THE WEST BENGAL SMALL INDUSTRIES DEVELOPMENT CORPORATION LIMITED

A Government of West Bengal Undertaking

"SHILPA BHAVAN"
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Kolkata – 700 012

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Memo No. SB2/2464 /11/26-27 **Dated:- 11.08.2026**

NOTICE INVITING ELECTRONIC TENDER No. 12 (ELEC.) OF 2026-2027 Sl. 1 & 2 OF THE WBSIDC LTD.

The Executive Engineer, WBSIDC LTD, invites ***e-tender*** for the work detailed in the table below: (Submission of Bid through ***online)***

Sl. No	Name of the work	Estimated Amount incl. taxes	Earnest Money	Price of Technical & Financial Bid documents and others Annexure	Period of Completion	Defect Liability Period for the purpose of Clause-17 of the conditions of Contract	Eligibility of Contractor
1	Annual Comprehensive Maintenance of Street Lighting and other electrical installation at Common service & Administrative Office at Kharagpur Industrial Park, Phase-I & II and Khasjungle Industrial Park, Paschim Medinipur. (2nd Call)	Rate to be quoted incl. 18% GST & 1% LWC	₹ 11,070.00	₹ 590.00 (incl. 18% GST)	365 (Three Sixty Five) days	01 (One) year	Resourceful Outside Contractor (Eligibility Criteria as per Sl. No. 3 Mentioned Below)
2	Annual Comprehensive maintenance & service contact of two nos. passenger lift (13 passenger) at Garia Commercial Park. (2nd Call)	Rate to be quoted incl. 18% GST & 1% LWC	₹ 3,450.00	₹ 236.00 (incl. 18% GST)	365 (Three Sixty Five) days	01 (One) year	Resourceful Outside Contractor (Eligibility Criteria as per Sl. No. 3 Mentioned Below)

1. In the event of e-filing intending bidder may download the tender document from the website, https://etender.wb.nic.in directly by the help of Digital Signature Certificate & necessary **Earnest Money** & cost of **Tender Documents.**

   Necessary Earnest Money will be deposited by the bidder electronically: online through his net banking enabled bank account, maintained at any bank **or** offline through any bank by generating NEFT/RTGS Challan from the e-tendering portal. Intending Bidder will get the Beneficiary details from e-tender portal with the help of Digital Signature Certificate and may transfer the **EMD** from their respective bank as per the Beneficiary Name and Account No., Amount, Beneficiary Bank Name (ICICI) and IFSC Code and also e-procurement Ref. No.

   Payment procedure:

   a) Payment by Net Banking (any listed bank) through ICICI Bank Payment Gateway:
      i. On selection of net banking as the payment mode, the bidder will be directed to ICICI Bank Payment Gateway;
      ii. Bidder will make the payment after entering his Unique ID and password of the bank to process the transaction.
      iii. Bidder will receive a confirmation message regarding success/failure of the transaction.

iv. If the transaction is successful, the amount paid by the bidder will get credited in the respective Pooling account of the State Government/PSU/Autonomous Body/local Body/PRIs, etc. maintained with the Focal Point Branch of ICICI Bank at R.N. Mukherjee Road, Kolkata for collection of EMD/Tender Fees.,

v. If the transaction is failure, the bidder will again try for payment by going back to the first step

b) Payment through RTGS/NEFT :

i. On selection of RTGS/NEFT as the payment mode, the e-Procurement portal will show a pre-filled challan having the details to process RTGS/NEFT transaction.

ii. The bidder will print the challan and use the pre-filled information to make RTGS/NEFT payment using his Bank account.

iii. Once payment is made, the bidder will come back to the e-Procurement portal after expire of a reasonable time to enable the NEFT/RTGS process to complete, in order to verify the payment made and continue the bidding process.

iv. If verification is successful, the fund will get credited to the respective Pooling account of the State Government/PSU/Autonomous Body/Local Body/RIs etc maintained with the Focal Point Branch of ICICI Bank at R.N. Mukherjee Road, Kolkata for collection of EMD/Tender Fees.

v. Hereafter, the bidder will go to e-Procurement portal for submission of his bid.

vi. But if the payment verification is unsuccessful, the amount will be returned to the bidder's, account.

c) If **EMD @ 2%** of quoted amount exceeds EMD as mentioned in case of work in Sl. No 1 & 2 as mentioned in the NIET, additional amount shall have to be paid in the form of D.D./P.O. etc. drawn in favour of "**The West Bengal Small Industries Development Corporation Ltd."** Payable at Kolkata on acceptance and before execution of agreement as per the prescribed pro forma available from down loaded copies of original documents duly uploaded on to the e-tender web portal of this corporation.

Refund/Settlement Process:

i. After opening of the bids and technical evaluation of the same by the tender inviting authority through electronic processing in the e-Procurement portal of the State Government, the tender inviting authority will declare the status of the bids as successful or unsuccessful which will be made available, along with the details of the unsuccessful bidder, to ICICI Bank by the e-Procurement portal through web services.

ii. On receipt of the information from the e-Procurement portal, the Bank will refund, through an automated process, the EMD of the bidders disqualified at the technical evaluation to the respective bidders' bank accounts from which they made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date of which information on rejection of bid is uploaded to the e-Procurement portal by the tender inviting authority.

iii. Once the financial bid evaluation is electronically processed in the e-Procurement portal, EMD of the technically qualified bidders other than that of the L1 and L2 bidders will be refunded, through an automated process, to the respective bidders's bank accounts from which they made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date on which information on rejection of financial bid is uploaded to the e-Procurement portal by the tender inviting authority. However, the L2 bidder should not be rejected till the LOI process is successful.

iv. If the L1 bidder accepts the LOI and the same is processed electronically in the e-Procurement portal, EMD of the L2 bidder will be refunded through an automated process, to his bank account from which he made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date on which information on Award of Contract (AOC) to the L1 bidders uploaded to the e-Procurement portal by the tender inviting authority.

v. As soon as the L1 bidder is awarded the contract (AOC) and the same is processed electronically in the e-Procurement portal –

a) EMD of the L1 bidder will automatically get transferred from the pooling account to the account of **THE WEST BENGAL SMALL INDUSTRIES DEVELOPMENT CORPORATION LTD.** along with the bank particulars of the L1 bidder.

b) EMD of the L1 bidder for tenders of the State PSUs/Autonomous Bodies/Local Bodies/ PRls, etc will automatically get transferred from the pooling account to their respective linked bank accounts along with the bank particulars of the L1 bidder. In both the above cases, such transfer will take place within T+1 Bank Working Days where T will mean the date on which the Award of Contract (AOC) is issued.

vi. Once the EMD of the L1 bidder is transferred in the manner mentioned above, Tender fees, if any, deposited by the bidders will be transferred electronically from the pooling account to the account of **THE WEST BENGAL SMALL INDUSTRIES DEVELOPMENT CORPORATION LTD**.

vii. All refunds will be made mandatorily to the Bank A/C from which the payment of EMD & Tender Fees (if any) was initiated.

2. **Technical Bid & Financial Bid** are to be submitted concurrently duly digitally signed in the Website https://etender.wb.nic.in

3. **Eligibility criteria for participation in tender:**

a. The prospective bidders shall have satisfactorily completed as a prime agency during the last 5 (Five) years prior to the date of issue of this Notice at least one work of similar nature under the authority of State/Central Gov., State/Central Gov. undertaking /Statutory Bodies constituted under the statute of the Central / State Government and having a magnitude of **30 (Thirty) percent in one job for Sl. No. 1 & 2** of the quoted amount put to tender. [Non Statutory Documents]

N.B.:- Completion certificate should contain a) Name of work, (b) Name & address of Client, (c) Amount put to tender, (d) Date of commencement of work (e) Date of completion of work.

b. An undertaking should be given stating thereby that the Firm has not been debarred or penalized for any reasons out of work by any Government Department.

c. The Bidder shall have to submit the scan copy of following information duly attested in non statutory cover (please refer Form-IV). The hard copy of the document shall have also to be submitted physically to the office of Executive Engineer/Assistant Engineer (El.)-in charge, WBSIDC Ltd. Silpa Bhavan, (4th Floor) 31, Black Burn Lane Kol-12 under sealed covered as and when desired by the authority.
i) Name, ii) Permanent Address and Address for communication, iii) Contact Mobile no, iv) email ID

d. Subletting of contract is strictly prohibited.

e. The prospective bidders shall have in their full time engagement experienced technical personnel**,** the minimum being one Electrical Engineering Degree Holder for works more than Rs. 30,00,000/-. One Electrical Engineering Diploma holder for works less than Rs. 30,00,000/- and more than Rs 1,00,000/- at their payroll. (Authenticated documents in respect of qualification and engagement shall be furnished for Technical-Evaluation). [Non Statutory Documents]

f. Pan Card, Professional Tax receipts Challan for the year 2022-23, 2023- 24 and 2024-25 (as applicable) Current GSTIN registration Certificate along with current vat payment receipt to be accompanied with the Technical Bid document. Income Tax (Saral) Acknowledgement Receipt for assessment year 2023- 24 AND 2024-25 (as applicable) to be submitted. [Non Statutory Documents]

g. **Additional Performance Security (10% of Tender amount)** shall be submitted by the Successful bidder if the accepted bid value is **80% or less of the estimated amount** in the form Bank Guarantee from any Schedule Bank before issuance of Work Order. If the bidder fails to submit the Additional Performance Security within seven working days from the date of issuance of Letter of Acceptance, his Earnest Money will be forfeited and other necessary actions as per NIT like blacklisting of the contractor, etc., may be taken. The Bank Guarantee shall have to be valid up to end of the Contract Period and shall be renewed accordingly, if required.

h. The **Working Capital** shall not be less than **15 (Fifteen) percent** of the amount put to tender out of which minimum 10% shall be of applicant's own resource.

i. The prospective bidders or any of their constituent partner shall neither have abandoned any work nor any of their contract have been rescinded during the last 5 (five) years. Such abandonment or rescission will be considered as disqualification towards eligibility. (A declaration in this respect through affidavit has to be furnished by the prospective bidders without which the Technical Bid shall be treated non- responsive).

j. The available Bid capacity (to be calculated on the basis of prescribed format) of the prospective applicant shall not be less than the estimated amount put to tender.

k. The prospective bidders should be owned (Details as mentioned in Sl. No. 1) the required plant and machineries of prescribed specifications as shown in format. Conclusive proof of ownership (Tax invoice, Way Bill, Delivery Challan, incorporation in the Balance Sheet as fixed asset) for each plant and machineries in working condition shall have to be submitted. Present location of installation of main Plant and machineries as mentioned in specified format has also to be

disclosed. Present status / location of all the Plant and Machineries are needed to be provided. If the same is already engaged in the other works, then name of client along with his contact number should be furnished in the declaration by the intended tenderer countersigned by the client with tentative date of release of such Plant and Machineries where the same are presently engaged. If necessary, authority/ screening committee may inspect Plant and Machineries physically or call for the original documents as proof of Ownership of the same. Plant & Machineries should be owned by the Applicant. [Non Statutory Documents], **For Road works only.**

a. **The Bidder must have valid Electrical Contractors License with Electrical Supervisor holding Supervisor competency on the parts 1, 2, 4, 6A, 7A & 11 – for Sl. No. – 1 and parts 1, 2, 4, 9 & 11 – for Sl. No. – 2 as per I.E. Rules for Electrical works only.**

b. In case of Proprietorship, Partnership Firms and The Company Tax Audit Report in 3CD Form are to be furnished along with the balance sheet and profit and loss account, and all the schedules forming the part of Balance Sheet and Profit & Loss Account in favour of applicant. No other name along with applicant name, in such enclosure will be entertained. (Non-Statutory documents).

c. Registered Partnership Deed (for Partnership Firm only) along with Power of Attorney to be submitted along with application. (Non-Statutory documents).

d. Declaration regarding Structure and Organization duly signed by the applicant to be submitted along with application.

e. A prospective outside bidder participating in a single job either individually or as partner of a firm or in Joint Venture shall not be allowed to participate in the same job in any other form.

f. A prospective outside bidder shall be allowed to participate in a single job either in the capacity of individual or as a partner of a firm or in Joint Venture. If found to have applied severally in a single job, all his applications will be rejected for that job.

g. Where there is a discrepancy between the unit rate & the line item total resulting from multiplying the unit rate by the quantity, the unit rate quoted shall govern. Where there is a discrepancy between the rate in figures & words the rate in words will govern.

h. Prevailing safety norms has to be followed so that LTI (Loss of time due to injury) is zero.

i. Registered Unemployed Engineers' Co-operative Societies/ Unemployed Labour Co.-Op. Societies are required to furnish valid Bye Law, Current Audit Report, Valid Clearance Certificate from A.R.C.S. for the year 2012 along with other relevant supporting papers. [Non Statutory Documents]

4 The prospective Bidder shall establish field testing laboratory equipped with requisite instruments and technical staff according to the requirements of works to be executed.

5 The Bid should be submitted in two parts in two separate sealed covers digitally super scribing "TECHNICAL BID" and "FINANCIAL BID". FINANCIAL bid of only those bidders shall be opened who are technically qualified on evaluation according to the predefined qualification criteria as mentioned in this N.I.T. by the 'Tender Committee', formed for the purpose. The decision of the 'Tender Committee' will be final and absolute in this respect. The list of Qualified Bidders will be displayed in the Notice Board of this office on the scheduled date and time as mentioned NIT.

6 Issuance of work order as well as payment will depend on availability of fund and no claim whatsoever will be entertained for delay of Issuance of work order as well as payment, if any. Intending tenderers may consider these criteria quoting their rates.

7 **Constructional Labour Welfare Cess** @ 1(one) % of cost of construction will be deducted from every Bill of the selected agency, Vat, Royalty & all other Statutory levy/ Cess will have to be borne by the contractor as per rule.

8 **Adjustment of Price (increase or decrease)** :- No escalation of cost will be allowed even in extension period of time, granted by WBSIDC.

9 **No Mobilisation Advance and Secured Advance** will be allowed.

10 **Price preference** will not be allowed.

11 Statutory addition / and or deduction will be made for all other taxes from the progressive bills whether Running Accounts or final Bills as the case may be as per Govt. Rules and Regulation.

12 Agencies shall have to arrange land for creation of Plant & Machineries, storing of materials, labour shed, laboratory etc. at their own cost and responsibility and also to be submitted the definite work programme within 07(Seven) days to

complete the same within stipulated period as mentioned in the NIT from the stipulated date of commencement of work in all respect.

13 **Bids shall remain valid** for a period not less than 180 (One Hundred and Eighty) days after the dead line date for Financial Bid/ Sealed Bid submission. Bid valid for a shorter period shall be rejected by the 'Tender Committee' as non-responsive.

14 All materials including bitumen(of All Grade), bitumen emulsion, cement, steel shall be of approved brand in accordance with relevant code of practice and manufacture accordingly and shall be procured and **supplied by the agency at their own cost.** Authenticated evidence for purchase of bitumen, bitumen emulsion, cement and steel are to be submitted along with challan and test certificate. If required by the Engineer-in-Charge, further testing from any Government approved Testing Laboratory shall have to be conducted by the agency at their own cost.

15 **Important Information:-**

A.**(Date & Time Schedule)**

Sl. No.	Particulars	Date & Time
1	Date of uploading of NIET Documents online (Publishing Date)	**11.08.2026 up to 6.00 PM**
2	Start Date of sale /download of Tender Documents (online)	**12.08.2026 from 10:00 AM**
3	End Date of Sale /Download of Tender Documents	**24.08.2026 up to 2:00 PM**
4.	Bid submission start date (online)	**12.08.2026 from 10:00 AM**
5.	Bid submission closing date (online)	**21.08.2026 up to 2:00 PM**
6.	Date of opening of Technical Proposals (online)	**24.08.2026 after 2:00 PM**
7.	Date of uploading list for Technically Qualified Bidder(online)	**Will be informed later on**
8.	Date of opening of Financial Proposals (Online)	**Will be informed later on**
9.	Date of uploading the list of bidder along with their rates through online, also if necessary for further negotiation through offline for final rate	**Will be informed later on**

A. Location of critical events:

Bid Opening: Office of the Executive Engineer,
The West Bengal Small Industries Development Corporation Ltd.
Shilpa Bhavan, 4th floor,31, Black Burn Lane, Kolkata – 700 012

16 The Bidder, at his own responsibility and risk is encouraged to visit and examine the site of works and its Surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the work as mentioned in the Notice inviting Tender, the cost of visiting the site shall be at the Bidder's own expense.

17 The intending Bidders shall clearly understand that whatever may be the outcome of the present invitation of Bids, no cost of Bidding shall be reimbursable by the Department. The Executive Engineer/Assistant Engineer (El.)-in charge, WBSIDC Ltd. reserves the right to reject any application for purchasing Bid documents and to accept or reject any offer without assigning any reason whatsoever and is not liable for any cost that might have incurred by any Bidder at the stage of Bidding.

18 Prospective applicants are advised to note carefully the minimum qualification criteria as mentioned in 'Instructions to Bidders' before bidding.

19 **The intending tenderers are required to quote the rate *online only. No offline tender will be entertained.***

20 Contractor shall have to comply with the provisions of (a) the contract labour (Regulation Abolition) Act. 1970 (b) Apprentice Act. 1961 and (c) minimum wages Act. 1948 of the notification thereof or any other laws relating thereto and the rules made and order issued there under from time to time.

21 During scrutiny, if it is come to the notice to tender inviting authority that the credential or any other papers found incorrect/manufactured/fabricated, that tenderer will not be allowed to participate in the tender and that application will be out rightly rejected without any prejudice. Beside the WBSIDC may take appropriate Legal Action against such defaulting tender.

22 In case if there be any objection regarding Prequalifying the Agency that should be lodged to the Chairman Tender Screening Committee within 2(Two) days from the date of publication of list of qualified Agency and beyond that time schedule no objection will be entertained by the Screening Committee.

23 Before issuance of the work order, the tender inviting authority may verify the credential & other documents of the lowest tenderer if found necessary. After verification, if it is found that such documents submitted by the lowest tenderer is either manufacture or false in that case, work order will not be issued in favour of the tenderer under any circumstances.

24 If any discrepancy arises between two similar clauses on different notifications, the clause as stated in later notification will supersede former one in following sequence:

a. Tender Form No.1 WBSIDC Ltd.
b. NIET
c. Special terms & Conditions with Tender Bid document
d. Technical bid
e. Financial bid

25 Prospective bidders shall have to execute the work in such a manner that the work under this e-NIT is kept maintained at appropriate service level during progress of work and for such a period as mentioned in column 7 of the table under Clause 1 A hereof from the date of successful completion of the work to the entire satisfaction of Engineer-in-Charge. If any defect / damage is found during the period as mentioned above the contractor shall make the same good at his own expense, or in default, the Engineer-in-charge may cause the same to be made good by other workmen and deduct the expense (of which the certificate the Engineer-in-charge shall be final) from any sums that may be then, or at any time thereafter become due to contract or from his security deposit, or the proceeds of the sale thereof, or of sufficient portion thereof. Refund of Security Deposit shall only be made on after successful completion of work maintaining appropriate service level of works up to the period mentioned above and in the manner prescribed in Circular No.:SB1/705/8; Dated:15.06.2018 of this Corporation (copy of the said Circular is appended hereto which shall form integral part of the contract formed between the Contractor and this Corporation).Hence Clause 17 of the Conditions of Contract of Tender form no. 1 shall be deemed to have been modified up to the above extend. No interest shall be payable against the security deposit and / or performance security deposit (if any). **(Applicable 1 year for Sl. No. 1 & 2)**

26 In case of Ascertaining Authority at any stage of application or execution of work necessary registered power of attorney is to be produced.

27 Intending tenderers are required to submit online attested/self-attested photocopies of valid enlistment renewal certificate, valid partnership deed (in case of partnership firm), current Professional Tax Deposit Challan / Professional Tax Clearance Certificate, PAN Card, Trade License from the respective Municipality, Panchayet etc. (in case of S & P Contractors only), [Non statutory documents].

28 If the dates fall on holidays or on days of bandh or natural calamity, the dates defer to next working days.

29 In case of inadvertent typographical mistake found in the specific price schedule of rates, the same will be treated to be so corrected as to conform to the prevailing relevant schedule of rates and / or technically sanctioned estimate.

30 The intending tenderer is required to quote the rate in figures as well as in words as percentage above /below than or at par with the relevant price schedule of rates.

31 No **CONDITIONAL/ INCOMPLETE TENDER** will be accepted under any circumstances.

32 Successful Tenderers will be required to obtain valid Registration Certificate & Labour License from respective Regional Labour Offices where construction work by them are proposed to be carried out as per Clauses u/s 7 of West Bengal Building & other Construction Works' Act, 1996 and u/s 12 of Contract Labour Act.

33 In case of Quoting rates, no multiple lowest rates will be entertained by the Department.

34 The Executive Engineer/Assistant Engineer (El.)-in charge, WBSIDC Ltd. reserves the right to cancel the N.I.T. due to unavoidable circumstances and no claim in this respect will be entertained.

35 All bidders are requested to be present either personally or through their authorized representatives in the chamber of the Executive Engineer/Assistant Engineer (Electrical) (In Charge), WBSIDC Ltd. during opening of the Tender, to observe the tender opening procedure.

36 ***Qualification Criteria***

The Tender Inviting & Accepting Authority through a 'Tender Committee' will determine the eligibility of each bidder, the bidders shall have to meet all the minimum criteria regarding**:-**

a) Financial Capacity
b) Technical Capability comprising of personnel & equipment capability
c) Experience

The eligibility of a bidder will be ascertained on the basis of the self attested documents in support of the minimum criteria as mentioned in a, b, c above, and the declaration executed through prescribed affidavit in non-judicial stamp paper of appropriate value duly notarized in Annexure-X. If any document submitted by a bidder is noticed either manufacture or false, in such cases the eligibility of the bidder/ tenderer will be out rightly rejected at any stage without any prejudice. The bidder would also be liable for the criminal proceedings as per law.

37 Successful tenderers will be required to observe the following conditions strictly:

a) Employees' Provident Fund and Miscellaneous Provisions Act, 1952 and Employees State Insurance Act, 1948 should be strictly adhered to wherever such Acts become applicable.
b) Minimum wages to the workers shall be paid according to the rates notified and/or revised by the State Government from time to time under the Minimum Wages Act, 1948 in respect of scheduled employments, within the specified time as per law. Payment of bonus, wherever applicable, has to be made.
c) Adequate safety and welfare measures must be provided as per the provisions of the Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act, 1996 read with West Bengal Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Rules, 2004
d) All liabilities arising out of engagement of workers are duly met before submission of bills for payment.

If there is any violation of any or all the relevant above criteria during execution of the job, it will render the concerned agencies ineligible for the work then and there or at any subsequent stage as may be found convenient.

INSTRUCTION TO BIDDERS

SECTION – A

General guidance for e-Tendering Instructions/ Guidelines for tenders for electronic submission of the tenders online has been annexed for assisting the contractors to participate in e-Tendering.

1. **Registration of Contractor**

   Any contractor willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement system, through logging on to https://etender.wb.nic.in (the web portal of e-tendering). The contractor is to click on the link for e-Tendering site as given on the web portal.

2. **Digital Signature certificate (DSC)**

   Each contractor is required to obtain a (class –I, class-II , Class-III and bonafide resourceful outsiders) Digital Signature Certificate (DSC) for submission of tenders, from the approved service provider of the National Information's Centre (NIC) on payment of requisite amount details are available at the Web Site stated in Clause-2 of Guideline to Bidder DSC is given as a USB e- Token.

3. The contractor can search & download NIT & Tender Documents electronically from computer once he logs on to the website mentioned in Clause 2 using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

4. **Participation in more than one work of a N.I.T will not be accepted.**
   A prospective bidder shall be allowed to participate in the single job of the N.I.T either in the capacity of individual or as a partner of a firm. If found to have applied in more than a single job of the N.I.T or severally in a single job, all his applications will be rejected for that N.I.T / that job.

5. **Submission of Tenders**

   General process of submission: Tenders are to be submitted through online to the website stated in Cl.2 in two folders at a time for each work, one in Technical Proposal & the other in Financial Proposal before the prescribed date & time using the Digital Signature Certificate (DSC) The documents are to be uploaded (virus scanned copy) duly Digitally Signed. The documents will get encrypted (transformed into non readable formats).

   A. Technical proposal
   The Technical proposal should contain scanned copies of the following further two covers (folders).

A1. ***Statutory Cover Containing***

i. RTGS/NEFT towards cost of tender documents as prescribed in the e-NIT, against the serial of work as applied for concerned with the Work.
ii. RTGS/NEFT towards earnest money (EMD) prescribed in the e-NIT, against the serial of work as applied for concerned with the Work.
iii. Tender form No. 1***(Download & upload the same Digitally Signed except quoting rate, quoting rate will be only encrypted in the B.O.Q. under Financial Bid. In case quoting any rate in*** form No. ***1 the tender is liable to be summarily rejected).***
iv. Special Terms, condition & specification of works.
v. Tender Bid Documents Applicable for work in Sl. 1 to 2

A2 ***Non statutory Cover Containing***

i. Valid Professional Tax(PT) deposit receipt challan for the valid financial year 2022-23 and 2023-24, 2024-25, 2025-26 Pan Card,
ii. IT return, for the Assessment year 2022-23 and 2023- 24, 2024-25, 2025-26, (as applicable) GSTIN Registration/clearance Certificate, Current GST payment receipt.
iii. Registration Certificate under Company Act. (if any).
iv. Registered Deed of partnership Firm/ Article of Association & Memorandum
v. Power of Attorney (For Partnership Firm/ Private Limited Company, if any)
vi. Tax Audited Report in 3 Cd Form along with Balance Sheet & Profit & Loss A/c for the last five
vii. years(year just preceding the current Financial Year will be considered as year – I)
viii. Clearance Certificate for the Current Year issued by the Assistant Register of Co-Op(S) (ARCS) by laws are to be submitted by the Registered labour Co-Op(S) Engineers' Co.-Opt.(S)
ix. List of Technical staffs along with their authentically to menials & appointment letter other supporting documents of any.
x. Affidavits (Ref:- format shown in section B, Annexure "X", Annexure"Y")
xi. Credential for completion of at least one similar nature for work under the authority of state / central Govt. undertaking statutory bodies constituted under the statute of the state/ state Govt. having a magnitude **30 (Thirrty) percent in one job for Sl. No. 1 & 2 of** the Quoted amount put to tender during the last 5(Five) years prior to the date of issue of this NIET is to be furnished.
xii. Successful tenderer have to submit three copies of completion drawing both in hard copies and soft copy (mentioning all dimensions, position of electrical & mechanical machineries /accessories etc.) at the time of submission of final bill.

Note:- Failure of submission of any of the above mentioned documents in specified cover as above in (A1, i.e Statutory cover and A2, i.e Non-statutory cover) and also non submission of document in proper perspective, the tender will be liable to summarily rejected .

B. Tender committee(TSC)

i. Opening of Technical proposal :-

Technical proposals will be opened by the Executive Engineer/Assistant Engineer (El.)-in charge, The WBSIDC Ltd. or his authorized representative electronically from the web site using their Digital Signature Certificate.
At the same time the Technical proposals which will be received through off-line will also be opened.

ii. Intending tenderers may remain present if they so desire.
iii. Cover (folder) statutory documents should be opened first & if found in order, cover (Folder) for non statutory documents will be opened. If there is any deficiency in the documents the tender will summarily be rejected.
iv. Decrypted (transformed in to readable formats) documents of the non statutory cover will be downloaded & handed over to the tender committee.
v. Uploading of summary list of technically qualified tenderers.
vi. Pursuant to scrutiny & decision of the tender committee the summary list of eligible tenders & the serial number of work for which their proposal will be considered will be uploaded in the web portals.
vii. While evaluation the committee may summon the tenderer & seek clarification / information or additional documents or original hard copy of any of the documents already submitted & if these cannot be produced within the stipulated time frame, their proposals will be liable for rejection.

C. Financial proposal

i. The financial proposal should contain the following documents in one cover (folder) i.e. Bill of quantities (BOQ) the contractor is to quote the rate (Presenting Above/ below/ at par) online through computer in the space market for quoting rate in the BOQ.

ii. Only downloaded copies of the above documents are to be uploaded virus scanned & Digitally Signed by the contractor.

1. Penalty for suppression / distortion of facts

i. If any tenderer fails to produce the original hard copies of the documents (especially Completion Certificates and audited balance sheets), or any other documents on demand of the Tender Evaluation Committee within a specified time frame or if any deviation is detected in the hard copies from the uploaded soft copies or if there is any suppression, the tenderer will be suspended from participating in the tenders on e-Tender platform for a period of 3 (Three) years. In addition, his user ID will be deactivated and Earnest Money Deposit will stand forfeited. Besides, this office may take appropriate legal action against such defaulting tenderer.

ii. Financial capacity of a bidder will be judged on the basis of working capital and available bid capacity as mentioned in the N.I.T. to be derived from the information furnished in **FORM-I & II** (Section-B) i.e., Application (for Pre-qualification) & Financial Statement. If an applicant feels that his/their Working Capital beyond own resource may be insufficient, he/they may include with the application a letter of guarantee issued by a first class Bank to supplement the applicant. **This letter of guarantee should be addressed to the Tender Inviting/ Accepting Authority and should guarantee duly specifying the name of the project that in case of contract is awarded to the Bidder, the Bidder will be provided with a revolving line of credit.** Such revolving line of credit should be maintained until the works are taken over by the Engineer-In-Charge/ Employer.

The audited Balance sheet for the last three years, net worth bid capacity etc. are to be submitted which must demonstrate the soundness of Bidder's financial position, showing long term profitability including an estimated financial projection of the next two years.

2. AWARD OF CONTRACT

i. The WBSIDC reserves the right to accept or reject any Bid and to cancel the Bidding processes and reject all Bids at any time the prior to the award of Contract without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the ground for Employer's action. The WBSIDC reserves the right to terminate the work order by giving One(01) months prior notice to the contractor.

ii. The Bidder who's Bid has been accepted will be notified by the Tender Inviting & Accepting Authority through acceptance letter.

iii. The notification of award will constitute the formation of the Contract.

iv. The Agreement in Tender Form No 1 WBSIDC Ltd. will incorporate all agreements between the Tender Accepting Authority and the successful Bidder.

Executive Engineer
The WBSIDC Ltd.

Memo No. SB2/2464 /11/26-27 **Dated:- 11.08.2026**

Abridged Copy forwarded for information and wide circulation through his office NOTICE BOARD.

1.	Managing Director	The WBSIDC LTD. Kolkata – 12
2.	Executive Director	The WBSIDC LTD. Kolkata – 12
3.	Estate Manager	The WBSIDC LTD. Kolkata – 12
4.	Superintending Engineer,	The WBSIDC LTD. Kolkata – 12
5.	Chief Financial Officer	The WBSIDC LTD. Kolkata – 12
6.	Assistant Engineer (Elec.)-I,	The WBSIDC LTD. Kolkata – 12
7.	P.S to the M I C, Department of MSME & T, Govt. of W.B.,	Hemanta Bhavan, 1st floor, 12, BBD Bag (East), Kolkata-700001.
8.	P.S to the M O S, Department of MSME & T, Govt. of W.B.,	Hemanta Bhavan, 1st floor, 12, BBD Bag (East), Kolkata-700001.
9.	Sr. P.S to Additional Chief Secretary, Department of MSME & T,	Shilpa Sadan, 7th floor, 4, Camac Street, Kol-700016
10.	Estimating Section (Elec.)	The WBSIDC LTD. Kolkata – 12
11.	Notice Board, Shilpa Bhavan, (4th floor)	The WBSIDC LTD. Kolkata – 12
12.	Office Copy	The WBSIDC LTD. Kolkata – 12

Executive Engineer
The WBSIDC Ltd.

SECTION – B

FORM –I

PRE-QUALIFICATION APPLICATION

To
The Executive Engineer/Assistant Engineer (Electrical)-in charge
The WBSIDC Ltd.
31, Black Burn Lane,
Silpa Bhavan
Kolkata 12

Ref: - Tender

for_____

_____ (Name of work)

_____

N.I.E.T. No.: 12 of 2026-27 (Sl. No. ……) of Executive Engineer WBSIDC Ltd.

Dear Sir,

Having examined the Statutory, Non statutory & NIT documents, I /we hereby submit all the necessary information and relevant documents for evaluation.

The application is made by me / us on behalf of_____

In the capacity

_____duly authorized to

submit the order.

The necessary evidence admissible by law in respect of authority assigned to us on behalf of the group of firms

for Application and for completion of the contract documents is attached herewith.

We are interested in bidding for the work(s) given in Enclosure to this letter.

We understand that:
(a) Tender Inviting & Accepting Authority/Engineer-in-Charge can amend the scope & value of the contract bid under this project.
(b) Tender Inviting & Accepting Authority/Engineer-in-Charge reserve the right to reject any application without assigning any reason.

Enclo:- e-Filling:-
1. Statutory Documents
2. Non Statutory Documents

Date: -

Signature of applicant including title
and capacity in which application is made.

SECTION – B
Form – II
FINANCIAL STATEMENT

B.1 Name of Applicant :

B.2 Summary of assets and liabilities on the basis of the audited financial statement of the last five financial years. (Attach copies of the audited financial statement of the last five financial years)

	Year (Rs. In lakh)	Year (Rs. In lakh)	Year (Rs. In lakh)
a) Current Assets : (It should not include investment in any other firm)			
b) Current liabilities : (It should include bank over draft)			
c) Working capital : (a) – (b)			
d) Net worth : (Proprietors Capital or Partners Capital or Paid up Capital + Resource & surplus)			
e) Bank loan/ Guarantee : (As per clause G.2. with all sub clauses)			

Signature of applicant including title
and capacity in which application is made.

Work in hand i.e. Work order issued	As on 31.03.2025	As on 31.03.2024	As on 31.03.2023

Work in progress				**Work order issued but work not started**		
Sl.No.	Name of the work with Tender No.	Estimated Amount	% of work executed	Sl.No.	Name of the work with Tender No.	Tendered Amount

B.4 Bid Capacity:
[A.N.2 –B]
A = Maximum value of work done in a single year during last three years
B = Value at current price level of existing commitments and ongoing works to be completed in the next N years.
N = Time of completion of the work in years for which tender has been invited

N.B. The Audited Balance Sheet and Profit & Loss Account with all the schedules and annexure forming part of the Balance Sheet and Profit & Loss Accountant for the last five years should be given. All these financial statements should be signed by a competent authority for the last five years[Ref. :- Clause A-6(f) of instruction to bidders & Clause No. 5(vii) of NIT].

Signed by an authorized officer of the firm

Title of the officer

Name of the Firm with Seal

Annexture– 'X'
Affidavit
(To be furnished in Non – Judicial Stamp paper of appropriate value duly notarized)
Ref : NIET NO : 12 of 2026-27 Sl. No. ……

1. I, the under-signed do certify that all the statements made in the attached documents are true and correct. In case of any information submitted proved to be false or concealed, the application may be rejected and no objection / claim will be raised by the under signed.

2. The under signed also hereby certifies that neither our firm nor any of constituent partner had been debarred to participate in tender.

3. The under signed would authorize and request any bank, person, firm or Corporation to furnish pertinent information as deemed necessary and / or as request by the department to verify this statement.

4. The under-signed understood that further qualifying information may be requested and agrees to furnish any such information at the request of the department.

5. Certified that I have applied in the tender in the capacity of individual / as a partner of a firm & I have not applied severally for the same job.

Signed by an authorized officer of the firm
Title of the Officer
Name of the firm with Seal
Date:

Annexure – "Y"

AFFIDAVIT

(To be furnished in Non – Judicial Stamp paper of appropriate value duly notarized)

I, (Name & Address of Supervisor), by occupation - Supervisor (Electrical), do hereby solemnly affirm and declares as follows:

1. That my SCC Registration No…… having parts …..,..... valid till ……..
2. That I have been appointed as a sole and whole time Supervisor at the firm (Name of Firm with Address) with effect from (period of engagement).
3. That I am not attached with any other concern and I am responsible in case of any legal litigation in that matter.
4. That this statements made above are true to the best of my knowledge and belief

I sign and swear this affidavit on this date.

Form –III

Work in progress				**Work order issued but work not started**		
Sl.No.	Name of the work with Tender No.	Estimated Amount	% of work executed	Sl.No.	Name of the work with Tender No.	Tendered Amount

Signed by an authorized officer of the firm

Title of the officer

Name of the Firm with Seal

SECTION – B
FORM- IV

STRUCTURE AND ORGANISATION

A.1 Name of applicant :

A.2 Office Address :

Telephone No. :

Fax No. :

E-mail :

A.3 Name and address of Bankers :

A.4 Attach an organization chart showing the structure of the company with names of Key personnel and technical staff with Bio-data. :

Note: Application covers Proprietary Firm, Partnership, Limited Company or Corporation,

Signature of applicant including title
and capacity in which application is made.

SECTION –B
FORM – V

C. DEPLOYMENT OF ROAD / BRIDGE MACHINERIES:-
(Original document of own possession to be annexed)
(If engaged before Certificate from E.I.C. to be annexed in respect of anticipated dated of release of Machineries.)

Name of Machine	Make	Type	Capacity	Motor / Engine No.	Machine No.	Possession Status		Date of release If Engaged
						Idle	Engaged	
1	2	3	4	5	6	7	8	9

For each item of equipment the application should attach copies of
(i) Document showing proof of full payment, (ii) Receipt of Delivery,
(iii) Road Challan from Factory to delivery spot, is to be furnish.

Signature of applicant including title
and capacity in which application is made.

SECTION – B

FORM – V (contd…)

G. CONTRACTOR'S EQUIPMENT

MINIMUM PLANT AND EQUIPMENT MUST BE OWNED BY THE CONTRACTOR. (For Road work only)

Whereas it is entirely the responsibility of the Contractor to deploy sufficient plant and mechanical equipment to ensure compliance with his obligations under the Contract, the following list is an indicative list of the minimum essential basic holding of plant and mechanical equipment which the Contractor must own.

Sl. No.	TYPE OF EQUIPMENT	CAPACITY	MINIMUM NUMBER REQUIRED
1.	Soil Compactor	-	1 No.
2.	Hot Mix Plant	40-60 TPH	1 No.
3.	Wet Mix Plant	100-120 TPH	1 No.
4.	Niddle Vibrator.	-	1 No.
5.	Tilting Drum Mixture	230-280 litre capacity with Hopper	1 No.
6.	Vibratory Roller	-	1 No.
7.	Dumper	-	1 No.
8.	Tar Boiler	-	1 No.
9.	Bitumen Sprayer	-	1 No.
10.	Tandem Roller	-	1 No.
11.	Static Roller	-	1 No.
12.	Paver Finisher	-	1 No.
13.	Water Tank	-	1 No.
14.	Air Compressor	-	1 No.
15.	Laboratory Instruments for Road Works. a) Bitumen Extractor Machine. b) Sand Replacement Apparatus c) Aggregate impact test apparatus **OR** Los-Angles abrasion Test Machine.	-	1 No.
16.	Concrete Testing Machine	-	1 No.

Signature of applicant including title
and capacity in which application is made.

SECTION – B
FORM – V
EXPERIENCE PROFILE

Name of the Firm:

D.1 LIST OF PROJECTS COMPLETED THAT ARE SIMILAR IN NATURE TO THE WORKS HAVING MORE THAN 30% OF THE PROJECT COST EXECUTED DURING THE LAST FIVE YEARS.

Name of Employer	Name, Location & nature of work	Name of Consulting Engineer responsible for supervision	Contract price in Indian Rs.	Percentage of Participation of company	Original Date of start of work	Original Date of completion of work	Actual Date of starting the work	Actual Date of completion of work	Reasons for delay in completion (if any)

Note: a) Certificate from the Employers to be attached
b) Non-disclosure of any information in the Schedule will result in disqualification of the firm

Signature of applicant including title

and capacity in which application is made.

SECTION – C

Special terms and conditions

B.1 General :

Unless otherwise stipulated all the works are to be done as per general conditions and general specifications as mentioned either in—

(i) 'Schedule', which means the Schedule of rates of Public Works Department(Roads, Building, Sanitary and Plumbing works) in different district of West Bengal for the working area including up-to-date addenda and corrigenda, if any, issued by the Department.

(ii) Latest edition of the book of name 'Specification for Road and Bridge Works' of the M.O.R.T. & H., Surface Transport (Roads Wing), Government of India, published by Indian Roads Congress, New Delhi, for the specification of various works.

For general conditions and general specifications of items of works including supply and carriage works, not appearing in the aforesaid two specification books, relevant Public Works Department Schedule of Rates for Building Works and Materials & Labour in force including up-to-date addenda and corrigenda, if any, issued from competent authority as applicable for the working area of concern State Highway Circle at the time of submission of tender for the working area will be considered.

B.2 Definition of Engineer-in-Charge and commencement of work :

The word "Engineer-in-Charge" means the Executive Engineer, WBSIDC Ltd. The word "**Department**" appearing anywhere in the tender documents means WBSIDC, Engineering Division, who have jurisdiction, administrative or executive, over part of whole of the works forming the subject matter of the tender or contract. The word "**approved**" appearing anywhere in the documents means approved by the Engineer-in-Charge. The work shall have to be taken up within seven days of the receipt of the work order or otherwise mentioned therein. Failure to do so will constitute a violation of the contract stipulation as regards of proportionate progress and timely completion of work and the contractor will thereby make himself liable to pay compensation or other penal action as per stipulation of the printed tender form.

B.3 Terms & Conditions in extended period :

As Clause 5 of Tender Form No. 1 as the case may be when an extension of time for completion of work is granted by the Engineer-in-Charge against proper reasoning's, it will be taken for granted by the working contractor that the validity of the contract is extended automatically upto the extended period with all terms and conditions rates etc. remaining unaltered, i.e. the tender is revalidated upto the extended period.

[Except in case of adjustment of price for increase or decrease of basic materials which is guided by relevant G.O. s stated in Cl. No. 9 of NIT]

B.4 Co-operation with other agencies and damages and safety of road users :

All works are to be carried out in close co-operation with the Department and other contract or contracts that may be working in the area of work. The work should also be carried out with due regard to the convenience of the road users and occupants of the adjacent locality, if any. All arrangements and programme of work must be adjusted accordingly. All precautions must be taken to guard against chances of injury or accidents to workers, road users, occupants of the adjacent locality etc. The contractor must see that all damages to any property which, in the opinion of the Engineer-in-Charge are due to the negligence of the contractor are promptly rectified by the contractor at his own cost and expenses and according to the direction and satisfaction of the Engineer-in-Charge.

B.5 Transportation arrangement :

The contractor shall arrange for all means of transport including railways wagons required for carriage and supply of materials and also the materials required for the construction work. The Department may however, at their own discretion grant necessary certificates, if required, for booking of railways wagons etc. But, in case of failure of the department to help the contractor in this respect, the contractor will have arrange at his own initiative so that progress of work will not hamper and no claim whatever on this ground will be entertained under any circumstances. If railways facilities are not available, the contractor will have to depend on transport of materials by road as necessary to complete the work without claiming any extra payment from department in this regard. The contractor must consider this aspect while quoting rate.

B.6 Contractor's Site Office :

The contractor shall have an office adjacent to the work as may be approved by the Engineer-in-Charge where all directions and notice of any kind whatsoever, which the Engineer-in-Charge or his representative may desire to give to the contractor in connection with the contract, may be left or sent by post to such office or delivered to the contractor's authorised agent or representative. For such intimation to the contractor's site office, it shall be deemed to the sufficient enough to be served upon the contractor.

B.7 Incidental and other charges :

The cost of all materials, hire charges to Tools and plants, labour, Corporation/Municipal Fees for water supply, Royalty or road materials (if any), electricity and other charges of Municipalities or statutory local bodies, ferry charges, Toll charges, loading and unloading charges, handling chargers, overhead charges etc. will be deemed to have been covered by the rates quoted by the contractor inclusive of also Sales Tax (Central and/or State), Income Tax, Octroi Duty/Terminal Tax, Turnover Tax, VAT etc. All other charges for the execution of the specified work, including supply of materials and related carriage, complete or finished in all respect up to the entire satisfaction of the Engineer-in-charge of the work. No claim extra claim in this regard beyond the specified rate as per work schedule whatsoever in this respect will be entertained.

B.8 Authorized Representative of Contractor :

The contractor shall not assign the agreement or sublet any portion of the work. The contractor, may however, appoint and authorized representative in respect of one or more of the following purpose only.

a) General day to day management of work.

b) To give requisition for Departmental materials, Tools & Plants etc. to receive the same and sign hand receipts thereof.

c) To attend measurements when taken by the Departmental Officers and sign the records of such measurements which will be taken of acceptance by the contractor.

The selection of the authorized representatives shall be subject to the prior approval of the Engineer-in-Charge concerned and the contractor shall in writing seek such approval of the Engineer-in-Charge giving therein the name of work, Tender No., the Name, Address and the specimen signature of the representative he wants to appoint and the specific purposes as specified here-in-above, which the representative will be authorized for. Even after first approval, the Engineer-in-Charge may issue at any subsequent date, revised directions about such authorized representative and the contractor shall be bound to abide by such directions. The Engineer-in-Charge shall not be bound to assign any reason for his revised directions. Any notice correspondence etc. issued to the authorized representative or left at his address, will be deemed to have been issued to the contractor.

B.9 Power of Attorney :

The Provision of the power of attorney, if any, must be subject to the approval of the Department. Otherwise the Department shall not be bound to take cognizance of such of attorney.

B.10 Extension of time :

For cogent reasons over which the contractor will have no control and which will retard the progress, extension of time for the period lost will be granted on receipt of application from the contractor before the expiry date of contract. No claim whatsoever for idle labour, additional establishment, cost of materials and labour and hire charges of tools & plants etc. would be entertained under any circumstances. The contractor should consider the above factor while quoting this rate. Applications for such extension of time should be submitted by the contractor in the manner indicated in Clause-5 of the printed form of W.B.F. No.2911 (ii).

B.11 Contractor's Godown :

The contractor must provide suitable godowns for cement and other materials at the site of work. The cement godown is to be sufficient in capacity and it must be water tight with either an elevated floor with proper ventilation arrangement underneath the floor or if solid raised flooring is made, cement is to be stored on bamboo or timber dunnage to the satisfaction of the Engineer-in-Charge. No separate payment will be made for these godowns or for the store yard. Any cement, which is found at the time of use to have been damaged, shall be rejected and must immediately to remove from the site by the contractor as per directed of the Engineer-in-Charge.

B.12 Arrangement of Land :

The contractor will arrange land for installation of his Plants and Machineries, his godown, storeyard, labour camp etc. at his own cost for the execution of the work. Departmental land, if available and if applied for, may be spared for the purpose on usual charges as fixed by the Engineer-in-charge.

B.13 Use of Government Land :

Before using any space in Government land for any purpose whatsoever, approval of the Engineer-in-charge will be required. Departmental land, if available and if applied for, may be spared for the purpose on usual charges as fixed by the Engineer-in-charge. The contractor shall make his own arrangements for storage of tools, plant, equipments; materials etc. of adequate capacity and shall clear and remove on completion of work and shed, huts etc. which he might have erected in Government land. If after such use, the contractor failed to clear the land, Department will arrange to remove those installation and adequate recovery will be made from the dues of the contractor.

B.14 Work Order Book :

The contractor shall within seven days of receipt of the order to take up work, supply at his own cost one Work Order Book to Assistant Engineer Concerned, who is authorized to receive and keep in custody the Work Order Book on behalf of the Engineer-in-Charge. The Work Order Book shall be kept at the site of work under the custody of Assistant Engineer or his authorized representative. The Work Order Book shall have machine numbered pages in triplicates. Directions or instruction from Departmental officers to be issued to the Contractor will be entered (in triplicate) in the Work Order Book (except when such directions or instructions are given by separate letters). The contractor or his authorized representative shall regularly note the entries made in the Work Order Book and also record thereon the action taken or being taken by him complying with the said directions or instruction on any relevant point relating to the work. The contractor or his authorized representative may take away the triplicate page of the Work Order Book for his own record and guidance.

Cases of supplementary items or of claims may not be entertained unless supported by entries in the Work Order Book or any written order from the Tender Accepting Authority.

The first page of the Work Order Book shall contain the following particulars:

a) Name of the Work

b) Reference to contract number
c) Contractual rate in percentage
d) Date of opening of the Work Order Book
e) Name and address of the Contractor
f) Signature of the Contractor
g) Name & address of the Authorized representative (if any of the contractor authorized by him)
h) Specific purpose for which the contractor's representatives is authorized to act on behalf if the Contractor.
i) Signature of the authorized representative duly attested by the Contractor.
j) Signature of the Sub-Divisional Officer/Assistant Engineer concerned.

K) DATE OF ACTUAL COMPLETION OF WORK.
L) DATE OF RECORDING FINAL MEASUREMENT.

Entries in (k) & (l) above shall be filled in on completion of the work and before the Work Order Book is recorded in the office of the Sub-Divisional Officer/Assistant Engineer.

B.15 Clearing Of Materials :

Before starting any work, work site, where necessary, must be properly dressed after cutting clearing all varieties of jungles shrubs, bamboo clusters or any undesirable vegetation from the alignment or site of works on completion of works all temporary structure or obstruction including some pipes in underground work, if any, must also be removed. All scars of construction shall be obliterated and the whole site shall be left in a clear and neat manner to the satisfaction of the Engineer-In-Charge. Total length (in case of road project) shall be demarcated by proper chainaging anon with fixing 200m post as per direction of Engineer-in-Charge on both side of the alignment and Bench Marking at desired locations as per direction of Engineer-in-Charge. No separate payment shall be made for all these works, the cost thereof being deemed to have been included in the rates of various items of works quoted by the contractor in the schedule of probable items of works.

B.16 Sundry Materials :

The contractor must erect temporary pillars, master pillars etc. as may be required in suitable places as directed by the Engineer-In-Charge at his own cost before starting and during the work by which the departmental staff will check levels layout different works and fix up alignment and the contractor shall have to maintain and protect the same till completion of the work. All machineries and equipments like Level Machine, Staff, Theodalite etc. and other sundry material like, pegs, strings, nails flakes instruments etc. and also skill labour require for setting out the levels for laying out difference structures and alignment shall also be supplied by the contractor as per direction of Engineer-in-Charge at his own cost without any extra claim towards the department.

B.17 Supplementary / Additional items of Works :

Notwithstanding the provisions made in the related printed tender form any item of the work which can be legitimately be considered as not stipulated in the specific price schedule of probable items of work but has become necessary as a reasonable contingent item during actual execution of work will have to be done by the Contractor, if so directed by the Engineer-in-Charge and the rates will be fixed with manner as stated below: -

(a) Rate of supplementary items shall be analysed to the maximum extend possible from rates of the allied items of work appearing in the P.W. Department schedule of rates (for building, sanitary & plumbing and road work) of probable items of work forming part of tender document Rates for the working area enforce at the time of N.I.T.
(b) In Case, extra items do not appear in the above Public Works Department Schedule of Rates (for building, sanitary & plumbing and road work), such items for the works shall be paid at the rates entered in the Public Works Department Schedule of Rates for the working area enforce at the time of N.I.T.

(c) If the rates of the supplementary items can not be computed even after applications of clauses stated above, the same shall be determined by analyses from market rates of material, labour and carriage cost prevailing at the time of execution of such items work. Profit and overhead charges (both together) at 10% (Ten percent) will be allowed only; the contractual percentage will not be applicable.

Black-market rates shall never be allowed.
Contractual percentage shall only be applicable with regard to the portions of the analysis based on clauses (a) & (b) stated above only.
It may be noted that the cases of supplementary items of claim shall not be entertained unless supported by entries in the Work Order Book or any written order from the tender accepting authority.

B.18 Covered up works :

When one item of work is to be covered up by another item of work the latter item shall not be done before the formal Item has been measure up and has been inspected by the Engineer-in-Charge or the Sub-Divisional Officer/Assistant Engineer, as the authorized representatives of the Engineer-in-Charge and order given by him for proceeding with the latter item of work. When however, this is not possible for practical reasons, the Sub-Assistant Engineer, if so authorized by the Sub-Divisional Officer/Assistant Engineer may do this inspection in respect of minor works and issue order regarding the latter item.

B.19 Approval of Sample :

Samples of all materials to be supplied by the contractor and to be used in the work shall have to be approved by the Engineer-in-Charge and checking the quality of such materials shall have to be done by the concerned Department or as directed by Engineer-in-Charge prior to utilization in the work.

B.20 Water and energy :

The contractor shall have to arrange on his own cost, required energy for operation of equipments and machineries, for operating of pumping set, illuminating work site, office etc. that may be necessary in difference stages of execution of work. No facility of any sort will be provided for utilization of the departmental sources of energy existing at site of work. Arrangement for obtaining water for the work should also be made by the contractor at his own cost. All cost for getting energy and / or for any purpose whatsoever will have to be borne by the contractor for which no claim will be entertained.
All materials, tools and plants and all labour (skilled and unskilled) including their housing, water supply, sanitation, light, procurement of food for contractors staff & crews, medical aids etc. are to be arranged for by the contractor at his own cost. The cost for transportation of labour, materials and all other incidental items as required for work shall also have to be borne by the Contractor without any extra claim from department.

B.21 Road opened to traffic :

It should be clearly understood that the contractor will be responsible to keep the road open to all kinds of traffic during execution of the work. The work should be so arranged and the programmed of work must be as adjusted as would not disturb the smooth flow of road traffic in any way. If necessary diversion road should be provided and maintained by the contractor at his own cost for the entire period of work, if not separately provided in the tender. The Contractor should take all necessary precautions including guarding, lighting and barricading as necessary, to guard against the chances of injury or accident to the road user and traffic and ferry users during execution of the work for which nothing extra will be paid except otherwise mentioned in specific price schedule. The contractor will also indemnify the Department against consequences of any such injury or accident, if so happens, as per opinion of the Engineer-in-Charge, due to contractor's fault in compliance with any of such obligations.
Suitable road sign as and where necessary should be provided by the contractor at his own cost as per direction of the Engineer-in-charge and shall also be maintained till the completion of the work. Road barriers with red light at night are to be placed where the existing surface is disturbed with proper road signs. All these shall be done at the cost of the contractor without any extra claim towards department.

B.22 Drawings :

All works shall be carried out in conformity with the drawings supplied by this Department. The Contractor shall have to carry out all the works according to the departmental General Arrangement Drawing and Detail Working Drawings to be supplied by the Department from time to time.

B.23 Serviceable Materials :

The responsibility for stacking the serviceable materials (as per decision of the Engineer-in-Charge) obtained during dismantling of existing structures/roads and handing over the same to the Engineer-in-charge of work of this Department lies with the contractor and nothing will be paid on this account. In case of any loss or damage of serviceable materials prior to handing over the same to this Department, full value will be recover from the Contractor's bill at rates as will be assessed by the Engineer-in-charge.

B.24 Unserviceable Materials :

The Contractor shall remove all unserviceable materials, obtained during execution at place as directed. The contractor shall dressed up and clear the work site after completion of work as per direction of the Engineer-in-Charge. No extra payment will be made on this account.

B.25 Contractor's risk for loss or damage :

All risk on account of railway or road carriage or carriage by boat including loss or damage of vehicles, boats, barges, materials or labour, if any, will have to be borne by the contractor without any extra claim towards department.

B.26 Idle labour & additional cost :

Whatever may be the reason no claim on idle labour, enhancement of labour rate additional establishment cost, cost of Toll and hire and labour charges of tools and plants, railway freight etc. would be entertained under any circumstances.

B.27 Charges and fees payable by contractor :

B.28 Issue of Departmental Tools and Plants :

All Tools and Plants required for the work will have to be supplied by the Contractor at his own cost; all cost of fuel and stores for proper running of the Tools and Plants must be borne by the Contractor.

B.29 Realization of Departmental claims :

Any some of money due and payable to the contractor (including security deposit returnable to him) under this contract may be appropriated by the Government and set off against any claim of Government for the payment of sum of money arising out of this contract or under any other contract made by the contractor with the Government.

B.30 Compliance of different Acts :

B.31 Safety, Security and Protection of the Environment :

The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein:

(a) have full regard for the safety of all persons and the Works (so far as the same are not completed or occupied by the department),

(b) provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer-in-Charge for the protection of the Works or for the safety and convenience of the public or others,

(c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes

arising as a consequence of his methods of operation,

(d) Ensure that all lights provided by the Contractor shall be screened so as not to interfere with any signal light of the railways or with any traffic or signal lights of any local or other authority.

B.32 Commencement of work :

The work must be taken up within the date as stipulated in the work order and completed in all respects within the period specified in Notice Inviting Tender.

B.33 Programme of work :

Before actual commencement of work the contractor shall submit a programme of construction of work clearly showing the required materials, men and equipment. The contractor will submit a programme of construction in the pattern of Bar Chart or Critical Path Method and a time table divided into four equal periods of progress of work to complete the work within the specific period for approval of the Engineer-In-Charge who reserves the right to make addition, alterations and substitutions to such programme in consultation with the contractor and such approved programme shall be adhered to by the contractor unless the same is subsequently found impracticable in part or full in the opinion of the Engineer-In-Charge and is modified by him. The contractor must pray in writing, showing sufficient reasons therein for modification of programme. The conditions laid down in clause 2 of the printed tender form regarding the division of total period and progress to work and the time table there for as provided in the said clause shall be deemed to have been sufficiently complied with the actual progress of work and does not fall short of the progress laid down in the approved time table for one fourth, half and three fourth of time allowed for the work.

B.34 Setting out of the work :

The contractor shall be responsible for the true and perfect setting out of the work and for the correctness of the position, levels, dimensions and alignments of all parts of work, if any rectification or adjustment becomes necessary the contractor shall have to do the same at his own cost according to the direction of the Engineer-in-Charge. During progress of works, if any, error appears or arises in respect of position, level, dimensions or alignment of any part of the work contractor shall at his own cost rectify such defects to the satisfaction of the Engineer-in-Charge. Any setting out that may be done or checked by either of them shall not in any way relieve the contractor from their responsibility for correctness and rectification thereof.

B.35 Precautions during works :

The contractor shall carefully execute the work without disturbing or damaging underground or overhead service utilities viz. Electricity, Telephones, Gas, Water pipes, Sewers etc. In case disturbances of service utilities is found unavoidable the matter should immediately be brought to the notice of the Engineer-in-Charge and necessary precautionary measures as would be directed by the Engineer-in-Charge shall be carried out at the cost and expenses of the contractor. If the service utilities are damaged or disturbed in any way by the contractor during execution of the work, the cost of rectification or restoration of damages as would be fixed by the Engineer-in-Charge concerned will be recovered from the contractor.

B.36 Testing of qualities of materials & workmanship :

All materials and workmanship shall be in accordance with the specifications laid down in the contract and also as per M.O.R.T. & H's specification for Road and Bridge Works (Latest Revision) and relevant IS codes and the Engineer-In-Charge reserves the right to test, examine and measure the materials/workmanship direct at the place of manufacture, fabrication or at the site of works or any suitable place. The contractor shall provide such assistance, instrument, machine, labour and materials as the Engineer-in-Charge may require for examining, measuring and testing the works and quality, weight or quantity of materials used and shall supply samples for testing as may be selected and required by the Engineer-in-Charge without any extra cost. Besides this, he will carry out tests from outside Laboratory as per instruction of Engineer-in-Charge. The cost of all such tests shall be borne by the agency and that

must be considered during quoting rate.

B.37 Timely completion of work :

All the supply and the work must have to be completed in all respects within the time specified in Notice Inviting Tender from the date of commencement as mentioned in work order. Time for completion as specified in the tender shall be deemed to be the essence of the contract.

B.38 Procurement of materials :

All materials required to complete execution of the work shall be supplied by the contractor after procurement from authorized and approved source.

B.39 Rejection of materials :

All materials brought to the site must be approved by the Engineer-In-Charge. Rejected materials must be removed by the Contractor from the site within 24 hours of the issue of order to that effect. In case of non-compliance of such order, the Engineer-In-Charge shall have the authority to cause such removal at the cost and expense of the contractor and the contractor shall not be entitled to claim for any loss or damage of that account.

B.40 Implied elements of work in items :

Except of such items as are included in the Specific Priced Schedule of probable items and approximate quantities no separate charges shall be paid for traffic control measures, shoring, shuttering, dewatering, curing etc. and the rates of respective items or works are to be deemed as inclusive of the same.

B.41 Damaged cement :

Any cement lying at contractor's custody which is found at the time of use to have been damaged shall be rejected and must immediately be removed from the site by the contractor or disposed of as directed by Engineer-in-Charge at the costs and expenses of the contractor.

B.42 Issue of Departmental Materials :

Departmental materials will not be issued under any circumstances.

B.43 Force Closure :

In case of force closure or abandonment of the works by the Department the contractor will be eligible to be paid for the finished work and reimbursement of expenses actually incurred but not for any losses.

B.44 Tender Rate :

The contractor should note that the tender is strictly based on the rates quoted by the Contractor on the priced schedule of probable item of work. The quantities for various other items of works as shown in the priced schedule of probable items of works are based on the drawing and design prepared by the Department. If variations become necessary due to design consideration and as per actual site conditions, those have to be done by the contractor at the time of execution at the rate prescribed in the tender condition. **No conditional rate will be allowed in any case.**

B.45 Delay due to modification of drawing and design :

The contractor shall not be entitled for any compensation for any loss due to delays arising out of modification of the work and due to non-delivery of the possession of site, if any.

B.46 Additional Conditions :

A few additional conditions under special terms and conditions :

B.48.1. Rate quoted shall be inclusive of clearing site including removal of surplus (both serviceable & unserviceable) earth, rubbish, materials etc. as per direction of the Engineer-in-Charge.

B.48.2. Rate quoted shall be inclusive of West Bengal Sales Tax, Income Tax Octroi and all other duties, if any.

B.48.3. Display board (Informatory) of size 150cm X 90cm is to be provided at starting and end chainage of the work-site with aluminum plate hoisted on steel tubular pipe/ angle post to a height of 1.5 Metre at the cost of the contractor including fitting, fixing, painting, lettering etc. complete as per direction of Engineer-in-Charge.

B.48.4.The Contractor is to display caution board maintaining I.R.C. norms at his own cost as per direction of Engineer-in-Charge.

B.48.5. Deep excavation of trenches and left out for days shall be avoided.

B.48.6. Labour welfare Cess will be deducted @ 1(one) % of gross bill value as per rule.

B.48.7. The whole work will have to be executed as per Departmental drawings available in this connection at the tender rate.
B.48.8. Income Tax Will be deducted from each bill of the contractor as per applicable rate and rules in force.

B.48.9. In accordance with the West Bengal Taxation Laws (amendment) Ordinance, 1993 amending the West Bengal Finance (Sales Tax) Act, 1994 necessary S.T / VAT will be deducted as per rate in force from the bill in addition to other deduction as per extent rules.

B.47 Payment of Bills :
As mentioned in clause 7 of the NIT

B.48 Refund of Security Deposit : As mentioned in Cl. No. 26 of NIT
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B.49 Arbitration :

Arbitration will be allowed, as per arbitration clause in terms of Clause-25 of the said Tender Form No. 1. So Clause -25 will stand valid while executing contract agreement.

Sd/-
Executive Engineer
The WBSIDC Ltd.

SECTION - D

(B) MATERIALS

Samples — Samples of goods to be supplied by the contractors and used in the works shall have to be got approved by the Engineer-in-Charge of work prior to being fitted and fixed.

Stone metal — 1. a) All stone metal and stone chips shall be of black colour. Trap in quality, Stone chips free from any yellow or surface stones, shall be hard coarse grain and rough. Materials shall be free from clay, dust, dirst or any others foreign matter.

Jhama metal b) All Jhama metals shall be from hard, well bumt, tough and heavy klin-burn bricks burnt from clayey soil and of a dark red colour. Any spongy or under burnt metal shall not be accepted.

Stacking c) Stocks are made at exact position indicated by the Engineer-in-Charge during actual stacking. Any stack made or excess quantity stacked at any one place without prior approval shall have to be removed and materials re-stacked at exact positions required. All costs are to be borne by the contractor and no extra payment will be made on this account

Site for Stacking d) Before stacking stone chips and metals, jhama metals etc., at roadside, the flanks of the road where these materials are to be stacked as directed, must be dressed, jungles, if any cleaned and undulations leveled up at the cost of the contractor. The Contractors will have to stack the materials on one side of the flanks of the road or as directed as per requirements at regular intervals and all stacks must be of the same section and as per direction of the Engineer-in-Charge. In doing so, the contractor may have to remove the stonechips, metals, jhama metals etc. as the case may be from the flanks and stack the removed metals as shown by the Engineer-in-Charge of the work and the contractor's rate should be inclusive of undertaking the above work and no extra payment would be made on this account.

e) During the collection time and supply at roadside, the contractor shall guard the materials at his own cost and this deptt. will not remain responsible for any loss whatsoever before the materials are measured and accepted by this deptt. The contractor should attend measurement either himself or through his authorized agent to avoid future dispute and sign the M.B. as a token acceptance of measurements. Regarding quantity and quality, measured by the Engineer-in-Charge or his subordinate staff, the decision of the officer of this deptt. shall be final and no claim whatsoever would be entertained afterwards under any circumstances.

Supply material f) The contractor will have to arrange for land at his own cost for intermittent loading and unloading if required. The contractor may supply the materials either by Rly. or by land route. In case of Rly. route, the contractor will have to pay the Rly. freight, demurrage or warfare, if any and arrange for stacking space at the Rly. station and this deptt. will have no responsibility for these under any circumstances.

Timber 2. Any timber for doors and windows in order works should not be fitted and fixed in position prior to approval of the Engineer-in-Charge which has got to be obtained prior to application of painting works.

Paint 3. The paint used in the work shall be of superior quality of ready mixed paint of approved made and brand eg. "Jhilmil" brand of "Jenson & Nicholson" Woodcote' of Shalimar, "Castle" brand of British paint "Overalls" of East India Paint, or/of similar quality of other manufacturers. The made, brand and shade of the paint must be to the prior approval of the Engineer-in-Charge.

(C) SPECIALO SPECIFICATIONS

(a) For Building Works

Excavation 1. It shall include the removal of material of any nature which may be encountered including sand, clay, earth, old masonry or roots of trees etc.

Testing of 2. For testing concrete, specified by strength, the contractor shall provide all labour cement materials and applicance required for making test specimen for experiments and for testing testing the quality of concrete going into the job. Each set of specimen shall consist of four cylindrical test block 15 cm diameter

and 30 cm high. The ends of the specimens are to be finished with utmost care so as to avoid eccentric loading at the time of test.

The contractor shall remain fully responsible for this and no subsequent plea from him that any deficiency in strength which the result of the test might show, was due to defects in the specimens will be entertained. Specimens are to be left in the moulds for about 24 hours when they are to be carefully removed from the moulds, and cured under similar condition to concrete in the job itself.

If requested by the contractor, the Engineer-in-Charge at his discretion, may permit the use of 15 cm cube specimens instead of cylindrical speciment but in that case the ultimate crushing strength indicated by these cube specimens shall always be multiplied by the factor 0.8 to convert as above shall be taken as the criterion for comparison with the specified strength.

A proper register of test specimen shall be maintained showing all relevant details. The flatness of the end surfaces of the specimens must not be spoiled by identification marks. These marks may at first be made on the moulds and painted in the curved surface of the specimens as soon as these are taken out from the moulds.

The contractor shall made all arrangements and do everything necessary for proper making and curving the test specimens under the direction supervision and control of the Engineer-in-Charge or his representative.

Where concrete is specified by strength, the Engineer-in-Charge or his representative may at any time direct the contractor to make specimens from the concrete actually going into the job when the contractor shall forthwith comply with the that direction. Not more than one set of specimen shall however be ordinarily required to be made on any day or for every 700 meter cube of concrete cast on the day. The contractor is to allow for the cost of these specimens in his rate for concrete work, no separate payment whatsoever shall be made for these specimens.

After curving the specimen shall be made over to the Engineer-in-Charge or his representative who will arrange to have been tested at 28 days from the day of casting if there be any delay for any reason whatsoever the result of the test shall never the less be valid and taken for the purpose of the contract to be the same as 28 days strength.

Out of four specimens in each set, the Engineer-in-Charge may arrange to have any two tested departmentally and if he likes, send the remaining two for testing by Govt. Test House at
Alipore, whose report shall be binding on all parties concerned. The test results (obtained from the Govt. Test House, Alipore) shall be considered “Satisfactory” if (a) The strength of each individual specimen is at least 90 of the specified strength and (b) the average of the results of the two specimens is not below the specified strength both conditions to be fulfilled. For concrete deficiency in strength, the average of the results of the two test specimens shall be taken as the strength of concrete and the percentage deficiency calculated accordingly. If however the test result be unsatisfactory from the point of view of condition (a) above but the average of the results of the two specimens be not less than the specified strength, then the deficiency in strength shall be taken as “not exceeding 5%”.

For work test specimen as are ultimately found to be “not satisfactory” and for all preliminary test specimen the contractor shall pay the incidental charges for sending the specimens from worksite to the testing laboratory at adhoc rate of Rs.10% for each piece of specimen. The contractor shall in addition, bear the charges of the Govt. Test House at Alipore in respect of the preliminary tests (if these are actually tested there) and also in respect of work test specimens as are as ultimately found to be “not satisfactory”. For all test specimens whatsoever the contractor shall be responsible for proper packing of the specimens at his own cost, for safe and convenient transport of the same from the site to the testing laboratory.

3. Mild steel round bars will be issued departmentally. The contractors rate shall include labour for cutting the bars to correct lengths binding cold to shape, placing and fixing in position as shown in the drawing, with 16G, were security tied at every intersection. The contractor shall without extra charge provide all other supports and fixings required and shall take precautions to see that all such temporary fixings are removed before the concrete is brought up. The contractor's rate shall also include any initial straightening of the bars whenever necessary and removing loose rust or scales. If any, and other incidental works in this connection. The contractor shall be paid on the calculated weight of steel reinforcement only actually placed in the structure i.e., the weight of tying wire or of cut pieces of rods not used shall not be considered.

If bars of exact required lengths be not available, these shall be cut from such lengths or available bars as will involve minimum wastage in cut pieces. If should be noted that rods of 12mm dia and below may be supplied in coils.

4. Scaffolding must be strong and rigid stiffened with necessary, corse bearers and always decked and boarded on the sites with close doared ceilings and swings to prevent any injury to persons or materials. The contractor shall have to allow other trades to make reasonable use of his scaffolding and storage and as directed by the Engineer-in-Charge.

If for the interest of the work the contractor have to erect scaffolding in the others properties including local bodies or corporation, the arrangement for the same including the cost of licensing fees etc. shall have to be borne by the contractor and the department should be kept free from liabilities on the account.

Rectification of damages

5. Rectification of damages, holes through walls, floor, chajia, sunshade etc. should be made just sufficient and not more than 7.5 cm larger than outside dia. of pipes. These should be filled up with traps stone chips after laying the concrete, the same should be properly cured. After curing, the damaged parts should then be fully restored to the original condition and fully matched with the surface in contact. Cost of the works are to be included in the rate quoted for relevant items and no extra for those items of work should be paid under any circumstances.

Cutting holes etc

6. All works viz. cutting holes, chases, recesses, trenches etc. at any place which may be necessary in executing any item of work in the schedule of items and subsequent restoration as per specification as well as direction of the Engineer-in-Charge, are included in the rate of such items and shall not be paid for separately unless specifically provided in the period schedule.

(C) FOR SANITARY AND PLUMBING WORKS

Flushing Cisterns

1. Flushing Cisterns of I.P.W.C. and E.P.W.C. will be patent 13.5 litre pull and let go or low down cistern types as specified. The flush pipes for W.C.S. will be 3.1 cm dia (internally) telescopic type with brass union and clamps, flush pipes for Urinals shall be made of G.I. pipes and fittings or lead pipes as may be directed by the Engineer-in-Charge. Flushing Cistern of Urinal shall be of approval type patent of specified capacity with prompt value. All flush pipes and cisterns in Hardware shall have to be painted 2 coats of paint of any shade and brand over a coat of approved primes. The inlets of Sanitary fittings and equipments shall have to be connected with the adjacent distribution line (water supply) with requisite lengths and size of PVC connection pipe provided with necessary unions and both ends complete with plumber wiped joints within the quoted rate of respective items. Cost of these PVC connection pipe will be paid separately.

Fittings for G.I. pipes

2. All G.I. pipes for installations included big or small fittings and specials as may be necessary and the contractor shall quote his rates accordingly and no extra payment will be made whatsoever unless stated otherwise in the Schedule of item of works in the Tender.

Joints

3. The joints of pipes, fittings & accessories shall be made as specified and unless otherwise specified, no separate payment shall be allowed.

i) G.I. pipes, fittings, valves and Cocks with jute and white lead paint.
ii) H.C.I. Pipes & fitting: The half of the depth of the annualar space between spigot and socket shall be packed with spern yarn and the remaining half shall be filled up with molten lead well caulked with caulking tools.
iii) Stone Ware Pipes & Fittings: The half of the depth of the annuatar space between socket and spigot shall be packet with tarred gusket and the remaining half shall be filled up with cement mortar (3:1) & shall be finished beveled at 45%.

Test of pipe Valve & Cocks

4. The pipe lines, valves and cocks shall be tested at the contractor's expense for which no extra payment shall be allowed. The available water supply sources may however be allowed to utilized for testing, but in absence of any such agreement-the contractor shall have to conduct the following tests.

i) H.G.I. Pipe : Smoke test
ii) G.I. Pipe Line: The pipes shall have to be tested at least for designed working pressure.

iii) S.W. Pipe Lines: All Section between two inspection pits shall have to be tested separately. The funnel shall be at least 1.8 Meter above the soft of the S.W. pipe at the upper inspection pit.

Any defects detected during testing shall be rectified at the Contractor's expenses.

Septic tank

5. Construction of septic tank shall be done as per approved design. After completion of the tank, the tank shall have to be filled up with clear water after removing any foreign materials from the inside of the tank, if any. No separate payment shall be allowed on this account.

Painting

6. All pipes & fittings shall have to be painted outside with two coats of paint of approved brand & shade over a coat of approved primer to match the surface. No separate payment shall be allowed on this account and rates of respective items shall be deemed to be inclusive of the work.

(D) FOR SINKING TUBE WELL UPTO 7.5 CM. DIA

Site

1. The tube well shall be sunk at the site selected by the Engineer-in-Charge. The site should be cleared of all removable materials that may obstruct the execution of work. The materials so removed shall be properly stacked at the place as directed. The site should be cleared after the work is completed in all respect. Contract should take the cost of clearing into consideration while quoting their rates and no payment will be made for the same as an extra item of work.

Pipe for the Tube-well

2. Pipes to be used in the tube well, excluding the strainers shall be galvanized and of the specified dia of approved make and quality. Only Class 'B' pipes shall be used Ends of pipes shall be treated properly. Cutting of pipes shall be done by hacksaw and not by pipe cutters. No separate payment shall be allowed for cutting pipes to required length and for cutting threads.

Strainers

3. Strainers shall be of the specified dia, and of approved make and quality. Required number of strainers shall be fitted to the tube well pipes with necessary fitting and placed at the positions as directed.

Sand trap

4. Pipes for the sand trap shall be of the same specification as that for the tube well pipes, if shall be of such length as directed. If shall be closed at one and threaded at the other end which shall be jointed to the bottom most strainer piece with a socket.

Joints

5. Galvanized sockets of approved quality shall be used at all joints, they shall fit well and right6ly with the threaded portion of the pipe and the inside of the socket shall be dried and given a thorough coat of read lead or of a mixture of white zinc and boiled linseed oil. No separate payment shall be allowed for the cost at sockets and making joint.

Boring

6. i) Boring shall be done by the system specified and shall be continued to such a depth as may be directed. Care should be taken to ensure that the boring being done vertically and the casting pipes are perfect in pump.

ii) Samples of boring etc. be collected for each type of stratum that will be met during boaring. They shall be kept in suitable containers. These containers shall be leveled inside and outside showing the position and depth of the stratum from which the sample is obtained. They shall then be submitted to the Engineer-in-Charge for his references and decision as regards depth to which the tube well is to be sunk. No separate payment shall be allowed for the collection of samples of boring.

iii) Contractors shall obtain samples of water for chemical analysis at the depth as required by the Engineer-in-Charge.

Loweing

7. Tube well pipes, strainers, sand trap etc. shall be lowered after boring to the required depth completed.

Strata

8. It is anticipated that good potable water should be available the normal depth specified in the contract. The contractor must however, be prepared to go down to greater depth if the situation demands. If satisfactory water bearing stratum be found before reaching the depth as specified herein it will be at the option of Engineer-in-Charge to stop the work of sinking further and order for lowering the well pipes and strainers at his stratum.

Bacteriolo-gical test

9. A tube well is generally bacteriologically safe. Hence contractor should guarantee a bacteria free water. Necessary pumping and arranging testing operation through the Public Health Laboratory will be done by the contractor. In case of unsatisfactory, the contractor will take advice of the experts till the result is satisfactory. The contractor will have to take into account this factor while quoting his rate in seutral as no payment would be made for Chemical and Bacteriological tests as an extra item.

(D) MODES OF MEASEUREMENT

General

Unless specifically mentioned otherwise, the following modes of measurements shall be adopted.

Profile Measurement

1. Where it would not be possible to adopt the usual procedure of borrow-pit measurement due to existence of old barrow-pits in haphazard condition and also due to difficulties in measuring the barrow-pit, the Engineer-in-Charge shall have sole power to allow profile measurements for which there may not be specific mention in the item of the tender. Earthworks in that case, shall have to be done in the shape of trapezoidal continuous or discontinuous drains, where necessary as per direction of the Engineer-in-Charge and for this no extra amount should be paid to the Contractor.

For good earth, created earth & for earth work for which profile measurement has been specified in the item, the earth work for the road embankment completed strictly accordingly to the specifications by method of average areas of section based on level sections taken before the commencement and after completion of the earth work at distances not more than 30 metre, apart in presence of the Contractor or their authorized representatives. The contractor should satisfy himself before commencement of work, regarding correctness of level as shown in the drawing. The contractors or their authorized representatives, the Sub-Assistant Engineer concerned and the Assistant Engineer will have to sign the level books. If the contractors or their representatives
fail to attend the leveling work after serving the notices to that effect the level taken by the Deptt. will have to be accepted by the contractor and no subsequent claim on this account will be entertained.

The measurement of road embankment shall include the net volume of earth work in the embankment between the original surfaces and the surface of the finished road embankments completed according to the drawing and specifications or instructions of the Engineer-in-Charge in writing and accepted by the Engineer-in-Charge in writing. Payment will be made after deducting $1/9^{th}$ of the volume for sinkage and/or shrinkages. But in case the earth is compacted on 0 Mm C. to the satisfaction of the Engineer-in-Charge for which no deduction for sinkage and / or shrinkage will be made.

All other conditions and specifications for ordinary earth work not in conflict with the above will also hold good in addition.

The rate should include the cost of bailing out water, shoring, etc. from borrowing area. All other conditions for ordinary earth work will hold good in this case too. Payment for earth work shall be made on the basis of the rate provide for on the item, where-in due consideration given for average land and lift considering the distance and location of spots of lands acquired. No extra shall be paid to the contractor for lead & lift over and above the rate provided for the item.

In case of earth work, where payment is made on pit measurement 10% of the value of the earth work will be withheld from the bills. In such cases, the contractor shall remove the witless and dress the spoils or obtained immediately after obtained the payment of such earth work and shall apply for refund of the withheld amount within 30 (thirty) days of the payments through the Sub-Divisional officer concerned, failing which the withheld amount will be forfeited.

Cinder

2. Schedule showing minimum height of stacks and the allowance to be deducted for sinkage and/or shrinkage when measured in fresh stacks.

Material	Minimum height of stacks	Allowance to be deducted for sinkage and/or shrinkages
CINDER	34 CM	1/9

Strainers

3. The total length of strainer as use in the tube well shall be measured in fitted condition.

Taking out Existing Tube well

4. While taking out existing pipes of tube well, payment for withdrawal shall only be made if full length of the pipe and strainer are withdrawn. In case of failure on the part of contractor, no payment shall be allowed.

The old pipe taken out from an existing tube well shall be cleared upto the satisfaction of the Engineer-in-Charge. This fact4or should be taken into account while quoting the rates.

Signature of the Tenderer

Signature of the Officer by whom accepted

The following certificates should be signed by the tenderer unconditionally before submission of the tender.

Certificates :

I/We have inspected the site of works and have made me/us fully acquainted with the local conditions in and around the site of works. I/We shall be bound by conditions laid down in the Notice Inviting Tenders, Special Terms & Conditions and Specifications. Specific Priced Schedule and as also Tender Form No.1. I/We have gone through the current schedule of rates of the regional Circle and General Specifications now in force in the P.W. Department, Government of West Bengal and also the I.S.I. code of Practice. I/We shall also uniformly maintain such progress with the work, as may be directed by the Engineer-in-Charge of the work to ensure completion of the same within the target date.

Special Specification for Road Works

C.1 Name of Work :

As per Detailed NIT

C.2 Site Condition :

The contractor before tendering must visit the site and satisfy himself as to the extent of the proposed construction difficulties and problems, if any, to start, to continue and complete the work within the time as stipulated in this tender without dislocation of normal traffics during day as well as to night. No interruption in works due to any site condition shall be engaged as to complete the work in time. The execution of the work should however be planned and phased so that there are no undue hazards to the movement of normal traffic over the road. No additional payment will be entertained on this account.

Difficulties and inconveniences in transporting materials over the bad roads, Kutcha roads, incomplete roads and over the weak and damaged culverts should be taken into consideration by the Contractor. The materials for the work may be required to carry over kutcha roads. These approach roads should be maintained by the Contractor at his own cost.

Difficulties in collection of different materials in lot, over the road flank due to insufficient space if there be, should be noted by the bidder. No rate or time will be allowed on these accounts as stated. The bidder should quote his rate taking into consideration regarding security of the materials. Nothing would be entertained under any circumstances beyond the respective tendered provisions.

C.3 Preliminaries :

During execution of the work contractor will remain responsible for providing reasonable facilities to traffic on the road and also lighting and guarding of the road during night for its safety while the work is in progress and no extra rate will be paid on this account before taking up the work.

Approximately half of the road width including one flank shall be kept clear to the traffic from all obstruction and the surface shall be properly cleaned and leveled as far as possible.

Sign Boards / Direction Boards are to be erected at required points of specified size indicating in red letters on a white back ground as per direction of the Engineer-in-charge. Cost of which should be borne by the agency.

Road barriers shall be placed wherever the existing road surface disturbed with proper' road signs. During night, these should be provided with the light, Night Guard e.g. 'Chowkidar' for watching the barrier etc. shall also be maintained by the Contractor to give due warning to road users specially at night.

D.1 Embankment & Sub-Grade :

(As per **clause-305** of ‘’Specification for Road and Bridge Works of MORTH’)

D.1.1 Scope:

The top 500 mm of the road embankment over the entire formation width and directly supporting the road pavement will be termed as 'Sub-Grade'.

D.1.2. Compaction :

Each layer of the material shall be thoroughly compacted to the densities as specified in tender. Subsequent layers shall be placed only after the finished layer has been tested and accepted by the Engineer-in-Charge.

D.1.3 Density & Compaction requirements for embankment and sub-Grade: (following table as guideline)

Type of work/material			Maximum laboratory dry unit weight (tested as per IS:2720(Pt-8))	Relative compaction as percentage of maximum laboratory dry density (As per IS: 2720 (Pt-8))
1	Embankment :	(i) Embankment height upto 3m not subjected to extensive flooding	1.52 gm/cc	Not less than 95%
		(ii) Embankment height exceeding 3m subjected to extensive flooding	1.60 gm/cc	Not less than 95%
2	Sub-grade and earthen shoulder/ verges/ backfill :	-------	1.75 gm/cc	Not less than 97%
3	Expensive clays	(i) Sub-grade and 500mm portion below sub-grade	------	Not allowed
		(ii) Remaining portion of embankment	------	Not less than 90%

When density measurement reveals any soft areas in the embankment/sub-grade earthen shoulder (verge), further compaction shall be carried out as directed by the Engineer. Inspite of that, the specified compaction is not achieved, the materials in the soft areas shall be removed replaced by approved materials, compacted to the density requirements and satisfaction of the Engineer.

D.1.4 Drainage :

The surface of the embankment/sub-grade at all times during construction shall be maintained at such a cross fall (not flatter than that required for effective drainage of an earthen surface) as will shed water and prevent ponding.

D.2 Granular Sub-Base & Base :

(As per **clause-401 & 404** of 'Specification for Road and Bridge Works of MORTH')

D.2.1 Granular Sub-Base :

D.2.1.1 Scope:

The work shall consist of laying and compacting well graded materials on prepared sub-grade in accordance with the requirement as per specifications. The material shall be laid in one or more layers as sub-base or lower sub-base and upper sub-base as necessary according to lines, grades and cross sections as shown on the drawings or as directed by the Engineer-in-Charge.

D.2.1.2 Materials :

The materials to be used for the work shall be natural sand, muram, gravel, crushed stone, or combination thereof depending upon the grading requirement. Materials like crushed slag, crushed concrete, brick metal and kankar may be allowed only with the specific approval of Engineer-in-Charge. The materials shall be free from organic or other deleterious constituents and conform to one of three grading as stipulated.

D.2.1.3 Physical Requirements aggregates :

The material shall have a 10% fines value of 50KN or more (for sample in soaked condition & tested in compliance with BS: 812, Pt.-111). The water absorption of coarse aggregate shall be determined as per IS: 2386, Pt.-3 and if this value greater than 2%, soundness test shall be carried out as per IS: 383. For Grading-II & Grading-III materials, the CBR shall be determined at the density and moisture content likely to be developed in equilibrium conditions which shall be taken as being the density relating to a uniform air void content of 5%.

D.2.1.4 Grading of materials :

D.2.1.4.1 For Closed Graded G.S.B :

IS Sieve Designation	Percentage by weight passing the IS Sieve		
	Grading - I	**Grading - II**	**Grading - III**
75 mm	100	----	----
53 mm	80-100	100	----
26.5 mm	55-90	70-100	100
9.5 mm	35-65	50-80	65-95
4.75 mm	25-55	40-65	50-80
2.36 mm	20-40	30-50	40-65
425 □	10-25	15-25	20-35
75 □	3-10	3-10	3-10
Minimum CBR Value	**30**	**25**	**20**

D.2.1.4.2 For Coarse Graded G.S.B :

IS Sieve Designation	Percentage by weight passing the IS Sieve		
	Grading - I	**Grading - II**	**Grading - III**
75 mm	100	----	----
53 mm	----	100	----
26.5 mm	55-75	50-80	100
9.5 mm	----	----	----
4.75 mm	10-30	15-35	25-45
2.36 mm	----	----	----
425 □	----	----	----
75 □	< 10	< 10	< 10
Minimum CBR Value	**30**	**25**	**20**

For both the gradations, the materials passing 425 □ sieve for all the three grading when tested according to IS : 2720, Pt.-5 shall have **Liquid Limit** not more than **25 percent** and **Plasticity Index** not more than **6 percent**.

D.2.1.5 Preparation of sub-grade & Preparation of mix :

Immediately prior to the laying of sub-base materials the sub grade shall be prepared by removing all vegetation and other extraneous materials, lightly sprinkled with water, if necessary, and rolling with one pass of at least 8-10 ton smooth wheeled roller to make the laying bed as per true line, level and cross-fall/ camber.

When the sub-base materials consists of combination of materials mentioned here-in-above, mixing shall be done mechanically by the mixing-place method, otherwise mixing shall be done as per direction of Engineer-in-Charge.

D.2.1.6 Spreading an compaction :

Spreading and compaction shall be done as per clause-401.4.2of 'Specification for Road and Bridge Works of MORTH'. The sub-base material of grading as specified in the contract shall be spread on the prepared sub-grade by any approved method. The thickness of loose layers shall be so regulated that the minimum thickness of the layer after consolidation does not exceed 100 mm or as specified in the contract. Moisture content of the loose material may be checked where necessary, in accordance with IS: 2720 (Pt-2) and suitably adjusted by sprinkling water. After water has been added the materials shall be processed by approved means, if so directed by the

Engineer in charge, until the layer is uniformly wet.
Immediately thereafter, rolling shall be started with at least 8-10 tonnes smooth wheeled Roller. Rolling shall commence at the edges and progress towards the center longitudinally except that on super-elevated portions where it shall progress from the lower to the upper edge parallel to the centerline of the pavement. Each pass of the roller shall uniformly overlap not less than one -third of the track made in the preceding pass. During rolling, the grade and cross fall shall be checked with the help of straight edge and camber board respectively and any high spots on depressions which become apparent, shall be corrected by removing on adding fresh material. Rolling shall be continued till the density achieved is at least 98% of the maximum dry density for the material determined as per IS: 2720 (Part-8). The surface of any layer of material on completion of compaction shall be well closed free from movement under compaction equipment and from compaction planes, ridges, cracks or loose material. All looses segregated or otherwise defective areas shall be made good to the full thickness of layer and re-compacted.

D.2.2 Jhama Metal Consolidation :

D.2.2.1 Scope:

This work consists of clean, crushed aggregates mechanically interlocked by rolling and bonded together with screening, binding material, where necessary and water laid on a prepared sub-grade/sub-base/ base or existing pavement, as the case may be and finished in accordance with the requirements of stipulated specifications and in conformity with the lines, grades, cross section and thickness as per approved plans or a directed by the Engineer in charge.

D.2.2.2 Materials for Jhama Metal :

Jhama metal of size 40 mm to 70 mm shall be obtained by breaking good quality kiln burnt jhama bats, must not be spongy or with any coating of foreign materials, uniformly vitrified and heavily picked jhama brick and the colour should be copper red to black. The metal should be more or less cubical in shape.

D.2.2.3 Grading of materials & Physical requirement :

Grading of Jhama materials should conforms to the following gradation or as directed by Engineer-in-Charge.

Grading Type	Size Range	IS Sieve Designation	Percentage by weight passing the IS Sieve
Grading-1	90mm to 45mm	125 mm 90 mm 63 mm 45 mm 22.4 mm	100 90-100 25-60 0-15 0-5
Grading-2	63mm to 45mm	90 mm 63 mm 53 mm 45 mm 22.4 mm	100 90-100 25-75 0-15 0-5

Impact Value under wet condition should only be tested in accordance with IS: 5640. (Shall not exceed 30%)

D.2.2.4 Construction Operations :

Immediately prior to the laying of sub-base, the sub grade finished shall be prepared by removing all vegetation and other extraneous matter, lightly sprinkled with water, if necessary, and rolling with one pass of at least 8-10 ton smooth wheeled roller

D.2.2.5 Spreading and Compacting :

The course aggregates shall be spread uniformly and evenly open the prepared sub-base to proper profile by using templates placed across the road about 6 metres apart in such quantities that the thickness of each compacted layer shall not more than 100 mm for Grading-I and 75mm for Grading-2. The spreading shall be done from roadside stacks. In no case shall be aggregates be dumped in heaps directly on the surface prepared to receive the aggregates. The surface of the aggregates spread shall be carefully checked with templates and all high or low spots and segregated spots shall rectified by removing or adding aggregates as may be required. The surface shall be checked frequently with a straight edge while spreading and rolling so as to ensure a finished surface as per approved plans or as directed by the Engineer-in-Charge.

Immediately following the spreading of the course aggregates, rolling shall be started with at least 8-10 ton smooth wheeled roller of approved type. Except on super-elevated portions where the rolling shall proceed from inner edge to the outer, rolling shall begin from the edges gradually progressing towards the center. First the edges shall be compacted with roller running forward and backward. The roller shall then move inwards parallel to the center line of the road, in successive passes uniformly lapping preceding trace by at least one half width. Rolling shall be continued until the aggregates are thoroughly keyed and if required and desired by Engineer-in-Charge screening of approved type shall be applied to produce a dense, compacted mass as per requirement. The roller surface shall be checked transversely and longitudinally with template land any irregularities corrected by loosening the surface adding or removing necessary amount of aggregates and re-rolling until the entire surface conforms to desired camber and grade. In no case shall the use of screenings be permitted to make up depressions.

D.3 Wet Mix Macadam :

(As per **clause-406** of ‘’Specification for Road and Bridge Works of MORTH’)

D.3.1. Scope:

This work shall consists of laying compacting, cleaning, crushed, graded, aggregate and granular materials and premixed with water to a dense mass on a prepared sub-base/base or existing pavement in accordance with the requirement of the specification indicated in the table. The material shall be laid in one or more layers as necessary to lines, grades and cross-sections as directed by the Engineer in charge.

The thickness of a single compacted Wet Mix Macadam layer shall not be less than 75 mm nor more than100mm and compaction shall have to be done by Vibratory Roller as per the approval of the Engineer in charge. Rolling should continue till density achieved is at least 98 percent maximum dry density as per IS: 2720(Part VIII).

D.3.2. Grading requirement for Aggregates:

As per following table :-

IS Sieve Designation	Percent by weight passing the IS Sieve
53 mm	100
45 mm	95-100
26.5 mm	-----
22.4 mm	60-80
11.2 mm	40-60
4.75 mm	25-40
2.36 mm	15-30
600 □	8-22
75 □	0-8
Materials finer than 425 □□shall have Plasticity Index (PI) not exceeding 6.	

D.3.3. Preparation of Mix :
Wet Mixed Macadam shall be prepared in a approved mixing plant of suitable capacity having provision for controlled addition of water and forced/positive mixing arrangement like Pug mill of Pan type mixer on concrete batching plant .

D.3.4. Spreading of Mix :
Immediately after mixing, the aggregate shall be spread uniformly and evenly upon the prepared sub-base/base in required quantities. The mix may be spread either by a paver finisher or motor grader.
The surface of the aggregate so laid shall be carefully checked with templates and all high or low spots remedied by removing or adding aggregate as may be required. No segregation of larger and fine particles should be allowed. The aggregate as spread should be of uniform gradation with no pockets of fine material

D.3.5. Compaction of the Mix :
After the mixed have been laid to the required thickness grade and cross fall /camber, the same shall be uniformly compacted to the full, depth as per the specification. The compaction shall be done with a help of Vibratory Roller of minimum static weight of 80 K N tol00 K N or equivalent capacity roller.

D.4 Water Bound Macadam :
(As per **clause-404** of ‘’Specification for Road and Bridge Works of MORTH’)

D.4.1. Scope:
Description water bound macadam consist of clean, crushed aggregates mechanically interlocked by rolling and bonded together with screening, binding material, where necessary and water laid on a prepared sub-grade/sub-base/ base or existing pavement, as the case may be and finished in accordance with the requirements of stipulated specifications and in conformity with the lines, grades, cross section and thickness as per approved plans or a directed by the Engineer in charge.

D.4.2. Preparation of base :
The sub-base to receive the W.B.M. course shall be prepared to the specified line and camber and made free of dust and other extraneous materials. Pothole and depressions shall be corrected in an approved manner and rolled until firm with the materials used in sub-base.

D.4.3. Spreading Course Aggregates :
The course aggregates shall be spread uniformly and evenly open the prepared sub-base to proper profile by using templates placed across the road about 6 metres apart in such quantities that the thickness of each compacted layer is not more than 100 mm for grading I & 75 mm for grading in II & ill. The spreading shall be done from roadside stacks. In no case shall be aggregates be dumped in heaps directly on the surface prepared to receive the aggregates. The surface of the aggregates spread shall be carefully checked with templates and all high or low spots remedies by removing or adding aggregates as may be required. The surface shall be checked frequently with a straight edge while spreading and rolling so as to course a finished surface as per approved plans or as directed by the Engineer –in-Charge.
The course aggregates shall not normally be spread more than 3(three) days in advance of the subsequent construction operations.

D.4.4. Compaction of the Mix :
Immediately following the spreading of the course aggregates, rolling shall be started with at least 8-10 ton tandem or vibratory rollers of approved type. Except on super-elevated portions where the rolling shall proceed from inner edge to the outer, rolling shall begin from the edges gradually progressing towards the center. First the edges shall be compacted with roller running forward

and backward. The roller shall then move inwards parallel to the center line of the road, in successive passes uniformly lapping preceding trace by at least one half width. Rolling shall be discontinued when the aggregates are partially compacted with sufficient void space in them to permit application of screening. The roller surface shall be checked transversely and longitudinally with template land any irregularities corrected by loosening the surface adding or removing necessary amount of aggregated and re-rolling until the entire surface conforms to desired camber and grade. In no case shall the use of screenings be permitted to make up depressions.

D.4.5. Application of Screenings :

After the course aggregates has been rolled partially with sufficient void spans, screenings to completely fill the interstices shall be applied gradually over the surface. These shall not be damped or wet at time of application. Dry rolling shall be done while the screenings are being spread so that vibration of the roller causes them to settle into the voids of the course aggregates. The screenings shall be spread uniformly in successive thin layers either manually or mechanically.

The screenings shall be applied at a slow and uniform in to the course or more application so as to ensure filling of all voids. This shall be accompanied by dry rolling and rigorous booming. These operations shall continue until no more screenings can be forced into the voids of the course aggregates. The spreading, rolling and brooming of screenings shall be carried out in only such length of the road which could be completed within one day's operation.

D.4.6. Sprinkling of Water Grouting :

After the screenings have been applied, the surface shall be copiously sprinkled with water, swept and rolled. Hand brooms shall be used to sweep the wet screenings into void and to distribute them evenly. The sprinkling, sweeping and rolling operations shall be continued, with additional screenings applied as necessary until the course aggregates has been thoroughly keyed, well bonded and firmly set in its full depths and a grout has been formed at screenings. Care shall be taken to se that the base or sub grade does not get damaged due to the addition of excessive quantities of water during construction.

D.4.7. Setting, Drying and Curing :

After compaction of water bound macadam course, the payment shall be allowed to dry overnight. Next morning hungry spots shall be filled with screenings as directed lightly sprinkle with water; if necessary, and rolled this surface shall be cured for at least 3 days. No traffic shall be allowed in the road until the macadam has set. The compacted W B M course should be allowed to completely dry and set before the next pavement course is laid over it.

D.4.8. Physical Requirements of Course Aggregates for Water Bound Macadam for Sub-base /Base Courses :

Test	Test Method	Requirement
Los Angeles Abrasion Value	IS-2386 (Part-4)	40 percent (max.)
OR		
Aggregate Impact value	2386 (Part-4) OR IS 5640 (For brick metal, kankar, Laterite etc which get softened in presence of water to be tested under wet conditions).	30 percent (max.)

Combined Flakiness and Elongation Index (Total)	IS- 2386 (Part-1)	40 percent (max.)

D.4.9 Grading Requirement of Course Aggregates :

D.4.8.1 Aggregate Grading :

Grading Type	Size Range	IS Sieve Designation	Percent by Wt. Passing
Grade-3	53 mm to 22.4 mm	63 mm 53 mm 45 mm 22.4 mm 11.2 mm	100 95-100 65-90 0-10 0-5
Grade-2	63m to 45m	90 mm 63 mm 53 mm 45 mm 22.4 mm	00 90-100 25-75 0-15 0-5
Grade-1	90mm to 45mm	125 mm	100
		90 mm	90-100
		63 mm	25-60
		45 mm	0-15
		22.4 mm	0-5

Compacted thickness of single layer with Grade-1 aggregate should not exceed 100mm and Compacted thickness of single layer with Grade-2 and Grade-3 should not exceed 75mm.

D.4.8.2 Grading of Screening:

Grading Type	Size of screening	IS Sieve Designation	Percent by Wt. Passing
Screening Type-'A'	13.2 mm	13.2 mm 11.2 mm 5.6 mm 180 □	100 95-100 15-35 0-10
Screening Type-'B	11.2 mm	11.2 mm 5.6 mm 180 □	100 90-100 15-35

D.4.10 Blinding Materials :

Blinding materials to be used for water bound macadam as a filler material meant for preventing reveling, shall comprise of a suitable materials approved by the Engineer in charge having a P I Value of less than 6 where the road will not be immediately open to traffic and P I Value of 9 when the road will be immediately be opened to traffic. Quantity of blinding materials to be used as provided in the item of work.

D.5 Primer Coat Over Granular Base :

(As per **clause-502** of ''Specification for Road and Bridge Works of MORTH')

D.5.1 Scope:

The work shall consist of application of single coat of bituminous primer to an absorbent granular surface preparatory to any superimposed bituminous treatment.

D.5.2 Materials:
The choice of bituminous primer shall depend upon the porosity characteristics of the surface to be primed and shall be decided by the Engineer in charge.

D.5.3 Weather and Seasonal Limitation :
The bituminous primer shall applied on a wet surface or during dust storm when the weather is foggy or rainy

D.5.4 Equipment :
The primer distributor shall be equipped for spraying the material uniformly at the specified rates and temperatures

D.5.5 Preparation of road surface :
The surface to be primed shall be swept clean, free from dust and shall be dry. It shall shape to the specified grades and section. It shall also be free from dust, any other irregularities and segregated materials: minor depressions and potholes may be ignored until the surface is primed, after which they shall patched with a suitable premix material prior to the surface treatment.

D.5.6 Application of bituminous primer :
The bituminous primer shall be spread uniformly over the dry surface as prepared by using suitable and approved sprayer at specified rates and temperature so as to provide a uniform unbroken spread of primer.
Temperature of application of a primer needs only be high "enough to permit the primer to be effectively sprayed through suitable sprayer to cover the granular base surface uniformly. The temperature of bitumen emulsion at the time of application may vary from 10°C to 50°C. Any scale of excess primer left on any part of the surface should be swept out over the adjacent surface.

D.6 Bituminous Construction :
(As per **clause-501** of ''Specification for Road and Bridge Works of MORTH')

D.6.1 Materials :
(As per **clause-501.2** of ''Specification for Road and Bridge Works of MORTH')

D.6.1.1 Bitumen :
The binder shall be a penetration bitumen of VG(30)/60-70 Grade as per IS: 73-1961/ IS:73-2006 or an appropriate grade to the region, traffic, rainfall and other environmental conditions as per stipulation of 'Specification for Road and Bridge Works of MORTH' or as directed by the Engineer-in-charge. The approved brand of Cationic Bitumen Emulsion shall be decided by the Engineer in charge.

D.6.1.2 Aggregates :
The aggregates shall consist of crushed stone. They shall be clean strong durable of fairly cubical shape and free from disintegrated pieces, organic of deleterious matters and adherent coating and of low porosity. The aggregates shall satisfy the physical requirements set forth below.

Physical Requirement of aggregate
for bituminous works : (D.6.1.2-contd.) :
(As per **clause-504.2.2** of ''Specification for Road and Bridge Works of MORTH')

Sl.	Test	Test Method	Item of works For Bituminous Macadam	Item of works For Mix Seal Surfacing

1.	Los Angeles Abrasion Value OR Aggregate Impact value	IS: 2386 (Part-4)	40% Maximum 30% Maximum	40% Maximum 30% Maximum
2.	Combined Flakiness and Elongation Index (Total)	IS: 2386 (Part-1)	30% Maximum	30% Maximum
3.	Stripping Value	IS: 6241	95% Maximum	95% Maximum
4.	Soundness i) Loss with sodium sulphate 54 cycles Soundness ii) Loss with Magnesium sulphate 5 cycles water absorption	IS: 2386 (Part-5)	12% Maximum 18% Maximum	12% Maximum 18% Maximum

Aggregate grading for potholes repairing works of different thickness will be determined by the Engineer-in-charge or as specified on the contract.

D.6.2 Constructional Operation :
(As per **clause-501.3 & 501.4** of ‘’Specification for Road and Bridge Works of MORTH’)
For Premixed method: HMP of approved type shall be employed for mixing the aggregates with the bituminous binder. For 60-70/VG-30 Grade bitumen, the binder shall be heated to a temperature between 150°C- 165°C in approved boilers. The aggregates should be dry and suitable heated to a temperature from150°C- 170°C separately before these are mixed with hot bitumen in the HMP, provided the difference in temperature between the binder and aggregate at no time exceeds 14°C. The mixing of binder with aggregates shall be continued until the same are thoroughly coated with the binder and temperature of the mix should not exceeded165°C. The mix shall immediately be transported from the HMP to the laying site. The laying temperature of the mix shall not be less than 125°C. All rolling (breakdown, intermediate and finishing) as per clause-501.6 of ‘Specification for Road and Bridge Works of MORTH’ should be completed before temperature of the mix comes down to 90°C.

D.6.3 Spreading and rolling :
(As per **clause-501.5 & 501.6** of ‘’Specification for Road and Bridge Works of MORTH’)
The premixed materials shall be filled in the potholes with rakes to required thickness without any undue loss of time and compacting the same with at least 8-10 ton tandem or vibratory roller. When the roller has passed over the whole area once any high spots or depression which becomes apparent shall be corrected by removing or adding premixed materials and finishing the top of the repaired surface, leveled with the adjoining area and completely sand blinding at the rate as specified in the respective item of works. Rolling operation shall be completed in all respects before the temperature of the mix falls below 80°C. The roller wheels shall be kept damp.

D.7 Open graded premix carpet :
(As per **clause-511** of ‘’Specification for Road and Bridge Works of MORTH’)

D.7.1 Scope :
This work shall consist of laying and compacting an open graded carpet of 2 cm thickness in a single course composed of suitable small sized aggregates, premixed with bituminous binder on a

previously prepared base, in accordance with the requirements of these specification to serve as a wearing course

D.7.2 Binder :

The binder shall be a penetration bitumen of 60-70/ VG-30 Grade as per IS: 73-1961 or an appropriate grade to the region, traffic, rainfall and other environmental conditions as per stipulation of 'Specification for Road and Bridge Works of MORTH' or as directed by the Engineer-in-charge. The approved brand of Cationic Bitumen Emulsion for tack coat, if applied shall be decided by the Engineer in charge.

D.7.3 Aggregates :

The aggregates shall consist of crushed stone, crushed gravel/shining or other stone. This shall be clean, durable, fairly cubical in shape and free from disintegrated pieces organic or other deleterious matters and adherent coating. They shall preferably be hydrophobic and of low porosity.

D.7.4 Construction Operation :

As per clause-D.7.5 of this section & clause-511 of ''Specification for Road and Bridge Works of MORTH'.

D.8 Mix Seal Surfacing :

(As per **clause-512** of ''Specification for Road and Bridge Works of MORTH')

D.8.1 Scope :

This work shall consist of laying and compacting mix seal surfacing in a single course composed of suitable aggregates premixed with a bituminous binder on a previously prepared base, in accordance with the requirements of these Specifications, to serve as a wearing course.

D.8.2 Binder :

The binder shall be a penetration bitumen of 60-70 Grade as per IS: 73-1961 or an appropriate grade to the region, traffic, rainfall and other environmental conditions as per stipulation of 'Specification for Road and Bridge Works of MORTH' or as directed by the Engineer-in-charge. The approved brand of Cationic Bitumen Emulsion for tack coat shall be decided by the Engineer in charge.

D.8.3 Aggregates :

The aggregates shall consist of crushed stone, crushed gravel/shining or other stone. This shall be clean, durable, fairly cubical in shape and free from disintegrated pieces organic or other deleterious matters and adherent coating. They shall preferably be hydrophobic and of low porosity.

D.8.3.1 Aggregate Gradation :

IS Sieve Designation	Percent by weight passing the sieve	
	For Type-'A' MSS	For Type-'B' MSS
13.2mm	-----	100
11.2mm	100	88-100
5.6mm	52-88	31-52
2.8mm	14-38	5-25
90 micron	0-5	0-5

D.8.4 Construction Operation :
As per clause-D.7.5 of this section & clause-511 of ''Specification for Road and Bridge Works of MORTH'.

D.8.5 Proportioning of materials :

The total quantity of aggregates used for Type 'A' or 'B' Mix Seal Surfacing shall be 0.27 cubic metres per l0 square metres area. The quantity of binder used for premixing in terms of straight-run bitumen shall be 22.0kg and 19.0 kg per 10 square metres area for Type A and B surfacing respectively

D.8.6 Opening to Traffic :
Traffic may be allowed after completion of the final rolling when the mix has cooled down to the surrounding temperature. After rolling is complete, traffic may be permitted for movement on the newly laid bituminous surface. Spreading of stone dust in extreme emergency case be allowed on freshly laid bituminous surface and in that eventualities cost of stone dust shall deemed to have been included in the rate and no extra cost on this account whatsoever will be admissible

D.9 Seal Coat :
(As per **clause-513** of ''Specification for Road and Bridge Works of MORTH')

D.9.1 Scope :
This work shall consist of application of seal coat for sealing of the voids in a bituminous surface laid to the specified levels, grade and cross fall/ camber.

D.9.2 Materials :

D.9.2.1 Binder :
The binder shall be a penetration bitumen of 60-70 Grade as per IS: 73-1961 or an appropriate grade to the region, traffic, rainfall and other environmental conditions as per stipulation of 'Specification for Road and Bridge Works of MORTH' or as directed by the Engineer-in-charge. The approved brand of Cationic Bitumen Emulsion for tack coat shall be decided by the Engineer in charge. Quantity of bitumen shall be as stipulated in the 'Specific Priced Schedule of probable items with approximate quantities'.

D.9.2.2 Aggregate :
(i) <u>For Type-'A' Seal Coat</u> : Stone chips of appropriate size, 100 percent passing through 11.2mm sieve and fully retained on 2.36mm sieve, with angular fragmented, clean, hard, tough and durable type shall be used. Quantity of stone chips shall be as stipulated in the 'Specific Priced Schedule of probable items with approximate quantities'.
(ii) <u>For Type-'B' Seal Coat</u> : Sand or Grit of appropriate size, 100 percent passing through 2.36mm sieve and fully retained on 180 micron sieve with clean, hard, uncoated, dry type free from soft or flaky/elongated materials, organic and other deleterious substances shall be used. Quantity of Sand or Grit shall be as stipulated in the 'Specific Priced Schedule of probable items with approximate quantities'.

D.9.3 Preparation of surface:
The seal coat shall be applied immediately after laying of bituminous course which is required to be sealed. Before application of seal coat materials the surface shall be clean free of any dust or any extraneous materials. Tack coat with appropriate rate shall be applied on old bituminous surface with specific prior permission of Engineer-in-Charge.

D.9.4 Construction Operation :
As per clause-513.3.3 for Type-'A' Seal Coat & clause-513.3.4 for Type-B Seal Coat of ''Specification for Road and Bridge Works of MORTH'.

D.9.5 "Specification for Road & Bridge Works" by MORTH :
The work specification as laid down in "speciation's for Road & Bridge Works" by MORTH (4th revision) shall be final and binding, in case if any work procedure found unsuitable/ not mentioned/ amended as stated in this Price Bid.
D.9.6 Defect liability period should be read 3(Three) years instead of 1(one) year in Clause No. A.10 of Technical Bid (Instruction of Bidders).

Sd/-
Executive Engineer
The WBSIDC Ltd.

SECTION - E

Instruction / guidelines for the tenderer for Electronic submission of the tenders on line:-

1. ***Registration of the contractors***
   - Any contractor willing to participate in the processes of e-Tendering is required to log on to https://wbtender.gov.in with user ID (a valid e-mail ID with password) for enrolment and registration. The contractor is to click on the link for e-Tendering site as given on the web portal.
   - The registration page would appear where the contractor is to fill up the details asked for regarding basic organization information in that page.
   - Upon submission of such details online, registration would be done.
2. ***Obtaining Digital Signature Certificate(DSC)***
   - A Digital Signature is not a digitized form of signature. It is rather an identity proof for the tenderer, who is tendering electronically online. This may be used in the name of Authorized Representative of the Organization(Firm). It is stored in and given as a USB e-taken.
   - Digital Signature Certificate can be procured from the approved Certifying Authorities recognized the Controller of Certifying Authorities. Government of India on payment of requisite amount.
   - The contractor is again required to log on with the User ID and password to register the Digital Signature Certificate (DSC) without which he cannot participate in e-Tendering. One registered, this DSC can be used for participating in any e-Tendering of the WBSIDC in future.
3. ***Uploading documents***
   - The tenderer is to log in with Digital Signature Certificate(DSC), e-token password to upload scanned copies of various documents, as sought for in the NIT. This can be saved, edited and even deleted, if necessary, by the tenderers.
4. ***Downloading tender documents***
   - By tender search,(by value, by location and by classification) or from latest tender, the tenderer may download and view details of tenders after clicking on serial number.
   - Such downloaded documents can be saved in computer as well.
   - After downloading documents and before submission of tenders online, it is to be ensured that the documents have properly been filled up and necessary scanned documents have been uploaded, virus scanned and digitally signed.
5. ***Tender submission***
   - The tenderer is to read the NIT carefully.
   - All corrigenda, addenda to the original NIT is to be considered as part of NIT
   - Each tenderer can submit tender for maximum 2 serials (packages) in any particular NIT, but such tenders will be considered subject to fulfillment of credential criteria and financial capability to be assessed by the Tender Evaluation Committee(TEC). In case the contractor opts to participate in two serials, credential submitted for one serial will not be considered during evaluation of other serial, i.e. two separate credentials would be assessed on the requirement of aggregate amount of both the serials.
   - The tenderer is to use log in ID and password, followed by Digital Signature Certificate and to give e-token password to search the tender(s) he wants to participate from 'Search Active Tenders'.
   - The selected tender may be added firstly in 'My favourite'and then 'My Tender' A massage would appear that the tender has been set as favourite.
   - The tenderer is click 'View' to submit tender.

- The tenderer is to further click 'I agree' and 'Submit', before opting for offline payment for cost of tender paper and Earnest Money Deposit (wherever applicable).
- Cost of tender papers and Earnest Money Deposit(wherever applicable) are to be paid through Demand Draft (DD), Banker's Cheque(BC), Deposit at Call Receipt (DCR) or as may be prescribed, details of which are to be filed up subsequently for online information. These DDs/BCs/DCRs, one for cost of tender paper and another for Earnest Money Deposit are to be submitted to the Tender Issuing Authority, positively at least one day before the scheduled date of opening of Technical Bid, otherwise the entire tender will be rejected.
- Synopsis of credential in prescribed format and other documents as may be required are to be entered, verified, encrypted (transformation into non readable format) and uploaded.
- Financial Folder containing the Bill of Quantities (BoQ) for offering the rate for execution of works is to be submitted next online, by uploading scanned copies duly encrypted.
- Before freezing the submission, changes may be made, but these cannot be done after freezing.
- Technical and Financial Bids, both are to be submitted concurrently online, positively before the prescribed date and time of tender submission.

6. In case of any clarification / assistance required fin the process of e- Tendering, please contact during office hours to Executive Engineer/Assistant Engineer (El.)-in charge, WBSIDC Ltd
Help desk of the WBSIDC Ltd.:- 033-2236 6769 (EXTN- 108/113) and email