) Method 2: Repair of Column/ beams due to Corrosion (Diameter of reinforcement has NOT corroded beyond 35 %)

Repair to damaged column/ beams / slabs where carbonation depth of concrete has reached the reinforcement, following are the steps for repairing by method 2.

- Prop and support the structure with MS props in order to relieve the RCC elements of stresses due to load coming over it.
- Remove the plaster and finishes all around the distressed RCC elements; remove the cracked and spalled concrete to expose the rusted reinforcement. Remove concrete all around the reinforcement in order to get a 25 mm air gap all round and clean the reinforcement and concrete. The concrete substrate shall be thoroughly soaked with clean water prior to priming.

- Apply appropriate passivating (Nito Zinc primer) and bond coat over the reinforcement and prepare RCC surface.
- Provide necessary shuttering. The prepared concrete surface should be covered with polymer modified cement sand mortar in layers including behind reinforcement over a bond coat with polymer modified cement slurry. (Adopt shotcreting technique).
- Apply 6 mm thick finishing coat with sand plaster 1:3, if felt necessary.
- Wet curing shall be done over the finished surface for a minimum period of 7 days. Necessary white washing / painting has to be carried out.

3) Method 3: Repair of Column/ beams due to Corrosion (Diameter of reinforcement has Corroded beyond 35 %):

Retrofit the damaged column/ beams / slabs where carbonation depth of concrete has reached reinforcement and the reinforcement diameter reduced more than 35 %, following are the steps for repairing by method 3.

- Prop and support the structure in order to relieve the RCC elements of stresses due to load coming over it.
- Remove plaster and finishes all around the distressed RCC elements; remove the cracked and spalled concrete to expose the rusted reinforcement. Remove concrete all around the reinforcement in order to get a 25 mm air gap all round and clean the reinforcement and concrete. The concrete substrate shall be thoroughly soaked with clean water prior to priming.
- Apply anti-corrosive compound and appropriate passivating (Nito Zinc primer) and bond coat over the reinforcement and prepare RCC surface.
- Put additional reinforcement wherever the reinforcement diameter has been reduced by more than 35% with necessary overlap or welding with the existing reinforcement. Fix shear keys of appropriate diameter at specified spacing as per the site requirement.
- Provide necessary shuttering. The prepared concrete surface should be covered with polymer modified cement sand mortar in layers including behind reinforcement over a bond coat with polymer modified cement slurry. (Adopt shotcreting technique).
- Apply 6mm thick finishing coat with sand plaster 1:3, if felt necessary.
- Wet curing shall be done over the finished surface for a minimum period of 7 days. Necessary white washing / painting has to be carried out.

4) Method 4: For the wall regions

- Apply slight tapping on the surface of the cracked and uncracked portions of the brick wall by using hammer and allow the distressed lime/cement mortar plaster to spall from the surface.
- After the removal of the distressed plaster surface, wet the layer and provide a chicken mesh layer and replaster the surface using cement mortar CM 1:3,

12-15 mm thick. Proper curing shall also be made every day for minimum 7 days.

- Peel of the existing paint provided in the structure and reapply after applying acrylic water proofing base coat. Do apply crack sealant if any for minor cracks.

5) Method 5: Removal of Brick Jelly and Replastering of the top of the Block's surface

- Demolition and removal of the surface tiles on the roof top inclusive of labour charges and removal from the premises in complete. The surface to be cleaned from all fine particles and dust.
- Application of Brushbond RFX using a brush, trowel, squeegee or Graco spray pump 1 mm in 2 layers perpendicular each other in both layers. The surface to be cured for 24 hours in a water depth of 50 mm minimum. All the coves should be primed with Nitoproof 600 PF 24 hours prior to main application to 150 mm on either of the coving.
- Providing screeding concrete using 6mm nominal size stone aggregates average 5cm thick. Work including cost of all material and labour charges, all material lead and lifts, scaffolding charges etc. complete as per specification and as directed by the engineer for all floors. The concrete not to be mixed on top of the water proofing surface.
- Plastering the top of roof slab with cement mortar 1: 4 (1 cement : 3 sand), with a minimum of 12 mm. thick and finished with cement flushing coat, one coat floated hard and trowelled smooth topped with well burnt terracotta tile including cost of all material and labour charges, lead, lift and hire charges for scaffolding, watering, curing etc. complete as directed.

II) REINFORCED CEMENT CONCRETE WORK

Reinforced cement concrete work may be cast-in-situ or Precast as may be directed by Engineer-in - Charge/CONSULTANT according to the nature of work. Reinforced cement concrete work shall comprise of the following which may be paid separately or collectively as per the description of the item of work.

- (a) Form work (Centering and Shuttering)(b)
- (b) Reinforcement
- (c) Concreting: (1– Cast-in-situ), (2 – Precast)

(1) Steel for Reinforcement

The steel used for reinforcement shall be any of the following types:

- (d) Mild steel and medium tensile bars conforming to IS 432 (Part I)
- (e) High strength deformed steel bars conforming to IS 1786
- (f) Hard drawn steel wire fabric conforming to IS 1566
- (g) Structural steel conforming to Grade A of IS 2062
- (h) Thermo-mechanically treated (TMT) Bar

Elongation percent on gauge length is 5.65 A where A is the cross sectional areas of the test piece.

Mild steel is not recommended for the use in structures located in earthquake zone subjected to severe damage and for structures subjected to dynamic loading (other than wind loading) such as railway and highway bridges.

Welding of reinforcement bars covered in this specification shall be done in accordance with the requirements of IS 2751.

Nominal mass/weight: The tolerance on mass/ weight for round and square bars shall be the percentage of the mass/ weight calculated on the basis that the masses of the bar/ wire of nominal diameter and of density 7.85 kg/ cm³ or 0.00785 kg/mm³.

Tests: Selection and preparation of Test sample. All the tests pieces shall be selected by the Engineer-in- Charge or his authorized representative either-

- a) From cutting of bars Or
- b) If he so desires, from any bar after it has been cut to the required or specified size and the test piece taken from and any part of it.

In neither case, the test pieces shall be detached from the bar or coil except in the presence of the Engineer-in-Charge/Consultant or his authorized representative.

The test pieces obtained in accordance with as above shall be full sections of the bars as rolled and subsequently cold worked and shall be subjected to physical tests without any further modifications. No deduction in size by machining or otherwise shall be permissible. No test piece shall be enacted or otherwise subject to heat treatment. Any straightening which a test piece may require shall be done cold.

Tensile Test: 0.2% proof stress and percentage elongation –
This shall be done as per IS 1608, read in conjunction with IS 226.

Rebend test: This shall be done as per IS 1786.
Chemical composition of reinforcement bars shall be done if required based on the advice of the consultants.

The TMT bars shall conform to IS 1786 pertaining to Fe 415 D or Fe 500 D or Fe grade of steel as specified. In design and construction of reinforced concrete building in seismic zone III and above, steel reinforcement of Grade Fe 415 D shall be used. However, high strength deformed steel bars, produced by thermo mechanical treatment process of grade Fe 415, Fe 500 and Fe 550 having elongation more than

14.5. % and conforming to other requirements of Fe 415 D, Fe 500 D and Fe 550 D respectively of IS 1786 may also be used for reinforcement. In future, latest provision of IS 456 and IS 13920 or any other relevant code as modified from time to time shall be applicable.

(2) Stacking and Storage

Steel for reinforcement shall be stored in such a way as to prevent distorting and corrosion. Care shall be taken to protect the reinforcement from exposure to saline atmosphere during storage, fabrication and use. It may be achieved by treating the surface of reinforcement with cement wash or by suitable methods. Bars of different classifications, sizes and lengths shall be stored separately to facilitate

issue in such sizes and lengths to cause minimum wastage in cutting from standard length.

(3) Identification

Care shall also be taken to properly identify these bars at site. The staff shall be specially trained for looking for identification marks on these bars given by the manufacturers which are generally given colour code. It will be advisable to see that only one type/grade of bars are brought to site and used in the project after conducting tests for each lot.

(4) Fabrication & Positioning

Bars shall be bent correctly and accurately to the size and shape as shown in the detailed drawing or as directed by Engineer-in-Charge/Consultant. Preferably bars of full length shall be used. Necessary cutting and straightening is also included. Overlapping of bars, where necessary shall be done as directed by the Engineer-in-Charge/Consultant. The overlapping bars shall not touch each other and these shall be kept apart with concrete between them by 25 mm maximum size of the coarse aggregate whichever is greater. But where this is not possible, the overlapping bars shall be bound together at intervals not exceeding twice the dia. of such bars with two strands annealed steel wire of 0.90 mm to 1.6 mm twisted tight. The overlaps/splices shall be staggered as per directions of the Engineer-in-Charge/Consultant. But in no case the overlapping shall be provided in more than 50% of cross sectional area at one section.

Fabricated reinforcement bars shall be placed in position as shown in the drawings or as directed by the Engineer-in-charge/Consultant. The bars crossing one another shall be tied together at every intersection with two strands of annealed steel wire 0.9 to 1.6 mm thickness twisted tight to make the skeleton of the steel work rigid so that the reinforcement does not get displaced during deposition of concrete.

Reinforcement including authorized spacer bars and lappings shall be measured in length of different diameter, as actually (not more than as specified in the drawings.) used in the work nearest to a centimeter and their weight calculated on the basis of standard weight. In case actual unit weight of the bars is less than standard unit weight, but within variation, in such cases weight of reinforcement shall be calculated on the basis of actual unit weight. Wastage and unauthorized overlaps shall not be paid for. Annealed steel wire required for binding or tack welding shall not be measured, its cost being included in the rate of reinforcement.

III) FORM WORK (CENTRING & SHUTTERING)

(a) Form Work

Form work shall include all temporary or permanent forms or moulds required for forming the concrete which is cast-in-situ, together with all temporary construction required for their support.

1) General Requirement

It shall be strong enough to withstand the dead and live loads and forces caused by ramming and vibrations of concrete and other incidental loads, imposed upon it during and after casting of concrete. It shall be made sufficiently rigid by using adequate number of ties and braces, screw jacks or hard board wedges where required shall be provided to make up any settlement in the form work either before or during the placing of concrete. Form shall be so constructed as to be removable in sections in the desired sequence, without damaging the surface of concrete or disturbing other sections, care shall be taken to see that no piece is keyed into the concrete.

2) Material for Form Work

Propping and Centering: All propping and centering should be either of steel tubes with extension pieces or built up sections of rolled steel. On prior permission of the consultant wooden shutters can be used, based on the quality of the form work to be used.

3) Centering/Staging:

Staging should be as designed with required extension pieces as approved by Engineer-in-Charge/CONSULTANT to ensure proper slopes, as per design for slabs/ beams etc. and as per levels as shown in drawing. All the staging to be either of Tubular steel structure with adequate bracings as approved or made of built up structural sections made form rolled structural steel sections.

4) Shuttering:

Shuttering used shall be of sufficient stiffness to avoid excessive deflection and joints shall be tightly butted to avoid leakage of slurry. If required, rubberized lining of material as approved by the Engineer-in-Charge/CONSULTANT shall be provided in the joints. Steel shuttering used or concreting should be sufficiently stiffened. The steel shuttering should also be properly repaired before use and properly cleaned to avoid stains, honey combing, seepage of slurry through joints etc.

- a) *Runner Joists:* RSJ, MS Channel or any other suitable section of the required size shall be used as runners.
- b) Assembly of beam head over props. Beam head is an adopter that fits snugly on the head plates of props to provide wider support under beam bottoms.
- c) Only steel shuttering shall be used, except for unavoidable portions and very small works for which 23 mm thick water proofing ply of approved quality may be used.

Form work shall be properly designed for self-weight, weight of reinforcement, weight of fresh concrete, and in addition, the various live loads likely to be imposed during the construction process (such as workmen, materials and equipment). In case the height of centering exceeds 3.50 meters, the prop may be provided in multi-stages.

IV) CONCRETING

- a) **Concreting** shall be commenced only after Engineer-in-Charge/Consultant has inspected the centering, shuttering and reinforcement as placed and passed the same. Shuttering shall be clean and free from all shavings, saw dust, pieces of wood, or other foreign material.

The concrete shall be deposited in its final position in a manner to preclude segregation of ingredients. In case of columns and walls, the shuttering shall be so adjusted that the vertical drop of concrete is not more than 1.5 meters at a time.

Concrete shall be compacted into dense mass immediately after placing by means of mechanical vibrators designed for continuous operations complying with IS 2505, IS 2506, IS 2514 and IS 4656. The Engineer-in-Charge/Consultant may however relax this condition at his discretion for certain items depending on the thickness of the members and feasibility of vibrating the same and permit hand compaction instead. Hand compaction shall be done with the help of tamping rods so that concrete is thoroughly compacted and completely worked around the reinforcement, embedded fixtures, and into corners of the form. The layers of concrete shall be so placed that the bottom layer does not finally set before the top layer is placed. The vibrators shall maintain the whole of concrete under treatment in an adequate state of agitation; such that de-aeration and effective compaction is attained at a rate commensurate with the supply of concrete from the mixers. The vibration shall continue during the whole period occupied by placing of concrete, the vibrators being adjusted so that the center of vibrations approximates to the center of the mass being compacted at the time of placing.

b) Micro Concreting:

Surface Preparation: Chip off the corrosion damaged areas on the beam/column/sunshade or any other structural members. Clean reinforcement and make that there is no traces of rust on the surface existing rebars. Check for the depth of carbonation using the phenolphthalein indicator and make sure that the contaminated concrete is removed completely. Make sure that the chipping is done till the rear side of the rebar so that the corrosion patches and also the application of the anti-corrosive coating can be done properly.

Additional Reinforcement: Check the diameter of the existing rebars and if the diameter is less than 35% of the original diameter, provide additional reinforcement. Cut 12mm dia bars as main reinforcement to the required length with proper development length. Tie them to the prefixed shear connectors so that the additional rebar acts monolithically with the existing ones and core concrete. In the case of the shear reinforcement also, if the diameter of the rebars are reduced, provide 8mm dia stirrups in the form of 2 "U" shaped bars. Tie them properly so that it has a tight contact with the main bars.

Anticorrosive Coating: Clean the rebars using the rust remover if there exists any rust, otherwise clean the rebar free of foreign material. Mix the base and

hardener of the zinc rich epoxy resin mechanically using a slow speed heavy duty drilling machine fitted with mixing paddle. Apply the mixed materials to the cleaned rebar and allow it to dry complete. The rate of the same to be included in the reinforcement rate quoted in the price bid.

Application of Epoxy Jointing Compound: Mix the base and hardener of the epoxy jointing compound using a slow speed heavy duty drilling machine fitted with mixing paddle and apply the same to the prepared lintel beam/beam surface. Make sure that the concreting is done within 3 hours and the application should be done in such a way that the allowance for concreting be kept in mind.

Form Work: Supply of slurry tight form work which should not deform and leak due to pressure of micro concrete. Provision should be made for a suitable feed hopper for pouring concrete. The form work should be coated with the mould release agent prior to final fixing in position. Proper supporting arrangements to be made for keeping the shutter in correct line and length -complete.

Micro Concreting: Stock sufficient quantity of micro concrete and 12mm down graded chips on site to enable the completion of the pouring in a continuous operation. An approved concrete mixer or a slow speed heavy duty drilling machine fitted with mixing paddle shall be used. Mix the micro concrete and the 12mm down grade chips in the ratio of 1: 0.5 by weight with required quantity of water and place the same to the prefixed formwork well before the epoxy jointing compound dries up. Remove the formwork after 24 hours in the case of columns and after a period of 72 hours in the case of slab and beam and check for any surface defects and if so apply polymer modified mortar - complete.

Curing: Soon after the formwork is removed, apply the water on the surface of the concrete to keep it moist. Mix the acrylic based compound with water in the ratio of 1:1 and apply the same to the entire concrete surface-complete.

Core Cutting: Mark the core holes along the beam to facilitate for the pouring of micro concrete. The core cutting need to be done with an electrically operated core drilling machine fitted with diamond tool of dia not less than 72mm and to the entire depth of the slab portion. Care to be taken to minimize the cutting of the rebar as reinforcements are expected at the negative bending moment zone. The rate of the same is to be included in the quote rate of concreting work where reinforcement is corroded more than 35%.

Plastering: Hack the surface of the RCC member area of the beam/columns, etc. to provide the mechanical bond for the plaster. Provide cement sand mortar 1:3 added with waterproofing admixture, normally at the rate of not more than 150ml per bag of cement. Plaster the surface using the prepared mortar to the required line and length, followed by curing the surface. Curing shall be started as soon as the plaster has hardened sufficiently. The plaster shall be kept wet for a period of at least 7 days. During this period, it shall be suitably protected from all damages at the contractor's expense by such means as the Engineer-in-Charge may approve.

c) **Polymer Modified Concreting**

Chip off the corrosion damaged areas on the beam/column/sunshade or any other structural members. Clean reinforcement and make sure that there are no traces of rust on the surface of existing rebars. Check for the depth of carbonation using the phenolphthaleine indicator and make sure that the contaminated concrete is removed completely. Wet the surface with potable water and make sure that the surface is kept moist so that the water cement ratio in the polymer modified mortar is maintained. Prepare the acrylic based jointing compound by mixing the acrylic with water and cement in the ratio of 1:3:1 and apply the same to the prepared surface as primer. Prepare cement sand mortar 1:3 added with the polymer at the rate of 2 litres per bag of cement and apply the same to the primed surface followed by a smooth finish. Soon after the finishing is over, apply the curing compound.

d) **Testing of Concrete (if required by NABARD)**

Regular tests as and when instructed by NABARD on the workability of the fresh concrete shall be done to achieve the specified compressive strength of concrete. These will be of two types

- (a) Lab, Test - *Cube Test for Compressive Strength of Concrete* – as per the code provisions. IS 456-2000
- (b) Field Test - ***Slump Test & Visual Inspection Test as per code provision – IS 456:2000***

Approved Design mix by the consultant and such concrete is that concrete in which the design of mix i.e. the determination of proportions of cement, aggregate & water is arrived as to have target mean strength for specified grade of concrete. The minimum mix of M25 shall be used in all structural elements in both load bearing & RCC framed construction.

One sample (consisting of six cubes of size 15x15x15 cm) shall be taken for every 20 cum or part thereof concrete work ignoring any part less than 5cum or as often as considered necessary by the Engineer-in- Charge/Consultant. The test of concrete cubes shall be carried out in accordance with the procedure. The casting of cubes, concrete used for cubes and all other incidental charge, such as curing, carriage to the testing laboratory shall be borne by the contractors. The testing fee for the cubes, if any, shall be borne by the Contractor.

V) **REPAINTING WORKS (INTERNAL AND EXTERNAL)**

A) **GENERAL**

The rates quoted shall include the following:-

- The rates shall be inclusive of costs of all materials, labour, tools & tackles, taxes, etc., and all costs and expenses which may be required in for the construction of the work described, together with all general risks involved, liabilities and obligations set forth or applied in the documents on which the tender is based.
- General directions and description of works and materials given elsewhere in the tender documents are not necessarily being repeated in the bill(s) of quantities. A reference shall be made to the other documents for the full information/details.
- Unless otherwise specified in the description of items of work in bills(s) of quantities the rates shall be for all heights and levels.
- For all cement concrete work, the machine crushed hard blue granite stone aggregate shall be used whether the same has been specifically mentioned in the item of work or not and the rates quoted will be deemed to have been for the use of the above mentioned aggregate.
- IS codes/specification referred shall mean latest IS codes/ specifications up to date.
- House keeping the area of work and surrounding shall have to be carried out on daily basis.
- Agency shall provide personal protective equipment (PPE) to all its workforce and should as here the refinery safety requirements.
- All statutory regulations like ESI, PF, minimum wages registration etc. shall be strictly complied with. The entry permission to refinery premises shall be against photo passes bearing valid ESI numbers.
- Removal and carting away all the debris from Bank's premises after cleaning the floors etc. with water and removing all paint spots & stains by using any approved paint remover to the satisfaction of the Employer.
- Before commencing the work, all plants and trees etc. found on the walls, terraces etc. shall be completely uprooted and the cracks or holes etc. shall be filled in as directed.
- Double scaffolding (Wherever applicable) up to complete height of the building externally and to the floor height in each floor.
- All articles or furniture, equipment etc. shall be protected by covering with cloth or tarpaulin etc. and the furniture rearranged and floors cleaned and mopped after the day's work.
- Painting of hardware fittings wherever directed in case of painting of doors and windows.
- Painting all picture hooks, fan hooks, coat hanger, battens, hooks etc.
- Curing the items of work involving the use of cement and waterproof paints.
- Unless and until all the paint stains on floor, walls ceilings, glasses, etc. are removed satisfactorily by the contractors; the work will not be certified as complete.
- All paints shall be of first quality of approved brand and shade and applied as detailed under specification.
- The entire painting work shall be done in first class manner. The contractor shall use readymade paints of best quality and of approved manufacturers such as Asian Paints, Jenson & Nicholson, Goodlass Nerolac, Jotun etc. of appropriate grade as per Annexure 'A' to this specification. The Contractor will not be permitted to carry out any mixing at site except for addition of

thinners for thinning the paint which shall be carried out in the presence of Bank's Staff. The contractor shall deposit with the Engineer at his own cost, sample panels of paints approved prior to commencement of work. The colour shades of the paint approved by the Engineer only shall be used. For outside painting, sample area shall be prepared and the shade got approved.

- Rates shall be inclusive of doing plaster patch work (not exceeding 0.1 Sq.m for each patch) and also making up the broken arises, edge of walls, columns, beams, sills, ceiling, etc. so as to match the existing surface.
- Special care shall be taken by providing suitable covers, tarpaulins etc. to prevent dust nuisance and for protecting furniture and costly equipment from stains. The work shall be carried out without any inconvenience to the occupants. The rates quoted shall include covering of furniture and for handling and re-arranging the furniture etc. and any damage to property caused by the Contractor shall be made good by the Contractor at his cost. The internal painting work in residential buildings, shall be done in a sequence to complete all works required to be done, in as short a time as possible, in each flat. The contractor has to wash and clean the floors after his work in the area that has been completed.
- Surface prepared for painting shall be got approved before proceeding with painting work. Similarly, work for each coat shall also be got approved from the Engineer before proceeding to next coat.
- No further coat shall be applied, till previous coat has completely dried.
- Additional coats shall have to be given without any extra cost. if instructed by the Engineer, over and above the number of coats prescribed till the surface presents smooth and uniform finish.
- After day's work is over, stains of paint over floor, fittings, furniture, glass panes etc. shall be thoroughly removed.
- The contractor should include the cost of erecting scaffoldings, for painting the building from inside and outside.
- Care should be taken to paint electric wiring on batten for which no extra payment will be made.
- The paints on the glass windows to be removed and made clean.
- Mode Of Measurements

The painting unless otherwise mentioned shall be measured by area in sqm. upto two places of decimal. Length and breadth shall be measured correct upto two places of decimal of a meter. Deduction will be made from the areas of fixtures, grills, ventilation, outlets individually more than 0.05 sqm. The item shall include removing nails, making good holes, cracks, patches etc. not exceeding 0.1 sqm each with materials similar in composition to the surface to be prepared.

Rate :

The rate shall include the cost of all materials and labour involved in all the operations described above.

- Co-Efficients To Be Applied To Other Surfaces To Get Plain

AREAS OF PAINTING

- (a) Wooden doors, windows, partitions etc. (Measured flat including frame)
1. Paneled doors and windows etc. : 1.3 (for each side)
 2. Flush doors : 1.2 (for each side)
 3. Fully glazed doors and windows etc. : 0.8 (for each side)
 4. Carved or enriched work : 2 (for each side)
 5. Partly paneled and partly glazed doors, : 2 (for both sides) Windows and partitions
 6. Fully venetian or louvered (not with glazing) : 1.8 (for each side)
 7. Low railing with vertical balustrade and bracing : 0.50 (for each side)
- (b) Steel doors, windows etc. (Measured flat including frame)
1. Plain sheet doors and windows : 1.10 (for each side)
 2. Fully glazed doors and windows : 1.5 (for both sides)
 3. Collapsible gates, steel gates, railings, etc. : 1.10' (for painting all over)
 4. Rolling shutters : 1.00 (for each side)
 5. Partly glazed & partly paneled / louvered : 2.00 (for both sides) Doors and windows.
 6. M/s. Grill / WI grill and expand metal / weld : 2.00 (for both sides) mesh / crimped mesh.
- (c) General Work
- Expanded metal, grills, gratings, etc. : 1.00 (for painting all over)

B) PATCH REPAIRING

The Patch repairs shall generally be carried out as under:

- (a) Patches should be marked properly on the surface and all loose plaster of the cracked portion shall be removed as directed by the Engineer.
- (b) The surface to be patched shall be wetted thoroughly and if plain, shall be raked or roughened up by hacking.
- (c) The plastering shall be done as directed. The finishing coat shall match with the adjoining surface. The rate quoted shall include all types of finishing and no extra payment shall be admissible.
- (d) The cement mortar used shall be 1:4 (one part cement to four parts of sand by volume) and the work shall be done as directed by the Engineer.
The patches thus repaired shall be cured adequately and shall be got approved from the Engineer before proceeding further.
- (e) Wide cracks in plaster, if any due to separation of brick work from the concrete or wood work 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. No payment will be made

for this operation.

(f) Minor cracks in plaster due to separation of brick work from the concrete or wood work or between two masonry panels or diagonal cracks shall be grooved as directed, filled and finished with "SNOW FILLA". The rates quoted for respective items shall be inclusive of this operation.

Measurement: The measurements of the patches exceeding 0.1 sqm. in area shall only be recorded. The patching works having 0.1 sqm. or less in area shall not be measured and paid for.

C) SCAFFOLDING:

(a) Unless otherwise instructed by the Engineer, double scaffolding or Bamboo scaffolding shall be provided. The supports shall be sound and strong, tied together by horizontal members over which scaffolding planks shall be fixed.

(b) 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.

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

(d) However, it should be noted that approval from the Engineer 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.

D) PAINTING & COLOUR WASHING:

The work of painting, colour washing shall be done according to IS.2395 (1966) and 1477 (1959) and shall be to the entire satisfaction of the CONSULTANT/Bank's Engineer.

1. White or Colour washing:

(a) **Preparation of surface:-** The surface shall be scrapped thoroughly to remove existing distemper colour wash or white wash or any other protective film. Any major patch repair or crack shall be cut out and made good as specified under patch repairing. Cracks may be wetted thoroughly prior to filling or priming paint may be applied to the sides of the cracks to avoid undue absorption of water and subsequent shrinkage of the filling. For filling, plaster of paris gauged with about one third of its volume of hydrated lime or "Snow Filla".

Prior to painting, fine cracks may be filled with distemper or Enamel putty depending on the proposed finish.

Distemper or lime wash shall be totally removed prior to repainting. The surfaces shall be wetted before scraping.

Greasy or oily spots in the surface should be removed by approved method. One coat of chalk and glue may be applied before application of colour/white wash. The rates quoted shall include all the above operations.

(b) **Preparation of Lime or Colour wash :-** The white wash/colour wash shall be prepared from fat lime conforming IS. 723- (1964). The lime shall be slaked at site and shall be mixed and stirred with about 5 liters of water for one Kg. of unslaked lime to make a thin cream. This shall be sieved through a muslin

cloth. Also, lime or colour wash in powder form packed in airtight drums may be considered to the above specification. Four kgs. of gum dissolved in hot water shall be added to each cubic meter of cream and 1.3 kg of sodium chloride dissolved in hot water may be added for every 10 kg. of lime. For white wash blue will have to be added in it in the quantity as directed. If directed, mineral colours not affected by lime may be added as directed by the Engineer.

(c) **Applications:** The colour or white wash shall be applied with Mooj brushes (flat brushes) or spray pumps, if approved, in the specified number of coats. The operation of each coat shall consist of a stroke of the brush first given horizontally from the right and then from the left and similarly the subsequent stroke from bottom upwards and the other from top downwards.

Each coat shall be allowed to dry before the next coat is applied. No portion of the surface shall be left out to be patched up later on. The sequence of application of paint shall be as under:

- (i) Apply 1st coat of colour wash or lime wash of lighter shade on the surface prepared as stipulated at (a) above.
- (ii) Indentations, unevenness etc. shall be filled to yield a uniform plain surface.
- (iii) Apply second coat of lime or colour wash of approved shade.
- (iv) Apply the third coat of colour or white wash where stipulated.

2. Exterior Painting:

The surface shall be prepared in the similar fashion as specified under lime and colour wash. In addition, any existing fungus or mould growth shall be completely removed by thoroughly scraping and rubbing down with bristle brush and sand paper and then washing down with clean water and allowed to dry. The surface shall be brushed with a soft bristle brush to remove any dust particles 24 hours after the wash.

3. With flat Oil Paint:

Preparation: The ready mixed exterior quality flat oil paint shall be prepared strictly according to the manufacturer's specification.

Application of Painting: The painting shall be carried out as follows:

- (i) Apply one coat of specified primer of approved quality.
- (ii) Apply 1st coat of flat oil 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 by adding white shade flat oil paint of the same specification. 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.
- (i) After overnight drying and light sand papering of surface, apply second coat of flat oil paint of final approved shade.
- (ii) If directed by the Engineer, additional coat of paint should be given to bring the surface to uniform shade and tone at no extra cost.

4. Waterproof Cement Paint:

The surface shall be prepared as specified at 2 above and thoroughly wetted with clean water before waterproof cement paint is applied.

The paint shall be prepared as per manufacturer's specification and in such quantities as can be used up in an hour of its mixing as otherwise the mixture will set and thicken affecting flow and finish.

The paint thus prepared shall be applied on clean and wetted surface with brush. The solution shall be kept stirred during the period of application. It shall be applied on the surface which is on the shady side of the building so that the direct heat of the sun on the surface is avoided. The completed surface shall be watered after the day's work. Number of coats shall be as specified in the item. The first coat shall always be in white shade or one or two tones lighter than the final approved shade.

5. Weatherproof Emulsion (Water based, 100% acrylic) paint:

The surface shall be prepared as specified at 2 above. The paint shall be prepared and applied as per manufacturer's specification.

E) PAINTING FOR INTERIOR SURFACES:

(A) Acrylic emulsion paint: The paint shall be of approved manufacturer and shade.

(i) Preparation of surfaces: The surfaces shall be prepared according to the instructions under lime and colour washing. In addition, before application of primer coat the surface shall be cleaned with water and allowed to dry.

(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 Acrylic emulsion paint 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 Acrylic emulsion paint shall be applied. This coat may be of final shade where two coats of Acrylic emulsion paint 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 Acrylic emulsion paint shall always be finished by using rollers to obviate brush mark.

F) PAINTING WITH SYNTHETIC ENAMEL PAINT

Synthetic enamel paint (conforming to IS 2932) of approved brand and manufacture and of the required colour shall be used for the top coat and an undercoat of ordinary paint of shade to match the top coat as recommended by the same manufacturer as far the top coat shall be used.

1) Application:

The number of coats including the undercoat shall be as stipulated in the item.

- a) *Under Coat:* One coat of the specified ordinary paint of shade suited to the shade of the top coat shall be applied and allowed to dry overnight. It shall be rubbed next day with the finest grade of wet abrasive paper to ensure a smooth and even surface, free from brush marks and all loose particles dusted off.
- b) *Top Coat:* Top coats of synthetic enamel paint of desired shade shall be applied after the undercoat is thoroughly dry. Additional finishing coats shall be applied if found necessary to ensure proper uniform glossy surface.

2) Enamel painting to wood and plastered surface:

- (a) While preparing surface in old wood work, accumulated dirt, grime, mould 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 piece and made level with the rest of the surfaces.
- (b) Surface of previously painted wood work. 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 colour 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 paint shall be applied to the surface as per schedule of work.

Application of paint: The enamel paint shall be of first quality unless otherwise specified. The painting work shall be carried out as per manufacturer's specification and as specified in 3-A (iii) above and the in coats specified under respective items.

3) Enamel painting to steel work:

- (a) The work shall generally be carried out as per I.S. 1477 (1959). wherever applicable and as directed by the Engineer.
- (b) The surface shall be thoroughly cleaned of all scale, rust, dirt, old paint, grease

and other imperfections by scraping 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 anticorrosive metal primer of approved make.

(d) Apply a coat of putty 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.

G) PAINTING C.I.G.I. ASBESTOS ETC., PIPES AND FITTINGS

(a) 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.

(b) Preparation of surfaces: All rust and scales shall be removed by scraping or brushing with steel wire brushes. All dust and dirt shall be carefully and thoroughly wiped away. The surface if wet, shall be sun dried.

(c) Application: After preparing the surface, one coat of primer shall be applied. Care shall be taken to ensure that the surface is fully and completely covered, special attention being paid to the Joints.

(d) 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.

H) POLISHING & VARNISHING

(a) French Polishing: French spirit polish shall be of an approved make conforming to IS: 348. If it has to be prepared at site, the polish shall be made by dissolving 0.7 kg. of best shellac in 4.5 liters of methylated spirit without heating. To obtain required shade, pigment may be added and mixed.

Surface shall be cleaned. All unevenness shall be rubbed down smooth with sand paper and well dusted. Knots if visible shall be covered with a preparation of red lead and glue. Resinous or loose knots and gaps shall be filled with seasoned timber pieces and made level with rest of the surface. Holes and indentations on surface shall be filled with putty made of whiting and linseed oil. Surface shall be given a coat of filler made of 2.25 kg. of whiting 1.5 litre of methylated spirit. When it dries, surface shall again be rubbed down perfectly smooth with sand paper and wiped clean.

Piece of clean fine cotton cloth and cotton wool made into shape of pad shall be used to apply polish. The pad shall be moistened with polish and rubbed hard on the surface applying the polish sparingly but uniformly and completely over the entire surface. It shall be allowed to dry and another coat applied in the same way. To give finishing coat, the pad shall be covered with a fresh piece of clean fine cotton cloth, slightly damped with methylated spirit and rubbed lightly and

quickly with a circular motion, till the finished surface attains uniform texture and high gloss.

(b) Wax Polishing: Preparation of surface shall be as in the case of French polish. Wax polish shall either be prepared on site or obtained ready made from market. Polish made on the site shall be prepared from a mixture of pure bees wax, linseed oil, turpentine and varnish in the ratio of 2 : 1 -1/2 ; 1 : 1/2 by weight. The bees wax and the boiled linseed oil shall be heated over slow fire. When the wax is completely dissolved, the mixture shall be cooled till it is just warm and turpentine and varnish added to it in the required proportions and the entire mixture is well stirred.

Surface shall be prepared as described under "French Polishing" except that the final rubbing shall be done with sand paper which has been slightly moistened with linseed oil.

Mixture or polish shall be applied evenly, with a clean cloth pad in such a way that no blank patches are left, and rubbed continuously for half an hour. When the surface is quite dry a second coat shall be applied in the same manner and rubbed continuously for an hour or until the surface is dry. Final coat shall then be applied and rubbed for two hours or more if necessary, until the surface has assumed a uniform gloss and is quite dry showing no sign of stickiness when touched. Gloss of the polish depends on the amount of rubbing, therefore rubbing must be continuous and with uniform pressure and frequent changes in direction.

Varnishing: Preparation of surfaces shall be carried out as in case of polishing. Varnish shall be of approved make and shall contain 3 parts of copal, 5 parts of turpentine and 2 parts of Linseed oil. After the linseed oil has dried two coats of varnish of approved manufacturer shall be applied at sufficient interval of time. If the surface fails to produce the required gloss, an additional coat shall be applied without any extra cost.

I) Washing/waterproofing treatment to external surfaces

The external surface shall be scrubbed and washed with commercial quality muriatic acid to remove completely fungus growth, black spots, etc. The surface shall then be allowed to dry. The silicon water repellent solution shall be applied till the surface is completely dry and free from dust, moss and other impurities.

Silicon water repellent, to be used for impregnating exterior wall surface shall be 'Sylitrit 772" manufactured by M/s. Metroak Pvt. Ltd. 23 Lenin Sarani, Calcutta 13, or equivalent, diluted with water as per manufacturer's specification.

VI) REPLASTERING

The mortar of the patch, where the existing plaster has cracked, crumbled or sounds hollow when gently tapped on the surface, shall be removed. The patch shall be cut out to a square or rectangular shape marked on the wall as directed by the Engineer-in-Charge or his authorized representative. The edges shall be slightly under cut to provide a neat joint. The masonry joints which become exposed after removal of oldplaster shall be raked out to a minimum depth of 10 mm in the case of brick work and 20 mm in the case of stone work. The raking shall be carried out uniformly with a raking tool and not with a basuli, and loose mortar dusted off. The surface shall then be thoroughly washed with water, and kept wet till plastering is commenced. Mortar of 1 : 4 mix with the specified sand shall be used, cement finished with a

floating coat
of neat cement of mix with water proofing compound of approved quality in proportion recommended by the manufacturer. The method of application shall be as per the standards for single coat plaster work of the specified mix and all dismantled mortar & rubbish etc. shall be disposed off within 24 hours after dismantling promptly as directed by the Engineer-in-Charge.

VII) BRICKWORK

- The bricks shall be table moulded first quality of regular and uniform size, shape and colour, uniformly well burnt throughout but not over burnt. They shall have plane rectangular faces with parallel sides and sharp straight and right angled edges. They shall be free from cracks or other flows. They shall have a frog of 10mm depth on one of their flat faces.
- They shall give a clear metallic ringing sound when struck.
- They shall show a fine grained, uniform homogeneous and dense texture on fracture and be free from lumps of lime, lamination, cracks, air holes, soluble salts causing efflorescence or other defects which may in any way impair their strength, durability, appearance or usefulness for the purpose intended. They shall not have any part underburnt. They shall not break when thrown on the ground on their flat face in a saturated condition from a height of 60 cm.
- The size of brick shall be 23 x 11.5 x 7.5 cm. Only bricks of one standard size shall be used on one work unless specially permitted. The following tolerances are permitted in the standard conventional size adopted on a particular work:

Length	plus or minus	3 mm (about 1/8")
Breadth	plus or minus	1.5 mm (about 1/15")
Depth	plus or minus	1.5 mm (about 1/16")

After immersion in water, absorption by weight shall not exceed 20 per cent of the dry weight of the brick when tested according to I.S. S.No.10771957.

VIII) GENERAL POINTS TO BE CONSIDERED DURING ON RETROFITTING:

- The repairing / retrofitting work of the building has to be executed in stages; one at a time.
- All unwanted vegetation growth in and around the structural elements has to be immediately removed.
- Remove the debris in slab regions of the building by scrapping off the existing water proofing coating and also tile coating if any and expose the concrete.
- During the maintenance work, utmost care should be taken to provide proper support to slab and beams of building by providing steel formwork and props using steel sections with proper base plate and foundation in order to relieve the RCC elements from stresses due to load coming over it.
- Examine thoroughly whether the inside concrete already existing in all the structural elements are of good quality and not loosely placed or having honey

combing. Apply slight tapping on to surface of the concrete by using hammer and allow the distressed concrete to spall from the surface. If it is found that the inside portion of concrete is not in usable stage, remove that portion of concrete too and relay using M25 grade concrete or micro concrete immediately.

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.

Place :

DATE :

(SIGNATURE OF THE TENDERER)

ADDRESS :

NAME and SEAL

LIST OF APPROVED MAKE 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 shall be considered while quoting the rates.

Sl No	Material	Brand/ Make
01	Epoxy Grout Material	Tite Injection Grout EP of M/s X Calibur / Sikadur 52 of M/s Sika / Shell Grout 2K of M/s Supreme Bituchem India Pvt Ltd or equivalent
02	Shotcreting Bond Coat	Cera Latex SBR or equivalent
03	Polymer Modified SBR Latex	SIKA Latex or Equivalent
04	Zinc Primer	NITO Zinc primer or Equivalent
05	Reinforcement Steel	TATA, JINDAL JSW Panther, SAIL, VIZAG
06	Cement	ACC Cements, Ultra-tech Cements, Gujarat Ambuja or approved equivalent
07	Msand	Well washed M sand for masonry work All M Sand to be free from Quarry dust
08	Plastering Sand	Well washed Plastering MSand for plastering works. All M Sand to be free from Quarry dust
09	Waterproofing compound	FOSROC Brushbond RX
10	Paint	Asian Paints/Jotun or equivalent
11	Putty	Birla or equivalent

I / We agree to execute the work with the supply of materials as per the specifications indicated above.

Place :

DATE :

(SIGNATURE OF THE TENDERER)

ADDRESS :

ANNEXURE -I
ARTICLES OF AGREEMENT
(On a Rs 200/- Non- Judicial stamp paper)

THIS ARTICLES OF AGREEMENT made on the _____ day of the month _____ between the National Bank for Agriculture and Rural Development having its Kerala Regional Office at Thiruvananthapuram- 695001 (hereinafter referred to as “the Employer”) on the one part

and

(hereinafter referred to as “the Contractor”) on the other.

WHEREAS the Employer is desirous of carrying out the.....

.... has caused specifications describing the work to be done.

AND WHEREAS the said specifications and the Schedule of Quantities have been signed by or on behalf of the parties hereto. AND WHEREAS the Contractor has agreed to execute upon the subject to the Conditions set forth herein and to the conditions set forth in the Special Conditions and in the Schedule of Quantities and Conditions of Contract (all of which are collectively hereinafter referred to as “the said Conditions”) the works shown upon the said Drawings and / or described in the said specifications and included in the Schedules of Quantities at the respective rates therein set forth amounting to the sum as therein arrived at or such other sum as shall become payable thereunder (herein after referred to as “the said Contract Amount”).

NOW IT IS HEREBY AGREED AS FOLLOWS

1. In consideration of the said Contract Amount to be paid at the times and in the manner set forth in the said Conditions, the Contractor shall upon and subject to the said Conditions execute and complete the work shown upon the said drawings and described in the said Specifications and the Schedule of Quantities.
2. The Employer shall pay the Contractor the said Contract Amount, or such other sum as shall become payable, at the times and in the manner specified in the said conditions.
3. In the said conditions herein before mentioned, the Chief General Manager, NABARD Kerala Regional Office, Thiruvananthapuram shall act on behalf of the employer.

4. The said Conditions and Appendix thereto shall be read and construed as forming part of this Agreement, and the parties hereto shall respectively abide by, submit themselves to the said Conditions and perform the agreements on their part respectively in the said Conditions contained.
5. The agreement and documents mentioned herein shall form the basis of this Contract.
6. This Contract is neither a fixed Lump sum Contract nor a piece work Contract but is a Contract to carry out renovation work to be paid for according to actual measured quantities at the rates contained in the Schedule of Rates and probable quantities or as provided in the said conditions.
7. The Contractor shall make good any damages done to walls, floors, etc., after the completion of such works.
8. The Employer reserves to itself the right of altering the nature of the work by adding to or omitting any items of work 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 Contractor hereby agrees to commence the work soon after the site is handed over to him or from tenth day after the date of issue of formal work orders as provided for in the said Conditions whichever is later and to complete the entire work within three months subject nevertheless to the provisions for extension of time.
10. All payments by the Employer under this contract will be made only at Thiruvananthapuram.
11. All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Thiruvananthapuram, and only Courts at Thiruvananthapuram shall have jurisdiction to determine the same. It is agreed that the Contractor shall not delay the carrying out of the works by reason of any such matter, question or disputes being referred to the Courts.
12. That the several parts of the Contract have been read by the Contractor and fully understood by the Contractor.

Signature Clause:

SIGNED AND DELIVERED BY

By the hand of shri

(Name and Signature)

_____ in the presence of

(1) _____

Address _____

(2) _____

Address _____

(Witness)

**SIGNED AND DELIVERED BY THE NATIONAL BANK FOR
AGRICULTURE AND RURAL DEVELOPMENT**

By the hand of Shri

(Name and Designation)

_____ in the presence of

(1) _____

Address _____

(2)

_____ Address

_____ (witness)

ANNEXURE-II

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 / Tenderer:

Name:

Address:

Seal:

Place:

Date:

ANNEXURE - III
LETTER OF INDEMNITY AND UNDERTAKING
(to be submitted by the successful Tenderer)

The Chief General Manager,
National Bank for Agriculture and Rural Development
Kerala Regional Office,
Punnen Road, Statue, Post Box No.220
Thiruvananthapuram -695001

Dear Sir,

'Tender for Undertaking Repair, Rehabilitation and Repainting works in C Block of the NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram.'

WHEREAS the National Bank for Agriculture and Rural Development, a corporation established under the National Bank for Agriculture and Rural Development Act, 1981 (hereinafter referred to as 'NABARD') has expressed desire to avail _____(type of procurement) at____(place) as per the Schedule hereunder written and which are hereinafter for brevity sake referred to as _____, subject to our furnishing declarations and indemnity as contained hereafter.

NOW THEREFORE THIS LETTER OR INDEMNITY WITNESSETH THAT:

We, the_____(Tenderer) hereby declare and certify that we are the rightful owners/ licensees of the said article/ service/ solution offered for sale to NABARD and that the sale of the said article/ service/ solution to NABARD by us and the use thereof by NABARD does not infringe the property or other intellectual property or copy rights of any other person and that the same does not infringe the Copy of Rights Act, 1957 or any other Act for the time being in force.

We, the said_____(Tenderer) hereby agree to indemnify and keep indemnified and harmless NABARD, its Officers, servants, agents and other authorized persons against any action that may be brought against us for infringement of the right of property or other intellectual property or copy rights in respect of the said systems package supplied by us to NABARD and will defend the same at our cost and consequences and will pay or reimburse NABARD, its officers, servants, agents and other authorized persons from all costs and other expenses that they may be put to or incur in that connection in accordance with the terms as provided for within the end User License Agreement that accompanies the said systems.

We, the said_____ (Tenderer) hereby also agree to indemnify and keep indemnified and harmless NABARD, its Officers, servants, agents and other authorized persons against any third party claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by our employees or agents, or by any other third party resulting from or by any action, omission, or operation conducted by or on behalf of us and against any and all claims by employees, workmen, contractors, subcontractors, suppliers, agent(s), employed, engaged, or otherwise working for us, in respect of any and all claims under the Labour Laws including wages, salaries, remuneration, compensation or like.

SCHEDULE (Please list all the hardware supplied to NABARD for providing this service on a separate sheet)

Yours faithfully

(Name and Designation) of the Tenderer

Annexure IV

Basic Information

S.No.	Particulars	Tenderers Response
1.	Name of the Applicant/ Organization and address of Registered Office	
2.	Year of establishment	
3	Type of the Organisation (like Sole Proprietorship, Partnership, Private Limited Company, Limited Company, or Cooperative Society, etc.)	
4.	Name of the Proprietor/ Partners/ Directors of the Organisation/ Firm	1. 2. 3. 4. 5.
5.	Details of Registration a) Whether registered as partnership firm or company, etc. b) Name of Registering Authority c) Registration No. d) Date of Registration	a) b) c) d)
6.	Whether registered/ empaneled for similar works with: a) Government/ Semi-Government/ Municipal Authorities or any other Public Organisation (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	
8.	a) Areas of business activities, other than civil construction, if any, and b) Place and address of such business	a) b)
9.	a) Address of office through which the proposed work of the Bank will be handled; and b) Name & designation of Officer-in-charge	
10.	Adequate and satisfactory evidence to indicate financial capacity of the person/ Organisation to undertake the said construction work	
11.	a) Names of bankers b) Full address of bankers	
12.	Yearly turnover of the Organisation during the last three years	2020-21 Rs.lakh 2019-20 Rs.lakh 2018-19 Rs.

	lakh
13.	Will the applicant be able to provide Bank Guarantee or other equivalent form of security from a scheduled nationalized bank? (Yes/No)	
14.	Number of supplementary sheets attached	
15.	<p>a) Whether any civil suit/ litigation has arisen in the contracts executed by the applicant during the last five years (Yes/No)</p> <p>b) If yes, please give following information (suit-wise/ project-wise):</p> <p>i) Name of the Project & Organisation</p> <p>ii) Nature of work</p> <p>iii) Work Order No. and Date</p> <p>iv) Present stage of work</p> <p>v) Value of contract</p> <p>vi) Brief details of litigation</p>	

Notes: Please attach self-certified copies of the following documents:

- Latest Income Tax Clearance Certificate
- Audited Balance Sheet and Profit & Loss Account for the past three years.

Place:

DATE:

(SIGNATURE OF THE TENDERER)
ADDRESS:

NAME & SEAL

ANNEXURE- IX PROFORMA FOR ELECTRONIC PAYMENT

Details of Bank account to be furnished by the contractor/ service provider for effecting payment

Name and address of contractor/ service provider with phone nos.

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.....
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1	Name of the account holder (As appearing in the Bank account)	
2	Name of the Bank	
3	Name of the Branch	
4	Account number	
5	RTGS/ NEFT/ IFS Code	
6	Type of account (Savings, current, etc.)	
7	PAN Number	
8	GSTN Number	

Please attach (1) a photocopy of one cancelled cheque leaf of the above Bank account and (2) copy of PAN card and (3) allotment letter / registration letter under GSTN.

Place:

DATE:

(SIGNATURE OF THE TENDERER)

ADDRESS:

NAME