



Tamil Nadu Road Development Company Ltd.

Tamil Nadu Road Development Company Ltd. (TNRDC)

“Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)”

BID DOCUMENT

Section I	:	Instruction to Bidders
Section II	:	Forms of Bids & Forms of Securities
Section III	:	Conditions of Contract
Section IV	:	Contract Data
Section V	:	Bill of Quantities
Section VI	:	Technical Specifications

TNRDC

Tamil Nadu Road Development Company Limited,

No.171, II Floor, Tamil Nadu Maritime Board Building,

South Kesavaperumal Puram,

Pasumpon Muthuramalingam Road,

(Near Greenways Road MRTS Station),

Raja Annamalai Puram, Chennai 600 028

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***Tamil Nadu Road Development Company Ltd.
(TNRDC)***

**“Carrying out maintenance works from Odhiyur to
Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast
Road for one year (2020-21)”**

Schedule of Bidding Process

Period of Issue of Tender Document	20th November 2020 to 05th December 2020
Bid Document Price	Rs.10,080/- DD in Favour of M/s Tamil Nadu Road Development Company Limited (TNRDC) payable at Chennai
Earnest Money Deposit (EMD) / Bid Security	Rs.46,800/- DD in Favour of M/s Tamil Nadu Road Development Company Limited (TNRDC) payable at Chennai
Last Date and Time for Receipt of Bids	07th December 2020 at 15.00 Hrs
Bid – Opening Date and Time	07th December 2020 at 15.30 Hrs

***Tamil Nadu Road Development Company Ltd.
(TNRDC)***

**“Carrying out maintenance works from Odhiyur to
Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast
Road for one year (2020-21)”**

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Tamil Nadu Road Development Company Ltd.

INVITATION FOR BIDS

Tender Notice No.:TNRDC/CD/021/2020

Date: 17.11.2020

Bids are invited by **M/s.Tamil Nadu Road Development Company Ltd. (TNRDC)** for implementation of the following works in **East Coast Road, Tamil Nadu** on **07th December 2020 upto 3.00 PM.**

S. No.	Description of Work	Indicative value of work (Rs) inclusive of GST	EMD / Bid Security Value (Rs)	Bid Document Cost(Rs) inclusive of GST	Period of Completion
1	Carrying out maintenance works from Mahabalipuram to Odhiyur (i.e.) Km 55/800 to Km 96/000 at East Coast Road for one year (2020-21)	48.48 lakhs	48,500/-	10,080/-	12 months
2	Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year(2020-21)	46.71 lakhs	46,800/-	10,080/-	12 months

The Bid documents and other details for the mode of remittance of EMD/Bid Security and cost of Tender Document, last date for the issue of tender document, opening of tender etc., are available in the website www.tnrdc.com. In case of any changes / corrections etc on the above, the same will be published in the above website only.

Chief General Manager
Tamil Nadu Road Development Company Ltd.

Section I

Instructions to Bidders

SECTION 1: INSTRUCTIONS TO BIDDERS

A: GENERAL

1. Scope of Bid

1.1 Background

(a) **M/s Tamil Nadu Road Development Company Ltd. (TNRDC)** is promoted by Tamil Nadu Industrial Development Corporation Ltd. (TIDCO) and TIDEL Park Ltd. Bids are invited by **M/s Tamil Nadu Road Development Company Ltd. (TNRDC)** for **“Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)”**

(b) The Total estimated cost of the work is **Rs. 46.71 lakhs** (inclusive of GST)

(c) **All the Terms and conditions stipulated in this Bid Document and its annexure thereof are applicable to the work.**

1.1.2 The successful bidder will be expected to carry out the works for a period of **12 Months** from the date of **Contract Agreement**.

1.1.3 The execution of the above works is proposed to be on “Item Rate Contract basis”. The approximate quantities for all items of works to be executed are furnished in the Bill of Quantities – Section - V of the bidding document.

1.2 Scope of works

1.2.1 The broad scope of works to be carried out by the selected bidder includes the following components, but are not limited to the following:

Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)

Other works and services as may be indicated in the contract.

1.2.2 The Details of the above subject work are as follows:

Description of Works	Indicative value of work inclusive of GST(Rs)	EMD / Bid Security Value (Rs)	Period of Completion
Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)	46.71 lakhs	46,800/-	12 months

1.2.3 The Bidder is required to furnish the requisite acceptable EMD only at the time of bid submission

1.2.4 Throughout this Bidding document, the term ‘bid’ and ‘tender’ and their derivatives (bidder/ tenderer, bid/ tender, bidding/ tendering, etc.) are synonymous.

2. Eligible Bidders

To be qualified for award of the contract, the Bidder shall provide the following evidence to the Employer of their capability and adequacy of resources to carry out the contract effectively.

- (i) Should have adequate labour resources / link with manpower agencies to supply the required labourers and equipment for the work.
- (ii) The Bidder should have **GST No., PAN No. , ESI or Workmen Compensation Policy and EPF code**. However, the Successful bidder has to furnish **GST No., PAN No., ESI / Workmen Compensation Policy and EPF code subsequent to which payment for the work done will be released**.
- (iii) The bidder should remit workmen compensation cess at the rate of 1% on the estimate amount as per notification under sub-section (1) of section 8-A of the Tamil Nadu Manual workers (Regulation of Employment and Conditions of Work) Act, 1982 (Tamil Nadu Act 33 of 1982) the Governor of Tamil Nadu, in suppression of the Labour and Employment Labour and Employment Department Notification No. II (2)/LE/1420(b-1)/97, published at page 1 of part-II – Section 2 of the Tamil Nadu Government Gazette Extraordinary dated the 2nd July 1997 as contribution to the fund constituted for the benefit of the manual workers under employment in construction or maintenance of dams, bridges, roads or in any building operations under section 3 of the said Act before execution of the Agreement as per the format prescribed in appendix 3

- 2.1 Bidders shall not be under a declaration of ineligibility or blacklisted for corrupt and fraudulent practices or poor quality/ delayed implementation of any work by the Government of India (GoI), Government of Tamil Nadu (GoTN), other State Governments or any other agencies and/ or Statutory Authorities

3 Qualification Criteria and Information

The bidder shall furnish the following details in addition to the information furnished as specified in clause 2 above to satisfy the qualification criteria.

3.1 Litigation History

- a) The bidder as on date should not have been debarred from taking up any civil works and shall not be under a declaration of ineligibility for corrupt and fraudulent practices by the Government of India, Government of Tamil Nadu or any other agency. The bidder should provide accurate information about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last five years. A consistent history of awards against the bidder will result in rejection of the bid. Suppression of any information or material in this regard would be construed as a fundamental breach and TNRDC reserves its right to take appropriate action including cancellation of the bid, forfeiture of EMD / performance security etc, as may be deemed fit and proper by TNRDC at any time before or after the award of work without requiring to give any notice to the applicant in this regard.
- b) Suppression of any information or material by the bidder regarding the Debarment, details of Litigation history, blacklisting of the bidder, misrepresentation or omission of any other material fact in order to influence a selection process would be construed as a fundamental breach and will lead to the disqualification of the Bidder or the termination of its Contract without any further notice.

3.2 Deleted

3.3 Experience

The bidder shall provide documentary evidence of having been actively engaged as agents of similar nature.

4 Cost of Bid document and Bidding

4.1 The Bid document cost for the work is **Rs. 10,080/- (Rupees Ten Thousand Eighty Only)** inclusive of GST as indicated in the Invitation for bids. Any bid not accompanied by the bid document duly signed in all pages and the acceptable Bid document cost shall be rejected by the Employer as a **Non-Responsive Bid**.

4.2 The bidder shall bear all costs associated with the preparation and submission of his Bid and the Employer will in no case be responsible and liable for such costs, regardless of the conduct or outcome of the tendering process.

5 Site Visit

The Bidder shall prior to submitting the Bid for the work, 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. The costs of visiting the Site shall be at the Bidder's own expense.

B. BIDDING DOCUMENT

6 Content of Bidding Document

6.1 The Bidding Document comprises the documents listed below and should be read in conjunction with any addenda/amendment issued in accordance with Clause 9.

(a)	Section I	Instructions to Bidders
(b)	Section II	Forms of Bid & Forms of Securities
(c)	Section III	Conditions of Contract
(d)	Section IV	Contract Data
(e)	Section V	Bill of Quantities (BoQ)
(f)	Section VI	Technical Specifications

6.2 The Bidder is expected to examine carefully all instructions, qualification information, Conditions of Contract, Contract Data, Technical specifications, forms and BoQ in the Bid Document. Failure to comply with the requirements of Bid Document shall be at Bidder's own risk. Pursuant to Clause 25.2, bids which are not substantially responsive to the requirements of the Bid Document shall be rejected.

7. Deleted

8. Deleted

9 Amendment/Addendum of Bidding Document

9.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda.

9.2 Any addendum thus issued shall form part of the bidding documents and shall be communicated to all the purchasers of the bidding documents and it will also be uploaded in the website. It is the bidder's responsibility (those who download from the website) to keep track of the website specified in the NIT (Notice Inviting Tender) for any addendum. The

addendum of the bidding document will not be notified in the newspaper. Prospective bidders shall acknowledge receipt of each addendum by post or fax to the Employer.

- 9.3 To give the prospective bidders reasonable time to take an addendum into account in preparing their bids, the Employer may, at his discretion, extend the deadline for submission of bids, in accordance with Sub-Clause 19.2.

C. Preparation of Bids

10. Language of the Bid

- 10.1 The Bid and all correspondence and document related to the bid exchanged between the Bidder and the Employer shall be written in **English** language.

11. Documents Comprising the Bid

- 11.1 The bid shall be prepared and complete in accordance with the provisions of Bid Document and shall be submitted properly filled in, signed and initialled as appropriate.
- (i) Bidder's qualification, other information and supporting documents of Clause 4 as per formats given in Section-II of Bid Document.
 - (ii) Earnest Money Deposit (EMD) as per Clause 15
 - (iii) Bid Document duly signed in all pages and its cost as per clause 4
 - (iv) Letter of Application and Letter of Financial Bid according to Section-II of Bid Document and
 - (v) Bill of Quantities as given in Section-V of Bid Document.
- 11.2 The bid must be in a bound form with pages numbered serially and by giving an index of submissions. The forms and schedules given in Section-II, and Section-V shall be filled in without exception and without any variation, both in respect of form and contents. **No bid shall be submitted un bound and in loose papers.**
- 11.3 All the addenda issued should be properly incorporated.

12. Bid Prices

- 12.1 Unless stated otherwise in the bidding documents, the contract shall be for the whole work or parts thereof as described in Clause 1, based on the quoted rates in Bill of Quantities submitted by the Bidder.
- 12.2 The bidder shall fill in rates and prices on unit basis (both in figures and words) which includes GST and all other items covered in clause 12.3 for all items of the works described in the Bill of Quantities along with total bid price (both in figures and words). Items for which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. Corrections, if any, shall be made by crossing out, initialling, dating and rewriting.
- 12.3 All duties, taxes (including GST), fees, tolls, royalties, cess and octroi, insurance, contribution to labour welfare fund, ESI / Workmen Compensation Policy and EPF code and other levies payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.
- 12.4 The rates and prices quoted by the Bidder shall be fixed for the duration of the Contract and shall not be subject to adjustment on any account.

13. Currencies of Bid and Payment

The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees only.

All payments shall be paid in Indian Rupees only.

14. Bid Validity

- 14.1 Bids shall remain valid for a period of **90 days (Ninety days)** after the deadline date for Bid submission as specified in Clause 19. A bid valid for a shorter period shall be rejected by the Employer as Non-Responsive.
- 14.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request the bidders to extend the period of validity for a specified additional period. The request and the bidder's responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his bid security for the period of the extension, and in compliance with clause 19.2 in all respects.

15 Earnest Money Deposit (EMD) / Bid Security

The proposals duly filled in the required format must reach the Office of **M/s Tamil Nadu Road Development Company Ltd. (TNRDC), R A Puram, Chennai – 600 028** on or before **15.00 hrs, on 07th December 2020** along with **EMD/ Bid security** for an amount specified in the table below in the form of Demand Draft drawn in favour of **M/s Tamil Nadu Road Development Company Ltd. (TNRDC)**, payable on any scheduled bank in Chennai as specified below:

Description of Works	Indicative value of work inclusive of GST(Rs)	EMD / Bid Security Value (Rs)
Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)	46.71 lakhs	46,800/-

- 15.1 **Any bid not accompanied by the acceptable EMD and Bid Document and its cost shall be rejected by the Employer as Non- Responsive.**

16 Alternative Proposals by Bidders

Bidders shall only submit offers that comply with the requirements of the bidding documents, including the basic technical design as indicated in the specifications.

Alternate proposals will not be considered.

17 Format and Signing of Bid

- 17.1 Only relevant supporting documents shall be submitted along with the Bid. Documents furnishing additional information other than that is required as per Bid Document, if any, shall be submitted separately under separate heading, which may not be considered for evaluation.

- 17.2 The entire Bid including covering letter, Bid Document duly signed in all pages and supporting documents shall be duly page numbered and shall contain a detailed table of contents with page references.
- 17.3 The person or persons signing the Bids shall initial all pages of the Bids.
- 17.4 The Bidder shall prepare and submit the bid comprising the Bid Document and other relevant document bound as described in Clause 11.
- 17.5 The Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. All pages of the bid where entries or amendments have been made shall be initialled by the person or persons signing the bid.
- 17.6 The Bid shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialled by the person or persons signing the bid.
- 17.7 The Bidder shall furnish information as described in the Form of Bid and Qualification on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.
- 17.8 All witnesses and sureties shall be persons of status and probity and their full names, occupation and addresses shall be printed below their dated signatures.

D. SUBMISSION OF BIDS

18. Sealing and Marking of Bids

- 18.1 (a) The Bid and other supporting documents shall be addressed to the Employer at the following address:

Chief General Manager

Tamil Nadu Road Development Company Ltd. (TNRDC)

No.171, II Floor, Tamil Nadu Maritime Board Building,

South Kesavaperumal Puram,

Pasumpon Muthuramalingam Road,

(Near Greenways Road MRTS Station),

Raja Annamalai Puram, Chennai 600 028

and

- (b) bear the following identification:

Bid for “Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)”

- 18.3 If the envelopes are not sealed and marked as above, the Employer will assume no responsibility for misplacement or premature opening of the bid and the bid will be treated as a **Substantially Non Responsive** bid and will be subsequently rejected.

19. Deadline for Submission of the Bids

- 19.1 Bids must be received by the Employer at the address specified above not later than **15.00 Hours on 07th December 2020.** In the event of the specified date for the submission of bids declared a holiday for the Employer, the Bids will be received up to the appointed time on the next working day.

- 19.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 9, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

20. Late Submission of Bids

Any Bid received by the Employer after the deadline prescribed in Clause 19 will be returned unopened to the bidder.

21. Deleted

E. BID OPENING AND EVALUATION

22. Bid Opening

- 22.1 The Employer will open all the Bids received (except those received late), in the presence of the Bidders or their authorised representatives who choose to be present **at 15:30 Hrs on 07th December 2020** at the office of the TNRDC, R A Puram, Chennai.

- 22.2 In the event of the specified date of Bid opening being declared a holiday, the Bids will be opened at the appointed time and location on the next working day by the employer.

- 22.3 Envelopes shall be opened and the submissions therein will be read out in appropriate detail at on the same day of bid opening

- 22.4 The Bidder's names, the Bid Prices, the total amount of each bid, any discounts, and such other details as the Employer may consider appropriate, will be announced and recorded by the Employer at the time of opening.

- 22.5 No bid shall be rejected at Bid opening except for late bids pursuant to Clause 20 and conditional bids. Bids that are not opened and read out at Bid opening will not be considered for further evaluation regardless of the circumstances.

23. Process to be Confidential

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

24. Clarification of Bids

- 24.1 To assist in the examination, evaluation, and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of the unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 27. Provided however, the employer shall seek the rectification of price with the bidder who quoted lowest in total;

- 24.2 Subject to sub-clause 24.1, no Bidder shall contact the Employer/ its representatives on any matter relating to its bid from the time of the bid opening to the time the contract is awarded.

- 24.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidder's bid.

25. Preliminary Examination of Bids and Determination of Responsiveness

- 25.1 Prior to the detailed evaluation of Bids, the Employer will determine whether each Bid (a) has been properly signed; (b) is accompanied by the required securities and; (c) is substantially responsive to the requirements of the Bidding documents; and (d) provides any clarification and/ or substantiation that the Employer may require pursuant to Clause 24.
- 25.2 A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract; (c) not confirming to the requirement at Clause 18 or (d) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.
- 25.3 If a Bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

26. Correction of Errors

- 26.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer, where there is a discrepancy between the unit rates in figures and in words, the lesser of the two will prevail.
- 26.2 The amount stated in the Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder in accordance with Sub-Clause 17.6. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security may be forfeited

27. Evaluation and Comparison of Bids

- 27.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause 25.
- 27.2 In evaluating the Bids, the Employer will determine for each Bid, the evaluated Bid Price by adjusting the Bid Price as follows:
- (a) Making any correction for errors pursuant to Clause 26;
 - (b) Excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities;
- 27.3 Towards evaluation, the employer will take into account the adjusted Bid Price for the works arrive at the lowest evaluated rate of bid.
- 27.4 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer and other factors which are in excess of the requirements of the Bidding document or otherwise result in the accrual of unsolicited benefits to the Employer shall not be taken into account in Bid evaluation.
- 27.5 If the Bid of the successful Bidder is seriously unbalanced in relation to or substantially below the Employer's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the methods proposed. After evaluation of the price analysis, the Employer may require that the amount of the performance security set forth in Clause 31 be increased at the expense of the successful

Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

F. AWARD OF CONTRACT

28. Award Criteria

28.1 Subject to Clause 27, the Employer will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents and whose bids are evaluated to be the lowest. The lowest (L1) bidder will be called for negotiation on the quoted rates. If the lowest bidder is not responding for further negotiations, the Employer reserves the right to negotiate with any of the eligible bidders who is willing to take up the work at the L1 price and to offer a further negotiated, reasonable rate.

Awarding the work to bidders or summarily reject all the proposals shall be the sole discretion of TNRDC, based on the capability of the Bidders.

Employer reserves the right to appoint other contractor/contractors for “**Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)**” or part of this work/contract and any other works that the Employer may decide.

29. Employer's Right to Accept any Bid and to Reject any or all Bids

29.1 Notwithstanding anything contained in Clause 28, the Employer reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids, at any time 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 grounds for the Employer's action.

30. Notification of Award

30.1 The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the *Conditions of Contract* called the "Letter of Award/ Work Order") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").

31. Performance Security

- a. Performance Security in the form of a **Demand Draft** in favour of **M/s. Tamil Nadu Road Development Company Ltd.**, payable at Chennai (or) in the form of a **Bank Guarantee** from Nationalised Bank/ Scheduled Bank acceptable to the Employer in the form as given in Section 2 for an amount equivalent to **2% of the Contract Price** in accordance with Clause 48 of Conditions of Contract. If the Performance Security is in the form of Bank Guarantee, the same shall be valid for a period of **13 Months** from the date of Bank Guarantee or **01 Month** beyond the work completion period whichever is later.
- b. In case the Intended Completion Date is extended, then the Contractor shall submit a fresh Performance Security or extension of the date of the Bank Guarantee/s if any, furnished as security, the same value valid up to a date of one month beyond the issue of Defect liability Certificate.

31.2 Retention Money

In each, Interim Payment Certificate (IPC) @ **5 %** of value of work executed during each bill will be withheld and the withheld amount will be refunded to the Contractor along with the

Final Bill /Taking over certificate. The maximum amount of Retention money to be with held is restricted up to **5%** of the contract value.

32. Work Order/ Letter Of Award

- 32.1 At the same time that the employer notifies to the successful Bidder that his quote has been accepted. The Employer will issue the Letter of Award / work order for the work. The conditions of the contract and other related documents shall form part of this work order and shall be binding upon either parties till the contract completion period.
- 32.2 Upon the placing of order for work to the successful Bidder and after furnishing of the Performance Guarantee and execution of Contract Agreement by the successful bidder, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful and upon request from the respective bidders to refund the EMD already submitted by the bidders, the employer will refund the EMD/Bid Security.

33. Corrupt or Fraudulent Practices

- 33.1 The Employer requires that all the Bidders should observe the highest standard of ethics during the procurement and execution of this Contract. In pursuance of this policy, the Employer:
- (a) Defines, for the purposes of this provision, the terms set forth as follows :
- i. "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of Employer/ its representatives in the procurement process or in contract execution; and
 - ii. "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and deprive the Employer of the benefits of free and open completion;
- (b) will reject a proposal for award if he determines that the Bidder recommended for award has engaged in corrupt or fraudulent, practices in competing for the Contract in question;
- (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded any contract in **TNRDC**, if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing this Contract.

34. Termination:-

In case the Contractor fails to carryout the works, as per the work programme and as per the conditions stipulated in the Bid Document , then the Employer, at its sole discretion is entitled to terminate this contract at the '**Risk and Cost**' of the Contractor and to employ such other Contractor/s to carryout the balance works. The additional cost incurred by the employer in completing the works, which remain unfinished at the time of termination of the contract will be recovered from the Contractor. Any unrecovered 'Risk and Cost' amount will be a debt payable to the Employer and the Employer will take suitable actions for such unrecovered 'Risk and Cost' amount at the cost of the Contractor. Any bill/s for the works executed remains unsettled and/or the value of materials, machineries etc., taken over or possessed by the Employer at the time of termination or on termination will be adjusted towards the 'Risk and Cost' recoverable from the contractor.

35. In the case of takeover of ECR by NHAI or pre-closure of TNRDC's concession agreement entered by GoTN for ECR, TNRDC is empowered to pre-close this maintenance agreement at any time by giving 15 days' notice without any compensation or whatsoever

Section II

Forms of Bid &

Forms of Securities

SECTION II

FORMS OF BID & FORMS OF SECURITIES

1. LETTER OF APPLICATION

(Letterhead paper of the Bidder)

[Including full postal address, telephone, fax, cable and telex addresses]

[Date]

To:

Chief General Manager

Tamil Nadu Road Development Company Ltd. (TNRDC)

No.171, II Floor, Tamil Nadu Maritime Board Building,

South Kesavaperumal Puram,

Pasumpon Muthuramalingam Road,

(Near Greenways Road MRTS Station),

Raja Annamalai Puram, Chennai 600 028

Sir,

1. Being duly authorised to represent and act on behalf of ----- (hereinafter "The Bidder"), and having reviewed and fully understood all the bid information provided, the undersigned hereby apply to be qualified by your agency as a bidder for the contract "**Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)**".
2. TNRDC and its associates/ representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents and information submitted in connection with this application, and to seek clarification from our bankers and clients regarding any financial and technical aspects. This Letter of Application will also serve as authorization to any individual or authorised representative of any institution, to provide such information deemed necessary to verify statements and information provided in this application or with regard to the resources, experience, and competence of the Bidder.
3. This application is made in the full understanding that:
 - (a) TNRDC reserves the right, to reject or accept any application, cancel the bidding process and reject all applications; and
 - (b) TNRDC shall not be liable for any such actions and shall be under no obligation to inform the Bidder of the grounds for them.
4. The undersigned declared that the statements made and the information provided in the duly completed application are complete, true and correct in every detail.

Authorised Signatory

Name and Title of Signatory

2. LETTER OF FINANCIAL BID

(Letterhead of the Bidder)

[Date]

Chief General Manager

Tamil Nadu Road Development Company Ltd. (TNRDC)

No.171, II Floor, Tamil Nadu Maritime Board Building,
South Kesavaperumal Puram,
Pasumpon Muthuramalingam Road,
(Near Greenways Road MRTS Station),
Raja Annamalai Puram, Chennai 600 028

Dear Sir:

Sub: "Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)" - Reg

Having examined the Bid Document including Notice Inviting Bids, Instructions to Bidders, forms, General Conditions of Contract, Special Conditions of Contract, Bill of Quantities, Annexure and Addenda for the execution of the above named works, we, the undersigned, offer to execute and complete such works and remedy any defects therein in conformity with the said Bid Document at the prices indicated in the enclosed BoQ.

The Payment for the subject work is **INR _____ (Indian Rupees in words)**
_____)
inclusive of GST and all other applicable taxes in accordance with the said Bid Document.

We undertake, if our Bid is accepted, to commence the works within seven (7) days of receipt of the Engineer's order to commence, and to complete and deliver the sections and whole of the works comprised in the Contract within the period stated in the Appendix to Bid/ Contract data hereto.

We agree to abide by this Bid for the period of **90 days (Ninety days)** from the date of Bid opening, as prescribed in Clause 14.1 of the Instructions to Bidders (Section-I), and it shall remain binding upon us and may be accepted at any time before the expiry of that period.

We confirm our agreement to treat the Bid Document, Drawings and other records connected with the works as secret and confidential document and shall not communicate information contained therein to any other person other than the person authorized by Employer or use such information in any manner prejudicial to the safety and integrity of the works.

We undertake that, in completing for (and, if the award is made to us, in executing) the above Contract, we will observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

We confirm that our firm has valid GST/PAN registrations along with ESI / Workmen Compensation Policy and EPF codes as stipulated under Appendix 2 and 3 of GCC.

We hereby confirm that this Bid complies with the Eligibility, Bid validity and Bid security required as stated in the Bidding documents.

Yours faithfully,

Authorised Signatory:

Name and Title of Signatory:

Name of Bidder with official seal:

Address:

3. Confirmation Letter

(Letterhead paper of the Contractor)

To:

[Name and address of the Employer)

Dear Sir,

Sub: "Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)".

We acknowledge receipt of your Letter of Award, Ref No. _____ dated and unconditionally accept the offer to take up above captioned works at the price indicated in the letter of award.

We also confirm our acceptance to all the corrections and modifications made by the Employer in respect of our bid.

We undertake to provide you unconditional bank guarantee/Demand Draft towards performance security and additional security for unbalanced bid as per the agreed format within the prescribed date as per the Instructions to Bidder and Conditions of Contract.

Yours faithfully,

Authorized Signatory:
Name and Title of Signatory:
Name of Agency:

4. BANK GUARANTEE FOR PERFORMANCE SECURITY

BG No dated20__

To

Tamil Nadu Road Development Company Ltd., (TNRDC)

No.171, II Floor, Tamil Nadu Maritime Board Building,
South Kesavaperumal Puram,
Pasumpon Muthuramalingam Road,
(Near Greenways Road MRTS Station),
Raja Annamalai Puram, Chennai 600 028

Bank Guarantee No.datedfor **Rs./- (Rupees
.....only)**

WHEREAS vide the Work order no..... dated for “**Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)**” (hereinafter referred to as “**The Contract**”) **M/s.....**, a company incorporated under the Companies Act, 1956, having its registered office at.....

.. (Address) (hereinafter referred to as “**The Contractor**” which expression shall unless repugnant to or inconsistent with the context mean and include its successors and assigns) has been awarded by **M/s Tamil Nadu Road Development Company Ltd.**, a company incorporated under the Companies Act, 1956, having its registered office at **No.171, II Floor, Tamil Nadu Maritime Board Building, South Kesavaperumal Puram, Pasumpon Muthuramalingam Road, (Near Greenways Road MRTS Station), Raja Annamalai Puram, Chennai 600 028** (hereinafter referred to as “**The Employer**” which expression shall unless repugnant to or inconsistent with the context mean include its successors and assigns), the contract for “**Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)**”

AND WHEREAS it has been stipulated by you in the said contract that the Contractor shall furnish you a Performance Guarantee, within 7 days of receipt of the Letter of Award / Work order by a specified Scheduled / Nationalised Bank, for the sum specified therein as security for compliance with the contractor’s obligations in accordance with the Contract and against any breach or non-performance of the terms and conditions contained in the contract.

AND WHEREAS we**BANK**, having its Head Office atand amongst others, a branch office situated at....., have agreed to furnish a Performance Guarantee for a sum **Rs. -----/- (Rupees ----- only)** (hereinafter referred as the Guaranteed amount) as security for compliance of the contractor’s obligations under the contract.

NOW THEREFORE we hereby affirm that we as the Guarantor are responsible to you on behalf of the Contractor, for the guaranteed amount and we irrevocably undertake to pay you upon your first written demand and without demur or argument, any sum or sums within the limits of the guaranteed amount as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified herein. The guaranteed

amount shall be payable merely on demand by the Employer. Any letter stating that the amount claimed in the demand notice/letter is due and payable, signed by a duly authorized official of the Employer to this effect, shall be final, binding or conclusive upon us.

We, hereby agree to pay on demand the guaranteed amount without demur by crediting to the Bank Account of the Employer, the details of which are to be informed to us by you during the validity of the guarantee.

Our liability under this Guarantee shall not be affected by any change in the constitution of the Contractor or of the Guarantor.

We hereby undertake that this Guarantee is absolute, irrevocable and unconditional and shall be enforceable against us notwithstanding any security or securities comprised in any instrument executed or to be executed by the contractor in favour of the Employer.

We hereby also agree that this guarantee shall not be wholly or partially satisfied or exhausted by any payments made to or settled with the Employer by the Contractor and shall be valid and binding on us and operative until the expiry of this Guarantee.

We, further agree that no change or addition to or other modification of the terms of the contract or of the works to be performed there under or of any of the contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

The jurisdiction in relation to this Guarantee shall be Courts at Chennai and Laws of India shall be applicable. This guarantee shall be valid up to -----20__ (hereinafter referred to us as the "Expiry Date") which is a period of **13 Months** from the date of Bank Guarantee or **01 Month** beyond the work completion Period whichever is later.

Notwithstanding anything contained herein.

- i) Our liability under this Guarantee shall not exceed the guaranteed amount **Rs _____ (Rupees _____ only)**

This Bank Guarantee shall be valid up to -----20__ (Expiry date) and

- ii) We shall be liable to pay the guaranteed amount under this guarantee only and if we receive a written claim or demand duly signed by a duly Authorised official of the Employer before the -----20__ (Expiry date) as mentioned above.

IN WITNESS WHEREOF we have executed this guarantee on this20__.

Signature of Authorised Representative of the Bank

Name and Designation

Seal of the Bank

Signature of Witness

Name of Witness

Section III

Conditions of Contract

Section III: CONDITIONS OF CONTRACT

A. GENERAL

1. Definitions

1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but kept their defined meanings. Capital initials are used to identify defined terms.

Activity Schedules means the priced and completed Activity Schedules forming part of the Bid.

Bill of Quantities (BOQ) means the completed Bill of Quantities attached in Appendix and forming part of this Contract.

Compensation Events are those defined in Clause 41 hereunder.

Confirmation Letter is the letter of the Contractor dated accepting the letter of Award/ Work Order issued by the Employer.

The **Contract Completion Date** is the date of completion of Contractor's Obligations under this Contract as certified by the Engineer in accordance with Clause 50.2.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.3 below.

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or firm or corporate body that's Bid to carry out the Works has been accepted by the Employer.

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer.

The **Contract Price** is the price stated in the Letter of Award/ Work Order and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days: **months** are calendar months.

A **Defect** is any part of the works not completed in accordance with the Contract.

The **Employer** is the party who will employ the Contractor to carry out the Works and in this case the employer is TNRDC, R A Puram, Chennai – 600028.

The **Engineer** is the person named in the Contract Data (or any other competent Person appointed and notified to the Contractor by the Employer to act in replacement of the Engineer) who is responsible for supervising the execution of the works and administering the Contract and in this case it is Tamil Nadu Road Development Company Ltd.,(TNRDC), R A Puram, Chennai – 600028.

"Engineer Representative" means a person appointed from time to time by the Engineer under Sub-clause 5.1.

Equipment is the Contractor's plant / machineries and vehicles brought temporarily to the site to.

Work means “Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)”.

The **Contract price** is the Works Contract price in the Employer’s Letter of Award/Work Order.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works as the case may be. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Engineer by issuing an extension of time, in writing.

Letter of Award is the letter issued by the Employer to the Contractor containing the Initial Contract Price and other details as enclosed in Appendix of this Contract.

Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.

Plant is any Integral part of the Works which is to have a mechanical, Electrical, electronic or chemical or biological function.

Project Facility means the stretch of the Road as mentioned in Contract Data, all appurtenances thereto, including road furniture, Sign boards and other road components and all access roads upto 50 m from the edge of the road

The **Site** is the area defined as such in the Contract Data.

Specification means the Specification of the Works included in the Contract and any Modification or addition made approved by the Engineer in writing.

Temporary Works are works designed, installed, and removed by the Contractor which are needed for the Works.

A **Variation** is an instruction given by the Engineer/ Employer in writing which varies the Works.

The **Works** are what the Contract requires the Contractor to carry out as part of this Contract and shall refer to Improvement Works or Maintenance Works or any combination thereof.

The **Works Completion Date** is the actual date of completion of the Works as certified by the Engineer in accordance with Clause 50.1

2. Interpretation

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Heading have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about the Conditions of Contract.
- 2.2 If sectional completion is specified in the Contract data, reference in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the works (other than references to the Completion Date and Intended Completion date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
 - a. Contract Agreement
 - b. Conditions of Contract (including Special Conditions of Contract)

- c. Instructions to Bidders
- d. Contract Data
- e. Letter of Financial Bid; Priced Bill of Quantities
- f. Letter of Award/Work order, Confirmation Letter
- g. Performance Security
- h. Technical Specifications and
- i. Any other document listed in the Contract Data / Bid Document as forming part of the contract (addendum and clarifications if any)

3. Language and Law

- 3.1 The language of the Contract and the law governing the Contract are stated in the Contract Data.

4. Engineer's Decisions

- 4.1 Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractors in his role representing the Employer.

5. Delegation

- 5.1 The Engineer may delegate any of his duties and responsibilities to other person/organization after notifying the Contractor.

6. Communications

- 6.1 Communication between parties which are referred to in the conditions is effective only when in writing. A notice shall be effective when it is delivered (in terms of Indian Contract Act).

7. Sub- contracting

- 7.1 The contractor shall not, with out the prior consent of the Employer assign the contract or any part thereof or any benefit or interest therein or there under.

The contractor shall not sub contract the works. Except where otherwise provided by the contract, the contractor shall not sub contract any part of the works, with out the prior consent of the Employer. Any such consent shall not relieve the contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults and neglects of any Subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the contractor, his agents, servants or workmen

Provided that the contractor shall not be required to obtain such consent from the employer for:

- a. The provision of labour and
- b. The purchase of materials which are in accordance with the Specifications and quality standards specified in the Contract.

8. Other Contractors

- 8.1 The Contractor shall cooperate and share with the other contractors, public authorities, utilities, and the Employer and his representative between the dates given in the Schedule of the other contractors. The Contractor shall also provide facilities and services to them as may be necessary for smooth coordination. The Employer may modify the schedule of other contractors and shall notify the Contractor of any such modification.
- 8.2 Pursuant to the above, the Contractor hereby agrees and acknowledges that the Employer is well within their right to appoint other contractor for **“Work means “Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East**

Coast Road for one year (2020-21)” a part of this work / contract and any other works that the Employer may decide. The Contractor acknowledges that the Employer has no liability what so ever towards the Contractor in this regard and that the Contractor will Unconditionally and without any financial charge, extend all necessary assistance and cooperation to the Employer and other Contractor(s), so as to ensure that the Works are completed in terms of the Milestones stipulated in the Contract Data.

- 8.3 Any default in the above regard shall be treated as a fundamental breach of the contract in terms of Clause 54.2

9. Personnel

- 9.1 The Contractor shall employ required personnel to carry out the functions stated in the approved program and atleast 25% of the personnel employed shall be certified skilled/semi killed personnel.

- 9.2 If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating reasons, the Contractor shall ensure that the person leaves the site within seven days and has no further connection with the work in the Contract.

9.3 Labour Statutory requirement

The Contractor shall confirm to and comply with the regulations and by-laws of the State or Central Government and other statutory Body the provisions contained in the various Acts specified in Appendix 2 of this section

10. Employer's and Contractor's Risks

- 10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

- 11.1 The Employer is responsible for the expected risks which are in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, hostilities, invasion, and act of foreign enemies, rebellion, and revolution. Insurrection or military or usurped power, civil war, (unless restricted to the Contractor's employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive.

12. Contractor's Risks

- 12.1 All risks of loss or damage to physical property or personal injury and death which arise during and in consequence of the performance of the Contract other than the expected Employer's risks are the responsibility of the Contractor.

13. Insurance

- 13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the start Date to the end date, in the Amounts and deductibles stated in the Contract Data for the following events:

- a. loss of or damage to Works, Plant and Materials:
- b. loss of or damage to Equipment;
- c. loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract;
- d. personal injury or death of employer/employee personal and third party persons;

However, it is for the contractor to decide whether the minimum amount specified in the Contract data is sufficient, and if he considers it necessary, to insure for a greater amount. The policy should cover an unlimited number of claims in a year.

- 13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the start Date. All such insurance shall provide for compensation to be payable in the type and proportions of currencies required to rectify the loss or damage incurred. The contractor shall be responsible for effecting change to the policies and certificates as may be directed by the Engineer, within time period indicated by the Engineer.
- 13.3 If the Contractor does not provide the policies and certificates as required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid, from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due and if warranted, recovered by invoking Performance Security.
- 13.4 Alterations to the terms of insurance shall not be made without the approval of the Engineer.
- 13.5 Both parties shall comply with any conditions of the insurance policies.
- 13.6 The Contractor shall be entitled to place all insurance relating to the Contract with insurers from India, which have been determined to be acceptable to the Employer.

14. Queries about the Contract Data

- 14.1 The Engineer will clarify queries on the Contract Data.

15. Contractor to undertake the Works

- 15.1 The Contractor shall undertake the Works in accordance with the Specifications, Conditions of Contract, etc and as per the instructions of the Engineer.

16 The Construction/Improvement Works to be Completed by the Intended Completion Date

- 16.1 The contractor shall commence execution of the construction works on the start date and shall carry out the construction works in accordance with the program submitted by the contractor, with the approval of the Engineer and complete them in all respects by the intended completion date.
- 16.2 All the time during the construction period, Contractor shall notify the Engineer details of drawings and instructions required and of why and by when it is required. This notice shall be given by the contractor at least one month advance correlating the work schedule program.

17. Deleted

18. Safety

- 18.1 The contractor shall be responsible for the safety of all activities on the Site. The proposed work site falls in High speed road Corridor. In addition to the safety of workmen in the project, the Contractor is responsible for the safety of the road users. The Contractor shall at his own cost formulate and implement an efficient traffic movement/regulation plan so as to achieve safe and efficient movement of vehicular traffic and pedestrians.
- 18.2 The contractor shall make necessary safety arrangements and equipments specified in Appendix 1 of this section.

- 18.3 Any damage caused to the existing structure, the road surface and other appurtenances shall be remedied/restored/replaced to the original condition at the cost of the Contractor and to the satisfaction of the Employer.

In case of default by the contractor, the Employer has the option to carry out the required remedial/restoration/replacement works and deduct the expenditure incurred from the payments due to the Contractor.

- 18.4 The Contractor shall 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.

- 18.5 During continuance of the contract, the Contractor shall abide at all times by all existing enactments on environments on environmental protection and rules, labour laws made there under, regulations, notifications and bye-laws of the State or Central Government, or local bodies/authorities and any other law, bye-law, regulations that may be passes or notification that may be issued in this respect in future by the State or Central Government or the local authority.

Salient features of some of the major laws that are applicable are given below:

- 18.6 The Water (Prevention and Control of Pollution) Act, 1974, provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water.

- 18.7 'Pollution' means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.

- 18.8 The Air (Prevention and Control of Pollution) Act, 1981, provides for prevention, control and abatement of air pollution. 'Air Pollution' means the presence in the atmosphere of any 'air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

- 18.9 The Environment (Protection) Act, 1986, provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants and property. 'Environment' includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property.

The Public Liability Insurance Act, 1991, provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.

19. Deleted

20. Possession of the Site

- 20.1 The Employer shall give possession of the site to the Contractor in accordance with the Contract Data. If possession of a part is not given by the agreed date stated in the Contract Data, then the Intended Completion Date shall be postponed by the Employer as may be required for that particular part/ stretch. However, this will not be applicable if sufficient work site is made available to the Contractor as and when required for him to proceed ahead with the progress of work and if available work fronts remain unattended.

- 20.2 The Contractor will co-ordinate with service provider/ concerned authorities for shifting of utilities and removal of encroachments etc. and making the site unencumbered from the project area required for completion of work. This includes getting estimates, initial and frequent follow-up with concern authorities. However, the cost of shifting shall be borne by the employer. The contractor will not be entitled for any additional compensation for delay in shifting of utilities and removal of encroachments by the service provider/ local bodies/concern authorities.

21. Access to the Site

- 21.1 The Contractor shall allow the Engineer and any person authorized by the Engineer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / tested/ stored for the works.

22. Instructions

- 22.1 The Contractor shall carry out all instructions of the Engineer which comply with the applicable laws where the Site is located.

23. Disputes

- 23.1 If either party believes that a decision taken by the Employer was either outside the authority given to the Employer by the contract or that the decision was wrongly taken, the objecting party may file written notice of dispute to the other party with a copy to the Engineer stating that it is giving the notice pursuant to this Clause while stating clearly the basis for the dispute.

- 23.2 The party receiving the dispute notice will consider it and reply in writing within 30 days of the receipt of the notice. If no reply is received or the reply is not acceptable to the other party, the affected party may refer only to the High Court of Madras (Chennai) for adjudication.

- 23.3 Further, in case of any dispute or difference between the parties to the contract either during the progress of the works or after the completion of the works or after the determination / abandonment of the contract or any other matter/s arising thereof shall be referred to or filed with the High Court of Madras (Chennai) within a period of 18 Months. No other courts, persons, or bodies will have any jurisdiction over the dispute/s beyond such date.

24. Deleted

B. Time Control

25. Deleted

26. Deleted

27. Delays Ordered by the Engineer

- 27.1 The Engineer in consultation with the Employer may instruct the Contractor to delay the start or progress of any activity within the Works.

28. Deleted

29. Deleted

B. Quality Control

30 Identifying Defects

- 30.1 The contractor shall permit the Employer to check the contractor's work and notify the Engineer and Contractor of any defects that are found. Such a check shall not affect the Contractor's or the Engineer's responsibility as defined in the Work Order / Agreement.

31 Deleted

32 Correction of Defects

- 32.1 The Engineer shall give notice to the Contractor of any Defects before the end of the contract Period.
- 32.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defects within the length of time specified by the Engineer's notice.

33 Uncorrected Defects

- 33.1 If the Contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected and rectify the defects if needed by employing other persons and the Contractor will have to pay this amount or will be recovered from the bills of the contractor as 'Risk & Cost'.

D. Cost Control

34 Bill of Quantities (BOQ)

- 34.1 The Bill of Quantities for works contains items for the Works being implemented by the Contractor as in Section – V.
- a. The Bill of Quantities (BoQ) is used to calculate the payment for works. The Contractor will be paid for the quantity of the work done at the rate in the Bill of Quantities for each item of work.
- b. Bill of Quantities for the work should also be submitted along with the bid in the single cover.

35 Changes in the Quantities

- 35.1 Any additional quantity required for completing the work will have to be carried out by the Contractor at the same quoted rate. There will be no percentage ceiling either addition or reduction in the quantities for completion of the project.
- 35.2 Provided further that no change in the rate or price for any item contained in the Contract shall be considered unless such item accounts for an amount more than 2 % of the Contract Price, and the actual quantity of work executed under the item exceeds or falls short of the quantity set out in the Bill of Quantities by more than 25%

36. Variations during Implementation of the Works

- 36.1 Approval and methodology for all variations either Rate or Quantity should be followed as per the directions of the Engineer / Engineer's representative.

37 & 38 Deleted

39. Payment

39.1

- (a) the estimated value of work executed (Works executed & payable) in accordance with conditions of contract, at base unit rates and prices;
- (b) The actual value certified for payment for the Works executed at base unit rates and prices;
- (c) the estimated value at base unit rates and prices of the Works obtained by deducting (b) from (a);
- (d) The value of any variations executed up to the end of the month in question, less the amount certified in the previous Interim Payment Certificate.
- (e) Amount to be deducted for all taxes in accordance with contract conditions.
- (f) Net amount of application, which will be expressed in Indian Rupees.

Notwithstanding the terms of this Sub-Clause or any other Clause of the Contract, no amount will be certified by the Engineer for payment until the Performance Security has been provided by the Contractor and approved by the Employer.

39.2 **Deleted.****39.3 Retention Money**

In each Interim Payment Certificate (IPC) @ 5% of value of work executed during each bill will be withheld and the withheld amount will be refunded to the contractor along with the Final bill / Taking over certificate. The maximum amount of Retention money to be with held is restricted up to 5% of the contract value.

40 Deleted**41 Compensation Events**

41.1 The following are compensation events unless they are caused by the Contractor;

- (a) The Engineer orders a delay in execution of works for a period of more than 60 days;
- (b) The effect on the Contractor of any of the Employer's Risks; and
- (c) Other Compensation Events listed in the contract data, if any.

41.2 If a Compensation Event would prevent the Works from being carried out in terms of the Contract, then the Employer shall extend the Intended Completion Date as may be warranted. The Engineer shall decide by how much the Intended Completion Date shall be extended.

41.3 As soon as information demonstrating the effect of each Compensation Event has been provided by the Contractor, it is to be assessed by the Engineer and the Intended Completion period shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Engineer shall adjust the Intended Completion Period on Engineer's own forecast. The Engineer will assume that the Contractor will react competently and promptly to the event.

41.4 The Contract shall be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Engineer/Employer.

42. Tax

42.1 The rates quoted by the Contractor shall be deemed to be inclusive of the GST, sales tax, contract tax, royalty, Toll tax, cess and other taxes/duties/levies as may be levied by Central /

State Governments and local bodies that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

42.2 The contractor shall have valid Registration for GST and PAN as prescribed in Appendix 3

43. Currency

43.1 All payments shall be made in **Indian Rupees only**.

44. Price Adjustment for Works

No Price adjustment shall apply to this work/contract

45. Penalty and Liquidated Damages

45.1 For Construction/ Improvement Works

(a) In case of non-completion of the construction / Improvement works within the Intended Completion Date as indicated in the Contract Data the Contractor shall pay liquidated damages to the Employer at the rate stated in the Contract Data for each day that the actual Completion Date is later than the Intended Completion Date. The liquidated damages amount shall be deducted from payments due to the Contractor and shall not be refundable. The total amount of liquidated damages shall not exceed the amount defined in the Contract Data.

(b) Time is the essence of the Contract and payment or deduction of penalty or liquidated damages shall not relieve the Contractor from his obligation to complete the works as per Program and/or Milestones or from any of the other Contractor's obligations and liabilities under the Contract or the Employer's right to invoke the Performance Security.

45.2 For Maintenance Works

In case the Contractor has not rectified or addressed deficiencies as directed by the Engineer at the time of Site inspections, the Employer retains the right to get works done through a third party and debit the cost and expenses incurred to the Contractor. Alternatively, the Engineer may recommend invoking of Performance Security in part or full, as the case may be. In case, the Contractor still fails to rectify or address deficiencies even after invoking Performance Security, as described earlier, then the Employer shall treat the event as fundamental breach of Contract in terms of Clause 54 of Conditions of Contract.

46. Deleted

47. Advance Payment

47.1 No Mobilisation advance/Machinery and equipment advance payment will be made to the Contractor for the works.

47.2 No material advance will be made or paid to the Contractor.

48. Securities

48.1 The Performance Security shall be provided to the Employer no later than the date specified in the work order and shall be issued in an amount and form indicated in Contract Data from:

- a. State Bank of India or subsidiaries;
- b. Any Indian Nationalised Bank; or
- c. Any Scheduled bank

as acceptable to the Employer, and denominated in Indian Rupees only. The Performance Security shall be **2%** of the Contract price. If the performance security is in the form of Bank Guarantee, the same shall be valid for a period of **13 Months** from the date of Bank Guarantee or **01 Month** beyond the work completion whichever is later. In case the Intended Completion Date is extended, then the Contractor shall submit a fresh Performance Security or extension of the date of the Bank Guarantee/s if any, furnished as security, the same value valid up to a date of one month beyond the issue of work completion Certificate.

49. Cost of Repairs

- 49.1 Loss or damage to or defective works or Materials during the Contract Period shall be rectified by the Contractor at the Contractor's cost to the satisfaction of the Engineer/Employer. In case of default by the Contractor, the Employer shall carry out suitable remedial measures and deduct the amount incurred thereto from payments due to the Contractor.

E. Finishing the Contract

50. Completion

- 50.1 The Contractor shall request the Engineer to issue a Certificate of Completion of Works and the Engineer will do so upon deciding that the Works are completed in all respects.
- 50.2 Upon satisfactory compliance and observance of the performance standards by the Contractor during the Defect Liability Period, the Engineer shall suitably inform the Employer who may then issue the Certificate of Contract Completion to the Contractor, subject to Contractor satisfying all Provisions under this Contract.

51. Taking Over

- 51.1 The Employer will take over the Site and the Works with in 1 month of the Engineer issuing a certificate of Contract Completion in terms of Clause 50.2.

52. Final Account

- 52.1 The Contractor shall supply to the Engineer, a Detailed account of the total amount that the contractor considers payable under the Contract on or before 30 days beyond the Engineer shall assess the quality and completion status of Works in terms of this Contract and upon satisfaction, shall certify and final payment that is due to the contractor within 30 days of receiving the Contractor's account. If the Engineer is not satisfied, then the Engineer shall issue within 7 days thereto a schedule that states the scope of the corrections or additions that are necessary. If the Contractor fails to comply with the Engineer's instructions, the Engineer shall levy Liquidated Damages and shall recommend the Employer suitably. The Employer retains the right to employ a third party and carry out the remaining works and deduct the payment from pending bills of the Contractor.

53. Deleted

54. Termination

- 54.1 The Employer or the Contractor may terminate the contract if the other party causes a fundamental breach of the Contract.
- 54.2 Fundamental breach of Contract includes, but shall not be limited to the following:
- (a) Contractor stops work for 28 days when no stoppage of work is shown on the program and the stoppage has not been authorized by the Employer.

- (b) Employer or the Contractor is made bankrupt or goes into liquidation, other than for a reconstruction or amalgamation.
- (c) Payment certified by the Engineer is not paid by the Employer to the Contractor within 60 days of the Engineer's Certificate.
- (d) The Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer.
- (e) The Contractor does not maintain a security (performance security, Security against Advance Payment etc) which is required;
- (f) In case of the Contractor has awarded more than 20% of value of works on sub-contract
- (g) The Contractor has defaulted in fulfilling his obligations under this Contract;
- (h) The Contractor has contravened clause 7,8 and 9 of the conditions of contract
- (i) The Contractor fails to carry out the instructions of Engineer within a reasonable time determined by the Engineer in accordance with Clause 15.1 and 22.1 of the conditions of Contract.
- (j) The contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract Data; and
- (k) If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this paragraph "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official or the Employer or Engineer in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract, and includes collusive practice among Contractors (prior to or after bid submission) designed to establish bid prices at artificial non competitive levels and to deprive the Employer if the benefits of the free and open competition."

- 54.3 When either party to the Contract gives notice of a breach of Contract to the Engineer for a cause than those listed under Clause 54.2 above, the Engineer shall decide whether the breach is fundamental or not.
- 54.4 Notwithstanding the above, the Employer may terminate the Contract for his convenience.
- 54.5 If the Contract so terminated, the Contractor shall stop work immediately make the site safe and secure and leave the site as soon as reasonably possible.
- 54.6 In case the Contractor fails to carryout the works, as per the schedule and as per the conditions stipulated in the Bid Document, then the Employer, at its sole discretion is entitled to terminate this contract at the '**Risk and Cost**' of the Contractor and to employ such other Contractor/s to carryout the balance works. The additional cost incurred by the employer in completing the works, which remain unfinished at the time of termination of the contract will be recovered from the Contractor. Any unrecovered 'Risk and Cost' amount will be a debt payable to the Employer and the Employer will take suitable actions for such unrecovered 'Risk and Cost' amount at the cost of the Contractor. Any bill/s for the works executed remains unsettled and/or the value of materials, machineries etc., taken over or possessed by the Employer at the time of termination or on termination will be adjusted towards the 'Risk and Cost' recoverable from the contractor.

55. Payment upon Termination

If the Contract is terminated because of fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less advance payment received up to the date of the issue of the work certificate, less other recoveries due in the terms of the Contract, less taxes due to be deducted at source as per applicable law and the estimated/actual '**Risk and Cost**' to be recovered from the contractor due to termination. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Engineer shall issue a certificate for the value of the Works done, the reasonable cost removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's cost of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

56. Property

- 56.1 All materials on the site, plant, Equipment, Temporary Works and Works are deemed to be property of the Employer, if the Contract is terminated because of a Contractor's default.

57. Release from Performance

- 57.1 If the Contractor is frustrated by the outbreak of war or by any other event entirely outside the control of the Employer or the Contractor, the Engineer shall certify that the Contractor has been frustrated. The Contractor shall make the site safe and stop works as quickly as possible after receiving this certificate and shall be paid for all works carried out before receiving it and any work carried out afterwards to which commitment was made.

58, 59, 60 Deleted

APPENDIX 1**Safety Measures****I Contractor's Liability**

The contractor shall be absolutely and solely responsible for any and all kinds of injuries or damages to person and property of any description whatever may be caused by or result from the execution of the works, whether these may have been carried out skillfully and carefully and strictly in conformity with the provisions of the specifications or not.

II Responsibility for Accidents, Damages etc.

The care of the whole of the permanent works shall remain with the contractor who shall be responsible for all accidents or damages from whatever cause arising and chargeable for anything that may be stolen, removed destroyed or damaged to whomsoever belonging and also for making good all defects and damages to the said works or to any property adjoining or any cause whatever whether such damage or defects were occasioned by the negligence of the contractor or not or may be or might have been discovered during the progress of the works or in consequences thereof, or shall appear to be known after the completion whereof or whether payment may wholly or partially have been made or the works approved as supposed to have been properly done and no certificate of approval of any works by any officers or TNRDC shall affect or prejudice the right of TNRDC against the contractor or be considered or held as at all conclusive as to the sufficiency of any works or materials.

III Contractor to be responsible for all Trespasses and Damages

In the event of accidents to any person including employees of TNRDC on duty, damages to property, trespass on land, injury to cattle, horses, or other animals or damage injury of any description to any person or thing arising out of the execution of the works, the contractor shall be held responsible for and make good the same and shall indemnify TNRDC from all claims or expenses on account thereof and if TNRDC has to pay any money in respect thereof the sum so paid and the costs incurred by TNRDC shall be charged to the contractor as so much money paid to him on account of his contract and the contractor shall not be at liberty to dispute or question the right of TNRDC to make such payment for him or on his account notwithstanding the same may have been made without his consent of authority and decision or determination in law or otherwise to the contrary notwithstanding. TNRDC shall not be liable to, or for in respect of any damages or compensation or claim there for, under any Act for the time being in force or common law because or by reason or in consequences of any accident or injuries to workmen or others in the employment of the contractor or any subcontractor or of any person acting under him or on his behalf or the staff / persons employed by TNRDC for supervision of the work under his contract and the contractor shall save TNRDC harmless and indemnify in respect thereof and of any all costs and expenses incidental there to or consequent thereon.

IV Safety Measures

1. All the works to be carried out in and around the work site, it must be under the contractors supervision with their supervisor, at their own risk and cost.
2. The contractor should possess rubber gloves, gum safety boots, helmet, face mask, torch light, emergency light etc. as safety equipments in good condition
3. Each and every employee of the contractor should have insurance cover under Workmen Compensation Act.
4. The Contractor has to carry out any activity of the construction work only after informing and getting concurrence of TNRDC / Engineer In Charge.

V Safety Equipments & Loose Tools:

The Contractor will be responsible to make available the safety equipment and loose tools as listed below. If the Contractor fails to keep the safety equipment and loose tools and consumable items as listed the above will be procured by TNRDC and the cost will be deducted immediately from the bill payable to the contractor with a penalty of Rs. 5,000/-

VI Safety Measures to be adhered

1. Only experienced, skilled people have to be employed by the contractor.
2. All personnel should be covered by insurance under Workmen Compensation Act.
3. All labour act provisions has to be met with.
4. Rubber gloves, gum safety boots, helmet, face mask, torch light, emergency light etc are need to be provided by the contractor.
5. Exhibit labels of "Safety First"

VII List of Safety equipments to be provided by contractor

SI No	Name of Equipment
1	Face Mask
2	Shock proof hand gloves
3	Disposable hand gloves
4	Gum boot / Safety shoes
5	First Aid Box
6	Emergency light
7	Helmet / hard hat
8	Safety cones
9	Traffic barriers
10	Warning lights
11	Red flags
12	Caution boards

Note: The above is only an illustrative minimum list. The contractor must note that it is their responsibility to ensure the lives and safety of the workers employed by them. Towards this end, all the equipments of appropriate specifications should be procured and made available to the workers in usable conditions throughout the period of contract. Responsibility for any health problem or death will solely rest with contractor.

APPENDIX 2**Labour Statutory Requirements****I General**

The Contractor shall confirm to and comply with the regulations and by-laws of the State or Central Government or TNRDC and of all other local authorities such as Corporation of Chennai, The Tamil Nadu Electricity System, The Chief Electrical Inspector to Government of Tamil Nadu, The Government Customs and Police Departments Fire Service, the provisions contained in the various Labour Acts enacted by the State Legislature and Central Parliament in force and rules made there under including those under Minimum Wages Act, Factories Act, The Indian Electricity Act and rules framed under it, Workmen Compensation Act, The Employees State Insurance Act 1948, Provident Fund Regulations Act, The EPF and Miscellaneous Provisions Act 1952, Employees Provident Fund 1961 and scheme made under the said Act, Health and Sanitary Arrangements for workers etc. and the Contract Labour (Regulation and Abolition) Central Act 1970 and the Contracts (Regulation and Abolition) Central Rules 1971 etc. for Welfare and protection of works, workers or for the safety of the public and other Insurance provisions.

II Further, the Contractor has to give a declaration for the following provisions:-

- i. That in the capacity of Contractor, the Contractor has to comply with the provisions of Contract Labour (Regulation & Abolition) Act, 1970 by obtaining a valid license under the Act and the Rules thereto and similarly under Factories Act wherever applicable.
- ii. The Contractor has to pay the wages in accordance with the Minimum Wages Act to all his / their employees.
- iii. That the Contractor has to abide to recover the Employees Provident Fund and the Employees' Insurance contributions (both Employees and employers contribution) from the payment of bills every month.
- iv. The Contractor's Code Nos. for E.S.I / Workmen Compensation Policy and E.P.F codes are----- & ----- and both the Employees, Employers contributions will be remitted by the contractor in his / their code numbers and copy of the remittance challans will be produced. In case, if the contractor is failing to remit, he / they will inform wage rates of employees to the Principal employer so that they can remit Employees' State Insurance Contribution & Employees Provident Fund contribution (both for employer and employee) and authorize them to make deductions from the payment of bills.
- v. That the contractor has to contribute towards Tamil Nadu Manual Worker (Regulations of Employment and Conditions of work) Act, 1982 fund at the percentage prescribed by the Government from time to time.
- vi. That the contractor has to further declare and undertake that in case of any liability pertaining to his / their employees is to be discharged by the Principal Employer for his / their lapse, the contractor undertake to reimburse the same or the Principal Employer is authorized to deduct the same from the contractor's dues as payable.
- vii. That the contractor will maintain the Registers and records about the Contract Labour employed under Section 29 of Labour (Regulation & Abolition) Act wherever applicable.
- viii. That the contractor will take insurance policy under Workmen Compensation Act to meet out any untoward incident until the contract labourers are issued with ESI card.

III Compliance with Labour Regulations

During continuance of the contract, the contractor and his sub contractors shall abide at all times by all existing labour enactment's and rules made there under, regulation, notifications and bye laws of the State or Central Governments or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. The Contractor shall keep TNRDC indemnified in case any action is taken against TNRDC by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulation's or notifications including amendments. If TNRDC is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications / Bye Laws / Acts / Rules / Regulations including amendments, if any, on the part of the contractor, the Engineer / TNRDC shall have the right to deduct any money due to the contractor including his amount of performance security. TNRDC/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by TNRDC.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of TNRDC at any point of time.

IV Contribution to Fund

Notwithstanding anything contained in any Law for the time being enforced or in any Agreement every person / Contractor who undertakes any Civil work shall be liable to pay a sum at such percent, not exceeding one percent of the total estimated cost of the work as may be fixed by the Government, by notification, as contribution to the fund constituted for the benefit of manual workers in the employment in Civil Works under a scheme, framed under Section 3 of Tamil Nadu Manual Workers (Regulation of Employment and conditions of Work) Act, 1982. The percentage of total estimated cost of work, as may be fixed by the Government notification from time to time shall be paid by the Contractor.

V Contract Labour Welfare

- i. The rights and benefits conferred on the workmen employed by the contractor under the provisions of various Labour Laws are the responsibility of the contractor. The contractor has to indemnify TNRDC in case of loss or any damages. It is the responsibility of the contractor to take insurance policy under Workmen's Compensation Act, 1923 for each labour engaged by the contractor. The contractor will be responsible for any deficiency on safety measures to be adhered as stipulated in Safety measures to be adhered in Appendix 1. A photocopy of the insurance under Workmen's Compensation Policy should be furnished to TNRDC. The policies should be kept alive till the completion of the contract period.
- ii. The Contractor shall produce fitness certificate from any Authorized Medical Attendant (AMA) of Government Hospital for all the Technical Staff and Labour Staff to be employed.

VI Following Laws shall be adhered to by the contractor wherever applicable

- a. Workmen Compensation Act, 1923
- b. Payment of Wages Act, 1936
- c. Industrial Disputes Act, 1947
- d. Minimum Wages Act, 1948
- e. Factories Act, 1948
- f. Employees PF and Miscellaneous Act, 1952
- g. Payment of Bonus Act, 1965

- h. Payment of Gratuity Act, 1972
- i. Equal Remuneration Act, 1979
- j. Maternity Benefit Act, 1951
- k. Contract Labour (Regulation & Abolition) Act 1970
- l. Industrial Employment (Standing Orders) Act 1946
- m. Trade Unions Act 1951
- n. Child Labour (Prohibition & Regulation) Act 1986
- o. Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act 1979
- p. The Building and other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996
- q. Employee State Insurance Act, 1948
- r. The Tamil Nadu Manual Workers (Regulation of Employment and Conditions of Work) Act, 1982
- s. The Bonded Labour System (Abolition) Act, 1976
- t. The Employer's Liability Act, 1938

VII Elimination of Child Labour

1. Attention of all contractor are invited to the Child Labour (Prohibition and Regulations) Act 1986, which prohibits employment of children below 14 years of age in certain occupations and process and provides for regulations of employment of children in all other occupations and progress. Employment of child labor is prohibited in building and construction industry.
2. Hence all the contractors are requested to adhere to the provisions in the above Act and see that engagement of child labour in the operational activities of TNRDC are completely prohibited. Any violation of the provision will lead to penal action and removing of the contractor from the list of registered contractors.

APPENDIX 3

Tax Registration Number

We confirm that our firm/company has valid GST/PAN details as under:

- i) GST No. _____
- ii) PAN No. _____
- iii) ESI / Workman Comp. Policy. _____
- iv) EPF _____

**1% Cess to be paid for the Contract Value as per the notification of Tamil Nadu
Manual Workers Act,1982**

(Format to be filled by the successful bidder)

- 1. Name of the Person
In charge of the Construction Work :
- 2. Place of Construction :
- 3. Total Cost of Construction :
- 4. 1% of the Total Cost of
Construction Work :
- 5. DD No., Date, Amount and Bank
On which Demand Draft is drawn :

APPENDIX - 4**Minimum Standards****I Preamble**

This Performance Standards are general guidelines for the Contractor to plan and follow up the maintenance activities. However, ***before executing any item of work given in this appendix, the maintenance Contractor should obtain prior approval from Engineer – in – Charge without fail***

II Detailed Scope of Work**1 General**

The Contractor shall be responsible for all maintenance activities on the Project Road which include ordinary repairs, routine maintenance, and any special repairs due to floods, accidents, or other similar events from the order date till the completion date. The maintenance works shall be carried out as per the relevant specifications and Performance Standards and Prudent utility practice

The maintenance activity shall be done to an approved plan and programme adequate data and records shall be maintained to create a database on ordinary or routine maintenance and periodic renewals.

The contractors shall be responsible, for all maintenance and repair / replacement (as warranted) of the facility and all its components

2 Traffic arrangements

The contractor shall be responsible for traffic arrangements for carrying out all the maintenance activities

3 Routine maintenance

Routine maintenance shall include periodic inspectors to assess the condition of pavement, structures and other components, repairs thereof, painting, patch repairs and marking-up defects, and any other activity that is not specifically included in “Pavement Renewal” or “Overlay” The Routine Maintenance shall be a continuous activity to ensure that good riding quality is maintained. The key activities would include repairs or replacement (as warranted) and upkeep of pavement, shoulders, berms, embankment, damage works, road furniture and appurtenance including signboards, road marking, delineators etc Activities such as painting, pointing, plastering, clearance of vent ways, repairs to paver block shoulders etc, would also be included in routine maintenance

4 List of regular maintenance activity**(a) Carriage Way and bituminous paved shoulder**

- i.) Spot sealing or skin patching : To prevent serious pavement failures, small cracks shall be monitored and skin patched when the opening exceeds 3 mm

- ii.) Premix patching
 - a. Potholes – more than 150 mm in width more than 25 mm in depth;
 - b. Depressions – more than 25 mm in depth;
 - c. Pipe settlement – more than 25 mm;
 - d. Settlement in bridge approaches, and
 - e. Surface breakup - to replace surface when sections can be removed and base material is undisturbed
- iii.) Edge damage – Erosion of original edge greater than 150 mm width must be patched and shoulders repaired
- iv.) Wheel track rutting greater than 25 mm should be patched and cracks treated
- v.) Spot reconditioning
- vi.) Treating of bleeding pavements road should be treated with sand when the area shows signs of vehicle tracking or the area becomes slippery. To roughen extremely slippery surfaces, sand may be substituted by 2 mm stones
- vii.) Other bituminous surface maintenance
 - a. Cleaning the intersection,
 - b. Cleaning the ramps,
 - c. Cleaning the traffic islands, and
 - d. Heating the uneven bituminous surface and removal of excessive material

(b) Shoulders (gravel and concrete block shoulders)

- i.) Blading / Reshaping to restore proper slopes and sides so as to maintain the standard formation width
- ii.) Spot re-gravelling
- iii.) Correcting gravel shoulder drop off granular material to be added and compacted properly to rectify shoulder drop-off
- iv.) Paved shoulders Damaged / Rocking Paver Blocks to be replaced / attended to immediately in case of depression greater than 50 mm
- v.) Sand flushing of paver blocks. Flushing the joints between paver blocks with wand, such that it always tops up with the level of the Blocks

(c) Maintenance of other facilities

- i.) Kerbs / medians / Studs – Missing and damaged kerbs to be replaced. Loose and ineffective studs to be removed and repaired. Reflective conspicuity of studs should be checked during darkness
- ii.) Vegetation Control- Height of vegetation to be controlled
- iii.) Removal of debris to ensure free flow of water in side drains any damages thereto to be attended
- iv.) Cleaning culverts vent ways silted up or blocked to be cleared to ensure free flow of water
- v.) Guard rail / Hand rail repair
- vi.) Road furniture: All road furniture to be maintained by cleaning and painting at regular intervals. It is to be ensured that replacement if any, are of the same or higher quality / standard as the ones in service Reflective quality to be checked during hours of darkness
- vii.) Lighting all lamps provided to be maintained in good condition lamps to be replaced in case of poor illumination
- viii.) Road Markings General recognition should be possible
- ix.) White / Colour Wash / painting - Parapet walls, handrails, kerbs to be painted appropriately

III Performance Standards**1 Performance Standards for Maintenance**

The performance standards define the level at which the proposed project road is to be maintained. The Contractor may carry out periodic inspection and audit of the components of the facility and appurtenances to fulfill its objective of providing a high level of service to the users

2 Roadway

- a). Pavement: IRC 82, 1982, Code of practice for maintenance of bituminous surface of highways and MORTH Specifications for Road and Bridge Works (Third Revision) or any modifications to these from time to time shall be followed
- b). Any physical damage to the road, median, carriageway, bridge and cross drainage works, road furniture, signs, markings and any other appurtenance which occurs due to any reason shall be repaired / replaced (as warranted) within a reasonable-period as directed by TNRDC
- c). Weekly inspections shall be done by the contractor to identify severe signs of pavement distress

- d). The pavement shall be maintained to provide a riding quality rating of 'Good'
- e). Any blemish on the surface of the pavement or shoulders, which affects or may affect the riding quality, serviceability or durability of the pavement or shoulder shall be termed as "Pavement Defect"
- f). Monthly inspections shall be made jointly by TNRDC and the contractor to assess the pavement defects. A chart shall be prepared which shows the location, extent and type of defect. The monthly inspection shall be used to demarcate areas of the pavement, shoulder or median which require immediate maintenance. The contractor shall carry out the required maintenance operation within a reasonable time as stipulated by TNRDC
- g). Any defects or deficiencies (other than those explicitly set out) noticed in any component of the facility shall be made good by the contractor as soon as possible and within a reasonable time frame acceptable
- h). The geometric profile of the project road shall be maintained as specified
- i). Signs and markings shall be maintained to adhere to the specifications specified at the time of handing over
- j). All road furniture shall be maintained to the specifications specified at time of handing over

3. Drainage System

- i.) The inspection and maintenance shall follow the guidelines specified in IRC:SP35-1990 or any modification to it by Indian Roads Congress'
- ii.) Pre-monsoon inspection shall be carried on all bridges, culverts and the longitudinal drainage system. This shall be followed by repairs as required clearance of waterways of cross-drainage (CD) works and bridge waterways (vegetation, silt) within the right-of-way and 100 m on either side of the Right-of-Way, cleaning the longitudinal and surface drains, repairs to flooring and pitching and face walls which should be brought to intact condition and painting of bridge markings shall be carried out
- iii.) During the monsoon, any blocked waterways shall be cleared immediately
- iv.) After monsoon, a summary inspection shall be done to identify any severe damage. One month after the cessation of rain, the structures shall be given one coat of white wash or colour wash as a protective measure

Conditions of Particular Application (COPA)

1. The work shall be carried out strictly as per MoRT&H specifications, IRC guidelines and relevant IS, BIS codes, Technical specifications or as per the instructions of Engineer.
2. Contractor is solely responsible for the safety of the workmen and other resources deployed at site. TNRDC shall be indemnified against any loss, whatsoever.
3. Cleaning activity shall be carried out by the contractor as per the instructions of the Engineer and as indicated in the BoQ. Contractor is responsible for Traffic Management / Traffic Safety along the work front.
4. Rate shall include GST and all other applicable taxes, labour charges, vehicle hire charges & its running and maintenance cost, consumables, contractor's overheads and profits etc., No extra cost over the BoQ quoted Rates shall be paid.
5. The **Bid Security / EMD** has to be submitted in the form of Crossed Demand Draft on any Nationalized Bank, drawn in favour of "**M/s. Tamil Nadu Road Development Company Ltd.**", payable at Chennai, along with the Single cover Bid. The EMD/Bid Security of the successful bidder will be released on submission of the Performance Security to TNRDC. The Bid Security of the unsuccessful bidders will be refunded on award of the contract without any interest. Bids not accompanied by Bid Security are considered invalid and will be summarily rejected. No exemption on submission of Bid Security will be allowed on any grounds.
6. The bidders whose relevant experience in similar type of jobs as mentioned in the Bill of Quantities should only quote. Bids from joint venture are not allowed.
7. TDS for IT as per rules will be deducted while making payment of the bills.
8. If the Contractor fails to commence the work within seven days from the date of commencement or the performance of the work is not found satisfactory, TNRDC reserves the right to rescind the contract and forfeit the Performance Security submitted.
9. TNRDC reserves the right to accept any bid, reject any or all bids without assigning any reasons thereof.
10. Escalation will not be allowed during the Contract i.e. during the contract period.
11. The Contractor shall at all times during the currency of this contract comply with all existing Acts, Regulations, Bylaws including all Statutory orders, Amendments enacted by State or Central or other Local Authorities.
12. The Contractor shall submit a valid insurance Workmen Compensation Policy duly covering men, material, machinery and equipment brought to the site of work during the currency of Contract as well as upto completion of Contract.

13. The Site – Incharge or his authorized representative will check the Contractors work during the course of execution or subsequently and any defects found shall be informed to the Contractor during rectification / removal of such defective work.
14. No land shall be provided by TNRDC for labour camp etc and the contractor has to make his own arrangements for the same.
15. The Contractor shall work in association with existing Works Contractors and any work activity within the jurisdiction of Works Contractor should be liaised on at his own level. TNRDC shall make earnest efforts to resolve any such matters. The Contractor shall not quote any reasons for his delay in the progress of work due to the work activity involved in the jurisdiction of Works Contractor nor seek any extension out of this.
16. At any point of time, if any discrepancy noticed in respect of contractor's resource deployment or work, as in the opinion of Engineer-in-charge, TNRDC shall reserve the rights to get the work done from other agencies or its own at the cost & risk of works contractor.
17. Employer may foreclose the contract at any point of time as per the convenience without assigning any compensation.
18. The bidders may obtain any further information, if desired from the following address:
M/s. Tamil Nadu Road Development Company Ltd.
No.171, II Floor, Tamil Nadu Maritime Board Building,
South Kesavaperumal Puram,
Pasumpon Muthuramalingam Road,
(Near Greenways Road MRTS Station),
Raja Annamalai Puram, Chennai 600 028
Phone: 91-44-2495 2800 / 3800,
Fax: 91-44-2493 3800
E-Mail: tenders@tnrdc.com
Web : www.tnrdc.com

General Specifications and Scope of work:

The Contractor shall be responsible for cleaning and proper maintenance of entire carriage way including the following activities during the period of the contract:-

1. Removal of all litter, debris, waste materials, plastic bags, paper wastes, organic waste materials and removal of dead animals from all area of the road (right of way)
2. Cleaning of spilt oil, diesel, grease, lubricants and other materials from the carriage way
3. Removal of mud, dirt, dust & sand collected along the median/kerb sides/edges
4. Removal of stones/ small obstacles from the road
5. Clearing and Cleaning of the accident area
6. Clearing the road of water stagnation, storm water etc.
7. Cleaning the median, railing, kerbs etc
8. Road furniture: Total Road furniture along the entire road way including, sign boards, delineators, road studs etc, to be maintained regularly in order to perform its proper function by cleaning at regular intervals.
9. Visual inspection of the road and road furniture.
10. Drainage

Culvert Vent ways silted up or blocked where free flow of water is impeded to be cleared.

During monsoon any blocked vent ways, drainage pipes for surface drainage should be cleared immediately.

Cleaning of drains: - Cleaning all cross drainage structures

Schedule for maintenance:

S No	Activity	Period
1	Visual inspection of the road and road furniture.	Daily
2	Removal of small obstacles from the road	24 hours
3	Cleaning of spilt oil, diesel and other materials	24 hours
4	Collection and Removal of all litter, debris and removal of dead animals from road way (right of way)	24 hours
6	Removal of mud, dirt , dust, sand collected along the median/kerb edges	Weekly
7	Cleaning the median, railing, kerbs, drain etc	Monthly
8	Clearing the road of water stagnation, storm water etc	During rains and monsoon period
9	Cleaning the walls, abutments, piers of the culverts/Bridges	Quarterly

10	Cleaning sign posts, including advance warning signs, posters as well as cleaning support posts	Quarterly
11	Cleaning beacon elements like landmarks and reflectors of all kinds	Quarterly
12	Cleaning road marking, safety barriers	Quarterly
13	Cleaning of Toll Plazas and Lanes.	Twice in a month.
14	Cleaning office premises and Toilet Cleaning and other Civil / Electrical related works	Day to day
15	Clearing and Cleaning of the accident area	Immediately

Section IV Contract Data

The law which applies to the Contract is the law of Union of India	3
The currency of the contract is Indian Rupees Only	43
<p>Retention Money :-</p> <p>In IPC's @ 5 % of value of each bill will be withheld and the withheld amount will be refunded to the Contractor along with the Final Bill / Taking over certificate.</p>	39.3
<p>The Liquidated Damages for short deployment of manpower shall be Rs.2,000 per incidence. The liquidated damages for non-Performance / improper maintenance / deficiency in work and non adhering to the directions of Engineer shall be Rs 3,000 per incidence. The maximum amount of liquidated damages for the whole of the works is 5% of final contract price for works.</p>	45.1
<p>The Performance Security shall be provided to the Employer no later than the date specified in the work order and shall be issued in an amount and form indicated in Contract Data from:</p> <ol style="list-style-type: none"> State Bank of India or subsidiaries; Any Indian Nationalised Bank; or Any Scheduled bank <p>as acceptable to the Employer, and denominated in Indian Rupees only. The Performance Security shall be 2% of the Contract price. If the performance security is in the form of Bank Guarantee, the same shall be valid for a period of 13 Months from the date of Bank Guarantee or 01 Month beyond the completion period whichever is later. In case the Intended Completion Date is extended, then the Contractor shall submit a fresh Performance Security or extension of the date of the Bank Guarantee/s if any, furnished as security, the same value valid up to a date of one month beyond the issue of Work Completion Certificate.</p>	48

Section V

Bill of Quantities

Bill of Quantities (BoQ) for works

A. Preamble

1. The Bill of Quantities shall be read in conjunction with the Instruction to Bidders, General and Special Conditions of Contract, Technical Specifications and conforming to the Indian standard specification.
2. The Bidder should closely peruse all the specification clauses for items of works for which he is tendering his rates.
3. The quantities given in the Bill of Quantities are approximate and provisional, which are given to provide a common basis for making payment for works. Actual quantities of work are likely to increase or decrease as per the requirement at site. Hence there is no claim for any additional or less quantities than the specified in the BOQ.
4. The rates in the Bill of Quantities shall except in so far as it is otherwise provided under the Contract, include all plant, labour, supervision, materials, erection, transportation, maintenance, insurance, Toll, administrative overheads, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
5. General directions and description of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the Bill of Quantities.

Carrying out maintenance works from Odhiyur to Koonimedu (i.e.) Km 96/000 to Km 135/500 at East Coast Road for one year (2020-21)

Bill of Quantities

Item No.	Description	Unit	Quantity	Rate inclusive of GST Rs		Amount inclusive of GST(Rs)
				In Figures	In Words	
1	Cleaning of B.T Surface, Paved shoulder and Paver block shoulder including all labour charges and other incidental charges etc. complete	Sq.m	39500.00			
2	Rain cut in shoulder and filling with edge packing using locally available material					
a)	Restoration of rain cuts with soil, moorum, gravel or a mixture of these, clearing the loose soil, benching for 300 mm width, laying fresh material in layers not exceeding 250 mm and compacting with plate compactor or power rammers to restore the original alignment, levels and slopes	Cu.m	750.00			
b)	b) Supplying and filling up the empty cement gunny bags with locally available soil, stitching them, conveying the same to site and stacking as directed by the Engineer-in-charge within a lead of 10m including cost of bags, jute, thread, needle and all labour charges etc., complete	Nos	1000.00			

Bill of Quantities

Item No.	Description	Unit	Quantity	Rate inclusive of GST Rs		Amount inclusive of GST(Rs)
				In Figures	In Words	
3	Removal of vegetation from the earthen shoulder and paver block shoulder including all labour charges and other incidental charges etc. complete	Sq.m	118500.00			
4	Cleaning of light jungle along the shoulder and removing from site including all labour charges and other incidental charges etc. complete	Sq.m	98750.00			
5	Re-fixing of RCC Guide Stone using PCC M15 Grade concrete of size 0.45x0.45x0.60m below ground level including cost of material, labour charges for removing and refixing etc complete as per direction of the Engineer in charge	Nos	80.00			

Bill of Quantities

Item No.	Description	Unit	Quantity	Rate inclusive of GST Rs		Amount inclusive of GST(Rs)
				In Figures	In Words	
6	Removing and refixing of heavy duty factory made hydraulically pressed and mechanically compacted pre-cast uniregular interlocking paver blocks of 80mm thick, M 40 grade strength preparation of sub base with compacted thickness of 50mm M-sand including leveling, laying of interlocking paver block with M-sand binding and final compaction with plate compactor finishing the surface including cutting of blocks at the edges with all labour and materials etc complete as per specification and direction of Engineer-in-charge.	Sq.m	500.00			
7	Cleaning of drainage and disposing the removed material away from the site as directed by the Engineer-in-charge including all labour charges and other incidental charges etc complete	Rm	200.00			

Bill of Quantities

Item No.	Description	Unit	Quantity	Rate inclusive of GST Rs		Amount inclusive of GST(Rs)
				In Figures	In Words	
8	Providing Patch work with bituminous premixed materials including Cutting and Removal of the existing damaged pavement , brushing, cleaning the surface, spreading the bitumen for tack coat, laying premix chips with hot bitumen in the drum mixer with 44 kg per cum of chips, levelling and tamping the premix in the patches and potholes, rolling including tolls, brush, safety arrangements etc complete and as directed by the Engineer incharge	Sq.m	3437.00			
9	<u>Fog sealing</u> :Providing and applying low viscosity bitumen emulsion and stone dust for sealing cracks less than 3 mm wide or incipient fretting or disintegration in an existing bituminous surfacing as directed by the Engineer-in-charge	Sq.m	11060.00			
10	Cleaning of culverts and removing of earth at inside of the vent and also removal of weeds from surroundings including all labour charges and other incidental charges etc. complete	Nos	50.00			

Bill of Quantities

Item No.	Description	Unit	Quantity	Rate inclusive of GST Rs		Amount inclusive of GST(Rs)
				In Figures	In Words	
11	Painting the old Cement Concrete surface with two coats using synthetic enamel paint of approved quality including cost and conveyance of all materials, all labour for scrapping and brushing with required quantity of Synthetic enamel paint as directed by the engineer incharge and as per standard specification	Sq.m	6000.00			
12	Painting the old Iron surface with two coats using synthetic enamel paint of approved quality including cost and conveyance of all materials, all labour for scrapping and brushing with required quantity of Synthetic enamel paint as directed by the engineer incharge and as per standard specification	Sq.m	1000.00			
13	Providing and Laying of Plain cement concrete M 20 Grade using 20mm gauge hard broken granite jelly including cost of form work, soft water, labour charges for mixing, transporting, proper vibrationg, laying curing etc., complete complying with standard specification and as directed by the Engineer-in-charge.	Cu.m	13.50			

Bill of Quantities

Item No.	Description	Unit	Quantity	Rate inclusive of GST Rs		Amount inclusive of GST(Rs)
				In Figures	In Words	
14	Refixing of Sign Board using PCC M15 Grade Concrete of size 0.45x0.45x0.60m including cost of material, labour charges for removing and refixing etc complete as per direction of Engineer in charge	Nos	50.00			
15	Supplying and fixing of Precast HM stone (Size 0.75 x 0.23 x 0.1 m), including painting and lettering cost of all material, transportation and labour charges etc complete as per direction of Engineer in charge	Nos	25.00			
16	Supplying and fixing of Precast KM stone (Size 1.65 x 0.45 x 0.15m), including painting and lettering cost of all material, transportation and labour charges etc complete as per direction of Engineer in charge	Nos	5.00			
17	Providing and laying of gravel for shoulder including watering and compaction, labour and hire charges for machineries etc complete as directed by the Engineer-in-charge	Cu.m	790.00			

Bill of Quantities

Item No.	Description	Unit	Quantity	Rate inclusive of GST Rs		Amount inclusive of GST(Rs)
				In Figures	In Words	
18	Painting & Lettering of H.M.Stone including cost of paint , all labour charges and other incidental charges etc. complete	Nos	158.00			
19	Painting & Lettering of K.M.Stone including cost of paint , all labour charges and other incidental charges etc. complete	Nos	39.00			
20	Casting,painting and fixing of RCC Guide stone (size 1.50m x 0.25m x 0.25m) using RCC M 20 Grade concrete, placing reinforcement, applying one coat primer and two coat enamel paint and fixing using M15 Grade concrete of size 0.45x0.45x0.60m including labour, material and moulding charges etc complete as per direction of the Engineer in charge	Nos	50.00			
21	Hiring of TATA Ace/207 Vehicle including driver salary and other allowances, Diesel and all other expenses for attending routine maintenance work and emergency work etc., complete	Per Month	12.00			

Bill of Quantities

Item No.	Description	Unit	Quantity	Rate inclusive of GST Rs		Amount inclusive of GST(Rs)
				In Figures	In Words	
22	Supplying the following labours for attending emergency works as and when required and as directed by the Engineer-in-charge					
a)	Supply of skilled labour (Mazdoor class- I)	Nos	150.00			
b)	Supply of unskilled labour (Mazdoor class-II)	Nos	300.00			
c)	Supply of Mason Class II	Nos	30.00			
Total inclusive of GST, Rs.						

(Rupees _____ Only)
inclusive of GST and all other applicable taxes

Section VI

Technical Specifications

Technical Specifications

PREAMBLE

1. The Technical Specifications contained herein shall be read in conjunction with the other Bidding Documents.

1.1 Site Information

General

1.1.1 The information given hereunder and provided elsewhere in these documents is given in good faith by the Employer but the Contractor shall satisfy himself regarding all aspects of site conditions and no claim will be entertained on the plea that the information supplied by the Employer is erroneous or insufficient.

1.1.2 The area in which the works are located is in plain terrain, the approximate longitude and latitude of the region (Tamil Nadu) being 76° 15'/80° 20' East and 8° 05'/13° 35' North.

1.1.3 Climatic Conditions

1.1.3.1 The temperature in this region is as under:

- i) During summer months, the average maximum temperature is 42°C.
- ii) During winter months, the average minimum temperature is 18°C.

1.1.3.2 The average annual rainfall in the area is of the order of 800mm.

1.1.4 Seismic Zone

The works are located in Seismic Zone-II as defined in IS :1893 (Part I) - 2002

2 GENERAL REQUIREMENTS

The Technical Specifications in accordance with which the entire work described hereinafter shall be constructed and completed by the Contractor shall comprise of the following. All the specification given in the relevant codes, MoRTH shall be adhered to during execution of the work

2.1 Part-I: General Technical Specifications

The General Technical Specifications shall be the "SPECIFICATIONS FOR ROAD AND BRIDGE WORKS" (Fifth Revision), issued by the Ministry of Road Transport and Highways, Government of India and published by the Indian Roads Congress, henceforth called MORT&H Specifications and deemed to be bound into this document.

2.2 Part-II: Supplementary Technical Specifications

2.2.1 The Supplementary Technical Specifications shall comprise of various Amendments/Modifications/ Additions to the "SPECIFICATIONS FOR ROAD AND BRIDGE WORKS" referred to in Part-I above and Additional Specifications for particular item of work not already covered in Part-I.

- 2.2.2 A particular clause or a part thereof in "SPECIFICATIONS FOR ROAD AND BRIDGE WORKS (Fifth Revision)" referred in Part-I above, where Amended/Modified/Added upon, and incorporated in Part-II, referred to above, such Amendment/Modification/ Addition supersedes the relevant Clause or part of the Clause.
- 2.2.3 The Additional Specifications shall comprise of specifications for particular item of works not already covered in Part-I.
- 2.2.4 When an Amended/Modified/Added Clause supersedes a Clause or part thereof in the said Specifications, then any reference to the superseded Clause shall be deemed to refer to the Amended/Modified/Added Clause or part thereof.
- 2.2.5 In so far as Amended/Modified /Added Clause may come in conflict or be inconsistent with any of the provisions of the said MORT&H Specifications under reference, the Amended/Modified/Added Clause shall always prevail.

2.2.6 Additional Specifications

In the absence of any definite provisions on any particular issue in the aforesaid Specifications, reference may be made to the latest codes and specifications of IRC, BIS, BS, ASTM, AASHTO and CAN/CSA in that order. Where even these are silent, the construction and completion of the works shall conform to sound engineering practice as approved by the Engineer and in case of any dispute arising out of the interpretation of the above, the decision of the Engineer shall be final and binding on the contractor. .

The latest edition till 28 days before the final date of submission of the bid of all specifications / standard shall be applicable.