



**The Navadarsha Co-operative Housing Society Limited
(TNCHSL)**

Srimantapur, Birati, PO-Nilachal, Kolkata 700134
www.navadarsha.in



**Name of Work : "Special Repair & Maintenance of Internal
Bituminous Road at Navadarsha Co-operative Housing Society
Ltd."**

Srimantapur, Birati, PO-Nilachal, Kolkata 700134"

NOTICE INVITING TENDER(NIT)

NIT Ref No.TNCHSL/CIVIL/2025-26/001

Dated:10thDecember'2025

Secretary of TNCHSL, Srimantapur invites sealed tender (Two bid system) from the experienced and resourceful civil contractor for execution of the Road work for Internal Roads.

Name of Work : "Special Repair & Maintenance of Internal Bituminous Road at Navadarsha Co-operative Housing Society Ltd."

Site of Work: Srimantapur, Birati, PO-Nilachal, Kolkata 700134

Location : Navadarsha Premises

Estimated Cost : INR 70,34,630/- (Rupees Seventy Lakh Thirty Four Thousand Six Hundred and Thirty Only)

Tender Fees : INR 1000 /- (Rupees One Thousand only)

Earnest Money (EMD) : INR 140693/-(Rupees One Lakh Forty Thousand Six Hundred Ninety Three only)

Date of publication	: - 10/12/2025
Issue of Tender paper	: - 15/12/2025
Last date for Application of Tender	: - 30/12/2025 at 3:00 PM
Pre-bid Meeting	: - 21/12/2025 at 1:00 PM
Last date for submission of tender	: - 30/12/2025 at 3:30 PM
Date & time of opening of Technical Bid	: - 30/12/2025 at 4:00 PM
Date & time of opening of Financial bid	: - 30/12/2025 at 4:00 PM

Tender related documents shall be obtained from the office of the Society between 11 A.M to 3.00 P.M. on all working days, except Monday. For submitting the tender document, please do deposit in the box at the office of The Navadarsha Co-operative Housing Society Limited. All updates/corrigendum/amendment will be uploaded on website of TNCHSL (www.navadarsha.in)


(Samir Kumar Chowdhury)

Secretary
The Navadarsha Co-Operative
Housing Society Ltd.
Srimantapur, Birati

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**Name of Work : “Special Repair & Maintenance of Internal
Bituminous Road at Navadarsha Co-operative Housing Society
Ltd.”**

PART -I: TECHNICAL BID

NIT Ref No.TNCHSL/CIVIL/2025-26/001 Dated 10th December' 2025

SEC-I: GENERAL INSTRUCTION

INTRODUCTION:

The Navadarsha Co-operative Housing Society Limited is a registered Co-operative Society inviting sealed two bid tenders from reputed firm/contractors for Special Repair & Maintenance of Internal Bituminous Road located at Srimantapur, Birati, PO-Nilachal, Kolkata-700134

- i. All the interested parties are advised to go through this tender document carefully and inspect the Internal roads that are to be constructed to have an adequate idea / information about the work before submission of tender. Contractors are requested to contact our concerned person Shri Samir Kumar Chowdhury from (Tuesday to Sunday) between 11.00 AM to 3.00 PM
- ii. The tender should be submitted in two-part bid system i.e., Technical Bid and Financial Bid. Both Technical and Financial Bid should be submitted in two separate sealed envelopes superscribed as Technical Bid and Financial Bid with Tender Ref No. These two sealed separate envelopes should be put in a third sealed envelope and should be superscribed as **“Special Repair & Maintenance of Internal Bituminous Road at Navadarsha Co-operative Housing Society Ltd.”**

EARNEST MONEY DEPOSIT (EMD):

140693 /- (Rupees One Lakh Forty Thousand Six Hundred Ninety Three only) to be deposited along with Technical Bid by crossed demand draft / banker's cheque favouring “The Navadarsha Co-operative Housing Society Limited” payable at Kolkata. Please note that bid received without EMD will not be considered and will be summarily rejected. The EMD will be refunded to the unsuccessful bidders immediately after finalization of the contract. No interest will be paid on the EMD.

COST OF TENDER:

Tender fee of INR 1000.00 (Non-refundable) by cash/crossed demand draft / banker's cheque favouring “The Navadarsha Co-operative Housing Society Limited” payable at Kolkata shall be deposited along with Technical Bid. Tender document can be collected from office on working days (Tuesday to Sunday from 11 AM to 3 P M) by making payment of tender fee in cash. Copy of the Money receipt should be submitted along with technical bid. Please note that bid received without tender fee will not be considered and will be summarily rejected.

iv. **TECHNICAL BID** should contain EMD, Tender Fee, relevant documents in support of eligibility criteria, terms and conditions with authorized signature and seal as a token of acceptance laid down in the tender document and work program schedule.

v. **FINANCIAL BID:**

The tenderer shall quote for all the items as per schedule of quantities of Financial Bid, failing which the bid shall be considered non responsive, incomplete and will be summarily rejected. Rates for the items shall be quoted in the Financial Bid of this tender, and the amount for each item shall be calculated accordingly. The required rates must be provided both in figures and in words. Special care should be taken to write the rates in figures as well as in words. In case of any dispute, rates appearing in words shall be treated final.

vi. **BID PRICE:**

The Rate should be the total composite price inclusive of cost of manpower, material, freight, loading, unloading, taxes, duties, cess, levies, insurance etc. including GST. No escalation of whatsoever nature, shall be payable in future due to any revision amendment in any act/ statute governing this contract. "The Navadarsha Co-operative Housing Society Limited" will not entertain any claim whatsoever in respect of the same. The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paise and less and considering more than fifty paise as rupee one.

vii. **DISCOUNT:**

if any, offered by the bidders **shall not be considered** at the time of evaluation of Financial Bid by the evaluation committee. Bidders desiring to offer any discount shall therefore consider while preparing bid and shall quote clearly net price taking all such factors like discount, free supply etc.

viii. **ELIGIBILITY CRITERIA:**

The tenderer should have and submit relevant documents along with Technical Bid for participation in this tender as per below:

- 1) Copy of valid registration certificate with local authorities/professional bodies/ CPWD/ PWD (states) / MES/ Railways/ BRO/ any other appropriate Govt. Body as civil contractor in appropriate class and categories should be submitted.
- 2) Valid registration copies of PAN, GST, P.Tax, ESIC, and EPF.
- 3) Copy of certificate of incorporation/registration of firm certificate/memorandum of Articles of Association Partnership deed Proprietorship deed/Declaration of proprietorship etc. in support of legal entity of the tenderer as the case may be demanded by "The Navadarsha Co-operative Housing Society Limited" and if required, the same shall be produced by tenderers.
- 4) Copy of Income Tax return for the last three financial years. Audited balance sheet for the last three years shall be attached.
- 5) Average annual turn-over for the last 3 financial year should be more than 2 crore

EXPERIENCE:

Contractor should have at least the following working experience with **Central Govt./ State Govt./ Autonomous govt. bodies/PSU** during the last 7 years as on 31st November 2025 . In support of experience **Work Order/ agreement with completion certificate** must be submitted along with technical bid:

- Three similar completed works costing not less than 40% of the above mentioned Estimated cost
- OR Two similar completed works not less than 60% of the above mentioned Estimated cost
- OR One similar completed work costing not less than 80% of the above mentioned Estimated cost

(Note: Similar works shall mean works related to the road, building construction or maintenance of roads.)

The above experience should be provided in the following format:

Sl. No.	Worked with the following organizations (mention the name of)	Value of the Work Order/ Contract
1		
2		
3		

6) Average annual financial turn over for the last 3 years ending 31st March of the previous financial year should be equal or more than INR 2(Two) Crore . Audited balance sheet for the last three years should be attached.

7) Copy of any other registration, which is mandatory for such agencies stipulated by concerned authorities from time to time.

8) A statement of up to date payment details of ESIC and EPF should be submitted.

BLACK LIST:

Bidder should submit declaration in the form of notarized affidavit on non-judicial stamp paper that he is not blacklisted by local authorities/professional bodies CPWD/PWD (states)/ MES/ Railways/ BRO/ competent local authorities / professional bodies any other statutory bodies fully / partly governed by the Government.

EVALUATION OF BIDS:

The technical bid will be scrutinized by the Technical Evaluation Committee as constituted by "TNCHSL" to check all the requisite and relevant documents and their authenticity at the stipulated date and time. Necessary clarification on technical bid will be sought by email/ hard copy in the agency's letter head as the case may be. After evaluation, the technically qualified bidders will be informed about the date and time of opening the financial bids. Bidders may choose to be present in the opening of the Technical and financial bid meeting. Maximum one authorized persons will be allowed in the bid opening meeting. Upon evaluation of the offers the notification on award of contract will be intimated to the successful tenderer.

For any clarification, if required, please email : office@navadarsha.in

PREBID MEETING:

The Bidders or their official representatives are invited to attend a pre-bid meeting on date, time and venue specified as below:

Date: - 21/12/2025

Time: - 1:00 PM Ist

Venue: Society office of "The Navadarsha Co-operative Housing Society Limited"

SEC-II: SCOPE OF WORK

- i. The scope of work includes civil Special Repair & Maintenance of Internal Bituminous Road of “The Navadarsha Co-operative Housing Society Limited” (TNCHSL).
 - ii. For timely completion of the work the bidder/contractor must have to deploy all tools & tackles, plants, machineries, equipment and materials required to perform the work simultaneously.
 - iii. The agency should ensure all safety precautions while execution of the repair and renovation work.
 - iv. The agency should ensure necessary labour license issued by appropriate Govt. for the execution of the work. Copy of documents relating thereto will be produced to “TNCHSL” on demand.
 - v. Agency will maintain manpower muster roll and wage register.
 - vi. The contractor will provide at least site supervisor/ Civil Engineer at site. Site supervisor/ civil engineer should have adequate knowledge in civil work and the Civil Engineer must provide respective certificates.
 - vii. Any other additional work apart of schedule of quantity, if required, will be executed after consultation with authorized person of “TNCHSL”.
 - viii. All temporary arrangements, staging, working platforms, safety arrangements etc. is to be provided to carry out the work at their own cost.
 - ix. Shelter for labours: The contractor shall arrange and maintain suitable shelter facilities for all labours and other workers engaged in the work.
 - x. Drinking water: The Contractor shall provide and maintain water with drinking purity in adequate quantity place at suitable location of work site easily accessible to labourers at all times.
-

SEC-III: TERMS AND CONDITIONS

1. DEFINITION OF TERMS:

CONTRACTOR: The Contractor shall mean the Bidder who will be awarded with the contract by "TNCHSL" and shall include the contractor's executors, administrators, successors and permitted assignees.

Equipment/materials shall mean and include all type of construction equipment & materials etc. required for true and satisfactory completion of the work under this contract.

2. AUTHORISED PERSON OF "The Navadarsha Co-operative Housing Society Limited" :

Shall mean person / Engineer engaged by "TNCHSL" for the tender work.

3. The construction work shall be carried out following CPWD / PWD norms and specifications. Whenever, the same are not available, Engineering practice as directed by Engineer, engaged by "TNCHSL" shall be followed.

4. **VALIDITY OF BID:** The bid should be valid for **120 days** from the due date of the tender.

5. **COMPLETION OF WORK:** Time is very essential for this work. The work should be completed within **3 MONTHS** from the date of issue of the Work Order. However, contractors are required to complete the job at least 80% of the schedule of quantity **within 1 month**.

6. All the documents and photocopies submitted by tenderer /bidder should be attested, legible, signed and stamped by authorized signatory, otherwise the bid is likely to be rejected.

7. **PERFORMANCE GUARANTY:** The successful bidder, whose tender is accepted upon finalization of the financial bid and prior to issuance of the work order, shall furnish a **Performance Guarantee** amounting to **5% (Five Percent) of the value of the work order**.

The performance guarantee shall be submitted **in the form of a fixed deposit** and shall be deposited **at the time of issuing the letter of acceptance (LoA)**.

The performance guarantee shall remain valid until the satisfactory completion of the work, including any applicable defect liability period, unless otherwise specified in the tender conditions.

The performance guarantee amount shall be **refunded without interest to the contractor after successful completion of the work** and upon issuance of a **completion certificate** by the Engineering in charge.

8. **SECURITY DEPOSIT:** The successful bidder shall furnish a security deposit equivalent to **5% of contract value** that shall be deducted at the **@ 5% from each running account(R/A) bill** of the contractor. The security deposit will be **refunded only after completion of the defect liability period(DLP) of 3 (Three) years**, subject to the following conditions:

- The contractor shall rectify, at his own cost, any defects observed during the defect liability period.
- No labour related complaints shall be received by the society.

9. **DEFECT LIABILITY PERIOD:** The contractor shall provide a **maintenance and performance guarantee** for a period of **3 (three) years** from the date of completion and handing over of the work. The guarantee shall cover the contractor's full financial responsibility for rectification of any defects, deficiencies or damages arising out of **poor workmanship, inferior quality/ sub-standard materials** discovered within the guarantee period. During this period, the contractor shall, at his own cost and without delay, make good any such defects as may be

notified by the society. After satisfactory completion of work withheld security deposit (5% of the tender amount) will be returned.

The contractor is required to sign the agreement and begin work within ten days from the date of receipt of the acceptance of work order.

The contractor shall prepare and submit a time and progress chart.

10. FORFEITURE OF PERFORMANCE SECURITY DEPOSIT: Performance security will be forfeited if any amount payable by the contractor is required to be recovered on account of any clause arising out of /contravening the Work Order/Contract.

11. FORFEITURE OF EMD : Earnest money shall be forfeited in case of following :

- If during the period of validity, the bidder withdraws/modifies its bid as a whole or in part.
- If the bidder deviates from any clarification/confirmation given by him subsequent to submission of his bid.
 - In case of successful bidder, if the Bidder fails to accept Work Order unconditionally.

12. ARITHMETICAL ERROR: Arithmetical errors shall be rectified on the following basis: If there is any discrepancy between the unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected by the purchaser. If there is a discrepancy between words and figures, the amount in words shall prevail. If the supplier does not accept the correction of the errors, his bid shall stand rejected.

13. MEASUREMENTS AND TERMS OF PAYMENT: All items of work carried out by the contractor in accordance with the provision of the order having a financial value shall be entered in the computerized measurement book (CMB)/ log book etc. as per CPWD format so that a complete record is obtained of all works performed under the order and the value of work can be ascertained and determined there from. Measurement shall be taken jointly and every measurement thus taken shall be signed and dated by both the parties.

Payment will be made as per actual measurement of items works after completion of work. Bill should be generated on the required format and payment shall be released **within thirty days** of its submission if all formalities as per terms of the contract are maintained.

However, payment of final bill shall be released after submission of completion certificate of the job, verification of overdue/overpayment if any and fulfilment of all contractual obligations by the contractor.

14. PAYMENT OF NON-SCHEDULED ITEMS: Payment will be made for various items as per existing CPWD/ PWD (state) rate. If not available in CPWD/ PWD payment will be made based on prevailing market rate with submission of rate analysis and admitted by "The Navadarsha Co-operative Housing Society Limited" before execution of work.

15. OVERPAYMENT: "The Navadarsha Co-operative Housing Society Limited" reserves the right to recover/ enforce recovery of any overpayments detected after payment as a result of post-payment audit or technical examination or by any other means, notwithstanding the fact that the amount of disputed item, if any, of the contractor exceeds the amount of such overpayments and irrespective of the fact whether such disputed claims of the contractor are subject matter of arbitration or not. The amount of such overpayment may be recovered

from subsequent bill/ security deposit.

16. EXTENSION OF TIME: If the work is suspended due to reasons beyond the control of the contractor, the contractor shall immediately give notice in writing within 7 (seven) days to “The Navadarsha Co-operative Housing Society Limited” for each occasion. On receipt of such notice, “The Navadarsha Co-operative Housing Society Limited” may verify the matter and agree to extend the completion period as may be reasonable but without prejudice to other terms and conditions of the contract as the case may be if the reasons behind the suspension of work are found to be justified.

17. LIQUIDATED DAMAGES: If the contractor fails to complete the work successfully within the time specified in the contract or any extension thereof, “The Navadarsha Co-operative Housing Society Limited” shall recover from the contractor as liquidated damages a sum of half percent (0.5%) of the contract value of works for each calendar week of delay or part thereof. Delay relating to Force majeure clause is not applicable for recovery.

The total recovery against liquidated damage shall not exceed ten percent (10%) of the contract value of the work. An extension of time without imposition of liquidated damage, may be granted by “The Navadarsha Co-operative Housing Society Limited” for delay in execution of work provided there is no fault whatsoever on the part of the contractor. Such extension may only be granted on the basis of application to be submitted by the contractor who has to establish that the extension of time required by him was not due to his fault.

18. ACCEPTANCE OF THE ORDER: The successful bidder has to submit acceptance of the order within 5 days from the date of issue of the order.

19. WORK PROGRAMME SCHEDULE: A chart with time schedule of the work should be **submitted along with Technical Bid.**

20. VARIATION, OMISSION, ADDITION & ALTERATION: The Contractor shall not modify the work until and unless approved by “The Navadarsha Co-operative Housing Society Limited” in writing. The quantities provided in the Schedule of work are provisional only, which may vary up to any extent or may be deleted altogether. The quoted rate of each item shall remain firm till completion of contract. “The Navadarsha Co-operative Housing Society Limited” reserves the right to alter, amend, and omit or otherwise vary the quantities as may be necessary. Payment shall be made as per actual execution.

21. MINOR WORK: For any additional minor work if required to be done beyond the schedule of works specified in this tender, separate order will be issued and payment for the same will be made as per existing CPWD rate. If not available in CPWD payment will be made based on prevailing market rate with submission of rate analysis and admitted by “The Navadarsha Co-operative Housing Society Limited”.

22. MATERIAL: Material should be used for repair and renovation work as per technical specifications specified in Sec-V. For other material not containing in the specifications will be as per relevant ISI standard and good quality subject to prior approval of “The Navadarsha Co-operative Housing Society Limited”. The material shall be in original packing clearly indicating manufacturing date, expiry date & price etc. Any item found defective / kind specified in the contract and/ or is unfit for work should be replaced free of cost to the satisfaction of “The

Navadarsha Co-operative Housing Society Limited" authority.

23. Cement used for the work should not be older than Two month from the date of manufacture. The contractor should purchase the cement from authorized dealer and submit the test certificates/ vouchers prior to execution of the work.

24. Electricity and water for execution of the work will be supplied by "TNCHSL", the charges shall be borne by the contractor at the **rate of 0.5%** on the executed value. The contractor has to make his own arrangement for use of the same including extending temporarily lines etc. The contractor cannot claim any compensation for any failure in such supply caused due to any reason whatsoever in case of non-availability of electricity and water for construction purpose from "The Navadarsha Co-operative Housing Society Limited". The contractor will have to arrange for the same at his own cost.

25. HOLIDAY WORK: If the work is required to be carried out in two shifts and/or in Sundays & Holidays, prior written permission from "The Navadarsha Co-operative Housing Society Limited" shall have to be obtained.

26. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection. Tender received by email / fax will not be considered.

27. Tender must be submitted within due date. Tender received beyond the due date by any other means like postal delay etc. will not be considered.

28. The Rates quoted by the tenderer must hold good till the completion of work and shall not be subjected to escalation due to increase in local market rates of materials and labour. No claim on this account whatsoever shall be entertained at any stage including the extended period, if any.

29. FORCE MAJEURE: The Contractor shall not be liable to pay any liquidated damage for delay/failure to perform the contract for reasons of force majeure such as acts of God, acts of the public enemy, acts of Governments, fire, flood, epidemics, quarantine restriction, strikes, freight embargos and provided that the contractor shall within 7(seven) days from the beginning of such delay notify "The Navadarsha Co-operative Housing Society Limited" in writing of the cause of delay. "The Navadarsha Co-operative Housing Society Limited" shall verify the facts and grant such extension as found to be justified without imposing liquidated damage. The department shall not be responsible or liable to pay any compensation for any interruption in your work at the site due to strike, lockout, riot earthquake, flood, cyclone or civil commotion or any other force of accident due to any reason beyond control. "THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED" shall not be held responsible to or liable to pay for any interruption in your work at the site arising out of resistance from the local public due to any resistance towards work.

30. The contractor shall have to attend the local bodies like Municipality/ Police/ CPWD/ Labour officer and all other Government authorities to fulfil all the requirements to execute the order

31. REMOVAL OF PERSON EMPLOYED AT SITE: "The Navadarsha Co-operative Housing Society Limited" shall be at liberty to ask the contractor to remove from the site any person,

employed by the contractor in the execution of work, for misconducts, in competent or negligent in the proper performance of his duties and such persons shall not be again employed upon the work without the permission of "The Navadarsha Co-operative Housing Society Limited".

32. "The Navadarsha Co-operative Housing Society Limited" will be at liberty to take samples during the course of execution of work, if necessary and get the same tested to ascertain the quality conforming to relevant specifications. The cost of sample and the charges for the testing will have to be borne by the contractor.

33. Irrespective of rates quoted by the bidder, the contractor shall be solely responsible for payment of Minimum Wages as stipulated by the Government from time to time.

34. The contractor will take utmost care to prevent from any damage to the property of "The Navadarsha Co-operative Housing Society Limited" while execution of work. If any damage arise apart from repair of maintenance work will be rectified by contractor at his own cost to the satisfaction of "The Navadarsha Co-operative Housing Society Limited".

35. AWARD OF WORK: "The Navadarsha Co-operative Housing Society Limited" will not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tenders received and to place order to one or more firms without assigning any reason thereof. The notification of award of contract will be made in writing to the best responsive bidder who is technically suitable and financially acceptable after evaluation of financial bid.

36. As the work will have to be carried out in building and area in use the contractor shall ensure a) That the normal functioning of Employer is not affected as far as possible b) That the work is carried out in an orderly manner without noise and obstruction to flow of traffic. c) Contractor will arrange photo identity card for his workers with approval of "The Navadarsha Co-operative Housing Society Limited".

37. Safety Measures: The contractor shall ensure safety of his workers, others at site of work and shall be responsible for any consequence arising out of execution of the Repair and Maintenance work. The contractor shall obtain valid license issued by appropriate Govt to comply with the provisions as per the contract labour to execute the work.

38. Workmen's Compensation for accident or injury to any workman:

"TNCHSL" shall not be liable for damages or compensation payable as per provision of law in respect or consequence of any accident or injury to any workmen or other person in the employment of the contractor. The contractor shall have to pay all claims, demands, preceding costs, charges and expenses whatsoever in respect thereof or in relation thereto. Insurance policy covering as per provisions of Workmen's compensation act for all the workmen to be engaged by the contractor is to be made by him. Apart from the above workmen compensation for workers, third party insurance will also be made.

Copy of the documents relating to the above effect should be produced to "TNCHSL" on demand.

39. CLEARING SITE ON COMPLETION: On Completion of the work the contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary work of every kind and leave the whole of the site and work clean and in good and tidy condition to the satisfaction of "The Navadarsha Co-operative Housing Society Limited".

40. TERMINATION OF WORK ORDER: If the contractor neglects or fail to proceed with the work proportionate to the scheduled time of completion or fails to complete the work within scheduled time of completion or within extended time approved by "TNCHSL" and "TNCHSL" shall have right to terminate the order/contract after giving notice in writing to the contractor. If the contractor fails, after 14 (fourteen) days of such notice, to proceed with the work in the manner notified, "The Navadarsha Co-operative Housing Society Limited" shall terminate the contract and call the contractor to take joint measurement along with the Engineer for finished portion of work. If the Contractor does not appear for a joint measurement, measurement taken by "TNCHSL" will be taken as final and bound. In that case, "TNCHSL" shall take possession of the work site and may engage other agency to complete the work. Extra cost, if incurred to get the unfinished work done through other agency, will be realized from him, from his pending bills or performance security deposit or both as case may be. If the contract is terminated as above, the contractor shall have no claim for compensation against "TNCHSL" for any loss or deterioration of any materials that he may have collected or engaged or entered into on account of the work.

41. SETTLEMENT OF DISPUTES: All disputes concerning question of act arising under the contract shall be decided by "The Navadarsha Co-operative Housing Society Limited" on receipt of written appeal by the contractor. Any dispute or differences arising out of or in connection with this contract shall to the extent possible be settled amicably and where settlement cannot be reached then such disputes shall be subject to settlement under the jurisdiction of Calcutta High Court.

42. "TNCHSL" reserves the right to accept or reject any tender or all tenders or part of tender without assigning any reason whatsoever.

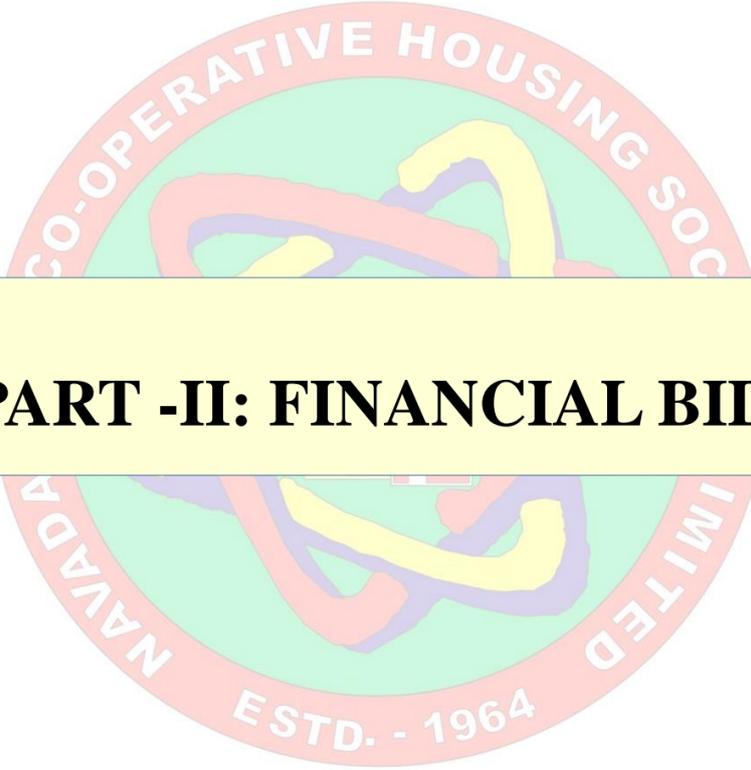
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**The Navadarsha Co-operative Housing Society Limited
(TNCHSL)**

Srimantapur, Birati, PO-Nilachal, Kolkata 700134

www.navadarsha.in

Name of Work : “Special Repair & Maintenance of Internal Bituminous Road of The Navadarsha Co-operative Housing Society Limited”



PART -II: FINANCIAL BID

NIT Ref No.TNCHSL/CIVIL/2025-26/001 Dated 10/12/2025

SEC-IV : TECHNICAL SPECIFICATIONS - (SPECIAL REPAIR & MAINTENANCE OF INTERNAL BITUMINOUS ROAD)

APPROVED MAKE LIST OF MATERIALS TO BE USED WHEREVER APPLICABLE

1) GENERAL

Specifications, scope of work, schedule of rates and drawings for a particular tender shall be read in conjunction with each other. In case of conflicts/contradictions amongst them, the clarification shall be obtained from "The Navadarsha Co-operative Housing Society Limited" whose decision, shall be final & binding. Following procedure shall be followed for the necessary clarification.

A. Item description shall prevail over specifications for item rates when provisions therein are different from those in specifications. Whenever any requirement is not covered in item description but is covered in specifications, the specifications shall be followed in addition to the requirements of item description; no extra payment shall be made to the contractor for executing such item as per specification.

B. Whenever drawing call for requirements different from or additional to those in item description and specification, the decision of "THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED" shall be obtained. However, no extra payment shall be made to the contractor for executing any work incorporating requirements additional to those in item description and specification but covered in applicable drawings or standards. Wherever references have been made to Indian standard or any other specifications the same shall mean to refer to the latest specifications irrespective of any particular edition of such specifications being mentioned in the specifications below in schedule of quantities.

2) WORKMANSHIP

Workmanship shall be to the satisfaction of "THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED". The contractor shall follow the specification, relevant codes & manufacturer's guidelines for achieving desired level of workmanship as per specification & good engineering practice, any executed work not conforming to the specification or not to the satisfaction of "THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED" shall be rectified by the contractor as directed by "THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED". No extra payment shall be made to the contractor for such rectification.

3) MEASUREMENT

Mode of measurement is generally specified in each specification, whenever mode of measurement is not specified, relevant IS- code, shall be applicable.

4) MATERIALS

(a) All materials shall be best of their kind and shall conform to the latest Indian standard

- (b) All materials shall be of approved quality as per samples and from origins approved by “THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED” before ordering & procurement. The contractor shall furnish necessary certificates further to that he shall get the materials tested from approved test house if asked by “THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED” & submit the test certificate at his own cost for which no extra payment shall be made to him. “THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED” shall have the right to reject all or any of the materials intended to be used and such materials shall be immediately removed from the site by the contractor at his own cost without any claim for Compensation etc. due to such rejection.
- (c) A set of specimen samples of all approved materials shall be kept at site with all precautionary measure, cost of which to be borne by the contractor.

5) CEMENT

Unless otherwise specifically called for, cement for RCC and PCC / lean concrete works shall be one the following. The type of cement selected shall be appropriate for the intended use.

Portland slag cement.	IS:455
Portland puzzling cement (fly ash based)	IS:1489(part-1)

PREFERABLE BRAND NAME OF CEMENT COMPANY -

ACC/ ULTRATECH/ LAFARGE/ AMBUJA Cement shall be stored in pucca godown with raised floor and should be water tight.

6) REINFORCEMENT

All steel bars, sections, plates and other miscellaneous steel materials, etc. shall be free from loose mill scales, rust as well as oil, mud, paint or other coatings. The materials, construction, specifications such as dimensions, Shape, Weight, Tolerances, testing etc., for all materials covered under this section. shall conform to respective IS code.

Steel reinforcement shall be stored in a way as to prevent distortion and corrosion. Bars of different classification, sizes and lengths shall be stored separately to facilitate issues in such sizes and lengths as to minimize wastage in cutting from standard lengths.

High strength deformed (HSD) steel bars of minimum grade Fe500. Conforming to IS: -1786 shall be used. PREFERABLE BRAND NAME OF STEEL COMPANY – SAIL / TATA.

7) STONE CHIPS

Stone chips shall be hard, dense, strong, sound, and durable. Clean and uniform in color, they shall also be free from veins. Adherent coatings. Injurious amounts of alkalis, vegetable matters and other deleterious substance such as iron pyrites. Cold, lignite, mica, sea shells etc. As far as possible stones from one single quarry shall be used for anyone work. The strength of stones should be adequate to carry, the imposed load and shall meet all the requirements of relevant IS

Code, taking into accounts the appreciate crushing strength of stone and type of the mortar used. The percentage of water absorption, when tested in accordance with IS: 1124 shall not exceed 5%.

8) COARSE SAND

Shall be either river sand or pit-sand, clean, sharp, strong, angular and composed of hard siliceous materials. It shall be approved by "THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED". The sand shall conform to relevant IS code (IS: 383). Fineness modulus shall not be less than 2.5. The maximum quantity of silt shall not exceed 8%.

9) FINE SAND

This shall be natural river sand. Fineness modules shall not be less than 1.0. The maximum quantity of silt shall not exceed 8%. The sand shall conform to relevant IS specification (IS: 383).

10) BRICKS

Bricks for masonry work shall conform to IS: 1077- specification for common burnt clay building bricks and shall be of class 5.0 (with minimum compressive strength of 5.0 N/Sq mm).

Physical requirements, quality, dimension. Tolerances etc. of common burnt clay building bricks shall conform to the requirements of IS: 1077. Bricks shall be hand- modular or machine -molded and shall be made from suitable soils. The brick shall have smooth rectangular faces with sharp corners and shall be well burnt, sound, hard, tough and uniform in color. These shall be free from cracks, chips, flaws, stone or lumps of any kind. Testing of the bricks shall be done as per IS: 5454 and IS: 3495. Water absorption shall not be more than 20% by its dry weight when soaked in cold water for 24 hours.

11) ADMIXTURES

General requirements for admixtures:

All concrete Admixtures shall comply with the following Indian standards

Specification for integral cements water proofing compounds	IS:2645
Specification for other admixtures for concrete	IS:9103

In case of non-availability of any IS code for testing and acceptability criteria, relevant American/ British or German code shall be applicable. No admixture shall impair the durability of the concrete nor combine with the ingredients to form harmful compound nor increase the risk of corrosion of reinforcement. Use of admixture shall not reduce-the dry density of concrete. Once the proportion of admixtures have been established, strict check shall be maintained not to alter the proportion of ingredients such as water- cement ratio of the design mix during execution. The chloride contents in admixtures shall not exceed 2% by mass of the admixture or 0.03% by mass of the cement.

PREFERABLE BRAND NAME OF BUILDING CHEMICAL COMPANY-SIKA/FOSROC/Dr. FIXIT/CHOKSEY

12) WATER PROOFING COMPOUNDS

The polymer modified, flexible cementitious negative side waterproofing coating with elastic waterproofing polymers on interior wall plaster surface in three coats @14.35 kg /10 sqm. one coat of self-priming of cementitious waterproofing polymer (dilution with water in the ratio of 1:1) and two coats of cementitious waterproofing polymer (dilution with water in the ratio of 3:1) after scrapping and properly cleaning the surface to remove pre-existing paint film & loose particles till plaster is visible, complete in all respect as per the direction of Engineer-in-Charge.

PREFERABLE BRAND NAME OF BUILDING WATER PROOFING COMPOUNDS COMPANY – SIKA/ FOSROC/ Dr. FIXIT/ CHOKSEY

13) STONE

90mm to 45mm, 63mm to 45mm, 53mm to 22.4mm stone aggregate for road work

14) BITUMIN

The materials of first/standard quality from the following preferred makes are to be used. In case it is established that the brands specified below are not available in the market, contractor shall submit alternative proposal for the approval of “THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED”.

The contractor shall provide the materials as per the Make or Brand indicated below. The contractor shall obtain the approval of “THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED” for the alternative brands, before the actual execution of items.

General Materials

- | |
|---|
| <ul style="list-style-type: none">• <i>Sl. No. Materials Brand/Manufacturer Name</i> <ol style="list-style-type: none">1. <i>Bitumen of grade VG – 10 & VG-30 IOCL, BPCL & HPCL. Temp. for Bituminous mixes 150 -160 degree Celsius .</i>2. <i>Medium setting emulsion BIS Certified</i> |
|---|

PROCUREMENT AND ACCOUNTING OF BITUMEN

The contractor shall procure Bitumen Emulsion (Medium Setting grade) conforming to IS: 8887–1995 from approved manufacturers such as Indian Oil Corporation Ltd. (IOCL), Bharat Petroleum Corporation Ltd. (BPCL), Hindustan Petroleum Corporation Ltd. (HPCL), or Jalinidhi Bitumen Specialities Pvt. Ltd.

The contractor shall also procure bitumen of the required grade, as specified in the contract, conforming to IS: 73–2006, from approved manufacturers such as IOCL, BPCL, or HPCL.

The contractor shall produce original challans, vouchers, and invoices for the purchase of bitumen and bitumen emulsion as documentary proof of procurement from approved manufacturers. The documents shall be verified by the Engineer-in-Charge / Authorized Officer and necessary

endorsement shall be made, after which the originals shall be returned to the contractor.

Bitumen of the specified grade shall be brought to the site of work in one or more lots. However, the quantity in each lot shall not be less than 25% of the total theoretical quantity required for the work. If materials are brought in smaller lots, they shall not be allowed to be used until the minimum lot size is achieved and any delay on this account shall be entirely attributable to the contractor.

The contractor shall obtain test certificates issued by the manufacturer for the bitumen supplied and submit the same to the Engineer-in-Charge for verification and record purposes.

Bitumen brought to site and any quantity remaining unused after completion of the work shall not be removed from the site without prior written permission of the Engineer-in-Charge. No extra payment shall be made for carriage or transportation of unused bitumen.

The contractor shall maintain day-to-day accounts of receipt and issue of bitumen in the register prescribed and issued by the Engineer-in-Charge, which shall remain available for inspection at all times.

Bitumen:

The bitumen shall be viscosity-grade paving bitumen complying with IS 73, Grade VG-30.

Coarse Aggregate:

The coarse aggregate shall consist of crushed rock, crushed gravel, or other hard material retained on the 2.36 mm sieve. It shall be clean, hard, durable, cubical in shape, and free from dust, soft or organic matter, and other deleterious substances.

If the selected source of aggregates shows poor affinity for bitumen, the Contractor shall provide test results demonstrating that, with the use of anti-stripping agents, the stripping value satisfies the specification requirements. Such a source may be approved only on the condition that the bitumen is treated with an approved anti-stripping agent, as per the manufacturer's recommendations, at the Contractor's cost.

The aggregates shall satisfy the requirements specified in Table-1:

Test Requirement	Maximum Limit (%)	Test Method
Aggregate Impact Value	30	IS: 2386 (Part IV)
Los Angeles Abrasion Value	40	IS: 2386 (Part IV)
Flakiness & Elongation Index (Combined)	35	IS: 2386 (Part I)
Stripping Value	25	IS: 6241
Water Absorption	2	IS: 2386 (Part III)
Coating & Stripping of Bitumen–Aggregate Mixture (Minimum Retained Coating)	95%	IS: 6241

Test Requirement	Maximum Limit (%)	Test Method
Soundness – Loss with Sodium Sulphate (5 cycles)	12	IS: 2386 (Part V)
Soundness – Loss with Magnesium Sulphate (5 cycles)	18	IS: 2386 (Part V)

Aggregate grading and bitumen content: - True and representative samples of the aggregates proposed to be used on the work shall be tested in the design laboratory and proper blend of the aggregates shall be worked out so that combined grading of coarse aggregate, fine aggregate and filler in the final composition conform to the limits given in Table 3 here below. The combined grading shall not vary from the lower limit on one sieve to the higher limit on the adjacent sieve to avoid gap grading.

Table 2: Aggregate grading (IS 2386 Pt-1, wet sieving method) & Composite of BM

Parameter	Specification
Mix Designation	Grading 2
Nominal Maximum Aggregate Size	19 mm
Layer Thickness	50–75 mm (or as specified in item)
IS Sieve Size 25.6 mm	100% Passing
IS Sieve Size 19 mm	90–100% Passing
IS Sieve Size 13.2 mm	56–88% Passing
IS Sieve Size 4.75 mm	16–36% Passing
IS Sieve Size 2.36 mm	4–19% Passing
IS Sieve Size 0.300 mm (300 micron)	2–10% Passing
IS Sieve Size 0.075 mm (75 micron)	0–8% Passing
Bitumen Content (% by mass of total mix)	

Mix design: - Bitumen content required shall be determined following the Marshall mix design procedure. Minimum bitumen content in the mix shall be 5.5% by weight of total mix. However, the binder content shall be optimised to achieve the requirement of the mix given in table-3. The binder content shall be selected to obtain 4% air voids in the mix design. 15.7 Requirement of the mix: - Apart from conformity with the grading and quality requirements for individual ingredients, the mixture shall meet the requirements set out in Table -3

Parameter	Specification
Number of compaction blows on each end of Marshall specimen	75
Marshall Stability (kN) at 60°C	9
Marshall Flow (mm)	2–4
Percent Air Voids (%)	3–5
Percent Voids in Mineral Aggregate Filled with Bitumen (VFB) (%)	65–75
Coating of Aggregate Particles	Minimum 95%
Binder Content (% by weight of total mix) (<i>to be decided based on Marshall design method</i>)	Minimum 4.5%

Construction Operation

Preparation of the Base

The base on which bituminous macadam or bituminous concrete is to be laid shall be properly prepared, shaped, and compacted to the required profile. A prime coat shall be applied as specified or as directed by the Engineer-in-Charge.

The surface shall be thoroughly cleaned using a mechanical broom. Dust and loose particles shall be removed using compressed air. In areas where a mechanical broom cannot access, other approved methods shall be used as directed by the Engineer-in-Charge.

A tack coat shall be applied using a self-propelled or sprayer-towed bitumen pressure sprayer.

Mixing and Transportation of the Mixture

The pre-mixed bituminous materials shall be prepared in a hot mix plant of adequate capacity, capable of producing a uniform mix with aggregates thoroughly coated with binder. Appropriate mixing temperatures are given in **Table 6** of these specifications. At no stage shall the temperature difference between binder and aggregates exceed **14°C**.

To maintain uniform quality and ensure proper coating of aggregates, the hot mix plant shall be calibrated periodically. Essential features of hot mix plants are given in **Annex A of IRC:27**.

Table 6: Mixing, Laying and Rolling Temperatures for Bituminous Mixes (°C)

Bitumen Viscosity Grade	Bitumen Temperature (°C)	Aggregate Temperature (°C)	Mixed Material Temperature (°C)	Laying Temperature (°C)*	Rolling Temperature (°C)
VG-30	150–165	150–170	150–165	140 min	90 min

*Rolling must be completed before the mat cools to the minimum temperatures specified.

If a continuous-type mixing plant is used, the contractor shall demonstrate through laboratory analysis that the combined cold-feed grading lies within the specified grading limits for the bituminous material. For designed job mixes, the bitumen and filler content shall be determined based on this combined grading.

Bituminous materials shall be transported in clean insulated vehicles, and unless otherwise agreed by the Engineer, shall be covered while in transit or

awaiting tipping. Subject to the approval of the Engineer, a thin coating of diesel or lubricating oil may be applied to the interior of the vehicle to prevent sticking and to facilitate discharge of the material.

Cleaning of Surface

The surface on which the bituminous work is to be laid shall be thoroughly cleaned of all loose and extraneous material using a mechanical broom followed by an air jet, or by any other approved equipment or method specified in the contract. A high-pressure air jet from a compressor shall remain available at all times on site for removing dust and loose matter, unless otherwise specified in the Contract.

Spreading of Bituminous Mix

Before spreading the mix, the base shall be fully prepared as required. Except in areas where a mechanical paver cannot operate, the bituminous mix shall be spread, leveled, and tamped using an approved self-propelled paving machine equipped with an electronic sensing device. The essential features of the paver finisher shall conform to Annex A of IRC:27.

As soon as possible after arrival at site, the mix shall be supplied continuously to the paver and laid without delay. The rate of material delivery shall be controlled to allow uninterrupted operation of the paver. The travel speed and method of operation of the paver shall be adjusted to ensure an even and uniform flow of material across the screed, avoiding dragging, tearing, or segregation.

In restricted areas where the paver cannot be used, the mix shall be spread, raked, and leveled manually using suitable hand tools by experienced personnel. Compaction in such areas shall be carried out to the satisfaction of the Engineer-in-Charge.

The minimum layer thickness for each paver pass shall comply with the relevant specifications. When laying binder or wearing courses near an expansion joint, machine laying shall end 300 mm short of the joint. The remaining portion up to the joint, and the corresponding area beyond it, shall be laid manually. The joint or joint cavity must be kept free of surfacing material.

Bituminous material with a temperature exceeding **145°C** shall not be placed or deposited on bridge deck waterproofing systems unless approved protective measures against heat damage are provided as per the directions of the Engineer-in-Charge.

Rolling/Compaction : Bituminous materials shall be laid and compacted in layers which enable the specified thickness, surface level, regularity requirements and compaction to be achieved. Compaction of bituminous materials shall commence as soon as possible after laying. Compaction shall be substantially completed before the temperature falls below the minimum rolling temperature stated in the relevant part of these Specifications. Rolling of the longitudinal joints shall be done immediately behind the paving operation. After this, rolling shall commence at the edges and progress towards the centre longitudinally except that on super elevated and unidirectionally cambered portions, it shall progress from the lower to the upper edge parallel to the centre line of the pavement. Rolling shall continue until all roller marks have been removed from the surface. All deficiencies in the surface after laying shall be made good by the attendants behind the paver, before initial rolling is commenced. The initial or breakdown rolling shall be done with 8 – 10 tonnes dead weight smoothwheeled rollers. The intermediate rolling shall be done with 8 – 10 tonnes dead

weight or vibratory roller or with a pneumatic tyred roller of 12 to 15 tonnes weight having nine wheels, with a tyre pressure of at least 5.6 kg/sqcm or 0.56 MPa. The finish rolling shall be done with 6 to 8 tonnes smooth wheeled tandem rollers. Rolling shall be continued until the specified density is achieved, or where no density is specified, until there is no further movement under the roller.

Joints : Where joints are made, the material shall be fully compacted and the joint made flush in one of the following ways: (a) All joints shall be cut vertical to the full thickness of the previously laid mix. All loosened material shall be discarded and the vertical face coated with a suitable viscosity grade hot bitumen, or cold applied emulsified bitumen. While spreading the material along the joint the material spread shall overlap 25 mm to 50 mm on the previously laid mix beyond the vertical face of the joint. The thickness of the loose overlap material should be approximately a quarter more than the final compacted thickness. The overlapped mix shall be dragged back to the hot lane so that the roller can press the small excess into the hot side of the joint to obtain a high joint density.(b) By using two or more pavers operating in echelon, where this is practicable, and in sufficient proximity for adjacent widths to be fully compacted by continuous rollingAll longitudinal joints shall be offset at least 300 mm from parallel joints in the layer beneath or as directed, and in a layout approved by the Engineer-in-charge. Joints in the wearing course shall coincide with either the lane edge or the lane marking, whichever is appropriate. Longitudinal joints shall not be situated in wheel track zones.

PREFERABLE BRAND NAME OF C.P.V.C PIPES COMPANEY-SUPREME/ ORI-PLAST, AND SANITARYFITTINGS COMPANY HINDWARE/PARRYWARE/JAGUAR/JOHNSON/NEYCR/ESCO

15) TECHNICAL SPECIFICATION OF REPAINTING & RESTORATION OF CIVIL WORKS

a. STRUCTURAL SUPPORT:

Providing appropriate & safe structural support in and around distress zone before taking up chipping or restoration work by using Sal-Ballah, heavy duty collapsible props or steel pipes as deemed necessary to ensure safety of the structure, under safe working condition as per approval of "TNCHSL".

b. CHIPPING & REMOVAL

Chipping and removal of damaged deteriorated, unbounded, spalled and unserviceable plaster and concrete and exposing the firm sound surface, including necessary staging and scaffolding.

c. CLEANING & SURFACE PREPARATION

Cleaning & preparation of the surface by mechanical means using powdered sand or high-pressure water jet and wire brushing to expose firm, sound substrate inclusive of necessary staging and scaffolding as directed by "THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED".

d. REINFORCED CEMENT CONCRETE WORK

General

Reinforced cement concrete work may be cast-in-situ or precast as directed. Reinforced cement concrete work shall comprise of the following which may be paid separately or collectively as per

the description of the item of the work (a) form work (b) reinforcement (c) concrete (d) plastering or other finishing on concrete surface. All concrete works shall be carried out as per the provisions of IS: 456, IS: 3370, IS: 2974, and other relevant IS codes. Concrete mix proportioning and design mix sampling and strength test of concrete, production and control of concrete, tolerances and placing of reinforcement and for cover, transporting, placing, compacting and curing etc, inspection and testing of structure shall be specified in IS: 456.as directed by "THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED". Minimum strength of R.C.C. should be 20 N/Sq. mm, Minimum mix for cement, sand, plastering on wall and that on concrete surface 1:4.

The damp proof course shall be laid in two layers of equal thickness.

From work and stripping of form work shall as per the provision of IS: 456.

Assembly of reinforcement in RCC structure shall conform to IS: 456.

All masonry works shall be carried out as per the provisions of IS: 1597/2212/4326 and other relevant IS codes. Fabrication of structural steel work shall be carried out as per the provisions of IS: 800/801/802/806 and other relevant IS codes. Fabricator shall do cleaning, straightening, cutting, bending, holding, bolting, welding marking, assembling, erecting, inspecting and testing etc. welding procedure and welder qualification shall be as per IS :800 and / or referred IS codes only.

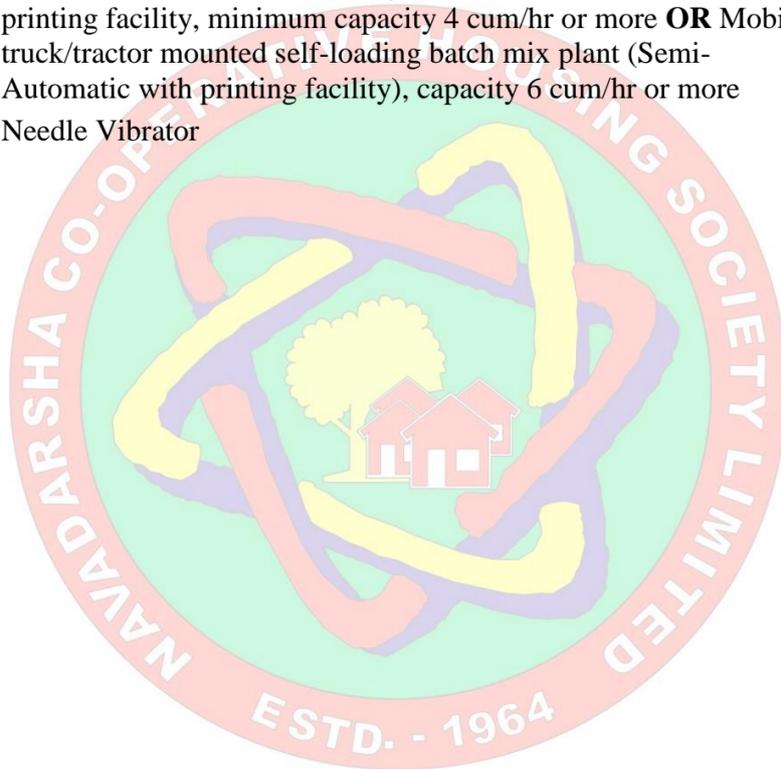
MATERIALS

e. EXTRA ITEM / SUBSTITUTED ITEMS

PAYMENT OF NON-SCHEDULED ITEMS: Payment will be made for various items as per existing CPWD/ PWD (state) rate. If not available in CPWD/ PWD payment will be made based on prevailing market rate with submission of rate analysis and admitted by "TNCHSL" before execution of work.

Sl. No.	Name of Equipment	Numbers
1	Excavator cum Loader	1 No.
2	Steel Shuttering	As required
3	Steel Scaffolding	As required
4	*Mobile Hot Mix Plant of suitable capacity	1 No.
5	*Paver Finisher (Hydrostatic with Sensor Control)	1 No.
6	*Front-End Loader (1 cum bucket capacity)	1 No.
7	*Smooth Wheeled Tandem Roller	1 No.
8	*Smooth Wheeled Vibratory Roller	1 No.
9	*Tippers	1 No.
10	*Trucks	1 No.

Sl. No.	Name of Equipment	Numbers
11	*Sprayer	1 No.
12	*Air Compressor (Diesel)	1 No.
13	Pump (Diesel)	1 No.
14	Pump (Electric) (Desirable)	1 No.
15	Diesel Generator	1 No.
16	*Mechanical Broom (Hydraulic)	1 No.
17	*Mechanical Cleaner using Compressed Air	1 No.
18	Water Tanker	1 No.
19	Tractor	1 No.
20	Concrete Batch Mix Plant (Fully Automatic / Semi-Automatic) with printing facility, minimum capacity 4 cum/hr or more OR Mobile truck/tractor mounted self-loading batch mix plant (Semi-Automatic with printing facility), capacity 6 cum/hr or more	1 No.
21	Needle Vibrator	2 Nos.



SCHEDULE OF QUANTITY

Name of Work :- Special Repair & Maintenance of Internal Bituminous Road at Navadarsha Co-operative Housing Society Ltd.

Item No.	Description of Items	Qty.	Unit	Rate	Amount
1	Surface dressing of the ground in any kind of soil including removing vegetation inequalities not exceeding 15 cm depth and disposal of the rubbish within a lead of 75 m as directed.	10000.00	Sqm		
2	Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material within all lifts and lead upto 1km (by mechanical means).	10203.00	Sqm		
3	Providing and laying Bitumen Penetration Macadam with hard stone aggregate of quality, size and grading as specified, with bitumen of suitable penetration grade, including required key aggregate as specified, spreading coarse aggregate with the help of self propelled/ tipper tail mounted aggregate spreader and applying bitumen by a pressure distributor and then spreading key aggregate with the help of aggregate spreader complete, including consolidation with road roller of minimum 8 to 10 tonne capacity to achieve specified values of compaction and surface accuracy :				
3.1	For 50 mm compacted thickness using coarse aggregate of size 50-20 mm graded @ 0.60 cum per 10 sqm key aggregate of size 12.5 mm graded @ 0.15 cum per 10 sqm. With paving asphalt grade VG - 10 @ 50 kg/ 10 sqm.	5870.00	Sqm		
4	Providing and applying tack coat using hot straight run bitumen of grade VG - 10, including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications :				
4.1	On Bituminous Road @ 0.50 Kg / sqm	15872.00	Sqm		
5	Providing and laying semi dense bituminous concrete using coarse stone aggregates of specified grading, premixed with bituminous binder and filler , transporting the hot mixed to work site by Tippers, laying with paver finisher equiped with electronic sensor to the required grade,level, alignment and rolling with smooth wheeled ,vibratory and tandem rollers to achieved the desired compaction and density as per specification ,complete and as per directions of Engineers -in- Charge.				
5.1	25 mm compacted thickness with bitumen of grade VG-30 @5%(percentage by weight of total mix) and lime filler @2%(percentage by	10203.00	Sqm		

		weight of aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.				
6		Seal Coat Providing and laying Liquid Seal coat (Type-A) with approved quantity stone chips and bitumen binder on thoroughly cleaned black top surface ,spreading screened & cleaned stoned aggregates (100% passing through 11.2 mm passing sieve & retained on 2.36 mm sieve) uniformly @0.09 M3 of dry aggregate per 10 m2 of area is in suitable means brushing the chipops if necessary to ensure unioformity followed by rolling with power roller including the cost & carraige of binder and stone chips ,cost of heating the binder & all other incidental charges ,cost of fuel and lubricants,including hire charges of machinaries ,tools and plants required for construction and quality control complete as per clausee 511 of specification for road and bridge works of MoRT&H (5th revision Revision). If by manual means with hot bitumen binder(@9.80 kg/10 sqm)	10203.00	Sqm		
		3 No.Culvert				
7		Excavating trenches by mechnical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :				
7.1		All kind of soil				
7.2		Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	30.00	metre		
8		Supplying ,fitting & fixing UPVC pipes A-Type and fittings conforming to IS: 13592-1992 with all necessar clamps nails ,including holes in walls floor etc cutting trenches in any soil through masonry concrete structure etc if necessary and mending good damages including joining with jointing materials(spun yarn, valamoid/bitumen/M-seal etc) complete.A) UPVC pipe ,110 mm dia	30.00	metre		
9		Reinforcement for reinforced concrete work in sorts of structures including distribution bars, stirrups,binders etc initial strengthening and removal of loose rust(if necessary),cutting to requisite length ,hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every inter section,complete as drawing and	0.54	M.T		

	direction.a) For works in foundation and upto roof of ground floor /upto 4 metre. i) Tor steel/mild steel.SAIL/TATA/RINL				
10	Brick work with 1st class bricks in cement mor(1:4). a) in foundation & plinth	9.6	Cum		
11	Ordinary cement concrete(mix1:1.5:3) with graded stone chips (20 mm nominal size) excluding and reinforcement if any,in ground floor as per relevant IS codes.i) Pakur Variety)	4.68	cum		
12	Hire and Labour charges for shuttering with centering and necessary staging upto 4 metre using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs,beams and columns, lintel curves or straight including fitting , fix in and striking out after completion of work(upto roof of ground floor) (when the height of a particular floor is more than 4 metre the equivalent floor height shall be taken as 4 m and extra for works beyond the initial 4 m ht shall be allowed under 12(e) for every 4 m or part thereof)a) 25 mm to 30 mm thick wooden shuttering as per decision and direction of Engineer-in charege.	23.4	sqm		
13	Plaster (to wall, floor,ceiling etc.) with sand and cement mortar including rounding off or chamfering coners as directed and racking out joints including throating,nosing and drip coure,scaffolding/staging where necessary(Ground floor).(Excluding cost of chipping over concrete surface)i) with 1:6 cement mortar c) 15 mm thick plaster	38.49	sqm		
14	Neat cement punning about 1.5 mm thick in wall,dado>window sill,floor etc. Note: Cement 0.152 cum/100 sqm	38.49	sqm		
				Total	

FORM OF TENDER

(To be filled up the tender form by the tenderer with sign and stamp in their Letter Head and to be submitted along with the Financial Bid)

To
The Secretary
"THE NAVADARSHA CO-OPERATIVE HOUSING SOCIETY LIMITED"
Srimantapur, Birati, PO-Nilachal
Kolkata - 700134

Date:

Dear Sir,

I/We, _____ Son/Daughter of Sri
Proprietor/Partner/CEO/MD/Director of M/s. _____ of(Address)

_____ having examined the site of works, carefully read and understood the Specifications, General Conditions of Contract and Conditions of the Tender, hereby tender and undertake to execute and complete all the works required to be performed in accordance with the schedule of quantities, specifications and General Terms and Conditions of Contract. The Total amount put to Tender Rs.....(Rupees.....).....

I also declare that the information / documents furnished along with the application and tender are true and authentic to the best of my knowledge and belief. I am well aware of the fact that furnishing of any false information / fabricated document would lead to rejection of my tender / termination of contract at any stage besides liabilities towards prosecution under appropriate law. Each page of the tender document and papers submitted by my Company are authenticated, sealed and signed, and I take full responsibility for the entire documents submitted with this tender.

Signature of the Tenderer / Authorised person

(Seal of the Tenderer)

Name of the Tenderer: _____

(in Block letters)

Signature: _____

Name: _____

Address : (in block letters) _____